CHAPTER 3

<u>RESEARCH METHODOLOGY</u>

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3.1. Introduction

This chapter presents the methodology employed in this study. It begins with a review of the research framework followed by the hypotheses development in this study. Then, this chapter will discuss the design of this research and sampling. Finally, it will outline the data collection procedure and data analysis techniques.

3.2. Research Framework

This study investigates the factors that influence Malaysian consumers attitudes towards adopting online shopping, specifically looking at online purchasing through Blogs. Among the factors that are involved in this study are five independent variables, namely, utilitarian orientation, hedonic orientation, word of mouth, trust and website features, while the dependent variable is attitudes towards online purchase. Based on the related literature presented in the previous chapter, a framework has been developed to investigate the relationship among the five independent variables and the dependent variable. Figure 3.1 presents the research framework.

Figure 3.1: Research Framework

3 _____ f Research Hypothesis
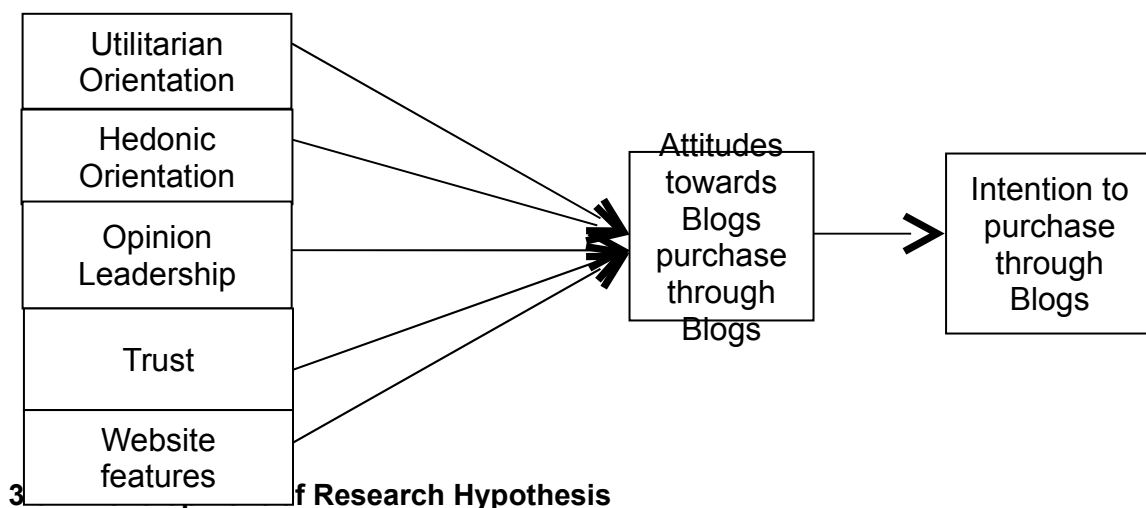
3.3.1. Utilitarian and Hedonic Orientation

Consumer's characteristics and goals have been found to influence their behaviour such as purchasing, revisiting intentions and attitudes towards a website (Wolfinbarger and Gilly, 2001). Babin and Attaway (2000) suggested that both utilitarian and hedonic shopping values are associated with approach behaviours while shopping. The authors stressed that consumers with a higher level of positive effect towards the online channel tend to have more favourable shopping value and choice intention.

The findings of Babin and Attaway (2000) were supported by Childers et al. (2001) who stated in their study that while the instrumental aspects of the new media are important predictors of online attitudes, the more immersive, hedonic aspects of the new media play at least an equal role. The study by Childers et al. (2001) generated evidence that shows the strong and consistent influence of enjoyment on attitudes towards interactive shopping. The authors also noted that usefulness and ease of use were strong predictors in their study concerning the influence of attitudes towards interactive shopping.

In addition, a study conducted by Chen and Lee (2008) concluded that consumers' perceived that hedonic value has a positive effect on their attitude towards a website. Delafrooz et al. (2008) on the other hand found that consumers who have utilitarian orientation are more likely to have a positive attitude towards online shopping. Based on this evidence, this study believes that both hedonic and utilitarian orientation may have an influence on consumer attitudes towards online shopping, resulting in the formulation of two hypotheses:

H1: Utilitarian shopping orientations have a positive relationship with consumer attitude towards online purchase through Blogs

H2: Hedonic shopping orientations have a positive relationship with consumer attitude towards online purchase through Blogs

3.3.2. Opinion Leadership

Wathen and Burkell (2002) concluded in their research that web information receivers considered virtual source credibility as an important indicator of information credibility. In addition, previous studies found that confirmation or disconfirmation of prior beliefs significantly influence the credibility of the received information (Fogg, 2002).

While confirming the above, Zhang and Watts (2003) suggest that if the current recommendation is consistent with the opinions of other forum users, the reader is likely to rate the credibility of this recommendation more highly. This is because people tend to follow and believe normative opinions. This statement is supported by Cheung et al. (2009) who concluded that normative influence cues significantly affect how people determine the credibility of online recommendations.

Normative influences can come from opinion leaders who have the characteristics of a unique and influential position and have a significant role in the innovation diffusion of online networks (Roger, 2003). Based on this, a hypothesis based on opinion leadership is suggested:

H3: Opinion leadership has a positive relationship with consumer attitude towards online purchase through Blogs

3.3.3. Trust

Martinez-Lopez et al. (2005) stated in their study that it is extremely important for online businesses to generate trust and brand equity so that consumers develop a purchasing

intention on the website. Their study also reveals that consumers' trust in Internet shopping exerts a strong and positive influence on online shopping.

Another study done by Castelfranchi and Tan (2002) argued that online shoppers would not get involved in a transaction on the Internet unless the perceived level of trust exceeds the minimum level acceptable to the shopper.

To substantiate the issue, Hoffman, Novak and Peralta (1999) mentioned that the lack of consumers' trust is one of the principal inhibiting factors in electronic transactions. When people have a positive attitude towards the information provided by the website, they may feel that the vendor is trustworthy, thus, motivating them to purchase online (Salo and Karjaluoto, 2007). The association between trust and attitude towards online shopping was clearly stated in the findings of these researches, therefore it is proposed that:

H4: Trust has a positive relationship with consumer attitude towards online purchase through Blogs

3.3.4. Website Features

The speed of interaction will be viewed as a challenge by consumers (Novak and Hoffman, 2000). This finding was supported by Dellaert and Kahn (1999) who stated that web waiting time negatively affects consumers' evaluation of website content.

A study conducted by Martinez-Lopez et al. (2005) produced findings that supported that website features affect consumers opinion towards the Internet. Among these findings are that consumers' perception of web design has a strong and positive direct effect on their opinion of the web. An effective web design is necessary to maintain or increase a

company's market share (Parboteeah et al., 2009).

It is also important to note that consumer interface can put consumers in a positive mood through auditory and visual stimulation (Baker et al., 2002). They can also address many of the obstacles that consumers face in the online retail store while creating a more attractive and engaging environment (Burke, 2002). They can also provide volumes of product information and facilitate the search and filtering process (Kemp, 2001). Therefore, it is reasonable to assume that:

H5:   Blogs interface has a positive relationship with consumer attitude towards online purchase through Blogs

3.3.5. **Influence of Attitudes towards Blogs Shopping on Intention to Purchase though Blogs**

A network structure can have a substantial effect on the manner in which innovations diffuse as the structure of communication networks influence the order in which potential adopters receive information about an innovation and, therefore, the order in which they adopt (Abrahamson and Rosenkopf, 1996). Strong ties in the structure will result in greater trust and credibility and in turn will lead to relatively earlier adoption (Vilpponen et al. 2006).

Webster and Morrison (2004) found a positive and significant relationship between network centrality and the time of adoption. Jarvenpaa et al. (2000) also discovered a positive relationship between consumers' trust in the Internet store, which reduces perceived risk. This generates a more favourable attitude towards shopping online, which, in turn, increases the willingness to purchase from that store.

In this research, the network structure characteristics are the utilitarian orientation, hedonic orientation, opinion leadership, trust and website features, which will result in consumers' attitude towards online purchase through Blogs. This network structure will in turn influence the potential adopter, which in this study's context is the consumers' intention to purchase through Blogs.

Therefore, it is important to acknowledge the research of Li and Zhang (2002) who concluded that a consumer's intention to shop online is positively associated with their attitude towards Internet buying, which influences their decision making and purchasing behaviour. Based on this a hypothesis was formulated:

H6:   Consumers' attitudes towards online purchase through Blogs have a positive relationship towards their intention to purchase through Blogs.

A comprehensive conceptual model and the proposed hypotheses are presented in Figure 3.2

Figure 3.2 Conceptual Model and Proposed Hypotheses in this Study
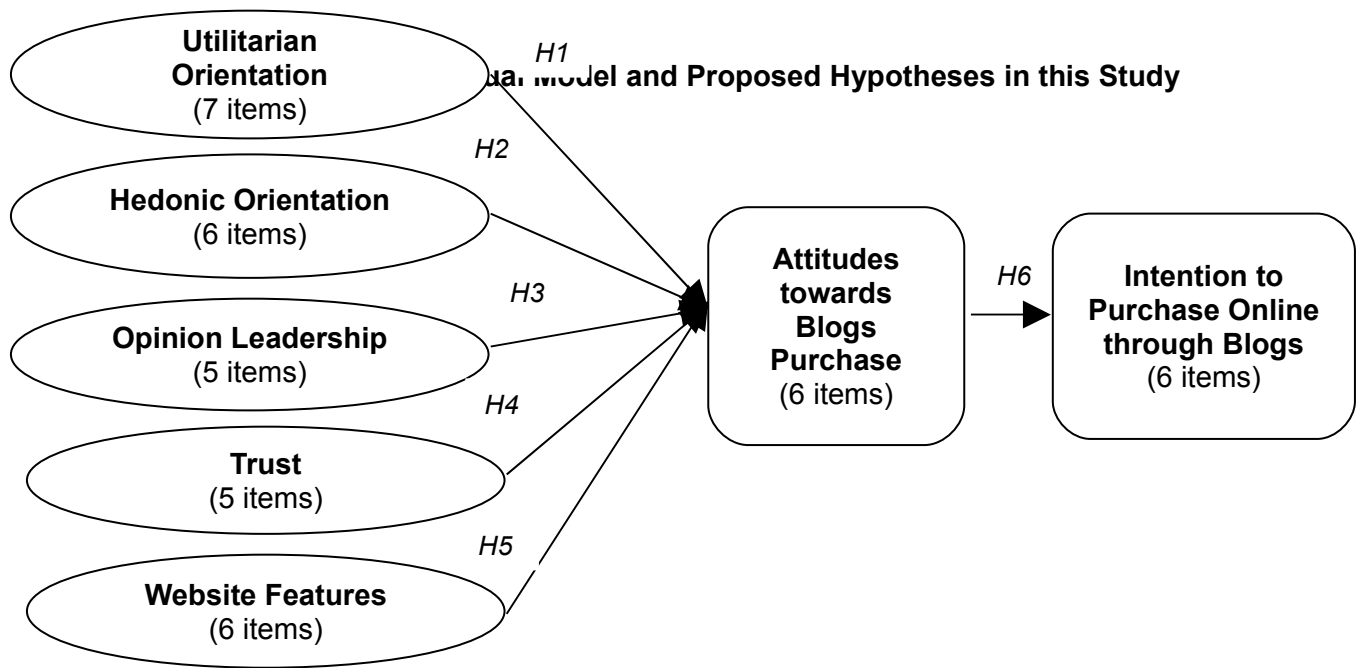
As a summary, in total there are six hypotheses in this study:

H1: Utilitarian shopping orientations have a positive relationship with consumer attitude towards online purchase through Blogs

H2: Hedonic shopping orientations have a positive relationship with consumer attitude towards online purchase through Blogs

H3: Opinion leadership has a positive relationship with consumer attitude towards online purchase through Blogs

H4: Trust has a positive relationship with consumer attitude towards online purchase through Blogs

H5: Blogs interface has a positive relationship with consumer attitude towards online purchase through Blogs

H6: Consumers attitudes towards online purchase through Blogs have a positive relationship towards their intention to purchase through Blogs.

3.4. Questionnaire Development

The instrument used in this study was designed based on prior published researchers regarding factors influencing attitudes and behaviour towards online shopping. The instrument was structured as self-administered questionnaires that were distributed as surveys to respondents. The questionnaires for this study consist of four parts:

Part A: Attitudes towards Online Purchase through Blogs

Part B: Factors for Online Purchase through Blogs

Part C: Intention to Adopt Blogs Purchase

Part D: Respondent Demographics

Part A contains questions to measure the respondents' attitudes towards online purchase through Blogs and Part B includes twenty nine statements regarding factors in this study's context, namely, utilitarian and hedonic orientation, opinion leadership, trust and website features, which influence customers' attitudes towards online purchase through Blogs. Subsequently, Part C outlines six items to test the consumers' intention to adopt Blogs purchase.

Respondents are required to indicate the extent of their agreement or disagreement with each statement using a five point Likert-type scale ranging from (1) 'strongly disagree' to (5) 'strongly agree'. All of the statements asked were adopted from previous studies as per the outline in table 3.1 below:

Table 3.1:Questionnaire items summary

PART A: Attitudes towards online purchase through Blogs

Code	Statement	Related Hypotheses	Scale Used	Adopted from
ATT1	Purchasing through Blogs is beneficial to me	H6	Likert-type 5 point scale	Kempf (1999)
ATT2	Purchasing through Blogs is enjoyable	H6	Likert-type 5 point scale	Kempf (1999)
ATT3	Purchasing through Blogs is a wise action	H6	Likert-type 5 point scale	Kempf (1999)

No	Statement	Related Hypotheses	Scale Used	Adopted from
ATT4	Online shopping through Blogs is favourable to me	H6	Likert-type 5 point scale	Martinez-Lopez et al. (2005)
ATT5	I like to purchase items through Blogs	H6	Likert-type 5 point scale	Martinez-Lopez et al. (2005)

PART B: Factors for online purchase through Blogs

No	Statement	Related Hypotheses	Scale Used	Adopted from
Utilitarian orientation				
UTI1	Shopping through Blogs is convenient for me	H1	Likert-type 5 point scale	Childers et al., (2001)
UTI2	I can buy what I really need through Blogs	H1	Likert-type 5 point scale	Addis and Holbrook (2001)
UTI3	While browsing through Blogs, I can find the items I am looking for	H1	Likert-type 5 point scale	Addis and Holbrook (2001)
UTI4	Shopping through Blogs would make my shopping less time consuming	H1	Likert-type 5 point scale	Childers et al. (2001)
UTI5	I can accomplish my shopping goal through Blogs	H1	Likert-type 5 point scale	Addis and Holbrook (2001)
UTI6	Blogs improve my online product searching task	H1	Likert-type 5 point scale	Gefen et al. (2003)
UTI7	Online purchase through Blogs is easy	H1	Likert-type 5 point scale	Gefen et al. (2003)

PART B: Factors for online purchase through Blogs (continued)

No	Statement	Related Hypotheses	Scale Used	Adopted from
Hedonic orientation				
HED1	I love browsing Blogs	H2	Likert-type 5 point scale	Schmitt (1999)
HED2	I feel good when I purchase items through Blogs	H2	Likert-type 5 point scale	Schmitt (1999)
HED3	While purchasing items through Blogs, I feel the excitement of shopping	H2	Likert-type 5 point scale	Schmitt (1999)
HED4	Online shopping through Blogs is fun	H2	Likert-type 5 point scale	Childers et al. (2001)
HED5	When doing online shopping through Blogs, I feel a sense of adventure compared to traditional shopping	H2	Likert-type 5 point scale	Babin et al. (1994)

HED6	Online shopping through Blogs is one of my favourite leisure activities	H2	Likert-type 5 point scale	Babin et al. (1994)

Opinion leadership

OPI1	I seek out the advice of people regarding which Blogs have the best offers	H3	Likert-type 5 points scale	Lam et al. (2009)
OPI2	I like to seek information before making a purchase through Blogs	H3	Likert-type 5 points scale	Lam et al. (2009)
OPI3	Other people's review / opinion supported my impression of the Blogs	H3	Likert-type 5 points scale	Cheung et al. (2009)
OPI4	Other people's review / opinion makes it easier for me to make a purchase decision through Blogs	H3	Likert-type 5 points scale	Cheung et al. (2009)
OPI5	I like to seek advice from people before making a purchase through Blogs	H3	Likert-type 5 points scale	Lam et al. (2009)

Trust

TR1	Blog owners are likely to be honest in dealing with buyers	H4	Likert-type 5 point scale	Pavlou (2002)
TR2	Based on my observation, I can tell whether the Blog's owner is trustworthy	H4	Likert-type 5 point scale	Gefen et al. (2003)
TR3	The decision to make online purchase through Blogs involves a significant amount of risk	H4	Likert-type 5 point scale	Pavlou (2002)

PART B: Factors for online purchase through Blogs (continued)

No	Statement	Related Hypotheses	Scale Used	Adopted from
TR4	The product as shown in the Blogs produces the results which the Blogs owner claims it does	H4	Likert-type 5 point scale	Salo and Karjaluoto (2007)
TR5	The Blogs purchase terms and conditions are important to me	H4	Likert-type 5 point scale	Salo and Karjaluoto (2007)

Website features

WEB1	Blogs design facilitate information searching	H5	Likert-type 5 point scale	Martinez-Lopez et al. (2005)
WEB2	I like to visit Blogs that are well structured	H5	Likert-type 5 point scale	Martinez-Lopez et al. (2005)
WEB3	I prefer Blogs which are easy to navigate	H5	Likert-type 5 point scale	Childers et al. (2001)
WEB4	I prefer Blogs that have interactive features	H5	Likert-type 5 point scale	Martinez-Lopez et al. (2005)
WEB5	I like visiting Blogs that are visually pleasing	H5	Likert-type 5 point scale	Loiacono et al., (2007)

No	Statement	Related Hypotheses	Scale Used	Adopted from
WEB6	The web content downloads of the Blogs are fast	H5	Likert-type 5 point scale	Martinez-Lopez et al. (2005)

PART C: Intention to adopt Blogs purchase

No	Statement	Related Hypotheses	Scale Used	Adopted from
Intention to adopt Blogs purchase				
INT1	I intend to make an online purchase through Blogs	H6	Likert-type 5 point scale	Gefen et al. (2003)
INT2	I am likely to provide the information needed by the Blogs owner to complete my online purchase transaction	H6	Likert-type 5 point scale	Gefen et al. (2003)
PART C: Intention to adopt Blogs purchase (continued)				
INT3	I would consider purchasing through Blogs as my first choice when doing online shopping	H6	Likert-type 5 point scale	Lundstrom and Sciglimpaglia (1977)
INT4	I would browse Blogs to find items that I need to buy	H6	Likert-type 5 point scale	Gefen and Straub (2000)
INT5	I plan to browse Blogs for products within this week	H6	Likert-type 5 point scale	Cho et al. (2002)
INT6	I have seriously thought of purchasing a product through Blogs	H6	Likert-type 5 point scale	Gefen et al. (2003)

The final part of the questionnaire requires respondents to answer demographic questions. Demographics include such variables as age, gender, level of education, income and time online (Bellman et al., 1999). Thus, this research includes all the above mentioned items with some additional questions, mainly to ascertain the interest of the respondent and whether they have experience of purchasing products online in regular web stores or through Blogs.

3.5. Sampling Design

Given the large Internet penetration rate in Malaysia, which was sixty-six percent as at the end of 2009 (MCMC, 2009), this study's targeted samples were Internet users throughout Malaysia. Furthermore, in alignment with the study focus, which is on Blogs

as an online purchase channel, the pre-requirement for respondents of this study were Internet users who were also Bloggers, which, by definition, means individuals who read or write in Blogs.

The respondents were selected for this study using the probability sampling technique, specifically, through stratified random sampling. Stratified random sampling is the process of grouping members of the population into relatively homogeneous subgroups before sampling. For this study, the population were Internet users in Malaysia; subsequently, this population was divided into Bloggers and non Bloggers.

Respondents were then randomly sampled from Bloggers groups by distributing the questionnaires among colleagues, friends and referrals from friends at various locations throughout Malaysia. This method is also known as snowball sampling, which uses recommendations to find people with the specific range of skills that have been determined as being useful.

3.6. Data Collection Procedure

The study used a survey as the method to collect the data from respondents. Respondents consist of Malaysian consumers that may come from anywhere in Malaysia. A pre screening was conducted either verbally or through phone prior to the distribution of the questionnaires to make certain that the questionnaire was only given to those who have experience in visiting Blogs. This was to ensure that respondents have adequate knowledge of the subject in this study before answering the survey questions.

The targeted sample size is 300 respondents to provide an adequate level of confidence in the study and a higher level or reliability in data analysis. The questionnaires were given with the expectation that some of the targeted respondents might not respond or

return the questionnaires.

Questionnaires were circulated physically after printing, through face-to-face, drop off and post. Respondents were allowed to take home the questionnaire and submit them upon completion within one week. In an effort to extend the sampling frame, the questionnaires were also circulated via electronic mail. A deadline of one week from the email send date for response submission was mentioned in the email invitation sent to establish a timeline.

A self administered questionnaire was developed to ease data collection and respondents were also informed to whom the completed questionnaires should be returned. The purpose of this survey was explained in the cover letter of the questionnaire. On average, respondent spent about five to ten minutes answering the survey questions.

3.7. Data Analysis Technique

The collected questionnaires were manually screened to sort out any incomplete response and data entry was executed in order to perform analysis. Completed questionnaires ware coded to numerical value upon data entry.

The data was then loaded into Statistical Package for Social Science program (SPSS) version 17.0 to obtain the statistical analysis. Among the analyses that were prepared were the normality test, descriptive analysis, validity and reliability test, inferential analysis and differential analysis.

The normality test was performed at the beginning of the data analysis stage in order to

determine whether the data collected was normally distributed and randomly collected. It is important that the normality of the sample is confirmed before subjecting it to inferential and differential analysis as it proves the capability and appropriateness of the sample concerning the actual total population.

In addition, descriptive analysis was performed to elaborate further on the samples characteristics and to get the mean and standard deviation of the samples. Next, the validity and reliability tests were conducted to ensure all the variables are valid and reliable. This test was performed using factor analysis and Cronbach's alpha.

Subsequently, two inferential analyses – Pearson's correlation and multiple linear regressions – were carried out to determine the relationship between the proposed independent variables (IVs) and the dependent variable (DV). The average scores of all items under each variable were subject to analysis using Pearson's correlations. Meanwhile, multiple linear regressions were done to evaluate the prediction of DV based on the scores of all five IVs. A summary of the data analysis used in this study is listed in Table 3.2

Table 3.2: **Summary of analysis**

Types of Analysis	Methodology	Section of Questionnaires	Objective of Analysis
Descriptive	• Frequency analysis Mean and standard deviation	• Part D: Demographics of the respondents	To understand the profile of the respondents
Normality Test	• Kurtosis Skewness analysis • Histogram chart	• Part A: Attitudes towards Blogs purchase • Part B: Factors for Blogs purchase Part C: Intention for Blogs purchase	To ensure data collected is normally distributed

Validity Test	• Factor analysis	• Part A: Attitudes towards Blogs purchase • Part B: Factors for Blogs purchase Part C: Intention for Blogs purchase	To confirm items are valid to measure the underlying concept
Reliability Test	• Cronbach's alpha	• Part A: Attitudes towards Blogs purchase • Part B: Factors for Blogs purchase Part C: Intention for Blogs purchase	To ensure internal consistency of the measurable item scale
Relationship approach: Bivariate and Multiple Analysis	• Pearson's correlation • Multiple regression	• Part A: Attitudes towards Blogs purchase • Part B: Factors for Blogs purchase • Part C: Intention for Blogs purchase	To identify the relationship between the Independent variables and the Dependent variable To determine the significant predictors and their contribution towards the criterion

3.8. Conclusion

This chapter discussed the research framework and model, which led to the development of the hypotheses. Each proposed hypothesis was comprehensively described in this chapter. An overview of the questionnaires was also discussed. This chapter also talked about the sampling design, data collection procedure and data analysis technique.

In the following chapter, the results of the conducted survey will be discussed. It will also identify the significance of each hypothesis, as outlined in this chapter.