"EFFECT OF INACCURATE INVENTORY INFORMATION ON DEMAND FORECASTING

(Review of Inventory Management in Cantt. General Hospital, Sialkot)"



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Table of Contents

Declaration
Dedication2
Abstract3
List of Acronyms and Abbreviations
CHAPTER # 1
INTRODUCTION1
1.1 Background8
1.2 Introduction
1.3 Objectives
1.4 Significance
1.5 Scope of the research
1.6 Problem statement
1.7 Limitations
1.8 Scheme of the report
CHAPTER # 2
CHAPTER # 2
BACKGROUND STUDY1
BACKGROUND STUDY
BACKGROUND STUDY 1 2.1 Background Study 15 CHAPTER # 3 1 DESIGN AND IMPLEMENTATION 1 3.1 Design and Implementation 29 3.2 Variables 34 3.3 Conceptual Framework 34
BACKGROUND STUDY 1 2.1 Background Study 15 CHAPTER # 3 1 DESIGN AND IMPLEMENTATION 1 3.1 Design and Implementation 29 3.2 Variables 34 3.3 Conceptual Framework 34 3.4 Construction of variables 35
BACKGROUND STUDY 1 2.1 Background Study 15 CHAPTER # 3 1 DESIGN AND IMPLEMENTATION 1 3.1 Design and Implementation 29 3.2 Variables 34 3.3 Conceptual Framework 34 3.4 Construction of variables 35 3.4.1 Inventory Inaccuracy 35
BACKGROUND STUDY 1 2.1 Background Study 15 CHAPTER # 3 1 DESIGN AND IMPLEMENTATION 1 3.1 Design and Implementation 29 3.2 Variables 34 3.3 Conceptual Framework 34 3.4 Construction of variables 35 3.4.1 Inventory Inaccuracy 35 3.4.2 Supply 35

TESTING AND DEPLOYMENT	1
4.1 Research Methodology	38
4.2 Variables used	38
4.3 Data source and collection	38
4.4 Hypotheses	39
4.5 Assumption testing	39
4.6 Model used	39
4.7 Software package used	39
CHAPTER # 5 CONCLUSION & RECOMMENDATION	1
5.1 Analysis & Conclusion	41
5.2 Recommendations	42
References	44
Annexure	47

Dedication

This research is dedicated to our great parents whose prayers have helped us throughout our life up till now. To all our respectable teachers who played an enormous role in our life and to all our friends whose affection and prayers are always with us. This research project is also dedicated to all those who served and did sacrifice for Islam and to those students of our university (Bahria University) who did sacrifice for our university and for the sake of knowledge.

Abstract

The importance of the demand forecast can be seen in decisions taken by retailers, suppliers, producers. Because supply must match demand in order to avoid extra costs incurred, hence demand must be forecasted accurately. While studying literature it has been found that, one of the most important parameter that influences demand and henceforth its forecast is; inaccuracy in inventory data. Inventory is considered the most important asset in many businesses and demand forecasts relies on it. If the former is inaccurate, the latter will show erroneous results. The underlying research is carried out to exactly identify the influence, with the help of sample data from Cantt General Hospital, Sialkot in a five year period time commencing from 2009 till 2013 (till November). With inventory inaccuracy being the independent variable, relative effect is seen with dependent variable i.e. demand forecast. Results show that presence of incomplete info vis-à-vis inaccuracies in data specifically inventory records can negatively influence demand estimates and its future forecasts. It is because of having not a good record keeping system. Even the date that is recorded is manually taken and in this way some of the data gets lost. So, no proper data record keep is maintained that had lead to inaccuracy in data that had made a negative impact on demand estimation and its future forecasting. Either the forecasts are overestimated or underestimated. Both cases are unfortunate for the continuous growth of a business and thus prove a daunting feature in successful supply chain management.

List of Acronyms and Abbreviations

SCM Supply Chain Management

SKU Stock Keeping Unit

MAPE Mean Absolute Percentage Error

RMSE Root Mean Square Error

SME Small Medium Enterprise

RFID Radio Frequency Identification

MRP Material Requirements Planning

IRI Inventory Record Inaccuracy