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## ***Aspects on the Information Applications for the Accounting and Management of Materials in a Public Institution***

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**Abstract:** *A study by the American economist Hybe reported that in an economic unit, 80% of all information is economic information, of which 47% is accounting information. Every day, the amount of information is growing. "For the normal functioning of an economic body it is necessary to carry out the following activities:*

- *collecting data on the state of the system and the environment;*
- *transmitting data to processing points via information channels;*
- *taking these data for the purpose of technical - economic analysis and obtaining the information used for decision - making;*
- *adapting decisions and transmitting to the enforcement bodies the information contained in the decisions taken;*
- *ensuring the control and follow-up of decisions.*

**Keywords:** *legislation, accounting, information system, IT products, modelling of decisions*

### **Introduction**

For the most part, the above-mentioned activities are carried out through the informational system which, from this point of view, is a direct instrument of the management system. In order to achieve its best performing functions, first of all in terms of operability, decision-making and quality of information, the information system has always appealed to a number of technical means through which certain phases and operations of it could be mechanized or even automated, the last means being computers.

The management information system is a set of human and capital resources invested in an economic unit to collect and process data necessary to produce information that will be used at all levels of planned management and control of the organization's activity. [1, 17]

The key purpose of the accounting information system is to facilitate the management of that body, which means the inclusion of all hierarchical levels in a unit, from the basic representatives of the management, to those responsible for the day-to-day problems of a single department, depending on the complexity of the organization, one or more levels of leadership. Leadership has as main goals planning and control. Information of different types is required to perform these functions. However, the notions of date and information must be differentiated.

The IT system has its past and evolution closely linked to the requirements of managing economic and social activity. The IT system is the "technical infrastructure" of the modern information system, with the objective of collecting, transmitting and processing data using modern computing means.

The organizational structure of the entity assures, together with the information system, the cohesion of the governing system that it fully models, and the two systems influence each other.

The basic element of the information system is information and it can be:

- formal information, established by normative acts;
- informal information, which circulates spontaneously between compartments and divisions, as required.

Accounting science, especially in the last decades of our century, has witnessed strong systemic opening moments in order to have a better theoretical and applicative coverage of the whole area of research and to be able to respond to modernization requirements.

For accounting, IT systems are of particular interest due to the performance gained in the processing of information, especially in terms of quality, correctness and operability, better accomplishing the objectives. At present, computerization of accounting ensures plenary manifestation of accounting principles and methods, systematization, processing and reporting of information on the balance sheet and other financial - accounting reports. These are tools of information technology designed to support specialists in all fields, in managing specific information and in making the most effective decisions. [2, 10]

Data is designed as a set of characters accepted as input into an information system that is processed and stored. The information refers to the outputs of the data processing processes, processes designed to satisfy informally the persons who will use them for decision-making.

The term data processing system is often used instead of the information system.

Another important aspect is that a management information system uses data, human, material, financial and logical resources. When an information system is being developed in complex units, the system concept will be viewed through the integration or combination of existing, disparate subsystems. Integration will make data processing more efficient by eliminating duplication in the recording, storage, and other activities of an economic unit. The accounting information system only concerns certain types of data and information. Thus, the accounting information system is a subsystem of the information system for the management of an economic organization. An accounting information system is defined as a set of human and capital resources in an organization that deals with the preparation of accounting information and information obtained through the collection and processing of economic transactions.

### **1. Data Management in an Informatics System**

The efficiency of using an IT system in an organization depends on how data is stored, organized and accessed. Providing quality information does not only depend on the performance of the computing system (hardware and software), and on the organization's ability to manage data as an important resource for the organization.

In an effort to increase the efficiency of data usage, an organization's management faces more problems. The most important of these are generated by organizational obstacles to change, the reluctance of managers to assume responsibilities resulting from profound changes and certain financial considerations.

In the classical approach, each department in an organization has built up files and programs to meet specific information needs. Databases, files and computer programs must be made taking into account the interests of the entire organization in data management. Moving from the classic to the modern approach to data management is somewhat resilient by the organization's staff. This resistance is explained by the fact that certain arrangements in the organization can be affected, the power ratios change by increasing the power in the strategic management, the control function is strengthened and, implicit, the control exercised by the managers at the strategic level at the functional level.

Many managers seek to avoid taking on major responsibilities due to deep organizational changes. Generally, they prefer the option of a step-by-step approach to creating and using databases. In this way, systems composed of small databases will develop into various divisions or organizational functions, departments or offices. This punctual approach to building an efficient data management system can face major organizational difficulties. The main causes are the incompatibility of isolated databases, redundancy and reduced flexibility. In conclusion, a gradual approach of the data management system at strategic management level is required.

Financial considerations are based on the fact that the benefits generated by the database management system are often intangible, while the related costs are tangible. Most companies buy the data management software package and the necessary physical equipment. This financial effort is perceived by strategic managers as an important investment. In this case, a careful analysis of the potential benefits that the organization would have in the future is required.

## 2. Types of Managerial Decisions and Constructive Variants of Computer Systems in an Organization

The main ways that information technology can contribute to improving the quality of managerial decisions are: making decisions in an interactive way, involving simulations and scenarios, by modeling and using artificial intelligence.

Adopting decisions in an interactive way has two important areas: scenarios and conversational programs. In case of scenarios, the computer solves each scenario and asks if there are other scenarios, and the manager can intervene by introducing new scenarios or stopping the process. Afterwards, the scenario that best meets the decision criterion is retained. Let's discuss the case of conversational programs now. Most clients of a bank are familiar with this kind of assistance a computer can provide in its decision-making process. ATMs, credit optimization programs or transaction processing are examples that illustrate this area.

*Modeling decisions.* Managers take daily routine decisions or planned decisions. For example, a bank branch manager may decide whether or not to approve a loan for the purchase of a car. Depending on the level of fuel stock, the gas station manager can order whether or not the station is replenished. In such situations, it is possible to design a decision-making model that can be run on a particular personal computer. Such models that behave like a human decision-maker are increasingly used for the adoption of programmed decisions. Many banks opt for lending decisions using computational models in the form of computer products.

*Artificial intelligence* refers to the fact that a computer can process information in the same way as human beings. An important application of artificial intelligence, which has been discussed previously, is known as expert systems.

There are five characteristics of the decision-making process that can greatly influence the acceptance and use of artificial intelligence and expert systems:

- Most management issues are unstructured;
- time and attention of a manager are limited resources;
- managers have different styles to solve decision-making problems;
- managers often work in groups, on formal or informal basis;
- Many managers already have access to and use software for decision-making

Managers who face the same bottleneck problems can use different ways to address them. Artificial intelligence and expert systems are applied to structure or partially structured problems before they are applied to completely unstructured or very little structured issues. Figure 4.16 shows a correlation between the type of decisions and the type of computer systems that can operate in an organization.

## 3. Integrated Accounting Software SAGA B

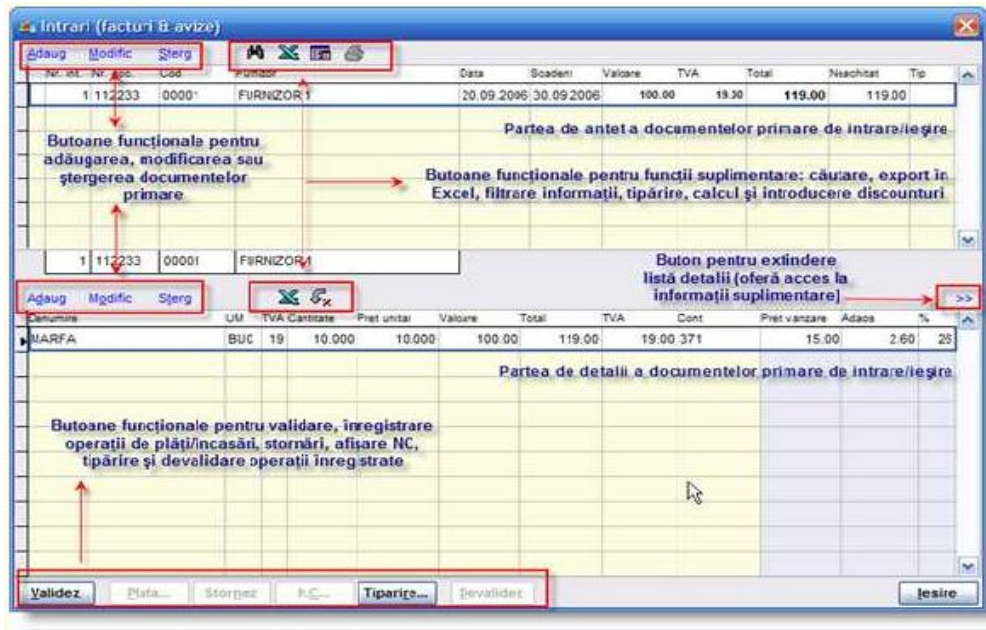
The Saga B software package provides quick and easy access to all available resources. It is a powerful tool for managing information. This program includes integrated tools for storing, analyzing and reporting information quickly, thus allowing managerial posts.

The program has an easy to use, intuitive, standardized and ergonomic interface. Works on computers where one of the Windows 95, Windows 98, Windows 2000, or Windows NT operating systems is installed, but also NOVELL or LINUX.

The Saga program package is protected against unauthorized use of password protection, for each user, with specific usage rights.

The installation for network operation must be done separately on each computer that wants to use the Saga program package. In this situation, it is important that the first installation is done on the host computer for the company database (SERVER for the database).

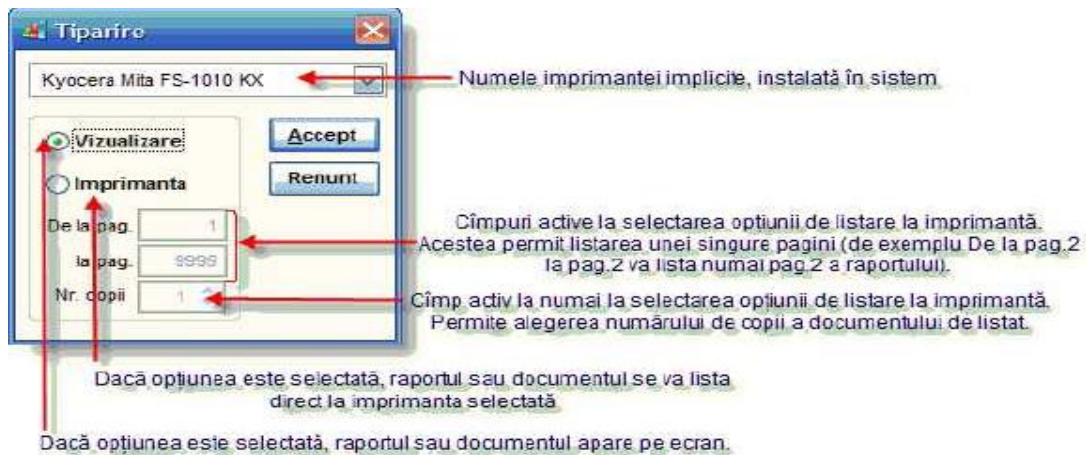
Navigating between fields is done with the keyboard (<Enter>, <Tab> or <Lower-arrow> keys) or directly with the mouse. The screens have standard graphics, with many common options. Such a screen is presented below:



Sorting the data according to the user's desired criteria within the functional screens is done by clicking the mouse button on the column according to which you want to sort them. By default, the data is sorted in the ascending order of the date (column - Date).

From any screen you can print primary documents, journals, etc. Printing is done by pressing the "Print" button on the screen you are in, or by selecting the "Print" button on the functional screens.

Pressing the print buttons causes the following window to appear:

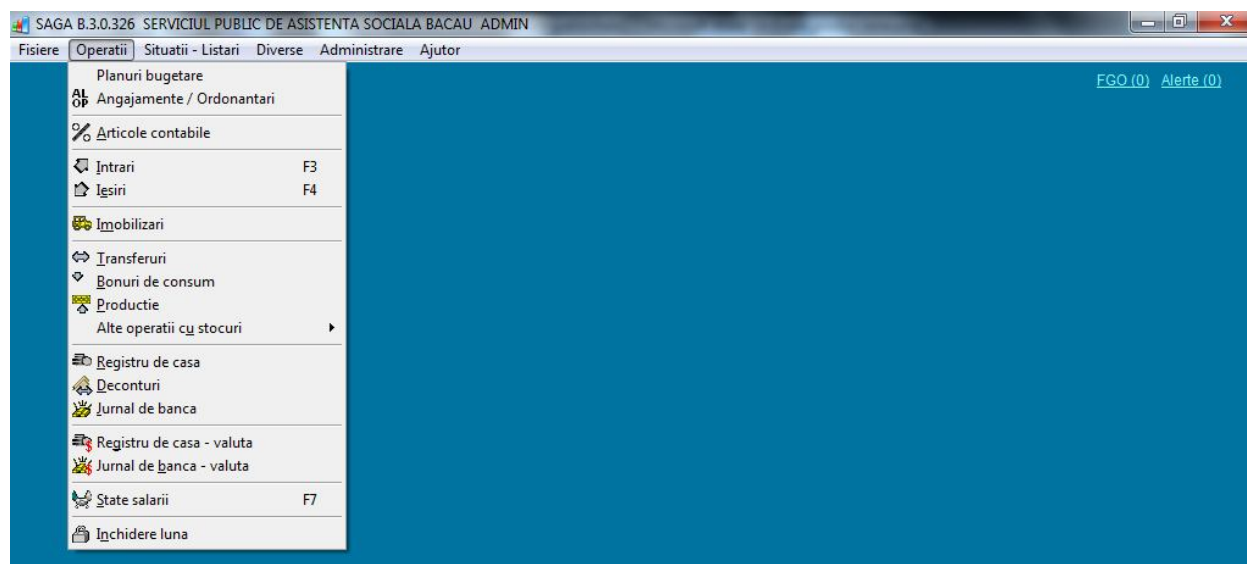


To print the document, regardless of the screen printing destination or directly to the printer, press Accept, otherwise - Cancel.

#### *Description of program menus:*

The program menus, the main menu and its submenus become active following the completion of the retrieval operation.

The main menu actively looks like this:



#### **4. Accounting for Materials Used to Carry out Operational Activities in Public Institutions**

In public institutions, due to the diversity of their activity and their particularities, there are the following categories of materials that are stocks and are intended for carrying out activities:

- raw materials;
- consumables;
- materials of the nature of inventory objects;
- state reserve and mobilization material.

**Raw materials** are stocks that participate directly in obtaining the products and are found in the finished product. Synthetic bookkeeping of raw materials is carried out using account 301 "Raw Materials", which is an account of assets:

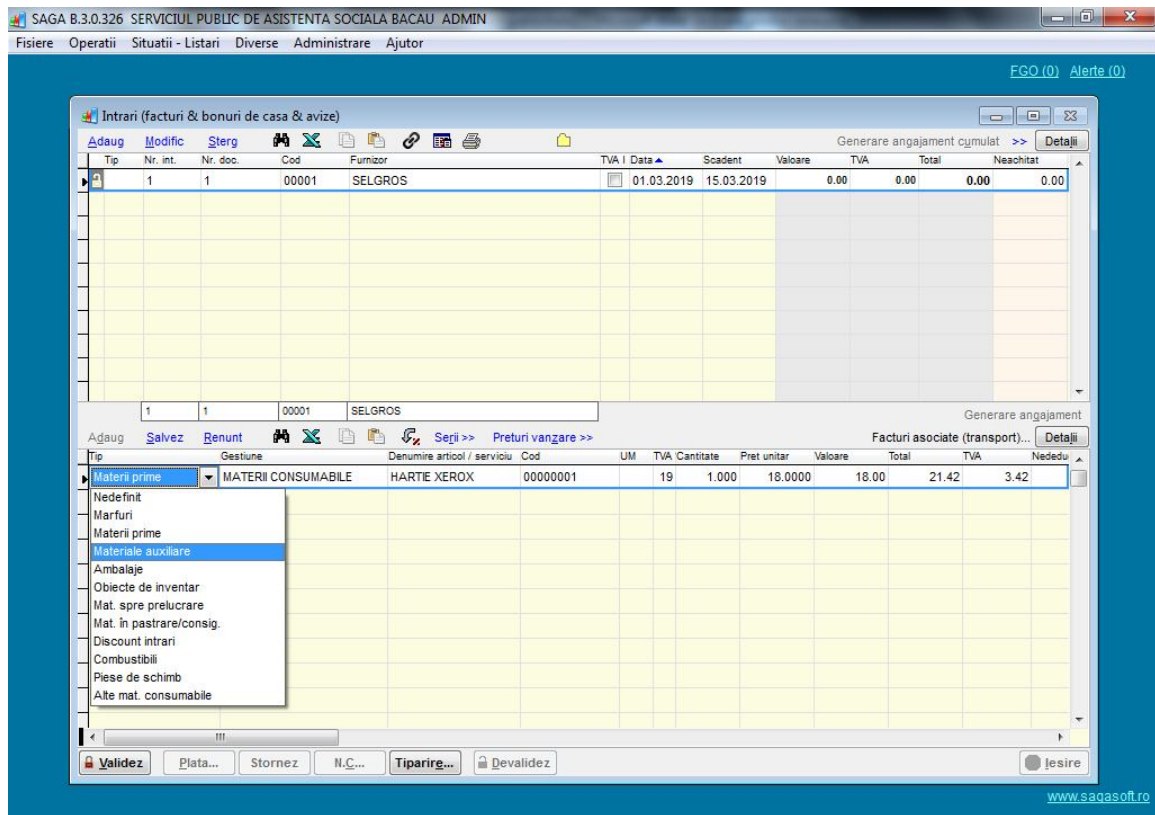
- is debited with the cost of acquisition of raw materials entered into management;
- they are credited with their value at exit.

Consumables are stocks that participate in the manufacturing process but are not usually found in the finished product. This category includes: fuels, sanitary materials, spare parts, maintenance materials, auxiliary materials etc.

Reflection in accounting for consumables is done using account 302 "Consumables".

**Inventory items** are goods, usually in the form of labor, but cannot be classified as fixed assets because they do not cumulatively meet the duration and value conditions. Inventory objects include: protective and working equipment, mechanisms, devices, verifiers, measuring instruments and control. Since inventory items are not consumed in the production process and are used on several operating cycles, a special account must be taken of the other stocks. Their tracking is done through the Inventory Record Sheet and evolves into the off-balance sheet account 8053 "Inventory". Synthetic inventory accounting is done using account 303 "Materials of the nature of inventory objects".

Entering raw materials, consumables, and inventory items into the accounting program is done by accessing the input file, and after entering the supplier's data from which we receive these inventories, choose the type of inventory, the management, the quantity and value of the good, as in the figure below:



After validating the Invoice, the program automatically carries out the accounting and reception notes that are being printed.

### Conclusions

Information systems play an important role in creating economic entities, managing business globally and providing products and services useful to customers.

The Saga B software package provides quick and easy access to all available resources. It is a powerful tool for managing information. This program includes integrated tools for storing, analyzing and reporting rapidly, thus allowing management posts to quickly access accounting and management information.

The Saga Program can be used both by companies with different profiles, such as: wholesale and retail trade, industrial and agricultural production, construction, auditing and financial accounting, public catering services, etc. as well as for budgetary institutions. For each entity, it is possible to set up the accounting record to be consistent with its specific activity.

The program package is designed to be used by people who are uninitiated in accounting. When entering data from primary documents into modules, the program automatically generates the related accounting records, which can be viewed immediately.

Saga provides the entire registry of reports required for the complex coordination of the entity that uses it. With this program, if the activity takes place in multiple workspaces, no physical connection is required between the computers, allowing the data to be entered in each one, and then the transfer to a central computer (usually located at the company's headquarters, at the accounting service). The

transferred data is logically coupled after coupling having the same properties as those entered on the central computer.

With this program, the lost time is eliminated by identifying the primary documents in the files, saving money and time in exploiting applications.

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