Cognitive Psychology to Enhance Internet Marketing Website

bу

Siti Noor Shahiera Binti Mohd Puad 12482

Dissertation submitted in partial fulfilment of
the requirements for the
Bachelor of Technology (Hons)
(Business Information System)

MAY 2011

Universiti Teknologi PETRONAS Bandar Seri Iskandar 31750 Tronoh Perak Darul Ridzuan

CERTIFICATION OF APPROVAL

Cognitive Psychology to Enhance Internet Marketing Website

By

Siti Noor Shahiera Mohd Puad

A project dissertation submitted to the Business Information System Programme Universiti Teknologi PETRONAS in partial fulfilment of the requirement for the BACHELOR OF TECHNOLOGY (Hons) (BUSINESS INFORMATION SYSTEM)

Approved by,

(MR. SAIPUNIDZAM B MAHAMAD)

UNIVERSITI TEKNOLOGI PETRONAS

TRONOH, PERAK

May 2011

CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

SITI NOOR SHAHIERA BINTI MOHD PUAD

ABSTRACT

In this new era, people need money for continuous of life. This has force people to work and gain money for themselves and also for house-hold income. When both parents are working, sometimes problem such as child care problem arise. One of the alternatives to avoid this problem is by earning income from home, which is through home-based business. The introduction of Internet has helped people those involve in home based-business. They started to sell the product world-widely through Internet and has their own virtual shop in the Internet. Cognitive Psychology is one of the methods that can be used to enhance Internet marketing website. The main objective of this project is to develop an Internet marketing website that fully implemented Cognitive Psychology elements. There are a lot of online shopping websites nowadays but some of them failed to attract customer which lead to fail in internet marketing. The approach proposes for development of the project is prototyping methodology. A chosen product, which is ladies dress, will be sold through the website. This project also will provide guidelines for future use regarding the website development; the architecture of the website by taking into consideration about Cognitive Psychology.

ACKNOWLEDGEMENT

First and foremost, the author would like to express her gratitude to Allah. The author also would like to take this opportunity to express her sincerely thankful to Universiti Teknologi PETRONAS and Computer Information Sciences Department of this university for the helps during this project accomplishment.

The author is heartily thankful for her supervisors, Mr. Abu Bakar Sedek A. Jamak for all the guides during FYP1 and Mr. Saipunidzam bin Mahamad for the guidance and support towards completing the project.

Not to forget, the author would like to thank all lecturers that have taught her during the studies in Universiti Teknologi PETRONAS, because without the knowledge that they taught, she would not able to make this project success.

Lastly, the author is very grateful and for the support received from her friends and family. To those that directly involved or indirectly involved in the accomplishment of this project, the author offers her regards and blessing to all.

TABLE OF CONTENT

CERTI	FICATION OF APPROVAL	ji			
CERTI	FICATION OF ORIGINALITY	iii			
ABSTE	ABSTRACTiv				
ACKN(OWLEDGEMENT	V			
TABLI	E OF CONTENT	vi			
LIST O	OF FIGURES	ix			
CHAP 1	TER 1	1			
INTR	RODUCTION	1			
1.1	Background	1			
1.2	Problem Statement	3			
1.3	Objectives	4			
1.4	Scope of Study	4			
1.5	The relevancy of Project	6			
CHAP'	ΓER 2	7			
LITE	RATURE REVIEW	7			
2.1	Home Based Business	7			
2.2	Internet Marketing	8			
2.3	New Technology in Internet Marketing Website	9			
CHAP	rer 3	. 12			
MET	HODOLOGY	12			

	3.1	Prototyping Methodology	12	
	Pha	ase 1: Planning	12	
	Pha	ase 2: Analysis	13	
	Pha	ase 3: Design	13	
	Pha	ase 4: Implementation	14	
	Pha	ase 5: System Prototype	14	
	Pha	ase 6: Implementation	14	
	Pha	ase 7: Final System	14	
	3.2	Project Activities	15	
	3.3	Key Milestone	15	
	3.4	Tools	15	
C	HAP	TER 4	17	
	RESU	ULT AND DISCUSSION	17	
	4.1	Introduction	17	
	4.2	Functional Modeling	17	
	4.3	Snapshots of the Web Application	21	
	4.4	Questionnaire	24	
	4.5	Research on Current Internet Marketing Website	29	
	4.6	Website that ignore Cognitive Psychology	32	
C	CHAPTER 5			
	CON	ICLUSION	35	

REFERENCES	37
APPENDIX:	40

LIST OF FIGURES

Figure 1: Prototyping Methodology	12
	15
Figure 2: Key Milestones	
Figure 3: Use Case Diagram for Guest and Member	18
Figure 4: Activity Diagram for Guest	19
Figure 5: Activity Diagram for Registered Member	20
Figure 6: Main page of website	22
Figure 7: Forum Snapshot	23
Figure 8: Video tutorial Snapshot	23
Figure 9: Catalogue Snapshot	24
Figure 10: Factors influenced in Online Shopping	25
Figure 11: The satisfaction in term of transaction	26
Figure 12: The influences of Web design toward purchase	27
Figure 13: Preferred payment method	28
Figure 14: QQQueen.com's landing page	29
Figure 15: QQQueen.com's website	30
Figure 16: QQQueen.com's payment methods	30
Figure 17: The Shopaholics Bar landing page	31
Figure 18: The Shopaholics Bar currency converter	32
Figure 19: Lelong.my Website	32
Figure 20: Blogspot	33

CHAPTER 1

INTRODUCTION

1.1 Background

The rising of living cost today has forced people to work hard and gain money. People need to compete in the competitive job market. The first class honored is not a guarantee that they will find a placement with high salary anymore. "The home-based businesses account more than half of all U.S. business and employ more people than venture-backed-company." (Tozzi, 2010)

Nowadays home-based business covers a wide range of business concepts such as product oriented business and also service oriented business. Home-based business does not require a large amount of space and large amount of initial capital.

There are a lot of advantages of Home based-business that drive people towards it. One of it is lower operating cost (Entrepreneur Magazine, 1999). The owners of the business do not need to pay for office rental and reduce the transportation fees because they do not need to travel. On 2006, the Small Business Administration Organization has made a study to compare between home-based business and non-home-based business. The result shows that home-based business earned 35 percent of the receipts earned by non-home-based business, have higher net income compared to non-home-based business and cut cost for the labor and business location (Joanne, 2006). Other than that, people especially married women tend to choose home based-business because they preferred the flexible working hours or flexible work schedules (Entrepreneur Magazine, 1999). They can care for the families and do others thing while running the business at home.

By owning and operating home based business, the owner will be able to choose their own working hours and not attached to someone else's work schedule.

From the last few years, there is new medium for the owner of home-based business to expand their business. It's called the World Wide Web (www) or Internet that can connect the business throughout world's consumers without ever leave the house. Internet is a new marketing medium radically changed the way firms conducted business with their customers. (Hoffman and Novak, 1996).

With using Information Technology (IT), people start to create website to sell their product. The researches on Human Computer Interaction have benefits the Internet marketers because they can come out with strategic marketing plan. One of the elements of Human Computer Interaction is Cognitive Psychology. Cognitive Psychology is mainly about how people perceive and remember things. It relates with the mental processes and influenced the decision making. Cognitive Psychology also tracks the amount of items that people can hold in their memory at one time. By implementing Cognitive Psychology features in the Internet marketing website, one can ensure the customer satisfaction is achieved. BusinessDictionary defined Cognitive Psychology as how people perceive, remember think and learn. So that by taking into consideration Cognitive Psychology in developing internet marketing website, the website later can serve customer very well and it may increase the likelihood of revisit. Cognitive Psychology concerns about the information provided. The way it is provided and the amount of information being display at one time shall has limitation. The overloaded information has been identified as the failure factor of the Internet marketing website. Visitor might miss the important information when there is too much to be captured at one time.

For this project, student will explore the Internet marketing world and develop the Internet marketing website that can provide full satisfaction to visitor by implementing Cognitive Psychology. From the website, the customer can have all information regarding the selling product, which is ladies dress, view the design and make online purchase. The website will be more interactive when it provides a medium for discussing among the customers such as Forum. A usability testing will be conducted at the end of the project to evaluate the implementation of Cognitive Psychology in internet marketing website, to evaluate whether customer can easily captured the information displays.

1.2 Problem Statement

Food cost, fuel and transportation cost, rent prices and others are constantly increasing. The cost of living would have to go up to accommodate with the high salaries that being paid (Tun Dr. Mahathir, 2010). "The rising cost of living is unavoidable and many countries in the region are feeling it too." (Mottain, 2008) The rising cost of living has forced both parents to work in order to support the household expenses. When both parents work, they have to deal with childcare problem. This might increase their cost especially if they have to hire someone to care for the kids. Some people quit from Internet Marketing because they cannot accommodate with the challenges. The most challenging part of Internet Marketing is to attract the right customer. Building customer trust is not an easy task. "Trust is a critical factor in stimulating purchases over the Internet, especially at the early stage of commercial development." (Quelch and Klein). Some Internet marketers failed in their business because they are failed to build trust among the customers. Their advertising is not able to attract the customer's attraction and their website failed to address the promotion and failed to lead customer to make purchase.

"I personally have seen so many web sites that do not function well for their target audiences." (Miller, 2008). When a website failed to serve the target user, it will cause problem in the future. The information that the owners provide sometime make the customers confuse and think twice before make purchase. A website shall have clear information and easy for the owner and customer to manage (Kuster, Villa, 2010). Instead of that, there are other factors that influence the customers before they make any transaction. One of it is the design of user interface. Some of the design for user interface failed to meet customers' satisfaction. Some of it cannot hold customer even for 30 seconds. Information provided on the user interface of the landing page is not sufficient enough to persuade people to make purchase.

1.3 Objectives

- 1. Develop a website by using Cognitive Psychology approach
 - i. Design an Internet marketing website that implementing Cognitive Psychology

1.4 Scope of Study

In order to complete this study, several scopes of study is in need to achieve. The major scopes are discussed as follows:

- 1. To understanding the concept of Home-based Business
 - Home-based business has been practiced a long time ago.
 - People choose to involve in home-based business because they preferred to work on their own and also to gain extra income. For

this study, student focuses on how the home-based business can help those people to gain income.

2. To understanding the concept of Internet Marketing

- Internet marketing is part of home-based business. The emergence
 of technology such as World Wide Web has introduced the
 Internet marketing as a useful method for home-based business.
- There are a lot of current internet marketing websites that failed to attract customer. This study will also focus on the development of internet marketing that able to attract customer's attention.

3. To research on web design that implemented Cognitive Psychology

- There will be research on existing internet marketing website to evaluate the degree implementation of the Cognitive Psychology.
- With research on the Cognitive Psychology, the marketer will have more information regarding customer behaviour; what will make the customer to repeat the visits.
- Research also will include the way information being display, to compare it with proposed way by Cognitive Psychology.
- The result will be use to come out with attractive internet
 marketing website that able to make the customer feel convenient
 during visit and transaction. Cognitive Psychology measures the
 information or diagrams that people able to hold at one time. By
 critically analyze the current situation on the current website;
 student can realize the lack in internet marketing website.
- A good user interface should be considered while developing the website.

 A guideline of developing Internet marketing website with implementing Cognitive Psychology will be produced.

1.5 The relevancy of Project

Internet marketing is not a new thing but with enhance of technology, the way it being hold has been different. This project can give knowledge to student how to be a netpreneur. Instead of waiting for job after graduation, student can create own job with this knowledge. Many people failed with their Internet marketing because they do not have enough knowledge before started the business. From the proper research, this project will provide student big opportunity to success in Internet marketing. This study can be used in the future as a reference for people that want to start their Internet marketing business. They can implement the Cognitive Psychology in the website. Cognitive Psychology is all about how the knowledge being represented in the mind and brain. Generally, human brain has limitation to remember things. So the marketer cannot simply display any information at the website. The website shall be well organized and information displayed has to easily remember by the user. Cognitive Psychology can help Internet marketers to enhance their business. Other than that, this project can be used by lecturers and student for academic purposes.

CHAPTER 2

LITERATURE REVIEW

2.1 Home Based Business

In the previous decades, people have their workstation at house but it was not for making money. Only in the '80s a home-based business owner hid the market (Weltmen, 2000). People need a quite large amount of capital such as money to start up any business. But with home-based business, they can reduce the cost because they do not need to pay for any space rental to run the business. People already paid the house's rent or mortgage for the house (Weltman, 2000). The owners can use their house's space to operate the business, so they do not need to pay for the office rental fees anymore. Logically, this is a good way of conducting business because if the business loss, the owners will not receive a big impact. Some entrepreneurs even make a loan to buy a shop lot. If the business not going well, they might end up with sell the shop. But in the mean time, they still need to pay back for the loan. This will affect their financial flow. Home-based business has reduced this risk.

The other factor that leads people to involve in home-based business is because they want to take care of others such as their children or their elderly parents. (Weltman, 2000). Some people cannot give full commitment especially when they are tied to someone else's timetable. What they prefer is flexible work schedules. Owning home-based business can promise the owner flexible work schedule and working hours (Wiley, 1999). People those have other responsibility such as to care for the elderly parents especially unwell parents, they need to spend a lot of their time at home. Sometime they need to apply for leave when the children or parents get sick. This might affect the works of their colleagues if they are working on the team. They might want to stay at the home and take care for the children and parents for fulltime, but due to

financial problem, they do not have any choice. If they quit the job, it might affect their household income. The only solution they have is to send the child or parents to the daily care center or to hire a personal maid to assist them. They actually have increase their expenses by sending the children or the elderly parents to daily care center while they are working during office hours. They do not realize that they can generate income from home and at the same time, they can care for the parents or children. This is because home-based business does not require the owners to travel from their home in order to operate the business. The owners can seat at the home, work at their own work station, following their own work schedules and care for the parents and children at the same time.

2.2 Internet Marketing

In the many years before the Industrial Age, marketing was done by the local merchant such as butcher, the baker and the candlestick maker. The local merchant knew everything about his or her customers (Cliff, Kania, Yaeckel). Time changes and the technologies are rapidly improved. From physically own a shop, now they go for virtually own a shop in the Internet. Internet is global information system that uses standard protocol and interconnected computer networks (Danns, 2004). Internet is very powerful tools because it can put one's business ahead of the competitors (Barney, 2011). "Consumers spend billions every month purchasing products online," stated Barbara Weltman in *Starting Home-Based Business* book.

Initially, business people use the Internet to develop their brand, generate more revenue and as medium to connect with their customers (Charlesworth, 2009). This is because when the product presence in the internet, people all over the world can have information regarding the product and might have intention that can lead to action in making purchase. Instead of just waiting for local customer to visit the physical store, the internet marketers have an advantage in generating more customers and revenues

because the customers are no longer people from local only. The owner also can immediately update the web-site for any promotion without any cost. The owner can directly email the customer to update them regarding the promotion (Barney, 2011). Internet marketing helps the marketers to reach more customers at the same time. This is because the viewer for their website is not limited to one or two persons only. Everyone can view the website at the same time. This is much better rather than having physical store. The normal physical store sometimes cannot accommodate even 50 customers at the same time. The marketers also can advertise their product anywhere, not limited on their own website only. They can send their website's link to friends or put it at their social network page. These are how marketers can be ahead of the competitors.

2.3 New Technology in Internet Marketing Website

The first commercial web site appeared in early 1990s and the styles of the web site more or less have similarity. Most of the website at that time focus on information publishing which is to display more information about one's product, transactional site which focus on buying and selling and last but not least, mass customization where the content of the web site is focus on user's history (Dann, 2004). In today's Internet Marketing web site, the styles are slowly shifted to a more interactive focus with transactional and customized site (Dann, 2004). "They have something in their mind that they are looking to buy and they're going to find it online in the quickest way possiblethey'll probably Google it- or they'll go directly to a merchant of choice and make their purchase." (Miller, 2009) People in this new age always like things that can make their life easier. The technologies are there to help them, so they would not waste it. Same goes for shopping. What they will do in today's world is just sit in front of the computer, click and make purchase. They prefer to stay at home, do not drive to the mall and queue up to pay for the thing. "The consumers' perceptions of Internet attributes have been reported to predict consumers' intentions to buy products or services via Internet" (Eun and Youn, 2002)

Website is an important medium for the internet marketers in order to sell the product. The best thing about having this virtual store is the store will be opened 24 hours per day and 7 days per week. In developing a website, there are many things that should be considered by the owners or developers. One of it is Human Computer Interaction (HCI). The HCI system composed of two information processing unit, the human being and the computer (Bonnie, 2009). The studies on this system can help the user to be more comfortable when using computer. This is because this study is to improve understanding between computer and user. There are a lot of elements in HCI that people can focus to improve the understanding between computer and user. For internet marketing purposes, it will be good if the developers can focus on the Cognitive Psychology. The studies of Cognitive Psychology can help to make the customer to stay longer on the website and that may lead them to make purchase. Cognition is about gaining knowledge and cognitive psychology is the study regarding human activities that related to knowledge. The activities include attention, creativity, memory, perception, problem solving, thinking and the use of language (Neisser, 2009). Based on the other elements of HCI which is an eye tracking, people are more attracted to picture. Even though human brain easily attracted to picture, but it will result in nothing if the person cannot remember the picture. The internet marketer should take into consideration regarding limitation of human brain. The amount of picture or information at one section on the website shall follow the human brain capability. The landing page shall be able to attract customer to move for another section in the website. The first perception about one's website is important because it is the main factor whether the customers will stay or not. The result from cognitive psychology can increase the effectiveness of website and then increase the sale.

Early research found that the cut-off of items that brain can remember is seven. Perhaps this has contributed why telephone numbers are seven digits long (Moskowitz, 2008). More research has been conducted and researcher has found that the true capacity is

lower especially when the information is not being repeating over and over. Thus in Cognitive Psychology, it has been stressed out regarding the brain capacity and capability. People should analyze and take it as advantage in come out with a good strategic marketing especially when using website.

CHAPTER 3

METHODOLOGY

3.1 Prototyping Methodology

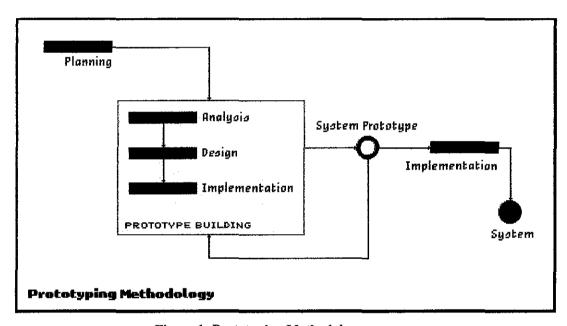


Figure 1: Prototyping Methodology

The project is segmented into four main phases which are Planning, Analysis, Design and Implementation. A Gantt chart on the project schedule is drafted (see Appendix).

Phase 1: Planning

Critical review on related work

The project is initiated with a detailed background study on the homebased business, internet marketing and cognitive psychology in existing Internet marketing website. All of this information is gained through the secondary data, which are journals and books.

Related works on Internet marketing is examined to identify the critical factors that will lead to success in Internet marketing. Its definition and website model is reviewed so that the implementation part will have no problem. Preparation for Internet marketing business includes identifying and planning on the target market and website. Research on existing website is to get information which website has implemented the Cognitive Psychology elements to attract the customer and to identify factors that may lead customers to make purchases.

Phase 2: Analysis

From the secondary data, a few primary data have been identified. To get information about the preferred design for Internet Marketing website, a survey is conducted among the university students. The survey is distributed among the students to get information about the website.

At this stage, student will analyze the current website design for Internet marketing. This is to come out with comparison on the website that implemented Cognitive Psychology and website that do not implement it. Student will also analyze the result from the survey conducted to get more information regarding website that preferred by the online purchaser.

Phase 3: Design

The website will be designed based on the research result of customer's preferences and Cognitive Psychology rules to ensure the customers' satisfaction. Student will use HTML, XML, CSS and PHP languages to develop the website.

The main thing to be included in the design of web site is the elements of Cognitive psychology. The amount of pictures, words and information display at one time need to be concerned. Otherwise, the effect of Cognitive Psychology would not happen.

Phase 4: Implementation

This is the place where the website is almost complete. A domain and server has been bought at this phase so it will be easier for the user to view and make evaluation on it. This will be the phase where the product is available to be purchased through the Internet but it will not being publish to the public yet.

Phase 5: System Prototype

The full complete system is available at this stage. A usability testing will be conducted once the website is ready to measure the effectiveness of implementation Cognitive Psychology on the website. Any improvement will be taken into consideration. The maintenance or repair will be conducted here. The evaluation on the approach and the design of the website will be made based on the critics and comments from the user.

Phase 6: Implementation

All the comments have been taken into consideration and improvement has been made. This implementation process is to make the prototype as a final system to be demonstrated to the user. The website is being published to public at this phase.

Phase 7: Final System

A complete system will be delivered to the user. User can use the website address to surf the website.

3.2 Project Activities

The project begins with understanding concept of Home-based Business. Student has examined the existing Internet Marketing websites to identify the success factors of Internet Marketing. To gain knowledge regarding home-based business and Internet marketing, student has attend the internet marketing seminar which usually organized by the expert in this field. A survey also has been conducted among students in UTP regarding the website that can meet their preferences when doing online purchasing.

3.3 Key Milestone



Figure 2: Key Milestones

3.4 Tools

- A recorder to record the interview session.
 - During the interview session, this recorder will be used to record the interview so that the information can be analyzed later.

Phone

- Phone is an important tool to contact the interviewee.
 An appointment will be made before conducting the interview session.
- Macromedia Dreamweaver and BlueVoda
 - It is a web development application that will be used to design the website.
- Note Pad
 - o To write the coding for website design

CHAPTER 4

RESULT AND DISCUSSION

4.1 Introduction

There are a lot of internet marketing websites that failed to meet customer's preferences. They failed to attract customer's attention and cause the customer to leave the website. The information loaded on the website sometimes goes beyond the brain capacity. This has cause misinterpretation and the owner's goal to embed the information into visitor brain might be failed. Thus, it will not be able to guide the visitor for the next step, which is to make purchase. This chapter will discuss more on the progress of the system.

4.2 Functional Modeling

4.2.1 Use Case Diagram

Use Case Diagram is a simple description to show the system's functions. For this web application, there are three actors that involved which are guest, member and admin.

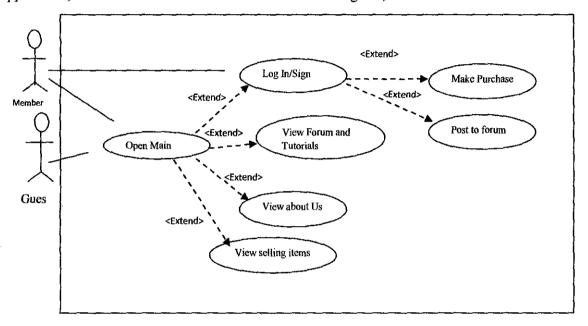


Figure 3: Use Case Diagram for Guest and Member

From figure 3, it shows the layer of activities that guest and members can enter. Guest can view everything but in order to make purchase or post anything to forum, the guest needs to sign up. Upon the registration, the guest will be given a set of username and password which can be used for the next transaction.

4.2.2 Activity Diagram for The System

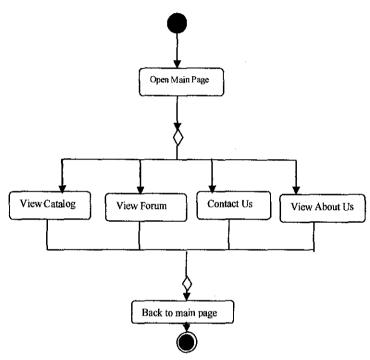


Figure 4: Activity Diagram for Guest

Figure 4 shows the flow and options of activities for Guest. Guest can get all the information needed such as the basic information in making purchase, about the company, catalog, and view and read forum and view video tutorials. This is different from Registered Member.

4.2.3 Activity Diagram for Registered Member.

In order to become a Registered Member, the guest just need to sign up and a set of username and password will be given. That set of username and password can be used anytime for the next transaction. The Activity Diagram for Registered Member is shows in Figure 5 below:

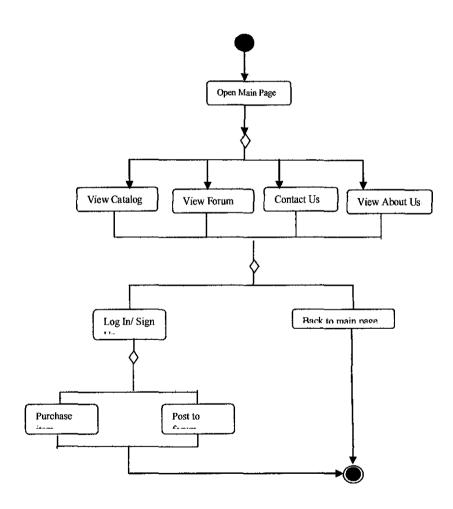


Figure 5: Activity Diagram for Registered Member

4.3 Snapshots of the Web Application

The design of website is based on the rules in Cognitive Psychology. In the main page, it concerns about information display for the guest. Guest shall be able to get all the basic information such as latest news, rules and regulation and payment method. For the New Arrivals, only 2 items will be showed at one time. Based on the Cognitive Psychology, the maximum number of items that human brain can remember at one time is four. Visitor will be able to view some of the items in the catalogue, payment method, rules and regulations and latest news at the landing page. That is the basic information that visitor needs to know before make purchase. Cognitive Psychology focuses on the information. All the information needed needs to well presented and easily captured by the target visitor. The information will support their decision making, whether to make purchase or to leave. If visitor has confident on the information, it is easier to attract them to proceed with purchase.



Figure 6: Main page of website

In order to make the website as Information Centric such what being proposed by Cognitive Psychology, section for Forum and Tutorial has been included. The tutorial will be more on the tips, such as to combine a different color of cloths or to choose color that match with skin. By implementing this section, the visitor will spend more time at the website. Forum section is to make the website more interactive. People can easily share and exchange information regarding the product or anything relates to fashion. The information can be an input to the owner to have more understanding toward customer.

For the forum, everyone can view the post but only registered member can post into it.

User can find Sign In or Register at the bottom column.



Figure 7: Forum Snapshot



Figure 8: Video tutorial Snapshot



Figure 9: Catalogue Snapshot

For each page of catalogue, only 3 items will be showed. Visitor still has choice whether to view it in thumbnail that contains more items at one time. However, by default, the present items will follow Cognitive Psychology rules.

4.4 Questionnaire

In developing the website, a quantitative approach was used to collect information regarding preferred preferences of the target user. The questionnaires are more on data collection of preferred website characteristic, so that improvement can be made. It is also to see whether user really concern about design of website when they making purchase.

50 students of Universiti Teknologi PETRONAS have been chosen to answer survey question. The characteristic of chosen students are they must have knowledge about

online shopping, Muslim and female student. The reason only female student be chosen is because this project aims to sell female product through the internet and this is a Muslim traditional clothes. So it is important to understand the behavioral of target people. The survey was conducted online; sent through their email and distribute manually to them. From the survey, it shows that:

64 % of the students have experience in the online purchased from website. The top three items that highly purchase from the survey result are clothes, shawl and bag. Most of the dissatisfaction found from the survey is regarding the types and quality of fabric and actual size of the items. The information provided on the website sometimes did not mentioned about the actual size of the items.

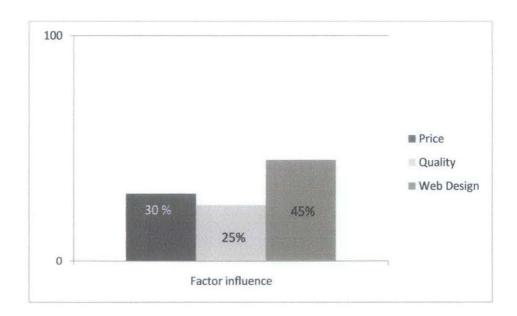


Figure 10: Factors influenced in Online Shopping

In term of transaction, the respondents were asked about factors that influenced them in making online purchase. For this question, responded are given three answers for choice. They are the quality of product, the attractive web design and the price of the product. They have the choice to mark more than one answer. Graph above illustrate the responses.

30% of the students answered price of the product does influence them to make the transaction. The most important factor is attractive web design. About 45% of them answered web design do influence them in making transaction. For payment method, about 38% of them prefer to make purchase with online banking.



Figure 11: The satisfaction in term of transaction

Based on the result, 70% do not have problem with the transaction. Things that they dissatisfied are quality of the fabric and actual size of the purchased items, not the transaction. Some website did not ever mention the actual sizes of selling item. This poor information might cause customer did not re-visit the website if they do not satisfy with the purchased product.

30% of the answered that dissatisfied is because some of methods for payment did not meet with their preferences. For an example, most of the youth still cannot afford to

have credit card. So if the method available for the payment is only credit card, it will become constraint to them in making purchase.

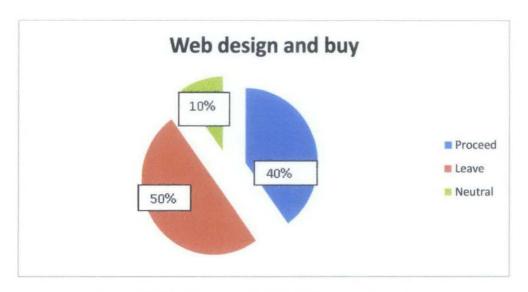


Figure 12: The influences of Web design toward purchase

The designs of website do influence the people to make transaction. The way product is display sometime successful attract the user attention. If the quality of product is low, they might not come back for the second time at the website. Thus, the information provided and the actual product must be balanced. 50% of the respondents answered that they will leave the website if the design is poor, 40% of them will just proceed and 10% not even care about it.

Respondent also being asked about the preferred payment methods. For this question, the respondents may choose from the answer that provided. There are four types of answer that provided to them which are payment through online banking transaction, pay pall, credit card and cash deposit. Graph below illustrate the answer:

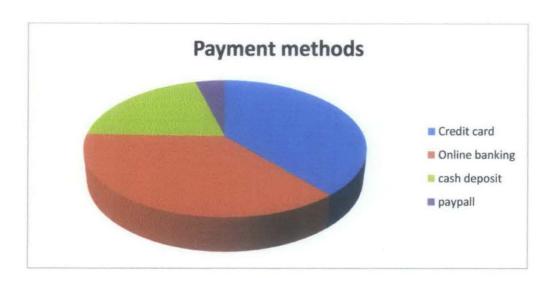


Figure 13: Preferred payment method

About 38% of the respondents prefer credit cards as the method of payment. Payment through bank also has high rate of respond which is about 36%. This result shows that the customer prefer the easier payment method. It is payment method that does not require them to travel anywhere just for do the settlement. They prefer the one that they can just click and settle.

Those that do not have experience with online purchase experience, they were being asked the factor that lead them to not make the online shopping. About 75% (out of 18 students) answered that they prefer to have a look at the real item before buy it. 20 % answered that online transaction is difficult as it involves so many steps. The other 5% answered there is no specific reason but they just do not have interest to make an online shopping. To overcome this solution, maybe in the future internet marketer can use the other approaches to attract this customer. Maybe the internet marketer can go to the customer and show the product when they asked for it. It can be restricted to the customers that reside around the internet marketer's house.

4.5 Research on Current Internet Marketing Website

Some of the current internet marketing websites:

Malaysia Online Boutique: QQQueen.com (http://www.qqqueen.com)



Figure 14: QQQueen.com's landing page

The landing page of this website did not show the main product that they sell. The information on the landing page is not sufficed if visitor do not get the purpose of website. It will waste customer's time if they need to scroll down and click for many times. Even if the customer scroll down, the 'About Us' section will appear. There is nothing that can capture customer's attention to stay longer and make purchase. The 'About Us' section is important because it is where customers can get knowledge about the owner and builds the trust to continue with the transaction. The best thing is to place

it in difference window so customers that do not even care about the section will feel more comfortable. The more important information is about the selling product.



Figure 15: QQQueen.com's website

This website shows the out of stock item. This might cause dissatisfaction towards customer and they need to scroll down and click for many times to search for available items.



Figure 16: QQQueen.com's payment methods

The good thing regarding this website is it provides several types of payment method.

• The Shopaholics Bar (http://www.theshopaholicsbar.com)



Figure 17: The Shopaholics Bar landing page

This website is quite empty. It requires the customer to click in different part to view the contents.

To place an order, international customer needs to contact the owner. They do not display any payment method available for the international customers. For Malaysian, the only payment method is through Maybank. The best website should serve the customer well and provide all relevant information that customer needs to know. If the customer wants to make purchase but then they need to contact the owner just to get information regarding the payment method, it may reduce the motivation to buy the product.



Figure 18: The Shopaholics Bar currency converter

This website target market is wide. It is not only focus on certain country. Thus, they provide the customer the currency converter. It is a good strategy to make the customer life easier and try to provide information that customer needs.

4.6 Website that ignore Cognitive Psychology

i. Lelong.my



Figure 19: Lelong.my Website

It will be better if this website can categorize the items show. In the picture above, it is quite messy when the items are being mixed from different categories. Visitor might miss the most important information that tries to be presented to them. There are more than 10 pictures of items are shown at the landing page. This has over the brain capacity so it might cause the visitor to easily forget about it.

ii. Blogspot



Apart from #1 - #129 (which is still going at an unbelievable price of RM50 for 2 pieces), any items from #129 onwards are entitled to the following discounts: 1-2 piece - 10% 2-3 piece - 15% 4 and above - 20% Free delivery for purchases of 5 pieces and above. Offer lasts from CNY eve till the 15th day, which is February 28. So hurry!!!!! **SOLD OUT ITEMS HAVE BEEN REMOVED TO ENABLE SPEEDIER BROWSING....**
DressTalk aims to bring you the latest and trendiest designs at very affordable online prices. Our clothes are sourced from within the Asia region and we only bring in 2-3 pieces of one style at a time. Learn How to Order Here.

Figure 20: Blogspot

The poor thing about Blogspot is it not allowed the customer to make direct purchase. Customer needs to contact the owner to get information on how to order the items. Compared to element in Cognitive Psychology, the basic information is missing. How to order the item is the basic information that customer needs to know at the very first place. This might reduce probability of customer to make purchase.

4.7 Guidelines Implementation of Cognitive Psychology on Internet Marketing Website

4.7.1 Information

- User shall be able to find all relevant information in the landing page such as:
 - About the company
 - o Payment methods
 - o Rules and Regulation
 - o How to make purchase
- The website shall be able to become an information centric website for user.

4.7.2 Pictures

- The maximum amount of pictures to be put on the website at one time is only
 4.
- The pictures shall be simple.

4.7.3 Payment methods

- · Several payment methods shall be provided
- The payment method shall meet with target customer's preferences. For an example, student might not have credit card so they cannot make payment with credit card.

CHAPTER 5

CONCLUSION

5.1 Conclusion

Home-based business provides good opportunities for those that want to start their own business. With the less amount of initial capital, the owner still can go beyond the horizon with involve in Internet marketing. The marketers shall give high priorities on the design of the website. If the website failed to attract people to make purchase, the probability of the business will fail is very high. The information provided at the website shall develop customers' trust towards the product and the marketers. Cognitive Psychology can provide the marketer behavioral of the customer. By considering the Cognitive Psychology, the information that marketer try to embedded in the human mind will be successful. By identifying successful factors in internet marketing and implement the Cognitive Psychology, the efficiency of internet marketing website can be enhance and the sales might increase.

5.2 Suggestion on Future Work

For practitioners, this study can benefit them in the long term. The customers will come back or repeat the visit if they satisfy with the services provided. Thus, the internet marketer should always modify their web content to match with customer preferences. The information on the website cannot be overloaded. By following the rules and elements in Cognitive Psychology, the website shall be able to serve the customers well. This is because Cognitive Psychology is really close with human daily activities. It relates with the most important organ in human body, which is the brain.

As further refinement, the website for online shopping should always be updated not with the current technology only, but also with the behavioral of the target people by studying the psychological side of them.

REFERENCES

- [1] Tozzi, John. (2009, October 23). bloomberg business week:the rise of homepreneur.

 Retrieved from http://www.businessweek.com/smallbiz/content/oct2009/sb20091023 263258.htm
- [2] Entrepreneur magazine, starting a home-based business. (1999). United States: John Willey and Son.
- [3]Mohamad, Tun Dr. Mahathir. (2010, October). *High income economy*. Retrieved from http://chedet.co.cc/chedetblog/2010/10/
- [4] Miller, Michael. (2008). Online marketing heroes interviews with 25 successful online marketing gurus. Indiana: Wiley Publishing.
- [5] Kuster, Ines, & Vila, Natalia. (2011). Successful sme web design through consumer focus groups. 28(2), Retrieved from http://www.emeraldinsight.com/0265-671X.htm
- [6] Weltman, Barbara. (2000). Starting the home-based business. United States: alpha books.
- [7] Allen, Cliff, Kania, Deborah, & Yaeckel, Beth. (1998). Guide one-to-one web marketing. Danvers: John Wiley & Sons.
- [8] Barney, Karen. (2011, February 28). Advantages for internet marketing. Retrieved from http://www.articlesbase.com/internet-marketing-articles/advantages-for-internet-marketing-4327990.html
- [9] Charlesworth, Alan. (2009). *Internet marketing [A Practical Approach]*. Retrieved from http://books.google.com.my/books?id=feyQ bJ0zi0C&printsec=frontcover&dq=internet +marketing&hl=en&ei=ms5sTYOGF43xrQfm8pj7Bg&sa=X&oi=book_result&ct=result&resnum=1&ved=0CDMQ6AEwAA#v=onepage&q&f=false
- [10] Eun, Young Kim, & Youn, Kyung Kim. (2003). Predicting online purchase intentions for clothing products. 38(7), Retrieved from http://www.emeraldinsight.com/0309-0566.htm

- [11] A.Nardi, Bonnie. (1996). Context and conciousness[Activity Theory and Human-computer interaction]. Retrieved from http://books.google.com.my/books?id=JeqcgPIS2UAC&dq=human+computer+interaction+journal&lr=&source=gbs navlinks s
- [12] Neisser, U. (2009). cognitive psychology. *Grolier Multimedia Encyclopedia*. Retrieved July 17, 2009, from Grolier Online http://gme.grolier.com.ccnyproxy1.libr.ccny.cuny.edu/cgi-bin/article?assetid=0066790-0
- [13] Stephenson, James. (2008). 202 things you can buy and sell for big profits. Madison: Jere L.Calmes
- [14] Vassos, Tom. (1996). Strategic internet marketing. United States: Que Corporation.
- [15] Yap, Danny. (2008, January 28). The star online: Economist on rising living cost. Retrieved from http://biz.thestar.com.my/news/story.asp?file=/2008/1/28/business/20135175&sec=busines

APPENDICES

APPENDIX:

ID)	Task Name	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
		A Hybrid Approach of Eye Tracking System			· · · · · · · · · · · · · · · · · · ·							•		***************************************
		to enhance Internet Marketing	4				•							
		Stage 1 - Proposal & Approval			1									
	1.1													
	1.2													
	2	Stage 2 - Research & Development	1											
	2.1	Phase 1 - Research Process	1											
2.1.1		Preliminary research on topic	1		-									
2.1.2		Specify scope	1		حبس									
2.1.3		Feasibility analysis	7		لبتت									
	2.2	Phase 2 - Data Collection	7	100	JACK .									
2,2,1		Requirement gathering	1											
2.2.2		Interview Session												
2.2.3		Survey]											
2.2.4		High level of initial design												
	2.3	Phase 3 - Design		1025-022	15:30.3		s since	1						
2.3.1		Design & development												
	2.4	Phase 4 - Implementation												
2.4.1		Testing												
2.4.2		Implementation									ľ			
	3	Stage 3 - Submission												
	3.1	System Delivery	1							41.77]			

Project Gantt chart