The Effective Design of Small Business's Website Interface With Regards To CRM Theories

.

By

Kamel Idham B. Ibrahim

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

JUNE, 2004

Universiti Teknologi PETRONAS Bandar Seri Iskandar 31750 Tronoh Perak Darul Ridzuan \pounds $rac{1}{4}$ $rac{1}{4}$ $5415 \cdot 5$.415.415.415

i

1) customer relations

2) JT 135 -- Theors

CERTIFICATION OF APPROVAL

The Effective Design of Small Business's Website Interface With Regards To CRM Theories

By

Kamel Idham B Ibrahim

A project dissertation submitted to the Information System Program University Teknology PETRONAS In partial fulfillment of the requirement for the BACHELOR OF TECHNOLOGY (Hons) (INFORMATION SYSTEM)

Approved by,

(Ms. Sharifah Bahiyah Rahayu Bt Syed Mansoor)

UNIVERSITI TEKNOLOGI PETRONAS TRONOH, PERAK JUNE, 2004

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.

KAMEL IDHAM B IBRAHIM

ABSTRACT

E-Commerce is an ever growing area of business that shows no signs of slowing down. Everyday more and more people are buying products online. Searching for a product within an E-Commerce website is different than browsing the aisles of the local department store. Therefore this is an important area that marketers focus in order to discover the potential of World Wide Web to bring huge profits to the business.

The success of e-commerce for any company is greatly dependent on the appropriate design of its Website. This study investigates the determinants of an effective Website. A literature survey indicated that the major categories of determinants are: page loading speed, business content, navigation efficiency, security, and marketing/customer focus. This project emphasizes on the effective interface design for e-commerce website in a broader perspective of Customer Relationship Management.

Basically, these research papers focus on the design of interface which should be incorporated by small business industry particularly in Malaysia. A brief explanation on project overview and also problem statement is provided at the early chapter. A thorough literature review has been done on the interface subject where the author focus more on the design and user interface of the propose website. In addition, the author observes many Malaysian e-commerce websites interface design, analysts and come out with propose design. The targeted audience for this prototype is for all users no matter what type of gender, profession or age.

Finally, based on the guidelines of designing good interface, the author develops a prototype website that incorporates the concept of e-loyalty with regards to customer relationship management (CRM) theories.

ACKNOWLEDGEMENT

Most grateful to God Almighty that I finally be able to complete the Final Year Project.

I believe this is a result of priceless contribution from many parties. I would like to express my sincere and heartiest appreciations to:

- Ms Sharifah Bahiyah Rahayu, final year project supervisor for her great help, guidance and valuable ideas towards completing the project
- My parents for their moral and financial support
- My colleagues who have together strive through the semester completing the final year project especially Ahmad Faisal Asra.
- Finally, thank you to everyone involve directly or indirectly with this project

Your assistance and ideas are really appreciated.

TABLE OF CONTENTS

| CE | ERTIFICATIO | N OF APPROVAL | ii |
|----|-----------------------|------------------------------|-----|
| CE | ERTIFICATIO | N OF ORIGINALITY | iii |
| AE | BSTRACT | | iv |
| AC | CKNOWLEDG | EMENT | v |
| | | | |
| 1. | INTRODUCT | ΓΙΟΝ | 1 |
| | 1.1 Background | | 2 |
| | 1.2 Problem Statement | | 2 |
| | 1.2.1 | Problem Identification | 3 |
| | 1.2.2 | Significant of the Project | 3 |
| | 1.3 Object | tives And Scope Of Studies | 4 |
| | 1.3.1 | Objective | 4 |
| | 1.3.2 | Scope of Study | 4 |
| | 1.3.3 | The Relevancy of the Project | 5 |
| 2. | LITERATUR | E REVIEW | 6 |
| 3. | METHODOL | .0GY | 13 |
| 4. | RESULTS AI | ND DISCUSSION | 14 |
| | 4.1 Lit | terature Review | 14 |
| | 4.2 W | ebsite Observation | 20 |
| 5. | RECOMMEN | DATION | |
| 6. | CONCLUSIC | DN | 26 |
| 7. | REFERENCE | ES | 27 |
| 8. | APPENDIXE | S | |

CHAPTER 1

INTRODUCTION

Interface design is difficult in part because everything requires interpretation. A design that works for one task or one user might not be appropriate for another. In other types of engineering, like architecture or bridge building, designers can always rely on laws of physics and gravity to make designs work. There is at least one immutable rule for interface design that we know about, and it's called Fitts's Law. It can be applied to software interfaces as well as Web site design because it involves the way people interact with mouse or other pointing devices.

Interfaces should operate in such a way that the user instinctively knows what to do when s/he sees a link, an icon or button. In other words, an ideal interface should be intuitive. Interfaces are designed with the end goal of creating a consistent, objective environment for the completion of tasks. A good interface is intended to be a truly interactive environment for the user-free of ambiguity or surprises.

Professor Kotler stated that the digital revolution has forced the markets to operate on quite different principles". Marketers are still learning the new Internet Age. The rapid pace of change makes it imperative that each company sets aside serious time to peer into the future and ask what adaptations should be implemented to survive these changes. Therefore, one of the medium that may give competitive advantages to company is by developing website. But is it enough to just have a website? Developing a websites must not a plain and simple website but it must have good interface design which help user search for information easily.

Therefore now, e-marketer can see how a good website interface help attract potential customer, thus help in changing the way people do business, the way people think and even people's behavior within the next 10 years. It is up to e-marketer to grab the opportunity by laying a foundation stone in creating good website, thus create long term relationship with the customers.

1

1.1 BACKGROUND

The purpose of this project is to perform a research on the effective website interface design that should be implemented by e-marketers in order to win customers loyalty and attract them to visit the business websites. As the world is moving to online marketing, it is undeniable that World Wide Web play important roles in determining company success. For the purpose of this project, the author will only focus on certain website that deploys e-commerce particularly in Malaysian context. The area of research will focus on the guidelines used in developing good websites interface based on customer preferences where they can easily search for information and do transaction. Apart from that, the study also will focus on the interface and human interaction. This aspect also plays important roles in developing an interesting website because first impression of customers will determine whether they will browse more or just simply leave the websites.

1.2 PROBLEM STATEMENT

Many organizations realize that internet has become a powerful tool in promoting the business with low cost but has wide coverage around the globe. It is true that most of them are preparing to develop their own websites but the question is do the website help them retain the customers? It is true that there are certain websites which deploy e-loyalty concept but that only limit to certain extent.

Sometimes, these websites just never bother about people's privacy by sending spamming message from time to time in order to influence people to buy. The author has identified certain website which not displays the privacy statement or terms of use. Such statement is crucial and it convey a meaning about companies effort to protect user's profile at all cost and ensure that the information is not pass to third party. Therefore users don't have to worry about spam or junk messages which really irritate visitors.

It is undeniable that marketers are fighting each other in developing good websites but most of the investment didn't produce the desire result. That is why this research is conducted in order to develop a websites that cope with customer preferences, thus winning their loyalty to visit the site again.

2

1.2.1 Problem identification

In order to develop a good website that meet e-loyalty concept, the author had identify certain problem such as:

- Most developer develop website without proper future expansion such as unsuitable database architecture and unsuitable tools. This may cause the visitors to download the plug-in or any script in order to view the page.
- Some e-marketer put the whole information in one page. Thus it makes the website crowded and unattractive to visitors to have a look at it. Apart from that, over web effect tend to distract visitors attention while browsing the website.
- Unsuitable website color background
- Unavailability of search engine

1.2.2 Significant of the Project

The significance of this project is to design a good website design which may incorporate the concept of e-loyalty where such design can be used by web developers in winning customer loyalty. The research is aim at helping developer develop business website in a proper way where there will be no spamming message and pop-up screen which really irritate the customers. Therefore, the main objective of maximizing profit can be achieved while the e-marketer won't have to suffer losses after deciding to embark in e-commerce.

1.3 OBJECTIVE AND SCOPE OF STUDY

1.3.1 Objectives

- i) To do research on the effective strategies of developing good website that can win customer loyalty.
- To build a prototype of websites that incorporates the elements of eloyalty.

1.3.2 Scope of Study

i) Prototype development

The author has developed a prototype that incorporates e-loyalty concept which based on the guideline of designing good website interface.

ii) Research

In order to produce a website that meet with customer preferences, a thorough research is needed. This will include discussion from on the existing articles based on e-loyalty, opinion from experts and also the public itself.

1.3.3 The Relevancy of the Project

Due to recent technological breakthrough in information technology, all information, transaction and communication is done via online. In term of business perspective, World Wide Web can be use as a powerful tool to boost company performance in term of profit.

It is true that everybody can develop a website but the question is 'will the customer visit the website again?' This project will come out with a complete design of website which adheres to the concept of e-loyalty. This study is very crucial as investment in developing website should be utilized to the fullest in order to reap the profit.

CHAPTER 2

LITERATURE REVIEW / THEORY

2.1 Literature Review

Interface is defined as the visible piece of a system that a user sees or hears or touches (Head, 1999, p. 4). In Websites, the interface deals specifically with the way in which a user navigates the site by clicking on text or image links, scrolling, choosing options from drop-down menus, or inputting data into text boxes. In short, the interface is fundamental to the navigability and functionality of a Website. An interface is best when it is invisible, when you never even have to think about it (Champeon, 1999, p. 4).

Basically, user interface refers to the methods and devices that are used to accommodate interaction between machines and the user (Li-Chuan Yu, Tsung-Yuan Lin, 2004). User interface can take on many forms, but always accomplishes two fundamental tasks: communicating information from the machine to the user, and communicating information from the user to the machine. The most common communication bridge between a person and a computer system is a visual display terminal. A well-designed screen can increase human processing speed, reduce human errors, and speed computer processing time.

While developer focuses on interface design, color aspect of a website also must be taken into consideration. Such choice of color for e-commerce website must be design for people with partial sight and color deficiencies. Two colors that contrast sharply to someone with normal vision may be far less distinguishable to someone with a visual disorder (Aries Arditi, 2002). It is important to appreciate that it is the contrast of colors one against another that makes them more or less discernible rather than the individual colors themselves.

Colors often have different meanings in various cultures. Certain colors tend to invoke a similar reaction from most people - the overall difference being in the shade or tones used. Colors determine the psychological effect on viewers (Geetha, 2004). According to Viki Nygaard and Liann Fahrmeyer (2001),

| Categories | Meaning |
|------------|---|
| Warm | i) Red - passion and fire, love, lust, energy and can motivate an individual to take action |
| | ii) Pink - romantic, calming and feminine |
| | iii) Orange - stimulate the appetite. As a citrus color, it can also symbolize health |
| Cool | i) Green - spring, renewal, and fertility. It can also mean jealousy or inexperience. |
| | ii) Blue - It is considered to be a "safe" color and signifies intelligence, reassurance, and trust. Blue has also been known to be an appetite suppressant and can signify depression and sadness. |
| | iii) Purple - spiritual and mysterious. Deep purple is associated with royalty and richness while lavender is associated with romance and nostalgia. |
| Neutral | i) Black - power, elegance, and sophistication, but it can also represent death (Western culture), evil, anger and sadness. |
| | ii) White - represents cleanliness, purity, and spirituality. It represents life and marriage in Western cultures, but it represents death in |
| | Eastern cultures. iii) Grey - symbolize security, maturity and reliability, but it can also signify gloominess and sadness. |

Figure 2.0: Effect of Color To Human Psychology

Actually website design is essentially the design of information. However certain developer tends to put the whole information about the business in the website which makes it look crowded and miserable. Sometimes even less useful information is being put in the website. According to Jacob Nielsen (1997)

In a recent study John Morkes and I found that 79 percent of our test users always scanned any new page they came across; only 16 percent read word-by-word

A page that is full of text tends to make visitors boring. Most people order online because they don't want to get stuck in the supermarket where they need to queue up for payment. Instead, they want to do it quickly and straightforward choose the stuff. Therefore in order to gets visitors' attention, developer need to deploy scannable text, using highlighted keywords such as different font, color, using bulleted list, meaningful sub heading and so on.

Apart of useful information, developer should use appropriate font in order to help visitor see the content clearly. While there is little reliable information on the comparative legibility of typefaces, there is some evidence that a roman typeface, using upper and lower cases, is more readable than italics, oblique or condensed (Aries Arditi, 2003). In terms of font family, developer should avoid complicated, decorative or cursive fonts and when they must be used, reserve them for emphasis only. Standard serif or sans-serif fonts with familiar, easily recognizable characters are the best.

In a second study (Bernard, et.al., 2001) they used a similar procedure to evaluate three different font sizes (10, 12 and 14-points) used with eight different fonts types such as Arial, Verdana and Times New Roman. They found that Arial and Times New Roman were read reliably faster than Courier, Schoolbook and Georgia, and that the 12-point fonts were read reliably faster than the 10-point fonts. All of the fonts except Century Schoolbook were reliably preferred over Times New Roman. Instead of simplifying the text and putting the necessary information only, developer also should place a search engine in the website. Some people call it search engine optimization (SEO), some call it search engine marketing (SEM), and some call it search engine strategies (Jason Olson, 2002). Regardless what people call it, it is one of the most cost-effective and targeted means of marketing. Search engine play important roles in order to keep visitors attention while surfing on the respective website. According to a report from Jupiter Media Metrix (Sept 2002),

| Percentage (%) | Findings |
|----------------|--|
| 28 | typing a product name into a search engine |
| 23 | going straight to the URL |
| 9 | typing a brand name into a search engine |
| 5 | typing a company name into a search engine |
| 5 | going to a search engine shopping channel |

Figure 2.1: Percentage of How Visitor Find Their Intended Information

Search engine marketing is not only effective, but the Cost per Lead is lower than many other forms of marketing. Compared to direct mail, acquiring a customer through search engine marketing is 35 times less expensive (keywordranking.com).



How visitors locate a Website:

Figure 2.3: Percentage of How Visitors Locate a Website

E-marketer also should know the importance of identifying target audience as they will become the potential customer to the company. There are a variety of ways where e-marketer can get to know their customer. One way is to use surveys. E-marketer or client can also pay for demographic information about the market. Perhaps the best way to get to know the customer is to get to know them firsthand. According to Heather Martin (2000),

If you think your target audience is "any and all Web surfers," you're in for a shock. You'll learn why tightly targeted customer will increase your sales and clarify your marketing message.

Therefore, developer should look at the potential customer background and design based on their need. A happy visitor tends to spread good news about the website to another 3 people while an unhappy visitor tends to exaggerate about the website drawbacks to another 10 people.

Before developer begin the design, decide its purpose. Then visit sites with a similar purpose to see what it looks like. Once these sites have been examined, plan the site with intended audience in mind. Year 2000 saw many Dot-com companies built up and many companies going into E-commerce however now in year 2002 it is a different story, more and more companies are failing, and investors are becoming cautious to invest money into Internet ventures. Experiences from companies that have failed will help companies to realize what they need to follow to have a successful business if they plan well and have a good strategy.

According to Court Cunningham (2004)

"The number and value of multi-channel shoppers continues to increase every year. Marketers should focus on identifying, targeting and communicating with this valuable customer segment, to maximize the value of their marketing and their overall profitability." From the statistics, it is obvious that large and small companies need to be online to better serve their customers. For example, from 143 million U.S. residents, about 54 percent of the populations were using the Internet and 55.8 million from the percentage buy goods or services online. According to e-commerce.com (2004),

| Percentage (%) | Age | Type of activity |
|----------------|---------|------------------------|
| 53 | 25 - 34 | Purchase from internet |
| 51.2 | 35 - 44 | Web buyers |

This shows that majority of consumers who are willing and able to buy are doing it online. In fact, it is interesting that lower-income households are adopting the Internet more quickly than their richer counterparts.

From the statistic shown above, online transaction has started to affect the daily life of people. Developer must understand that customers are doing online transaction because they're comfortable with the services provided. Thus, the web should be a winwin situation for both companies and customer. According to Vividen Corporation (2002),

"Companies can fill a site with brand-building 'marketese' but the biggest impact on a brand comes from the way customer experience the website itself. To build a world class brand, website must deliver a world class customer experience"

Instead of market the product or services to customers, companies must focus on making customer happy by shifting the priorities to customer satisfaction. When a websites deliver poor user experiences, both parties will lose: the customers sacrifice their valuable time or the business forfeits the opportunity to build brand equity. In the event that customer is facing problem or would like to ask for question, companies should provide contact information on each page of a website. A site with no information on whom to contact may drive business away. Smith (1997) recommends installing 'mail-to' links on every page. Maloff (1997, p. 70) suggests a more elaborate method, which is posting threaded on-line discussions, message boards, or even interactions via real-time, on-line chat.

Apart of that, companies also should make regular changes to the site. This is wise for two reasons: first, visitors want to see fresh material, and secondly, by updating the site often will ensure that the information is current.

Requesting customers to fill in form also must be taken into consideration. Developer should limit registration forms and the amount of requested information on them. Another way to drive away customers is to blitz them with intimidating registration forms, and especially those that request a burdensome amount of unnecessary information.

Finally, if e-marketer manages to overcome those drawbacks, a higher degree of trust is achieved, because customers feel more comfortable and satisfied after their visit, and because their goals are expected to be achieved in an earlier stage.

3.0 METHODOLOGY / PROJECT WORK

For this project, the author has decided to use a hybrid model which consists of a combination of other software life cycle model. This will be used in the course of the software development process. The stages will include stage from other model and combined it into new models which will best fit this project:

- Investigate and report the objectives of implementing e-loyalty into e-commerce website.
- Summarize the best practice research on e-commerce website. Report on the gains portal designers seek and what their actual experience has been when putting a website in place.
- Design an e-commerce website according to guideline for designing good interface design and visitor expectation.
- Test the prototype website and get user feedback about the website.

However, the design for the prototype website might be different from the storyboard as the user requirement has change. The user requirement is always change as they feel that something should be included in the portal which can satisfy their needs. However, user can't change their requirement at the end of the project because it is difficult for the developer to change the design to satisfy the user requirement while the project is almost complete.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Literature Review

4.1.1 Information gathering

- this may include research from articles, white paper, journal and several websites which related to good website development practices. The author had read and analyzed those sources in order to identify the key element of developing website that incorporate e-loyalty.

4.1.2 Findings from Information Gathering

Website must be updated regularly

Set a target that is realistic within the capacity, and then meet that target. For instance, if you have the time to update your site only every 2 weeks, then make it crystal clear from the start. Regular visitors will appreciate it for saving them the effort in checking back with website respective every day, only to find nothing has changed.

• Keep the customers aware of important event

One of the key ways to build community around the website is to start a mailing list to keep on winning attention from regular visitors. Such e-mail might contain news about visitor's field of interest, helpful tips about things, discussions or anything that they can dream up. It is vital that developer make the mailing list "opt-in": where system only mail people who have explicitly asked to be put on the mailing list and also make it easy for people to unsubscribe as well.

• Comprehensiveness

Make the information on the website so complete that it effectively becomes the main resources for whatever subject that the website deals with. At the end of the day, people will come back to the website again and again to keep on checking that information.

• Word of mouth

Encourage visitors to tell their friends about the website. While a simply-worded message like "Please be sure to tell your friends about this site", e-marketer can leverage the power of people to spread the news about the website.

Example is Recommend-It.com where user can specify a paragraph or two describing the website's best features. When visitors click on the Recommend-It button, they can specify a friend's email address and then type a personal message. The service will automatically add the site description and URL supplied and sends off the email. Through this way, e-marketer can harness their visitors' willingness to tell others about your site.

• Quick response to email

It is crucial that e-marketer make an attempt to respond to most, if not all email. The rule of thumb is to respond to all mail with suggestions or comments while at the same time ignore email that shows the writer has clearly not even looked at your site or your Frequently Asked Questions list. Such email response doesn't have to be much, just a couple of lines will do but it shows that someone actually read your message.

• If they can't find it they won't buy it

Customers searching for products to buy typically work their way through a list of possible Web sites especially if they are using a search engine. They may spend only a few seconds on the website before moving on to the next one, unless e-marketer can hold their interest. If they have to drill down through endless departments and categories, or if the search function simply returns an unhelpful "product not found" message, potential customers will get bored and go away.

• Slow site = slow business

One of the great advantages of selling on the Net is immediacy. A customer can find a product and buy it with a few mouse clicks and key strokes. It follows that e-marketer want to make the time between deciding to buy and completing the sale as short as possible, to minimize the chance of the customer **reconsidering**. Basically, 40% of shopping carts are abandoned before the checkout process is complete and one of the main reasons for this is the length of time the checkout process takes.

Button

Graphical user interfaces have become another form of transferable knowledge. People who use computers learn that they can press on buttons with their mouse (Figure 4(a)). This becomes a learned behavior that can be transferred to how people perceive and interact with Websites.

OK.cv Cancelle i Maileo

Figure 4(a): Buttons in modern graphical user interfaces appear three dimensional; to make them look as if people can press on it. Developer can take

advantage of this knowledge by making the most important buttons on your Web site look three dimensional too.

Basically, there are two kinds of action buttons: HTML action buttons and graphical action buttons. HTML buttons are specified in HTML, so you have little control over how they are displayed. Figure 4(b) shows an example of an HTML button.



Figure 4(b): The gray Search button on the right-hand side is an example of an HTML action button. HTML action buttons can be specified in HTML and are created by the Web browser.

• Poor navigational assistance

GUI controls should be positioned according to frequency of use. The most important field should be in the upper left; the least important field should be in the lower right. It's hard to imagine how the company and invoice number could be the most important fields when dispatching an ambulance.

• Inappropriate use of controls

The designer chose to use text labels rather than group boxes to identify which groups of data would be placed in the boxes. This many group boxes with text labels in these positions makes the screen appear convoluted and makes it difficult to distinguish the data from the labels. Also, the editable fields should be identified with a box around them so that it is intuitively obvious which fields can be changed.

• Lack of symmetry

Lining up fields, group boxes, and buttons will make the interface much easier to look. Thus it creates a good impression about the website and looks professionally arrange.

Provide explanation for information requests

It is common that a website need some personal information from the user. At this point, there should have an explanation why the information is needed. For instances, it is critical whether a women is pregnant or not before the doctor give medicine to her. Here, it is clear why the personal information is needed. If such information is sought in connection with product promotion, user will reluctant to give their details as they worry that the companies will call them in the future.

• Clearly label optional and required information

Certain field or information is optional to be filled by the user such as email. If customer knows that such information is optional, they may decide whether to provide it or not. This will enforce them that the company is sincere in doing business with the customer.

• Visited links

Most Web sites use a different color for "unvisited links" than for "visited links" in order to enable users to quickly identify pages that they've seen. However when using an application, users don't really "visit" the pages; they perform tasks such as entering data into forms. In cases like this, it's preferable to specify the same color for the unvisited links as for the visited links so all links look the same.

• Page titles

In Web site design, it is considered a good practice to use a unique page title which appears in the browser title bar for each page. The first reason is because it enables users who bookmark the page to quickly identify it in their Favorites. Secondly, it provides context for users who land on the page from outside the Web site, such as from a Search engine or hypertext link.

18

Hypertext vs. linear tasks

In most Web sites, users can jump from one page to another using hypertext links. Designing good hypertext requires some thought about how and when to link to related content. But with applications, users perform tasks, which may require linear paths through the pages and additional application processing when a user navigates from one page to the next. This requires a different kind of design, one that focuses on navigation among tasks rather than hypertext among pages of content.

Scrolling

A user who is content to scroll through a lengthy page of text and graphics may find it cumbersome to scroll through a form while filling out the fields. However, if moving from page to page requires lots of background application processing and the pages take awhile to download; users may prefer one long form. Such design choice is best made with the help of some usability testing.

Cross-browser considerations

Most Web sites are designed to work properly with all or at least the most widely used web browsers in the market. Designers often use browser-safe colors, avoid browser-specific capabilities, and perform thorough testing of their pages on many browsers and browser levels. Designers of Web-based applications, however, may have more control over the target environment, depending on the situation.

• Always allow "Undo."

The unavoidable result of not supporting undo is that user must then support a bunch of dialogs that say the equivalent of, "Are you really sure?" Needless to say, this will slows people down. In the absence of such dialogs, people slow down even further. A study a few years back showed that people in a hazardous environment make no more mistakes than people in a supportive and more visually obvious environment, but they worked a lot slower and a lot more carefully to avoid making errors.

Choose suitable metaphors well

Metaphors will enable users to instantly grasp the finest details of the conceptual model. Bring metaphors alive by appealing to people's perceptions-sight, sound, touch, and kinesthesia as well as triggering their memories. Metaphors usually evoke the familiar, but often add a new twist. For example, Windows 95 has an object called a briefcase. Like a real-world briefcase, its purpose is to help make electronic documents more portable. It does so, however, not by acting as a transport mechanism, but as a synchronizer: Documents in the desktop briefcase and the briefcase held on portable media are updated automatically when the portable media is inserted in the machine.

4.2 Website Observation

Based from past experiences of surfing these website plus observation for almost a month, the author manage to see how the element of e-loyalty is being implemented in the websites. In Malaysian context, there are certain website which develop website that incorporate e-loyalty concept but there are some improvement that can be done. Here is some of the website observed by the author:

- i) <u>http://auc.buysell.com.my/</u>
- ii) <u>www.blooming.com.my</u>
- iii) <u>www.pureseed.com.my</u>
- iv) <u>http://www.leeflower.com</u>
- v) <u>www.flowers.com.my</u>
- vi) <u>www.malaysiaflowers.com.my</u>

4.2.1 Findings From Websites Observation

Based from the observation, the author had identified some weaknesses in certain ecommerce websites which can be improved:

- i) Failure to display user agreement and privacy policy
 - User agreement and privacy policy should be clearly stated in the website as it explains to potential customer, how the personal information is being use. Companies which embark in e-commerce must understand that it is important to ensure visitor's on-line experience to be enjoyable. In addition, it also shows that the companies respect visitor's privacy when they visit the website. When visitors are happy, they will want to visit the website again and maybe even tell their friends about the website.
- ii) Unsuitable color for website interface

- There are e-commerce websites which uses dark color as website background while the font color also quite dark. This will create difficulty to visitor as they need to focus on monitor to capture each word.

iii) Unavailability of search engine

- Without search engine, visitor need to find the information on their own which mean they need to spend more time looking for such information.

iv) Information overload

- Automating the process of organizing website information will allow visitor to find what they need. Putting the whole information in one page make website look crowded and unattractive, thus discourage visitor to have a look at it. In this case, search engines work much more effectively when it is rest on a foundation of organized information.

21

- v) Provide helpful error message
 - Error messages should clearly state what the user needs to do in order to correct the problem. Such error message may point where the error occurs. Therefore, users don't have to spend their time search for such errors.
- vi) Help user understand legal agreement
 - Generally, certain website put the legal agreement just for display only without proper method to help user understand the legal agreement. A simple sentence for legal agreement can help user avoid misunderstanding, thus increase their confidence to do transaction with the companies.

CHAPTER 5

RECOMMENDATION AND CONCLUSION

5.1 Recommendation

Even though the technology moving very fast, which mean design of interface become more simple, easy and interactive, the author feels that certain area of interface design can be improve. Perhaps, developer can make up a language that visitors can use in their daily work. The patterns might reflect visitors own experiences using the Web where they might have picked it up from another site. According to Douglas van Duyne etc (2003) when people go online, they do not start with a blank slate. They take with them all of their experiences, their know-how, and their understanding of how the world works. Some patterns reflect abstract qualities that make great Web sites such as value, trust, and reliability. Developer should integrate such traits into the design of the entire Web site, and reaffirm and reinforce it at every point of contact with the customers.

Apart from that, developer can automate certain features of user interface design. Previous work in the automation of user interface design has had mixed success. Researchers have developed systems that are effective for narrowly focused domains including, for example, automatic generation of forms, or automatic generation of dialog boxes for database access (Puerta etc, 1994). At designer's perspective, such technological developments in user-interface design can be accommodated by existing design software without the need for updates or patches. If, for example, a new userinterface widget is introduced, the automatic design algorithm can learn to handle it by observing the designer's behavior.

23

Designer also should change the way they create button. According to Fitts's Law, The basic idea in Fitts's Law is that any time a person uses a mouse to move the mouse pointer; certain characteristics of objects on the screen make them easy or hard to click on. The farther the person has to move the mouse to get to an object, the more effort it will take to get to.



Figure 5(a): The blue line represents the boundary of the clickable region.

In order to ensure that objects are easy to click on, designer can give the button large target spaces. Take a look at the examples in Figure 5(a). The blue line represents the area of the button that can be clicked on while the design on the left requires the user to target a very small space. If designer force the user to spend a lot of time wandering around the screen figuring out what they can click on and what they can't, they might not want to come back again.

Apart from that, designer may think of implementing voice interfaces in the website. Basically, voice interface may benefit users with various disabilities, who cannot use a mouse and/or a keyboard or who cannot see pictures on the screen. Voice output is the main way for visually impaired users to interact with computers, and because these users rely so heavily on audio presentation of information, it is very important to design Web pages with voice-only browsers in mind (Jakob Nielsen, 2003). Perhaps, such technology is a secondary interaction mode when additional media are available. It's much easier to pick out the desired item from a list when the list is displayed on a monitor than when it is read aloud. Voice is a one-dimensional medium with zero persistence while a monitor is a two-dimensional medium that combines persistence with selective updating where user can type a value into a field anywhere on the screen without changing the rest of the screen.

Fifthly, designer also may focus on the front page of a website which serves as frontier of a business. Organize the home page according to user perspective because it is the first opportunity to clearly communicate the site's value proposition. Try to reduce clutter as clutter yields site abandonment. Designer may present only the relevant information to user in order to simplify their experience.

In terms of using picture, developer may opt in using virtual reality picture where it implement 3D or 2D picture in the website. This can help user understand the product offered clearly. They managed to see the actual picture, the size or even special features which are blocked in normal view.

5.2 Conclusion

Designing a good interface is a critical skill for application developers, regardless of the GUI platform for which they are designing. Good interface designs do not happen naturally. It requires the designer to learn and apply some basic principles where user will enjoy working with the design. Besides, it also require designer to get as much experience as possible in working on and being exposed to good interface designs. Therefore, a good interface will produce a nice and interactive website which will please the customers, thus bringing profit to companies who embark in e-commerce.

The Web is not simply an electronic display of information. It is an interface, implying interaction between writer and reader, or designer and user. To be effective communicators, designers need to think about the user interface to their hypertexts. The fields of human-computer interaction, cognitive science, and interface design can support writers and designers in creating easily navigable, useful, and effective hypertext interfaces. Designers can also apply their own knowledge about audience analysis and reader-response criticism to the interface as well as the text of their documents.

Finally, designing a website interface that meet user needs and expectation will bring more benefits to businesses in the future. Once the customer experience is enforced with the ease of browsing the website, they won't hesitate to visit again and conduct transaction. Again, as our life is moving towards borderless world, it is undeniable that a website which offers e-commerce services can take advantages of the scenario.

REFERENCES

- 1. <u>http://www.workz.com</u> (accessed on 8 Feb 2004)
- 2. <u>www.e-commerce.com</u>, (accessed on15/2/2004)
- Matt Brown(2004) http://www.macromedia.com/devnet/mx/dreamweaver (Accessed on 8 Feb 2004)
- 4. <u>http://www.websitetips.com/writing/</u> (accessed on 8 Feb 2004)
- 5. http://www.definethat.com/ (accessed on 9 Feb 2004)
- 6. www.embeddedstar.com/technicalpapers (accessed on 10 Feb 2004)
- Nilpa Shah and Ray Dawson 2002, How to be an E-survivor in the current Economic climate: E-Commerce Strategies and Tactics to adopt for Success, Thesis, Loughborough University, United Kingdom.
- 8. S Ghosh, "Making Business Sense of the Internet," Harvard Business Review March/April1998.
- 9. <u>http://www.kmart.com</u> (accessed on 23 Feb 2004)
- 10. Court Cunningham (2004), <u>http://ecommerce.internet.com</u> (accessed on 14 Feb 2004)
- 11. Laura Rush (2004), http://ecommerce.internet.com (accessed on 14 Feb 2004)
- 12. Jakob Nielsen (2004), http://www.nngroup.com/reports
- 13. Jakob Nielsen (1997), http://www.useit.com/papers/
- 14. Li-Chuan Yu, Tsung-Yuan Lin (2004), What Should We Consider for User Interface Design?, <u>http://slis-two.lis.fsu.edu/websitedev</u> (accessed on 12/4/2004)
- 15. Jason Olson (2002), The Importance of Search Engine Strategies, http://www.ultimatewebdesigning.com/newsletter/importanceses.html (accessed on 12/4/2004)
- 16. Jupiter Media Metrix (Sept 2002), <u>http://www.ultimatewebdesigning.com/</u> newsletter/importanceses.html, (accessed on 12/4/2004)
- 17. The Importance of Search Engines, http://www.keywordranking.com/ search_engines.cfm, (accessed on 12/4/2004)
- Aries Arditi (2002), Effective Color Contrast, <u>www.lighthouse.org</u> (accessed on 12/4/2004)

- Aries Arditi (2003), Making Text Legible, <u>www.lighthouse.org</u> (accessed on 12/4/2004)
- 20. Geetha (2004), Importance of Color in Web Design, http://www.theukwebdesigncompany.com/articles/color-web-design.php (accessed on 12/4/2004)
- 21. Viki Nygaard and Liann Fahrmeyer (2001), Choosing The Perfect Colors for Your Web Site, <u>http://www.write101.com/16febadv.htm</u> (accessed on 12/4/2004)
- 22. Bernard, M., Mills, M., Peterson, M. and Storrer, K. (2001a), A comparison of popular online fonts: Which is best and when? Usability News, July, 3(2)
- 23. Douglas van Duyne, James Landay, & Jason Hong (2003), Making the Most of Web Design Patterns, http://www.uiconf.com/8/articles/design_patterns_ article.html (accessed on 12/4/2004)
- 24. Puerta, A.R., Eriksson, H., Gennari, J.H. and Musen, M.A. Model-Based Automated Generation of User Interfaces. In Proc. AAAI 94 (Seattle, July 31-August 1, 1994), AAAI Press, pp. 471-477.
- 25. Jakob Nielsen (2003), Voice Interfaces: Assessing the Potential, http://www.useit.com/alertbox/20030127.html (accessed on 12/4/2004)
- 26. Vividen Corporation (2002), How To Make Customer Happy On The Web, www.vividen.com (accessed on 12/4/2004)
- 27. Smith, V., "What Every Good Webmaster Knows," Home Office Computing, October 1997, pp. 56-58.
- Maloff, J., "Growing a Business at Net Speed," Internet World, July 1997, pp. 68-70.

Appendixes



Malaysia Flower Shop Offering Flowers For Delivery In Malaysia

Welcome To Eccentrix Florist & Gift. Eccentrix Florist offers variety of floral arrangement and services ranging fro

Figure 7.1: Main Page of e-florist.com.my

(INFORMATION

Subscribe Newsletter For non members,

enter your email

Subscribe

Click here to unsubscribe

We Accept





Flower & Bouquet





* A major concern when placing order is whether your flowers or hampers will arrive on time and th





Figure 7.2: Main Page of e-florist.com.my (bottom part)

FREE delivery for Kuala Lumpur and Petaling Jaya

condition upon arrival. Our assurance to you..... read on * Same day delivery (for flower deliveries) if order before 10.00 am

| | alaysia Online Florist - Florist in Malaysia - Microsoft Internet Explorer | |
|--------------------------------------|--|---------------------------------------|
| File Edit View Fevor | ies Tools Help C C C Psearch & Favorites C Media O C C | |
| Address & http://localhos | ala da ser en entre de la companya de la companya de la contra de | 😨 🛃 Go 🛛 Lini's 🎽 Norton AntiMius 🔒 🕯 |
| Recipient Inf | | <u></u> |
| Recipient Name * | | |
| Company Name | | |
| Address * | | |
| Postcode | State 🛛 Wilayah Persekutuan 🛩 City 🛛 Bandar Sri Damansara 🖉 | |
| Contact | Home Mobile Mobile | |
| Delivery & S | ender Information | |
| | | <u>.</u> |
| Message | | |
| | | |
| | | |
| | | |
| 🕑 Dane | | Loca Intranet |



.



Figure 7.4: Sample of Product Offered

1 3.



| Flower Basket Interfaith Etiquette for Funeral Flowers | | | |
|--|---|--|--|
| Fruit Basket Gift of Health Get Well | * Funeral traditions vary for each culture and faith. Here are some general guidelines to help. If in in doubt, check with loc religious leaders or family members, too. | | |
| Congratulation Birthday | Baha'i Burial should take place within a one-hour drive from the place where death occurs. Flowers are appropriate. | | |
| Sympathy With Thanks | Buddhist Most Buddhist funerals take place in a funeral home not in a temple. Sending flowers is normally considered appropr. | | |
| New Born | Catholic Flowers are usually welcomed and appreciated. For deliveries to the church, please confirm details with the parish, as practices may vary with regard to casket sprays, where flowers may be displayed, etc. | | |
| | Church of Jesus Christ of Latter Day Saints, the Mormons | | |
| Flower Care | Most floral tributes are encouraged and appropriate, excpet flowers arranged on a cross or crucifix. Funerals are not | | |
| Flower Facts | normally held inside the temple. | | |
| Etiquette | Eastern Orthodox | | |

V ₩ Home

Bulletin

11

лъ

n

About Us Contact Us

<u>F</u>

Figure 7.5: Sample of information offered

115.0

New Born

(INFORMATION) Flower Care Flower Facts Eliquette Guy/siGuide

We Accept

16

| ΩΥ | ieriic | an) | |
|----|--------|---------------------|---|
| L | Serr | Ess | |
| 0 | 風胸 | ersCild mational | • |

Flower & Bouquet

And a host of other great stuff coming soon!!! So don't bother reading this anymore. Sign up NOW!!! Membership is FREE!!!

Fields marked with * are compulsory fields Email * Your email will be used as your ; user name] Password * ; (At least 6 characters) Confirm Password * : First Name * ÷ Last Name * 1 Street Address * ; City * : State* : Postal Code/Zip Code * ; Phone Number* : Fax Number :

Member Information

Submit cancel

Figure 7.6: Member registration section