THE REGULATION AND THE MANAGERIAL DESIGN OF THE ACTIVITY THROUGH THE ACCOUNTANCY INFORMATIONAL SYSTEM

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Abstract:
The activity of any organization is largely based on the informational system, its role in the competitive environment being defining for the performance achievement. Management has regulation mechanisms on execution - information - decision way which can ensure a control of costs, their proper awareness of the responsibilities. The stocks informational system is even more important for a productive process consumer of material resources and generator of storable products. The information obtained in this system, the analysis and their processing offer the possibility of a management control with a maximum effect and the decisional support for the management for all the hierarchy levels. Thus, the accountancy informational system, integrated in the company's informational system, fulfils the prediction function, of interpretation of data from the economic environment and diagnosis, through the generation of informational reports, absolutely necessary for a management interested in the efficiency of its decisions.

Key words: *informational system, decisional system, managerial regulation, alert indicators, operational support, supply budget*

JEL classification: *M41*

The entire activity of a company is based on the double information of the members of collectivises, the informational process being achieved with the help of the informational system. Its importance can be appreciated from a point of view of the conception and its analysis, as well as under the aspect of exploitation. In the mean time, this needs to be efficient (to supply data according the set objectives) and have a certain capacity (that is a maximal level of production and distribution of information which allows the proper satisfaction of the users' needs).

An informational system organised on managerial principals will allow the management to find out the current situation of the company, to find out the chances, but also the potential risks for the policy of the organisation, to find out the advantages, but also its weak points, to take the proper decisions and then control its effects.

Each hierarchy step must receive the information it needs for its decisions and there must exist an optimal communication between all the structural elements.

In order to achieve an informational system which ensures an effective management, the following ideas are taken into account:

- it is subordinated to the requests of the company's manager, both the achievement as well as the operation of the system;
- it is correlated with the organisational structure and the decisional system;
- it takes into account the methodological unit of the collection and processing of the data;
- the significant non-compliances of the information are taken into account;
- obtaining a maximum of primary information is pursued (this maximum does not refer to the quantitive aspect);

- the achievement of a flexible system is wanted (the dynamic modular approach of its characteristics).

There is an internal mechanism of regulation at the level of the informational system, with a certain degree of autonomy, and a complex one, the managerial type, within the company, which through its operation, affects the informational. Both mechanisms aim at either the prevention of the disturbances or their correction. Their prognosis can be done using an algorithm or the heuristic methods.

For the stocks management, in case of the organisations with a short production process, we consider as suitable three "types of managerial regulation", on the execution-information-decision path:

✧ *through feedbefore*

The informational system (based on the "environment reading") provides the decisional system signals regarding the existence of (near) future disturbances. The latter is capable of predicting the influences that they will have on the execution system and acts through the command variables. In this way the operational system is not affected (the disturbances that come directly to it from the environment are "annihilated" through the received commands).

In such a situation we suppose we dispose of operative enough information in order to identify the disturbances, without errors or ambiguities.

Practically, the mechanism is efficient in the "activity modules", which directly feel the influences of the environment, respectively the activity of supply and the one of retail sale. The existing information in the system and based on which the managers act from these levels can be permanently corrected as a consequence of the modifications occurred in the program for the supply from the suppliers or the deliveries to the clients. The non-compliance with the concluded contracts or the change of the contractual conditions during the contract determines the reconsidering of the decisions which aim at the production.

The stocks for production can be affected until the decrease under the critical level of stocks, given the fact that the resource providers do not fit into the interval set for the deliveries. The information referring to this phenomenon is revealed by the operative evidence, analysed by the decisional factor and used for the correction of the supply order from another provider.

The finite products stored that exceed the maximum admitted volume, as a follow-up of the clients' renouncement to the contracts, are reflected as information in the analytic and synthetic accountancy, thus we can intervene within the retail sale department for the reorientation on the market, the collection of new orders and the distribution of the completed products. In the mean time, the order can address the execution system which regulates the production volume in concordance with the order of products.

✧ *through alerts*

To this purpose the operational system sends certain alert variables (indicators) of the informational system, through which potential disturbances are reported, and this alerts the decisional system, which provides the order variables to the execution system. In this case there are no data coming directly from the environment.

This alert manner means viability for the alert indicators (signalling any disturbance) and, at the same time, pertinence (not to signal a non-existing event). At the same time, we must take into account the fact that the alert given too late is no longer efficient.

The systematic control of stocks and the comparison of the information generated by the synthetic, analytic or management accountancy evidences, with the predicted estimations, is able to signal the eventual deviations from the productive

process. Through this the categorisation within the set specific consumptions and obtaining the products at the proper quality parameters are aimed. The deviations in the operational system are alert indicators for the decisional factors, and the corrections are efficient only if the informational system disposes of the input data, it can process it and transmit it as output data in real time.

✧ of the feedback type

The informational system transmits the decisional system the existence of a difference compared to the objective, regarding the result. The command consists of the reaction to this trajectory interval.

Such a regulation mechanism, less pretentious at the level of the informational conditions, raises certain problems related to the reaction time (how long until the disturbance is noticed? won't it be too late?) and the sensitivity (what level of the interval will there be a reaction of the decision centre? are there reactions to the useless random variations?).

For each of the activities, the retroactive regulation is considered functional, because their periodic analysis has as purpose the comparison of the obtained results with the operative programs previously set forth. The supply activity has as result the storage of the resources necessary for production, at a level and a consumption reflected in the stock management evidence. The value and the quantitive limits stipulated in the budget and the supply programs are analysed comparatively, and the significant variations are processed by the informational system and transmitted in the proper shape to the manager of the department. According to these data, as a reaction, decisions will be taken to adjust the quantities or to reconsider the cost of the goods purchased, stored, of the order etc..

In these three situations presented, the information conditions of the decisional structure or in other words the informational system which this affords are essential for the execution system command.

The complexity of the informational system for the management is very well captured by the definition given by the Institute of Research Stanford, according to which such a system refers to:

- an assembly of management operational systems (which administer the elementary data and which will be converted into information);
- an assembly of informational report generators, dedicated to the various decisional factors (which serve to the communication, the presentation and the remittance of information);
- an assembly of decisional systems (it has as purpose the direct influence of the decisional factors);

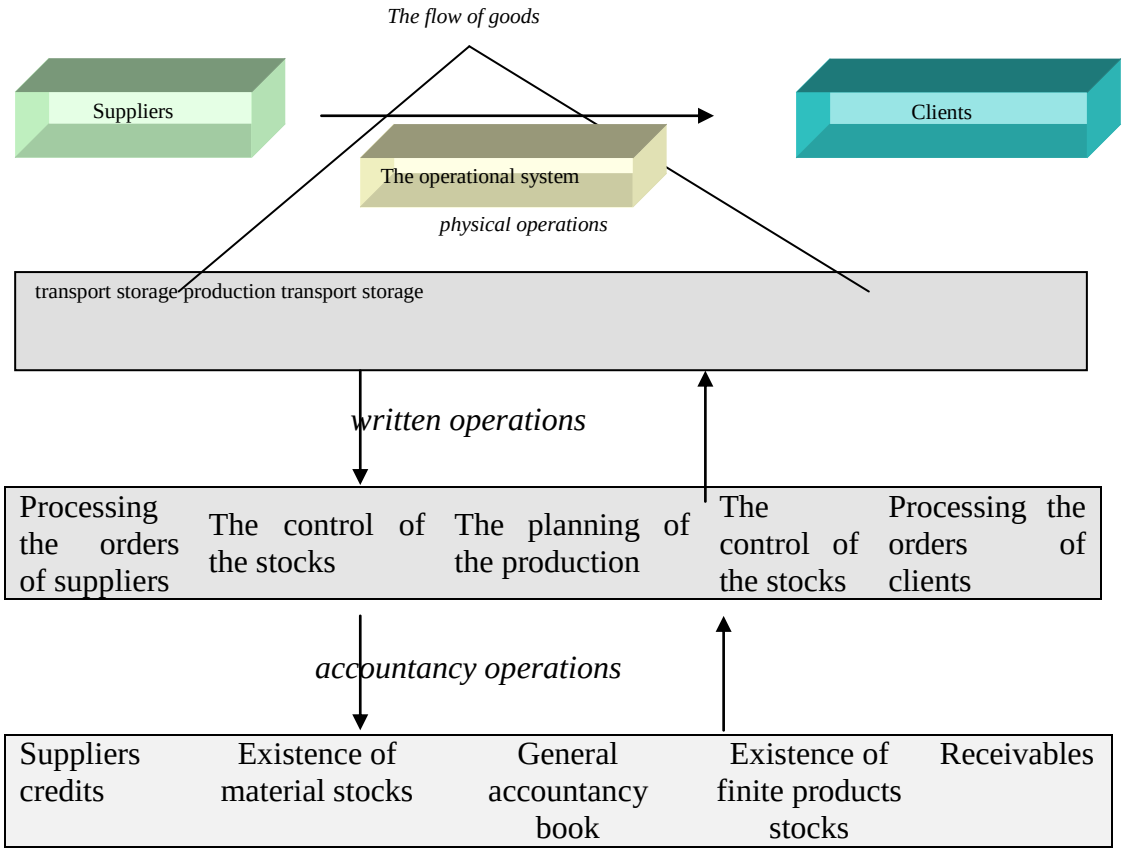
The managers of the companies must use the functions of the managerial informational system starting with the communication one, turning to the one of access to predetermined files regarding the responsibility of the managers, and finishing with the interrogation and analysis functions. The latter determines the elaboration by the managers of models of assistance to the decisions and the completion of processing.

Taking into account the storage process, with all the connected activities it involves, we can conclude that the objective of the systems for the operational support refer to the support of the management and the control of the logistic operations related to it, divided into three categories:

a. physical operations, like the transportation and the stocks reception, the processing and the supply of orders to the clients;
b. written operations, necessary for the launching and the control of the physical operations - the processing of the supply orders, the control of the stocks, the processing of the retail sale orders;

c. accountancy operations of processing the financial transactions resulted from the physical operations - debits, receivables.

These operations and their most important functions can be graphically represented as follows:



Picture 1. Logistic operation for the operational support

Within the design of an informational system for the activity of follow-up and control of stock, the own manner of unfolding the company businesses must be taken into account, as well as the specific requirements and the system's features. Its completion is subordinated to the final purpose, the one of integrating into the informational system of the company, so that it can offer assistance to the management and the control of the activity in general.

Referring to the practical activity from the companies, the existence of an informational system, as a support of the storage activity, means the modulation on the three categories of operations, in order to obtain the maximum effect in its exploitation.

The analysis of the systems used has revealed the fact that the companies do not manage to implement a fully integrated system, the majority using a support system for a limited number of functions, the most important being the accountancy operations functions, while the physical operations are less reflected in the system.

The construction of an operational system, which we consider suitable for the researched companies' activity, supposes the use of certain delimited modules on categories of operations.

Part of the informational system, but on superior level of complexity and importance, the systems are situated for the support of the long and medium term decisions.

Conceived to transform the existing archived data into the useful information for the management, these systems can assist the process of decision through the

evaluation of the different alternative consequences. Based on some mathematical models, it calculates the optimal decision, given the limited number of data.

In order to reach such objectives, the Accountancy informational system must exercise functions specific for the systems for the assistance of decisions, like:

- the prediction function regarding the provision of the information necessary in a given situation. In the field of research, this supposes the elaboration of certain predictions on the stocks evolution (supply budget, retail sale budget, production budget), based on the accountancy data analysis and on the analysis of the predictable factors that can influence the future results;
- the interpretation function of certain information received from the real environment through which the status of the system is set forth, with an impact on the economic and financial analysis, which can identify the factors and the causes with a negative effect on the performances;
- the diagnosis function, through the capturing of the situations of malfunctioning of the components of the organisational system, which can contribute to the increase of the decisions efficiency.

The informational report generators are considered powerful instruments, which can transform the systems for operational support into decisional systems efficient for the level of the operational activities, reducing the period of time necessary to make the decisions.

The type of reports directed towards the decision making refer to the information regarding:

- the analysis of the products completed, gathering the performances and the features of each type;
- the analysis of the products sold; on retail sale areas, on clients, on the costs of the sale activity;
- signalling the exceptional conditions, exceeding the limits imposed in consumptions, in sales or costs;
- the market analysis, through estimations which use the quantitive data recorded and information referring to the environment, setting the size of the market and of the changes of options regarding the products sold.

REFERENCES

1. Airinei D. - Expert Systems in the Financial Accountancy Activity, Junimea Publishing House, Iaşi, 1997.
2. Belkaoui A.R. - *Accounting theory, Academic Press, 1992.*
3. Benichou J. - *Sistemes D`approvisionnement et gestion de stocks, Les Editions D`organisation, Paris, 1991*
4. Dalotă M., Mocan M. - *The Management of Productive Businesses, Sedona Publishing House, Timişoara, 1995.*
5. Everett E.Adam jr., Ronald J. Ebert - *The Management of Production and of Operations, Teora Publishing House, Bucharest, 2001.*
6. Gattorna John L - *The Management of Logistics and Distribution, Teora Publishing House, Bucharest, 2001.*
7. Munteanu A. - *The Accountancy Informational Systems Audit, Polirom Publishing House, Bucharest, 2001.*
8. Oprea D. - *The Analysis and the Design of the Economic Informational Systems, Polirom Publishing House, Iasi, 1999.*
9. Pântea I. P., Bodea Gh. - *Romanian Accountancy Harmonised with the European Accountancy Directives, Inelcredo Publishing House, Deva, 2003.*
10. Staicu C. - *Economic Entities Accountancy, Universitaria Publishing House, Craiova, 2008.*