# A WEB-BASED JOB MANAGEMENT SYSTEM MODEL FOR BM COMMUNICATION

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# A Web-Based Job Management System Model For BM Communication

A project submitted to Dean of Research and Postgraduate Studies Office in partial

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Master of Science (Information Technology)

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By Soon Chooi Wah



# **KOLEJ SASTERA DAN SAINS** (College of Arts and Sciences) Universiti Utara Malaysia

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# ABSTRAK (BAHASA MALAYSIA)

Kebelakangan tahun ini, internet merupakan salah satu servis yang penting dalam kehidupan manusia. Penggunaan internet telah memenuhi keperluan harian manusia dengan penggunaan aplikasi web. Peniaga boleh menguruskan segala urusniaga peniagaannya dengan mudah melalui aplikasi web. BM Communications telah menghadapi masalah gunaan manual untuk merekodkan status perkerjaan mereka. Tujuan utama kajian ini adalah untuk menyelesaikan masalah merekod status pekerjaan BM Communications dengan menggunakan aplikasi web. Kepentingan model ini adalah untuk menawarkan sistem pengurusan aplikasi web untuk mengurangkan beban dan meningkatkan kecekapan pekerja. Malah pengurus BM Komunikasi boleh menggunakan sistem ini untuk merekod dan menyemakan status pekerjaan dengan mudah. Akhir kata, penggunakan prototaip ini akan meningkatkan prestasi kakitangan BM Communications.

# **ABSTRACT (ENGLISH)**

In recent years, because of the rapid rise of the Internet, it has become a part of daily life. People complete their daily needs through the web application. Some small businesses even set up their own web application Systems to make their work more efficient. BM Communication was facing problem where their manual operation for record their job status. This study is aim to propose web-based Job Management System model for BM Communication in order to help them manage their job records. The main significant of this model is to offer a web-based Job Management System to decrease admin workload and increase the staff's efficiency. On the other hand, this system could allow the owner and admin manage the jobs record and check the job status which will improve the staff's efficiency. Moreover owner of BM Communications could use this system to check the job record easily by using this web-based System. By using this prototype, it will increase work performance of the staff form BM Communications.

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# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

Job Management System (JMS) is a component of cluster middleware responsible for management of users' applications (i.e. jobs) execution at the computational cluster (SRCE, 2007). The main goal of JMS is to create interface for users' job requests, to achieve efficient resource utilization and to allow owners to define cluster usage policies (Emir, Branimir and Dobrisa, 2004). According to Xiaoguang, Hui and, Yongbin (2010)'s research mentions, Microsoft provides a new HPC platform, Windows HPC Server 2008 which brings the power, performance, and scale of high performance computing to mainstream computing. Although Windows HPC Server provides multiple methods for job management and submission, but none of them supports web-based and user friendly interface.

According to Emir, Branimir and Dobriša (2004), they talked about some of the JMS features that they have installed and their own experiences with those systems. All JMSs comes with standard features. For this reason, they have outlined only those that are not provided or those that are significantly good. They stated that Portable Batch System (PBS) do have some limitations like limited graphic user interface, no complex job types, limited node configuration and so on. Besides that, they highlighted on the

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