44 Generic IT Platform Hosted on Mobile Devices for Automated Logistics and Management Processes

C. Apostolakis

E.Symeonaki

M.Papoutsidakis

D.Tseles

44.1 Abstract

With the rapid development of technology in all areas nowadays there is a constant effort to introduce technological solutions in everyday life with emphasis on materials management information systems (Enterprise Resource Planning). The last few years the variety of this systems have been increased for small business or for SMEs or even for larger companies and industries. In the field of material management with automated processes, ERP applications have only recently begun to make their appearance. This thesis will present the development of a system for automated material storage process in a system built through specific roles that will manage materials using an integrated barcode scanner. In addition we will analyse and describe the operation and modules of other systems that have been created for the same usage. The object of research and development, falls to P.M.S since it deals with modern automation technology applications, we will attempt to construct an original application enabling better management of materials for usage and storage. The aim of this thesis is to create a prototype application that will be innovative with a flexible nature that will give solutions, with low cost, also it will be user friendly. This application will allow quick and proper materials management for storage. In the main part of the study will be an analysis of the programs used for creating the application , the capabilities and the way it works , we will also discuss the advantages and disadvantages and simultaneously propose optimizations to further extend the benefits of the operation. The expected result is that the application can be used by smart devices with android environment and computers without an external barcode scanner, making the application accessible to the buyer with low cost. The main aim of this project is to reduce the time required for registering and counting large number of products for transport and storage.