# The Influence of Website Quality on Customer E-Satisfaction in Low Cost Airline

Zainab bt Khalifah, Wong Chiet Bing, Noor Hazarina Hashim

Abstract—The evolution of customer behavior in purchasing products or services through the Internet leads to airline companies engaging in the e-ticketing process in order to maintain their business. A well-designed website is vitally significant for the airline companies to provide effective communication, support, and competitive advantage. This study was conducted to identify the dimensions of website quality for low cost airline and to investigate the relationship between the website quality and customer esatisfaction at low cost airline. A total of 381 responses were conveniently collected among local passengers at Low Cost Carrier Terminal, Kuala Lumpur via questionnaire distribution. This study found that the five determinant factors of website quality for AirAsia Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy. The results of this study revealed that there is a positive relationship between the five dimensions of website quality and customer e-satisfaction, and also information content was the most significant contributor to customer e-satisfaction.

**Keywords**—Website Quality, Customer E-Satisfaction, Low Cost Airline

# I. INTRODUCTION

In the tourism industry, online transactions have grown continuously even during the economic downturn in the late 1990s. The growing importance of the Internet as a source of information demands a greater understanding of users' acceptance of electronic travel and tourism. The knowledge is needed not only for strategic marketing formulation, but also to enable the quality of the website features and design to be superior to those of competitors.

According to [1], purchase of air tickets is the main source of the greatest amount of revenue in online travel. This is projected to grow about 40 percent from \$48 billion in 2008 to \$68 billion in 2014. In Asia, the online booking of low cost carrier is expected to reach US\$ 13.3 billion in 2013, increasing 55 percent over 2011. In 2012, AirAsia was nominated as the largest low cost carrier and fourth largest airline in Asia, having carried 37 million passengers, thus surpassing other legacy carriers [2]. AirAsia's success has shown that the phenomenon of low cost carriers has emerged all over the Asia Pacific Region and continuously dominates

Zainab binti Khalifah is with the Faculty of Management, Universiti Teknologi Malaysia, 81310 Skudai, Johor Bahru, Malaysia (phone: 607-5610100; e-mail: m-zainab@utm.my).

Wong Chiet Bing, is with the Faculty of Business and Management, Southern University College, 81300 Skudai, Johor Bahru, Malaysia (e-mail: cbwong@sc.edu.my).

Noor Hazarina Hashim is with the Faculty of Management, Universiti Teknologi Malaysia, 81310 Skudai, Johor Bahru, Malaysia (e-mail: m-hazarina@utm.mv).

the airline market in Malaysia. Airasia.com has a strong online presence having a total of 131.5 million average views per month [2]. Further, given the easy link between online social platforms and airline websites, the social activity increases the number of visitors to AirAsia's website. As the number of users of the Airasia.com website increases, the challenge is for the airline company to handle a large number of online visitors, which each of them has their own unique different experiences in the online environment. Hence, providing a quality website which will satisfy the customer is a considerable task.

As the airline industry continually undergoes a liberalization process, Malaysia is opening up new opportunities to other low cost carriers such as Malindo Airlines. Thus, the competition will increase not only in terms of price, but also customer experience and relationships. Recently, there have been numerous personal experiences, feedbacks, and complaints about the quality of website provided by AirAsia that have been highlighted by the media (social network, blog, article, newspaper, and others). Therefore, it is critical for airline companies to have the knowledge and understanding in designing a customer-based website that can help them create better relationships and interactivity with customers.

The studies of website quality in airline industries, especially low cost carriers, are limited. [3] stated that studies providing a clear view on the impact of e-service quality on satisfaction towards e-ticketing offered by airline companies, especially in Malaysia are lacking. To date, only some related studies have been found, such as those done by [3]-[6]. These studies only utilized e-service quality and consumer behavior literature to measure the customer perception toward website quality in low cost airlines, however there is still a need to combine dimensions from different disciplines in order to create new and supportive measurement tools [7], [8]. Most researchers proposed or utilized existing models to measure website quality, particularly in various products and services found in the retailing environment. However, none of the above studies have adapted and modified models from different disciplines, to identify the dimensions of their specific-related retailing website. In the study by [9], E-QUAL model was used to measure online service quality in the travel and tourism sector. While the environment is, similar, this study will adapt the E-OUAL model related to airline website. online motivation of customer as well as past studies on the travel and tourism industry respectively to develop the dimensions of low cost airline's website quality.

The purpose of this study is therefore to identify the

dimensions of website quality for low cost airline and to investigate the influence of the website quality on customer esatisfaction in low cost airline in Malaysia.

## II. LITERATURE REVIEW

# A. Customer E-Satisfaction

Over the years, there have been numerous concepts and definitions of satisfaction which have been proposed by prior researchers. It has been defined in many ways by different scholars. The experience of online shopping differs considerably from the traditional way, as customers encounter security problems as well as the inability to make a physical examination during an online purchase. Since the online environment involves interactions of both marketing and technological aspects, customer e-satisfaction is more complicated than the physical environment. According to [10], the online customer has a multi-identity, as a traditional shopper and also a computer user. This implies that attracting and retaining customers is based not only on a marketing aspect, but also on the issue of technical support. Previously, some research works have proposed and applied several factors by which to analyze customer e-satisfaction. This was based on three major qualities, namely: information quality, system quality, and service quality. However, some dimensions of these qualities are overlapping. For example, [11] mentioned that Tangible and Reliable in SERVQUAL (service quality) overlap with some of the information quality and system quality dimensions. By using e-service quality to analyze customer e-satisfaction, it may eliminate the situation of overlapping dimensions that has occurred between service quality, system quality, and information quality respectively.

# B. Website Quality

In the current trend, it is important for any business to have their own website through which to promote and sell their products and services. However, website quality becomes a key element by which to attract customers to visit and purchase any products or services online. Website quality has great influence on online business to customers (B2C) usage. Within the academic literature, website quality has been recognized as a significant factor towards the driving of e-business [12].

Researchers [13] found that customer expectations are not being met on the internet and the technical and logical aspects of an online transaction take on a heightened importance for the customer as there are no person-to-person interactions. Even though companies may try to emulate human behavior with technology, the interaction remains different since some aspects of human interaction simply cannot be replaced with technology. Thus, the absence of the human interaction aspect will have to be compensated by some "new" specific web quality factors.

# C. Conceptual Framework of This Study

There are numerous concepts and models of e-service quality which have been proposed and utilized by previous studies to evaluate the website quality in different business environments. In this study, the E-QUAL model proposed by [14] was utilized and adapted, since the model was originally developed to measure travel website quality, which has a similar context to the airline industry. As mentioned by [14], there are similarities of travel sites in the types of additional information and service they provide. These sites have become homogenous in terms of offering online reservations for hotels, airlines, and cars.

Based on adaptation and modification of E-QUAL model of website quality evaluation, online customer motivation orientation, as well as past studies on the travel and tourism industry, four of the E-QUAL model dimensions were selected. these being namely: Information Content, Navigation, Responsiveness, and Personalization. However, three of the E-QUAL dimensions such as Accessibility, Background Information and Design Presentation were omitted due to extenuating factors. Further, an additional dimension called "Security and Privacy" is included in this study as supported by evidence from previous studies. Since an online flight reservation requires personal and bank information to be divulged in the transaction process, it can lead to a high concern of customers toward the security level when providing sensitive information online.

This research explored the hypothesized influence of website quality dimensions of Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy on customer e-satisfaction. The dependent variable, customer E-satisfaction is the primary interest in this study. The conceptual framework for the study is shown in Fig. 1.

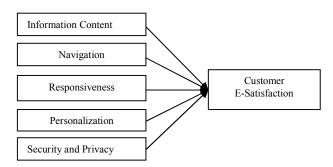


Fig. 1 Conceptual framework

## D. Hypotheses of the Study

Based on reviewed literature, relevant hypothesis were developed. The following hypotheses were projected.

- H1. There is a positive relationship between information content and customer e-satisfaction in the website quality of low cost carrier.
- H2. There is a positive relationship between navigation and customer e-satisfaction in the website quality of low cost carrier.
- H3. There is a positive relationship between responsiveness and customer e-satisfaction in the website quality of low cost carrier
- H4. There is a positive relationship between personalization and customer e-satisfaction in the website quality of low cost carrier.

H5. There is a positive relationship between security and privacy, and customer e-satisfaction in the website quality of low cost carrier.

## III. METHODOLOGY

#### A. Data Collection

In this study, multi-language questionnaires were prepared and distributed to respondents based on their most preferred language. The survey questionnaires were administered using convenience sampling method to 397 local passengers in the Low Cost Carrier Terminal (LCCT) Sepang, Kuala Lumpur. However, only a total of 381 responses were deemed useful.

#### B. Instruments

A set of questions was constructed based on the modification of previous researches related to this study. Out of all items in the five dimensions, some were proposed and adapted by authors who had deployed E-QUAL model to specific cases [9]. The remaining items were made according to several researches relating to this study, such as: [15]-[18], [3]. Customer e-satisfaction was measured by utilizing four items that were adopted and modified from the study of [19]-[21]. To evaluate the dimensions, the five point Likert scale (1 = strongly disagree to 5 = strongly agree) has been applied.

## IV. RESULTS AND DISCUSSION

## A. Respondents Demographic Profile

Table I shows the demographic profile of the 381 respondents, from which 59.8% of the respondents were male and 40.2% were female. The majority of the respondents' age was 21-30 years, which contributed to 80.1% of the total respondents. The remainder of the respondents' age groups was 31-40 years and 41-50 years respectively, namely accounting for16% and 3.9%. Furthermore, the majority of the respondents were Malay which represented 49.6% of the sample size, followed by Chinese (37.5%), Indian (2.1%), and others (10.8%).

A total of 75.3% of the respondents were single and 24.1% of the respondents were married. Meanwhile, 0.5% of respondents were described as being in 'other' status. With regard to respondent work status, full-time employment respondents contributed the highest frequency at 47.5%, followed by students at 45.9%, part-time employees at 5%, and retired citizens at 1.6%.

Furthermore, the analysis showed respondent income as follows: below RM 1,000 - 10.5%, RM 1,001 to RM 2,000-13.1%, RM 2,001 to RM 3,000-16%, RM 3,001 to RM 4,000-12.3%, RM 4,001 and above - 14.2%, and no income was listed at 33.9%. Lastly, current education levels of respondents were listed as follows: 53% Bachelor degree, 17.1% Diploma/Matriculation, 12.3% Master degree, 10.2% SPM/SPUM/MCE, 2.6% were listed as "others" level, while STPM/HSE and Doctorate/PHD levels each represented 2.4%.

TABLE I DEMOGRAPHIC PROFILE

| Variables       | Category              | Frequency | Percentage |
|-----------------|-----------------------|-----------|------------|
| Gender          | Male                  | 228       | 59.8%      |
|                 | Female                | 153       | 40.2%      |
|                 | 21 - 30 years old     | 305       | 80.1%      |
| Age             | 31 - 40 years old     | 61        | 16%        |
|                 | 41 – 50 years old     | 15        | 3.9%       |
|                 | Malay                 | 189       | 49.6%      |
|                 | Chinese               | 143       | 37.5%      |
| Race            | Indian                | 8         | 2.1%       |
|                 | Others                | 41        | 10.8%      |
|                 | Single                | 287       | 75.3%      |
| Marital         | Married               | 92        | 24.1%      |
| status          | Others                | 2         | 0.5%       |
|                 | Student               | 175       | 45.9%      |
| Work            | Full-time             | 181       | 47.5%      |
| status          | Part-time             | 19        | 5%         |
|                 | Not working           | 6         | 1.6%       |
|                 | Below RM1,000         | 40        | 10.5%      |
|                 | RM 1,001-RM 2,000     | 50        | 13.1%      |
| Monthly         | RM 2,001-RM 3,000     | 61        | 16%        |
| Income          | RM 3,001-RM 4,000     | 47        | 12.3%      |
|                 | Above RM 4,001        | 54        | 14.2%      |
|                 | No Income             | 129       | 33.9%      |
| Education level | SPM/SPUM/MCE          | 39        | 10.2%      |
|                 | STPM/HSC              | 9         | 2.4%       |
|                 | Diploma/Matriculation | 65        | 17.1%      |
|                 | Bachelor Degree       | 202       | 53%        |
|                 | Master                | 47        | 12.3%      |
|                 | Doctorate/PHD         | 9         | 2.4%       |
|                 | Others                | 10        | 2.6%       |

# B. Factor Analysis

A varimax rotated principal component factor analysis was performed on the five dimensions of website quality (Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy) consisting of 28 items. The analysis showed that 26 out of 28 items have been loaded in the Varimax Rotation Matrix which had a factor loading of more than 0.6. Meanwhile, two items (Availability of Information and Personalized Attention) were suppressed due to the factor loading value of each being less than the aforementioned standardized value [22]. The results for the factor analysis extracted five factor solution with eigenvalues greater than 1 and the total variance explained was 59.16%. The KMO measure of sampling adequacy was 0.948 while the Bartlett's test of sphericity was significant (p = 0.000 < 0.01). The results of the factor analysis were shown in Table II.

## C. Reliability Coefficient

As mentioned by [23], a value of Cronbach's alpha greater than 0.7 is considered as being highly satisfactory for most research purposes. The result of the Cronbach's alpha coefficient showed that five dimensions such as Information Content (0.865), Responsiveness (0.879), Navigation (0.856), Security and Privacy (0.861), and Personalization (0.813) were rated as being more than 0.7. Accordingly, this is considered as being reliable. Moreover, the customer's Esatisfaction variable had scored a Cronbach's alpha value of 0.895 which is greater than 0.7. Table III showed the value of Cronbach's alpha's for each variable.

TABLE II FACTOR ANALYSIS

| FACTOR ANALYSIS        |                                      |                   |  |  |  |
|------------------------|--------------------------------------|-------------------|--|--|--|
| Dimensions             | Items                                | Factor<br>loading |  |  |  |
|                        | Detailed Information                 | .767              |  |  |  |
| T. C                   | Accurate Information                 | .743              |  |  |  |
| Information<br>Content | Relevant Information                 | .731              |  |  |  |
| Content                | Updated Information                  | .713              |  |  |  |
|                        | Information Needs Fulfilment         | .684              |  |  |  |
|                        | Relevant and Accurate Response       | .803              |  |  |  |
|                        | Appropriate Response Content         | .786              |  |  |  |
| Responsiveness         | Prompt Response                      | .716              |  |  |  |
|                        | Accessibility of Customer Service    | .655              |  |  |  |
|                        | Processing Status Response           | .642              |  |  |  |
|                        | Ease of Search Facilities            | .700              |  |  |  |
|                        | Webpage Loading Speed                | .699              |  |  |  |
| Navigation             | Quick and Efficient Transaction      | .698              |  |  |  |
|                        | Simple Layout                        | .670              |  |  |  |
|                        | Ease of Navigation                   | .670              |  |  |  |
|                        | Secure Payment Method                | .826              |  |  |  |
| Security and           | Assurance                            | .782              |  |  |  |
| privacy                | Confidentiality                      | .751              |  |  |  |
|                        | Personal Security Protection         | .677              |  |  |  |
|                        | Personalized Customization           | .762              |  |  |  |
| Personalization        | Personalized Service and Information | .722              |  |  |  |
|                        | Personalized Interactivity           | .699              |  |  |  |

TABLE III RELIABILITY ANALYSIS

| Variables/ Dimension    | No of items | Alpha Coefficient |  |
|-------------------------|-------------|-------------------|--|
| Customer E-Satisfaction | 4           | 0.895             |  |
| Information Content     | 5           | 0.865             |  |
| Responsiveness          | 5           | 0.879             |  |
| Navigation              | 5           | 0.856             |  |
| Personalization         | 3           | 0.813             |  |
| Security and privacy    | 4           | 0.861             |  |

# D. Hypotheses Testing

Multiple-regression analysis was used to assess the influence of the five dimensions of website quality of Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy on customer Esatisfaction.

The results of this study show that the significant value for the entire set of independent variables such as Information Content, Navigation, and Security and Privacy had scored 0.000, while Responsiveness and Personalization had scored 0.007 and 0.008 respectively. Therefore, there are no hypotheses which have been rejected due to each dimension of website quality scoring a significant value of below 0.01, which is considered as significant. The standardized βcoefficient for five variables showed positive signs, which reflect a positive relationship between website quality dimensions and customer e-satisfaction. Thus, hypotheses 1 to 5 were accepted. The result shows that the most important contributor to customer e-satisfaction was Information Content (0.28), while the least important contributor was Personalization (0.118). Following were Security and Privacy, Navigation, and Responsiveness which accounted for 0.25,

0.217, and 0.124 respectively. The value of R2 implied that this model explained approximately 61% of the total variance in customer e-satisfaction. The results were summarized in Table IV below.

TABLE IV

| MULTIPLE REGRESSION ANALYSIS                |                               |            |                             |         |       |  |  |  |  |
|---|-------------------------------|------------|-----------------------------|---------|-------|--|--|--|--|
| Model                                       | Unstandardized<br>Coefficient |            | Standardized<br>Coefficient | t-value | Sig.  |  |  |  |  |
|   | В                             | Std. Error | Beta (β)                    |         |       |  |  |  |  |
| Dependent Variable: Customer E-Satisfaction |                               |            |                             |         |       |  |  |  |  |
| Constant                                    | 0.430                         | 0.145      | -                           | 2.971   | 0.003 |  |  |  |  |
| Information Content                         | 0.285                         | 0.043      | 0.280                       | 6.582   | 0.000 |  |  |  |  |
| Navigation                                  | 0.208                         | 0.044      | 0.217                       | 4.726   | 0.000 |  |  |  |  |
| Responsiveness                              | 0.101                         | 0.038      | 0.124                       | 2.692   | 0.007 |  |  |  |  |
| Personalization                             | 0.103                         | 0.039      | 0.118                       | 2.667   | 0.008 |  |  |  |  |
| Security and Privacy                        | 0.209                         | 0.034      | 0.250                       | 6.171   | 0.000 |  |  |  |  |

R2 = 0.611; F-value = 117.963; Adjusted R2 = 0.606; Significance = 0.000

#### V.DISCUSSION

# A. Determinant Dimensions of Airline's Website Quality

Based on the results of factor analysis, the five dimensions that describe the AirAsia website's quality were, specifically: Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy. Based on the result of total variance explained, Information Content is one of the dimensions extracted by factor analysis which has had the largest impact on improving the website quality.

# B. The Influence of the Website Quality on Customer E-Satisfaction in Low Cost Carrier

As expected, the results of multiple regression analysis indicated that there is a significant positive relationship between Information Content and Customer E-satisfaction in the website quality of AirAsia. Hypothesis H1 ( $\beta=0.28,\,p<0.01$ ) is supported by the finding of this study. This finding is consistent with previous research studies [24], [25], [17]. In addition, Information Content was found to have the highest value of  $\beta$ -standardized coefficient, and was considered to be the most significant contributor to customer e-satisfaction. This reflects that Information Content is a strong predictor of customer satisfaction when using the AirAsia website. If the dimension is emphasized strongly, it will achieve the maximum level of e-satisfaction.

The second hypothesis of the study confirms that Hypothesis H2 ( $\beta$  = 0.217, p< 0.01) is accepted. This finding is consistent with prior research studies in the e-commerce field [26], [27], [3]. Researchers [28] mentioned that users can become dissatisfied if the website is difficult to navigate. If users encounter a website that is confusing and slow to process information, they begin to feel frustrated and will tend to terminate the transaction in the end [3]. In this study, five items which were found to be significant for customers when they access the AirAsia website were loaded into the navigation dimensions. These items include, namely: ease of navigation, simple layout, ease of search facilities, quick and efficient transaction, and webpage loading speed.

In this study, the result of multiple regression analysis

supports the assertion of Hypothesis H3 that responsiveness has a positive relationship with customer e-satisfaction in the AirAsia website quality ( $\beta = 0.124$ , p< 0.01). The finding is consistent with previous research studies into the website quality context [3], [9], [17], [27], [29]. Responsiveness refers to the way in which an airline website responds to customers who have encountered problems in the online environment. Customers expect airlines to answer their enquiries, questions and complaints via online services (email or live help functions) in a timely and courteous way. Normally, every airline provides a Frequently Asked Questions (FAQ) page for online customers to view should they have any enquiries. Alternatively if their enquiries are not presented on the FAQ page, there should be either a live help function in the airline website or an email to respond to their problems. According to [30], the issue of a responsive website is highly important to users as customers expect an online website to respond to their inquiries promptly.

The finding of the current study shows that Hypothesis 4 (β = 0.118, p< 0.01) which claimed a positive relationship between personalization and customer e-satisfaction in the website quality of AirAsia was also supported. This is consistent with prior studies by [3], [28], [31], [17], [27]. The three items which are loaded in this dimension consist of personalized customization, personalized interactivity, and personalized service and information respectively. Personalization is becoming an essential ingredient to websites, as there is a lack of real time interaction in the online environment. There are numerous needs from different users; they may feel delighted if they are able to modify or customise the website content to best fit their personal needs. For example, airline customers need to be able to select the following through the website, specifically: the preferred language, seat arrangement and payment methods, auto-filling of personal information, as well as the travel date and time that they wish to fly. During the process of flight booking, customers feel that they can more fully investigate preferences online rather than offline. This shows that the airline cares for their customers and understands that they have individual needs. It also demonstrates that they are providing preferences in the website to satisfy those specific needs. Thus, the customers feel respected in being able to represent their creativities and ideas into the services provided on the website.

Security and privacy of an airline's website was found to have a significant positive influence on customer e-satisfaction toward AirAsia's website quality. The finding confirms that the assertion of Hypothesis H5 ( $\beta$  = 0.250, p< 0.01) was accepted. The finding was consistent with that of prior researchers [32]-[34], [27], [17], [3]. Out of the five dimensions, Security and Privacy has the second-highest value of  $\beta$ -standardized coefficient, and is considered as being a significant contributor to customer e-satisfaction. This clearly reflects that online users are very concerned about security and privacy when they access an airline website. In addition, the issue of security and privacy has been a global phenomenon [35], [36]. The four items corresponding to this dimension

were personal security protection, secure payment method, assurance, and confidentiality respectively. As mentioned by [37], customers are concerned about security and privacy due to various reasons ranging from spam attacks to online identity theft.

#### VI. IMPLICATIONS AND LIMITATION

The results from the factor analysis indicated that 22 items were loaded into 5 dimensions. These consisted of, namely: Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy, which constituted the website quality of AirAsia. Out of the five dimensions, Information Content demonstrated the highest percentage of variance for website quality dimensions, reflecting the fact that it had a significant impact on improvement of website quality. Moreover, Information Content was found to be the most important factor perceived by airline online users in Malaysia. Other than that, the results of the study indicate that there is a significant positive relationship between AirAsia's website quality and customer e-satisfaction. As airline companies come to understand which dimensions of website quality are viewed as being more important for customers, they can move towards determining and enhancing performance in those dimensions. However, strong and positive customer e-satisfaction can be developed by improvement or enhancement of the website quality. In general, an airline company should look at all the five dimensions which have been identified, in order to achieve a higher level of overall website quality. The results found that Information Content was the most significant contributor to customer e-satisfaction. Therefore, the Information Content should be highly focused, in order to improve website quality and increase customer e-satisfaction. It is recommended that airline management should focus on meeting all the criteria, particularly the Information Content dimension, as this exerts the greatest influence on customer e-satisfaction.

Poor information presented in a website may lead to misunderstanding, misinterpretation, and confusion of customers toward the information delivered by an airline. The key reason for travellers making online bookings via a travel website is due to the quality of information [38]. In order to have better Information Content, an airline company needs to deliver updated, detailed, relevant, need-fulfilling and accurate information to customers. This will enable customers to clearly understand and interpret the information provided by the flight service in order to make an informed decision. An airline company should regularly update information content regarding flight availability (dates of flight availability, prices, and seating arrangements) in their website to enable customers to receive accurate and up-to-date information. Researchers [39] also mentioned the importance of highly accurate and current information being delivered by travel and tourism operators in order to attract customers to the website. However, inaccurate and out-of-date information may mislead customers regarding the flight service information being delivered. For example, in the event of the flight being overbooked, customers are still permitted to make their

bookings based on incorrect information. It is sometimes not until reaching the payment page that customers are informed that, in fact, no more seats are available on that particular date. Consequently, this may leave a customer with negative feelings about the airline because of the unpleasant online experience. Hence, it may also lead to customer dissatisfaction. Furthermore, detailed and relevant information should be presented in the airline website to meet a website user's needs and reduce uncertainty regarding the information delivered (flight information, terms and conditions, and advertisement content). Many customers are likely to search for and compare flight dates, times, and prices on airline websites before making their purchase. Accordingly, they must have in-depth and relevant information on which to base their decision. The more detailed and relevant the information content delivered to the user, the higher the understandable level of information and the lower the perceived risk will be experienced. Basically, the content of the company's policy statement is attached in a website written in technical language. Hence, a clear and comprehensive version should be provided enabling customers to easily understand the attached policies and finally create a sensation of trustworthiness for

There are some limitations that the researcher encountered whilst carrying out this research. In addition, some recommendations are proposed for future research based on the limitations found.

Although the sample of the research consisted of people from different backgrounds, it did not however represent actual responses of large populations in the whole of Malaysia. In this study, the questionnaire distribution was conducted mainly at a single airport (LCCT Sepang), and the results might only be applicable for the population of this particular setting. In future studies, it is recommended that the study be conducted at every airport located in all states. In this way, a larger sector of the population of Malaysia could be represented. Moreover, large samples are highly recommended in order to gain a more accurate response.

The study employed a manual method by which to administer the questionnaire to the selected respondents at LCCT, Sepang (i.e. by hand). However, it is both time and resource-consuming for a study of this nature, since not many passengers are willing to spend time to answer a detailed questionnaire. Extra questionnaires were prepared and distributed to respondents due to some people not having returned the questionnaire. With reference to the data collection method, it is recommended for further studies to collect the data by using an online web survey website, in preference to the manual method. It may succeed in saving both time and resources. In addition, qualitative methods are highly considered for future use, as these may provide clearer and in-depth views of customer perceptions.

The research framework of this study was focused only on determining the website quality of low cost carriers, specifically AirAsia. The findings and results might only be applicable to airlines having a similarity of website structure. Further research studies should assess the website quality of

different airline companies in order to acquire a comparative overview of the findings.

In factor analysis, the percentage of variance for the website quality dimensions of this study recorded 59%. Therefore, further research is needed to validate the remaining 41% of unexplained variations so as to obtain more representative website quality dimensions of the AirAsia website. Other dimensions such as transaction utility, profile usability, and web check-in functionality should be included and examined in a further study, in order to obtain more variance of representatives for the airline's website quality.

This study has constructed a framework by which to examine the relationship between website quality and customer e-satisfaction for airline industry. Thus, it is recommended that a further study be carried out to extend the causal relationship framework to include, namely: e-purchase intention, word of mouth communication, willingness to recommend to others, and e-loyalty. At the same time, it would be interesting to add a promotional advertisement factor since promotion strategy is the main focus for low cost carriers by which to run their business.

#### VII. CONCLUSION

In this study, the five proposed dimensions of website quality are based on modification and adaptation of EQUAL model, airline website quality evaluation instrument, previous studies on travel and tourism, and online customer motivation respectively. The determinant factors for AirAsia website quality were, specifically: Information Content, Navigation, Responsiveness, Personalization, and Security and Privacy. Information Content was shown to have the most significant impact on improving website quality. As expected, it was confirmed that these five dimensions had a positive relationship with customer e-satisfaction in the AirAsia website. It also proved that Information Content was the most significant contributing factor to customer e-satisfaction. The findings suggested that it is essential to improve several website quality dimensions to ensure high level of customer esatisfaction. It also useful especially for airline management that rely upon website quality to improve sale.

#### REFERENCES

- eMarketer, "Asia-Pacific is to lead the World in Online Sales by 2013," August 2012, Retrieved on 27 December 2012 from http://www.newmediatrendwatch.com/news/1089-asia-pacific-is-to-lead-the-world-in-online-sales-by-2013.
- [2] AirAsia, "AirAsia named World's Leading Low Cost Airline. 1 December 2013," Retrieved on 20 January 2014 from http://www.airasia.com/ my/en/press-releases/ airasia- named-worlds-leading-low-cost-airline.page.
- [3] T. C. Lau, C. H. Kwek, and H. P. Tan, "Airline e-Ticketing Service: How e-Service Quality and Customer Satisfaction Impacted Purchase Intention," *International Business Management* 5(4), 2011, pp. 200-208.
- [4] M. A. C. Ahmad, Relationship between Online Service Quality Dimensions and Customers' Satisfaction: A Study of Electronic Ticketing (e-Ticketing) System in Airasia Berhad, 2011 Master thesis, Universiti Utara Malaysia.
- [5] A. S. Tan., Determining Online Service Quality in Airline Industry: A Case Study of Airasia Berhad at Sultan Ismail International Airport, Johor Darul Takzim, 2007, Project Paper, Universiti Teknologi Malaysia.

- [6] Y. S. Kueh., Determinant Dimensions of E-Service Quality and Its Effect on E-Satisfaction in Airline Service: A Case Study of Malaysia Airline, 2011, Project Paper, Universiti Teknologi Malaysia.
- [7] C.M.K. Cheung., G. W. W. Chan., and M. Limayem, "A Critical Review Of Online Consumer Behavior: Empirical research," *Journal of Electronic Commerce in Organizations*, 3(4), 2005, pp.1–19.
- [8] C. Dennis, B. Merrilees, C. Jayawardhena, L. T. Wright, "E-Consumer Behaviour," European Journal of Marketing, 43(9/10), 2009, pp.1121-1139
- [9] C. Ho, and Y. Lee., "The Development of an E-Travel Service Quality Scale," *Tourism Management*, 28(6), 2007, pp.1434-1449.
- [10] Straub, Detmar, and Richard, T. Watson, "Transformational Issues in Researching IS and Net-Enabled Organizations," *Information Systems Research*, 12 (4), 2001, pp.337 – 45.
- [11] C. M. K. Cheung., and M. K. O. Lee, "Research Framework for Consumer Satisfaction with Internet Shopping. City University of Hong Kong, China," Sprouts: Working Papers on Information Systems, 5(26). 2005, http://sprouts.aisnet.org/5-26.
- [12] M. F. M. Sam. and M. N. H. Tahir, "Website Quality and Consumer Online Purchase Intention of Air Ticket," *International Journal of Basic* and Applied Sciences. IJBAS, Vol. 9, No. 10, 2009, pp.20-25.
- [13] M. Long., and C. McMellon, "Exploring Determinants of Retail Service Quality on the Internet," *Journal of Service Marketing*, 18(1), 2004, pp.78-90.
- [14] S. A. Kaynama. and C. I. Black., "A Proposal to Assess the Service Quality of Online Travel Agencies: An Exploratory Study," *Journal of Professional Services Marketing*, 21(1), 2000, pp.63–89.
- [15] J. E. Mills., and A. M. Morrison, "Measuring Customer Satisfaction with Online Travel, In Frew, A., Hitz M. and O'Connor, P. (Ed.)," Information and Communication Technology 2003: Proceedings of the International Conference in Helsinki, Finland, 2003, pp.10-19, Austria: Springer-Verlag Wien.
- [16] H. Murphy., and A. Leung, "E-service Quality, Perceived Value, Satisfaction and Loyalty: An Investigation of a Third Party Website," Proceedings of the EUROCHRIE conference, 2010.
- [17] V. D. Merwe, The Impact of Electronic Service Quality Dimensions on Customer Satisfaction, Master Theses in Business Management. University of Nelson Mandela Metropolitan, 2011, From http://hdl.handle.net/10948/1367
- [18] F. Lee, and W. Wu, "Moderating Effects of Technology Acceptance Perspectives on E-Service Quality Formation: Evidence from Airline Websites in Taiwan," *Expert Systems with Applications*, 38, 2011, pp.7766–7773.
- [19] S. Forgas., M. A. Moliner., J. Sánchez, R. Palau., "Antecedents of airline passenger loyalty: low-cost versus traditional airlines," *J Air Transp Manag* 16(4), 2010, pp.229-233.
- [20] Y. Hur., Y. J. Ko, and J. S. Valacich, "A Structural Model of the Relationships between Sport Web Quality, E-Satisfaction, E-Loyalty, and Behavioral Intention," *Journal of Sport Management*, 25, 2011, pp.576-592.
- [21] H. Y. Ha, and S. Janda, "An Empirical Test of a Proposed Customer Satisfaction Model in E-Services," *Journal of Services Marketing*. 22(5), 2008, pp.399-408.
- [22] J. F. Hair., W. C. Black., B. J. Babin, R. E. Anderson., and R. L. Latham., *Multivariate Data Analysis*. (6<sup>th</sup> Ed.). New Jersey: Prentice Hall. 2006.
- [23] J. F. Jr. Hair., R. E. Anderson., R. L. Tatham., and W. C. Black., Multivariate Data Analysis. (3rd Ed.). Macmillan Publishing Company, New York, USA, 1995.
- [24] W. G. Kim, and H. Y. Lee., "Comparison of Web Service Quality between Online Travel Agencies and Online Travel Suppliers," *Journal of Travel and Tourism Marketing* 17 (2-3), 2004, pp. 105-116.
- of Travel and Tourism Marketing 17 (2-3), 2004, pp.105-116.
  [25] V. McKinney, K. Yoon, and F. Zahedi., "The Measurement of Web-Customer Satisfaction: An Expectation and Disconfirmation Approach," Information Systems Research, Vol. 13 No. 3, 2002, pp.296-315.
- [26] C. Jayawardhena, and P. Foley, "Changes in Banking Sector The Case of Internet Banking in UK," *Journal of Internet Research: Networking and Policy*, Vol. 10 No. 1, 2000, pp.19-30.
- [27] K. Nusair, K. and J. Kandampully., "The Antecedents of Customer Satisfaction with Online Travel Services: A Conceptual Model," *European Business Review*, 20(1), 2008, pp.4-19.
- [28] C. N. Madu, and A. A. Madu, "Dimensions of E-quality," *International Journal of Quality and Reliability Management*, 19 (3), 2002, pp.246-258.

- [29] G. G. L., and H. F. L., "Customer Perceptions of E-Service Quality in Online Shopping," *International Journal of Retail Distribution Management*, 3, 2005, pp.161-176.
- [30] S. Robbins., and A. Stylianou, "Global Corporate Web Sites: An Empirical Investigation of Content and Design," *Information and Management*, 40(3), 2003, pp.205-12.
- [31] Y. J. M. Kim., T.I. Eom., and J. H. Ahn, "Measuring IS Service Quality in The Context of the Service Quality-User Satisfaction Relationship," J. Inf. Technol. Theo. Appl. 7(2), 2005, pp.53–70.
- [32] D. M. Szymanski, and R. T. Hise, (2000). E-satisfaction: An initial examination. *Journal of Retailing*, 76(3), 2000, pp.309–322.
- [33] V. A. Zeithaml., A. Parasuraman., and A. Malhotra., "Service Quality Delivery through Web Sites: A Critical Review of Extant Knowledge," *Journal of the Academy of Marketing Science*, Vol 30, No (4), 2002, pp.362-375.
- [34] M. Moharrer., H. Tahayori., A. Albadavi., S. H. Zegori, and H. Perzon, "Satisfaction in e-tourism: A case of European online customers," IADIS International Conference e-Commerce, Sandeep Krishnamurthy and Pedro IsaÃas: 2006, pp.303 - 307.
- [35] M. Buys, and I. Brown, "Customer Satisfaction with Internet Banking Websites: An Empirical Test and Validation of a Measuring Instrument," Proceedings of the 2004 Annual Research Conference of the South African Institute of Computer Scientists and Information Technologist, in developing Countries, Western Cape, South Africa. 2004
- [36] S. C. Chan, and M. T. Lu., "Understanding Internet Banking Adoption and Use Behavior: A Hong Kong Perspective," *Journal of Global Information Management*, 12(3), July-Sep, 2004, pp.21-43.
- [37] M. Wolfinbarger, and M. Gilly, "Etailq: Dimensionalizing, Measuring and Predicting Etail Quality," *Journal of Retailing*, Volume 79, Issue 3, 2003, pp. 183-198
- [38] R. R. Perdue, "Internet Site Evaluations: The Influence of Behavioural Experience, Existing Images, and Selected Website Characteristics," *Journal of Travel and Tourism Marketing*, 11(2/3), 2001, pp.21–38.
- [39] C. Standing, Internet Commerce Development. Norwood, MA: Artech House Inc. 2000.