

Management Functions Particularities In The Competitive Intelligence Process

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Abstract: The manager is the key element in the process of information analysis inside a firm, especially because this process is used to make vast decisions, from strategic decisions to the most detailed tactical movements. It is a process that can reach all company's departments and make them more efficient. The process' success and its completion in order to create intelligence depends, first of all, on the manager's ability to carry out the five competitive intelligence process activities and to act accordingly at each stage. Also, the manager's response speed can make the difference between the success of an action to capitalize on the results of information analysis and its failure. Therefore, the paper will emphasize the importance of management functions and, especially, their particularities regarding the information analysis process and the competitive intelligence cycle. In the end, those particularities might be more important than the process itself, since the quality of the result depend drastically on the way tasks are distributed and managed. Last but not least, the manager should be able to make the distinction between regular activities and the ones defining the competitive intelligence process, in order to reach to desired objectives in an efficient manner.

Keywords: information analysis, intelligence, management functions, competitive intelligence process, competitiveness

JEL Clasification: D83, M11, M15

1. Introduction

If in 1903 the management was defined by Frederick Taylor as the “way of knowing exactly what people want to do and to ensure that they do it in the best and cheapest way” (Taylor, 1911)[15], the modern concept has taken on a much more complex pattern. Thus, we define management as a science, “an organized and coherent set of knowledge, concepts, principles, methods and techniques”, as an art, namely a reflection of the pragmatic side of the activity and the exercise of managerial skills, but also as a state of spirit, as a means of seeing and seeking progress (Russu, 1993)[14].

Therefore, management functions represent a series of major components, important activities which constitute the process of management. Henri Fayol defines for the first time five managements functions (forecast, organization, command, coordination and control), and the approaches from our country preserve this number, having slightly differences in form, such as: forecast, organization, coordination, training-motivation and control-evaluation (Moga and Radulescu, 2004)[9].

In terms of information analysis, it deals with a current problem of modern society, namely the need to obtain information that provides intelligence. Today the mere possession of information is not sufficient, but the way they are analyzed and used becomes absolute. In this relate, competitive intelligence is a systematic gathering program and

information analysis regarding competitor’s activity and market’s evolution so as to meet the goals of the company (Kahaner, 1997) [5]. Even though Porter defines this concept for the first time time in 1980 (Porter, 1980) [11], competitive intelligence is not assimilated into the organizational culture of entrepreneurs in Romania[10]. The usability of this type of analysis is growing along with the evolution of technologies. Due to high volume of information over the competitive markets, the need to reduce or even eliminate informational asymmetry has developed [6]. The use of information regarding competitors’ wage policy, expected market developments, possible mergers, pricing policy is an essential element for the company’s evolution on a highly aggressive and competitive market. In fact, the essence of the information analysis activity is to obtain legally and ethically-informed market-able information and competitors so that a firm can have competitive advantages. Besides the quantitative methods that are particularly important for the economic activity, one can notice the activity of information analysis, a qualitative method that adds value to the competitive market.

In the information analysis activity specific to competitive intelligence, a correct and complete approach of the managerial activity is essential. Creating intelligence follows a cycle that not only requires strict compliance with the manager’s duties, but asks for careful follow-up on step-by-step activities specific to each function. This cycle contains

a series of five activities (Kahaner, 1997)[5]:

- a. Defining information requests and planning the collection of data and information;
- b. Collecting data and information;
- c. Processing the data and information;
- d. Analyzing data and information, the production of information that provides the capacity of actions and development of intelligence products;
- e. Disseminating intelligence products and obtaining feedback from beneficiaries.

To emphasize the importance of management in activities that involves information analysis, especially those of intelligence creation, Henry Mintzenberg shows that the manager performs three informational roles: monitor, speaker and spokesperson (Pugh and Hickson, 1989)[12]. Hence, the manager monitors the whole firm activity, both in terms of internal and external information. This whole process represents the role of information speaker and the manager has the task of transmitting valuable and substantial information. Regarding the role of the spokesperson, it is often necessary for the manager to give information about the firm to outsiders, whether they are part of the general public or have a decision-making role.

2.Particularities of management functions in the information analysis process

In addition to the general features, management functions present a number of peculiarities in the information analysis process. Knowing and respecting these peculiarities are thus essential to the end of the process, achieving satisfactory results.

2.1. Predictive function

In general, it assumes the anticipatory identification of the problems that occur in the activity of the unit, inside and outside. Specifically, in the information analysis activity, one can identify the need for complete database, the company's previous performances and the need for specialized personnel able to analyze aggregate information. It also involves trying to reduce probability and uncertainty, while using as much information analysis methods as possible.

2.2. Organization function

Uses recent information, defining methods to achieve goals. There is the need to identify the best organizational configuration for the information analysis cycle to function as efficient as possible. Information in an unpredictable good and the assignment of specific tasks to the rights persons becomes an essential activity to achieve the expected results.

2.3. Coordination function

Uses very recent information and it is often quantified in action coordination tools (time and event graphs, critical road). The decisional speed is very fast, the manager being obliged to make on the spot decisions depending on the evolution of the events. Good knowledge of the field of action of each actor in the information analysis cycle and the existence of an adequate communication system are essential elements for the exercise of the coordination function.

2.4. Drive function

It refers to socially relevant information and includes motivation factors such as pay, rewards, and moral incentives. By talking about a high added value activity but also a high level of employee engagement, the engagement function has the role of maintaining the level of motivation needed to achieve the expected performance.

2.5. Control function

It assumes preventative control, which has the task of identifying weak signals that can create major problems in the future, but also combining the concept of back-up control with forward control for a more competent analysis of the results obtained.

3. Information analysis activities from the perspective of management functions

The five functions of management form themselves a cycle around each information analysis activity. Therefore, the specific characteristics of each activity will highlight the approaching particularities of management functions. The conclusions of the particularities' study will show how each function influences the precision and quality of the intelligence resulting from the entire cycle of activities. The approached perspective is that of the information analysis and competitive intelligence activity manager, perspective that reveals management functions for each stage of the cycle.

3.1. Enunciation of information requirements and collection planning

This activity includes the early steps of the information analysis cycle. It can provide a clear understanding of the beneficiary company's needs, including time constraints, establishing a collection and analysis plan, informing the user about information needs and establishing the type of information sources. It also sets out the specific objectives that will be verified at the end of the cycle.

The predictive function is identified by the need to obtain information, the clear definition of the objectives, but also through forecast and plans for the information analysis activity. It is necessary for the manager to ensure that the objectives are feasible and their fulfillment can be done under ethical and legal conditions. At the same time, the predictive function in this first step is a very important one throughout the whole cycle, being the one that ensures that the starting point is a fair one and the activity following this step will satisfy the initial requirements.

The organization function shows the ways through which the manager identifies the need for information according to the initial elements and defines the informational system that will be the basis of the subsequent activity and will guide the collections teams in order to achieve proposed goals.

As regards to the coordination function, taking into account the information requirements, the manager needs to know the structure of his staff, both the collection and analysis staff, his capabilities and the level of knowledge of the field of action of each subordinate. Depending on these, the manager will know if the expected results can be achieved by the staff at his disposal and will also be able to carry out the most consistent

and accurate planning of the activity.

This first step of the cycle defines the first ways to attract staff to achieve their goals. The drive function thus includes the ways to stimulate employees even with the help of specific objectives. A company that analyzes information in the competitive environment is characterized by a high level of challenges, and these can motivate employees. The more challenging the objective is, the more motivated the employees will be to accomplish that objective given its complexity.

Finally, the control function highlights both weaknesses and strengths that the manager can encounter in the next steps. If at the time the information requirements were formulated and the collection was planned, all indicators show a high chance of success, the manager can proceed to the next step. Otherwise, it must modify either the objectives or the way of planning the collection in order to achieve a higher degree of success.

3.2. Collection of data and information

This phase of the cycle involves the actual collection of the raw data and information from which the intelligence will be produced. Most collection materials are public goods, which means they are available to anyone, and include annual and regular reports, whether private or governmental, books, shows, speeches, or databases. Creative staff can find in the public, often legally and ethically, all the information they need (Kahaner, 1997)[5].

In this case, the forecast consists on identifying places and environments where data and information might be available to achieve the objectives set. Information can be

accessed inside or outside the company. For the correct operation of this step, the collection methods specific to each environment from which information is to be collected (public data, regulated data, data retrievable on the Internet, etc.) are established.

By organizing the hierarchy of collecting teams, they are structured on several levels (eg collecting manager - team leader - online collection staff, field collection staff, telephone collectors) and assign tasks to each level.

Depending on the specific goals previously set, coordination requires the manager to determine the best environment in which an efficient collection can be made for the case, directing collection teams to that environment. Depending on the unexpected hardships or problems encountered along the way, it is up to the manager to interfere and to find the best way to solve them. In this case, we find both bilateral and multilateral coordination, depending on the nature and gravity of the problem.

Training may seem difficult when reaching this step, because it is also the most demanding. Employees come in direct contact with the external environment, which can often be hostile, especially as they are trying to obtain important and interesting information. However, besides the usual means (motivating salary according to the efforts made, bonuses offered to overcome the proposed targets, collecting performing equipment), the manager needs to know the necessities of the employees as well as their psycho-moral profile in order for the training to be effective. Employees must also make sure that the company's actions are legal and ethical, especially if such activity is new to Romania, and the public must be educated about what

the information analysis implies (there will be reservations about its legitimacy).

Combining past and preventive control is an important step in this phase. Depending on the outcome of this merge, the manager will decide whether the cycle may continue or whether it is necessary to return to the first stage. Firstly, the control will show whether the collection teams have been able to meet the objectives set for this stage and whether the information obtained can be a raw material for intelligence creation. Then, the preventive control will analyze, given the volume and type of information obtained, whether the cycle can continue and the objectives initially set can be met. If the manager decides that the information obtained is not sufficient, then it is necessary to return to the initial stage and change the information requirements.

3.3. Processing and storing information

The third stage involves processing, conjuncting and evaluating meaningful information for the targets so that they can be transmitted and stored. In particular, it is desirable to process information so that it can be stored electronically, because this way it can be managed easier for the purpose of future analysis. It is also necessary to specify some features (the veracity of the source, the domain to which it relates, the stage of processing, the means of obtaining, the authenticity in relation to other information held) that will be useful in the next steps.

The predictive function includes the manager's ability to correctly establish information classifications, to establish the necessary characteristics in a continuous

relationship with the proposed objectives. If these attributes are correlated with the information requirements, subsequent analysis can be done efficiently.

In the case of the organizing function, the manager will indicate how to process and store the information. The manager must instruct and guide the staff who will perform these tasks for the correct processing. If processing and storage are assigned to a different team than the collection team, a close hierarchical link between the two teams is needed for the information to be complete and most of all true.

As far as the coordination function is concerned, the staff involved in processing and storing information must know in detail both the nature of the initial requirements and the way the information was obtained. That is why this step can be done in the best way only by the same team that was involved in the collecting process. This way, the team will have all the information necessary to perform the tasks of the processing and storage stages, transferring them to a different team would mean an additional cost.

The drive function has characteristics similar to those in the previous stage, especially if the team is not the same. Even if it is not the stage with the major implications, but rather an intermediate stage between the collection and analysis process, it is important not to ignore its importance. Employees must be aware that the competent processing and labeling of the information will increase both the chances of business success and the quality of the intelligence products.

The relationship between the employees and the manager should be, especially in this case, extremely tight. That is why the control function is exercised by ensuring

equity among the employees who perform the processing; studying the attributes resulting from this activity and ensuring that in the next stage the processed information can be used, this way leading to a higher quality of the resulting intelligence.

3.4. Analysis, production of new information and reporting

Moving forward, analysis, producing intelligence and reporting is the most complex and difficult stage of the cycle. This refers to the application of the information analysis techniques to transform those collected in intelligence and then to correlating the results with the initial information requirements by producing reports based on these. The analysis requires special skills, because the analyst has to weigh the information, identify patterns and create different scenarios based on what he knows. Even if the analysis is based on quantitative information (hard information), analysts sometimes have to fill in "free spaces", make competent assumptions, and estimate possible outcomes (Kahaner, 1997) [5].

The forecast, in this case, refers to identifying the most appropriate methods of analysis, depending on the nature of the information gathered. Also, in order to eliminate the uncertainties in the results of this step, the manager will use several methods of analysis (consecutively or in parallel can use techniques belonging to quantitative methods using empirical data, quantitative methods using data generated by experts, unassisted decision method, analysis structured etc.).

The organization consists in the effective choice of those analytical methods defined in

the predictive function, taking into account not only the information requirements but also the nature of the information gathered. Ensuring the framework to support cooperation, both vertically and horizontally, is also needed at this stage, because the end result must be complete, complex and compact.

Coordination requires the manager to make sure that the analysts know the methods they use and that they have the capacity to analyze the collected information, regardless of the difficulty degree of they pose. The goals of this stage are to answer the questions, meet the information needs and meet the objectives of the initial stage. Therefore, the purpose of the analysis process should relate to these purposes in order for the information to be transformed into intelligence

The training is motivated by the analysts' motivation to carry out the work in question as effectively as possible. For this, the analysis stage provides employees with the highest degree of professional satisfaction due to the fact that they carry out an activity with extremely high added value, in which simple public information can turn into very valuable assets. The satisfaction experienced by analysts is significant, especially if the intelligence created by them is used to gain important competitive advantages. All these elements of moral motivation, of course, belong to those of a physical, monetary nature, which are in line with the large added value specific to the competitive intelligence activity.

Control is the step in which the manager can assess the success of the activity. Although the final control takes place at the last stage of the cycle, by analyzing the process results, the manager will see if this result coincides with the objectives and the

initial information requirements. Again, it is necessary to combine past and preventative control. Moreover, based on the resulting intelligence, the company can formulate new information requirements and even new future targets, thus turning to the stage of formulating information requirements and planning the collection that will underpin a new cycle. We see, therefore, that the information needs may change according to the results of the analysis, being extremely sensitive to changes in the competitive environment.

3.5. Intelligence product dissemination and feed-back from gainers

Finally, the fifth stage of the cycle is that of dissemination and obtaining feed-back. Since we are talking about a continuous cycle, we can say that this stage can be both the last and the first. Specifically, it can be the last step of a cycle that started with the information requirements formulations or it can be the first step in a new information analysis cycle whose objectives will be determined by disseminated projects. It is the time when analysts will suggest new possible action directions based on results. They need to be capable of materializing the recommendations and support them with solid arguments. It is advisable for the beneficiaries to produce a report from which to come out the usefulness of the information and the interest for the topics addressed. Most of the times, the resulted intelligence can be distributed throughout the company, in departments where it is considered to be needed.

The predictive function consists of final correlation of the intelligence resulting from the previous stage with the objectives originally set. Also, the manager can anticipate

new information requirements based on what has been discovered, but the implementation of these requirements in a new information analysis cycle can only be done after consultation with the beneficiary and only if this is of interest.

The organization's function is to establish the person or persons who will carry out the dissemination. In general, it is advisable that the same person who fulfilled the information requirements in the first stage of the cycle is also the one who will present the results to the beneficiary. Most times, even the manager, together with one or more analysts, will be the one who will make the dissemination.

Within the coordination function, the role of the manager is to ensure that analysts will explain and support their views on the results. The latter must be able to accomplish the task in question and be sufficiently trained in the field of activity concerned by that intelligence in order to conceive competent explanations.

The drive function shows a more pronounced moral motivation due to the fact that the product created by the analysts together with the collecting and processing teams finally shows their usefulness. The employees can see how the products help the beneficiary to create a competitive advantage and also if the products meet the needs of the beneficiary, a new cycle of information analysis will begin.

The control function includes the final evaluation of the activity and balancing the specific objectives established with the results obtained. If these are met in a proportion agreed by both parties as acceptable, the process is a success. Otherwise, it is up to the manager to identify the causes of the failure

and, by preventive control, to make an action plan for the problems discovered to be corrected in the future. It is noteworthy that the lack of correlation of the results with the initially established objectives may also have causes that are not related to the failure of the staff, but to the impossibility of obtaining the necessary information by legal and moral means.

Conclusions

Competitive intelligence and information analysis includes a high degree of management involvement. This is the most important pillar, due to the fact that without its coordination the entire activity can fail. Intelligence is, actually, a sum of elements that are created in each stage of the cycle, the essential roles of the manager being to supervise the activity and to combine these elements, interfering whenever it is necessary to ensure a correct evolution of the process.

In Romania, these roles are even more important since the activity itself is new. If the person in charge of the competitive intelligence cycle does not combine managerial skills with respect to basic principles, particularities of management functions and in depth knowledge of information analysis, the results cannot be positive. This is all the more to the fact that the Romanian market has not been exploited yet, from the Romanian companies' point of view, on the side of the competitive environment analysis, the guidance for certain directions of action becoming strictly necessary.

The particularities of the management functions represent a guide that a manager who coordinated information analysis can follow. However, this activity is known to

have a low degree of predictability, and, therefore, unexpected situations occur with a high frequency. Spontaneity, adaptability and ability to make a competent decision under pressure and in a very short notice are other qualities a manager needs to have in this domain.

The final conclusion is that although they contain a number of specific particularities and despite the fact that competitive intelligence differs in many aspects from all other study methods of the competitive market, management functions are related to a set of general principles valid for any type of activity. Knowing all these principles is the element that differentiates a good manager from a simple leader.

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