ABSTRACTS

IMPROVEMENT OF PRODUCTION PLANNING IN COMPANY PARS KOMPONENTY

(pages 1-7)

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Keywords: the MRP system, production planning, reserve time, stocks

Abstract: The article analyzes the current status of production planning in company Pars Komponenty s.r.o., proposes a new method of planning based on application of the principle of MRP. It is a discrete type of production with high complexity of BOM and MTO (Make-to-Order) and ETO (Engineering-to-Order) from the point of decoupling point. The original planning system plans according to production capacity backward without collisions, but for a given type of production does not work in practice. Planning system was analyzed and the main problems were identified, which were high work in progress and material stocks. This article target is to propose a new planning system based on the inclusion of time reserves of purchased material items. New planning system was tested in practise with benefit in reducing both the material inventory and work in progress.

STRATEGIC PURCHASING IN A PROJECT- BASED COMPANY – TO CENTRALIZE OR DECENTRALIZE

(pages 9-15)

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Keywords: purchasing, centralization, decentralization, transparency, competencies

Abstract: Organizations all lie on a spectrum, at one end of which are firms with complete centralization of purchasing, and at the other end are firms with complete decentralization. Most firms lie somewhere between the two extremes, and we have already mentioned the most common model that has certain decisions centralized (perhaps strategy design, selection of suppliers, purchasing of major capital equipment, training, co-ordination, communications, etc.) and bulk of purchasing devolved to local buyers. There are many variations on the type of activities that are either centralized or decentralized. In the last 12 years purchasing has noticed two radical changes in the majority of facilities. First change was the reverse of supplier – customer relationships where the role of purchasers changed from persuading and begging the suppliers to ever deliver, preferably with minimum delay (for fixed prices), to standard purchase activities where the purchaser can choose from many suppliers and negotiate prices with vendors to achieve the best conditions for his buyer. The second change was the establishing of a modern IT system that made purchasing activities more effective, more automatic and transparent to a considerable extent. It is good to realize whether all changes have led to improvement or whether these changes have caused a stop or a slowdown of the project purchasing – whether it is possible or even necessary to take into account global as well as local suppliers or to combine them. This Case Study demonstrates how a project - managed organization could look like, where it is necessary to take into account customer's wishes and benefit.

APPLICATION OF THE LOGISTICS PRINCIPLES FOR THE COMPANY OMEGA, S.R.O. IN CRISIS TIME

(pages 17-21)

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Keywords: crisis, company, analysis, impact of crisis

Abstract: The article is focused on a concrete company and its management practices in crisis state. The content of the article are the characteristics, decomposition, development and consequences of crisis and crisis management through the identification of crisis initiation of crisis management, halting of crisis development and evaluation of crisis management. The article is focused on the possibility of solving crisis that may happen in the company, through avoidance of a crisis implementation of monitoring and controlling the business and to reduce risks and deal with them as soon as possible. The next center of article is evaluation of appropriate methods, which company should focus in case that will into a state of crisis, such as outsourcing, union materials in production, redundancies, restructuring, acquisitions, mergers or sale of the company. There are also evaluated individual company departments by ABC analysis.

INTELLIGENT TRAFFIC-SAFETY MIRROR BY USING WIRELESS SENSOR NETWORK

(pages 23-25)

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Keywords: traffic, safety, wireless sensor, wireless network

Abstract: This article is focused on the problematic of traffic safety, dealing with the problem of car intersections with blocked view crossing by a special wireless sensor network (WSN) proposed for the traffic monitoring, concretely for vehicle's detection at places, where it is necessary. Some ultra-low-power TI products were developed due to this reason: microcontroller MSP430F2232, 868MHz RF transceiver CC1101 and LDO voltage regulator TPS7033. The WSN consist of four network nodes supplied with the special safety lightings which serve the function of intelligent traffic safety mirror.



TRACKING AND TRACING SOLUTION FOR DANGEROUS GOODS CARRIED BY INTERMODAL TRANSPORT

(pages 27-30)

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Keywords: tracking, goods transportation, software, information technologies

Abstract: This paper deals with the problem of designing a complex tracking and tracing solution for dangerous goods transportation with the support of modern information technologies. This research activity presents a part of the "ChemLogTT" project solved at the University of Žilina. The main goal of our contribution is to present basic conception of a complex developed software tool for monitoring and analyzing mentioned dangerous goods transportation.

IMPLEMENTATION OF ASSET MANAGEMENT IN ROAD ADMINISTRATION OF SLOVAK REPUBLIC

(pages 31-38)

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Keywords: Asset management, Maintenance Repair & Reconstruction, Road Administration

Abstract: The article presents basic principles and solutions for the application of Asset Management as part of road administration in Slovakia. It deals with application of Assets management methods and best practices of global trends in road maintenance, repair and rehabilitation strategies. An effective public Asset Management combines principles and strategies of asset management used in private sector with sound practices and methods proven to be applicable by public road administrator and his digital information systems. The under-funding of road management leads to development of tools and methods, which enable us to define criteria for establishing priorities for investments into road assets.