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Accounting Computer Systems as a Part of the Information System in the Textile Company

(Recommended by Prof. A. F. Katkov)

Economic information becomes the indispensable tool for decision-making in a market economy. The preparation, processing and delivery of the information to the decision-making individuals provides the competitive advantage on the market. Accounting computer systems, which constantly observe, register and process the economic operations of the company, may provide the reliable information for the management of the economic unit.

Экономическая информация становится незаменимым инструментом принятия решений в рыночной экономике. Подготовка, обработка и доставка информации специалистам, принимающим решения, обеспечивает конкурентные преимущества на рынке. Бухгалтерская компьютерная система, постоянно наблюдающая, регистрирующая и обрабатывающая экономические операции компании, может обеспечить надежную информацию для менеджмента экономического блока.

Key words: computer science for (in) accounting, computer systems in accounting.

In a market economy the dynamic changes in the surroundings of the economic units are observed. The growing competition triggers new processes in the field of company management. Running of the company is inseparable with the social development, settled in the economic and legal manner of functioning. Companies which manage their resources have to use the modern tools which inform them about their income and incurred costs [1]. In the accounting development there are certain tendencies, some of which deserve further discussion, like more spread and highly detailed gathering and presenting of the data by the accounting systems.

Information as the inseparable decision-making element. The economic information (especially about achieved income, incurred costs, owned resources and the sources of their financing), becomes the indispensable element of the decision-making process. Only the information appropriately prepared, processed, certain and being up to date, enables one to make the correct decisions [2]. The exchange of information between the company and the surroundings (environment) becomes highly significant in the market economy [3].

More often the company computer systems are expected to deliver all the information about the company and the way of its functioning. Technology should become more helpful in the process of company management and therefore bringing the «positive asset» into the company. This may be achieved by development and increasing the effectiveness of economic organization and by reducing the amount of work necessary to accomplish a certain assignment [4]. The processing and retrieving information by the accounting systems became a serious problem in the past few years. The process of creating, processing and exploiting information allows one to get the competitive advantage on the market. More complicated and integrated computer systems can satisfy the information needs of the unit managers. Moreover, in the future they may become the primary tool used by all employees of a modern company.

In the economics and management literature one can find two possible definitions of the computer systems: a complex approach and partial approach [5]. The first one defines the computer system as a exclusive part of social, economic or technical system which realizes «its own» functions or goals. Such an approach exists in information technology in economy. This is the way the managers and administrators of information systems perceive them. This approach is useful when the certain social or economic system is essentially the information system.

For the purpose of this article the information system is defined as a set of the connected information processes [5]. The information systems — just like any other subsystem of the company — may be characterized in the intentional, subjective, structural, functional and instrumental aspect. From the intentional point of view, certain goals are determined for the existence of the subsystem of the company. Those goals arise from the classification of goals of the whole company and should contribute to the realization of the company's mission. The characteristics of the intentional information system should also include such issues as the motivation of employees to realize the goals, the division of work and the principles of actions coordination.

From the subjective point of view, certain characteristics of the information system units are presented. What is also determined are the work posts or the organization units which are responsible for the realization of the functions of the company's information system, and how one should measure the effectiveness of the realization of those functions by those units.

From the structural point of view, the place in the company's structure is characterized. Details are determined related to the hierarchical relations, entitlements and duties of the subjects which realize the information functions. The essential element is the organizations of the decision and control systems in the scope of realization of the information system's assignments [2].

Computer system as part of the management and information systems.

The management system in a company may be described as a set of actions,

which cover the full process of managing; planning and decision-making, organizing, and leadership that are directing people to the company's resources (human, financial, material and information) and are used with the intention to achieve a goal efficiently and effectively [6]. All good management systems are similar and they must be capable to plan, substantiate, measure, compare, describe and correct. The definition of the information system varies in the literature. It is most commonly described as the multi-level structure, which allows the user of this system to transform the specific incoming information to the desirable output information by means of particular procedures and models [6]. According to Andrzej K. Koźmiński the knowledge (from the information system, authors note) is the set of information organized in a particular way; it corresponds to the intentions of its creators and users [7]. The computer system, being the element of the information system, from the goals point of view becomes a computerized system [6]. The financial accounting and register information processing is based on such systems.

Accounting computer systems. The specificity of the generated information by the accounting systems in a company depends on a few factors, the most important of which is correctly designed, configured and used computer system. In the majority of textile companies computer systems are being used to keep accounting records, mainly the register books, the ledger, together with analytical books. One can often come across mixed systems, which use, for the purpose of keeping records of economic operations, the computer systems available on the market, for example: register-financial system SYMFONIA, CDN classics, CDN OPTIMA, or more complex ones like DYNAMIX, which also includes settlement and calculation in the manual accounting system. The system created this way do not give opportunities to sculpt the created information in various sections, often becoming only the extension of the register function of the register-financial system, which is delivered by the accounting act.

The analysis system based upon the register-financial system is included in the SYMFONIA program, which among other functions can determine the liquidity index of I, II, III level, index of asset coverage and asset turnover with the personal capital, the system can determine the profitability of the personal capital, assets or turnover assets. In the financial- register program the user can determine the indicators, taken from the balance of profit and loss, useful to evaluate the situation regarding wealth and finance. The value of resources of the textile unit, in the significant way determines the value of indicators specified by the system, influencing the profitability, liquidity and the wealth and financial situation of the textile company. The creation of a dynamic database, indispensable in the process of company management, becomes very important due to the usefulness of the data in the process of managing the economic unit.

In the register systems, created in order to inform the management of a small company, there are certain simplified solutions due to the frequent lack of the calculation team (informing about the places of incurred costs) in the used set of accounts in such companies. In case of a bigger company, there are more complicated ways of registering calculation costs and together with modern technology the more extended systems give the full picture of the cost incurred on product production, identifying indirect costs, the board costs and showing detailed sources of the unit's income.

This picture is not based on the modern approach to production costs (included in the accounting act in 2002), however, it is accepted in the bigger textile companies, that the generation of the values crucial for decision-making regarding the warehouse management, production process and the ready-product storage issues, is possible in the computer systems used by the textile companies.

The above data, indispensable for the proper functioning of the management information system, are often considered as useless by most companies. The accounting information systems are more developed due to certain modules cooperating with the financial-bookkeeping systems. They are, for example: warehouse systems, payroll, sales handling or employees, and the modules providing the analysis of the gathered data in the bookkeeping system, cooperating for instance with such programs as: SMFONIA or CDN classics. The configuration, computational or accounting possibilities are complicated enough to satisfy the needs of managers regarding generation of the information indispensable for managing the company. In the more complicated systems (CDN OPTIMA or DYNAMIX), it is possible to supplement the databases with the computational functions (spreadsheet), thus creating the base to construct any configurations and combinations which boost the process of generating information in the textile company.

Given the fact that the prices of the accounting computer programs are quite affordable, in the scale of the whole economy, hardly any unit keeps the manual records of the economic operations. The companies which functioned on the market for a long time use the common data processing computer systems together with the elements of the accounting kept manually in the past period. The reason for such an approach to bookkeeping is mainly the habit of the accountants to the old schemes of bookkeeping. The introduced computer system is somehow «laid upon» the functioning accounting and it is not strong enough to change common habits. The properties of a certain data processing system are the outcome of its configuration in connection with the professionalism of the accountants and IT specialists. The price of the system is often the indicator of its configuration possibilities, which together with the clearly specified needs of the management and accountants concerning the way of the system configuration,

gives the highly advanced solution regarding technology and substantiality of the techniques applied in the accounting system.

One of the advanced technological possibilities of the computer systems is the analytical development of the generated information. In the first computer systems the unit could use the one-step level of detailed synthetic notation;

synthesis; 201 — account with deliverers

analysis; 201- x_1

201- x_2

201- x_n

The system based on the one-step analytical level allows one to distinguish legal records correctly from the point of view of the accounting law, significantly limiting the possibilities of the computer accounting information system. This is how the computer system CDN Classics is build.

The more modern solutions allow one to detail the analytic notation, also from the viewpoint of managing the economic unit account;

synthesis; 201 — account with deliverers

I degree analysis; 201-1 account with connected deliverers

II degree analysis; 201-1-1 account with other deliverers before 12 months

III degree analysis; 201-1-1- x_1 contracting party

201-1-1- x_2 contracting party

201-1-1- x_n contracting party

II degree analysis 201-1-2 account with other deliverers over 12 months

III degree analysis; 201-1-2- x_1 contracting party

201-1-2- x_2 contracting party

201-1-2- x_n contracting party

I degree analysis; 201 — 2 account with other deliverers

II degree analysis; 201-2-1 account with other deliverers before 12 months

III degree analysis; 201-2-1- x_1 contracting party

201-2-1- x_2 contracting party

201-2-1- x_n contracting party

II degree analysis; 201-2-2 account with other deliverers over 12 months

III degree analysis; 201-2-2- x_1 contracting party

201-2-2- x_2 contracting party

201-2-2- x_n contracting party

The system developed in this way allows one to distinguish the analytical information indispensable in the effective knowledge of the basics of performed economic operations, and therefore to know better about the managed unit. The discussed function of extending the account is included in the SYMFONIA system.

The systems integrated with managing the company, include the analysis allowing not only the detailed analytical notation, but also giving the possibility to freely compile the constructed analytical notations.

201– 01– 01– 01– 001

201– 01

201– 01– 01

201– 01– 01– 01

201– 01– 01– 01– 001

This system allows one to compile easily the analysis on the first, second, third or fourth level. It gives the possibility to distinguish certain data on particular levels of the record, what enables to configure the gathered data. Therefore, it is possible to configure data needed for managing the unit and not for records or constructing the report. Such possibilities are provided by the managing system as: CDN OPTIMA or DYNAMIX.

Summary. Survival, development of the company is one of the basic goals for the economic unit managers. Extremely helpful in that matter is the modernly organized (computer) systems of gathering, drawing up, updating, reconstructing and processing data and delivering them to the unit's management in order to effectively manage own resources. The accounting computer system is an integrated part, internally solid base that may, to a great extent, help to boost the functioning of the information system of the company, throughout the correct selection, construction, programming, qualifying and using the data generated by the computerized accounting system.

Економічна інформація стає незамінним інструментом прийняття рішень у ринковій економіці. Підготовка, обробка та доставка інформації спеціалістам, які приймають рішення, забезпечує конкурентні переваги на ринку. Бухгалтерська комп'ютерна система, що постійно наглядає, реєструє економічні операції компанії, може забезпечити надійно інформацією менеджмент економічного блоку.

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