



UNIVERSITI PUTRA MALAYSIA

**ANTECEDENT FACTORS AND INTERNET USAGE AMONGST
UNDERGRADUATES IN UNIVERSITI PUTRA MALAYSIA**

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**ANTECEDENT FACTORS AND INTERNET USAGE AMONGST
UNDERGRADUATES IN UNIVERSITI PUTRA MALAYSIA**

By

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**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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Science**

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ESPECIALLY DEDICATED TO:

HUBBY: AHMAD AKMAL JBRAHJM

MAK: HAMJMAH OSMAN

ABAH: SAPARJ KAMDJ

ABANG NOOR & FAMJLY

SJSTERS: HJDAYAH & MUSLJMAH

FOR THEJR LOVE, PRAYERS, KJNDNESS & ENDLESS SUPPORT.....

Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfillment of the requirement for the degree of Master of Science

ANTECEDENT FACTORS AND INTERNET USAGE AMONGST UNDERGRADUATES IN UNIVERSITI PUTRA MALAYSIA

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June 2008

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Internet usage is increasing at a phenomenal rate and is being widely discussed throughout the country in trying to achieve the best worldwide. Oblivion to that, the educational sector itself is also no exception. Thus, in an effort to make Internet usage an effective educational tool, it is essential to understand which antecedent factors contribute to the effectiveness of the Internet usage amongst undergraduates.

This research was an attempt to study on the antecedents' factors and Internet usage amongst students of UPM. The main objective of this study is to investigate the antecedents factors associated with the Internet usage amongst students in UPM. There were fifteen research questions posed in order to achieve the objectives. The antecedents factors that were accessed were Individually (Internet experience, Internet playfulness), Institutionally (Organizational support) and Internet Attitudes and Beliefs (Internet Self –



Efficacy, Attitude towards Internet & Internet Satisfaction). The Internet usage was based on time, frequency and activities accessed.

With the research framework based on the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM) and IT Diffusion Process Model, a survey was conducted amongst final year undergraduates of UPM to explore these issues. The research design was a descriptive research and the data were collected using questionnaires. Both descriptive (percentage & frequency) and inferential statistics (t- test & Pearson correlation) were used to analyze the data of the study. A pilot test was conducted and the reliability coefficient for the instrument was high as each section ranges from 0.782 – 0.859.

This quantitative descriptive research involved 361 final year undergraduates of UPM. The research findings indicated that in general most undergraduates can be considered experienced Internet users as they have used the Internet for more than five years with looking for general information being the main activity whilst on the Internet. Though results showed no significance difference for time spent on the Internet and in the Internet activities between the male and female students and between the science and non-science streams but there was a significance difference in their frequency. Pearson correlation analysis indicated that there was a low positive correlation between Internet usage and the antecedents. This is also similar with the correlation between Internet usage and impact of the Internet.



Thus, based on the findings of this study, it is therefore crucial to look into other factors that would actually utilize the maximum usage of the Internet rather than having the technology but not using it to its fullest potential.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

**FAKTOR LATAR BELAKANG DAN PENGGUNAAN INTERNET DALAM
KALANGAN PELAJAR UNIVERSITI PUTRA MALAYSIA**

Oleh

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Penggunaan Internet semakin mendadak dan mendapat sambutan menyeluruh di serata dunia. Oleh itu, bidang pendidikan juga adalah tidak terkecuali dalam memartabatkan pendidikan ke tahap yang lebih tinggi. Maka itu, untuk menjadikan penggunaan Internet sebagai satu alat yang amat efektif serta berkesan dalam bidang ini, ianya adalah penting untuk memahami latar belakang yang dapat menyumbang kepada keberkesanan penggunaan Internet di kalangan pelajar UPM.

Penyelidikan ini merupakan satu kajian untuk mengenalpasti faktor latar belakang para pelajar UPM serta kesan penggunaan Internet di kalangan mereka. Objektif utama kajian ini adalah untuk mengkaji berkenaan latar belakang yang dikaitkan dengan penggunaan Internet serta kesannya terhadap para pelajar UPM. Terdapat lima belas soalan kajian yang dibentuk bagi



mencapai objektif tersebut. Faktor latar belakang yang dikaji adalah dari segi individu (penggunaan Internet, sifat ketika menggunakan Internet), institusi (sokongan dari organisasi) dan sikap serta kepercayaan terhadap Internet (keberkesanan sendiri terhadap Internet, sikap terhadap Internet dan kepuasan terhadap Internet). Penggunaan Internet pula terbahagi kepada masa, kekerapan dan aktiviti yang dilakukan di Internet.

Dengan berdasarkan rangka kajian *Theory of Reasoned Action (TRA)*, *Technology Acceptance Model (TAM)* dan *IT Diffusion Process Model*, satu kajian untuk mengkaji perkara ini telah dijalankan di kalangan para pelajar graduan sarjana muda tahun akhir di UPM. Rekabentuk kajian ini adalah penyelidikan deskriptif dan data dikumpul dengan menggunakan satu set soal-selidik. Kedua-dua statistik deskriptif (peratusan & kekerapan) dan inferensi (t – test & korelasi pearson) digunakan bagi menganalisis data kajian. Kajian rintis telah dijalankan dan pekali kebolehpercayaan bagi instrument kajian adalah tinggi bagi setiap seksyen iaitu dari 0.782 – 0.859.

Penyelidikan deskriptif yang dijalankan secara kuantitatif ini melibatkan 361 orang graduan tahun akhir sarjana muda UPM. Keputusan kajian ini mendapati bahawa secara amnya, kebanyakan graduan tahun akhir sarjana muda UPM ini boleh dianggap sebagai pengguna Internet yang berpengalaman kerana mereka didapati telah menggunakan Internet lebih daripada lima tahun. Aktiviti utama mereka dalam melayari Internet adalah untuk mendapatkan maklumat secara

am. Dari segi penggunaan Internet di kalangan pelajar lelaki dan perempuan serta pelajar sains dan bukan sains, keputusan kajian ini tidak menunjukkan sebarang perbezaan signifikan dari segi masa yang diluahkan dalam penggunaan Internet serta aktiviti yang dilakukan ketika melayari Internet. Namun terdapat perbezaan signifikan dari segi kekerapan penggunaan Internet mereka. Analisis korelasi Pearson, mendapati terdapat korelasi yang rendah namun positif di antara penggunaan Internet dengan faktor latar belakang pelajar. Keputusan ini juga adalah selari dengan dapatan daripada korelasi antara penggunaan Internet dan kesan terhadap penggunaan Internet.

Oleh, itu berdasarkan dapatan kajian ini, ianya adalah penting untuk kita melihat kepada faktor-faktor lain yang dapat menyumbang kepada penggunaan Internet sebagai satu alat teknologi yang hebat untuk mencapai hasil yang maksima.

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I declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Putra Malaysia or at any other institutions.

NOOR ARIFFAH BINTI SAPARI

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CHAPTER 1

INTRODUCTION

1.1 Research Background

The Internet is considered as the fastest globally adopted technology in the history of civilization (Hizamnuddin Awang, 2005). With the Internet, everything about the world is just a click away. Thus, with the swift change of technology, the Internet is something everyone should be familiarized with in order to be in touch with the development of a country throughout the world. The Internet has a major impact on society, both on the people using it and also on those who are not using it as well (Albertson, Five & Zender, 1995). Whatever we do now is all about the Internet.

There is tremendous number of people throughout the world who have used the Internet, as not only a communication tool but also as a source of information and the number is increasing day by day. The Internet has now become a dominant force in this decade (Parker, 2000). Though much has been said about the wonders of the Internet, not many individuals are using this new technology to its fullest potential.

People of all ages, colors, creeds and countries freely share ideas, stories, data, opinions and procedures. Increasingly, news get out on the Internet before its available on other media and the cyber-deprived are losing ground in keeping current on the world's happenings (Levine, Young & Baroundi, 2003).



Prior to this, Malaysians themselves are no exception. We could see this through the development of the Multimedia Super Corridor (MSC). In an excerpt made by the former prime minister, Tun Datuk Dr. Mahathir Mohammed in his speech at a Los Angeles Conference for Investors at University of California Los Angeles he said that;

“MSC acts as a global bridge to the Information Age that will enable genuine mutual enrichment for our partners possessing the vision to participate. MSC is truly a world first and the careful creation of a region with the infrastructure, laws, policies and practices that will enable companies to explore the Information Age without the usual constraints that frustrate them.”(1998, p.12)

Information and knowledge can be acquired by various methods but to be at the leading edge, skills in Information Communication Technology (ICT) are a must. The Internet plays an important role in the everyday lives of many people throughout the world. The Internet can provide its users with a vast amount of information and had penetrated into areas such as education, business, entertainment, general knowledge and many other useful areas.

Tun Datuk Dr. Mahathir Mohammad also stated that the success of a country depends on its ability to adopt and adapt to global forces and not as the basis exclusively of comparative advantages such as natural resources, population and labour costs. All these contribute to Malaysia’s vision to become a fully developed country by the year 2020. Since knowledge is power, it is then important for one to gain as much knowledge as possible. In fact, not only knowledge but also information is now a necessity to all individuals. Since knowledge and information are becoming the foundation of economic and social

relationships in the society, there is then a need for Malaysians to strive for the highest level of education attainable.

Tun Datuk Dr. Mahathir Mohammad initiated the MSC whereby it is a world first careful creation of a region with infrastructure, laws, policies and practices that will enable companies to explore the Information Age without the usual constraints which frustrate them. The MSC is a 15km wide by 50km long corridor that runs from the world's tallest buildings in the Kuala Lumpur City Centre (KLCC), down to the region's largest airport, Kuala Lumpur International Airport (KLIA).

To spearhead the development of MSC, the Malaysian government has identified seven flagship applications and they are the e-government, telemedicine, smart schools, multi purpose card, Research and Development (R&D) clusters, worldwide manufacturing webs and borderless marketing (Hizamuddin Awang, 2005). Looking at how important education is towards the development of Malaysia, the government has added smart schools to further produce an Information Technology (IT) literate society. Students are stressed to having skills and knowledge in ICT due to the vast advancement of technology throughout the world (Foo & Chan, 2000).

The Ministry of Education (MOE) has initiated various ways to increase the development of ICT in teaching and learning especially in smart schools. Ten thousand schools throughout Malaysia are expected to be smart schools in the