

**GRADUATE ENTREPRENEUR ANALYTICAL REPORTS
(GEAR) USING DATA WAREHOUSE MODEL: A CASE STUDY
AT CEDI, UUM.**

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UNIVERSITI UTARA MALAYSIA

2011

**GRADUATE ENTREPRENEUR ANALYTICAL REPORTS
(GEAR) USING DATA WAREHOUSE MODEL: A CASE STUDY
AT CEDI, UUM.**

A project submitted to Dean of Research and Postgraduate Studies Office in partial
Fulfillment of the requirement for the degree Master of Science (Information
Technology) Universiti Utara Malaysia

By
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ABSTRACT

Business Intelligence (BI) system using Data Warehouse (DW) technology is one of the important strategic management approaches for decision making in the organizations today. BI combines architectures, tools, databases, analytical tools, and methodologies to enable interactive information focused on analytical reports. Analytical reports, which affect the long-term direction of the entire company, are typically made by top managers. These types of decisions are often complex and the outcomes uncertain, because available information is often limited. Managers at this level must often depend on past experiences and their instincts when making strategic decisions. DW is a technology enable to integrate and transform enterprise data for strategic decision making. The organization, which is, responsible to manage entrepreneur activities need an analytical report for strategic decision making. This paper is focused how to design and develop Graduate Entrepreneur Analytical Reports called GEAR by using a DW Model in Cooperative and Entrepreneur Development Institute (CEDI), Universiti Utara Malaysia (UUM) as a case study. This system has been tested through the system user feedback by using Computer System Usability Questionnaire (CSUQ), which measures user satisfaction and consumer usability.

ACKNOWLEDGEMENT

By the Name of Allah, the Most Gracious and the Most Merciful

First and foremost, I would like to thank the God for giving me the power, patience, and courage to complete my work. I never thought how long I will take to reach here to write the acknowledgement. So that by this gift, I would like to give my sincere thanks for my father who always supported me to complete my study from the beginning till the end, special thank for my mother and all of my family members that has been supporting me. Special thanks to my friends, especially Rafed, Adel, Munaif, Mehdi, Tamar, Hayder Salah, Ayad M., Ayad and everyone who was helping me to do my work. I wish to express my sincere thanks to Miss Willawan Jansri for her support and encourage me during my study.

Last but not least, I would like to sincere thanks to my supervisor, Muhamad Shahbani Abu Bakar for his guidance, motivation and helping me to complete my work. I am also appreciating my evaluator, Azizah Bt Haji Ahmad, for her comments, patience, supporting and always give the positive idea to finish my work.

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LIST OF ABBREVIATIONS

BI	Business Intelligence
CEDI	Cooperative and Entrepreneurship Development Institute
CSUQ	Computer System Usability Questionnaire
DM	Dimensional Modeling
DSS	Decision Support Systems
DW	Data Warehouse
ERD	Entity Relationship Diagram
ETL	Extract, Transfer And Loading
GEAR	Graduate Entrepreneur Analytical Reports
GMDR	General Methodology for Design Research
MAKMUM	Majlis Keusahawanan Mahasiswa Universiti Malaysia
OLAP	On-Line Analytical Processing
OLTP	On-Line Transaction Processing
ReCODS	Requirement Centric Operational Data Store
SBU	Strategic Business Unit
SQL	Structured Query Language
SSAS	SQL Server Analysis Services
SSIS	SQL Server Integration Services
SSRS	SQL Server Reporting Services
UML	Unified Modeling Language
UUM	Universiti Utara Malaysia

CHAPTER ONE

INTRODUCTION

1.0. Introduction

An entrepreneur is the person who has possession of a new venture, idea or enterprise. Entrepreneur is responsible for the inherent risks and the results by himself. The entrepreneur monitors and controls his business activities as a manager. The supporting of the entrepreneur has become to enhance an agenda in national policy for many countries. The Cooperative and Entrepreneur Development Institute (CEDI) at University Utara Malaysia (UUM) has an own vision to become the leader academic and research in the field of entrepreneurship. CEDI is the original name of a business and entrepreneurship development institute which handled entrepreneurship activities in UUM.

Business Intelligence (BI), which is a business management term, it is a set of methodologies, architectures, processes and technologies used to explain the technology. These technologies collect enough amounts of right data in the given time. It analyzes the data into meaningful and useful information by traditional data warehousing technologies (Lida et al., 2007). The main function of BI technology is the analytical report, which helps the management to make the right decisions. Figure 1.1 presents a typical layered view of architecture for business intelligence (Liya et al., 2007).

BI component, called Data Warehouse (DW) is a database designed to support decision making (Chau et al., 2003; Seungjae et al., 1998). The DW takes data from operational applications then edit and finally gather them to provide

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the thesis is for
internal user
only

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