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**THE DETERMINANTS OF VIRTUAL LEARNING ENVIRONMENT (VLE)
SYSTEM ADOPTION ATTITUDE AMONG TEACHERS IN NATIONAL
SECONDARY SCHOOLS IN KUALA LUMPUR**



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Thesis Submitted to

**Othman Yeop Abdullah Graduate School of Business
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Master of Sciences (Management)**

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ABSTRACT

Virtual Learning Environment System (VLE) is one the current trending technology in education globally. The Virtual Learning Environment (VLE) system has enable to bridge teacher-student-parent communication through its various advantageous functionalities. In Malaysia, the Ministry of Education has joined the global leap of adapting the Virtual Learning Environment (VLE) technology via the introduction of Frog Virtual Learning Environment (VLE) system in 2012. This initiative under the project, 1BestariNet was coupled with high speed broadband access that bridges the digital divide of all schools in the Nation. However, the utilization of the Frog Virtual Learning Environment (VLE) system has seen a low uptake by its stakeholders. Hence, this study aims to investigate the determinants of Virtual Learning Environment (VLE) system adoption attitude among teachers, specifically secondary school teachers in Kuala Lumpur. This study administered the survey methodology for data collection from 89 secondary schools located in three zones in Kuala Lumpur namely zone Bangsar/Pudu, zone Sentul and zone whereby 366 secondary school teachers were chosen as the sample for this study. A disproportionate stratified sampling procedure was used to select respondents from the respective schools within the zone. Five hypotheses were proposed in regards to the determinants of Frog Virtual Learning Environment (VLE) system adoption attitude. A structured questionnaires consisting 35 questions were adopted from previous scholars for this study in order to measure five variables namely Frog Virtual Learning Environment (VLE) System adoption attitude, perceived usefulness, and perceived ease of use, organizational culture and self-efficacy. As of from the 800 questionnaires handed out, only 336 were usable after the outlier assessment thus yielding a response rate of 42.0%. The research was analyzed using descriptive as well as inferential statistics in order to measure the relationship of the variables and draw the inferences between the independent variables and the dependent variable. The research result indicated that there are relationships which exist between the determinants and Frog Virtual Learning Environment (VLE) System adoption attitude. In concluding the research, the academic and managerial implications as well as suggestion for future research was discussed.

Keywords: Virtual Learning Environment (VLE), Technology Adoption, Perceived Usefulness, Perceived Ease of Use, Organizational Culture, Self-Efficacy and Adoption Attitude

ABSTRAK

Persekitaran Pembelajaran Maya (VLE) adalah salah satu trend teknologi semasa dalam bidang pendidikan di peringkat global. Teknologi Persekitaran Pembelajaran Maya (VLE) telah membolehkan komunikasi guru, murid serta ibu-bapa dirapatkan melalui pelbagai fungsi berfaedah yang terdapat dalam sistem Persekitaran Pembelajaran Maya (VLE). Di Malaysia, Kementerian Pendidikan telah menyertai lonjakan global dalam pengadaptasian teknologi Persekitaran Pembelajaran Maya (VLE) melalui pengenalan sistem *Frog Virtual Learning Environment* (VLE) pada tahun 2012. Inisiatif ini diterapkan di bawah projek 1BestariNet, dimana sistem Persekitaran Pembelajaran Maya (VLE) ini digabungkan dengan penyediaan akses jalur lebar berkelajuan tinggi yang di inispirasikan dapat merapatkan jurang digital semua sekolah di Malaysia. Walau bagaimanapun, penggunaan sistem *Frog Virtual Learning Environment* (VLE) telah menyaksikan penggunaan dan pengadaptasian yang rendah dikalangan pihak-pihak berkepentingan dalam sektor sekolah. Oleh yang demikian, matlamat kajian ini dijalankan adalah untuk mengkaji faktor yang mempengaruhi pengadaptasian sistem *Frog Virtual Learning Environment* (VLE) di kalangan guru-guru, khususnya guru sekolah menengah kebangsaan di Kuala Lumpur. Satu metodologi kaji seldik telah digunakan untuk pengumpulan data dari 89 sekolah menengah kebangsaan yang terletak di tiga zon Kuala Lumpur iaitu zon Bangsar/ Pudu, zon Sentul dan zon Keramat di mana 366 guru sekolah menengah kebangsaan telah dipilih sebagai sampel kajian ini. Prosedur persampelan berstrata yang tidak seimbang telah digunakan dalam proses pemilihan responden daripada sekolah dari tiga zon tersebut. Lima hipotesis dicadangkan mengenai penentu penggunaan teknologi *Frog Virtual Learning Environment* (VLE). Satu soal selidik berstruktur yang terdiri daripada 35 soalan telah digunakan untuk kajian ini bagi mengukur lima pembolehubah iaitu sikap penggunaan sistem *Frog Virtual Learning Environment* (VLE), tanggapan kegunaan, tanggapan penggunaan yang mudah, budaya organisasi dan efikasi sendiri. Sebanyak 800 soal selidik telah diedarkan, dimana hanya 336 boleh digunakan yang menghasilkan kadar tindak balas 42.0%. Kajian ini dianalisis menggunakan statistik deskriptif dan inferensi untuk membuat kesimpulan terhadap hubungan antara pembolehubah-pembolehubah. Dapatan kajian menunjukkan bahawa hubungan signifikan wujud di antara pembolehubah dengan sikap penggunaan sistem *Frog Virtual Learning Environment* (VLE). Kertas kajian ini diakhiri dengan perbincangan mengenai implikasi akademik dan pengurusan teori dan praktikal serta cadangan untuk kajian akan datang.

Kata kunci: Persekitaran Pembelajaran Maya (VLE), Penggunaan Teknologi, Tanggapan Kegunaan, Tanggapan Penggunaan yang Mudah, Budaya Organisasi dan Efikasi Kendiri.

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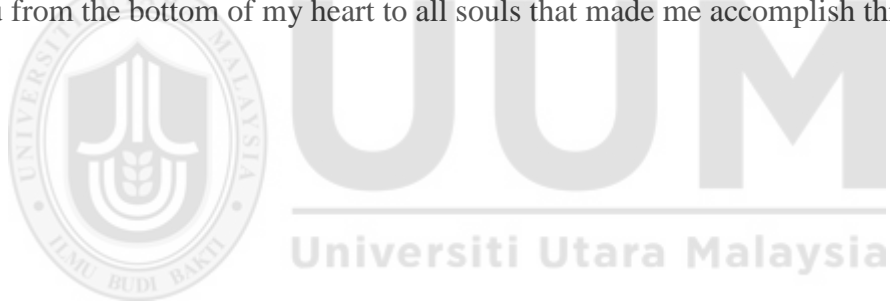


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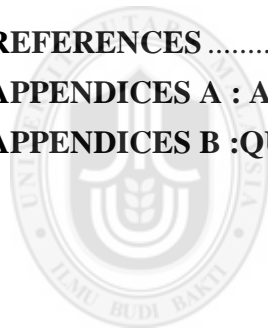
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LIST OF ABBREVIATION/NOTATIONS/ GLOSSARY OF TERMS

JPWKL	<i>Jabatan Pendidikan Wilayah Kuala Lumpur</i>
MOE	Ministry of Education, Malaysia
OC	Organizational Culture
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
SE	Self-Efficacy
SMK	<i>Sekolah Menengah Kebangsaan</i>
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
VLE	Virtual Learning Environment



CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

The advancement in technology has taken over world in the past decade and is being a huge part of a societies' daily need. Thus, this has ignite global educational institutions to continuously harness the potentials of technology that overcome geographic barriers, enhance service delivery and streamline business processes (Zhao et al., 2009). According to Johannesen (2013), Virtual Learning Environment (VLE) is among the top technologies that being adapted by many education institution. The Virtual Learning Environment (VLE) is demarcated as an internet based system which compliments the traditional face-to-face teaching in where the physical presents of a teacher is not required, the teachers may be in a different geographical setting from their students and it also helps teachers in preparation and managing the learning resources for their students (Jackson & Fearon, 2014).

The Virtual Learning Environment (VLE) system is also defined as an advanced e-learning tool that is accessible by teachers, students as well as parents (McGill & Klobas, 2009) and can be accessed via the world wide web through computers, smart phones and other technological devices (Mbengo, 2014). Furthermore, many research has distinguished that e-learning systems are now being an important tool in the process of the school's education management system (Pituch & Lee, 2006). Essentially, Virtual Learning Environment (VLE) refers to the utilization of multiple technological devices combined with the advancement of Internet in order to enhance the quality of learning. Thus, the Virtual Learning

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