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COMPETITIVE INTELLIGENCE IN THE KNOWLEDGE-BASED ORGANISATION

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Abstract

Knowledge-based organizations (KBO) are usually considered to be those whose product or service is knowledge-intensive. The characteristics of a KBO, however, go beyond product to include process, purpose and perspective. Process refers to an organization's knowledge based activities and processes. Purpose refers to its mission and strategy. Perspective refers to the worldview and culture that influence and constrain an organization's decisions and actions.

In order for organizations to remain globally competitive, new tools for decision-making are required. Of these tools, it is internationally recognized that Competitive Intelligence (CI) is fast becoming a norm rather than the exception to assist management with decision-making in the modern knowledge-based organization.

The purpose of competitive intelligence in the organization is to support and lead to management decisions and action. There exists a clear and concise link between competitiveness and the process of innovation. Innovation depends on a number of factors for success. Of these factors, information and intelligence are believed to be primary drivers.

The main purpose of this paper is to explain the need for competitive intelligence in KBO and to present a model for the implementation of competitive intelligence in the KBO and the involvement of the information professional in the competitive intelligence process.

1. INTRODUCTION

In order for organisations to remain globally competitive, new tools for decision-making are required. Of these tools, it is internationally recognised that Competitive Intelligence (CI) is fast becoming a norm rather than the exception to assist management with decision-making in the modern knowledge-based organisation.

The purpose of competitive intelligence in the organisation is to support and lead to management decisions and action. Kahaner argues that the prosperity (and competitiveness) of organisations depends on their capacity to innovate. There exists a clear and concise link between competitiveness and the process of innovation. Innovation depends on a number of factors for success. Of these factors, information and intelligence are believed to be primary drivers.

Training in competitive intelligence did not form part of the formal education of the majority of current enterprise leaders. If one recognises that competitive intelligence plays an important role in the capability of industries and countries to become or remain competitive, the lack of training in competitive intelligence may be one of the factors contributing to the poor performance.

Intelligence is a crucial element in the strategic planning, being the mechanism through which a firm's objectives can be achieved in a short time regardless of how fast the external conditions change.

Broadly, competitive intelligence should be seen both as a product made by a team and as a systematic internal process within an organization appeared as a result of the need to meet an informational requirement that triggers a process of information collection, processing, evaluation and analysis of data and information provided by various sources through which information becomes carrying of value added in order to provide

a picture of the intentions, capabilities or activities of a competitor and of grounding the decisions of driving factors.

Competitive intelligence is a new cultural revolution as competitive information is the soul of the competitive strategy. If this information is used correctly, it is a source of strength for companies seeking sustainable competitive advantage.

Competitive intelligence emerged about 40 years ago in the U.S., where it became a fashion in American companies hiring retired officers and former U.S. intelligence officers because they knew best how to collect and process information, and thus make possible the development of early warning systems on the actions of competitors. Even if it comes from the military area, intelligence is not the same as espionage, not even with the economic one, as it is governed by codes of professional conduct and therefore the entire process of collecting and processing data is placed in the ethical and legal area.

This concept has arrived in Europe about 20 years ago, today being present in over 80% of European firms. In recent years there have appeared different software applications that support this process.

Although the need for competitive intelligence in organisations is growing and decision makers are starting to recognise the role and importance of competitive intelligence, very few publications indicate how this function should be installed and positioned in the company in order to benefit decision-making and ultimately support the innovation process. This paper will try to shed some light by suggesting an implementation model for competitive intelligence in a knowledge-based organisation. Although organisations use different approaches for the implementation of competitive intelligence, the model shown in this paper has proven to be successful in the implementation of competitive intelligence in knowledge-

based organisations. The model is based on practical experience in organisations and not only theory.

2. COMPETITIVE INTELLIGENCE STRATEGY - AS A MODERN METHOD OF OBTAINING COMPETITIVE ADVANTAGE

Information is one of the underlying elements to obtain and maintain competitive advantage. In order to choose the best sources of information to gain competitive advantage, it must be taken into account what really matters. The pillars of success of an organization are employees and information.

For the information to be competitive, it must be:

- The right information;
- At the right time;
- In the right place.

To determine whether an information is correct or not, it must take into account: the content (type, topic, language), trust in the source, the level of expertise of the provider, specializing source, depth and accuracy, exclusivity and the way of providing (functional, archiving, search options).

For example, information obtained from the free web sites often are unstructured and redundant or require a difficult multilingual search. Instead, pay sites are reliable for many professionals, contains several analyzes, statistics, reports, information is exclusive, valuable, access is quick and easy, with no commercials, but often such sites are limited as fields.

For an information to be "on time" it must occur either before the onset of a crisis (before it's too late for a decision (preventive)) or as soon as an opportunity arises (to sit in the "head" competition (offense)), precisely "now" at the right time.

2.1. THE DEVELOPMENT OF INTELLIGENCE CAPABILITIES IN A COMPANY

The development of intelligence capabilities in a company implies the existence of some special skills and capabilities on:

a) Information management

6 skills regarding information management	
1	Perception and understanding of environmental information based on predetermined mental filters in terms of alignment with company strategy
2	Development and use of a system for information sources (internal and external primary and secondary)
3	Timely sharing and with integrity of information of interest to colleagues and decision makers
4	Organizing information into visual mind maps and taxonomies
5	Generate actionable intelligence - in terms of consequences and recommendations for decision
6	Intelligence heritage protection and recognition of collection of information actions

b) Strategic thinking

5 skills of strategic thinking	
1	Three steps thinking in present actions: action, counter-action, counter-counter action
2	Using war games and scenario in planning and operations
3	Application of principles of war art/peace art type in business behavior
4	Creative integration of relevant concepts to current practice (for ex.: early warning, risk management and opportunities operations) to proactive, agile and persuasive conduct
5	Identify patterns, models and trends from parts of disparate information

c) Skills of empathic action

4 skills of empathic action	
1	Knowledge and understanding in real-time of own personality system and of the other (values, way of energetic

	reaction and peculiarities of individual expression)
2	Accurate prediction of the behavior and of the behavioral strategies of colleagues and business partners
3	Engaging dialogues with colleagues and business partners, respecting their mental and emotional set (verbal and non-verbal techniques)
4	Creating and using their own affective states as levers for changing the moods of the listener

In the context of globalization and the knowledge-based society, it is difficult for firms to cope with rapid change in the conditions under which new competitors appear overnight and gain different market segments. In this context if the competitive information is not collected and analyzed properly, this can cause "loss" of the company. It thus becomes essential to understand the distinction between data, information and intelligence (first show what happens in the market, while intelligence is much more than an information showing in what manner and to what extent a competitor actions affect us).

Information about competitors must have a single objective, namely the development of successful strategies, ie those necessary to carry out the transfer of benefits from individual competitors at their own company.

Competitive intelligence in business requires research, analysis and transmission of information to decision makers in the tactical and strategic conduct. For a more productive action, who coordinates the operations (Chief Information Officer) must be realized that the result of an algorithm intelligence includes: requirements analysis, definition of knowledge requirements of the client, coordination of information gathering, assessment and validation of source and information, analytical integration of information, dissemination of the intelligence product.

If a company fails to rigorously analyze, the main competitors will not be able to achieve the implementation of a robust competitive strategie.

It is necessary so for competitors, suppliers, partners, and so on, to create databases and various other items of information, such as early warning, competitor profiles, market shares summaries, strategic scenarios, risk maps, opportunities bulletins, etc.

a) collecting information. Reading the press and other ad hoc information practices are still used documentary sources of Romanian managers, and they are not enough to understand what competitors always do. Staff of intelligence is the one who needs to answer these information needs by creating a system of internal and external sources of information.

Collecting information can be done both using the Internet, online databases, mass media, literature, etc. (secondary sources of information) and using internal and external human resources that are primary sources of information and should be used first. This is a process that can involve the entire staff of the company, or at least all those who have direct contact with the business environment, such as the sales department, marketing department, public relations department, etc..

The activity of gathering information about the external environment of the company is conducted continuously, so that changes in the competitive environment will not take by surprise the company, its customers or partners.

These internal and external information should be used to create an intelligence portal that will integrate and categorize that information, thus providing employees intelligence materials developed by a specialized team and encouraging them to their turn to put information on this portal.

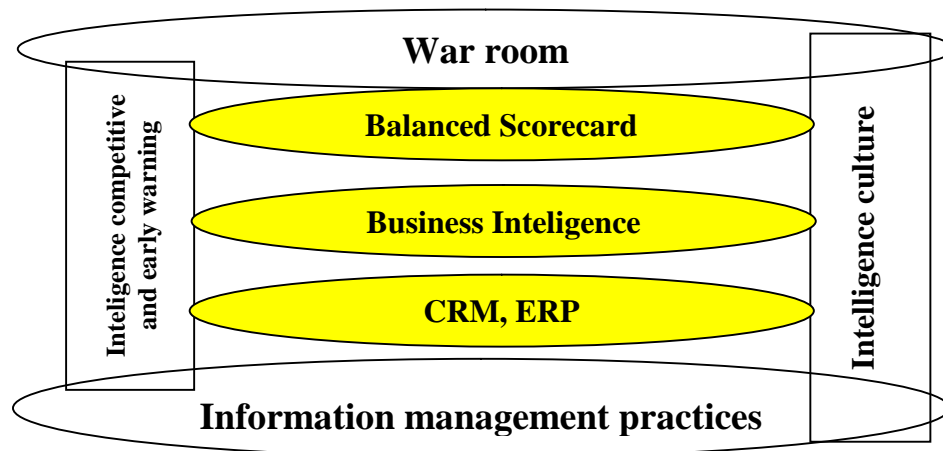


Figure 1 - War room

b) staff for intelligence is the brain of competitive intelligence system, and may be included in one of the departments of planning - development or marketing but this is not advisable because it may limit the ability to provide strategic intelligence. CI department's mission is to determine the risks and strategic opportunities, both in relation to the actions of competitors and other market players, and to develop a benchmarking best practices, services and products of the competition. If the market changes require, the intelligence staff must edit even weekly newsletters about what competitors are doing and how these changes affect their business. The manager of a company that has built such a department will be more informed about what is happening in the business and be able to respond faster to movements of the market and know the major players in the market.

c) war room is one of the main tools used by people at CI, and is basically a room full of charts, tables and all sorts of other information entered in the company.

War Room is the place for meetings with "cards on the table" and the participants can't forget for example the corporate objectives as they are written on

a wall or to inquire how is the situation of production chapter because they are on another wall, etc. This place can be checked and compared various information, and the result of meetings in a war-room is the strategy.

2.2 THE ADVANTAGES OF THE EXISTANCE OF AN COMPETITIVE INTELLIGENCE DEPARTMENT WITHIN A KNOWLEDGE BASED ORGANIZATION

Advantages of the existence of a competitive intelligence department within a company can be:

- Such firms cannot be taken lightly by surprise because having access to the right tools, can implement a principle in the attention of the intelligence specialists according to which "the best surprise is no surprise". Therefore, companies that have such a system are not mere spectators on the market but are aware of their ability to be market players, which sometimes has the ability to make rules, sometimes can change them, and in the worst of cases, has the ability to understand.

- Increasing the company's

reputation, which depends, among others, on the ability to propose and implement new business models, and this is not possible without understanding the business environment, which in turn requires knowledge of competitors and understand how their actions will affect the company, which is impossible if the company does not have competitive intelligence.

- If information from the competitive intelligence system is used properly to take on their base the best decisions, this may lead to increased profits. This does not mean that after the establishment of a department of CI, the company will record a "boom" in the "Profit". It requires information to be taken seriously, to be created a culture in the organization so that after collecting information they are used, because if you collect them does not mean that the company and uses them. Mechanisms should be created to induce performance because holding information allows achieves performance. When the loop is closed, and the information was actually used it can be observed some effectiveness of the company. The effects may occur after a period of three months up to a year or more.

Data show that only 5% of Romanian firms have a staff of CI, the rest being integrated with other departments such as Sales, Marketing, Human Resources, etc.

After two decades in which, in the time of the Cold War espionage of any kind has been elevated to an art, there is a tendency to not look very kindly Competitive Intelligence. It is a mentality problem that should be overcome.

In Romania this concept is still used shallow, in the way that we read newspapers, internet, etc. Every business should have a staff for this task, because everywhere is needed communications systems from the top down and bottom up, but it has to be systematic and not just how informal "let's make a meeting".

In any market would act the company, always will be part of the competition, will be challenged and competitors will try to win its market share. It will take time to react and develop a strategic response, in which case it is recommended a sustainable approach and the implementation of a competitive intelligence system.

We can thus identify five specific phases that used continuously make up the circle of the competitive intelligence.

1. Analysis of required information. The first step to be taken is to establish the necessary data for analyzing competition. Should be set the markets to be analyzed, competitors we wish to gather information about, on which kind of products we focus, etc.

2. Data collection can be done in several ways, even without espionage. The first concerns the use of so called "primary data collection", which involve collecting information directly by staff, for example through interviews with experts or by using questionnaires for customers. The secondary data are represented for example by studies conducted by specialized companies or free analysis of various publications or on the internet.



Figure 2 - *Competitive intelligence circle*

3. Documentation – aiming the gathering and combining of data from previous phase, in such a way that it can be made available to decision makers on long term and can later be analyzed in an

effective way.

4. Analysis and data processing to identify certain patterns, structures.

5. Communication - supposes putting the analysis results in a readily understandable to beneficiaries. Can be made periodic reports, and ad hoc briefings when the results are significant and require quick decisions.

2.3. THE IMPORTANCE OF COMPETITIVE INTELLIGENCE SYSTEM SOFTWARE (CI)

To reveal one of the advantages of using this software we can take the example of a company in the food industry who two years ago took over another firm in the same industry. CI staff had the task of evaluating the transaction price and the prospects for growth in the customer base, and from the analysis resulted that the owners asking price is not correct because in recent years the company had poor performance and the demand for those products decreased. After presenting the analysis results, the company's price dropped from 8 million to 5.8 million EUR, the purchasing firm achieving a added value of EUR 2.2 million as a result of using the software.

Most times it is difficult to estimate in financial terms what is the impact of Competitive Intelligence process on firm performance. There are still some very simple and practical methods for assessing the significance of CI projects undertaken by a firm of which the most important are:

based on direct financial impact that it has on the company CI implementation; for example by means of this system it can fairly estimate the cost of certain products of competitors, and such information may be used by the sales force to negotiate with potential customers. Therefore it can be said with certainty that some success (including profit) is due to CI. There are cases in which the CI leads to future benefits, and not necessarily materialize in future

benefits. For example for the following year may predict market shares of the leading competitors, and according to them can adapt marketing mix of the company or it can adjust its product portfolio, the impact of CI analysis in this case is not directly or immediately.

There are cases where CI tests are not attributable to direct or immediate financial values. It is the case of intelligence staff participation in fairs and conferences to assess the actions of competitors, and real time data transmission to PR department so that it can respond immediately and appropriately if for example will be asked how the company will be affected by the statements or product launches of the competitors.

This software is proving to be very practical because all the information is collected in one place, in a standardized structure, adapted to the needs of each user so that the collection of data and information from various sources and formats becomes much easier and faster, precious time being saved in this way. Meanwhile, the CI software makes sharing and dissemination of information relevant to the entire company, helping to improve decision-making and then to obtain and maintain a sustainable competitive advantage in a market quite aggressively.

3. ANALYTICAL MODEL: SUPPLY CHAIN ANALYSIS

One of the most overlooked analytical models has to do with the Supply Chain. A great deal of knowledge can be gained by understanding the dynamics behind a supply chain – manufacturer, distributor, retailer, and customer.

One good place to start the analysis is with a map, showing each player in the chain and depicting the basic flow:

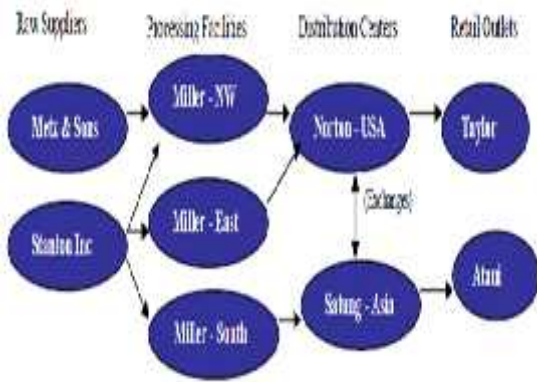


Figure 3 - Supply chain

The purpose of value chain analysis is to understand the complexity of the entire process and how can we produce more value for the customer at the end of the process. Many Analysts try to streamline and extract more performance within the value chain, such as faster cycle times. However, it is very important to understand how information is shared within the value chain. Also, the nature of the products and services will impact the performance within the value chain.

A basic model for pulling this together comes from Michael Porter’s book: *Competitive Advantage: Creating and Sustaining Superior Performance*. Porter concludes that the profit margins for a business are a function of the Sales Revenues less all value-chain activity costs. Porter’s model divides value chain activities between primary (directly involved in making and moving the products) and support (functional type activities such as product quality, order processing, technology, finance, etc.).

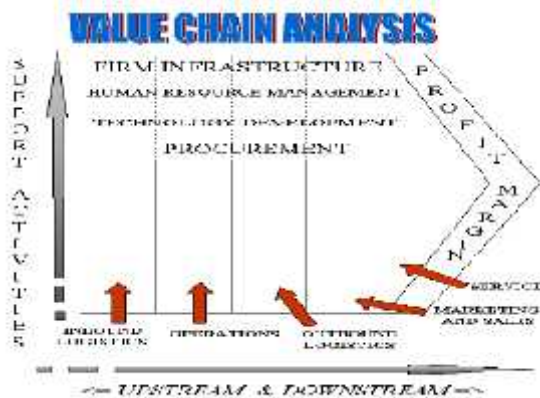


Figure 4 - Value chain analysis

One of the benefits behind value chain analysis is that it gives us an “operational” perspective of the business – production, logistics, distribution, selling, customers. The support activities (HR, Technology, Finance, Procurement, etc.) provide the underlying layer, working in conjunction with operations. Value chain analysis is also useful for SWOT Analysis. For example, how do we differ from our competitors in terms of processes, logistics, and other components of the value chain? Based on these differences, what are our strengths and weaknesses? What opportunities should we look at for improved competitiveness? And finally, are there any major threats that we need to address?

4. CASE STUDY: COMPETITOR WITH SUPERIOR PRODUCTS

Merry Weather has enjoyed over 20 years of business in Canada. Merry Weather manufactures and sells special weather monitoring equipment for harsh environments, such as the North Slope. Some of Merry Weather’s equipment is used to monitor movement of glaciers and trend long-term weather patterns. Over the years, Merry Weather has made minor improvements to its weather monitoring equipment. Since Merry Weather is the only supplier of these types of products, it enjoys a virtually monopoly in Canada as well as Alaska. Merry Weather’s customer base includes government agencies, airports, weather services, and scientific projects.

A European Company, DeGaltier-Hesson, is well known for very innovative and accurate weather monitoring equipment. Last week, DeGaltier-Hesson issued a press release, indicating that it will market its full range of products in North America (United States and Canada). Unlike Merry Weather, DeGaltier-Hesson, continues to improve its product line, offering “state of the art”

in weather monitoring. DeGaltier-Hesson currently has no distribution or market presence within United States or Canada.

1. What analytical research should Merry Weather undertake for assessing the threat posed by DeGaltier-Hesson?

2. What, if any thing, might help protect Merry Weather from DeGaltier-Hesson's entry into the market?

3. What things could Merry Weather have done to prepare itself better given the changing competitive environment?

5. POSSIBLE SOLUTION TO THE CASE STUDY

1. It is critically important for Merry Weather to understand DeGaltier-Hesson. This includes:

- SWOT Analysis to give us insights into the strength's and weaknesses of the competitor.

- Psychological Profile of the CEO and company can be useful. We need to understand how DeGaltier-Hesson makes decisions and past behavior should help us understand decisions going forward.

- Supply Chain Analysis might be useful since DeGaltier-Hesson has no footprint in the marketplace.

- Porter's Five Forces Model can help us understand if we should remain in this industry.

- Reverse Engineering of DeGaltier-Hesson's products. Merry Weather should obtain some of DeGaltier-Hesson's products that compete directly with their products

2. If customers for Merry Weather decide to use DeGaltier-Hesson, they will be faced with the time and expense of switching out their current monitoring equipment. The benefit may not exceed the costs of switching over. For customers likely to switch, it could help to show product comparisons that highlight the low costs and same basic features of Merry Weather's products.

3. Merry Weather should establish

some basic competitive intelligence, such as attending trade shows to identify competitors and evaluate product innovations. It is needed to understand customers, suppliers, and external forces that shape the industry.

6. CONCLUSIONS

Competitive intelligence can only contribute to a company if it receives the attention and priority it deserves. This activity should not form part of the "nice to have or know" activities in the organisation, but should be focused on the issues critical to the survival of the company – "must have or need to know" issues.

In many instances top management still lack the experience of how to "make" competitive intelligence work for them. Many executives still rely on historical knowledge and preconceived ideas to base their decisions upon. They have to be lead and 'educated' to trust the products and recommendations of competitive intelligence. Competitive intelligence will only gain trust of management by marketing its products and showing decision makers that they attain actionable results based on the competitive intelligence recommendations.

In order to function in the age of head to head competition, we have to develop our company 'sensors' to operate like our biological nervous system, capable of triggering our company reflexes for reaction to danger or need. This should provide a well-integrated flow of information to the right part of the organization at the right time. This "nervous system" should consist of the processes that can empower a company to perceive and react to its competitive environment, sense competitor challenges and changing customer needs and to organize and react timely to address these challenges.

Organisations who have succeeded to implement an effective formal and

structured competitive intelligence process focusing on critical issues; will have a competitive advantage over their rivals. Organisations can simply no longer afford not to have an effective competitive intelligence capability.

In conclusion, Competitive Intelligence is a specialized internal system of a firm, whose development includes:

1. Intelligence staff - staff trained to transform data and information into intelligence;
2. Internal network and external sources of information;
3. Databases of competitors profile;
4. Internal policies and procedures for information management;
5. Products and services of intelligence on areas for different levels of decision;
6. Specialized IT tools and systems - intelligence portal, CI-War-Room, dedicated software applications;
7. Intelligence self culture and values etc.

The understanding and implementation of an competitive intelligence system has as results: early warning regarding competitive threats, identification of opportunities, effective benchmarking of products, services and practices of competition, faster response to market movements, better understanding of the relevant "players", development of scenario for strategic planning, finesse estimates for tactical decisions, etc.

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