

CONCEPTUAL MODEL OF INTELLECTUAL INFORMATION SYSTEM OF SMALL ENTERPRISE

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To research the design of intellectual information systems of a small enterprise the comparative analysis of management systems and their application in business was carried out.

The aim of the research is to create intellectual information system that would allow all types of enterprises (as small and medium-sized businesses) to operate more efficiently, store and search for the required information in the process of using more sustainable methods of access.

The main task of the research is to develop strategies for building intellectual information systems as an extension of CRM-systems.

The object of research is a process management of a small enterprise.

The subjects of research are methods, tools and principles of construction and operation of intellectual information systems management of a small enterprise.

Under the conditions of an economic crisis effective solutions of the problems of small businesses depend on the sufficient implementation of information systems based on the standard configuration of CRM-systems.

The novelty of the research is the design of an intellectual component of this information system.

The practical value of the research is to build a conceptual model of intellectual information system of a small enterprise that is ready to use. The economic effect is expected from the introduction of a model of results of an intellectual system, which was elaborated and the main processes were described. A conceptual domain model was presented in the form of class diagrams, and also the predicate semantic network of information of the research. It has to increase profits.

The generic system was described. To improve the process of maintenance of decision-making of the company a set of production rules was given.

The introduction of CRM-system that considers both internal communications and communications with customers is more effective than introduction of management systems that focus only on internal processes. Therefore the developed system is not only an ERP system based purely on internal relations of the enterprise, but it is a CRM-system that uses a "customer-centric" approach, the result of which is the improvement of the competitiveness of enterprises and the profits increase.

Keywords – CRM-system, conceptual model, diagram of classes, production rules, intellectual system.