



**FACULTY OF TECHNOLOGY MANAGEMENT
AND TECHNOPRENEURSHIP**

**BEHAVIOUR OF HIGHER EDUCATION
STUDENTS IN CHOOSING INTERNET SERVICE
PROVIDER IN MALACCA**

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INTERNET SERVICE PROVIDER IN MALACCA**

By

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DEDICATION

To my beloved family

ABSTRACT

Customer behaviour studies the characteristics of an individual such as demographics and behavioural variables in attempt to understand what people wants. Despite it is importance, the attempt to understand customer wants and needs, and provide the most high service level with in considering cost limitation. These research are about to study the factors falls into student's considerations while choosing internet service before purchasing. The survey done in university area in Malacca, the data collection used is survey questions selecting only students who is currently subscribe for internet connection. From the population, 103 samples were collected. The main objective of the research is to the elements between internet service connectivity and the package or pricing rate. Online addiction used as moderating variables to indicate the personal behaviour will influence students to subscribe. T-test and ANOVA analysis is test to variables to indicate the relationship and significant level of the variables.


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My appreciation also goes to my family and friends for putting up with my long hours and for their support and understanding throughout the research period for which I am forever grateful.

DECLARATION

I hereby declare that the case study is based on my original work except for quotations and citations that have been duly acknowledged. I also declare it has not been previously or concurrently submitted for any other degree at UTeM or other institution.

Signature : 

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Date : 30/12/2011

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CHAPTER 1: INTRODUCTION

1.1 Background of Study

Technology revolution in Malaysia started on 1995 when the first time internet introduced. On 1996, Malaysia has entered and launching an international public relations campaign to engage in its technology research and development under Malaysia Multimedia Super Corridor (MSC). The aim for this program is to help Malaysia to become an international information technology leader. This program is design to build a high technology business center and communications infrastructure, as the development of the Internet infrastructure is a state priority, Malaysia citizen who also the targeted customer are encourage to purchase and upgrades to current technology.

The number of internet subscribers in Malaysia was rapidly increased and the figure is expecting to grow larger due to aggressive research and development, creative marketing strategy by many internet service provider companies. TMnet, a subsidiary of Telekom Malaysia is Malaysia's largest internet service provider. Currently there are more than 9 internet service providers in Malaysia such as Celcom, Digi, Maxis, P1 and so on, but Telekom Malaysia owns a virtual monopoly of the broadband market due to their ownership of the nation's last mile connections.

Not only mention in Malaysia, the Internet has grown potentially over the years and has emerged as the foremost source of disseminating information quickly to a large audience, transcending the limitation of time and space worldwide. The continuing figure of internet usage and the populations of world Internet usage may prove as the table below.

Table 1: World Internet Usage and Population Statistics

WORLD INTERNET USAGE AND POPULATION STATISTICS						
March 31, 2011						
World Regions	Population (2011 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000 - 2011	Users %
Africa	1,037,524,058	4,514,400	118,609,620	11.4 %	2,527.4 %	5.7 %
Asia	3,879,740,877	114,304,000	922,329,554	23.8 %	706.9 %	44.0 %
Europe	816,426,346	105,096,093	476,213,935	58.3 %	353.1 %	22.7 %
Middle East	216,258,843	3,284,800	68,553,666	31.7 %	1,987.0 %	3.3 %
North America	347,394,870	108,096,800	272,066,000	78.3 %	151.7 %	13.0 %
Latin America	597,283,165	18,068,919	215,939,400	36.2 %	1,037.4 %	10.3 %
Oceania / Australia	35,426,995	7,620,480	21,293,830	60.1 %	179.4 %	1.0 %
WORLD TOTAL	6,930,055,154	360,985,492	2,095,006,005	30.2 %	480.4 %	100 %

Source from Miniwattsmarketing group (2011). Available at: www.internetworldstats.com

Since then, the use of Internet has grown tremendously. In education sector especially, the use of electronic learning had been implement not only as a new teaching methods but it changed the whole university operation. Sophisticated system had been develops to support the internal and external data. Theoretically, internet had transforms the traditional data keeping into paperless culture.

The development of the internet would be meaningless if it's not used appropriately. The growth of the Internet and the increase in the variety of information spread via the World Wide Web has undeniable benefits used in education especially to students. We already know that students are among the keen users of information from the internet. However, it's still important to find out to what makes students choosing those internet service providers due to service connectivity, pricing rate or due to online addiction. Facebook is the current famous social networking website in the world. A statistics by socialbakers.com shown the largest group of Malaysian Facebook user is currently between 18 – 25 years old with total number of 4,020,969 users (*socialbakers.com/facebook-statistics/malaysia*).

As reported in Malacca official website stated Malacca is now famous as a state that offers a variety and affordable level of education by all society levels. Currently Malacca has 21 public higher learning institutions (IPTA) and 25 private higher learning institutions (IPTS) make a total number of 46 higher learning institution in Malacca itself. (Refer to Appendix for the list of IPTA and IPTS in Malacca). This education industry is growing rapidly due to the efforts taken by the state government and supported by comprehensive infrastructure such as free WiFi zones at Malacca International Trade Center (MITC), Jalan Hang Tuah, Perbadanan Perpustakaan Awam Melaka (PERPUSTAM) and etc.

It is proven using internet as a tool of information technology (ICT) in higher education levels has positive impact in communication and information flow within the university staff, lecturer and students. The implication of computer-based

learning system may increase the quality learning among students by understanding of theoretical and critical concepts. Internet is an information gateway which not only allows students to access more knowledge but it's also a new communication tools. Students use the Internet as the source of information, communication and entertainment. There are also a number of students which actively involved in e-business by using blog and social networking as a start-up place.

Thus, the purpose of this study is to see the behavioral pattern on what influences student in purchasing and subscribing internet provider. This behavior will be determine by the service offered by the ISP, how the pricing rate will influence the behavior and does students really goes online for study purposes or because they are actually addicted.

1.2 Problem statement

Within less than 10 years, the internet revolution continues develop in conjunction with new technology and innovation either through hardware or software development. Since the early age of internet, the dial up connections then broadband, and now the High Speed Broadband (HSBB) phenomenal, Malaysian ISP companies never fails in providing the latest technology to customer hands.

Students in higher learning institutions being choose as the main subjects in this study because the high needs of information and knowledge access as their tools to improve theoretical understanding as what they learn in textbooks and implements

the theoretical into real case study. In some way, most of these students are using internet as socializing medium instead of used it academically.

Students normally have issue on financial constrains as the internet package offer in the market are mostly quite costly and different type of connections differ the internet connectivity. Through observations, students mostly are technology savvy and frequently computer exhibitions will be fill by students present. Thus, it is important for internet service Provider Company to create attraction and interest in order for them to made purchases. However, there is no package in market offer specifically package for students. Somehow, it's the student intention drive them to look for the internet package which might offer best.

1.3 Research objective

As for students, limitation to choose the best broadband provider which is affordable and reliable had challenges them to satisfy with whatever the ISP might offer.

Besides that, there's many protocol and procedures follow, makes it more difficult to switch to other provider. In this paper, I would like to explore and focus more on higher institutions learning in Malacca, the main reason students choosing local broadband providers and how does new promotion package influence their behavior and their satisfaction level in the service that company offers.

1.4 Research Question

In this study the research questions were developed to evaluate whether the students behavior pattern towards internet service provider in term of plan and pricing and service connectivity of the internet. Apart from that, a test on students online behavior specifically on online addiction are related to their behavior to subscribes internet. This study will only targeting students who are currently subscribe to any internet provider. The research questions of this study are:

- Does service connectivity relate to students behavior in choosing the internet service provider?
- Does the package and pricing of internet relate to students behavior in choosing the internet service provider?
- Does online addiction influence the student behavior in choosing the internet service provider?

1.5 Significance of Study

The study gives a significance benefit for internet service Provider Company as to create a niche market specifically for students. Solid brand loyalty attitudes will build up between students and the company brand itself. Apart from that, a long relationship may take place and it may increase the company's market share in long run. As for students positively they will enjoy the affordable package and cut their survey time comparing one package with anther.

1.6 Scope of Study

The study will be carried out in Malacca concerning on university area neither private or local institutions. Researcher will aim on subjects, which is a student who's currently had and paid for any internet package. This research is related only with the behavior of students while they were choosing the most suitable packages.

1.7 Limitation of Study

1.7.1 Time Constraint

The time frame given to finish up the research is quite limited as the researcher only has time more or less than three months. At the same time the Fasting and Hari Raya months was felt in this time frame. The task as students (referring to the respondents) also contributed to time constrain as they had to finish their assignments before the dateline, this reflecting to the time they might need to participate with the questionnaire. Some students are hard to reach due to different district or area.

1.7.2 Cost incurred

In order to carrying out the study, researcher requires to bear all the cost incurred associated to the research accomplishment report such as photocopy, printing, souvenir, internet sources and other materials. The souvenir is given to the respondents as their participation in responding to the questionnaire. This is to express a gratitude for the contribution and time they spent.

1.7.3 Information Gathered

Information gathering is critical to researcher to support and improve understanding on the topic. To finish the study, researcher needs to engage with online sources, journals, statistical report and data to well recognize the problems.

1.8 Hypothesis of the Study

1.8.1 Hypothesis 1

- | |
|--|
| <p>H₀: There is no significant relationship between service and connectivity towards student's behavior in choosing ISP.</p> <p>H₁: There is significant relationship between service and connectivity towards student's behavior in choosing ISP.</p> |
|--|

1.8.2 Hypothesis 2

- | |
|--|
| <p>H₀: There is no significant relationship between price and rate structure towards student's behavior in choosing ISP.</p> <p>H₁: There is significant relationship between price and rate structure towards student's behavior in choosing ISP.</p> |
|--|

1.8.3 Hypothesis 3

- | |
|--|
| <p>H₀: There is no significant relationship between online behavior patterns towards student's behavior in choosing ISP.</p> <p>H₁: There is significant relationship between online behavior patterns towards student's behavior in choosing ISP.</p> |
|--|

1.9 Definition of Terms

1.9.1 ISP

An Internet service provider (ISP) is a company that provides access to the Internet. Access ISPs directly connect customers to the Internet using copper wires, wireless or fiber-optic connections. Hosting ISPs lease server space for smaller businesses and host other people servers (colocation). Transit ISPs provide large tubes for connecting hosting ISPs to access ISPs. (Wikipedia.org)

1.9.2 Broadband

The term broadband refers to a telecommunications signal or device of greater bandwidth, in some sense, than another standard or usual signal or device and the broader the band, the greater the capacity for traffic. The term became popularized through the 1990s as a vague marketing term for Internet access. (Telecom Glossary 2000)

1.9.3 Online or Internet Addiction

Internet addiction disorder (IAD), or, more broadly, Internet overuse, problematic computer use or pathological computer use, is excessive computer use that interferes with daily life. These terms avoid the distracting and divisive term addiction and are not limited to any single cause. (Wikipedia.org)

1.9.5 Demographic

Demographics are the most recent statistical characteristics of a population. In this research, demographic variables include gender, age, education level, institutional, internet services provider subscribe and frequent online device.

1.10 Summary

The outcome for this research would expect to derive understanding on customer behavior pattern, specifically student in higher education learning in Malacca on purchasing internet package. The outcome may recommend to several internet service providers to extend or creates new product line or packages which specifically for students. The number students of population in Malaysia on 2007 are 673,737 and projected to increase. It's quite a number towards increasing the market share.

CHAPTER 2: LITERATURE REVIEW

The Malaysian telecommunications market has all the characteristics of a developing communications industry in Southeast Asia. (malaysianbroadband.org).

General Manager of Strategic Development Division, Dr Fadhlullah Suhaimi Abdul Malek stated that Malaysian Malaysia Internet Subscribers to Double by 2012 (internetworldstats.comg). His statement is based on the growing trend of Internet users in the last three years as Malaysia moved towards advanced information, communications and multimedia services. In other report, Frost & Sullivan said broadband market to be worth RM9 billion by 2015. (Frost & Sullivan Malaysia, 2011).

Muniandy B. (2010) identify several studies have been reported in the literature on academic use of Internet by students. George et Al. (2006) reported the results of a study on academic use of Internet by graduate students of Carnegie Mellon University in the USA. The study shows that information search at the university is basically through Internet and Intranet facilities. The students generally do Google search (73%), find web pages (68%), journals (50%), citation chaining (48%), and other general searching (47%). Several other studies also show that academic use of the Internet by university students is increasing. In his study, Muniandy B.(2010) study the academic Use of Internet among Undergraduate Students. This prove students use internet as their primary source in looking for information.

Internet Service Connectivity

Internet service connectivity is consisting of speed and stability of the internet connection. Ahmad Syakir and Dr Mohd Rafi (2011) agree speed factor, such quick access to internet is an important factor and thus user would consider changing to other internet broadband service provider due to speed factor.

Previous study revealed that with a mean of 6.38 respondents agreed that the speed of internet access is important (Suradi et. al 2008).

Ahmad Syakir (2011) and Suradi (2008) also agree that stability is highly important in internet connectivity. From the survey, respondents are agreed that it was easy for them to get connected at anytime and anyplace, the stability of internet service was important to them and they would consider changing to other broadband service provider due to stability factor. (Ahmad Syakir and Dr Mohd Rafi, 2011) This result is consistent with past research that revealed wide network coverage is important to the customer. (Suradi et al, 2008)

Package and Price Influences

Industry factors like price and speed might influence broadband penetration. Fixed broadband price might be a key industry factor in promoting broadband demand (International Telecommunication Union, 2003a).

In general, lower prices can contribute to higher broadband adoption. A competitive market structure leads to low prices (International Telecommunication Union, 2003a). Through statistical analysis of

approximately 100 countries, Garcia-Murillo (2005) found fixed broadband price and competition have been influential factors of fixed broadband adoption.

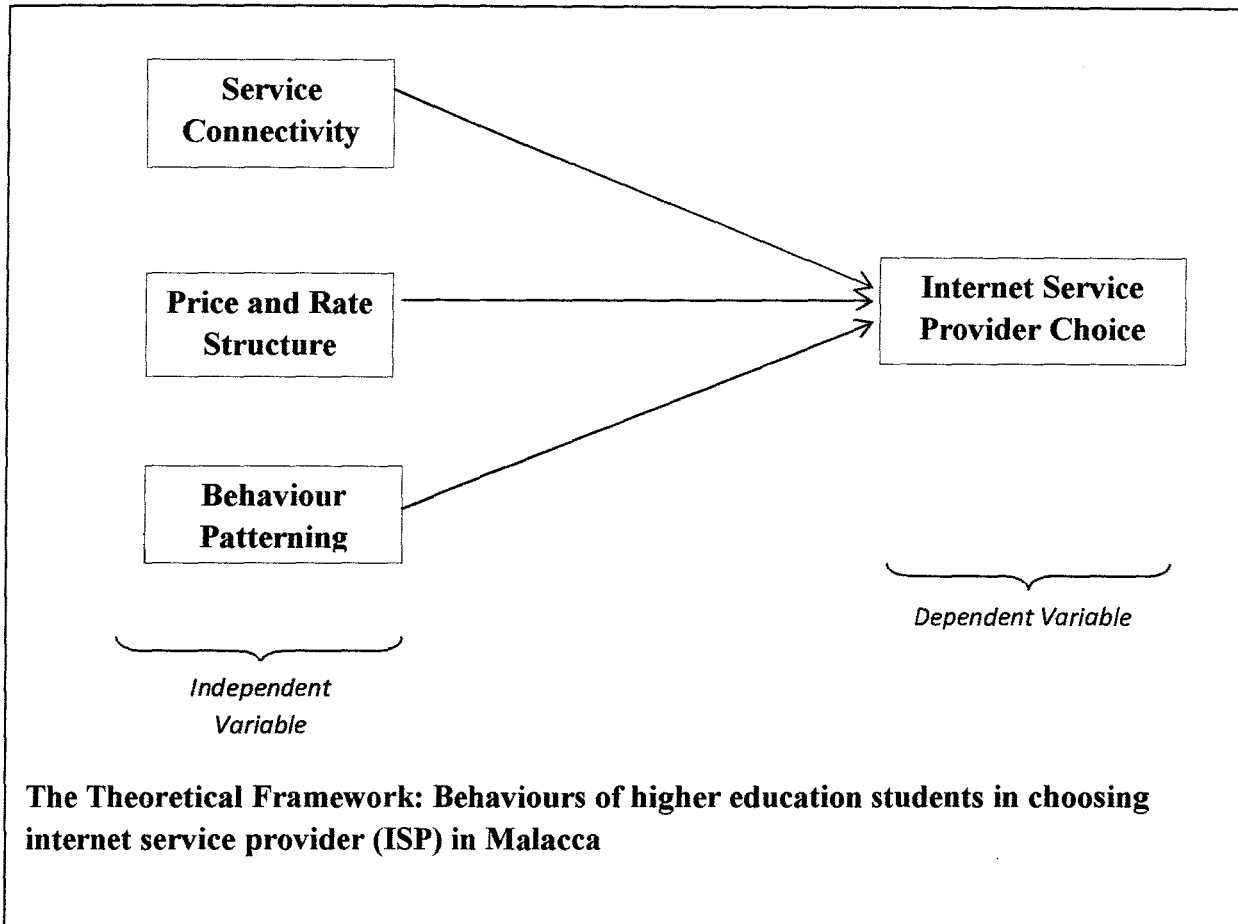
As a product differentiation strategy in the broadband access market, broadband speed might influence broadband demand. Higher speed may even be a key driver of broadband adoption (International Telecommunication Union, 2003b).

Behavioral Patterning - Online Addiction

Online addiction otherwise known as computer addiction, internet addiction or internet addiction disorder (IAD). A case study in Taiwan, where the internet addicts spent almost triples the number of hours. (Chien Chou & Ming-Chun Hsiao, 2000).

A statistical reported launch by Nelson Malaysia indicates consumers / user aged between 20-24 spend an average of 22.3 hours per week online and resulting increased in internet usage to 41%. As the average age of students in high institutions also between 20-24 years old, there might high chances for students pursue to subscribes internet due to the addiction behavior.

2.2 Theoretical framework



2.3 Relationship of Behavior to purchasing decision

- Internet service connectivity are the elements in service performance to measuring the internet service provider (ISP),
- Stability and speed determine are the factors students to purchase ISP,
- Package and pricing in the other hand will be the second issue concern, in which extend students afford to purchase or subscribes,
- Online addiction will influence decisions to purchase ISP moderately, statistical report on amount spent online in youngster indirectly reflect students. Students not only spent their time online to look after

information. Internet had change the way of communication among students from wired to wireless.

2.4 Summary

In this chapter, a brief understanding is produced to the purpose of emphasize the purpose and the significant of the research. Through literature reviews the degree of need and importance for this research is highlighted then demonstrate the research. In this chapter variables are discuss in a manner to prove the degree of important towards the study. As discuss, independent, dependent and mediating variables does related to each other.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The objective of this chapter is to elaborate the information on the research design and procedure used to accomplish this research paper in details. The research design is a careful planning of the operations to be done to collect the data in a rigorous, systematic way, in accordance with the methods and ethics of the social research. (Antonius, 2003)

3.2 Research design

3.2.1 Purpose of the Study

The aim of this study is to discover the behavior of students in higher learning institutions in selecting internet service provider before subscribing. Internet is one the major source for students to gather information and as a method to access e-learning. However, the fix line connections are a bit costly and not portable, although it can be shared but there's other issue they need to consider. Other option for fix line broadband is the mobile broadband.

3.2.2 Types of Investigation

The type of investigation for this research is causal study. Casual studies are study methods that test a hypothesis in a market situation to better understand cause and effect relationships. In this research, several causes of