A DEVELOPMENT OF DATABASE DRIVEN INVENTORY MANAGEMENT FOR SAUDI SMALL ENTERPRISES

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A Development of Database Driven Inventory Management for Saudi Small Enterprises

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ABSTRACT

Nowadays, the changing in business operations among customers is facing huge challenges due to the new competition of adopting technology by businesses today. Most of these challenges can be found among the Saudi Small Enterprise companies (SSEs), which reflects the needs of developing a suitable system for managing and optimizing the business activities in these companies. A number of difficulties were reported during the process of inventory management, which recognized to be one of the most critical operations for any SSEs. Hence, integrating new technology could help to overcome the SSEs difficulties in performing and managing its operations in reliable way. Meanwhile, this research aimed to develop an inventory management system for simplifying and managing SSEs operations in a flexible way based on the utilization of multi agent interface that could add extra advantages in operating the business deals over the internet.

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LIST OF OBSERVATION

ICT	Information and Communication Technology
ERP	Enterprise Resource
MPA	Master Production Schedule
RCCP	Rough Cut Capacity Planning
MRP-I	Material Requirement Planning
CRP	Capacity Requirement Planning
SCM	Supply Chain Planning
MES	Manufacturing Execution System
EOQ	Economic Order Quantity
RP	Reorder Point
JIT	Just In Time
DCOM	Distributed Component Object Model
IIOP	Internet Inter-Orb Protocol
CISS	Computerized Inventory System Specialists
IIMS	Integrated Inventory Management System
AOM	Aspect Oriented Modeling
RE	Requirement Engineering
DDIS	Development Database Inventory For Saudi
SPSS	Statistical Package for Social Sciences

CHAPTER ONE

INTRODUCTION

This chapter briefly elaborates the main idea of this research, providing an answer of the question why the study is conducted and what is the main element involved in the study. The first sub-topic describes the overall idea in this study through the introduction and motivation that lead to the implementation of the whole research. In addition, the problem statement, objectives, significance and scope of the study were followed towards the research topic. The last sub-topic amplifies the way this research is organized.

1.0 Introduction

The Information and Communication Technology (ICT) has been changing the way how things are done by people irrespective of age, gender or social status. These changes include everything starting from day to day things such as how people communicate with each other, how students study to how businesses are carried out (Adams, 1998; Noudoostbeni, Yasin, & Jenatabadi, 2009).

With the change of customers' preferences, break of geographical and political barriers to business, development and proliferation of technology, changes in the laws protecting the customer interests and other changing factors in the external environment and the internal environment changes like educated and skilled labor, demands on limited capital put businesses under great pressure. The amount and the nature of pressure felt by businesses depends on various factors like the type of business, size of business, nature of market etc., (Scheer & Habermann, 2000; Umble, Haft, & Umble, 2003). Businesses use different strategies to cope with these pressures. Some businesses adapt to the changing environments

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