

**CULTURAL FACTORS IN A MOBILE PHONE ADOPTION AND
USAGE MODEL: A CASE OF UUM POSTGRADUATE STUDENTS**

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**CULTURAL FACTORS IN A MOBILE PHONE ADOPTION AND
USAGE MODEL: A CASE OF UUM POSTGRADUATE STUDENTS**

**A Thesis submitted to the UUM College of Business
In partial fulfillment of the requirement for the degree
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**By
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2011



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ABSTRACT

Mobile phone is one of the communication devices that can meet requirement where it consists of an integrated system of technology and socially derived components. The technology that provided in mobile phone keep changing by the features and there a lot in the market today. Hence, the upgrading technology will influence user behavior. For that, the objective of this research is to identify on the factors that influence mobile phone adoption and usage and evaluate on significant between human behavior pattern and technology in mobile phone. To be success in this research, quantitative and qualitative approach has been used to explore, observation and cultural analysis. Meanwhile, the results also indicated that variable need for achievement contributes high influence in social factors that influence mobile phone adoption and usage, where it is the components of human nature and culture.

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CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

In a globalizing world, information technology (IT) has big influence on how to redefine new space, time, and new life style of information age society. IT is said to be reshaping the material basis of society and economies around the world which have become globally interdependent, introducing new forms of relationship between the economy, state and society. Technologies, it is argued, through state intervention, can accelerate the process of technological modernization and rapidly change the direction of economies and societies. Therefore, IT is being seen as a way to achieve competitive advantage by maximizing the function and benefits from it (Abdul Manaf Bohari, 2009).

The technological trends for IT are changing everyday. In fact, IT is changing drastically. In that way, you need to 'have' the newest technology. From a businesses point of view, trends will drive the major changes in information technology used in every functional and department of business. So, more and more companies are relying

on information technology to succeed in business. Then, more and more consumers and businesses are getting high-speed Internet access, which can lead to changes on how online business such as e-commerce is done on the Internet. And, the advent of more bandwidth Internet sites will become more interactive and display more video and sounds which result in more customers repeat the online visiting and purchasing.

Specifically, the mobile Internet is supposed to have significant impact to organizations because they think that the mobile Internet will create special value to their business. The business value of the mobile Internet comes from the ability to derive strategic business value from the mobile Internet while at the same time, the firm has an obligation to disseminate information globally, communicate with various parties, and doing trade interactively with customized information and services for individual customers. Abdul Manaf Bohari (2009) described some of the business value of the mobile Internet:

- Ubiquity which refers to the web technology that is available everywhere, anytime, and everyplace.
- Richness, which refers to the possibilities to transmit video, audio and text, messages over the net.
- Global reach which refers to the technology that reaches across national boundaries and available to every people around the earth.

- Interactivity which refers to the technology operation that works through interaction with the user, customer and any firms around the globe.
- A universal standard which refers to a set of technology standards, namely Internet standards and used by every persons and parties as far as they deal with the Internet services.
- Personalization also refers to customization of the technology that enables personalized messages to be delivered to individuals as well as groups.

In general, any kind of new technology will face the new challenges and treats. Here, you need to identify some of the challenges faced when using the wireless technologies. May be we can discuss any solutions offers by wireless based technology to customers. According to Abdul Manaf Bohari (2009) problems would include:

- Having everyone online in a meeting can be toxic to productivity. “No laptop” policies for important meetings.
- Enormous pressure within companies to provide Wi-Fi in all areas of the company. Determine what areas have no compelling need for wireless such as deskbound employees in finance or customer service.
- Cost exceeds the benefit to be gained by providing Wi-Fi such as in a manufacturing plant that would require numerous additional access points than usual.

- Security of information available via the Wi-Fi system. Delay implementation until security assurances are met.

1.2 BACKGROUND OF THE STUDY

Mobile phone is a medium of conversation for anyone where it can be connected in all entire of world. It can be seen everywhere such as in trains, busses, cars or even at the street. They are making connection each other. Besides making a calls by using a mobile phone also they use to sending a massage and picture for their members or even listening a music or radio that they prefer. With the new technology that keeps upgrading the facilities of the mobile phone, it also can make a video call even though there are in different location or city.

A mobile phone is an electronic device that used for full duplex two-way radio telecommunications over a cellular network of base stations also known as cell sites. It is connect to a wireless communications network through radio wave or satellite transmissions. A mobile phone allows its user to make and receive telephone calls to and from the public telephone network which includes other mobiles and fixed line phones across the world. It does this by connecting to a cellular network owned by a mobile network operator. A key feature of the cellular network is that it enables seamless

telephone calls even when the user is moving around wide areas via a process known as handoff or handover.

The development of mobile technologies and services in the last two decades has had huge implications on the information communication and technology landscape. Mobile technologies enable mobility and flexibility in the use of ICT services. Mobile technologies have primarily been driven by voice telephony but in their development, they embrace the whole portfolio of converged services, particularly when it comes to wireless standards and the new generation mobile technologies.

Mobile communication including mobile phone is a complex rapidly changing industry consisting of hardware, software, network and business aspects. The usage involves the mobile phone, the telecommunications system, the mobile phone user, the adoption and the used of the system. One of the best benefits of mobile phones is that this technological invention made people accessible almost anytime and anywhere. The mobile phone has totally changed the world. In a short period, the mobile phone has learned to do lots of things, such as to take pictures, to listen to music, to have Internet access and you can even break with somebody with the help of a SMS.

In order to consider mobile phone usage variety, it also would be considered in mobile phone usage. Mobile phone usage involve the telecommunications system, the mobile phone users, the adoption and use of the system (Pedersen 1993). Advance in technology and market competition drive is an additional of new service and capabilities. Human cognition and attention have limited and many users are difficult to cope with the information overload and the demand of mobile phone technology (Palen et. al. 2000, Donner 2004 Ziefle and Bay 2005).

1.3 PROBLEM STATEMENTS

Mobile phone evolution began with car-mounted devices and developed through the phase of portable, hand-portable and pocket phone to the phase of palm phone where a mobile phone is now fit into a person palm (William 1995). Currently, Forrester Research (2011) reported that the latest currents of mobile technology are:

- (a) The mobile/social/local combo will explode in usage but generate little revenue.
- (b) The year 2011 will be the year of the “dumb” smartphone user.

(c) The mobile fragmentation problem will continue in 2011 where prioritizing mobile developments will still be a challenge, and cross-platform development has not yet been achieved successfully.

(d) The apps versus mobile Internet debate will continue — and remain irrelevant.

(e) Mobile marketing spend will grow significantly and surpass \$1 billion in the US as consumers spend billions via mobile.

(f) Mobile will increasingly prompt consumers to interact with their physical environment. Technologies such as QR codes and mobile augmented reality are already helping bridge the real and digital worlds via mobile devices.

(g) The attention paid to 4G will vastly outweigh the impact of these new networks.

(h) Companies will invest first in convenient services for customers; acquisition will come second. In the hierarchy of benefits that mobile offers — revenue generation, cost savings, and convenience — convenience will reign for the next year.

(i) Casual gaming will continue to lead the mobile charge for content companies. Forrester has already highlighted how media companies have some of the most advanced mobile strategies. Several news publishers that Forrester spoke with expect mobile to represent more than 20% of their total online audience.

(j) The term “mobile” will mean a lot more than mobile phones with consumers are connecting more and more devices wirelessly to the Internet (Forrester Research, 2011)

Beside these, there is a big question about what are the social factor can effects these trends? Is there any new social factor that contributes to the successfully of mobile technology usage?

It thus becomes interesting to understand how such extraordinary market penetration occurs and how IT (information technology) managers might need to reconsider their approaches to better manage this mobile phenomenon. While popular perspectives such as diffusion of innovation theory by Roger (1995) and technology acceptance model (TAM) (Davis, 1989) have examined various aspects of technology adoption, they could hardly shed light on the social context in which the users reside Schwarz (2005), with which they interact, as cited in Thomas (1996) and by which their innovation or adoption process is shaped and reshaped, as explained by Barley (1986).

Chen, Wong and Sutanto (2008) as example, did one study on social factor on mobile technology. The study has results prompted interesting future research directions for this proposed study. Evidently, social factors might affect the use of certain mobile technology as shown in both factor analyses but their effects might not last or become too

complicated over time as implied by the results of regression analyses. This study thus proposes two central questions that might help shape future research direction: “What are the underlying social forces that lead to the rapid adoption of mobile communication technology” and “how do those social effects evolve over time.” Given the rapid mobile phone penetration rate globally, future investigations of these research questions could help IT practitioners and researchers to better understand and manage the youth market’s adoption behavior.

This research will be analyzed on knowing the factors of cultural that can be influences students using a mobile phone and to identify on the interest of students on mobile phone adoption. It because the mobile phone in market is likely to grow more due to the variety of usage and the functional of the mobile phone itself.

1.4 RESEARCH OBJECTIVES

- a) To analyze on the factors that influence mobile phone adoption and usage to the students in UUM.
- b) To evaluate on significant between human behavior pattern and technology in mobile phone.

1.5 RESEARCH METHODOLOGY

In this research, a holistic view of mobile phone usage is a comprehensive set of factor that will be consider including demographic, cultural dimension of the user and the features and services of the mobile phone.

The research design consist exploratory data from literature reviews in primer and secondary data. Primary data will be gathered through questionnaires, survey and analyzing it through data collection based on the methods. Secondary data will be obtained from articles and journals which are already done by previous researchers on the issues regarding to the topic of this study. The existing literature on mobile phone usage, questionnaires, information on mobile devices, user and interaction were use in basic for the initial questionnaires.

Besides that, the research uses the questionnaire with a group of students in UUM that use a mobile phone. It is use to get an information and understanding of the factors that influence mobile phone adoption and usage and it will gathered in qualitative data. Besides that, the research also used the interview method to get more information from

the student to get their view and opinion about the cultural that may influence or not in mobile phone adoption.

1.6 SIGNIFICANT OF STUDY

The technology will keep changing frequently including mobile phone. It is where the manufacturer produces a lot of mobile phone model in market. Each of the phones has different usage, icon and function. Therefore today, there are a lot of customers like to change their mobile phone for some reason. the technology of the mobile phone maybe become as influences of adoption in mobile phone especially for students in UUM.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

The basic of mobile phone is one of the communication device that can meet requirement where it consists of an integrated system of technology and socially derived components such as hardware, software, netware and bizware (Palen, et. al 2000, Coen et. al 2002 and Jones and Marden 2005).

All these components converge on the mobile phone interface where user has to deal with continually evolving technical specifications for handsets, transmission specification standards and the interaction model of network and also marketing service providers. (Jones and Marsden 2005, Ketpola and Rovkee 2001, Jarvenpaa et. al, 2003 and Vlok 2006)

The demonstrated was done rapidly with mobile development. The evolution of mobile telecommunication capabilities facilities innovation in platform technology relating to the

mobile phone and services and influences the business model. (Coen et. al 2002 and Winter et. al 2004).

2.1 TERMS AND DEFINITIONS

2.1.1 Definition of mobile phone

According to the online Cambridge Advanced Learner's Dictionary a mobile phone, cell phone or hand phone is a telephone which is connected to the telephone system by radio instead of by a wire, and can therefore be used anywhere where its signals can be received. It is an electronic device used to make mobile telephone calls across a wide geographic area, served by many public cells, allowing the user to be mobile.

An electronic telecommunications device often referred to as a cellular phone or cell phone. Mobile phones connect to a wireless communications network through radio wave or satellite transmissions. It is because most mobile phones provide voice communications, Short Message Service(SMS), Multimedia Message Service (MMS), and the latest phones may also provide Internet services such as Web browsing and e-mail.

A mobile phone can make and receive telephone calls to and from the public telephone network which includes other mobiles and fixed-line phones across the world. It does this by connecting to a cellular network provided by a mobile network operator. In addition to telephony, modern mobile phones also support a wide variety of other services such as text messaging, MMS, email, Internet access, short-range wireless communications such as infrared and Bluetooth, business applications, gaming and photography.

2.1.2 Features of mobile phone

Mobile phones that offer these more general computing capabilities are referred to as smartphones. All mobile phones have a number of features in common, but manufacturers also try to differentiate their own products by implementing additional functions to make them more attractive to consumers.

The common components found on all phones are battery that typically rechargeable, providing the power source for the phone functions. An input device is allowing the user to interact with the phone. The most common input mechanism is a keypad, but touch screens are also found in high-end smartphones today. Besides that, a basic mobile phone services to allow users to make calls and send text messages. All GSM phones use a SIM card to allow an account to be swapped among devices. Some CDMA devices also have a

similar card called a R-UIM. An individual GSM, WCDMA, iDEN and some satellite phone devices are uniquely identified by an International Mobile Equipment Identity (IMEI) number.

Other features that may be found on mobile phones include GPS navigation, music (MP3) and video (MP4) playback, RDS radio receiver, alarms, memo recording, personal digital assistant functions, ability to watch streaming video, video download, video calling, built-in cameras and camcorders for video recording, with autofocus and flash, ringtones, games, PTT, memory card reader, USB, dual line support, infrared, Bluetooth and WiFi connectivity, instant messaging, Internet e-mail and browsing and serving as a wireless modem. Some phones can make mobile payments via direct mobile billing schemes or through contactless payments if the phone and point of sale support Near Field Communication (NFC).

2.2 EVOLUTION OF CELLULAR TECHNOLOGY

The telecommunications industry is generally started in 125 years ago when Alexander Granham Bell made his first call while the wireless industries started in 105 years ago when Marconi made his first transatlantic call (Cooper 2001). The first radiotelephone

service was introduced in the United States at the end of the 1940s (William 1995, ITU 2006). In 1956, the Swedish Company LM Ericsson introduced the first automatic mobile phone system in Sweden. The phone weighed 40 kilos and cost as much as the car in which it was mounted (Adner 2003).

Over the past 20 years, functionality and capability of mobile phone have increased while the size has decreased by 94% and weight by 93% (Winter et al 2002). Since 2004, the average cellular phone has been smaller than a deck of cards, capable of connecting to a well-established wireless network in most parts of the world and often come as free with a service contract (Winter et. al., 2004)

The mobile telephone evolution may have started from the car-mounted device but currently mobile wireless communication devices also include notebook computer, personal digital assistants, pen-based computer, palm-top computer and portable data collection and processing devices, apart from hand-held phone (Cooper, 2001 and Jones and Marsden, 2005a)

Mobile communication technology is often described or classified according to the generation it belongs to. The first (1G), second (2G) and third (3G) generations are

compared to show the rapid development of mobile phone services since the late 1970s (Agrawal Famolari 1999, Nakajima 2001, Coen et al 2002, Nurvitadhi 2002, Leung et al 2003, Rappa 2004 and ITU 2006).

	First Generation (1G)	Second Generation (2G)	Third Generation (3G)
Started	Late 1970s	1980s	2001
Access technology	Frequency Division Multiple Access (FDMA). The spectrum is divided up into frequencies and then assigned to user.	Time Division Multiple Access (TDMA). Each frequency is split into time slots.	Code Division Multiple Access (CDMA). User "spread Spectrum" technology also called 'frequency hopping'.
Standards	Advanced Mobile Phone System (AMPS)	Global System for mobile Communication (GSM)	International Mobile Technology (IMT-2000)
Characteristics	Low capacity, insecure communications. Ability to send digital data so limited that they were considered to be analog only.	Increase capacity, better speech quality and enhanced security. Digital cellular service for sending and receiving data gained limited popularity. The terminals were designed to resemble cordless phones with limited memory, processing power and graphics capability.	Large capacity, the ability to transfer large amounts of data at high speed. This enable applications like video calling, video downloads, web browsing, e-mail and others. It provide seamless global roaming, enabling users to move across borders while using the same number and handset.

Table 1 : A comparison of 1G, 2G and 3G mobile communication technology

According to Nakajima 2001, that 1G started commercially in 1979, 2G started in 1983 and 3G started in 2001. He conclude that the system that provides new services emerge every 10 years and the forecasts that the next generation may be expected in 2010. Voice

and text messages still dominate current mobile consumptions but there are predictions that web enable capability will dominate future decision making on mobile infrastructure (Roberts 2004 and Winter et. Al 2004).

In fourth generation (4G) is still in progress where the services, scope and mobility of 4G systems will have to be compatible with 3G systems, yet 4G should be able to increase system capacity by 10 times while decreasing cost (Tachikawa 2003). There are 3 targets have been mentioned for 4G systems base on Nakajima 2001 and Tachikawa 2003:

- Giving wireless communication functions to all moving objects. This could include communication terminals or modules attached to various kinds of entities, such as cars, bicycles and even pets.
- Providing wireless communications functionality where fixed lines are difficult to install.
- Giving wireless communications factions to objects that can take order, doing confirmations and execute control functions. This could include remote monitoring or controlling service like managing stock in vending machines or monitoring health conditions in medical care.

The evolution of technology and the changes experiences by the user are bound to increase where it is benefit for consumer in term of cost and the range of services including features available, but it can be increase the cognitive overheads of understanding the mobile phone usage scenario. People can reap the full benefit of these developments if they understand what is useful and beneficial to their own situation, otherwise the confusion about the mobile phone industry may well be exploited by unscrupulous marketers.

2.3 MOBILE DEVICES AND SERVICES

According to Hansen et. al. 2005, there are 3 key factors that influencing the use of mobile devices:

- Characteristics of the applications and physical limitation of the equipment.
- Needs and characteristic of the mobile user.
- Usage context of the mobile device.

These three key factors are fundamental to understanding what influences people in selecting and using mobile phones which are classification of mobile devices, designing of mobile phone and also mobile services.

In mobile device classifications have been based on their main objective, defining features, main capabilities, primary input mechanism and price. This classification approach is briefly discussed as a table below.

	Classifications
Objective	Based on Mohageg and Bergman (2000), there are 3 domain of use in mobile device which are entertainment, information access and communication and assistant devices. These domains are not mutually exclusive but them different in user interaction and user expectations. It considering information access and communication devices, interaction periods are typically shorter, task are structured and users are more goal-oriented and focused. Assistant device have more specific user population and task set.
Defining features	Manufacturers have different classifications and proposes the following eight distinctions to conditionally contain the different classifications (The Mobile Review,2006) such as low-end phones, middle-range phones, outdoor phone that provide protection from external influences, business phony, fashion phone, communicator and 3G phone.
Main capabilities	Ketola (2002) defines the various kinds of phone according their main capabilities. It can be distinguishes between, <ul style="list-style-type: none"> a) basic phone are voice devices designed to provide only voice functions and limited contact management b) Enhanced or smart phone are voice-centric devices to provide voice functions and data content via the Wireless Application Protocol(WAP). WAP is a transmission standard that connects wireless networks to the internet (Tsalgatidou et. Al 2000). c) Wireless Information Devices (WIDs) are generic digital mobile phone with the capability to browse the internet, receiving and sending faxes, Short Message Service(SMS) and electronic mailing(e-mail).
Primary input mechanism	Device can also be categorized to their ergonomist use and form factor where the primary input mechanism is essential in determining the ergonomic usage (Ketola and Roykee 2001). Devices such phone design to be used with one hand only. Besides, Bluetooth headsets enable the user to make a phone call using voice commands to control the phone without physically touching it.
Price	Price is influenced by factors that have usefulness or usability. It is where it usually based on the features and functional of the phone.

Table 2: Mobile Device Classifications

In designing of the mobile phone handset where the user interacts with the mobile phone via user interface the is implemented through software and hardware elements. Mobile handset providers are driven towards constantly designing new products, new interaction style and implementing advanced features, functions and styling to attract and retain customer. According to Winter (2004) the key focus of the wireless industry is cost, power and features capability.

To designing the platform component consists of the industrial design and the mechanical design, it constitute the physical interface between user and phone (Ketola 2002). A mobile phone is identified and distinguishes by its industrial design that used to create globally identifiable icons. Mechanical design is a detailed implementation of industrial design defining the physical product implementation in term of materials, dimensions and position for product components (Ketola and Roykee 2001 and Ketola 2002).

Industrial design is constantly seeking innovation. New user interface (UI) design leads to new ideas for use interaction, new navigation concepts, special display size or shape. Moreover, for hardware and software design is an incentive to standardize and support cross-platform and cross-manufacturer services and technologies.

UI components can be classified as those that facilitate user input and provide output (Kiljander 2004). The UI hardware includes the output device such as displays and vibration motors as well as input device (Ketola 2002). The fundamental UI hardware components can be incorporated in different industrial designs to deliver products with different shapes, materials and color.

In hardware components, a mobile phone has been described as a battery-powered microprocessor on a circuit board with an antenna, liquid crystal display (LCD), keyboard, microphone, speaker and wireless transmitter and receiver for input and output voice (Coen et. Al 2002 and Keshav 2005). Hardware defines main performance issue as display capabilities, battery consumption, memory capacity and processor efficiency. It make software performance is dependent on hardware (Ketola 2002).

Software is classified into manufacturer specific platform software, developed and optimized for the specific needs of the hardware, open platform that can be accessed by other software developer (Ketola 2002). Based on Winter et, al. (2004), Coulton et. al (2005) and Keshav (2005), software functions in mobile phone:

- Voice calls in the traditional services offered by phone
- Internet access such as browser for Compact HTML, WAP

- Messaging is a part from e-mail, mobile phone network provide three type of messaging.

- a) Short Message Services (SMS) to be send to other mobile phone

- b) Enhanced Message Services (EMS) is provide limited enriched content to mobile terminal using existing SMS transport mechanism.

- c) Multimedia Message Services (MMS) are unlimited in length to transforming from mobile phone into standard Internet e-mail endpoint. It also allowed text, image, graphics, sound and unlimitedly video to be combining in single message.

- Multimedia software for the display of still image files, playback of animation, movie and audio file

- User applications like personal information management, games, electronic commerce, novel applications to utilize the peripherals.

The hardware and software components and also a network together make the provision of mobile services. Mobile services can be divided into three categories such as privately communication, content services and mobile data services (Alahatuha *et. al.*, 2005)

- a) Private communication

Consists of private text-based messaging, multimedia messaging, e-mail and other form of private messaging.

b) Content service

Refer to text-based services that usually implemented using SMS technology and 2.5 G content services such as MMS services and downloadable applications.

c) Mobile data services

Refer to electronic services that utilizes wireless communication technologies for data transfer (Alahatuha et. al 2005)

The evolution of cellular technology and the evolution of services from 1G to 3G and beyond was reviewed to make argument that mobile phone technology has experienced rapid development since the first mobile phone call was made in 1973 (Cooper 2001).

2.4 CULTURAL FACTORS

The mobile device market has widened to a global scale and consequently mobile device are distributed throughout world (Kim and Lee 2005). Communications technologies are entirely dependent on the social network for the adoption and use, therefore the diffusion of these technologies within a culture (Urbaczewski, Wells et. al 2002).

The work “culture’ originally stems from an agricultural root: ‘cultural as cultivation of the soil and plants’ (Hartley 2002). Applying to people offers a metaphor for the development of products, minds and social relations. Culture can be seen as the social production of sense, meaning and awareness (O’Sullivan-et. al 1994). It also can be seen as learned behavior consisting of thoughts, feeling and actions (Del Gado 1996). While according to Hall (1990), culture is a communications through words, material things and behavior.

Based on Honold (2000) that it is more meaningful to find a definition of culture that suits the specific area of research than to produce. Culture in the context of human-computer interaction (HCI) as ‘the patterns of thinking, feeling and acting that influence the way in which people communicate among themselves and with computer’ (Ford 2005). It also applicable to mobile interaction and it consequently adapted for the purpose to consider culture as ‘ the pattern of thinking, feeling and acting that can influence the way which people communicate and use mobile device’.

The mobile device market has widened to a global scale and consequently mobile device are distributed through the words (Kim and Lee 2005) the globalization of mobile device user design will be more cruel to business success and building a loyal customer base.

Communications technologies are entirely dependent on the social network for adoption and use and the diffusion of these technologies within a culture should be studied (Urbaczewski et. al. 2002).

There are several metamodels of culture such as the Union Model, the Pyramid Model and the Iceberg Model. Hofstede (1996) defined that the Iceberg Model comprises of three layers which are:

- The surface layer hosts visible and obvious characteristics like number, currency and time formats
- It contains the unspoken rules where the specific context of a situation determines the rules in second layer
- The last layer consists of the unconscious rule that one is not consciously aware of that are difficult to reason with.

Hofstede (1995) encompassed this Pyramid Model in three layers and attempts the origin of culture and it affects human mental programming:

- Human nature is common to all human beings, it is inherited and not learned.

- Culture is specific to a group of people to learned not inherited
- Personality is attributed to an individual and its attribute is both learned and inherited.

The Onion Model defined by Trompenaars and Hamden-Turner (1997) comprises in three layers:

- The outer layer refers to explicit products and artefacts of culture.
- The middle layer consists of the norms and values. Norms are principles shared among a group of people for the purpose of distinguishing between right and wrong.
- The core layers consist of people's basic assumptions about human existence. This is implicit and determines how people adapt to their environment.

In Hofstede (1995) conceptualized culture as 'programming of the mind' and focuses on determining the pattern of thinking, feeling and acting that form a culture's mental programming. In the 1970s and 80s, Hofstede (1995) dealt with 'the employee's personal value related to the work situation' and investigated cultural variations within 5 different parameters. According to Hofstede (1995) and (2001) and Hofstede (1996) an overview of the culture dimensions are:

- Power distance, denoting the extent to which less powerful members expect and accept unequal power distribution within a culture, and scaling from high-power-distant to low-power-distant.
- Masculinity vs. femininity, referring to gender roles, not physical characteristics, as commonly characterized by the levels of assertiveness or tenderness in the user, and scaling from masculine to feminine.
- Individualism vs. collectivism, referring to the role of the individual and the group, and is characterized by the level of ties between an individual in a society, and scaling from individualistic to collectivistic.
- Uncertainty avoidance, referring to the way in which people cope with uncertainty and risk, and scaling from high-uncertainty-avoidance to low uncertainty-avoidance.
- Time orientation, referring to people's concerns with the past, present and future and the importance they attach to each, and scaling from short-term orientation to long-term orientation.

These dimensions correspond with dimensions identified in the other models of culture mentioned above. Hall [1959; 1976], however, identified time perspective in terms of polychronic time (doing many things at the same time) and monochromatic time

(concentrating on one thing at a time), adding a further time dimension compared to time-orientation identified by Hofstede.

Baumgartner [2003] researched the importance of cultural dimensions in the field of user-interface design. The following five dimensions were ranked most important:

- Context, as described by Hall [1959; 1976].
- Technological development, referring to the rate of technological development, and scaling from advanced to backward.
- Uncertainty avoidance as described by Hofstede [1995].
- Time perception as described by Hall [1959; 1976].
- Authority conception or power distance according to Hofstede [1995].

The mobile phone design and usage existing research into the effects of culture has been aimed at the culture-based preferences for specific design attributes (Choi, Lee et al. 2005 and Kim and Lee 2005) and the distinction between universal and to-be-localized components (Lee, Ryu et al. 2005b). The follows are representing the general trends:

- Choi et al. [2005a] looked at cultural influences on functionality design of mobile data services by comparing 24 Korean, Japanese and Finnish users. They found 52 attributes considered important by mobile data service users and identified 11 critical attributes related to the user interfaces of mobile data services devices. The critical attributes such as minimal keystrokes, iconic menu style, logical ordering of menu items, variety of fonts and font colours, etc., all showed a clear correlation with characteristics of the culture of the user's country (as identified by Hofstede).
- Kim & Lee [2005] investigated cultural influence and mobile interface design to clarify the relationship between cultural traits and mobile phone interfaces. Their subjects came from the USA and Korea. The results suggest a possibility of cultural impact on icon recognition. They found that Korean subjects performed better using concrete representations, while American users preferred the abstract icon representations.
- Lee et al. [2005b] studied multi-cultural usability in mobile phone navigation in a laboratory-based usability experiment with participants from the USA, West Africa, Eastern Europe and South America. They collected cross-cultural usability information in the product development process to determine universal and to-be-localized components, detect mistakes that lead to critical miscommunication, and assess the usability of cross-cultural user interfaces. Their study was again based on Hofstede's premise, but combined with the work of Jordan [1998] on pleasurable

products. They found no real differences between the various cultures for the issue of sportiveness, but found evidence that the perception of the same icons differs across cultures.

The relationship between the social and the cultural aspects where the social emphasis seems to be on new ways to use mobile phone in enhancing socialization(Jones and Marsden 2005 and Schiphorst 2006) and the mobile phone to eliminate physical location as a determinant of communication (Geser 2004).

2.5 DOMESTICATION THEORY

The domestication theory views technologies as social, cultural, political and economic products that play a symbolic and aesthetic, as well as material and functional role (Silverstone and Haddon 1996). The domestication approach aims to discern the interaction between the innovation and the context in which it is being placed.

The concept of domestication is derived from the British studies on consumption [Sun 2004]. It refers to the taming of innovation by the individual and focuses on the process that integrates technology into everyday domestic life [Sun 2004; Pedersen 2005]. The

domestication approach considers the following phases in the adoption process [Silverstone and Haddon 1996; Ling 2001 and Habib 2003]:

- Commodification: the way a technology is designed to give it an image with a number of functional, aesthetic and symbolic claims.
- Imagination: the way in which an innovation enters our consciousness.
- Appropriation: the actual purchase of the technology.
- Objectification: the phase in which the technology is made acceptable and familiar in the daily life of the consumer.
- Incorporation: integrating the technology with daily use.
- Conversion: the technology becomes fitted into routines and is seen by others as part of the individual's identity.

Pedersen et al. (2002) distinguishes between the first purchase decision, which refers to adoption, and post-decision buying behavior. They recommend that usage be seen as a transition between stages of increasing consumer sophistication in the consumer life cycle rather than a specific event. This is in line with the domestication approach which considers consumption rather than mere use, and views adoption as a process rather than a specific event (Ling 2001 and Haddon 2003).

Brown and Randell (2004) use the term 'dwelling' with technology to describe the study of technology use over a long period of time where the context in which technology is used may change. Domestication studies do *ex post facto* examination of technology adoption to understand why a technology has been adopted and why not (Pedersen 2005). It is therefore intended as a tool for observing adoption rather than a tool for the prognosis of an adoption (Ling 2001).

2.6 TECHNOLOGY ADOPTION

Technology adoption involves the user, technology and the context (Humphreys 2005). There are various models for understanding technology adoption had been propose. Based on Pedersen (2003) list, Roger's innovation diffusion model, the domestication model and the Technology Acceptance Model (TAM) as the most commonly applied.

- Roger's innovation diffusion model is founded in sociology but has also been applied to the world marketing where users are seen as economic entities that provide an approach to understanding on innovations adopted by particular population (Roger 2003).
- The domestication model where users are seen as social entities and it aims to provide a framework for understanding on technology innovations change and changed by their social contexts (Silverstone and Haddon, 1996)

- Davis (1989) noted the technology acceptance model was developed to explain the determinants of computer acceptance and usage behavior.

Rogers' innovation diffusion model focuses on marketing and sales processes, the domestication approach deals with a more global analysis of adoption ex-post factor and TAM focuses on information technology adoption in organizations (Ling 2001).

2.7 INNOVATION DIFFUSION MODEL

Rogers, a sociologist, developed the innovation diffusion model to explain how an innovation diffuses through a society (Geoghegan 1994, Walton and Vukovic 2003, Kiljander 2004 and Rogers 2003]. The innovation diffusion model has been used extensively to explain the acceptance or rejection of IT innovations in an organization or society (Urbaczewski, Wells et al. 2002).

According to Rogers [2003] 'an innovation is an idea, a practice, or object that is perceived as new by an individual or another unit of adoption'. Diffusion is defined the process by which an innovation is communicated by means of certain channels over a period of time between the members of a social system.

Rogers' adoption/innovation curve divides adopters of innovations into five categories each representing a unique psychographic profile as table below.

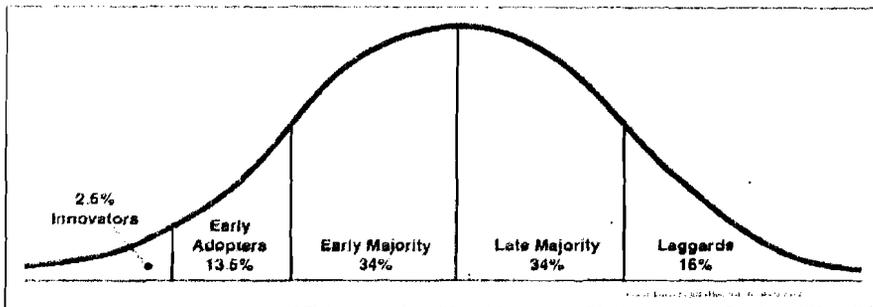


Table 3: Roger Bell Curve

Each adopter group in the model represents a unique psychographic profile based on the idea that some individuals more open to adoption than others. The categories can be described as follows (Geoghegan 1994, Leung, Chan et al. 2003, Walton and Vukovic 2003, Kiljander 2004 and Rogers 2003):

- Innovators: These are the 'techies', the experimenters who have technology as a central interest in their lives and pursue new technology as soon as it appears, no matter what the function is. Their interest lies more with the technology itself than with its applications to problem. Innovator makes up approximately 2.5% of the adopter population.

- Early adopters: They are the 'visionaries' who blend an interest in technology with a concern for significant professional problems and tasks. They are mostly not technologists but exploit the new capability. They find it easy to imagine, understand and appreciate new technologies for their potential to bring about major improvements and achieve a competitive advantage. Early adopters make up approximately 13.5% of the adopter population.
- Early majority: They are the 'pragmatists'. Although fairly comfortable with technology in general, their focus is on concrete professional problems rather than on the tools (technological or otherwise) that might be used to address them. They are driven by a strong sense of practicality and adopt a 'wait and see' attitude toward new applications of technology. They require concrete references and example to success before adopting. They make up approximately 34% per cent which is the first half of the mainstream.
- Late majority: They are the conservatives or 'sceptics'. They share the attitude of the early majority, though being less comfortable with technology. They will wait until something has become established standard and they prefer buying from large, well-established companies. The late majority make up approximately 34% per cent which is the latter half of the mainstream.
- Laggards: They are the most likely never to adopt at all. They are not interested in new technology and they generally buy technology products only when these are

buried inside other products. Laggards make up the last approximately 16% per cent of the potential adopter.

A successful innovation will be adopted in this order, beginning with the innovators, followed by the early adopters, the early and late majority, and perchance the laggards. A new technology is best focused on innovative adopters since they do not insist that the technology should have a track record, as they value a product on the basis of the latest technology built into it [Leung, Chan et al. 2003].

2.8 CONCLUSION

The conclusions of this chapter know the factors and element that exist in technology of mobile phone. The evolution of technology and services has experienced rapid development since the first mobile phone made was viewed. This is more complicated since the hardware, software and bizware are included to an extent that makes it difficult to decide between them. Furthermore, it also difficult for average user to manage the available service and capabilities because of the new model of mobile phone and features that provided.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

In this research, the researcher using the observation, interviews and passing the questionnaire to their sample to get information and view from them about the culture adoption in mobile phone usage. Both qualitative and quantitative methods is used in this research where the observational method is use to observe the natural scenario without interfering and experimental method is use to manipulate some aspect of the environment and observe the effect.

In literature review is use to highlights the main definition, theories, model and empirical findings that provide information for this research. The information on field of mobile phone infrastructure, issue affecting the mobile user and technology adoption and usage will be use to access the contribution of this research.

3.1 INTERVIEW

Interviewing for information gathering entails asking questions of another person or a group of people. Interviewing people can be provide information on their needs, opinion, attitudes, perception, observations and behavior.(Thomas,1999) The participants are requested to reflects on their experience with an objects, concept or event in their own words.

Interviewing is a process that starts with identifying the need for specific information and then develops appropriate questions to obtain that information. A person with appropriate expertise is identified and interviewed and finally the information is assessed. (Zimmerman and Muraski, 1995).

The goal of the interviews was to gain a better understanding of the way in which people use their mobile phone and to observe if the questionnaires are usable, effective and efficient in capturing the data needed.

Interviews range from formal, highly structured interview, based on a fixed questionnaire, to formal responsive interviews as extend conversations. Responsive

interviews are different from conversation as they more focused, more in-depth and more detailed than conversations. (Rubin and Rubin, 2005) Apart from avoiding the practical, legal, privacy and ethical issue involved in automated data capturing, asking participants to describe their communication activity retrospectively is the least intrusive way to gain information on their mobile phone. (Blom et.al,2005).

Responsive interviews are different from conversations as they are more focused, more in-depth and more detail than conversation (Rubin and Rubin 2005). Apart from avoiding the practical, legal, privacy and ethical issue involve in automated data capturing, asking sample to describe their communication activity retrospectively, is the least intrusive way to gain information on their mobile phone usage (Blom et, al 2005)

3.2 SURVEY

Surveys are conducted by means of interview or by distributing questionnaires to a sample or the entire target population for completion (Olivier 2004). Survey can be self-administrated, personal survey (interviewer-administrated, telephonic and online which include e-mail, computer direct and web based variations (Zimmerna and Muraski (1995) Zimmer 2004 Ford 2005). The purpose was to provide quantitative data to be used in creating a model of the cultural factors that influence phone usage.

Questionnaires can be written in many ways that to be used in many different situations and with many different data gathering media. (Brace 2004). Questionnaires are not always required for a survey (Olivier 2004) but they can provide standardized interviews across all subjects (Brace 2004). According to Harbich and Auer(2005) usability testing often realizes on questionnaires as they are easy to handle, reliable, statistically objective, economical and easy evaluate.

For the purpose of this research we distinguish between a survey by interview which is designed for extracting in-depth information from a very limited number of people and a survey by the administrating of questionnaires aimed at obtaining a large number of responses. In both cases, questionnaire can be used as a data capturing tool but in the personal interview the interviewer has the opportunities to adopt the questions according to the responses.

During interviews, the interviewer gather deep, richly nuances data from data from a limited number of test participants – this is termed qualitative information gathering. Doing a survey with fixed-response questionnaire means that dynamic adoptions are possible and the responses are collected from larger number respondents known as quantitative information gathering. The aim in quantitative information gathering is

usually to include a large number of participants since a certain minimum number is required for statistical analysis.

Survey are useful in quantifying user preference in adoption and usage but they are not as useful in discovering news needs(Qualasvirta 2005), in modeling mobile phone usage it is important to know the reason behind a specific use or non-use. This type of information is extremely difficult to capture with a fixed responsive questionnaires since it is important that these responses reflect realistic conditions.

3.3 DATA ANALYSIS

In this study, standard statistical techniques will be used for purpose of data analysis. In respect of analyzing the result and data, this study will use computer programming for “Statistical Package Social Science (SPSS) version 14.

3.4 CONCLUSION

This chapter discussed about conceptual and operation definition on important terms as discussed in chapter 2. Based on that conceptual definition the interview session and survey was conducted.

CHAPTER FOUR

RESULTS AND ANALYSES

4.0 INTRODUCTION

In this chapter describes on the analysis of the data obtained from the interview and the survey that had done by researcher. The aim is to relate the mobile phone user to the cultural dimensions in order to seek the cultural factors that can influence people in selecting their mobile phone. It is because, each of the user have their own opinion and need that they required as their features of the phone.

There are 2 phases that researcher use to determine the influences of culture on mobile phone usage such as interviews and data gathering survey. In this survey, the respondents in this group are purposively selected for age and education level that have been found to influence mobile phone usage.

Besides that, employment status, income and experience is using mobile phone are factors that can influence people in using a mobile phone (Rice and Katz (2003)).

4.1 RESULT FROM THE INTERVIEWS

The interviews session was conducted by face to face with respondent. The face to face interactive process can be use where the researcher can guide the respondent if they need clear information and encourage the respondents on giving their idea or experience on mobile phone. The session was done around 20 to 30 minutes to complete the questionnaires.

Researcher meets the respondent to get information from them about the capacity and usage of their mobile phone. The capacity used to determine by going through the menu items on their mobile phone with the respondents and expressing the number they used on mobile phone. From the interviewed, the researcher found that there are differences on usage and capacity based on the individual and knowledge of technology of the respondents.

It is because the individual and knowledge of technology is important where each of the mobile phone have their own facilities and technology that should use to make contact to others. It is where, some of the individual like to use the latest technology on their mobile phone and some of them do not really use the technology where the usage of the mobile phone is only use to make a call.

Researcher made an informal observation to know does the culture made influences on mobile phone adoption from the respondents. One of the respondent agreed that the latest technology of the mobile phone make her change mobile phone. The price of the phone does not mean for her and that is why she chooses iphone 4 as her latest mobile phone. Other respondent, they go to other brand of mobile phone and the important is the technology that provided especially the features and usage. The responses shows 65% of the respondents goes on technology and usage of the mobile phone.

Besides that, there is also a respondent that does not care about the technology which is only 20%. For them, the mobile phone only use for receiving and make a phone call and also massaging only. For their point of view, the latest technology in mobile phone is very expensive and it cannot use for long and it can be lost anytime.

Other than that, 15% responses from respondents are intermediate where they will only buy a mobile phone if their phone lost or having a problem. Moreover, they also were looking for the price of the phone and the features of the mobile. The technology of mobile phone is depends on the situations of the respondent when they want to buy the mobile phone.

This where, each of the respondent have their own opinion and need before they buy their mobile phone. This is because, there are a lot of choice that offer by marketers such as Nokia, Samsung, Sony Ericsson and others. This is where as a customer they need to make a perfect choice before made a decision on buying mobile phone.

As a result from the survey, there are some differences from the attitudes of people age over and under 30 years old. It is because in the age for over 30 years, most of them use a traditional mobile phone which is can be use for basic facilities. They are very concern about the price of the phone and the complicated the application in the mobile phone.

However, for the age below 30 years old, their model phone usually have a lot of application and the most of them will use entertainment such as media tool. They also can demonstrate a keen interest in exploring the entire feature available but inhibited by cost. Apparently today mobile phones have become a necessity for both adults and teenager. Parents have realized that mobile phones are useful for their children as they provide safety and security. Teenagers spend most of their time outside and with mobile phones parents feel comfortable and they no longer need to wonder if their child going to be late or having a problem. Mobile phones allow the teenagers to communicate with their parents or ask for help if they are in difficulty.

4.2 RESULT FROM SURVEY

Based on the article in Buzzle.com in the high-tech world, the mobile phones have become an indispensable and inseparable object from our day to day life. The mobile phones are gaining its importance in the world today because of their communication features, which attribute as a way of life statement. Therefore, it can be said that mobile phones have turned out to be one of the most popular additions to style statements. These devices can be seen out among people of all ages, all over the world. Many people consider that without mobile phone, they cannot imagine their life and both in terms of necessity and in terms of a fashion statement.

This is where the result that researcher received from the participant regarding the influences from mobile phone adoption. There are a lot of influences factor that may influence user when using a mobile phone. It is because mobile phones are growing in popularity all around the world. Mobile technology has also become important in the developing world, for example, by allowing it to “leapfrog” and take advantage of advances in information and communication technologies (ICT) without land lines (Carolyn Wei, 2005).

According to Ali-Vehmas and Luukkainen (2005), the most influential factors determining service adoption include complexity of the product and services including

usability and configurability, compatibility of the product and relative advantage of the new service compared to the original ways of doing similar task.

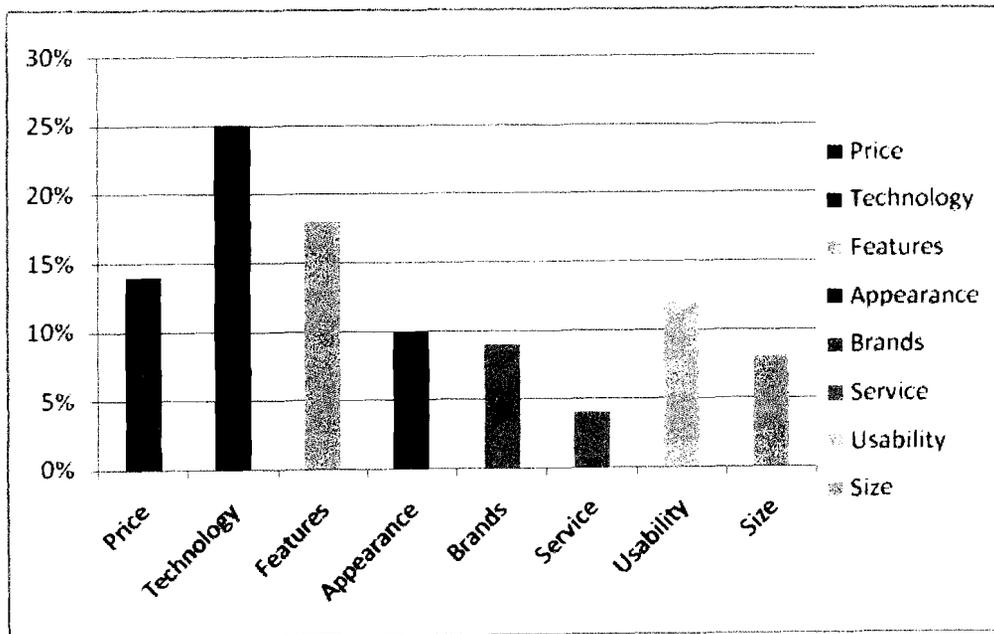
From the questionnaire shows that the demographic factor one of the factor that may influence on buying a mobile phone. It is where the majority age of 18-28 years old, participants the most influences in mobile phone adoption are. It is because they like a latest technology that the mobile phone can provide beside the design of the phone itself.

There were 50 respondents which are 75% are female and 25% are male. All respondents are successfully finished the questionnaire that dispute by researcher. They also able to give a good respond about the factors that influences mobile phone. However, gender actually is not a focus of this research. Therefore difference genders are not investigated as a factor that can influence on buying a mobile phone. The priorities are on buying and technological development will be investigated for gender differences.

All participants are from variety of background especially type of work and income. It is important to ensure that they would be in possession of mobile phone with the function and services of the mobile phone and can afford to buy the mobile phone services. Moreover, it also will make a difference in a point of view of each respondents on

influences of mobile phone because of the usage of the phone either it is necessary to be use or not.

Educational level is an increasingly important factor as technology becomes more important to day to day living. Generally, the more education a person has, the greater the income they will earn, thus the more money they have to purchase products. It will make knowledge of technology will be higher. This means a business may have to work harder to reach and keep those customers.



Bar chart 1: The important issue in buying a mobile phone

The bar chart 1 shown, the most important issue that will be consider in buying a mobile phone. From the chart is the most response that related to have a technology is 25% in mobile phone while the features are 18% was come next. Price was 14% in third and usability is 12% in the forth priorities.

It shows that technology is needed today where it can be access anyway such as cafe, hospital and many more. Usually, customer would like to buy a mobile phone that can access wireless and can explore anything that they required using their mobile phone without carry their laptop or access from the personal computer. Other than that, with a mobile phone the can easily keep it in their pocket and can be bring anyway.

As a matter of fact, initially the mobile phones were launched in the market to provide the normal telephonic communication with the help of the wireless technology and the short message service or SMS. The phones also offered the facilities such as phone book storage, organizing of dates and time. These mobiles served as a suitable way of managing and detecting appointments. With the advancement in the digital technology these basic facilities have become more advanced with lots of new added features.

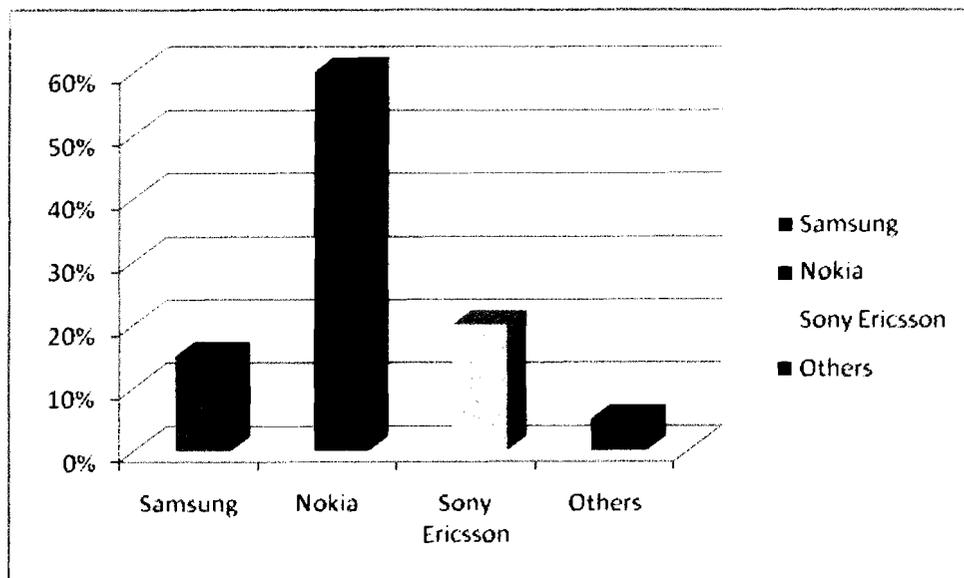
The users can utilize mobile phones for various other purposes also, for example, checking mails or using the internet, listening to music, capturing images and playing games. Nowadays, phones are operated as a mini laptop, with more or less all the essential features of personal computer. It is because a cell phone not only used as connecting to other people abut also able to access and find where ever the user want to go and provide an information that they required. Besides, cell phones also have a memory card to keep information and also can be share with other cell phone model that can be access.

Features in a mobile phone are the thing that user will be use. There are a lot of features such as messaging, phonebook, alarm, calendar, media, camera, games and lots more depends of the model of the mobile phone that user use. However, the main use that user need are massaging, make and received a call and phonebook. Other than that, according to Nurvitadhi (2002), the features most often use is massaging where the result done among University students in Japan. She also found that in United States, games are the most important features.

Nowdays, most of the features in mobile phone have high value. It can be seen in the mobile phone that have most application such as iphone 4, where it have a lot of tools

including basic features. Besides, usually the latest model of mobile phone, with a new features and technology provided, the price will be expensive.

Price is become an important thing on buying a mobile phone. It is where the technology that included in mobile phone is the price that user have to pay to get it. Price is also related with the features provided in mobile phone. Place of distribution in also may influence the price of mobile phone. It depends on the user where do they want to buy the mobile phone either from booth or shop.



Bar chart 2: The number of brands

The bar chart 2 shown, that the number of brands that respondents choose for a mobile phone. Nokia is the highest number brand which is 60% that respondent use. Followed by Sony Ericsson 20%, Samsung 15% and others mobile phone only 5%.

Nokia brand mostly use by female where for them it is easier to use and friendly user. The features also can be find and use for user. A male user also use Nokia brand as their mobile phone. Besides that, the prices of mobile phone also are cheaper compared to other brands. It means that, the more technology application in the mobile phone, the price will be higher. It is why most of the user uses Nokia as the mobile phone.

The three major mobile phone today have a lot of model where user can be choose which want that they like either from the features that they offer of from the price of the mobile phone itself. Moreover, there have a lot of model in market. Each of it have their own specific features. User usually will use the same brand name but difference model except certain user who like to change a brand to make a comparison.

Besides that, the experiences of the user is important where they will choose the same brand because of the loyalty and it easier for them to identify the tools. It also was including a user that buys a mobile phone from other user that introduce and advisement.

It is because sometimes, other user has their own experience about the mobile phone either bad or good expression.

According to Venkatesh et. al (2003), he develops the Unified Theory of Acceptance and User of Technology (UTAUT) model to explain user intentions to use an information system and subsequent usage behavior. UTAUT was developed through a review and consolidation of the constructs of the following model (Venkatesh, Morris et. Al (2003), theory of reason action (Fishbein and Ajzen (1975), technology acceptance model Davis (1989), motivational model (Davis, Bagozzi et. Al(1992), theory of planned behavior or technology acceptance model(Tylor and Todd (1995)), model PC utilization(Thompson, Higgins et.al(1991)), innovation diffusion theory(Roger 2003, Moore and Benbasat(1991)) and social cognitive theory(Compeau and Higgins(1995)).

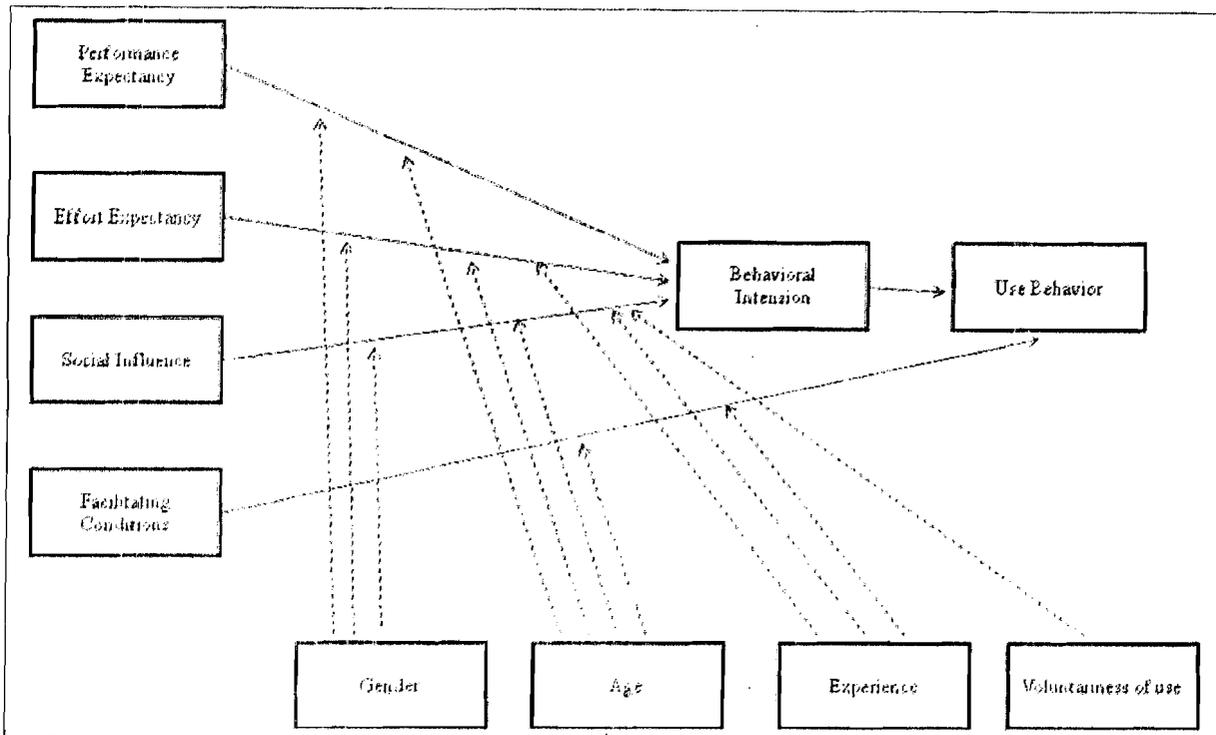


Table 4 : Unified Theory of Acceptance and User of Technology (UTAUT)

According to UTAUT (Venkatesh, Morris et.al(2003), performance expectancy, effort expectancy, social influence and facilitating conditions are four keys constructs that determine usage intention and behavior. Gender, age, experience and voluntaries are mediating factors in the impact of the key constructs on usage intension and behavior. An important contribution of UTAUT is to distinguish between mediating factors and determining factors.

The results and analysis of the data captured from the interviews and survey in this research were discussed. There are some factors that influence user in mobile adoption from the culture. Besides that, the behavior of the user can be known based on their view and perception of the mobile phone.

4.3 CONCLUSION

As the conclusion in this chapter is discussing on the result that has done to the respondents regarding a mobile phone adoption. From the result is shows that technology adoption may influence user to buy a new mobile phone because of their daily used and easier for them to explore information that they required.

All the respondents have gave their feedback about the adoption of mobile phone that researcher need. It shows that, user actually will buy a mobile phone depends on their needs and conformabilities of the mobile phone when they using.

The data that researcher received is agreed by other researcher. It is where the changing of technology will make some user change their behavior for them to get the mobile phone that more effective.

CHAPTER FIVE

DISCUSSION AND FUTURE RESEARCH

5.0 INTRODUCTION

The purpose of this research is to get information from primary and secondary sources regarding this researched to identify the approach that been used. The result shows that there are cultural influences that can adopt the mobile phone usage by the user. User that alert on advance in technology will find the latest mobile phone as their daily usage.

5.1 LIMITATION

There are difficulties that researchers faced when this research has been done such as time constrains, financial, gathering in formations and others. The main problems in this research are gathering information and time constrains.

Researcher need more time to explore for getting information on the cultural factor that can adopt on mobile usage. This is because, researcher have limited time on gathering in formations. Besides that, researcher need get information from the internet, journals and

some respondents regarding mobile phone usage. In fact,, each of them have their own opinion where its depends on their experience, perception and knowledge about mobile phone.

Moreover, technology usage today keep going changing and it will effect on user to buy a new mobile phone in the market with latest technology provided. There are also some of the respondent's lacks of knowledge of technology in mobile phone usage. It make difficult to researcher to get information because they are using just a basic features such as pickup calls and messaging.

5.2 DISCUSSION

Based on the finding, the usage of mobile phone has a unique set of cultural dimensions which are not necessarily match with those variables proposed by Hofstede or other researchers. This would mean that the concept of a unique mobile phone usage culture may exist and not necessarily correspond to the culture that exists in human relations.

The important contribution is a model that explicitly includes social influence in representing the factors that influence mobile phone adoption and usage, where social influence encompasses the components of human nature and culture. The model

combines the influence of mediating factors which are personal, demographic and socio-economic and determining factors which are social influence, perceived ease of use, perceived usefulness, and facilitating conditions on behavioral intention and actual mobile phone usage. The individual had given an exposure to infrastructural factors that effect on facilitating conditions on behavioral intention, as well as on actual use, distinguishes personal mobile phone usage from technology used in organizations.

Besides that, the model is useful in representing the factors that influence mobile phone adoption and use. The main contribution is to provide evidence that social influence which encompasses human nature influence as well as cultural influence that can influences perceived value and behavioral intention. It also to represent the social influence together with the other determining and mediating factors. A secondary contribution is the identification and positioning of facilitating conditions and personal factors in the mobile phone adoption and usage scenario.

The result from comparing the Unifies Theory Acceptance and Usage Technology model with previous models, it shows that the model are including social influence but limited the influence of social influence to behavioral intention. Furthermore Unifies Theory Acceptance and Usage Technology represented facilitating conditions but it known only in the relationship between facilitating conditions and actual use. Even as it found that facilitating conditions also influence behavioral intention. In Technology Adoption

Model, this model has perceived ease of use and perceived usefulness as components that influence behavioral intention and ultimately actual use. The differences in Technology Adoption Model are the relationships between the basic elements are mediated by demographic factors, socio-economic factors and personal factors. The Technology Adoption Model component of attitude has been misplaced, like it has also been lost from Unifies Theory Acceptance and Usage Technology.

In Unifies Theory Acceptance and Usage Technology the proposed model makes a distinction between determining factors and mediating factors but the mediating factors, such as demographic, socioeconomic and personal factors difference from the factors that proposed by Unifies Theory Acceptance and Usage Technology. This difference in mediating factors reflects the nature of the mobile phone scenario. Facilitating factors, which include cost, infrastructure and service, emerged strongly from the qualitative observations although they may not be important in technology adoption within organizations.

5.3 FUTURE RESEARCH

Mobile phones are the ultimate, personalized, personal computer, mobile phone adoption and usage therefore where it is difference from other technology adoption and use in ways we are only beginning to understand. It is because there are many unanswered questions along the way and it need more debate on integrating research on mobile phone

adoption and usage across disciplines. For the future research, it can be useful to a group of people and expressed in their behavior based on their knowledge of technology adoption and demographic factors. It can be discuss more because of their behavioral, knowledge and technology that keep changing each time.

5.4 CONCLUSION

As the conclusion, technology adoption is important for those are using it as their daily job. It is necessary nowadays because there are a lot of communication can be done by using a mobile phone. Even though, the more technological mobile phone sell in market, user still buying it without looking on price. Some of behavior of user will change based on their perception and knowledge about technology.

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