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Abstrak


Katakunci: gudang data, kejayaan gudang data, faedah gudang data, kualiti maklumat, kualiti hubungan, kualiti pengguna, business intelligence, pembuatan keputusan.
Abstract

Increased organizational dependence on data warehouse (DW) systems has driven the management attention towards improving data warehouse systems to a success. However, the successful implementation rate of the data warehouse systems is low and many firms do not achieve intended goals. A recent study shows that improves and evaluates data warehouse success is one of the top concerns facing IT/DW executives. Nevertheless, there is a lack of research that addresses the issue of the data warehouse systems success. In addition, it is important for organizations to learn about quality needs to be emphasized before the actual data warehouse is built. It is also important to determine what aspects of data warehouse systems success are critical to organizations to help IT/DW executives to devise effective data warehouse success improvement strategies. Therefore, the purpose of this study is to further the understanding of the factors which are critical to evaluate the success of data warehouse systems. The study attempted to develop a comprehensive model for the success of data warehouse systems by adapting the updated DeLone and McLean IS Success Model. Researcher models the relationship between the quality factors on the one side and the net benefits of data warehouse on the other side. This study used quantitative method to test the research hypotheses by survey data. The data were collected by using a web-based survey. The sample consisted of 244 members of The Data Warehouse Institution (TDWI) working in variety industries around the world. The questionnaire measured six independent variables and one dependent variable. The independent variables were meant to measure system quality, information quality, service quality, relationship quality, user quality, and business quality. The dependent variable was meant to measure the net benefits of data warehouse systems. Analysis using descriptive analysis, factor analysis, correlation analysis and regression analysis resulted in the support of all hypotheses. The research results indicated that there are statistically positive causal relationship between each quality factors and the net benefits of the data warehouse systems. These results imply that the net benefits of the data warehouse systems increases when the overall qualities were increased. Yet, little thought seems to have been given to what the data warehouse success is, what is necessary to achieve the success of data warehouse, and what benefits can be realistically expected. Therefore, it appears nearly certain and plausible that the way data warehouse systems success is implemented in the future could be changed.

Keywords: data warehouse, data warehouse success, data warehouse net benefits, information quality, relationship quality, user quality, business intelligence, decisions making.
Acknowledgement

In the name of Allah and his mercy, the more you learn, the more you realize how little you know. We come to understand that our accomplishments are not possible without the help of Allah. The following are just a few of the countless people who have helped me to complete my Ph.D. studies.

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Lastly, I dedicate this thesis to the spirit of my brother Mohammed, who was martyred during the war on Gaza, the end of 2008, and to the spirit of my uncle Mahmoud Al-Mabhouh who was killed by the Israeli Mossad in Dubai, the beginning of 2010.
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<th>Full Form</th>
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<tr>
<td>DW</td>
<td>Data Warehouse</td>
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<tr>
<td>IS</td>
<td>Information System</td>
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<td>MIS</td>
<td>Management Information System</td>
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<td>IT</td>
<td>Information Technology</td>
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<td>PCs</td>
<td>Personal Computers</td>
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<td>CSFs</td>
<td>Critical Success Factors</td>
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<td>TDWI</td>
<td>The Data Warehouse Institution</td>
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<td>DSS</td>
<td>Decision Support System</td>
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<td>KM</td>
<td>Knowledge Management</td>
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<tr>
<td>OLAP</td>
<td>Online Analytical Processing</td>
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<td>OLTP</td>
<td>Online Transaction Processing</td>
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<tr>
<td>ETL</td>
<td>Extract, Transform and Load</td>
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<td>MDD</td>
<td>Multi-Dimensional Database</td>
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<td>RDBMS</td>
<td>Relational Database Management System</td>
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<tr>
<td>B2C</td>
<td>Business-to-consumer</td>
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<tr>
<td>B2B</td>
<td>Business-to-business</td>
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<tr>
<td>CRM</td>
<td>Customer relationship management</td>
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<td>ERP</td>
<td>Enterprise Resource Planning</td>
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<td>VCF</td>
<td>Virtual Case File</td>
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<td>FSC</td>
<td>Financial Service Company</td>
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<td>GUI</td>
<td>Graphical User Interfaces</td>
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<td>IV</td>
<td>Independent Variable</td>
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<td>MV</td>
<td>Mediator Variable</td>
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<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>DV</td>
<td>Dependent Variable</td>
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<td>EFA</td>
<td>Exploratory Factor Analysis</td>
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<td>CFA</td>
<td>Confirmatory Factor Analysis</td>
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<td>PCA</td>
<td>Principal Components Analysis</td>
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<td>KMO</td>
<td>Kaiser-Meyer-Olkin</td>
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<tr>
<td>MAS</td>
<td>Measure of Sampling Adequacy</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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CHAPTER One
INTRODUCTION

In this chapter, the researcher discusses the background of the data warehouse’s technologies. Then starts with the statement of the problem, the research questions, the research objectives, the significance of the study, the scope of the study, and finally the structure of the study.

1.1 Introduction

A data warehouse is an Information System (IS) that provides the means to extract the knowledge from the operational data stores of the business. Data warehouse can also provide information about suppliers, customers, markets, and financial results. Thus, according to Ganczarski (2006), it is enabling the organizations to adapt to the present, learn strategically from the past, and position for the future. Furthermore, a data warehouse is a collection of data from multiple sources, integrated into a common repository and extended by summarized information for the purpose of analysis (Ester et al., 1998). This repository allows enterprises to collect, organize, interpret and leverage the information for decision support (Groth, 2000; Wixom & Watson, 2001; Gupta & Mumick, 2005). It provides the foundation for effective business intelligence solutions for the companies seeking competitive advantage (Chenoweth, Corral, & Demirkan, 2006). Popularity of the data warehouse for data analysis has grown tremendously, as the conventional transaction processing systems have matured while becoming faster and stable (Raden, 1996; Humphries, Hawkins, & Dy, 1999; Phipps & Davis, 2002; Parida, 2005).
The contents of the thesis is for internal user only
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