

FACTORS OF THE COMPUTETIZED MAINTENANCE MANAGEMENT SYSTEMS IMPLEMENTATION

Summary:

In the doctoral thesis, the issue of implementation of computerized maintenance management systems (CMMS) in manufacturing enterprises was addressed. The lack of reliable presentation of these systems in Polish literature and examples of their implementation causes that a small number of companies report about their effective deployment and use, and even theoretical knowledge. The work was embedded in Polish realities due to the benefits that can be provided by properly implemented CMMS for the reliability of assets in organizations and cost optimization, and thus increasing the competitiveness of domestic companies.

The main goal of the study was to diagnose the determinants of CMMS implementation in manufacturing enterprises. Based on literature studies and preliminary studies based on individual interviews and conversations with managers of maintenance departments and managers of technical departments as well as experts in the field of practical implementation of computerized maintenance management systems, a questionnaire was built, which was used to conduct proper research.

Using the methods of quota sampling and the limitations resulting from them, the author of the dissertation established cooperation as part of the study with these companies, which respond positively to the proposal for participation in the interview and corresponded to the established structure of the population of enterprises according to the rules of quota sampling. From the perspective of specific features of the studied population, assuming an appropriate level of confidence and maximum error, the sample size was determined in the number of 193 manufacturing companies. The surveyed organizations represented the various industries, were located in different locations, had different sizes and different time of operation on the market. The following characteristics were adopted as the basis for the quota sampling: the size of the company and its location. The research results were developed using descriptive methods and statistical inference. The conducted research allowed, on the one hand, to identify potential factors influencing the implementation of CMMS, and on the other hand allowed to identify barriers that may occur during the implementation of these systems. In addition, statistics on functionality, parameters relevant to purchase, benefits of use and CMMS disadvantages were presented from the organization's point of view.

The doctoral thesis contains a summary in which conclusions resulting from the studies and recommendations for enterprises deciding to implement computerized maintenance management systems were presented. This dissertation does not cover all issues related to

CMMS. Separated determinants and barriers create the beginnings of further research, which are going to deepen and refine these solutions and create a CMMS implementation model.