

# **BUSINESS INTELLIGENT GRADING SYSTEM OF GRADUATE STUDENTS**

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**BUSINESS INTELLIGENT GRADING SYSTEM OF  
GRADUATE STUDENTS**

A thesis submitted to the graduate school in partial  
fulfillment of the requirements for the degree  
Master of Science (Information Technology)  
Universiti Utara Malaysia

By

**ROHAYA BINTI DAHARI @ DAMIRI**

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## **ABSTRAK**

Tidak berapa lama dahulu, didapati seorang eksekutif korporat sudah memadai bagi menjustifikasikan sebarang keputusan perniagaan atau pengurusan yang strategik. Namun kini kebanyakan organisasi, contohnya institusi pendidikan, terpaksa berhadapan dengan masalah pangkalan data yang kian membesar dan menjadi semakin kompleks. Mereka terpaksa bergelut untuk mengurus dan mengemaskini timbunan maklumat yang disimpan di dalam pangkalan data di jabatan-jabatan dan sekolah-sekolah. Dan kini, eksekutif pengurusan menyedari bahawa maklumat dari pangkalan data tersebut perlu diproses dan disalurkan untuk menyokong keputusan perniagaan yang strategik. Analisis data diperlukan bagi sebarang tindakan yang akan dibuat untuk jangkamasa panjang atau pendek dan organisasi juga perlu mempunyai keupayaan untuk memperolehi maklumat daripada pangkalan data secara mudah dan cepat. Namun begitu, tanpa kaedah yang sesuai organisasi tidak akan berupaya untuk menyungkil aset mereka yang paling penting iaitu maklumat.

Dalam hal ini, satu teknologi yang dikenali sebagai *business intelligent* didapati dapat membantu organisasi bagi menyelesaikan masalah tersebut. *Business intelligent* direkabentuk untuk meningkatkan keupayaan *enterprise* bagi menghasilkan keputusan yang terbaik. Ianya boleh digunakan bagi menghasilkan maklumat yang diperlukan bagi semua peringkat dalam organisasi dari pengurus atasan hinggalah ke peringkat pekerja berilmu.

Di dalam projek ini, “*Business Intelligent Grading System of Graduate Students*”, teknologi *business intelligent* telah digunakan bagi mengekstrak data daripada

sistem pemarkahan pelajar siswazah bagi program Sarjana Sains (Teknologi Maklumat) secara kerja kursus untuk menghasilkan satu penyelesaian iaitu maklumat berbentuk carta/laporan yang mempunyai keupayaan untuk mengemukakan pertanyaan secara lebih terperinci. Projek ini telah diimplemenkan menggunakan Groupware Business Intelligence.

## **ABSTRACT**

Not long ago, a corporate executive was adequate to justify a strategic business decision. Organizations such as educational institutions now are wrestling with larger and increasingly more complex databases. They are struggling to manage and update the wealth of information stored in departmental and schools databases. And today, executive management realizes that information from these databases needs to be streamlined to support the strategic business decision. Data analysis is required for both short- and long-term actions, and organizations want to be able to get that information from their databases easily and quickly. Without the proper tools, however, organizations will not be able to leverage one of their most important assets i.e. information.

In this case, business intelligent technology can help an organization to overcome the above mention problem. Business intelligent is designed to improve an enterprise's ability to make good decisions. It makes necessary information available to all levels of the enterprise, from senior management to the knowledge worker.

This project, "Business Intelligent Grading System of Graduate Students", has make use the technology of business intelligent to extract the data from grading system of graduate students for Master of Science (IT) by coursework program to capture the important solution i.e. useful information in form of chart/report with capability to make queries. The Groupware Business Intelligence has been used in implementing this project.

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Yours sincerely,

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## **CHAPTER 1**

### **INTRODUCTION**

Educational institutions today, both public and private, are perpetually seeking competitive advantages. It has become an incontrovertible axiom that information is the key to determining how to gain such a competitive advantage (Mark Davis).

Information is the hottest commodity in university's operation today (Jane Griffin, 1999). Succeeding in operation depends on how well the universities know their customers/students, how well they understand their business/operation processes, and how effectively they run their operations. And having that kind of far-reaching insight depends on information, which is accessed, integrated, and distributed in a meaningful fashion.

The problem today is how to deal with mountains of raw data, which collected, massaged, processed, derived, and disseminated by information systems. We literally are in the midst of a volcanic eruption of data (Informatica Corp., 2000). Somewhere hidden in this explosion of data is the clue management needs to define their strategic positioning in the market so as to maximize their competitive stance (Mark Davis).

Into this picture, technology has inserted the concept of business intelligent as one of the alternative in coping with the well-known information overload described above.

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