Chapter 3: Methodology

3.1 Introduction

This chapter explains in detail the methodology used in gathering information necessary to conduct this study. It highlights questionnaire Design, Identifying the Constructs, sources of data used and the survey design which includes the sampling plan, assumption of this study and data analysis method employed. The steps involved were elaborated in details and have been carried out systematically in order to achieve a high degree of reliability and validity.

3.2 Identifying the Constructs

This paper has listed and searched literatures mainly from top journals in information system that reflects the topic of this study. Some of these referred journals are MIS Quarterly as one of the most important and reliable journal, Information & Management, Decision Support Systems, Information Systems Research, International Journal of Electronic Commerce (all these journals are under ISI), beside this journals, for cultural part in literature and definition of culture some reference book was used such as Culture and organizations: Software of the mind by Hofstede. Management Science is journal from management and organization field that was used in this paper.

A comprehensive review of the above literature was the basis for assuring the content validity of the instrument used in this study. Five dimensions of TAM (usefulness, ease of use, subjective norm, perceived behavioural control and
Behavioural Intention) are developed and itemized into five sets in order to find relation between each item with Behavioural Intention (BI). (Appendix B)

This paper constructed using items from instruments measuring Perceived Usefulness and Perceived Ease of Use (Davis, 1980), Subjective Norm, perceived behavioural control and Behavioural Intention (Taylor and Todd, 1995), and culture (Hofstede, 1980). The technology acceptance items were adapted and changed slightly to fit the technology under investigation (internet/mobile banking), the cultural items were used exactly as they appeared in prior research of Hofstede (1980).

### 3.3 Sources of Data

Data sources are classified as being either primary sources or secondary sources. A source is primary if the data collector is the one using the data analysis. A source is secondary if one organization or individual has compiled the data to be used by another organization or individual. In this study, primary sources of data which are interviews, and distributed questionnaires are used to analyze the data gathered. The instrument or measure used is a structured questionnaire based on the literature review on the relevant topics. Face to face interview in order to find African sample was used in first step, and then give them questionnaires by hand. Because of cross-cultural aspect of this study and assumption that all samples must study or work in Malaysia, an e-mail version of questionnaires was sent to them. Another assumption for this study is that all samples have enough ability in English Language skills.
3.4 Selections of Measures
The survey instrument consisted of two parts. In part A of the questionnaire, Demographic of students was asked. Some were assigned to certain categories and it is mutually exclusive and collectively exhaustive.

In part B of the questionnaire, survey respondents were asked to state their level of agreement of each statement for seven dimensions of TAM on a seven-point scale (-5 represent “Strongly Disagree” to 5 representing “Strongly Agree”; 0 ‘neither disagree nor agree”). According to Cooper (2000), this type of scale is considered to be a ratio scale. Therefore, measurement of central tendency and its dispersion can be made.

3.5 Sampling
Base on the main aim of this study to draw people according to their cultural value then finding cultural effect on TAM, framework and table, this paper needs different samples from different countries that stay in Malaysia. Gathering data for this research paper included different stage and level. Four university students (UM, UTM, MMU, Limkokwing), more than seven embassies in Malaysia (Belgium, Hungry, Czech Republic, Slovakia, Ukraine, Mexico, Jamaica, Bulgaria), and more than three international organization participated in this survey. The social networks such as facebook community in Malaysia were another source for handle sampling for this paper.

This paper tried to select necessary samples base on fair condition and ethical situation. Issues in international dimensions of survey were considered, such as language differentiation, time of data collected across culture and Ethical issues in data collection. (Sekaran, 2003)
In the first stage, questionnaire was sent through the mail to the MBA student, University of Malaya. All Iranian and some Malaysian students replied through the mail. That means cell number three (countries with low Power Distance, low individualism and moderate level of uncertainty avoidance) and number two (High level of Power Distance, low level of individualism and low level of Uncertainty Avoidance). So again a print out version of questionnaire was distributed to the UMGSB students, students was selected according to their nationality, and so the cell number two filled up by this way, also some sample for cell number four was gathered (Arab countries: Egypt, Kuwait, Lebanon, Libya, Saudi Arabia and UAE), but still was needed more sample for fourth cell (high Power Distance Index, high individualism and moderate uncertainty avoidance).

Finding samples for the cell number four was a little bit harder. For finding the people for this cell Multimedia University, Limkokwing University and University technology of Malaysia were selected. There were a lot of students from East and West African and Arab countries, sample from Arab countries who have used Internet banking or mobile banking, were found easily. Problem raised for finding sample from East and West Africa. According to the short interview with them, it was found that most of them never used internet banking in their home countries, and in Malaysia have hardly tried it more than ten times. They said all of them have internet facilities and also internet banking service available in their home countries, but because of high uncertainty avoidance in their culture and fear of security problem and privacy, they never have used internet banking in their home countries.
In order to create a fair situation for all people who were participated in this research, choosing African samples was under one condition that none of the elements of samples have lived in Malaysia less than six months. Under this condition, they had enough time to adapt themselves with host country (Malaysia) internet banking facilities. After short interview and finding that users of online banking facilities are, questionnaires were distributed among them. By this way fourth cell in table was found its samples.

Cells numbers five and six, by visiting the embassy of countries, also finding people who work in Malaysia, were completed.

In order to find elements of samples for countries with low power distance, high individualism and low level of uncertainty avoidance (cell number seven), exchange student from European and the United States were participated to fill up questionnaire, also British council and ELS lecturers in KL were selected to fill up questionnaire by sending email or giving the printing version of questionnaire.

Cell numbers nine and twelve were completed by finding samples through people who work and study in Malaysia. Cells number one, eight, ten, and eleven were cells that samples of them completed by referring to the their embassy in KL, social networking such as facebook assists this paper finding the elements of sample through the Malaysia (community Slovakian in Malaysia).

3.6 Sampling Size
Roscoe (1975) proposes that the appropriate sample size for most research to be greater than 30 and less than 500. Needed samples for this research are at least 180 elements, and it is 15 for each cells.
Around 270 questionnaires gathered from who work or study in Malaysia by mail or by hand.

Because of necessity of this study to collaborate people of different nation, some questionnaire were backed by email, it was around 105 questionnaires. Print out version of questionnaire that was collected is around 165. Through these questionnaires, 243 questionnaires were used as a useful for analysis part.

Around 27 questionnaires were detected as unused questionnaires.

3.7 Data Analysis Method
Statistical Program for Social Science (SPSS) is used to analyse in this paper. The data was analyzed by Design of Experiment method (DOE), for reliability test, the cronbach’s Alpha is used to ensure the measures are free from error and produce consistent results.

Factor Analysis was used in order to validity test of each constructs.

In order to analyse and find results, General Linear Model, and 3 way Analysis of Variances was used in this paper.