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## INFORMATION SYSTEM FOR ACCOUNTING

**Abstract.** It can be seen from the analysis that the products of computerised records prevail over other ones in Lithuania. Local programmes match the requirements of the country better and they are cheaper.

The analysis of Lithuanian accounting programmes has shown that they match the consumers' requirements for computerised records and to get the accounts, which are necessary to present for state institutions. Nevertheless, statistical analysis is not sufficient to govern the activities of enterprises. The financial situation of an enterprise must be modelled according to the requirements of a consumer and not after the end of a financial year.

Modern systems of business managing offer lots of different possibilities. But statistics show that most enterprises use only 30–40% of the capacity of programmes. Smaller enterprises use local programmes, and only larger enterprises use the decisions of business governing. Such tendencies must prevail in future too. Even now successful companies adopt systems, that offer larger possibilities of business.

Computerization of records in the agricultural companies is at the initial stage, and the reason of this are high prices of computers and software.

A system of industrial coordination which associates industrial activities and analysis, strategic planning and optimization, and helps enterprises to take strategic decisions increasing the profit of enterprises, is being proposed.

### 1. Introduction

**Relevance of this work.** In the period of developing market economies the level of computerization has grown in Lithuania. While Lithuanian enterprises are thrusting themselves forward into the foreign markets, the requirements for the companies to accept the main international quality

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standards are being raised. The production standardization is impossible without computerization. This kind of situation attracted lots of software companies, that have a wide market in Lithuania. The Lithuanian market consists of national and foreign software. The quality and fullness of programmes has a great influence on precise records maintaining. Most often such companies have created their own programmes, but they do not always administer records precisely or present detailed information, which corresponds to the requirements of records and constantly changing laws.

As a rule, small and average enterprises in Lithuania are young and constantly changing their sphere of activities depending on fluctuations of the market. Trade and services are developing most dynamically. Even a small enterprise with limited resources must administer records and organize financial management propely, so the demand for implementation of the programmes of computer records is still growing. The requirements for information managing and application of modern information technologies have also increased.

The system of management information records does not exist in isolation. It is connected with other information systems: personnel selection, production planning, marketing, quality control and other systems. These systems act through people and influence them due to the information they present. Each information system has its specific goals, its significance and place in the enterprise. The goal of information records is to satisfy information needs of people in order to guarantee organizational control and to get the effect.

**Problem.** The conditions of market economy require application of the achievements of science and the progressive technologies of information and quick solution of the information equipment problem.

**The aim of investigation** is to analyse the conditions and problems of the information record supply of enterprises; to reveal the possibilities for application of modern information technologies in order to enhance the effectiveness of enterprise; to propose the means for the enhancement of implementation of information systems; to investigate the technology of the establishment and management of the information system of firms analysing the opportunity of the application of the information system in management.

In order to reach the object of this work theoretical investigation based on analysis and synthesis of systemic scientific information is being carried out.

**The object of investigation** is to analyse what are the possibilities of using computerized records system during the last decade, and the future perspectives connected with integration into the European Union (EU); to present the importance of the creation of computerised records and their usefulness for management.

**The tasks of the investigation** are to analyse the requirements of enterprises for information and to reveal the ways of application modern technologies in order to increase the effectiveness; to estimate the company possibilities for the information technologies application which support company's decisions.

**The methodology of investigation.** Investigation was carried out using the systemic analysis and synthesis methods and summing-up of scientific references.

## **2. The relation of the programmes of computerised records with the requirements of consumers**

One of the main ways to equip managing and control personnel with information is integrated administration of records and other kinds of economic information, and its presentation to consumers. The integration of special records (engineering – technical, personnel, operational – industrial) with the financial and costs data is especially important. Such integration of separate kinds of records enables calculation of complex indices that comprehensively characterise the management object.

Digital technologies guarantee the increasingly cheaper and more ordinary process of information receiving, processing, storage and transferring. High flow of receiving information creates large opportunities of its usage in creating products and providing services. A large amount of models of financial analysis has been in use, and with new technologies coming into being they are becoming better and better. But they are not integrated into the information system suitably.

It is important to have an information system which can help in accepting the effective strategic and operative decisions according to the state of company and its outer conditions. The information system that presents necessary information for the decision making consists of knowledge, models and dialogue managing means. Lithuanian enterprises and other industrial subjects are still hardly implementing the information systems of decision support due to their large expenses of planning and the primary difficulties of preparations.

Presently we observe the increasing interest in the sphere of information systems. The system engineers are improving the development of instant database and the ways of Internet application. The organizations of various kinds are reforming their business into the electronic form, and for this reason the whole structure of organization must be changed. Leaders have

appeared in many spheres of activity (book trading, brokers, publishing industry, communication computers trading), which did not exist a few years ago. The key to their development is the usage of information systems and the Internet, at the same time increasing productiveness and widening markets.

At present the information system has become the concurrent part of organisation. The main problem is the establishment of its real requirements (needs) and the integration of these requirements into the general information system. The main function of information system is to present all the necessary information for the managers, which allows effective decision – making. As often as not the system of information is the main instrument of an organization in creating a product, whereas at present in various spheres of activity the information itself is being used as a product (commodity).

The analysis has shown that managers and their subordinates do not want to be the experts of information technologies. Actually they seek the flexible ways of systematizing the knowledge of business in such a way that they would be able to intergrate it them into an information system.

It is very important for the modern organisation to analyse and systemise the information. The organization is influenced by the changing conditions of an environment, and only after understanding tendencies of present changes and their reasons and based on the experience of your and other organizations it is possible to forecast the perspectives of this organization and to create the rational strategy of its activities more easily, to avoid certain mistakes and to eliminate the reasons of failures.

Outages and advisers' visits put the organization to great expense, and it is important to lessen the possibilities of fluster as much as possible. The resistance to fluster is determinated by engineering data. The programmes that are based on the potent managing systems of database (DBMS – database management system), – “Oracle”, “Sybase”, “Informix”, “Microsoft SQL” – are more trustworthy than those that have their own systems of database managing. The programmes with their own database system are not always regularized with modern technologies.

The practice has shown that databases can change the use of modern information technologies.

Information cumulated inside of the company must be evaluated objectively. We cannot make precise decisions without objectively and properly evaluated information. The financial analysis is one of the most suitable ways to evaluate information, establish present conditions, and adopt the optimal decisions of management and the future prospects. Financial analysis is the most important element of the managing system. If there is no such element or it is unqualified, the wholeness of the managing system is being transgressed. It

is important for modern business. **The information that financial analysis gives helps to check if the past decisions are accurate and helps to reason present and future decisions of management. The present economic situation is being checked by the method of retrospective analysis, and the meaning and urgency of management decisions are being checked with the help of perspective analysis.**

The decisions of management, their validity, possibilities to put into practice and consequences depend on the information, based on which decisions are made. Therefore, the important role in management falls on a business information system, the base of which consists of record data that characterise the factual situation of activities. We start creating the information system of any object from the complex of record tasks. Creating a new or reorganising the working information system it is very important to analyse and evaluate available opportunities and means in order to choose the most rational version. It is very important work from the standpoint of the implementing of computerised record system taking into consideration that the supply of software (the packets of conciliatory record programmes) develops very quickly in Lithuania. Alongside the more or less popular local production (Stekas, Labbis, Revile, Debetas, etc.) more packets of foreign production are being used (Hansa, PC Kaufmann, Navisios, Skala, etc.). At the same time the necessity to investigate all possible alternatives and to prepare decisions arises. One of the main problems of the whole information system of management is to establish such criteria and to organize the mechanism of evaluation.

The whole information system must match the strategic aims of business. Only then can we speak about the creation, implementation, modification and development of such systems. Nevertheless, the order of criteria can differ in different objects of management. The situation of Lithuania is different from the world standards. The consumers' preparation is not very high, and it creates difficulties in working with foreign programmes. Besides, the translation of foreign packages into Lithuanian language is poor.

One of the main factors that bode well is the ability to manage effectively the flow of information. Managers often face the necessity to evaluate large amounts of information flows that are changing all the time and that is why they are seeking to receive this information already processed and systematic. The development of modern information technologies allows management of the information usefully and effectively in the computerized way. This process is being carried out by creating systems that correspond to the logic of organization activity. The information system of an organization is not only the tool to gather, store and process the information, but it is also the source of profit.

The main purpose of financial analysis is to give information for the making effective managing decisions, to use optimally the resources of that organization by carrying out the objective of its owners.

Lithuanian enterprises buy computerised programmes of information increasingly; nevertheless, they rarely implant the subsystems of market investigation and planning. Organizations cannot implant new technologies of information and communication because of the poor financial resources.

The analysis shows that the jump of computer techniques and information technologies has brought the gap between the possibilities of usage and methods of usage. Inconsistence during computerization of a company can lead to vast and unnecessary.

After investigating the usage of the information system of records in agricultural enterprises we can state that the needs for the implementation of modern information technologies have grown. The computerization of records in farms is necessary in order to meet not only their needs but also information needs for other purposes: fee-paying, insurance, compensations, VAT declarations and the planning of EU structural funds. Because accounting regulations approved by Lithuanian Government are being applied from the 2000, the government empowered farmers to manage the accounting of their farms, if they want to get national or other investment support.

The requirements are obvious in large farms and enterprises, and they grow increasingly. Universal packages of software that are presented take into account the particularities of agriculture and do not present full data for the effective management of agricultural production. The level of computerization in Lithuanian agricultural companies is far away from developed European countries. The worst situation is in the farms. The computerised programmes are created to meet the requirements of larger farms and enterprises, so the small ones are disaffected. The other reason is the high price of programmes and software.

The computerization of records at the present economic level is in the initial stage because of high prices of computers and software. Besides farmers have too little knowledge and experience, only a low proportion of farmers use services of consulting firms.

Any information system must be improved and amplified according to the requirements of consumers. Business knowledge must be systematized in such a way as to integrate them into the information system. The principles of integration can change the comprehension between consumers and producers.

Accounting information is the main kind of economic information, which has a great influence on the economic decision of its users, their behaviour and possibility of action in the market.

The performed investigation of Lithuanian and foreign computerised programmes and the analysis of data show that Lithuanian enterprises have a good setting to the development of the business of information technologies.

Implementation of optimization system widens the flexibility of company's activity, enhances reliability of decision making, because they become less dependent on the person that makes that decision.

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## SYSTEM INFORMACYJNY RACHUNKOWOŚCI

(Streszczenie)

Na podstawie przeprowadzonej analizy można stwierdzić, że w większości litewskich przedsiębiorstw stosuje się skomputeryzowane systemy ewidencji księgowej. Lokalnie opracowane programy w większym stopniu odpowiadają specyfice krajowej przedsiębiorczości, a poza tym są tańsze.

Analiza litewskich programów finansowo-księgowych pokazuje, że są one dostosowane do wymagań odbiorców związanych z komputeryzacją ewidencji oraz do uzyskiwania sprawozdań, które należy przedstawić instytucjom. Tym niemniej, analiza statystyczna dla celów zarządzania działalnością przedsiębiorstwa jest niekompletna. Sytuację finansową przedsiębiorstwa prezentuje się w sposób zgodny z wymaganiami użytkownika, a nie po zakończeniu roku finansowego.

Poziom komputeryzacji księgowości w przedsiębiorstwach rolniczych jest dość niski. Z danych statystycznych wynika, że większość przedsiębiorstw wykorzystuje możliwości programów zaledwie w 30–40%. Mniejsze przedsiębiorstwa stosują własne systemy, a tylko większe wykorzystują systemy wspomagające decyzji. Istnienie takich tendencji przewiduje się

także w przyszłości. Skomputeryzowane programy są tworzone z myślą o dużych przedsiębiorstwach, więc nie są przydatne w przypadku mniejszych jednostek. Dodatkowa barierą są wysokie ceny takiego oprogramowania.

W artykule zaproponowano system koordynowania działalności gospodarczej, uwzględniający analizę, planowanie strategiczne i optymalizację działalności, mającą na celu ułatwienie podejmowania strategicznych decyzji, których efektem będzie zwiększenie zysku przedsiębiorstw.

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## INFORMACINES SISTEMOS APSKAITOJA

(Santrauka)

Lietuvoje netgi maža įmonė, turinti ribotas lėšas, privalo tvarkyti apskaitą ir tinkamai organizuoti finansinį valdymą, todėl didėja poreikis diegti kompiuterines apskaitos programas.

Siekdamos palengvinti ir paspartinti apskaitos informacijos tvarkymą, įmonės diegia įvairias apskaitos informacijos tvarkymo technologijas. Išaugo poreikiai ir informacijos tvarkymui, modernių informacinių technologijų diegimui.

Iš atliktos analizės matosi kad Lietuvoje vyrauja vietiniai kompiuterizuotos apskaitos produktai. Nes vietinės programos labiau atitinka šalies įstatymų reikalavimu ir yra gerokai pigesnės.

Lietuviškų buhalterinės apskaitos programų analizė parodė, kad jos atitinka vartotojų poreikius kompiuterizuoti apskaita ir gauti ataskaitas reikalingas valstybinėms institucijoms. Tačiau vien statistinės analizės nepakanka įmonių ūkinei veiklai valdyti. Reikia modeliuoti įmonės finansinę situaciją kad gauti išsamias ataskaitas apie pinigų srautus, prekių judėjimus, realizaciją, kita informaciją, kuri turi būti pateikta pageidaujant vartotojui, o ne metams pasibaigus. Šia kryptimi toliau dirba programuotojai.

Šiuolaikinės verslo valdymo sistemos siūlo aibę galimybių. Tačiau statistika rodo, kad dauguma įmonių panaudoja tik 30–40% įdiegtų programų galimumo. Vietines programas daugiau taiko mažesnės įmonės, o verslo valdymo sprendimus, naudoja stambesnės bei vidutinio dydžio įmonės. Tokios tendencijos tikimasi ir ateityje. Jau dabar sėkmingai besiplėtojančios įmonės pereina prie sistemų, kurios teikia didesnes verslo sprendimų galimybes.

Žemės ūkio įmonėse apskaitos kompiuterizavimas prie esamo ekonomini lygio yra pradinėje stadijoje, nes jį nulemia didelės kompiuteriu ir programinės įrangos kainos.

Siūlomos įmonės gamybos šakų derinimo sistema, turinti jungianti gamybinės veiklos analizę, strateginį planavimą ir optimizavimą, padeda įmonėms priimti strateginius sprendimus, didinančius įmonės pelną.