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## MATHEMATICAL METHODS, MODELS AND INFORMATIONAL TECHNOLOGIES IN ECONOMY

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### **INFORMATION SYSTEMS IN CORPORATE BUSINESS PROCESSES MANAGEMENT**

Corporate information system – is an integrated, which permits to create a single information space for effective management of business processes at all levels and throughout the management cycle. Modern corporate IS must satisfy the following requirements: Complexity. CIS functioning spreads to all levels of parent company, affiliates or subsidiaries, from higher levels of management to direct work places.

The modular construction principle. It allows as an isolated use of the separate software modules, and arbitrary combinations depending on the industrial and economic necessity.

Client-server architecture. It has the ability to apply the most industrial database management system.

Support for distributed information processing. Adaptability. The ability of system flexibly to be reconstructed in the case of change of factors internal and external environment (enterprise organizational structure, product range, legislation in the field of economics, etc.).

Reliability. The ability to maintain functionality even under disability its individual elements. Safety. According to the CIA model, to the characteristics of information as an object of protection are included:

confidentiality, integrity and availability. Scalability information system. This is an ability to increase its productivity in terms of additional growth of resources (typically hardware).

Supporting technologies of Internet and Intranet. Availability exploration through user-friendly interface. Warranty support. Firm-developer or its representative must ensure launch into action IS validation software and its correction, if necessary, its adaptation and improvement in case of changing conditions.

For the successful implementation of the CIS the company needed based approach for selecting the method of implementation and, in addition, following the general method of implementation and realizing the recommended stages: pre-project examination, construction of information and functional model of enterprise activity, CIS adaptation to the needs of the enterprise, trial operation, commissioning, maintenance operation. It is necessary to pre-determine the effectiveness of the introduction of the product on the basis of use such indicators as total cost of ownership, implementation period, total cost and the payback period on investment.