

SYSTEMS & MANAGEMENT Electronic magazine

ACQUISITION AND USE OF INFORMATION IN COMPETITIVE INTELLIGENCE PRACTICES IN RISK MARKETS

Ana Virgínia Alberici Giordani Bertolini¹, Fernanda D'Arrigo¹, Ana Cristina Fachinelli¹

1 University of Caxias do Sul - UCS

ABSTRACT

The balance between the risk of an investment and the achievement of profit is a turning point for success in markets in uncertain environments. The information for the decision making acquires strategic contours for the gain and the maintenance of this balance. The objective of this article is to analyze the dimensions of acquisition and use of information in the practices of Competitive Intelligence in the market characterized by risk. The study examines dimensions regarding the importance, frequency, and influence of information on investment decisions. The research approach is qualitative and exploratory. The method used in data collection consists of in-depth interviews with professionals that operate with the São Paulo Stock Exchange. The results indicate that the Competitive Intelligence practices of the stock market players are influenced by uncertainty in business environments. The greater the perception of uncertainty in the environment, the more information the decision maker will acquire and use for better results.

Keywords: Information; Competitive intelligence; Risk Market; Decision Making.

1. INTRODUCTION

Risk investments can be a very attractive way to increase economic gains. However, the risks inherent in investing or the search for the right balance between risk-taking and profit-making are challenging and at the same time decisive for success in markets in uncertain environments (Kucera et Kantnerova, 2014).

In this sense, Duncan (1972) and Milliken (1987) have contributed to the field of studies regarding perceived environmental uncertainty (PEU), indicating that the uncertainty of the environment is a perceptual phenomenon. Duncan (1972) understands perception as a significant role in terms of how managers react to an environment of uncertainty. Milliken (1987) argues that there are three dimensions, of different natures, which executives can perceive as uncertainties of the environment. The first is the perceived environmental uncertainty in relation to unpredictability, which presents a lack of understanding about components and possible changes in the environment. The second describes the difficulty for executives to predict how environmental changes

will affect their organizations, that is, cause-and-effect in decisions. The third dimension is the uncertainty of response, reflected in the inability of executives to determine what their companies are likely to face and the potential consequences of responding to the selection of a particular initiative. Each of the conceptual dimensions of uncertainty is evidenced when decision makers try to understand the range of options open to them.

In the stock market of the São Paulo Stock Exchange, environmental uncertainty is constant, and it is up to financial intermediaries, such as analysts, to seek the best profitability options despite constant uncertainty. These professionals have a role to play in providing information to investors even though most of them work in an information-deprived environment (Wang et Wang, 2014).

Uncertainty and information are also central issues in the field of Competitive Intelligence. Previous studies indicate its linkage with the analysis processes for decision making (Fachinelli *et* Alberdi, 2014). There is recognition of the importance of greater knowledge about business environments for the strategic integration of information

PROPPI / LATEC

DOI: 10.20985/1980-5160.2017.v12n3.819



at high decision levels (Viitanen et Prittimak, 2006). This view is based on the perception that, the greater the importance of information in decision-making processes, the smaller the risks of its actions and, consequently, the greater the chances of positive returns for investors (Calof et Wright, 2008). The purpose of the practices of Competitive Intelligence is to facilitate the effective decision-making that leads to the execution of actions (Yap et al., 2011).

The basis of Competitive Intelligence is to realize that the difference between information and intelligence are the levels of analysis produced. Understanding this difference will lead managers to make more efficient decisions for their business. The information can have different formats, statistical or semantic, and often shows itself as an aid to understanding an event and making a decision (Muhammad *et al.*, 2017). On the other hand, intelligence is a collection of information that needs to be filtered, analyzed and processed (Kahaner, 1996).

Keynes (1985) states that a situation of uncertainty can be configured in two ways: (i) the agent has incomplete information about factors that cause a given event; and (ii) the agent, despite having relevant information, is unable to compute relationship of probability due to individual subjective limitations. In this perspective, the uncertainty in the context of the São Paulo Stock Exchange market would be related to the insufficiency (qualitative and quantitative) of information associated with probabilities of results at the moment of decision making.

On the other hand, the perception of uncertainty can be a factor of pressure on its acquisition and its use. Thus, if, on the one hand, the value of Competitive Intelligence for an organization is strongly related to its use within it (Colakoglu, 2011), on the other hand, the way information acquisition takes place could vary according to the pressure exerted by the perception of uncertainty. If, for traditional organizations, Competitive Intelligence is characterized as a process that develops from practices that consolidate over time (Calof et Wright, 2008), in turbulent contexts and with a high level of uncertainty, the conditions for the practices of Competitive Intelligence can characterize different forms of acquisition and use of information. In this perspective, the present article seeks to examine the Competitive Intelligence practices acclimated in the stock market, considered as a turbulent environment with a high level of uncertainty. The focus of the study is on the dimensions of acquisition and use of information. More specifically, the objective is to analyze the influence of the dimensions of acquisition and use of information in the practices of Competitive Intelligence in the market characterized by risk, through qualitative interviews conducted with stock market operators of the São Paulo Stock Exchange - BOVESPA.

2. LITERATURE REVIEW

2.1 Competitive intelligence

Competitive intelligence, according to Tarapanoff (2001), is a new theoretical synthesis in the treatment of information for decision making. It includes a methodology that allows the informational monitoring of the environment and, when systematized and analyzed, enables decision making. In fact, the synergistic use of knowledge and intelligence results in effective decision making, thus leading to competitive advantage.

For Prescott et Miller (2002), Competitive Intelligence professionals present the need to ethically and legally collect, analyze and apply information regarding the capabilities, vulnerabilities and intentions of their competitors. These professionals need to monitor events in the overall competitive environment, such as competitors and incoming technologies.

Competitive Intelligence, besides being seen as a crucial element and facilitator of the decision-making process, is situated in the process-product aspect. When considered as a process, it is described through legal and ethical methods for collecting, developing, analyzing and disseminating pertinent information to competitors, customers, suppliers and organizations, that is, a set of methods that are sequentially structured in well-defined stages. Its nature is a dynamic process that evolves with the environments, also evolving the definitions of the activity (Fachinelli et al., 2013). In addition, the company uses it to benefit itself, through information, and to help achieve success in a globalized and competitive market (Colakoglu, 2011; Muhammad et al., 2017). When considered as a product, that is, as information already processed and delivered, the scope turns to the present and future behavior of competitors, suppliers, government, market, technology, products and services, customers and businesses in general (Vedder et Guynes, 2002; Colakoglu, 2011).

Schwaninger (2001), from the perspective of cybernetics, defines Competitive Intelligence as the ability to adapt to changes in the external environment, the ability to influence and shape this environment and, if necessary, the ability to find new environments to work with. For this author, professionals and researchers of Administration have produced new concepts, models and methods of Competitive Intelligence at an accelerated rate.



Organizational learning and knowledge creation are two key terms that classify much of this production.

Competitive Intelligence means a systematic process for the purpose of collecting and analyzing information about competitors and the economic and sociopolitical environment of companies. Its main objective is to use different sources of resources in order to increase the competitiveness of the organization and decrease this factor in rivals (Cruz, 2016). Human capital can be a critical source of competitive advantage and must be worked on as such (Drucker, 2005). Calof et Wright (2008) define that Competitive Intelligence collects internal, external and competitive information from competitors, customers, suppliers, technology, environment and potential business relationships. It is designed to alert about prior signs and to help predict the movement of competitors, customers and government. For SCIP (2014), Competitive Intelligence is focused on producing results such as: new or growing revenues, new products or services, and cost and time savings in organizations. It is evident that for competitive intelligence professionals, their abilities to handle various functions are remarkable, and the influence of the area is significant for the future success of the organization.

At first, it is necessary to understand the benefits of Competitive Intelligence, such as the quality of information and its dissemination to foster speed in decision making. As a benefit, a systematic improvement in organizational processes, time and cost savings, and the rapid identification of opportunities and threats from the environment are highlighted. However, the existence of Competitive Intelligence benefits depends on a high-quality information infrastructure. Thus, management must take multidisciplinary actions and develop operational flexibility, as well as speed and accuracy in terms of information gathering, and in this context, Intelligence becomes an important conceptual and methodological resource for processing information (Fachinelli et Alberdi, 2014).

2.2 Acquisition and use of information in the practices of Competitive Intelligence

Gilad (1989) discusses how monitoring of environmental competitiveness is able to alleviate the blind spots and to identify threats and opportunities early. At the same time, Porter (1998) defines Competitive Intelligence as a collection of information of the movements of competitors and their patterns of strategic action and growth. Intelligence may be associated with a system that uses information to evaluate organizational resources in order to implement strategies to deal with its complex and constantly changing with its cultural environment (Cruz, 2016, Muhammad *et al.*, 2017).

Today's business environment demands a comprehensive system to manage risks from the external environment as the forces of globalization are intense and can destabilize business environments. For risk management, there is an increase in the need for information, especially regarding the frequency of acquisition and use of Competitive Intelligence and, consequently, the increase in the importance that the professional will give to the information that he possesses. Environmental monitoring can be considered as the predecessor of Competitive Intelligence focused on collected information (Calof et Wright, 2008). In this scenario, when an uncertain environment is perceived in the business environment, the need for information processing and the identification by managers of opportunities and threats, which must implement necessary strategies and promote structural adaptations (Culnan, 1983, Daft et al., 1988, Hambrick, 1982, Cross, 2016).

Daft et al. (1998) divide the environment into two: one considered by industries that need to grow and survive (clients, suppliers and competitors) and the other by external forces that influence social institutions (economic, technological, development, socio-cultural and demographic). In the relationship between the environment of uncertainty and practices of Competitive Intelligence, it is observed that industrial environments are perceived as strategically more uncertain than regulatory, economic and sociocultural environments. Thus, when the uncertainty of this environment is high, executives report a higher frequency in terms of acquisition and use of information for decision making.

According to Choo (2002), decision makers are not presented automatically to the problems they need to solve, nor to the alternative solutions they can choose. They should identify problems, seek solutions and develop methods to generate and evaluate alternatives. Decision makers should actively seek information, manage it, and integrate it into the organizational process, since such information is not readily available. From the perspective of organizational theory, the decision process consists of searching for information about the environment and making the right choice (Cyter et March, 1963, Simon, 1976). On this issue, it is important to emphasize that, because individuals have different perceptions about ethical situations, each uses different ethical frameworks through situations, that is, individual perception of ethics in situations influences the way people make choices.

The need for companies to be informed about new developments in their business areas should be a way to foster greater understanding, appreciation and representativeness of Competitive Intelligence (Calof et



Wright, 2008). The informational domain related to operating environments is considered a fundamental variable of competitiveness (Cruz, 2016; Muhammad *et al.*, 2017). However, in turbulent business environments, many companies are struggling to acquire Competitive Intelligence using unethical information acquisition strategies. The frequency of information use by individuals, their companies and their competitors was assessed, and the results revealed the extent of the gap between ethics and practice.

When ethical, the relationship between the information systems of companies and the acquisition of Competitive Intelligence indicates the importance of this system as a generating and information gathering tool, suggesting that Competitive Intelligence professionals can approach members from outside organizations to leverage the intellectual capital (Stewart, 1998). The author classifies intellectual capital as an exchange between parts of structural, human, and client capital. Thus, Competitive Intelligence professionals can develop knowledge centers to help disseminate intra-organizational information and develop customized Competitive Intelligence information services for each customer group (Zangoueinezhad *et* Moahabaki, 2009).

Authors Calof *et* Wright (2008) point out the structured process of Competitive Intelligence as essential for continuously and systematically identifying business opportunities and threats. The information processing approach seeks to understand and predict how organizations perceive and interpret stimuli and how to store, retrieve, and transmit information to generate judgment and problem solving (Larkey *et* Sproull, 1984).

The value of Competitive Intelligence for an organization is strongly related to its use. By using Competitive Intelligence, companies can achieve better performance in areas such as: acquiring new business, retaining existing businesses, and improving the company's sales force (Colakoglu, 2011). With regard to the acquisition of new businesses, Porter (1998) defines that a diversified company (in number of business units) presents two levels of strategy: a competitive one, of the business units, and another of the entire business group. Thus, a corporation needs to introduce in its new business unit some important competitive advantage, and the new unit must offer absorption potential for the corporation. Intelligence and analysis are woven together as a complex problem solving system that begins with data collection and its dissection, evaluation and interpretation in order to calculate threats, risks, standards and opportunities.

Competitive Intelligence, when organized within the company, plays an important role in corporate strategy,

having a positive impact on the results that relate to the identification of new business opportunities, the sharing of ideas, the ability to anticipate unexpected events, the development of the skill Management analysis and, finally, the interaction of knowledge and ideas (Gilad, 1989). Competitive Intelligence professionals within organizations are learning to acquire and use this intelligence through listening, writing, and discussion activities. They need to present specific skills to make the acquisition and use worthwhile in the answers they will find to the company's questions. These skills are intrinsically related to the knowledge, skills and abilities of working with a sustainable intelligence cycle (Fleisher, 2004). When these skills are found in professionals, the process of improving and evaluating the competitive intelligence they develop within organizations becomes better and more visible. The application of standards of excellence, the feasibility of systematic studies and a consistent support of business leaders also help in this evaluation process and in the achievement of the objectives initially proposed by the companies, providing, in the short or long term, positive results (Colakoglu, 2011).

While Competitive Intelligence issues are in the pipeline, its main goal is to gather experiences, and its future must be based on learning to find solutions to new problems. Its constant development will be vital to its own survival, as well as the correct acquisition and use of information.

2.3 Scientific Methodology

The study approach was qualitative exploratory, and the data were collected with 10 professionals that operate with the São Paulo Stock Exchange. The participants in the survey were selected for their work in a context marked by uncertainty and high risk transactions, which are characterized in the financial market by legal exchanges that involve risk management, from poor cash flow management to returns below the expected and also high amounts of money. Risks are classified, according to Gitman (2010), in market risks (fluctuations in prices and quotations), credit risks (lender does not receive what is owed to them), liquidity risks (companies cannot afford their commitments) and operational risks (those resulting from equipment failure, low employee qualification, obsolete systems).

The data collection technique used was Goodman's snowball sampling (1961), and then the initial recruitment was carried out by the researchers themselves through in-depth knowledge and traffic in a community of agents that operate with the Stock Exchange of São Paulo in the Northeastern region of Rio Grande do Sul.



These initial participants (seeds) indicated new participants with the necessary profile for the research (children or fruits) which, in turn, indicated new participants until the saturation point, exhaustion of the accessible participants, was reached. This is because an initial probabilistic sample is impossible or impractical and, therefore, the seeds help the researcher to initiate their contacts and to perceive the group to be researched, in the desired scope. This particular type of sampling is useful for studying sensitive, private issues such as those involving financial transactions and therefore requiring the knowledge of the people belonging to the group or of individuals recognized by them to locate informants for the study (Vinuto, 2014). The data, collected from May 1 to May 20, 2014, formed a bank of 10 respondents, all males, aged between 28 and 55 years, who act directly with shares in the São Paulo Stock Exchange.

The data were analyzed from categories established a priori according to the method of content analysis (Bardin, 2009; Flick, 2009). The QSR NVIVO 10® software was used to organize responses from data hierarchy logic on a set of 'nodes' configured by the analysis categories. Thus, each node represents a category that originates in the literature. In the case of the present research, the categories used to define the questions and for the subsequent analysis were: sources (Calof et Wright, 2008), information analysis (Fachinelli et Alberdi, 2014), ethics in the search for information, risk, uncertainty and error (Culnan, 1983; Daft et al., 1988) and market signals (Choo, 2002), according to Figure 1. For the validation of the questionnaire used, which is described in Figure 1, it was first applied to a specialist in financial markets in risk markets to adjust questions related to the terminology commonly used in this market.

3. RESULTS AND ANALYSES

The results were analyzed with the support of the QSR Nvivo 10® software, because as an analysis program, it is useful to create databases structured hierarchically from large volumes of content (Sampieri *et al.*, 2013). Thus, the content, when associated to the categories, reveals the relations of the answers with each node, which also indicates the predominance of one category in relation to the others. In the case of this study, the category related to all responses (10) was uncertainty, risk and error, while the analysis was the least related (8). Ethics, signs and sources were related to 9 of the 10 responses, as can be seen in Figure 2.

Once the responses to the categories were related, the content of the responses was analyzed, guided by the use and acquisition dimensions in each category. That is, we sought to identify the use and acquisition dimensions in the set of answers associated with sources, signals, risk, uncertainty and error, and ethics and analysis.

In the acquisition dimension, the answers aligned with the categories sources and signals, as can be seen in some excerpts of the answers.

"The sources of information I search for are public market data, information made available by publicly traded companies, reports from banks/brokerages, information provided by Bloomberg, in addition to the context of the moment (perception of high or low risk, economic and sector situation, external environment and possible unfolding), etc. Additionally, I try to analyze if the risk premium

Categories defined in the literature	Theoretical basis	questions elaborated from the literature
Sources	Calof et Wright, 2008	How many sources do you constantly analyze?
		Which sources are constantly analyzed?
		How often do you track your trusted data sources?
		How often do you search for new data sources?
Information Analysis	Fachinelli et Alber- di, 2014	Excess information facilitates or hinders decision-making?
		How you filter which information will be useful to make a decision?
Ethics	Beltramini, 1986	Within a risk market, what are the ethical limits for obtaining information?
Risk, Uncertainty and Error	Culnan, 1983; Daft et al., 1988	When do you realize that the decision action taken has occurred in the wrong way? Is there any chance of correction? What changes are made to correct the error that was made?
Market Signals	Choo, 2002	When identifying a signal, how do you analyze its importance in the decision making??

Figure 1. Categories defined from the literature

Source: The authors.



Electronic Journal of Management & System Volume 12, Number 3, 2017, pp. 275-285

DOI: 10.20985/1980-5160.2017.v12n3.819

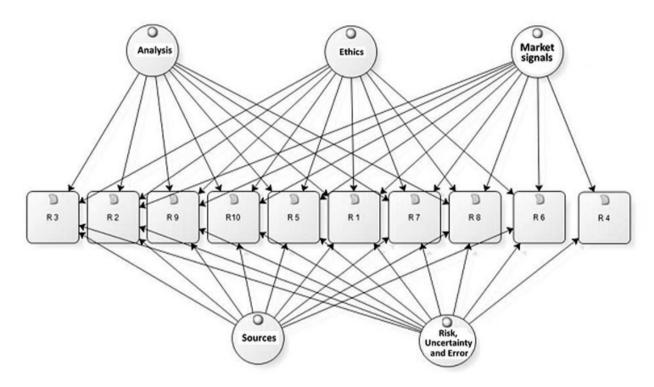


Figure 2. Relationship between Fonts and Nodes Source: Elaborated from QSR Nvivo 10°.

compensates the positioning in the market". R8

"We constantly use websites linked to the national and international financial market, economic sites, corporate websites, information transferred directly from the broker's analysis area and we should mainly be alert to any movement of the government and indicators relating to the Brazilian economy (GDP, interest, unemployment, etc.) as information sources. But I can say that in periods of balance sheets, it's time to do a more critical analysis, since we will have a picture of the company and whether it is or not bringing results." R10

When the sources of information present market signals, it is possible to perceive that the respondents associate the visibility of the signals to the execution of the actions.

"...When it is **clear that it is a reliable signal**, the importance is total; besides the analysis in terms of what the signal will impact on the company to which it relates". R1 (Our griffin)

"After identifying a signal that can or is already moving the market, we search for more information that will be specific about this subject, we talk in a group to understand this new factor and the veracity of the information. I analyze the stock chart to see if there is already a greater flow of buyers or sellers, the impact that this news may already be causing and, within the diversification of investments, I risk a percentage over the value in the portfolio in the purchase or sale of these shares. If the signal is simply graphic, that is, if the stock starts to rise and the buying force is very strong, I also make an immediate purchase decision (following certain graphical points) and, if the decision was wrong, I use the idea of going out of the operation, assuming little loss". R10

In the use dimension, the answers are aligned with the category sources, with the category analysis and with the category error, uncertainty and risk. In the source category, alignment is identified in the sense of credibility of the information, as can be seen in the excerpt below.

"In the financial market, if we go after all the opinions, information and rumors, it will only

get in the way, because we will not be able to make any decisions and we may run the risk of buying and selling on impulse. The ideal is to have some sources of greater confidence and to base ourselves on these sources, believing in the credibility of the origin." R10

The analysis category in the use dimension of information is associated with aspects related to the volume of information and the capacity of the respondents to process it.

"Too much information facilitates decision making as it allows those individuals who are able to process a greater volume of information, and who already know with certain affinity the herd behavior, can predict such movements in subtleties." R7

"Too much information hinders decision making. Much information generates more noise, so I don't take into account some sources of information, such as TV, newspaper, mass media in general, because, usually, when the facts are published in these vehicles, prices already reflect it, and then it is too late to buy or sell." R8

The category *error*, *risk* and *uncertainty* appears in line with the dimension of information use in the perspective of the possibility of correcting directions.

"The stock market, by definition, is a risk market, so the variable loss is also an element of natural coexistence. In this line, the recommendation is, therefore, not to concentrate on one investment portfolio; diversification into separate roles is required to minimize the impact of risk, but risk also means opportunity, and you must take losses as long as they are within a calculated universe and can be recomposed." R4 (Our Griffin)

"There is a form of correction when I realize that the decision was made wrong. In the investment market, when we see that it is wrong and we do not have a positive outlook, we must stop the operation (accept leaving at a loss, after all, the first is always the smallest). We only do average price when something shows us that the situation is momentary and that it is worth investing more resources in this company. Usually, this idea is used, but it is not always followed because of the "psychological" issue, and we depend on the client also accepting the situation". R10

Aspects related to ethics appear aligned to both the acquisition and use of information. On ethics, respondents reveal that, in both the acquisition and use of information, the boundaries are defined by legislation. However, personal values influence the ethical parameters of the respondents.

"We know that there are rules and regulations within a risk market, and the CVM considers it a crime when someone gets caught dealing with inside information. These are the rules, but I believe that, yes, there are many people who benefit from this information and use it, and generally they are only influential, business executives who end up having, and even leaking, that information. My opinion: there are and, unfortunately, there will always be people who will have privileged information; the ethical issues here are to circumvent the idea of everyone having equal access to information and making decisions from that moment on, that is, whoever is "unethical" will have advantage knowing something relevant before. I understand that we cannot come to search for information at any price, to the point that we hurt or injure others." R10

"In relation to ethics, we can emphasize the values of each one. When a person or company is suitable, ethical and professional, he seeks information by lawful and legal means. We know that, in monopolized and risky markets, personal values only figure in the company's mission and vision frameworks. I believe that the professional ethical limit goes to the point where you no longer have the capacity to do what you really want with your own resources and in a legal way." R3

Finally, the use and acquisition of the information are aligned to the decision making, thus completing the process of Competitive Intelligence.

"I consider Competitive Intelligence as the act of collecting information in various media, then making the selection of the information considered appropriate and coherent, in order to perform a deeper analysis and be able to make a decision, trying to achieve the objectives, mitigating the risks. In my day to day, Competitive Intelligence is basically applied in the decision to buy or sell a stock, in the choice of assets that will be placed in the clients' investment portfolios, depending on the profile that each investor fits in. We need to be updated on a daily basis on the situation



of each company, global market in general. For example, if today there was positive or negative news about a company listed on the São Paulo Stock Exchange or had an atypical movement in its values, we sought to gather as much information as possible, to make a brief analysis and make the decision considered adequate, trying to "predict" the movement of this company." R10

Thus, starting from the categorization of responses and the analysis of the dimensions acquisition and use, a conceptual map was developed (Figure 3), which provides an analysis of the main points, portrayed in the answers, according to the categories and dimensions.

In relation to the acquisition of information, the sources of information highlighted by the respondents are characterized by the diversity of formats and origin. In this respect, Drucker (2005) discusses the importance of using different sources of information to make the organization more competitive vis-à-vis its competitors. Respondents cited as sources of information the monitoring of newspapers and magazines regarding the subject and its variations. In relation to specific companies in the market analyzed, the sources mentioned were the websites of banks and companies, blogs and even the monitoring of financial statements of companies operating on the São Paulo Stock Exchange. In the macro environment, the respondents reported the verification of economic and financial indicators, as well as political research. There is also an exchange of ideas between the colleagues in the company's stock market segment and external colleagues to compare the perception of risk in the same situation.

For Kahaner (1996), intelligence does not exist if the information obtained is not filtered, analyzed and processed, since the filters are part of the basis of an organization's Competitive Intelligence. From a personal perspective, the information filters used by respondents include personal perception in terms of the business and the market, the credibility of the issuer of information, individual values and luck. When questioned about the filters used in the specific relationship between the technical application of the information and the performance in the risk market, the respondents highlighted the market projections to be able to establish comparisons from various sources of information.

The observation of market signals can be an alternative in the search for information in a risk market and, also, an option to anticipate events. Calof *et* Wright (2008) define that Competitive Intelligence, besides analyzing the information coming from the macro and microenvironments, is responsible for alerting the decision makers about the previous signals that the market emits and, thus, help in the prevention of movements that come to occur.

In the study, the respondents reported the verification of the signals in a reactive manner, that is, when the market indicates other indicators that strengthen this signal. Thus, it is perceived that respondents needed information and even concrete actions from other actors to make a more secure decision. Only one respondent reported that he analyzes signals that are not yet visible to the market as long as it indicates something sustainable, positively or negatively.

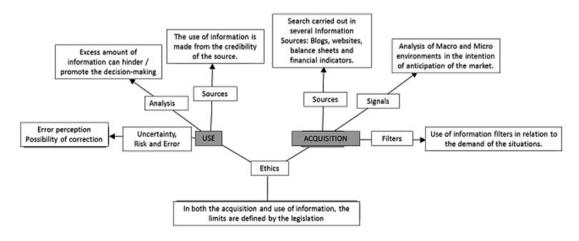


Figure 3. Conceptual map of use and acquisition in risk markets Source: The authors.



Regarding the use of information, the benefits of using Competitive Intelligence, defined by Colakoglu (2011), are related to the company's business: new ones, maintenance of the current ones and their improvements. These benefits are related to the use, in the decision making, of information within the organization. When asked if excessive information disrupts or facilitates decision—making in the stock market, half of respondents reported that too much information hinders decision making.

Within this uncertain market, where the perception is, according to Duncan (1972), a key role, respondents reported that, at times, the work of operators and analysts took place in the relationship between trial and error. Respondents pointed out that they assume the mistakes of operations and aim to reduce losses by working with the adoption of new strategies and, when the possibilities of gain are exhausted, they enclose the operation.

Regarding the error, it is possible to perceive that the operators consider the financial loss as a natural element of the operation, precisely because it is a risk market. Another important point is the application of investments in parallel alternatives to reduce losses. Reapplication in other stocks that may demonstrate better market opportunities may be a parallel alternative for minimizing losses.

Regarding ethics in relations, half of the respondents stated that the limits are delimited by the legislation. Another point that stood out in the answers was the lack of limits regarding ethics. Access to inside information was cited as an advantage in the stock market. Only one respondent reported the perception of a well-defined market ethic. It was common among respondents to influence the personal and individual values of market players.

In the questioning about the importance, acquisition and use of information, the respondents reported that the relationship between use and acquisition of information in the practices of Competitive Intelligence is extremely important. This result converges with Calof *et* Wright (2008), when the authors affirm that the acquisition and use of information reduces uncertainties in decision making.

4. CONCLUSIONS

The perspectives of use and acquisition of information in the practices of Competitive Intelligence involve collection, analysis and dissemination of information. These steps can be fundamental in risk markets, since care in each one of them can be an important tool in decision making. For this reason, this article proposed as an ob-

jective to analyze the practices of Competitive Intelligence performed by decision makers in risk markets.

Based on a qualitative approach and data collection with semi-structured interviews, the study revealed that the acquisition and use of information, although not referenced as frequent among respondents, play a fundamental role in decision making. Calof et Wright (2008) believe that in an environment of perceived uncertainty, such as the São Paulo Stock Exchange market, it is necessary to increase the importance given to the process of acquiring and using information in decision making. Consequently, this can result in positive returns for its investors as they will have risks lowered. Yap et al. (2011) argue that Competitive Intelligence, through monitoring the competitive environment and analyzing and interpreting information, facilitates decision-making and its consequent actions. They also affirm that greater access to quality information results in the optimization of results and that the greater the risk, the greater the search and use of information.

This work aimed to analyze the dimensions of acquisition and use of information in the practices of Competitive Intelligence in the market characterized by risk. The results indicate that, in the dimension of the acquisition of information, the sources play an important role, as well as the interpretation of market signals. The credibility of these sources in the market of uncertainty was related to the use of the information, that is, if the source is reliable, the probability of using the information is greater. Still in the use dimension, the analysis of the volume of information divided the opinion of the respondents: one part believes that the volume facilitates decision making, while another believes that the excess of information makes decision making more difficult. This aspect reveals the importance of the analysis, since the capacity of interpretation of larger volumes of information is perceived by the respondents as a condition for their use in the decision making process. On the other hand, the error in the decision making was considered by the respondents as a natural consequence of the uncertainty of the market. Ethical issues were mentioned in the acquisition of information and also in the use, and, in this respect, respondents believe that ethics depends on personal values, but is validated by legislation.

The study highlights the importance of information in a risk market, in the dimensions of the acquisition and use of information in the practices of Competitive Intelligence, which can be a differential in the stock market, in which the interpretation of information can create competitive advantage. As a perspective of future studies, the evaluation of the use and acquisition of information in other markets identified as risky, which is not only res-



tricted to the market of the São Paulo Stock Exchange, can be considered, as well as the application of this research with respondents who operate in the Stock Exchange market outside Brazil, where the economic scenarios may be different.

REFERENCES

Bardin, L. (2009), Análise de Conteúdo. Edições 70, Lisboa, Portugal.

Calof, J. L. et Wright, S. (2008), "Competitive Intelligence: a practitioner, academic and inter-disciplinary perspective", European Journal of Marketing, Vol. 42 No.7/8, pp. 717-730.

Choo, C. W. (2002), Information Management for The Intelligent Organization: The Art of Scanning the Environment, 3rd ed. Medford, Information Today, Inc., NJ.

Colakoglu, T. (2011), "The Problematic of Competitive Intelligence: How to evaluate & develop competitive intelligence?", Procedia Social and Behavioral Sciences, Vol. 24, pp. 1615–1623.

Cruz, J. C. (2016). Organizational Complexity: Examination of the Strategic Intelligence Model and Management Control Systems for Dynamic Decision Making. Northcentral University.

Culnan, M. J. (1983), "Environmental Scanning: the effects of source task complexity and accessibility on information gathering behavior", Decision Sciences, Vol. 14 No. 2, pp. 194-206.

Cyter, R. M. et March, J. G. (1963), A Behavioral Theory of The Firm. Prentice Hall, Englewood and Cliffs, NJ.

Daft, R. L., Sorminen, J., Parks, D. (1988), "Chief Executive Scanning Environmental Characteristics and Company Performance: an empirical study", Strategic Management Journal, Vol. 9 No. 2, pp. 123-139.

Drucker, P. F. (2005), Inovação e Espírito Empreendedor (entrerpreneurship): prática e princípios, Pioneira Thomson Learning, São Paulo, SP.

Duncan, R. (1972), "Characteristics of Organizational Environments and Perceived Environmental Uncertainty", Administrative Science Quarterl, Vol. 17, pp. 313-327.

Fachinelli, A. C., Giacomello, C. P., Rech, J., Bertolini, A. L. (2013), ②Inteligência Estratégica: uma escala para compreensão do construto②. REBRAE ② Revista Brasileira de Estratégia, Vol. 6 No. 2, pp. 179-191.

Fachinelli, A.C. et Alberdi, A.M. (2014), ②Integridade Estrutural da Inteligência Estratégica: uma avaliação em uma corporação cooperativa②, BBR — Brazilian Business Review, Vol. 11, No. 3, pp. 81-105.

Fleisher, C. S. (2004), "Competitive Intelligence Education: competencies, sources, and trends", Information Management Journal -Prairie Village, Vol. 28 No. 2, pp. 56-63.

Flick, U. (2009). Introdução à pesquisa qualitativa, 3° ed., Artmed, São Paulo, SP.

Gilad, B. (1989), "The Role of Organized Competitive Intelligence in Corporate Strategy", Columbia Journal of World Business, Vol. 24 No. 4, pp. 29-35.

Gitman, L. (2010). Princípios da Administração Financeira, 12ª ed, Perason Education, São Paulo, SP.

Goodman, L. A. (1961), "Snowball Sampling", Annals of Mathematical Statistics, 32:148-170.

Hambrick, D. (1982), "Scanning Organizational Strategy", Strategic Environmental and Management Journal, Vol. 3 No. 2, pp. 159-174.

Kahaner, L. (1996), Competitive Intelligence: how to gather, analyze and use information to move your business to the top, Touchstone, New York, NY.

Keynes, J. M. (1985), Teoria geral do emprego, do juro e da moeda, Nova Cultural, São Paulo, SP.

Kucera, S. et Kantnerova, L. (2014), "Investment in today's turbulent markets", WSEAS Transactions on Business and Economics, Vol. 11 No. 1, pp. 1-11.

Larkey, P. D. et Sproull, L. S. (1984), "Advances in Information Processing in Organizations", JAI Press, pp. 1-8.

Milliken, F. J. (1987), "Three types of perceived uncertainty about the environment: state, effect, and response uncertainty", Academy of Management Review, Vol.12, pp. 133–143.

Muhammad S. et al. (2017) "Strategic management model with lens of knowledge management and competitive intelligence: A review approach", VINE Journal of Information and Knowledge Management Systems, Vol. 47 Issue: 1, pp.55-93, doi: 10.1108/VJIKMS-06-2016-0035

Porter, M. (1998), ②A Vantagem Competitiva das Nações ③ em Estratégia: a busca da Vantagem Competitiva, 6 ed., Campus, Rio de Janeiro.

Prescott, J. et Miller, S. H. (2002), Inteligência Competitiva na prática: técnicas e práticas bem-sucedidas para conquistar mercados, Campus, Rio de Janeiro, RJ.

Sampieri, R. H., Collado, C. F., Lucio, M. P. B. (2013), Metodologia da Pesquisa. 5. ed., Mc Graw Hill, New York, N.Y.

Schwaninger, M. (2001), "Intelligent Organizations: An Integrative Framework", Systems Research and Behavioral Science, Vol. 18, pp. 137-158.

Electronic Journal of Management & System Volume 12, Number 1, 2017, pp.275-285

DOI: 10.20985/1980-5160.2017.v12n3.819



SCIP. Strategic and Competitive Intelligence Professionals, disponível em: http://www.scip.org. Acesso em 12 abr. 2014.

Simon, H. A. (1976), "Administration Behaviour", Macmillan, New York.

Stewart, T. A. (1998), Capital Intelectual. 10 ed., Campus, Rio de Janeiro, RJ.

Tarapanoff, K. (2001), Inteligência Organizacional e Competitiva, Editora Universidade de Brasília, Brasília, DF.

Vedder R. G. et Guynes, C. S. (2002), "Cios' Perspectives on Competitive Intelligence", Information Systems Management, Vol. 19 No. 4, pp 49-55.

Viitanen, M. et Pirttimaki, V. (2006), "Business Intelligence for Strategic Management in A Technology-Oriented Company", International Journal of Technology Intelligence and Planning, Vol. 2 No. 4, pp. 329-343.

Vinuto, J. (2014). Amostragem em bola de neve na pesquisa qualitativa, Temáticas, Campinas, 22, (44): 203-220, ago/dez.

Wang, X. et Wang W. (2014), "Predicting Earnings in A Poor Information Environment", Journal of Contemporary Accounting & Economics, Vol. 10 No. 1, pp. 46-58.

Yap, C. S., Rashid, M. Z. A. et Sapuan, D. A. (2011), "Perceived Environmental Uncertainty and Competitive Intelligence Practices", VINE: The journal of information and knowledge management systems, Vol. 43 No. 4, pp. 462-481.

Zangoueinezhad A. et Moshabaki A. (2009), "The Role of Structural Capital on Competitive Intelligence", Industrial Management & Data System, Vol. 109 No. 2, pp. 262-280.