

SECTION 11  
MATHEMATICAL METHODS, MODELS  
AND INFORMATION TECHNOLOGIES IN ECONOMY

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**EFFICIENCY OF COMPUTER TECHNOLOGIES  
IN ACCOUNTING**

This article analyzed the current state of the spread of information technology in accounting. The author showed the characteristic advantages of using computer technology and software specifics of economic analysis. The main indicators for evaluating the effectiveness of any measures to automate accounting are examined.

Study on the development and improvement of information systems of businesses will be beneficial for future chief accountants and managers when considering the implementation of automated accounting.

Creation of information systems contributes to the efficiency of economic object and provides quality control. The greatest efficiency is achieved by optimization of plans of enterprises, companies and industries, fast operational decision-making, precise material and financial resources manoeuvring, and others.

Characteristics of the organization of economic analysis in computer environment are:

- increased systemacity of economic analysis, due to the need to clearly define and formalize the analytical tasks during their automatic solutions. The formalization of analytical tasks eliminates their duplication, promotes clearer definition of the scope and the quality of the information base of economic analysis, is the direct object of economic and mathematical modelling, which significantly increases the depth of analytical study of economic activity;

- providing analysis of the influence of a wide range of internal and external factors on object under study, which contributes to the degree of scientific validity of administrative decisions taken on the basis of economic analysis;

- increase of the credibility and reliability of the results of economic analysis provided by dynamic correction of accounting data;

- expansion of the feasibility of analytical studies – the use of computers enables to conduct real-time operational and situational anal-

ysis, to increase the possibility of multiple predictive analysis providing processing and calculation of a number of approaches and making better management decisions by choosing the most appropriate one;

- creation of opportunities for comprehensive analytical research associated with operational processing of large volumes of incoming analytical information.

Therefore, computer technologies significantly increase processing quality of accounting information. Thus, the use of computers changes the content and organization of work of staff, reduces the number of manual operations on processing primary documents, ordering accounting indicators, filling registers and reports.