RELATIONSHIPS BETWEEN THE INFORMATIONAL SYSTEM AND DECISIONAL PROCESS

Carmen-Luiza COSTULEANU¹, Coca ENĂCHESCU¹

¹ University "Petre Andrei" from Iaşi e-mail: ccostuleanu@yahoo.com

The objective of the informational system is represented by the providing of the managers with the information necessary for the control, decisional process and good functioning of the enterprise. It represents the ensemble of means and procedures for working out, sorting out, storing, spreading and valuing of data and information at the level of one economic and social entity, in the view of furnishing the information under a direct usable form, at a certain moment, to assure the good functioning of operational systems, as well as for deciding at different levels. The decisions elaborating process is a complex act which involves competence and responsibility. The decisions elaborating process is working out under the influence of internal and external stimuli. The reaction against the external stimuli is of independence, since the enterprise suffers the changes imposed by external medium, but, through the productive and innovative potential, it implicitly participates in the creation and changing of this medium.

Key words: informational system, decisional process

The "classic" system model of one enterprise comprises 3 subsystems, respectively operational, informational and management, the informational component being the one assuring the functioning of the management through the accomplishment of the coupling of the management with the operational component [Airinei, 1997].

The informational subsystem represents for the manager user:

- an essential functional service to depend the enterprise functioning and evolution, having the same importance as the accounting compartments, the production organising, marketing or personnel;
- an important part of enterprise resources and of exploiting expenses;
- a capital element which influences the operational output, productivity, the personnel motivation as well as the services granted to the client;
- an important information source and the necessary assistance for optimal decisions;
- a necessary ingredient for products and competitive services achievement, which will concede to the enterprise a strategic advantage on internal and international market;
- stimulating and dynamic carriers for millions of people.

MATERIAL AND METHOD

The pyramid of problems presented by James O'Brien, taking into account the above enumerated elements, is having as the peak "The management of the informational systems", the second stage being "The development of the informational systems", the third one "Applications of the informational systems", the fourth stage named "Techniques and instruments of the informational systems" and the fifth one "Basic notions on the informational systems". These problems might be known by the manager concerning the informational systems (O'Brien, 1995).

The information represents the main resource of the management process since is having characteristics similar to the material resources as follows: is produced, stocked, distributed and is perishable with the time passed.

The primary components of the informational system are represented by the data and information, meaning their approach together. *Data* represent the numeric description of some actions, processes, facts, phenomenon referring to the enterprise or to external processes which characterize its management.

It is necessary to make the distinction between data and information. The information is in fact the news, which includes a novelty for its user and the data represent facts, situations, formal support for the information. The power is owned by the one possessing the necessary information. It remains memorable Napoleon's statement: "The exact information, possessed at the right moment, assures 99% of the battle victory".

From the point of view of management the information mean those data bringing to the rivalry a direct and indirect knowledge benefit on the enterprise, furnishing new elements, to be used for the accomplishment of the load incumbent in the respective enterprise [Nicolescu and Verboncu, 1999].

Both the information and the decision are linked tight through a connections system, and information appears as decision support during the decisional process.

RESULTS AND DISCUSSIONS

For the adopted decisions to be qualitative it is necessary that the information to accomplish certain requirements: to be truthful, that is to faithfully reflect the reality, to contain knowledge elements which to allow the formulation of an exact image; to be representative; to be objective, not to contain elements based on personal opinions; to be actual, to be transmitted, intercepted and analysed in time, the delay of the information determining the delay of the decision achievement.

The economic information may be outlined as two acceptations. One first modality starts from the idea that the commercial society and autonomous enterprises are economical units. Any information used inside them might be considered economic since contributes to the achievement of provisioned objectives. Into another acceptation the economic information are reduced to that used into the economic processes of the enterprise.

Into the sphere of economic information there are also the information produced by economic program, income and outcome budget, economic evidence,

production prognosis and programming, marketing, management, administration control, the solving and control of some problems.

The accounting information is a specific economic information resulting from the taken over through own methods and instruments of the data from the accounting service. The American economist Hybe establishes that from the total of the information circulated into an economic entity about 80 % are information with economic character, and from these 47 % are information of accounting nature (Pahone, 2004).

This accounting information is real, precise, complete, operative, representing "board panel, the support of economic, financial and administrative decisions which are taken by the managers" of the economic agents. During the activity of commercial societies a special importance is having accounting information. Thus, we can talk about accounting decisions or economic-financial decisions.

The accounting decision is the rational choosing process of one action line from several possible ones, having as basis accounting information.

The accounting information which model the patrimonial situation, the results and the financial situation of the enterprise are becoming transparent in the conditions of market economy. These ones are concerning their relationships with the third parts and the transparency of this component of accounting information, their publishing as synthesis accounting documents is subject to certain norms and control operations necessary for the assurance of a correct information of the external users.

The other component of accounting information is linked to internal administration of enterprise, to the adopted strategy and tactics, these ones remaining confidential, not being subject of the publication.

In the decisional process, for the efficient utilisation of the accounting information, there is necessary an *informational circuit*. This one is marking the way covered by the information or a category of information between the transmitter and the receptor. The informational flux represents the quantity of information transmitted between the transmitter and the beneficiary on the informational circuit characterized through length, efficiency, cost, velocity, etc.

The *informational system* might take a part of the managers activities, respectively that of the working out of data and information, the results analysis, the elaboration of the variants for the solving of problems and to assure the connection between the conducting and the managed systems.

The economic informational system is formed from an ensemble of subsystems which is finding, working out, giving an accessible form, transmitting the information and follows the effects of decisions application, having a pyramidal form and being a natural consequence of the organizational structure of the enterprise [Tabără V. and Horomnea E., 1997].

The improvement of the economic informational system results from:

- the knowledge of the development manners of the economic processes and phenomena;

- the promoting of modern methods to manage with a high level of computing;
- the diversifying of the relationships between the enterprise and internal or external partners.
- The data and information **collecting subsystems** are drawing together data from sources and are registering them into one document which delivers the information as electrical or optical impulses. The correct collecting of data represents an essential problem which might be realized as closer as possible to the source generating them.
- The **converting subsystem** might be merged with the collecting one with the goal of automatic working out, being represented by a technical system which transforms information to be transmitted at the distance and intercepted by the unity of processing.
- The **transmitting subsystem** of information is represented by a phone, a fax or other mean proper to the system and is linking the collecting place and computer.
- The introduction subsystem assures the carrying out of the logical operations of classification, sorting, grouping, as well as the accomplishment of some calculations on the basis of a certain program built up from a succession of instructions specific to the aimed goal.
- **External memory** allows the data stocking and their reusing in case of need and is raised from archived documents, or from files, bands, etc.
- The **extracting subsystem** of the results from the computer is printing them on the paper as text, tables or graphics. The extracting subsystem is represented by the computer terminals: the display or the teleprinting system.

The choosing of the best decisional solution might respect the following criteria [Drucker, 1967]:

- the identification and prevention of the risk, each alternative containing an evaluation of the ratio between the aimed benefit and possible risk;
- the sparing of the effort, that means the establishment of the action directions which, through the lowest effort, are giving rise to the biggest results and the most reduced perturbations of the system;
- the synchronization and timing, respectively the correlation of the decisions with the factor time;
- \not the understanding, the skills, the competence and the optics of the people applying the decisions.

The process of decisions elaboration represents a complex act which necessitates competence and responsibility. The process of decisions elaboration is under the influence of external and internal stimuli. The reaction toward the external stimuli is that of independence, since the enterprise suffers the changes imposed by the external environment, but through the productive and innovative potential it implicitly participates at the creation and changing of this environment.

The taking of one decision is the result of an entire process through which the managers are finding modalities of action for the optimal solving of the problems with which the economic unity is confronting. The decisional process is a complex one which comprises three stages: the preparing, the adopting and the final application phase.

- 1. THE PREPARING STAGE is formed from: the notice of the necessity of the decision supposes the taking into account of the factor time, specifying if it is necessary to immediate action or not; the formulation of the aimed goal concentrates the attention on what it is expected after the decision materialization, being necessary the goal to be clear formulated, and beyond the general objective to be also formulated some partial objectives; the informational basis creation might foresee a corresponding volume of information furnished in usefully time and of quality; the elaborating of decision variants is realised on the basis of some solid analysis. The diversity of the particularities of each unity is making that each problem to be addressed through the prism of several alternatives.
- 2. THE PROPER ADOPTING of the decision is taking into account the comparative analysis of the variants and the adopting of the decision. The comparative analysis is taking into account all the variants looked through the prism of criteria, consequences and factor time, being necessary the taking into account the direct effects of each variant on the different domains of activity, as well as the conditions for their appliance into the practice.

The adopting of the decision, that means the choosing of the optimal solution, will have results dependent on the way in which was worked in the interior phases, as well as on the value of decisional person.

3. THE FINALISATION transforms the decision into action and comprises the following phases: *the formulation of the dispositions* might be clear and complete for not to be differently interpreted by the executive staff; *the organization of the carrying out of the decisions* allows their materialization. When the decisions engage a high volume of resources it is necessary the drawing up of some technical and organizational plans with the specification of general objective. *the control* allows the knowledge of the modalities to fulfil the decision through the comparing of the results with the aimed objective.

CONCLUSIONS

The decisions elaborating process is a complex act which involves competence and responsibility. The decisions elaborating process is working out under the influence of internal and external stimuli. The reaction against the external stimuli is of independence, since the enterprise suffers the changes imposed by external medium, but, through the productive and innovative potential, it implicitly participates in the creation and changing of this medium.

The succession and connection of the stages and phases of the decisional process are principally valuable for each type of decisions, but especially for the strategic and some more complex tactic decisions, but they might not be rigidly respected since some phases might interpenetrate and others might develop in parallel.

Sometimes, in the management activity one might get through some unexpected situations and might rapidly action through operative decisions without to go over absolutely all the stages of the decisional process.

BIBLIOGRAPHY

- 1. Airinei, D., 1997 Expert systems in the financial-accounting activity. Junimea Publ. House, Iaşi, p. 62.
- O'Brien, J., 1995 Les sistemes d'information de gestion. De Bocck Université, Montréal, p. 7-8.
- 3. Drucker, P.F., 1967 The practice of Management. London, Heinemann, p. 356.
- Nicolescu, O., Verboncu, I., 1999 Management. Economics Publ. House, the 3-rd ed., p.242.
- 5. Pahone, C, 2004 The accounting and Economic Informational System (E.I.S.). ECONOMIA XXI, no. 2-3, p. 37.
- 6. Tabără, V., Horomnea, E., 1997 *Accounting information in the decisional process.*Tribuna Economică Magazine, no. 39, p. 175.