

E-Commerce and Ethical Web Design: Applying the BBBOnline Guidelines on Malaysian Websites

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Abstract: *The aim of this study is to find out to what extent Malaysian companies incorporate trustworthy elements on their websites. The study provides a detail website evaluation based on the principles for ethical online business provided by the BBBOnline guidelines. The five principles used as an evaluation instrument are: (1) Truthful and accurate communication, (2) Disclosure, (3) Information practices and security, (4) Customer satisfaction, and (5) Protecting children. The study selected ten Malaysian-based companies which adopt e-commerce as part of their business. The findings of the study indicate that some principles are well-adhered to, while others need more attention.*

Keywords: *E-commerce, ethics and e-commerce, web analysis, seal program, trust.*

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1. Introduction

The birth of e-commerce was due to the existence of Internet and computer technology. Its thrust, driven by these technologies consequently led e-commerce to spread throughout the globe confirming the recent statistical analysis which indicates that e-commerce growth is at a constant increase [18].

At the same time, over the last five years, there has been a significant increase in the level of exposure to new business risks affecting products and service providers and their customers [7]. These risks have arisen from the increased use of the Internet technology and the mistrust by customers in security, privacy and service fulfillment when purchasing online. Mistrust by customers represents a serious threat and business risk to the prosperity and financial success of any enterprise, particularly those using the Internet technology. In order to develop, strengthen, accelerate and maintain customers' trust in the e-commerce it is vital for enterprises to identify and manage these new business risks proactively.

This paper presents findings of a study on e-commerce websites of Malaysian companies. One of the goals of the research is to find out to what extent Malaysian companies incorporate ethical and trustworthy elements on their websites. The literature review highlights the ethical concerns and the issue of trust in relation to e-commerce, the role and use of third party seals, and an overview of e-commerce in Malaysia. Selection of websites and how the review was carried out is discussed in the following section. Finally, the findings of the study are presented and discussed.

2. Literature Review

2.1. E-Commerce and Ethical Concerns

E-commerce generally is defined as the process of buying and selling over the computer network. However this definition was found fairly narrow by some people, thus the new term e-business has emerged, which brings the broader definition of e-commerce. e-business is not just the buying and selling of goods and services, but also servicing customers, collaborating with business partners and conducting electronic transactions within an organization [32].

The driving force behind e-commerce is associated with the arrival of the commercial use of the Internet technology, especially the World Wide Web (WWW). However, according to Zwass, it would be entirely wrong to interpret e-commerce as a largely technological development [35]. This way of doing business can be understood as the deployment of information technologies together with the organizational and management advances that pull the technology and are pushed by it in turn.

The advent of e-commerce brings with it a host of ethical issues surrounding customer privacy, risk, security, and reliability. The issue of privacy has received much attention, particularly in the developed countries. Technology has evolved to the point at which detailed, comprehensive profiles of individuals can be created and disseminated at unprecedented levels. Technology has substantially altered the relationship between customers and merchants, and tipped the balance in favor of online merchants' commercial interest versus the customers' privacy interest. This change leaves online consumers

particularly vulnerable, subject to harm, and their right to privacy compromised [16].

In addition to privacy concerns, the issue of security is well-known worldwide as a major barrier to shopping online. One aspect of the security relates to the potential technological sources of errors and security gaps which govern e-commerce transactions [12]. The smooth and secure processing of an online transaction depends on the functioning of hardware and software, as well as the cryptographic protocols that are used. The other aspect of security concerns is information security, which when lacks, results in data theft and file corruption, and access to personal and confidential information. According to Aljifri *et al.* [3], in the context of developing countries, security has been singled out as the most important issue in the growth of e-commerce.

Confidence in the Internet privacy and security of personal information relates to the level of trust that customers have in shopping online. In this new era, it has been noted that trust is more crucial than ever [14]. Most people hesitated to purchase online or even left the electronic market because of a lack of trust. Lohse *et al.* [21] found that concerns about privacy and lack of trust online were among the most important factors that lead customers to drop out of the online business.

According to Chadwick, there appear to be two domains of action e-companies that can take to engender trust in their consumers: Web design and trust-building behavior [8]. On the web design front, Kim and Moon [17] found that perceptions of trustworthiness can be manipulated by varying the design of the web page, particularly the use of graphics and color. Cheskin/Sapient demonstrates that trustworthiness of an e-commerce website as a function of six components: Seals of approval, brand, fulfillment, navigation, presentation, and technology [9].

Looking specifically at trust building behaviors, most analysts limit e-commerce trust to the issues of privacy, risk, security, and reliability [24]. Chadwick criticized such perspective, which limits the view of trust as something derived solely from the technical aspect of e-commerce and ignores the human factor in e-commerce [8]. He emphasized the importance of recognizing trust as a component of the relationship between the consumer and the e-company. This will lead to considering not just how information is processed and kept secure, but at the ways in which e-commerce messages are constructed and used to affect trust.

2.2. Seal Programs and Codes of Conduct

E-commerce self-regulation regarding consumer privacy and advertising has occurred through the development and implementation of seal programs. Examples of these seal programs are TRUSTe,

BBBOnline, MasterCard, Visa, Verisign and ProTrust. The most widely recognized seal programs are TRUSTe and BBBOnline, which provide guidelines and code of ethics for e-commerce companies to follow, in order to protect customer's privacy and make online shopping a positive experience. These are third party organizations which attempt to promote self-governance on the privacy and advertising practices.

TRUSTe was the first online privacy seal program [11]. The core of this initiative was the TRUSTe Privacy Seal, a visual symbol that could be displayed by websites that met the requirements for data gathering and dissemination practices, and agreed to participate in its dispute resolution process. The backbone of the TRUSTe program is the contract that is signed between TRUSTe and the website. This contract gives TRUSTe the ability to address users' privacy concerns regardless of their citizenship or the location of the TRUSTe licensee. Today, nearly 2000 websites display TRUSTe Privacy Seal [31].

BBBOnline is another self-governance approach that is working towards accelerating the growth of the Internet industry. BBBOnline encourages sound and ethical online business practices through its privacy program and reliability program [5]. The BBBOnline Privacy Seal confirms that a company stands behind its online privacy policy and has met the program requirements regarding the handling of personal information that is provided through its website. The Reliability seal confirms that a company has been reviewed to meet truth in advertisement guidelines and follows good customer service practices. Currently, more than 9800 businesses have been qualified to display the BBBOnline reliability seal; 822 websites have earned the BBBOnline privacy seal [5].

Under the reliability program, BBBOnline has come up with the code of online business practices which acts as a guide for an ethical "business to consumer" conduct in e-commerce. The use of codes of practice or conduct is not uncommon in business organizations today. Research by the Institute of Business Ethics in UK indicates that there has been an increase in the number of firms adopting a code of ethics covering business activities [13]. BBBOnline claims that the code contains practical, performance-based guidelines, rather than dictating methods for achieving the goals that could interfere with a particular business models. The code is designed to allow online businesses to take advantage of evolving technology and to foster innovation while adhering to principled business practices that provide truthful and accurate information to online customers.

This study has adopted this code as the framework to evaluate websites of Malaysian companies on ethical conduct of e-commerce. The next section will present an overview of the state of e-commerce adoption among Malaysian companies.

2.3. E-Commerce in Malaysia

In Malaysia, various efforts from the Malaysian government and private sectors act as major drivers towards promoting e-commerce in the country. Vision 2020 is a national agenda that sets out specific goals and objectives to transform the country into a fully developed, mature and knowledge-rich society. The Multimedia Super Corridor (MSC) project was initiated in 1995 to help companies of the world to test the limits of technology and prepare themselves for the future [26]. In 1997, the government took the initiative to set up the Malaysian Inter-Agency Task Force on Electronic Commerce (IATFEC) to formulate a National Strategic Action Plan to enable Malaysian businesses to compete successfully in the global marketplace. Since then, many other steps have been introduced by the government in promoting e-commerce, including the introduction of cyber-laws and intellectual property laws, building up of nationwide telecommunications infrastructure and services, enhancing e-payment systems and launching numerous grants and other financial incentives [25].

However, despite these efforts, online shopping in Malaysia is its infancy. Although it has been a few years since the commercialization of the Internet, Malaysians still mainly regard it as a novel means of communication and entertainment, but not yet as a medium for commerce [25]. Although almost every Internet user surveyed said in general they like the idea of shopping on the Internet, in fact, only a small number of Malaysians actually buy online [2, 23]. The 4th Malaysia Internet User Report stated that Malaysians are very curious about this new market but are delaying transactions due to a lack of product awareness, value awareness and concerns regarding credit card security [33].

On the seller side, the take up of e-commerce by Malaysian companies is also slow. According to Paynter and Lim [25], only one percent of retailers in the country are involved in e-commerce. A survey conducted by Malaysian Development Corporation (MDC) found that, out of the 811 Small- and Medium-scale Enterprises (SMEs), only 7% were selling via the Internet [4]. A major hindrance to Malaysia's involvement in electronic businesses is the enterprise attitude [22]. Malaysians tend to be "followers" rather than "pioneers" or "first-movers" in creating intellectual property [19]. A study by Mustafa and Mohd Khairuddin found that most managers of SMEs have positive perceptions towards e-commerce, but feel that they need guidance and assistance to embark on e-commerce activities [34]. Researchers agree that there are significant reasons behind the slow uptake of e-commerce in Malaysia. This includes the security issue, the reliability of businesses on the web, the attitude of buyers and sellers, the general Malaysian culture, the preference of Malaysian consumers for

brick-and-mortar shopping, the price of online products, the level of IT knowledge, payment options, and the high price of personal computers [25].

On the other hand, the future for e-commerce in Malaysia is promising. International Data Corporation (IDC) Malaysia reported that Internet users in Malaysia passed the 2.5 million mark at the end of 2000, and will reach 3.25 million by end 2001 and six million by 2005 [15]. According to Lee [20], IDC Malaysia expects e-commerce revenue generated in Malaysia to amount to US\$ 426 million for 2000 and this would grow to US\$ 3 billion in 2004. Another figure from MDC estimated that e-commerce transactions carried out by local companies and individuals should be about RM623 million by the end 2000 [26]. E-commerce has been growing by more than 100 percent in this region. It projected that the market would exceed between US\$ 1-3.5 billion in the next five years [6]. With further efforts, particularly those that relate to building up trust among consumers and sellers, e-commerce is ready to take off in this country. This study hopes to contribute towards further understanding online business practices by Malaysian firms.

3. Research Methodology

There are numerous ways to evaluate the quality of websites [28, 29]. However, most of past studies focused on general qualities of websites that induce transactions from potential customers; none actually explore from the ethical perspective. Since the main objective of the study is to look at website quality from the ethical dimension, it was decided to adopt the BBOnline code of online business practices as the framework to analyze the websites. The BBOnline code was selected as opposed to TRUSTe because TRUSTe only covers privacy issue, whereas BBOnline covers both the privacy and the general business practice, particularly on advertising. It is argued that trustworthy elements is not only restricted to privacy issue, but it encompasses general practices which to some extent are reflected on the appearance and declarative statements on the websites.

This study involves a review of ten selected websites of Malaysian companies by two reviewers. The major criterion used in selecting the companies is that the websites must provide the online payment mechanism, or in other words, the e-commerce feature is available. Table 1 shows the list of companies selected for the study. The review was carried out in August 2003.

Specifically the review process is carried out following these steps:

- The five principles of BBOnline code of practice are analyzed and specific key indicators are identified for each principle.

- These indicators are prepared in the form of a template.
- The reviewer used this template to review each website, identifying which indicators are available on the website and which are missing.
- Data collected for each website is compiled, and later aggregated to allow comparison between websites.

Table 1: Selected websites.

| No | Company Name | Website |
|----|-------------------------|-----------------------------------|
| 1 | ArthursBooks.com | http://www.arthursbooks.com |
| 2 | Penerbitan Pelangi | http://www.pelangibooks.com |
| 3 | Bamboo Green Florist | sales@bambooflorist.com.my |
| 4 | Flowers.com.my | http://www.flowers.com.my |
| 5 | Interbase Resources | http://www.fragrance.com.my |
| 6 | NS Cashpoint Sdn Bhd. | http://www.fragranceonline.com.my |
| 7 | Royal Selangor | http://www.royalselangor.com |
| 8 | All Ninety Nine Sdn.Bhd | http://www.all99.com |
| 9 | Mgt Online Sdn Bhd. | http://www.mgt.com.my |
| 10 | Lilian Jewellery | http://www.liliantojewellery.com |

The BBBOnline code of business practices is based on the following principles:

1. *Truthful and Accurate Communication*: This principle states that online businesses should not engage in deceptive or misleading practices with regard to any aspect of electronic commerce, including advertising, marketing, or in their use of technology. Six indicators are identified for this principle, namely:
 - Truthful advertising material.
 - Cooperate with self-regulatory advertising program for dispute settlement.
 - No misuse of hyperlinks.
 - Proper use of search terms.
 - Use of third party seals are functional.
 - Non-interference of customers browser.
2. *Disclosure*: According to BBBOnline, this principle means that online merchants should disclose to their customers and prospective customers information about the business, the goods or services available for purchase online, and the transaction itself. Related to business information, companies should provide details such as company legal name, the name under which it conducts business, company physical address, an online method of contact, a point of contact that is responsible for customer inquiries, and a telephone or facsimile number. Information on products and services should cover all the necessary information in order for the customers to make an informed choice about whether to purchase such products or services. Related to the information about the online transaction itself, the code states that online merchants should provide enough information so that customers can make an informed choice whether or not to engage in the transaction. The merchants should also provide the customer with an opportunity to review and approve transaction and receive a confirmation on the transaction. For this principle, a total of 25 indicators are identified which reflect the above discussion.
3. *Information Practices and Security*: This principle expects online merchants to adopt information practices that treat customers' personal information with care. They should post and adhere to a privacy policy based on fair information principles, take appropriate measures to provide adequate security, and respect consumers' preferences regarding unsolicited email. Seven indicators are identified to represent this principle, namely:
 - Accessibility of the personal information collected.
 - Customers' choice on business use of personal information.
 - Security measures taken to protect the information.
 - Violation policy.
 - Use of encryption standards.
 - Use of security standards.
 - Unsolicited mail practices.
4. *Customer Satisfaction*: This principle emphasizes on the importance of ensuring customer satisfaction. Businesses should seek to ensure their customers are satisfied by honoring their representations, answering questions, and resolving customer complaints and disputes in a timely and responsive manner. Six indicators are identified to reflect this principle, namely:
 - Legal declaration on fulfillment of promises.
 - Responses to customers' questions through FAQs.
 - Responses to customers' queries via e-mails.
 - Contact for dispute settlement.
 - Internal mechanism to settle disputes.
 - Third party dispute resolution.
5. *Protecting Children*: The last principle states that if online advertisers target children under the age of 13, they should take special care to protect them by recognizing children's developing cognitive abilities. The indicator used to represent this principle is to examine whether this concern is reflected in some ways.

4. Results of Web Analysis

Related to principle 1, a review of selected websites reveals the results as shown in Table 2.

From Table 2, it appears that all selected companies attempt to display truthful advertising material. It is hard to ascertain the advertiser's intention in designing

the advertisement, however, as long as material representation is free from deception, then it is considered to be truthful. However, none of the companies publish any information suggesting that they cooperate with any self-regulatory advertising program.

Table 2. Selected websites and the principle on truthful and accurate communication.

| Principle 1 | Companies | | | | | | | | | |
|-------------------------------------|-----------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Truthful adv. material | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Coop. with self-regul. advert.prog. | X | X | X | X | X | X | X | X | X | X |
| No misuse of hyperlinks | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Search term | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Third party seals | X | X | X | X | X | X | X | X | X | X |
| Cust. browsing | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |

Table 2 shows that, generally, selected companies do not misuse the Internet technology. All of the ten companies have utilized the hyperlinks properly. Search terms relate well to the content of the website. It also appears that all selected companies do not deceptively interfere with customers’ browsers, computer or any appliance used to access internet. However, in the use of third party seals, none of the selected companies have linked their websites to any seal programs. To some extent, this indicates the lack of awareness among Malaysian firms on the importance of using third party seals in promoting trust to customers.

Related to principle 2, the result of web review is shown in Table 3.

Table 3. Selected websites and the principle on disclosure.

| Principle 2 | Companies | | | | | | | | | |
|---------------------|-----------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Co. name & url | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Mailing address | √ | √ | √ | X | √ | √ | √ | √ | √ | √ |
| E-mail address | √ | √ | √ | X | √ | √ | √ | √ | √ | √ |
| Cust. Inq. contact | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Tel. and Fax No. | √ | √ | √ | X | √ | √ | √ | √ | √ | √ |
| Info.Clear & acc. | √ | X | √ | √ | X | X | √ | √ | √ | √ |
| Info. is noticeable | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| maintain record | √ | √ | √ | √ | √ | √ | X | √ | √ | √ |
| Acc prior to trans. | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Geog. limitations | √ | √ | √ | √ | √ | X | √ | √ | √ | √ |
| Paym. mechanism | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Return olicy | √ | X | √ | √ | √ | X | √ | X | √ | √ |
| Prod. Warranty | √ | X | √ | √ | X | X | X | √ | √ | √ |
| Prod. availability | √ | X | √ | √ | X | X | X | X | √ | √ |
| Shipment basis | X | √ | √ | √ | X | X | √ | X | √ | √ |
| Delivery claim | √ | X | √ | √ | X | X | X | X | √ | X |
| Deliv. limitation | √ | X | √ | √ | √ | X | √ | X | X | X |
| Delay in shipment | √ | X | X | √ | X | X | X | X | X | X |
| Trading currency | √ | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| Shipping charge | √ | √ | √ | √ | √ | X | √ | X | √ | √ |
| Taxes info. | √ | √ | √ | √ | X | X | √ | X | X | √ |
| Bill. information | √ | √ | √ | √ | X | X | √ | √ | √ | √ |
| review trans. | √ | √ | √ | √ | √ | X | √ | √ | √ | √ |
| review payment | √ | √ | √ | √ | √ | X | √ | √ | √ | √ |
| Confirm sale | √ | √ | √ | √ | √ | X | √ | √ | √ | √ |

From Table 3, it is apparent that all selected companies disclose information related to their businesses, except for Flowers.com.my, which did not provide some details like the mailing address and telephone number. Table 3 shows that most of the websites display sufficient details on products offered. Penerbitan Pelangi Sdn. Bhd, Interbase Resources Sdn. Bhd and NS Cashpoint Sdn. Bhd., however, need to improve on the clarity and accuracy of their product information.

Table 3 shows that nine out of ten companies provided clear terms on geographic limitations, and all selected companies provided clear information on different payment options. Eight out of the ten companies provided at least one of the policies related to return or refund. Information on product limitation, which includes a clear set of warranties/guarantees/escrows provided by the business, is only available on six websites.

From Table 3, it appears that half of the surveyed companies failed to display availability basis of their products. Six of the websites have fulfilled the criterion on providing shipment basis, although the opportunity to cancel the shipment is not declared. Four out of ten websites provides delivery claim information and five companies display at least one delivery limitation. However, only two companies, that is, ArthursBooks.com and Flowers.com.my provide material delay in shipment information.

Table 3 also shows that all the ten companies have specified the trading currency before the customer enters any transaction. Two companies did not disclose shipping and handling charges and four companies fail to provide routine costs such as taxes or other government imposed- fees. Online merchants should also provide customers with the option to review the online transaction information, payment method and transaction completion option before affirmatively completing the transaction. All of the companies selected for the study have attained to these criteria except the NS Cashpoint Sdn. Bhd.

Related to principle 3, Table 4 shows the results of the web review on selected websites.

From Table 4, it appears that only half of the websites have a privacy policy statement or an equivalent. The table shows that out five companies that display privacy policy, only four provide statement on customer’s choice on business use of customer information and another four include terms on security measures to protect customer information. None of the companies display information on what enforcements is in place to remedy violations of the policy. The apparent lack of concern on privacy issue by the selected Malaysian companies is perhaps shared by the Malaysian society in general.

Table 4. Selected websites and the principle on information practices and security.

| Principle 3 | Companies | | | | | | | | | |
|------------------------|-----------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Accessibility | √ | √ | X | √ | X | X | √ | √ | X | X |
| Cust's Choice | √ | √ | X | X | X | X | √ | √ | X | X |
| Sec. measures | √ | √ | X | √ | X | X | √ | X | X | X |
| Violn policy | X | X | X | X | X | X | X | X | X | X |
| Std. of encrypt, etc. | √ | √ | √ | √ | X | X | √ | X | √ | √ |
| Std. of security, etc. | √ | √ | √ | X | X | X | √ | X | X | X |
| Unsolic. mails | √ | √ | X | X | X | X | √ | X | X | X |

Table 4 shows that seven out of ten companies provide terms regarding secure measures of encryption and authentication. On the use of standard for security and integrity, however, only four companies provide such information. Related to company's practices on the use of unsolicited emails, only three companies declare such terms.

Related to principle 4, the result of the web review is displayed in Table 5.

Table 5. Selected websites and the principle on customer satisfaction.

| Principle 4 | Companies | | | | | | | | | |
|-----------------------------|-----------|---|---|---|---|---|---|---|---|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Fulfilmt. of promises | √ | √ | √ | √ | X | X | √ | X | X | X |
| FAQs | √ | X | √ | √ | X | X | √ | X | X | X |
| Ans. Q.emails | √ | √ | √ | X | √ | √ | √ | √ | √ | √ |
| Notice of bus. contacts | X | X | X | X | X | X | X | √ | X | X |
| Use of internal mechanism | √ | √ | √ | √ | √ | X | √ | X | X | √ |
| 3rd party disp. resolution. | √ | X | X | X | X | X | X | √ | X | X |

Based on Table 5, half of the websites studied did not mention anything about fulfilling promises to customers. This does not necessarily suggest that these companies disrespect customers or fail to fulfill customer's promises; this only means that they did not declare their commitments to customers. Related to company's responsiveness, it is found that there are two ways a merchant may respond to customers' questions: through Frequently Asked Questions (FAQs) or e-mails. Table 5 shows that only half of the surveyed companies provide FAQ section. On the other hand, all the companies, except Flowers.com.my provide email contact to answer customers' questions. Table 5 also shows that only one company provides contact address for complaints and disputes, that is, Ninety Nine Sdn Bhd. Seven out of ten companies use internal mechanism for addressing complaints, and only two companies rely on third party dispute resolution. In this case, the two websites contain declarations that refer to the country's laws and regulations in settling disputes with customers.

Related to principle 5, a review of websites of selected companies indicates that only two of them have successfully provided guidelines on the protection of children, namely, ArthursBooks.com Sdn Bhd and All Ninety Nine Sdn Bhd.

4.1. Extent of Adherence by the Principles

While previous analysis shows how individual company performs in relation to the principles, it will also be of interest to find out which principles are widely adopted and which ones are less adopted. Hence further analysis is done where an aggregate value is computed. Hence, one point is assigned to each tick (√) that appears on each table, and the total number of ticks is summated. Since the number of criteria used for each principle is not the same, a percentage is used. The result is presented in Table 6.

Table 6. Adherence to each principle.

| | Princ. 1 | Princ. 2 | Princ. 3 | Princ. 4 | Princ. 5 |
|-------------------------|----------|----------|----------|----------|----------|
| Percentage of adherence | 68% | 78% | 39% | 47% | 20% |

Table 6 shows that principle 2, which is on Disclosure, is the most adhered to by the selected websites. Generally most of the companies in the study conform to principles 1 and 2, namely, Truthful and Accurate Communication and Disclosure. Perhaps the companies consider adherence to these principles as critical towards establishing trust with customers, and later leads them to do transaction on their websites. The other three principles, namely, Customer Satisfaction, Information Practices and Security, and Children Protection, are not well-adhered to by the selected companies. However, in this case, the study just evaluate on declared statements and indications towards this goal, as the researcher did not actually conduct a transaction to determine this. The principle that relates to protecting children under the age of 13 is the least adhered by the selected websites.

4.2. Best Practice

It is also of interest to identify which businesses adopt best practice compared to the rest. Hence, to find out which website obtains the highest score on ethical practices, the points are added for each company. The result is shown in Table 7.

From Table 7, it appears that ArthurBooks.com adhere to most of the codes of ethical online business conduct espoused by BBBOnline. This is followed by Royal Selangor and Bamboo Green Florist. The worst practice in terms of ethical web design for e-commerce is the NS Cashpoint Sdn. Bhd. Having a closer look, it seems that companies that disclose lot of information on their business, products and transactions, are not necessarily adhering well to the BBBOnline ethical code of online business as a whole. Similarly, some

companies adhere to certain principles better than others. For example, it is observed that on privacy and security practices, ArthursBooks.com Sdn Bhd., Royal Selangor International Sdn. Bhd. and Penerbitan Pelangi Sdn. Bhd. score the highest.

Table 7. Total score for each website.

| No. | Company | P1 (6) | P2 (25) | P3 (7) | P4 (6) | P5 (1) | Tot.pnt (45) |
|-----|--------------------|-----------|------------|-----------|-----------|-----------|-----------------|
| 1 | ArthursBooks.com | 4 | 24 | 6 | 5 | 1 | 40 |
| 2 | Royal Selangor | 4 | 20 | 6 | 4 | 0 | 34 |
| 3 | Bamboo Green | 4 | 24 | 2 | 4 | 0 | 34 |
| 4 | Flowers.com.my | 4 | 22 | 3 | 3 | 0 | 32 |
| 5 | Penerbitan Pelangi | 4 | 18 | 6 | 3 | 0 | 31 |
| 6 | Lillian Jewellery | 4 | 22 | 1 | 2 | 0 | 29 |
| 7 | All Ninety Nine | 4 | 17 | 2 | 3 | 1 | 27 |
| 8 | Mgt Online | 4 | 22 | 1 | 1 | 0 | 28 |
| 9 | Interbase Resource | 4 | 17 | 0 | 2 | 0 | 23 |
| 10 | NS Cashpoint | 4 | 10 | 0 | 1 | 0 | 15 |

5. Discussion

Considering the efforts and initiatives of the Malaysian government towards promoting e-commerce in the country, the adoption of this new way of conducting business is still slow among Malaysian companies, especially the B2C. Looking closer, trust could be one of the main factors inhibiting e-commerce growth. Hence, besides promoting ethical behavior, the design of company websites should also include elements that reflect trustworthiness.

This study found that generally, most Malaysian business organizations are not adhering well to the five principles espoused by the BBBOnline code of online business conduct. The code was designed to guide ethical 'business to customer' conduct in e-commerce transaction, focusing the US environment but planned to be globally accepted. It is observed that US is advance in e-commerce practice, hence, Malaysian companies should learn from the experience of American counterparts. While the country is still working on its own code of online business conduct, the BBBOnline may be used as the guiding step. The fact that most Malaysian companies are not adhering to the code reflects to some extent the lack of awareness on the implications and importance of building ethical and trustworthy websites. The use of third party seals is generally not adopted which again shows the lack of awareness on the issue.

The study shows that the selected websites particularly, do not adhere well to the principles on customer satisfaction, information practices and security, and children protection. Customer satisfaction is core to any business. The conduct of business through the Internet poses particular challenges for organizations, as the anonymity of the interactions requires fresh considerations. The key elements of customer service must be frequently revisited, for examples, an ease of access, quality of product offerings, certainty of fulfillment of requirements and efficient dispute resolution and service recovery [7].

The report in [33] indicated that the majority of participants and groups surveyed at the cyber communities forum said that one of the reasons they do not like online shopping is due to the possibility of returning items bought via the web is much lower. The fact that many of Malaysian websites do not have such indicative statements may affect the trust level of Malaysian buyers. In order for e-commerce to grow in the country, Internet sellers must gain the trust from customers by making the shopping experience easy and reliable, and have clear redemption and return policies.

The principle on information practices and security relates to the privacy and security issues. According to Paynter and Lim [25], the main obstacles that prevents Internet users from transacting over the Internet is security, not only in Malaysia but also worldwide. The finding of this study which indicates that many Malaysian companies' websites do not reflect good and secure information practices is a concern as it may hinder the growth of e-commerce in the country. While a survey of companies in Malaysia interested in e-business found that 70 percent believed that security was the most important barrier to e-commerce [1], those that have built their websites somehow did not incorporate these trustworthy elements. According to [27], for developing countries, the information security issues have been compounded by the lack of trusted certificate authorities and telecommunication systems that would provide the protection needed for e-commerce to grow in that country. On the issue of privacy, a similar observation was made by Paynter and Lim [25] when they commented that generally Malaysian e-commerce websites lack privacy declarative statements, which eventually hinders customers' trust.

Due to the nature of the internet technology, the issue on children protection is of great concern in the Western society. The Federal Trade Commission has issued rules implementing the Children's Online Privacy Protection Act (COPPA), which takes effect in April 2000 [30]. COPPA outlines basic privacy rights for children under 13 and their parents on the Internet. The Act requires an operator to notify parents if it wishes to collect personal information from the child, and needs parent's consent for such disclosure. In Malaysia, and perhaps in other developing countries as well, such an Act is yet to be passed. In general, the awareness on the importance of children protection on the Internet is not widespread among the Malaysian society, hence, companies may put low priority on the issue. As found from this study, only a small percentage of companies actually declare this policy on their websites.

This study suggests that generally, Malaysian companies are not incorporating enough trustworthy elements on their websites. As reviewed by the paper, past research indicates that website design can

influence the willingness of customers to transact online. Corbitt, Thanasankit and Yi [10] found that people are more likely to purchase from the web if they perceive a higher trust in e-commerce, and two of the factors that influence customers' trust levels are site quality and technical trustworthiness. The Internet makes it easy and simple for customers to switch and move onto the next product/service provider's website if the first exchange was not a positive experience. Hence, the managers should give due attention to the quality of their websites as the organization's image reflected by its website is critical to customers' perceived level of trust.

6. Conclusions

This study has reviewed ten Malaysian businesses websites using the BBBOnline code of practice guidelines and, in so doing, has provided us with useful information on their web design practices. The study found that some principles are well-adhered to while others need more attention. The principle which is most adhered to is principle 2 which relates to disclosure of information, followed by principle 1 which is on Truthful and Accurate Information. The evidence suggests that the principle on child protection is the least adhered to. Interestingly, the study has also revealed which companies among those selected are considered as having 'best practices' in terms of their commitment in incorporating ethical and trustworthy elements on their websites. Despite some limitations, such as, using a small number of websites and reviewers, the findings of this study shed some light on the issue of e-commerce and ethical awareness and practice in a developing country.

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