

EXPLORING THE FACTORS INFLUENCING UTeM's PORTAL
EFFECTIVENESS

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Report submitted in fulfillment of the requirement for the degree of Bachelor of
Technology Management (Hons) in Innovation Technology

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JUNE 2015

I declare that this project is the result of my own research except as cited in the references. The research project has not been for any degree and is not concurrently submitted in candidature of any other degree.

Signature :

Name :

Date :

DEDICATION

This research paper is dedicated to my beloved parents who educated me and motivate me to reach at this level. They constantly give me support and advice throughout the process. Without their blessing and encouragement, this research is impossible to complete.

ACKNOWLEDGEMENT

I take this opportunity to express my profound gratitude and deep regards to my supervisor, Dr. Yusri Bin Arshad for her exemplary guidance, monitoring and constant encouragement throughout the course of this research. The blessing, help and guidance given by her time to time shall carry me a long way in the journey of life on which I am about to embark.

Secondly, sincere appreciation and thanks to Ir. Budiono Hardjono who positively guiding, supporting and contributing his opinion and experience in complete this research.

Lastly, deepest thanks and appreciation to my family and friends with their endless support, encouragement and care during the report completion from the beginning till the end.

Thanks again to all who helped me.

ABSTRACT

The purpose of the research is to evaluate the effectiveness or success of universities' portal implementation from the perspective of students as users. Adopting the model developed by Delone and McLean, portal effectiveness is defined as being composed of information quality, systems quality and service quality. In addition, the research also seeks to investigate the influence of individual factors comprising attitudes towards the portal, perceived attractiveness, personal innovativeness and web self-efficacy on the effectiveness of the portal. The study adopted a survey research design with questionnaires being administered to 180 students as respondents. Descriptive statistics utilized questionnaire data from three cluster of courses at this faculty. The data showed that most of the respondents were relatively from Malay, Chinese and Indian were majority has STPM/Matriculation on education attainment, were skilled in using the computer and the internet, had internet access at home, and were committed to using the web portal. The cross-sectional strategy for data collection resulted in 180 usable responses that were used for data analysis as design methodology approach. In addition, the study also showed that of the three predictors investigated, only personal innovativeness were found to be significantly correlated with portal effectiveness dimensions. The perceptual self-report measures rather than objectives measures adopted in this study contribute to bias, and a cross-sectional design for data collection only provides data at one point in time. The instrument developed in the study could assist the authorities concerned in evaluating the effectiveness of the portal. Despite the growing interest in universities adopting portal technologies, studies addressing the issues of successes and effectiveness are still very limited. Hence, this study provides an impetus for evaluating campus portals from the user's perspective.

ABSTRAK

Tujuan kajian ini adalah untuk menilai keberkesanan atau kejayaan pelaksanaan portal universiti dari perspektif pelajar sebagai pengguna. Menggunakan model yang dibangunkan oleh Delone dan McLean, keberkesanan portal ditakrifkan sebagai yang terdiri daripada kualiti maklumat, kualiti sistem dan kualiti perkhidmatan. Di samping itu, kajian ini juga bertujuan untuk mengkaji faktor yang mempengaruhi iaitu terdiri daripada sikap terhadap portal, tarikan yang dilihat, inovasi peribadi dan web sendiri ke atas keberkesanan portal. Kaedah kajian ini berbentuk kajian tinjauan dengan soal selidik yang diberikan kepada 180 orang pelajar sebagai responden. Statistik deskriptif telah digunakan bagi data soal selidik daripada tiga kelompok kursus di fakulti pengurusan teknologi dan teknousahawan. Data menunjukkan bahawa kebanyakan responden secara relatifnya dari Melayu, Cina dan India. Tambahan, majoriti yang mencapai tahap pendidikan STPM / Matrikulasi, adalah mahir dalam menggunakan komputer dan internet, mempunyai akses internet di rumah, dan komited untuk menggunakan portal web. Strategi keratan rentas untuk pengumpulan data mengakibatkan 180 jawapan yang digunakan untuk analisis data sebagai pendekatan metodologi kaedah kajian. Di samping itu, kajian itu juga menunjukkan bahawa satu daripada tiga peramal disiasat, hanya inovasi peribadi didapati mempunyai hubungan yang signifikan dengan keberkesanan dimensi portal. Persepsi langkah laporan diri dan bukannya objektif langkah-langkah yang diguna pakai dalam kajian ini menyumbang kepada berat sebelah, dan reka bentuk keratan rentas untuk pengumpulan data hanya menyediakan data pada satu-satu masa. Instrumen yang dibangunkan dalam kajian ini dapat membantu pengkaji dalam menilai keberkesanan laman web ini. Walaupun minat yang semakin meningkat di universiti menggunakan teknologi portal, kajian menangani isu-isu kejayaan dan keberkesanan masih sangat terhad. Oleh itu, kajian ini memberi dorongan untuk menilai portal kampus dari perspektif pengguna.

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ABBREVIATIONS

UTeM	=	Universiti Teknikal Malaysia Melaka
FPTT	=	Fakulti Pengurusan Teknologi dan Teknousahawan
IS	=	Information System
IV	=	Independent Variables
DV	=	Dependent Variable

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The university portal is a web portal where all information and all services that students need can be found in one place. The contents of the portal are divided into the tabs studies, contact and service, student life and careers also a business. Portals such as Yahoo! offer users a single point of access to a wide variety of services (Russell et al., 2006). The portal is the most accessed type of web site (Outing, 2000). It relies on advertising as its main source of revenue (Ha, 2003). As more users visit the portal, more income is generated (Spreng and Olshavsky, 1993).

While web portals have attempted to provide a full range of functions, the dissimilarity among portals has significantly decreased. The lack of differentiation has led to fierce competition among portals. One solution for managing and complex amount data is the use of portals. This innovative technology can be used to gather, manage, share and utilize information that has been stored in disparate databases throughout the company (Aneja et al., 2000; Bock, 2001; Brabston & McNamara, 1998; McManis et.g , 2001; Yu et al., 2001).

This program and other related programs, are expected to improve university information systems and help them to be strong and competitive in education, science, and study. This study assesses user satisfaction with university students' portal services for a consistent assessment of campus portal services being operated, in terms of a maintenance and improvement management of the service.

The aim of this research was to measure the effectiveness of using Universiti Teknikal Malaysia Melaka (UTeM) portal by contributing factors that affect towards dependent variable among Fakulti Pengurusan Teknologi dan Teknousahawan (FPTT). Students and web portal are strongly related because they always use the portal in terms of getting information, sharing and gather data between university and students also service that they provided. Finally, a conceptual framework for understanding the contributing factors towards portal effectiveness is highlight and supported by previous study.

At the core of portal effectiveness is the ability to gauge that the portal is fulfilling its objectives and to measure that planned improvements on the portal have their desired impact. In practice, however, measuring portal effectiveness is a gray area. Often portal sites lack the the tools, the techniques, and the empirical metrics needed for meaningful measurement. Web-portal is becoming a promising web-based technology that integrates and consolidates the business's scattered internal and external information and knowledge repositories, and presents them in one single personalized view (Benbya et al., 2004; Rainer et al., 2007).

1.2 Problem Statement

The aim of this section is to examine some of the issues and problems that researcher found. The rationale behind the researcher including this section is that it provides a nice hook for researcher to detail the contents of the book and place them in context. If an information portal is to achieve it is full potential for users, there are several issues to be considered with implications for both systems and people across the institution.

The visual attractiveness of the web portal refers to its visual elements, most notably the colour scheme and its overall layout (Heijden, 2003). Playfulness is regarded as an individual state, because an individual can feel playful during a visit to a web portal (Lin et al., 2005). Psychic cost perceptions are defined as users' negative affective reactions to a web portal and its environment (Baker et al., 2002).

In this current situation, the researcher would like to highlight the issues as the problem that users faces. According to (Bajec, 2005) noted that today, almost all universities are either developing or purchasing portal solutions for their needs. Despite the growing interest in universities adopting portal technologies, studies addressing the issues of success and effectiveness are still very limited. The bulk of the studies that were found in the literature were mainly concerned with reporting the experiences of developing a university portal or setting plans and strategies for its development (Jafari, 2003; Eisler, 2003; Thomas, 2003; Campbell & Aucoin, 2001; Frazee et al., 2003; Bajec, 2005; Bishop, 2003).

1.3 Research Objectives

Important Objectives of the study are stated as follows:

- i. To identify the factors that influence of effectiveness using UTeM portal among FPTT students.
- ii. To know the ranking of the factors that influence the portal effectiveness among FPTT students.
- iii. To investigate the correlation between factors that influence the portal effectiveness among FPTT students.
- iv. To know the multiple regression impact factors that influence from using portal among FPTT students.
- v. To provide the recommendation of these factors on overall satisfaction of UTeM portal effectiveness among FPTT students.

1.4 Research Questions

The research questions relates to the nature and factors of the UTeM's Portal effectiveness. These are questions that construct as follows:

- i. What are the factors that influence UTeM portal effectiveness?
- ii. What are the ranking between of each factors towards UTeM portal effectiveness among FPTT students?
- iii. What are the correlation between factors interact to determine the extent of UTeM portal effectiveness among FPTTstudents?
- iv. What is a significant factors to put in place to assist the UTeM portal effectiveness among FPTT students?
- v. What are the multiple regression impact factor that influence from using portal among FPTT students?
- vi. What is the recommendation of these factors on overall satisfaction of UTeM portal effectiveness among FPTT students?

1.5 Research Hypothesis

- i. H1: Web self-efficacy is significantly related with UTeM portal effectiveness among FPTT students
- ii. H2: Personal innovativeness is significantly related with UTeM portal effectiveness among FPTT students
- iii. H3: Attitudes towards the portal are significantly related with UTeM portal effectiveness among FPTT students
- iv. H4: Perceived attractiveness are significantly related with UTeM portal effectiveness among FPTT students

1.6 Scope of the Study

The scope of this study involves the adoption and utilisation of ICT to enable the buying and selling of commodities and the exchange of information that brings knowledge and business value among FPTT students that using UTeM portal. Thus, this study will be focus on contributing factors that influencing UTeM portal effectiveness among FPTT students. Other than using personal computers for business transactions, participants in information system may employ various other devices and ICT applications (Ngai & Wat, 2002). Although most of institution and organisation now days have their own portal interface. It is easy for users look up what a new information had been add on.

1.7 Limitation of the Study

Limitation that researcher will face are time and cost. The researcher need to divide the time to get the data collection. It is because the respondent should be peoples among FPTT student at UTeM which is consist of cluster of courses and year of study. Other than that, it may higher costly to distribute questionnaire based on population that will be pick.

1.8 Significance of the Study

Adoption and the deployment of any information system (IS) might be hindered by several factors or challenges. The factors that might affect the adoption of a using portal are related technical factors such as system design, information quality, usability and segmentation; management challenges such as leadership, rewards system, cost effectiveness and strategy or social factors such as organizational culture, trust, commitment and satisfaction (Benbya et al., 2004).

1.9 Structure of Research

<u>Chapter</u>	<u>Brief Description</u>
One	On this chapter the researcher describe on exploring factors influencing UTeM's portal effectiveness. The research objectives and hypothesis was guided the research question that had been built from problem issues. Some element such limitation, significance, and scope was stated.
Two	On this chapter, the researcher come out with theoretical framework development that are supported from past previous study (literature review). There are three independent variable which are the factors that related or match to dependent variable which is UTeM's portal effectiveness.
Three	On this chapter describe about the research methodology. Type of technology that the researcher using. The analysis and procedure to come out with an accurate result. Quantitative method as a method was chose to use on collecting data.
Four	On this chapter, more discussion and analysis is going in this phase. The researcher were transfer the data in order to get the results. Hence, the relationship between independent variable and dependent variable will measure by correlation and multiple regression.
Five	On this chapter, conclusion had been made by viewing the overview on overall study. Recommendation for future research as guideline to others.

1.10 Summary

This chapter is the introduction for the topic of the research. Among other, it discusses the background of study, problems related to the topic, objectives of the study, research scope, limitation of study, significance of study, and finally outlines the whole subsequence in chapter one in structure of the study. In general, this chapter provides basic ideas of what this research is all about. It provides an overview of the objectives of the study to ensure that it is appropriately aligned with the objectives and related to the problem statement that occur in the research. It includes basic information about the research encompassing introduction to portal effectiveness, and the contributing factor that may build in chapter two.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The previous chapter introduced the problem statement, the research objectives and the research questions that this study attempts to address. In this chapter, the researcher provides the whole of the study describing the literature as a main source. This chapter also consists of the relevant statement, and related written sources such as journals, articles and internet sources by a lot of philosophies that support the research in strengthening the argument given. It is very important to the researcher to emphasize and assert the topic in order to come up with solid and strong evidence unhesitatingly.

2.2 Defining the Portal

Portals were first introduced as search engines and became useful gateways to information and commerce. Even though a portal is conceived as a useful business model, the success of a portal depends on how it attracts and keeps visitors in order to increase revenue (Gounaris et al., 2005). Because a portal's low switching cost makes it easy for customers to leave and threatens its survival, the portal needs to find ways to retain customers (Zott et al., 2000; Gandal, 2001; Sieber & Valor, 2002). To solve this problem, portals had tried to provide appropriate and useful services to retain customers for long periods of time (Dewan et al., 2009). However, the services that portals can provide depend on the cost of offering the services and revenue due to advertisers' marginal value for information acquired from portals (Chellappa & Shivendu, 2005).

Various communities have taken advantage of the current Web functionalities to strengthen communication and information exchange inside and outside of the community. Miscellaneous web portals have appeared with the purpose of providing an open and effective communication forum for their members.

According to semantic web (Berners-Lee et al., 2001) stated as the next generation web, enables automated information access and use based on machine-processable semantics of data. Hence, information is made understandable for the computer, thus assisting people to search, extract, interpret and process information. Semantic web technologies can considerably improve the information sharing by overcoming the problems of current web portals. In this sense, portals based on semantic web technologies represent the next generation of web portals.

There is still no universally accepted definition of what constitutes a portal. The discussion that follows will present a selection of some recently published definitions to indicate the various categories of portals. (Dias, 2001) stated that provides an excellent list and interpretation of definitions from over 20 authors, showing the diversity of opinion between the years 1999 and 2000. Based on these, Dias consequently identified various categories of portals, suggesting through this process that decision support and management information systems were the precursor of (corporate) portals, and as such

- a. Adapted to enterprise information environments to suit employees' information needs.
- b. Optimised the interaction, distribution and management of internal and external information resources, resulting (at least theoretically) in.
- c. Reduced costs, as well as increased productivity and competitiveness.

User needs, internal and external information sources and reduced cost seem to be good departure points, but they do not indicate what makes a portal unique when compared with the functionality of a good intranet directory or a hub of links to digital information resources. It is surprising how many times the term portal is being used to describe a static Web site environment. The corporate world is particularly at fault in this context: a well-designed and dedicated Web site that provides access to specialised resources or goods might be referred to as an information directory or information hub, but it is definitely not a portal with its current specialised functionalities. Simply affixing the word “my” to a system and adding a personal logon feature, definitely does not metamorphose a static Web site into a portal.

According to (Meta, 2001), is worth mentioning, namely that (enterprise) portals are replacing first generation intranet Web sites as a more effective, efficient and flexible means of managing and delivering applications and information to diverse sets of users. It also seems that portals are potential tools for increasing productivity by enhancing access to an enterprise's information assets. To what extent is this “enhancement” already present in the information world will be addressed later in discussing the information functions of portals.