

**THE ROLES OF ADVERTISING AND PRODUCT QUALITY  
ON ONLINE CUSTOMERS' SATISFACTION**

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**UNIVERSITI UTARA MALAYSIA  
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**THE ROLES OF ADVERTISING AND PRODUCT QUALITY  
ON ONLINE CUSTOMERS' SATISFACTION**

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**Thesis Submitted to the Centre for Graduate Studies,  
Universiti Utara Malaysia, in Fulfillment of the Requirement  
for the Degree of Masters of Business Administration**

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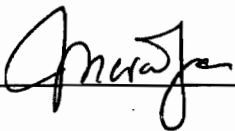
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# ABSTRACT

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The daily growth of the internet and e commerce has changed the way of marketing and selling product and service. Internet is changing the way corporation conduct business with their consumers who are increasingly expecting higher service, becoming time saved, and wanting more convenience. The Internet has significantly increased the bargaining power of consumers and to sustain in this business field, business organization need to know how to satisfy their customer. The purpose of this research is to study the factor affected customer satisfaction towards online shopping among staff at University Utara Malaysia (UUM). The objectives of the study were 1) to determine which factor more contribute in online customer satisfaction among staff in UUM and 2) to examine the relationship between online customer satisfaction and quality of advertising, and product/service quality among staff in UUM. Data were collected from 60 from academic and non-academic staff by using simple random sampling where every element in the population will have an equal chance of being included in the sample. Further, in this study data were analyzed using SPSS version 14.0 and the tests conducted were Pearson's Correlation and multiple regression. From the correlation and multiple regression analysis, the result indicates that the factor more contribute in online customer satisfaction is a quality of advertising compared with product/service quality factor. Besides, all the factor have a significantly and positive relationship towards customer satisfaction Recommendations for future research were also discussed.

# ABSTRAK

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Perkembangan harian internet dan e-commerce pada masa kini telah mengubah cara dalam pemasaran dan penjualan produk dan perkhidmatan. Internet juga telah mengubah cara syarikat menjalankan perniagaan dengan pelanggan mereka yang semakin mengharapkan perkhidmatan yang bermutu tinggi, menjimatkan masa dan menginginkan lebih kemudahan. Internet secara signifikan telah meningkatkan daya tawar pelanggan dan untuk bertahan dalam bidang perniagaan ini, organisasi perniagaan perlu tahu bagaimana memuaskan pelanggan mereka. Kajian ini dilakukan adalah untuk mempelajari faktor yang mempengaruhi kepuasan pelanggan terhadap perbelanjaan secara online di kalangan kakitangan Universiti Utara Malaysia (UUM). Tujuan kajian ini adalah 1) untuk menentukan faktor yang lebih berperanan dalam kepuasan pelanggan talian antara kakitangan di UUM dan 2) untuk menguji hubungan antara kepuasan pelanggan dalam talian dan kualiti iklan, dan kualiti produk / perkhidmatan antara kakitangan di UUM. Data yang dikumpulkan adalah sebanyak 60 orang daripada kakitangan akademik dan bukan akademik dengan menggunakan kaedah sampling secara rawak di mana setiap elemen dalam populasi akan mempunyai peluang yang sama untuk termasuk dalam sampel. Seterusnya, dalam kajian ini, data dianalisis dengan menggunakan SPSS versi 14.0 dan ujian terhadap data pula menggunakan Korelasi Pearson dan regresi berganda. Daripada hasil dapatan analisis korelasi dan analisis regresi berganda, menunjukkan bahawa faktor kualiti pengiklanan memberikan pengaruh yang sangat tinggi terhadap kepuasan pelanggan secara talian berbanding dengan faktor kualiti produk/perkhidmatan. Selain itu, keputusan analisis juga menunjukkan semua faktor tersebut mempunyai hubungan yang signifikan dan positif terhadap kepuasan pelanggan. Disamping itu, cadangan untuk kajian pada masa akan datang juga dibincangkan.

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# LIST OF ABBREVIATIONS

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- **UUM**                      Universiti Utara Malaysia
- **ICT**                      Information and Communication Technology
- **FAQs**                    Frequently Asked Questions
- **SERVQUAL**            Service Quality
- **SITEQUAL**            Website Quality
- **SPSS**                    Statistical Package for Social Science

# 1

## INTRODUCTION

---

### 1.0 CHAPTER INTRODUCTION

This chapter provides a general idea about the background of the study, problem statement, research questions, research objectives and significance of the study. Besides, limitation of the study and organization of the study also provided.

### 1.1 BACKGROUND OF THE STUDY

Internet has been the revolutionary technology of the new millennium, empowering consumers and business with connectivity. Its enables consumers and companies to access and share huge amount of information with just few mouse clicks. In the emerging global economy, e-commerce and e-business have increasingly become a necessary component of business strategy and a strong catalyst for economic development. The integration of information and communications



technology (ICT) in business has revolutionized relationships within organizations and those between and among organizations and individuals. Specifically, the use of ICT in business has enhanced productivity, encouraged greater customer participation, and enabled mass customization, besides reducing costs.

In Malaysia today, usage of internet and multimedia by public, corporate sectors and government are increased. According to Statistic report by the Internet World Stats (2009) internet penetration in Asia itself indicate 545.9 % growth based on usage of internet from year 2000 to year 2009. Malaysia internet usages are also showing growth and increment of internet user. Based on the favorable potential and environment, there are many retailers and business companies using internet as their alternative distribution channel and try to gain profit and benefit to make them more competitive in the global competition.

The Internet has significantly increased the bargaining power of consumers. Many online shopping search engines allow consumers to find most retailers that sell a specific product, compare product prices, and review detailed store ratings. With competition just a click away, online retailers have little control over where consumers would shop. Offering the lowest price alone does not always guarantee that consumers will come and buy at your site. Other non-price attributes, such as service quality and a merchant's brand recognition, also play important roles in helping online retailers to build competitive advantages. Many companies believe that there is money to be made as soon as the internet becomes popular. In the retailers' opinion, the future of Internet shopping will always be bright however; nothing is guaranteed success for retailers and companies in e-commerce (Ahasanul Haque *et al*, 2006).

The key to success in internet businesses is in the hands of customers whereas they know what they want, and they know what they are willing to spend money on. To be successful, organizations must look into the needs and wants of their customers. A business owner's ability to understand customer experience and turn it to customer care will determine the measure of his success. Today, more than ever, online businesses need to emphasize customer care and experience in order to maximize customer loyalty and keep up with competition that is always only one click away.

Satisfaction plays a particularly important role in competitive environments such as e-commerce because of its impact on customer loyalty (Auh and Johnson, 1998; Shankar *et al.*, 2000; Soëderlund, 1998; Zeithaml *et al.*, 1996). Satisfaction is a feeling which results from a process of evaluating what was received against that expected, the purchase decision itself and the fulfillment of needs or want (Armstrong & Kotler, 2005). Kotler, (2009) also noted that satisfaction is a person feeling of pleasure or disappointment that result from comparing a product's perceived performance (or outcome) to their expectation.

In order to attract new customers and as well to retain the current customer online shopping organization need to know the factors that affect customer satisfaction whereas indirectly will influence the customer loyalty, so that steps can be undertaken to keep these customers. The customer satisfaction seem realistic in the current dynamic market structure that defines the online shopping and may expose some of the critical factors of satisfaction as a process (Sharon, 2003). By understanding and identify online shopping behavior of individual customers, the business owner can therefore suggest appropriate products to meet their needs.

Hence, this study is to identify the factor effecting online customer satisfaction such as advertisement and product or service quality and then their relationship with customer satisfaction.

## **1.2 PROBLEM STATEMENT**

Nowadays, online business become more popular and has grown every year. However, some business do not sustain long in their market place. The business owner's face many problems and the one of the problem is fulfill the customer needs to attract they buy our product or use our service. So, the business owner's should be aware of the customers' needs and requirements which are always change and pose challenges to them in creating customers value. Customer satisfaction does have a positive effect on an organization's profitability.

According to Hoyer and MacInnis (2001), satisfied customers form the foundation of any successful business as customer satisfaction leads to repeat purchase, brand loyalty, and positive word of mouth. They also should manage their customers, competitors, and internal business management effectively to ensure their success in businesses are sustain long in their market place. This requires them to study and know their customer. Satisfied customers are central to a long-term success of business, and a linkage between customer satisfaction and customer behavior has been well documented in marketing literature.

Besides, the Internet-based electronic commerce environment enables consumers to search for information and purchase products or services through direct interaction with the

online store. That is, consumer purchases are mainly based on the cyberspace appearance such as pictures, images, quality information, and video clips of the product, not on the actual experience (Lohse and Spiller, 1998; Kolesar and Galbraith, 2000). Shopping at an online store is like shopping through a paper catalog because both involve mail delivery of the purchases and in both cases customers cannot touch or smell the items (Spiller and Lohse, 1997). So, the promise of electronic commerce and online shopping depends to a great extent on user interface and how people interact with computer (Hoque and Lohse, 1999; Griffith *et al.*, 2001). Hence, the business owner's need alert and understand about online business environment to driven them success in future, if they fail to adopt online environment at the beginning of their business, it may adversely affect their business performance.

### **1.3 RESEARCH QUESTIONS**

The present study focuses on the systematic response behavior of consumer shopping in the online environment. The question mainly focuses on customer satisfaction in purchasing products online.

Three research questions have been developed for this study and it is related to the factor effecting of online customer satisfaction. The three questions are:

- i. Is there any relationship between quality of advertising and online customer satisfaction among staff in UUM?

- ii. Is there any relationship between product/service quality and online customer satisfaction among staff in UUM?

#### **1.4 RESEARCH OBJECTIVES**

Based on research questions, two research objectives have been set. The objectives are:

- i. To determine the influence of quality of advertising on online customer satisfaction among staff in UUM.
- ii. To determine the influence of product/service quality on online customer satisfaction among staff in UUM.

#### **1.5 SIGNIFICANCE OF THE STUDY**

This study is designed to provide the benefit for marketing practitioner, especially for online business. For marketing practitioner, the aim is to offer a holistic and in-depth overview of how customer form, experience and exploit their satisfaction towards service or product that offered in online business.

By analyzing the customer in a different background, this study can provide the marketers a better understanding of what customer needs and wants to make them satisfy in online business. Management theory illustrates that finding out about customer preferences will allow marketers to

provide customized products and superior service to current customer, which will entail further sales, as well as boost in image so that can increase customer satisfaction whereas will effect customer loyalty. High customer satisfaction leads to greater customer loyalty (Anderson and Sullivan, 1993; Boulding *et al.*, 1993; Yi, 1990), which in turn, leads to future revenue (Fornell, 1992; Bolton 1998). Through this also, new customers can be gained. Besides, the findings this study will also provide information that can be used to develop precise marketing strategy and to compete in the global market. This study can also be a foundation for other researchers on online marketplace or online business to investigate other factors that influence the ability of businesses to grow.

## **1.6 SCOPE OF THE STUDY**

This study is limited to identifying the factor affecting online customer satisfaction, and will focus on staff in University Utara Malaysia main campus. These include advertisement and product/service quality.

## **1.7 LIMITATION OF THE STUDY**

There are some limitations for this study. Firstly, this study has a limited sample to determine the factors that effecting customer satisfaction towards online shopping. The sample of this study is staffs who are working at University Utara Malaysia (UUM) and not all of them use internet application for shopping purpose.

Moreover, the level of satisfaction for every customer is very subjective due to their culture, background, perspective, races and status. Some customer might be satisfied with the basic conveniences provided but some customer might have higher expectations especially on the website quality, trust, advertisement and product or service quality. This is because; as a customers have different needs, objectives and past experiences that influence their expectation.

Lastly, limitations of the study are the constraints of time. This is because the study took only less than five months to be completed. The short period of time will somehow limit this research indirectly but will not effect in achieving the objective and goals.

## **1.8 ORGANIZATION OF THE STUDY**

This research is structured into five chapters. There are chapter one, chapter two, chapter three, chapter four and chapter five as below:

### **i. Chapter One**

This chapter explains and identifies the background of the study and the research problems that need to be solved which gives motivation to this study. The research question, objective, scope and its significance has been identified and described well.

### **ii. Chapter Two**

In this chapter, the researcher reviews the literatures based on related previous studies to support this thesis. The literature review consists of customer online

satisfaction concept, factors effecting the online customer satisfaction and their relationship.

iii. Chapter Three

This chapter describes and discusses the research methodology which is adapted in this study. The chapter mentioned the selection of the respondents, sample types and size, the development of the questionnaire for the research and data collection procedure. Chapter 3 ends with a brief description of the strategies and procedures that were used to analyze data collection from the survey.

iv. Chapter Four

Chapter Four is related to the findings of this study. Topics discussed will include data analysis, findings and discussions.

v. Chapter Five

The final chapter discusses the interpretation of the research findings from the study. The findings from this study are compared with those found in past researches. Chapter 5 concludes with discussion and some suggestions for future research are put forward.



## **1.9 CHAPTER CONCLUSION**

This chapter gives an insight of the thesis by describing the background of the study, the problem statement and the motivation factors that lead to the selection of the area studied. It also explains the research questions and objectives of conducting the study, as well as its contribution. Scope of this study, limitation, significance and organization of this study were also been described. The next chapter will discuss the literature review related to online shopping and customer satisfaction.

# 2

## LITERATURE REVIEW

---

### 2.0 CHAPTER INTRODUCTION

This section consists of relevant literature used in previous studies. In this chapter, various concepts will discuss such as customer definition and customer satisfaction. Online shopping behavior and factor affecting customer satisfactions also will be discussed. Lastly, advertisement, relationship between advertisement and online customer satisfaction, product/service quality and relationship between product/service quality and online customer satisfaction is explained.

### 2.1 DEFINITION OF CUSTOMER

The importance of customers has been highlighted by many researchers and academicians. Zairi (2000) stated that customers are the purpose of what we do and rather than them depending on us, we very much depend on them. The customer is not the source of a problem, we shouldn't perhaps make a wish that customers 'should go away' because our future and our security will be

put in jeopardy. That is the main reason why organizations today are focusing on customer satisfaction, loyalty and retention.

In general terms, a customer is a person or organization that a marketer believes will benefit from the goods and services offered by the marketer's organization. As this definition suggests, a customer is not necessarily someone who is currently purchasing from the marketer. In fact, customers may fall into one of three customer groups:

- i. **Existing Customers** – Consists of customers who have purchased or otherwise used an organization's goods or services, typically within a designated period of time. For some organizations the time frame may be short, for instance, a coffee shop may only consider someone to be an Existing Customer if they have purchased within the last three months.

Other organizations may view someone as an Existing Customer even though they have not purchased in the last few years (e.g., television manufacturer). Existing Customers are by far the most important of the three customer groups since they have a current relationship with a company and, consequently, they give a company a reason to remain in contact with them. Additionally, Existing Customers also represent the best market for future sales, especially if they are satisfied with the relationship they presently have with the marketer. Getting these Existing Customers to purchase more is significantly less expensive and time consuming than finding new

customers mainly because they know and hopefully trust the marketer and, if managed correctly, are easy to reach with promotional appeals

- ii. **Former Customers** – This group consists of those who have formerly had relations with the marketing organization typically through a previous purchase. However, the marketer no longer feels the customer is an Existing Customer either because they have not purchased from the marketer within a certain time frame or through other indications (e.g., a Former Customer just purchased a similar product from the marketer's competitor).

The value of this group to a marketer will depend on whether the customer's previous relationship was considered satisfactory to the customer or the marketer. For instance, a Former Customer who felt they were not treated well by the marketer will be more difficult to persuade to buy again compared to a Former Customer who liked the marketer but decided to buy from someone else who had a similar product that was priced lower.

- iii. **Potential Customers** – The third category of customers includes those who have yet to purchase but possess what the marketer believes are the requirements to eventually become Existing Customers. As we will see in the Targeting Markets Tutorial, the requirements to become a customer include such issues as having a need for a product, possessing the financial means to buy, and having the authority to make a buying decision. Locating Potential Customers is an ongoing process for two reasons.

First, Existing Customers may become Former Customers (e.g., decide to buy from a competitor) and, thus, must be replaced by new customers.

Second, while we noted above that Existing Customers are the best source for future sales, it is new customers that are needed in order for a business to significantly expand. For example, a company that sells only in its own country may see less room for sales growth if a high percentage of people in the country are already Existing Customers. In order to realize stronger growth the company may seek to sell their products in other countries where Potential Customers may be quite high.

## **2.2 CUSTOMER SATISFACTION**

Every successful business should fulfill their customer needs and wants whereas indirectly the customer can feel satisfy. Customers' needs state the felt deprivation of a customer and customers' wants refer to "the form taken by human needs as they are shaped by culture and individual personality" (Kotler, 2000). There are two principal interpretations of satisfaction within the literature, satisfaction as a process and satisfaction as an outcome (Parker & Mathews, 2001). Kotler (2000), defined satisfaction is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance (or outcome) in relation to his or her expectation.

By study of Stahl (1999, p. 15), satisfaction could be also viewed as the customer's feeling about the value that they received from a particular product experience. Customer value communicated to the customers then should cover what should be delivered to its customers. In this way, customer satisfaction that tells an organization how well customers feel that their existing offers are performing relative to the goal could be implicated.

Desired and anticipated values which are driven by quality specs and will therefore drive satisfaction in return are communicated through advertisements. One company that best understood this is McDonald's. According to Dodds (2003, p. 54), through consistent roll outs of advertisement worldwide, McDonald's believes that it is the total experience of what customers receive for what they pay that is true value equation.

Customer satisfaction is one of the most important issues concerning business organization of all type because customer satisfaction has a positive effect on an organization's profitability. Satisfied customers are central to the long-term success of business, and the linkage between customer satisfaction and customer behavior has been well documented in marketing literature. High consumer satisfaction leads to greater customer loyalty (Anderson and Sullivan, 1993; Boulding *et al.*, 1993; Yi, 1990), which, in turn, leads to future revenue (Fornell, 1992; Bolton, 1998).

According to Hoyer and MacInnis (2001), satisfied customers form the foundation of any successful business as customer satisfaction leads to repeat purchase, brand loyalty, and positive word of mouth. Increasing customer satisfaction has been found to lead to higher future

profitability (Anderson *et al.*, 1994), lower cost related to defective good and services (Anderson *et al.*, 1997), increased buyer willingness to pay price premiums, provide referral, and use more of product (Reichheld, 1996; Anderson & Mittal, 2000), and higher levels of customer retention and loyalty (Fornell 1992; Anderson & Sullivan, 1993; Bolton, 1998). Increasing loyalty in turn has been found to lead to increase in future revenue (Fornell 1992; Anderson *et al.*, 1994) and reduction in the cost of future transaction (Reichheld, 1996; Srivastava, *et al.*, 1998).

Besides, customer satisfaction is defined as the result of a cognitive and affective evaluation, where some comparison standard is compared to the actually perceive performance. If the perceived performance is less than expected, customer will be dissatisfied. On the other hand, if the perceived performance exceeds expectations, customer will be satisfied. Otherwise, if the perceive expectation are met with performance, customer are in an indifferent or neutral stage (Chia, 2003).

**Table 2.0 (a), (b) and (c)** below shows some of the previous study on drivers of online satisfaction.

**Table 2.0(a): Prior Research on Drivers of E-Satisfaction**

<b>Authors</b>	<b>Dependent Variable</b>	<b>Drivers</b>	<b>Comments</b>
Zeithaml et al. (2000)	e-service quality	<p>Perceived convenience</p> <ul style="list-style-type: none"> <li>• access</li> <li>• ease of navigation</li> <li>• efficiency</li> <li>• flexibility</li> </ul> <p>Perceived control</p> <ul style="list-style-type: none"> <li>• reliability</li> <li>• personalization</li> <li>• security/privacy</li> </ul>	Navigation, efficiency and access are “new” to the online environment and capture aspects of ease of use and usefulness which underlie acceptance of information technologies (Davis, 1989) Paper was conceptual.
Szymanski and Hise (2000)	e-satisfaction	<p>Convenience</p> <p>Site design</p> <p>Financial security</p> <p>Product information.</p>	Compares e-tail to retailing satisfaction, based on Web site characteristics and did not include potential drivers such as customer service.

*Continue to next page*



**Table 2.0(b): Prior Research on Drivers of E-Satisfaction**

<b>Authors</b>	<b>Dependent Variable</b>	<b>Drivers</b>	<b>Comments</b>
Francis and White (2002)	PIRQUAL (Perceived Internet Retail Quality Model)	Web store functionality Product attribute description Ownership conditions Delivered products Customer service Security	Except for product attribution description, the factors were significantly related to future visit and purchase intentions. Results confirmed proposition that online satisfaction was a function of the purchase experience, the delivery experience and the customer service (e.g. responsiveness, fix problems)/security experience.
Donthu (2001)	SITEQUAL (Internet Shopping Quality)	<p>Site-related factors</p> <ul style="list-style-type: none"> <li>• ease of use</li> <li>• aesthetic design</li> <li>• processing speed</li> <li>• security</li> </ul> <p>Vendor-related factors</p> <ul style="list-style-type: none"> <li>• competitive value</li> <li>• clarity of ordering</li> <li>• corporate and brand</li> </ul> <p>Equity</p> <ul style="list-style-type: none"> <li>• product uniqueness</li> <li>• product quality assurance</li> </ul>	A validation study indicated that SITEQUAL was directly correlated to shopping likelihood, attitude and loyalty.

*Continue to next page*

**Table 2.0(c): Prior Research on Drivers of E-Satisfaction**

<b>Authors</b>	<b>Dependent Variable</b>	<b>Drivers</b>	<b>Comments</b>
Loiacono <i>et al.</i> (2002)	WebQualTM (Web site quality – predicts Web site reuse)	<p>Ease of use</p> <ul style="list-style-type: none"> <li>• ease of understanding</li> <li>• intuitive operations</li> <li>• usefulness</li> <li>• informational fit-to task</li> <li>• interactivity</li> <li>• trust</li> <li>• response time</li> </ul> <p>Entertainment</p> <ul style="list-style-type: none"> <li>• visual appeal</li> <li>• innovativeness</li> <li>• flow emotional appeal</li> </ul> <p>Complementary relationship</p> <ul style="list-style-type: none"> <li>• consistent image</li> <li>• online completeness</li> <li>• better than other</li> <li>• channels</li> </ul>	The model exhibited both reliability and validity, and correlations between the composite WebQual measure and intention to purchase and intention to revisit were significant.
Srinivasan <i>et al.</i> (2002)	e-loyalty	<p>Customization</p> <p>Contact interaction</p> <p>Cultivation</p> <p>Care</p> <p>Community</p> <p>Choice</p> <p>Character</p>	<p>A key feature of the study was that it relied on data collected from a survey of online consumers. All data collected were from the same instrument.</p> <p>Surprisingly, convenience (i.e. ease of use) was not a driver. E-loyalty was significantly related to word of mouth and willingness to pay more.</p>

## 2.3 FACTOR AFFECTING ONLINE CUSTOMERS SATISFACTION

In recent years, online shopping has become popular due to technological advances. The Internet as a global medium is speedily gaining interest and popularity as the most revolutionary tool for marketing. It has also redefined the global nature of shopping and communications, as it is the perfect vehicle for online shopping. Customer just need surf the internet to order an amazing variety of product. Online shopping is defined as a process of building and maintaining customer relationship through online activities to facilitate the exchange of idea, products and services that satisfy the goals of both buyers and sellers (Imber & Betsy, 2000).

If companies can better understand their customers, they can present products or services more effectively and continuously improve them in order to strengthen their competitive advantage. Market orientation and customer satisfaction research show there is direct connection between customer satisfaction and organizational performance (Garver and Gagnon, 2002). Consequently, in the turbulent e-commerce environment, Internet companies need to know how to satisfy customers. This will enable them to sustain their growth and market share (McKinney et al., 2002). The customer satisfaction seem realistic in the current dynamic market structure that defines the online shopping and may expose some of the critical factors of satisfaction as a process (Sharon, 2003).

In addition, as known that online shopping environment and behavior is fundamentally different from that of a conventional retail environment (Degeratu *et al.*, 2000; Lynch and Ariely, 2000; Shankar *et al.*, 2001, 2003; Ranganathan and Ganapathy, 2002; Heiner *et al.*,

2004). It can be expected that the key drivers of customer satisfaction and retention in the Internet economy may be also different from those in the traditional economy.

Based on the different perspectives from the studies, researchers have developed and tested instruments to measure customer satisfaction towards online shopping (Szymanski and Hise, 2000; Koivumaki, 2001; Heiner *et al.*, 2004; Kim and Stoel, 2004). These researchers have done some innovative and pioneering work, but revealed conflicting findings, such as Szymanski and Hise (2000) find that web site design has the secondary significant impact on e-satisfaction, the study conducted by Kim and Lim (2001) shows that information quality has relationship with online shoppers' satisfaction, but Kim and Stoel's (2004) study indicate that web appearance and information attribute have little impact on customer satisfaction.

Moreover, Mary Wolf (2003) defined customer satisfaction as consumers' perception to their online shopping experience, and his empirical research indicates that four factors--website design, convenience, security and customer service--are positively related to customer satisfaction to the website. Liu, C. and Arnett, K. P (2000) set up an integrated framework from logistics support, customer service, product price priority and other website advantages. Wang shu-chuan (2001) discussed the probability that potential consumers go shopping in Internet from consumer characteristics, cognition and psychology, and results suggested consumer cognition and psychology have greater impact on consumer attitude and intention, but demographic characteristics does little. Aron and Tino (2003) built up a path dependence chart of consumer purchase behavior based on previous research on consumer acceptance of new technology and Internet shopping systems. In addition, product attributes, convenience, and electronic shopping

atmosphere are very important to improve interactive online efficiency. (As cited in Meilian & Yuefeng, 2008).

According to Oliver (1997), customer satisfaction as the summary psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with a customer's prior feeling about the customer experience. Szymanski and Hise (2000) then contended that consumer perceptions of online convenience, merchandising (product offerings and product information), site design, and financial security play important roles in e-satisfaction assessments.

At that time, there have been several other attempts to build an evaluation framework or identify dominant factors concerning customer satisfaction with online shopping from the perspective of web site quality (Ranganathan and Ganapathy, 2002), purchasing behavior (Koivumaki, 2001; Park and Kim, 2003), consumer attitude (Elliott and Speck, 2005), customer value (Shun and Yunjie, 2006) and service quality (Zhilin et al., 2003).

**Figure 2.0** below shows the cycle of customer satisfaction.

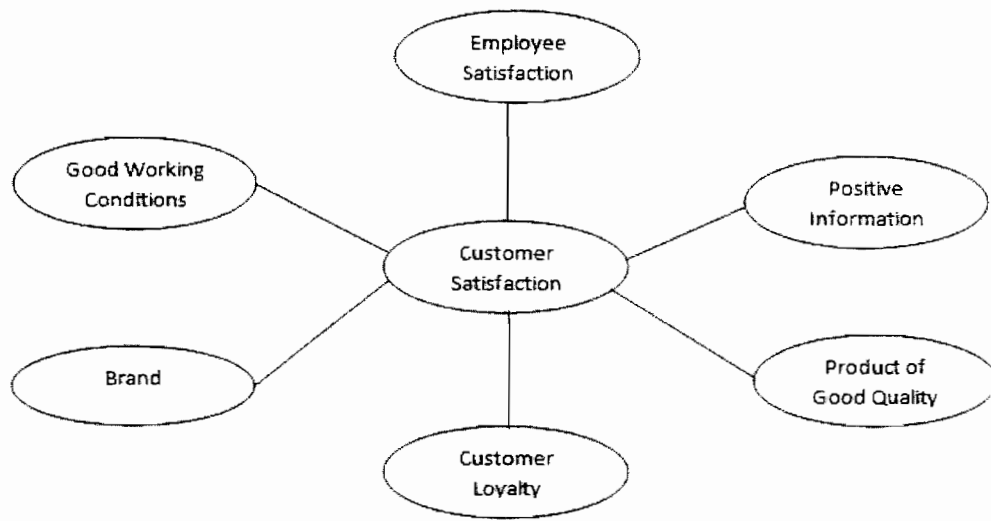


Figure 2.0: The Cycle of Customer Satisfaction

Source: *Spreng and Mackoy (1996)*

Shopping at an online store is like shopping through a paper catalog because both involve mail delivery of the purchases and in both cases customers cannot touch or smell the items (Spiller and Lohse, 1997). So, the promise of electronic commerce and online shopping depends to a great extent, on user interfaces and how people interact with computers (Hoque and Lohse, 1999; Griffith *et al.*, 2001). Moreover, the characteristics of information presentation, navigation, order fulfillment in an interactive shopping medium considered a more important factor in building electronic commerce trust than in the traditional retailing (Alba *et al.*, 1997; Reynolds, 2000).

Furthermore, based on Cheung *et al.*, (2003) studies, they summarize in a model depicting the main categories of factors affecting the online customer satisfaction. The study identifies two groups of uncontrollable factors: customer characteristics and environmental influences. Then, have a three group of controllable factors: product/service characteristics, medium characteristics and merchant/intermediary characteristics. This classification underlines the fact that most researchers endorse the suggestion that in traditional markets, the interaction of controllable and uncontrollable factors underpins also the online decision-making process (O'Cass and Fenech, 2003), (As cited in Efthymios, 2004).

The customer service and promotion are also critical in designing an online store that will effect the customer satisfaction (Jarvenpaa and Todd, 1997; Lohse and Spiller, 1998). This is because the online shopping environment enables consumers to reduce their decision-making efforts by providing vast selection, information screening, reliability and product comparison.

Based on Kotler's (1997) study, this study divides the purchasing process into three stages: information search and alternatives evaluation stage, purchase stage and post-purchase stage, and proposes a model of the satisfaction process in the e-commerce environment outlined in **Figure 2.1**.

As indicated by the below model, customers' overall satisfaction can be affected by all factors relevant to the process of online shopping.

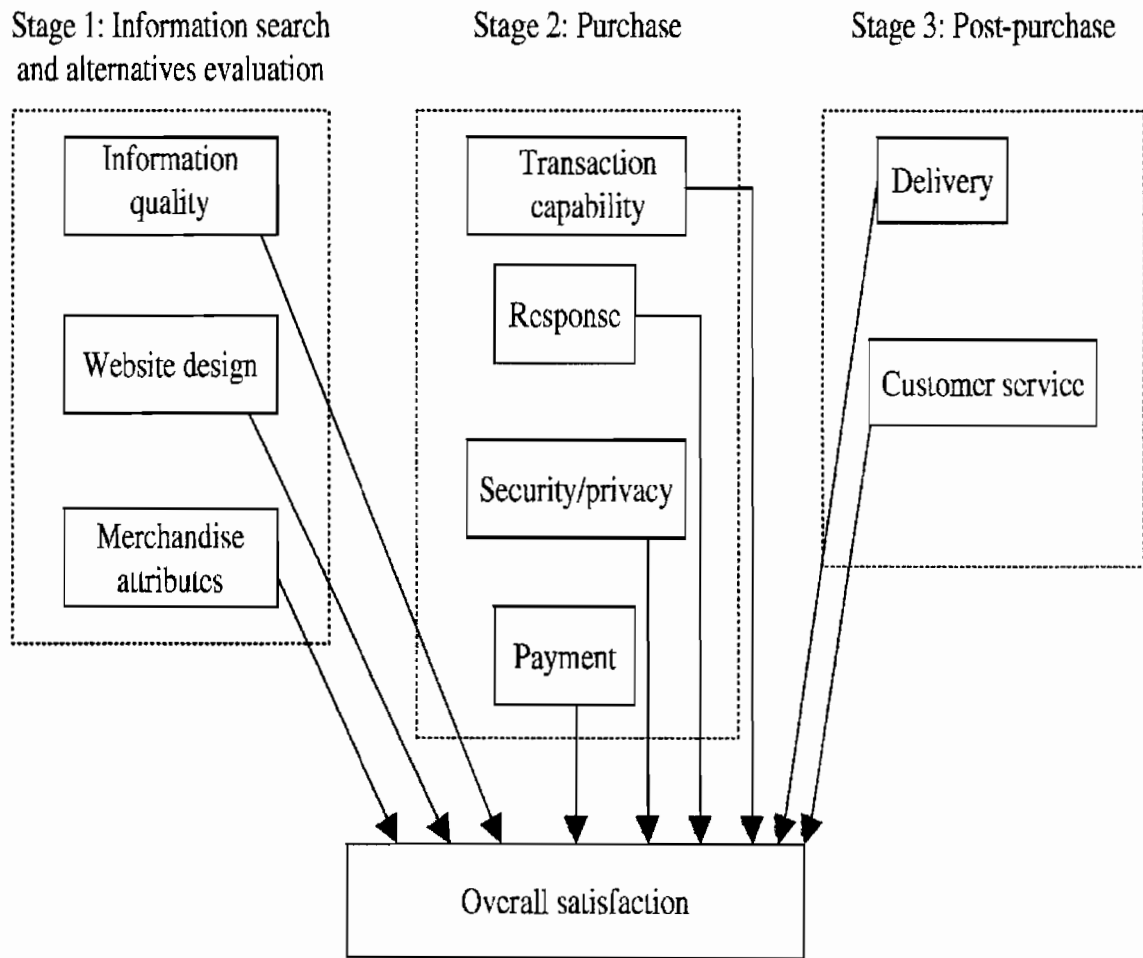


Figure 2.1 Model of the satisfaction process in e-commerce environment  
 Source: Kotler's (1997)

## 2.4 THE QUALITY OF ADVERTISING

Advertising is a form of communication intended to persuade an audience (viewers, readers or listeners) to purchase or take some action upon products, ideas, or services. It includes the name of a product or service and how that product or service could benefit the consumer, to persuade a target market to purchase or to consume that particular brand. Advertising can also serve to



communicate an idea to a large number of people in an attempt to convince them to take a certain action.

Commercial advertisers often seek to generate increased consumption of their products or services through branding, which involves the repetition of an image or product name in an effort to associate related qualities with the brand in the minds of consumers. Non-commercial advertisers who spend money to advertise items other than a consumer product or service include political parties, interest groups, religious organizations and governmental agencies. Nonprofit organizations may rely on free modes of persuasion, such as a public service announcement. Advertising and promotions is bringing a service to the attention of potential and current customers. Advertising and promotions are best carried out by implementing advertising and promotions plan. The goals of the plan should depend very much on the overall goals and strategies of the organization, and the results of the marketing analysis, including the positioning statement.

Moreover, the advertisement are in the form of a slam rectangular graphic image that is linked to a target advertisement which generally appears at the top or the bottom of web site and contain a short text or graphical message that can be customized for target audiences. According to Kierzkowski *et al.*, (1996), this can be achieved by billboard advertisement, links from other site and leveraging on existing marketing communication, termed piggy-back advertising. Companies need to develop website with customer service in mind (Karakaya, 2001).

## **2.5 RELATIONSHIP BETWEEN QUALITY OF ADVERTISING AND ONLINE CUSTOMER SATISFACTION**

In general, advertisement on the internet and traditional media are not the same, since the internet has the capacity to extend the function of advertising far beyond that which traditional media are able to accomplish (Li and Leckenby, 2004). The internet has potential to affect each component marketing mix (Gordon and Turner, 1997). This is very important for the retailers to influence the internet user to buy their product by using all the element of marketing mix. According to Strauss and Frost (2001), marketing communications consist of sale promotions, public relations; direct marketing and advertising comprise an important component of e-commerce strategy. E-marketers use these tools to create brand awareness, preference and selection. Internet advertising is an especially important part of e-communication strategy because of the vast sums spent by firms and the crucial role advertising plays in informing and persuading consumers.

Advertising is one of the main approaches for a company or a firm to employ to manage demand risk by raising awareness of their product (Bodreau and Watson, 2006). Since internet are accessible by anyone who has web browser, without barriers of location, consumers can get different type of information about the products or services by clicking symbols or links. Thus internet advertisement can be an important medium for attracting and retaining consumer (Ahasanul *et al.*, 2007). Consumer might visit a retailer's site to read customer reviews and to read from others comment about the product. By display/branding ads can also influence

consumers to the point of purchasing products online, though rarely is the impact in the form of an immediate click. (As cited in Hassan & Abdullah, 2010).

Quality of advertising is very important because it provides product and service information to customers. Product information includes product attribute information, consumer recommendations, and evaluation reports while service information that most online stores provide includes membership information, FAQs, ordering and delivery information, and promotion. The availability of information considers not only product or service but also convenience and personalization for retaining customers. It depends on the degree to which information can be employed by customers to predict their probable satisfaction with subsequent purchases. Consequently, the success of online stores will be determined by the ability to tailor their information to meet the customers' needs (Kolesar and Galbraith, 2000). To satisfy consumers' information needs, such information should be up-to-date in presenting products and services, sufficient to help consumers make choice, consistent in representing and formatting the content, and easy to understand (Wang and Strong, 1996; Zhang *et al.*, 2000).

The important factor which drives customer satisfaction is the ability of the web to provide ability of the user to control the medium. Consumers are able to tailor the web content according to their need and liking. This gives customer the same power as the content provider. Online buyers have fewer security worries, appreciate the quickness and flexibility of online buying and see the web as making buying easier. To satisfy all level of competence among consumers and their different requirement, tastes and preferences a site must offer a vast array of

features and functions which will inevitable make it slower to load and more complicated to use (Reichheld & Schefter, 2000).

In addition, according to Levine *et al.*, (2000), the consumer has to come to expect interactive links with banner advertisement and web links that provide access to the depth of information desired with the ability to purchase when they feel the time is right. Information such as discounted product and compiling special offers from several different companies selling the same product and displaying them to the public could increase customer satisfaction (Khanh & Kandampully, 2002).

Besides, a website with high information quality can help a business to deliver customized, innovative and value-added products/services to their customers (Chiu *et al.*, 2005). The more valuable and detailed the information provided on a website, the greater the likelihood that the website will gain and retain customers (Honeycutt *et al.*, 1998). Similarly, Liu and Arnett (2000) also pointed out that the higher the information quality on a website, the higher the user satisfaction, perceived benefits and level of system use.

## **2.6 PRODUCT/SERVICE QUALITY**

Quality of a product or service refers to the perception of the degree to which the product or service meets the customer's expectations. Based upon the nature of customer viewpoints and behaviors, quality of service is typically measured by the customer in terms of the "products" the customer expects to receive. Thus it is important for every organization, especially service

organizations, to determine what customers expect and then develop service products that meet or exceed those expectations. Product quality is customers' overall evaluation of the excellence of the performance of the good or service (John *et al.*, 1997).

The customer experience is defined as the aggregate of all the interactions that customers have with the company's products and services. Service quality is influenced by expectation, process quality and output quality; in other words the standards of service is defined by customers who have experienced that service and used their experience and feelings to form a judgment (Dayang & Francine, 2009). Therefore, the organizations and marketers have to understanding how consumers judge service quality.

Many researchers have recognized the need to develop measures of service quality. One of the most often used measures is the SERVQUAL based on extensive research in generic determinants of perceived service quality (Parasuraman, Berry *et al.*, 1985; Parasuraman, Berry *et al.*, 1988; Zeithaml, Parasuraman *et al.*, 1990; Parasuraman, Berry *et al.*, 1991; Parasuraman, Berry *et al.*, 1993; Parasuraman, Berry *et al.*, 1994). The SERVQUAL instrument is accepted as standard for assessing various dimensions in service quality (Buttle, 1994). It is a concise multiple-item scale with good reliability and validity that researcher can use to better understand the service expectations and perceptions of consumers and, as a result, improve service (Parasuraman *et al.*, 1988). There are five service quality dimension identified by Parasuraman *et al.*, (1988). All these five dimensions are:

- i. Tangible refers to appearance of physical facilities, equipment, personnel, and communication materials. Include all physical products that are involved in service delivery, and even other customers.
- ii. Reliability refers to ability to perform the promised service dependably and accurately, service is performed with high accuracy and thoroughness every time.
- iii. Responsiveness refers to willingness to help customers, provide prompt service and how fast the service is provided.
- iv. Assurance refers to knowledge and courtesy of employees and their ability to convey trust and confidence.
- v. Empathy refers to the firm provides care and individualized attention to its customers.

SERVQUAL was developed in the traditional marketing literature, and later was widely applied in research studying information system (IS) service quality (Van Dyke *et al.*, 1997; Van Dyke *et al.*, 1999; Jia *et al.*, 2008) and e-commerce service quality (Devaraj *et al.*, 2002; DeLone, 2003; DeLone & McLean, 2004). For example, DeLone and McLean (2004) argued that three factors including system quality, information quality, and service quality determined e-commerce system success.

Furthermore, product/service quality will affect the customer intentions to repurchase from the original seller. There is strong evidence in the marketing and operations management literatures to suggest that these two factors are key determinants of consumers' purchase intentions (Taylor and Baker 1994; Archer and Wesolowsky 1996). One set of literature has found that service quality and customer satisfaction play a key role in formulating the purchase intention among consumers (Woodside, Frey, and Daly 1989; Bitner 1990; Cronin and Taylor 1992). While another set of literature indicates that product quality and price are important determinants of shopping behavior and of product choice (Zeithaml 1988; Narasimhan, *et al.*, 1993).

## **2.7 RELATIONSHIP BETWEEN PRODUCT/SERVICE QUALITY AND ONLINE CUSTOMER SATISFACTION**

The relationship between service quality and customer satisfaction has received considerable academic attention in the past few years. This relationship has been the subject of continued debate in the marketing literature, the distinction and association between service quality and customer satisfaction remains at the forefront of many academic and practitioner- oriented research endeavors (Anderson, 1994; Brown & Swartz, 1989; Spreng & Mackoy, 1996).

Many researchers operationalised customer satisfaction by using a single term scale and many others have used multiple item scales. Service quality and customer satisfaction has been investigated, and results have shown that the two constructs are indeed independent, but are closely related, implying that an increase in one is likely to lead to an increase in the other

(Sureshchandar *et al.*, 2002). According to Zeithaml and Bitner (2003), satisfaction and service quality are fundamentally different in terms of their underlying causes and outcomes. Although they have certain things in common, satisfaction is generally viewed as a broader concept, whereas service quality assessment focuses specifically on dimensions of service. Service quality is a component of customer satisfaction. (As cited in Ogunnaike, 2010).

Besides, Parasuraman *et al.*, (1991) argued that reliability was mainly concerned with the outcome of service whereas tangibles, responsiveness, assurance and empathy were concerned with the service delivery process. The customers not only judge the accuracy and dependability (i.e. reliability) of the delivered service but they also judge the other dimensions as the service is being delivered. Customer satisfaction can thus be based not only on the judgment of customer towards the reliability of the delivered service but also on customers' experiences with the service delivery process. This is the reason why in the services literature, there is strong emphasis on the importance of service quality perceptions and the relationship between customer satisfaction and service quality (Cronin and Taylor, 1992).

Meanwhile, in one of the most eminence study also addressing the relationship between service quality and satisfaction, Spreng and Mackoy (1996) tested a model developed by Oliver (1993). Oliver's model integrates the two constructs, and suggests among other thing that perceived service quality is an antecedent to satisfaction. Spreng and Mackoy results indicate that, as predicted, service quality leads to satisfaction.



## **2.8 CHAPTER CONCLUSION**

This chapter had presented a review of literature that focused on customer satisfaction and the factor that influence of their satisfaction in the online business environment. This element is very important because its unpredictable environment and globalizations of the online business need to compete and survive. The literature reviews also explain about online shopping behavior and the relationship of the customer satisfaction with advertisement and product/service quality. The following chapter describes in the detail the procedures and methodology that were used for data collection and analysis in this study.

# 3

## RESEARCH METHODOLOGY

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### 3.0 CHAPTER INTRODUCTION

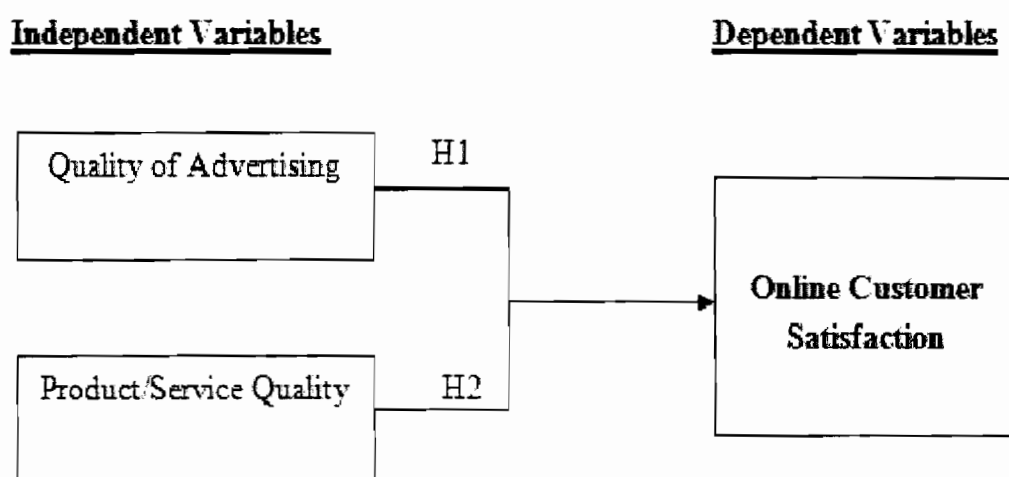
Research methodology defines what the activity of research is, how to do it, how the researchers can measure upgrading, and what represent success. This chapter presents a description of the methodology that used in this study. This chapter begins with the covered on the research framework, hypothesis, research design and measurement of variables or instrumentation. Further, data collection and techniques of data analysis is also explained in this chapter.

### 3.1 RESEARCH FRAMEWORK

Sekaran (2006) notes that a theoretical framework is a conceptual model of how one theorizes of makes logical sense of the relationships among the several factors that have been identified as important to the problem. The framework discusses the inter interrelationships among the variables that are deemed to be integral to the dynamics of the situation that are being

investigated (Sekaran, 2006). This will help the researcher to postulate or hypothesize and test certain relationships and thus to improve understanding of the dynamics of the situation (Sekaran, 2006).

In this section, a research framework is provided for this study in order to be guide and answer the questions of this study. From the literature review, there have variables that identified in the research framework in this study. The variables are quality of advertising and product/service quality as independent variables. Independent variable, as it is the variable manipulated by the researcher, thereby causing an effect or change on the dependent variable (Cooper and Schindler 2008). Besides, according to Cooper and Schindler (2008) the dependent variable is a measured, predicted, or otherwise monitored by the researcher; expected to be affected by a manipulation of the independent variable. Dependent variable for this study is online customer satisfaction. **Figure 3.0** illustrates the variables.



**Figure 3.0: Theoretical Framework**

## **3.2 HYPOTHESES**

The hypotheses that were developed for this study are as follows:

H1: There is a positive relationship between online customer satisfaction and quality of advertising.

H2: There is a positive relationship between online customer satisfaction and product/service quality.

## **3.3 RESEARCH DESIGN**

A research design is used as a basic plan of the research projects that guiding researcher to collect their data and analysis for their research. Hair and Samouel (2007) pointed out two obvious steps that would bring benefits – choose a design that (1) will provide relevant information on the research questions/hypotheses, and (2) will complete the job most efficiently. They mentioned that sometimes theory are limited or perhaps nonexistent, however when hypotheses can be developed the researcher ‘chooses the appropriate design alternatives, taking into consideration its specific purpose’ (Sekaran, 2006).

Description and hypotheses testing were the main purpose of this study. It was a cross-sectional survey design where data were collected at one time. In this type of design data are gathered just once over a period of time in order to meet the research objectives (Cavana *et. al*, 2001). Survey questionnaires method was used as means of collecting the data. This method is

cheaper and quicker as compared to other methods. The questionnaire forms were sent personally to the respondents. According to Sekaran (2000), questionnaires are the most useful data collection method when large numbers of people are involved.

Further, the unit of analysis refers to the level of aggregation of the data collected during the subsequent data analysis stage. The research is focusing on customer satisfaction in purchasing decision especially in online shopping. The unit of analysis for this study is staffs who work in UUM. They will be evaluating by the questionnaire given to prove whether quality of advertising and product/service quality will effect customer satisfaction in online purchasing.

### **3.4 MEASUREMENT OF VARIABLES**

The questionnaire is one of the main tools for collecting data from the respondents. It was necessary to employ the instruments to measure the independent and dependent variables this research. Kent (1993) stated that the advantages of using questionnaire are the order and the applicability of questions can be monitored by the interviewer. The interviewer can check the eligibility of the respondent prior to the interviewing process. It lists all the questions a researcher wishes to address to each respondent, and it provides space or some mechanism for recording the responses.

The types and designs of questionnaire that were used depend on the studies that had been carried out. In this study the questionnaire was divided into three sections with the total of 26-items. The first section has 6-items that contains of information regarding the respondent's

demographic features which includes gender, age, race, marital status, education and income level. The second section covered 8-items that measured the online customer satisfaction. The last section of the questionnaire will cover some set of question that related to factors affecting the online customer satisfaction. It has 12-items correspond to the quality of advertising and product/service quality.

**Table 3.0: Questionnaire Design**

<b>Variables</b>	<b>No. of Items</b>	<b>Items</b>
<b><u>Section A:</u></b>		
Gender	1	Section A: Item 1
Age	1	Section A: Item 2
Race	1	Section A: Item 3
Educational level	1	Section A: Item 4
Marital status	1	Section A: Item 5
Monthly income (RM/Month)	1	Section A: Item 6
<b><u>Section B</u></b>		
Online Customer Satisfaction	6	Section A: Item 1 - 6
<b><u>Section C</u></b>		
Quality of Advertising	6	Section A: Item 1 - 6
Product/Service Quality	6	Section A: Item 7 - 12

### 3.4.1 Measurement of Personal Background

This section consisted of six (6) questions to obtain respondents' demographic information. Questions asked are related to gender, age, race, educational level, marital status and monthly income.

### 3.4.2 Measurement of Online Customer Satisfaction

Questionnaire in the Section B based on customer satisfaction towards online shopping whereas to measures the level of online customer satisfaction. It is consisted 6 questions that were adapted from Hanson (2000) and Egger and Rauterberg (1996). The five-point scale is used to measure the level of online customer satisfaction as shown in **Table 3.1**. In order to answer the questionnaire, respondents have to select their choice of answer based on the five-point scale according to their experience or opinion on each question. Rating scale was from “*strongly disagree*” with a value of 1 to “*strongly agree*” with a value of 5.

**Table 3.1: Five-Point Scale for Online Customer Satisfaction**

Score	Scale
Strongly disagree	1
Disagree	2
Neutral	3
Agree	4
Strongly agree	5

The questions of the online customer satisfaction as follows:

1. The internet now day is prominent strategy.
2. The internet is safe.
3. The internet saving cost and time.
4. The internet applications supporting the shopping process.
5. I feel satisfied spend my money via the internet for shopping.
6. I frequently was using internet service in a month.

### **3.4.3 Measurement of Factor Affecting Online Customer Satisfaction**

The last section consists of questions that can measure the factor affecting of respondents satisfaction towards online shopping. The structured questionnaire consists of 12 items which is divided into two dimensions. The first dimension is quality of advertising that consist 6 questions adapted from Liu and Arnett, (2002) and the second is product/service quality that contain 6 questions (adapted from Spreng and Mackoy, 1996). Likert Scales with rating of 1 to 5 were used. The respondents were requested to indicated the extent to which they satisfied or dissatisfied to the questionnaire survey using the five point Likert Scales as shown in **Table 3.2**



**Table 3.2: Five-Point Scale for Factor Affecting Online Customer Satisfaction**

Score	Scale
Strongly dissatisfied	1
Dissatisfied	2
Somehow satisfied	3
Satisfied	4
Strongly satisfied	5

The questions of the factor affecting online customer satisfaction as follows:

**Quality Of Advertising Impact Online Shopping**

1. I think advertising online is very informative.
2. Pop-up advertisements provide me with useful information for my purchasing decision.
3. The information that I received online impacts my purchasing decision.
4. I enjoy being informed about new products via in my e-mail address.
5. I would like a greater variety of products sold online.
6. Advertisement can improve in selling products online.

### **Product/Service Quality Impact Online Shopping**

7. Product/service quality is impact my purchase decision in online shopping and my satisfaction.
8. Products sold online are cheaper than in real-time.
9. Product/service quality is one of the major criteria from time to time to shopping online.
10. Overall products that are sold online provide me with a much greater value than product sold in real time.
11. I prefer purchasing products from the same e-tailor online.
12. Quality product is a major concern in online shopping.

## **3.5 DATA COLLECTIONS**

The questionnaire is used as the main tool to collect data from the respondents. Data collected from the people or objects will provide the correct answers to solve the problem. This section discusses the population and sampling procedures, data collection procedures, and pilot test.

### **3.5.1 Population and Sampling**

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Cavana, *et al.*, 2001). The population of this study covers all staff at

Universiti Utara Malaysia (UUM). It includes staff from the academician or non-academician field.

Further, sample is a subset of the population. It comprises some members selected from it. For this study, the sample size involve is 70. A proper sampling design and size helps the researcher to draw conclusions that would be generalized to the population of interest. According to Roscoe (1975), sample sizes are larger than 30 and less than 500 are appropriate for most research, within this limits (30 to 500), the use of sample about 10% size of parent population is recommended. Sampling technique use to this research is probability sampling. Probability sampling is a sampling technique in which every member of the population has a known, nonzero probability of selection (Zikmund, *et al.*, 2010). Under this technique, the method used is a simple random sampling where every each element in the population will have an equal chance of being included in the sample. This is the least expensive technique, less time consuming, easily accessible and easy to measure compare to other sampling technique.

### **3.5.2 Data Collection Procedures**

The primary data was collected using survey questionnaire which were validated using pilot method. The questionnaires was personally distributed and administered by the researcher to the respondents. Questionnaire was distributed by hand and using the e-mail. The advantage of using mail questionnaire survey is easy to administer, can reach out globally, fast delivery and respondent can answer at their convenience, as with the mail question (Sekaran, 2006). The respondents are given a week to answer and return the questionnaire by posting it at the office

counter. Data collection was carried out from December, 30<sup>th</sup>, 2010 by hand and e-mail, and collection process was collected on January, 6<sup>th</sup>, 2010 through hand and email.

### **3.5.3 Pilot Test**

A questionnaire should be piloted with a reasonable sample of respondents representing the target population or who closely resemble the target population. Weakness in design and instrumentation can be detected thru a pilot study and it can provide proxy data for selection of profitability sample (Cooper *et al.*, 2008). In this study, 25 respondents have been selected to be in the pilot test. The questionnaires were distributed randomly to staff at College of Business and UUM Library to ensure the reliability and validity of the questionnaire before the real data collection process started.

### **3.5.4 Reliability Analysis**

Reliability testing will test the appropriateness of questionnaire used in this study. According to Cavana *et.al.*, (2001), the reliability of a measure indicates the extent to which the measure is without bias (error free) and hence offers consistent measurement across time and across the various items in the instrument. In other words, the reliability of measure indicates the stability and consistency with which the instrument measures the concept and helps to assess the 'goodness' of a measure.

Consistency indicates how well the items measuring a concept hang together as a set. The most common consistency measure is Cronbach's alpha. Cronbach's alpha will generally increase

when the correlations between the items increase. Generally, alpha value can take values between negative infinity and 1, although only positive values make sense. The closer reliability coefficient gets to 1.0 the better. Sekaran (2000) have clearly mentioned that a reliability factor less than 0.6 was considered poor, in the range of 0.6 to 0.8 acceptable and 0.8 and above was considered good. Furthermore, the alpha coefficient range from 0.8 to 0.9 indicates a very good strength of association among the instruments and the alpha coefficient that reaches more than 0.9 shows an excellent strength of association among instruments.

**Table 3.3 below** explains the level of acceptability of the instrument that is being used in this study.

**Table 3.3: Criterion for Acceptability**

Alpha Coefficient Range	Strength of Association
< 0.6	Poor
0.6 < 0.7	Moderate
0.7 < 0.8	Good
0.8 < 0.9	Very Good
= 0.9	Excellent

In this study, all the independent variables and dependent variable met the above requirement. Therefore, pilot test has been done before conducting the research in order to determine the reliability of the instruments. The results of the reliability test of the pilot instrument recorded Cronbach's alpha values 0.703 for customer satisfaction, 0.928 for quality of advertising

and 0.805 for product/service quality. Hence, variables measured in this study are considered reliable as their alpha values are 0.7 and higher. The result is shown in **Table 3.4** below.

**Table 3.4: Reliability Statistic for the Pilot Test**

Items	Number of Items	Cronbach's Alpha
Customer satisfaction	8	0.703
Quality of advertising	6	0.928
Product/service quality	6	0.805

### **3.6 TECHNIQUES OF DATA ANALYSIS**

After data have been collected from a representative sample of the population, a few procedures have been done such as checking the data for accuracy. Besides, the questions were being coded to enable for analysis. Getting a feel for the data, testing the goodness of data, and testing the hypotheses developed for the research is a three objective of the data analysis. The results of the tests will determine whether or not the hypotheses of the study substantiated.

In this study, Statistical Packages for the Social Science (SPSS) version 14.0 is used to analyze the data. SPSS is a good first statistical package for people wanting to perform quantitative research in social science because it is easy to use and because it can be a good starting point to learn more advanced statistical packages (Harvard-MIT Data Center, 2009). For

data processing, several statistical techniques were used for different purposes. These included descriptive statistics and inferential statistics.

### **3.6.1 Descriptive Statistics**

Descriptive statistics are used to present quantitative descriptions in a manageable form. Descriptive statistics such as means, standard deviations and variance and percentage values for interval-scaled for all variables were obtained. The purpose of descriptive analysis was to represent raw data transformed into a form that will make then easy to understand and interpret.

According to Leary (2004), descriptive statistics are used to summarize and describe the behavior of participants in a research. In this study, it was applied to describe the sample used in the analysis based on demographic information of the respondents such as age, gender, race marital status, education level and monthly income.

### **3.6.2 Inferential Statistics**

Inferential statistics refer to the use of current information regarding a sample of subjects in order to make assumptions about the population at large and make predictions about what might happen in the future. Inferential statistical analysis always involves the process of sampling and the selection of a small group assumed to related to the population from which it is drawn (Best & Kahn, 2003). According to Leary (2004), inferential statistics are used to draw conclusions about the reliability and generalize of one's finding.

Most of the major inferential statistics come from a general family of statistical models known as the General Linear Model. This includes the t-test, Analysis of Variance (ANOVA), Analysis of Covariance (ANCOVA), regression analysis, and many of the multivariate methods like factor analysis, multidimensional scaling, cluster analysis, discriminant function analysis, and so on. In this study, Pearson's Product-Moment Correlation Analysis (Pearson's  $r$ ) and Multi Regression Analysis will be used.

To investigate whether all factor independent and dependent variable were independent or inter correlated, a person predict moment correlation analysis conducted. The Pearson correlation will be used to measure the significance of linear bivatriate between the independent variables and dependent variables thereby achieving the objective of this study (Sakaran, 2006). Pearson correlation is appropriate for interval and ratio scale variable. The correlation is expressed as a number that can take any value between +1.0 and – 1.0 and the symbol of a correlation is  $r$ . A correlation coefficient tells two things about the relationship between two variables; the direction of the relationship and its magnitude. The closer the measure is to 1.00, the more likely the relationship is statistically significant (Muchinsky, 1993).

The interpretation of the strength of correlation according to “Guilford Rule of Thumb” is shown in **Table 3.5**.



**Table 3.5: Interpretation of Strength of Correlation Coefficient**

Value of Coefficient	Relation between Variables
0.00 – 0.30	Very low relationship
0.30 – 0.50	Low relationship
0.50 – 0.70	High relationship
0.70 – 1.00	Very high relationship

Furthermore, regression analysis will be used to test hypotheses formulated for this study. Multiple regressions will determine the significant relationship between dependent and independent variables, the direction of the relationship, the degree of the relationship and strength of the relationship (Sekaran, 2006). Hair *et al.*, (2007) explained that with multiple regression analysis, several independent variables are entered into the same type of regression equation and predict a single dependant variable, whilst a separate regression coefficient then is calculated for each independent variable that describes its individual relationship with the dependent variable. The coefficients enable the researcher to evaluate the relative influence of several independent variables on the dependant variables (Hair *et. al.*, 2007). In this study, multiple regressions will carried out to identify dominant factor among the two factors in online customer satisfaction. The factors are considered dominant if the beta value is the largest among the significant factors.

### **3.7 CHAPTER CONCLUSION**

As a conclusion, this chapter focused on the methodological issues that are relevant for the study. It discussed the research framework, hypothesis, research design and measurement of variables or instrumentation. In addition, the conducted pilot test also indicated that the instrument is useful reliable for this study. In term of data analysis technique, descriptive statistics and inferential statistics were used to analyze the data. Then, the next chapter will focus on the findings and results that were derived from the respondent responses on the questionnaires that had been distributed.

# 4

## FINDINGS

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### 4.0 CHAPTER INTRODUCTION

This chapter presents the results of the data analysis based on the analysis done on the data collected from respondents. This research focuses on the factors affecting online customer satisfaction. Descriptive and inferential analyses were performed using the Statistical Package for Social Science (SPSS) version 14 for Windows. The descriptive statistics will present the feel of the data that gives preliminary ideas how good the scales are, how well the coding and entering of data has been done, and the central tendency of the research variables. Finally, testing of the hypotheses will determine whether or not the hypotheses can be substantiated and accepted. The results gathered from the descriptive statistic analysis in this study include information those related to demographic characteristics of respondents and the results for inferential analysis highlight the hypothesis testing using Pearson Correlation and multiple regression analysis.

#### **4.1 RESPONSE RATE**

Questionnaires were distributed to 70 people who are work in UUM. The questionnaires were distributed to 4 different offices (COB main Office, Library, Faculty Accounting Office and HEA Office). After that, only 60 set were returned back to the researcher, or a response rate of 85.71%. Hence, the findings and discussion will focus on the response of the 60 respondents.

#### **4.2 DESCRIPTIVE STATISTICS**

Descriptive statistics involve transformation of raw data into a form that would provide information to describe a set of factors in a situation. This is done through ordering and manipulation of the raw data collected (Sekaran, 2000). Descriptive statistics is used in this segment to derive frequencies, percentages and to determine the mean. In this chapter, frequency analysis was used to examine the demographic characteristics of the respondents from staff at UUM. Nominal data like gender, age, race, education level, marital status and income gathered from in Section A questionnaire of the study.

##### **4.2.1 Gender of Respondents**

**Table 4.0** below shows the gender of respondents. 76.7% (46) at the respondents were female and 23.3% (14) at the respondent were male. These results clearly indicate the majority of the respondent is female.

**Table 4.0: Gender of Respondents**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	14	23.3
Female	46	76.7
<b>Total</b>	<b>60</b>	<b>100.0</b>

#### **4.2.2 Age of Respondents**

Table 4.1 shows the age of the respondents. Based on the table below, there are four group age of respondent. The age group between 23 to 27 years shows a frequency of 18 (30.0%), age group between 28 – 32 years had 16 (26.7%) and 20 (33.3%) frequency recorded by age group between 33 – 37 years. Lastly, group age for 38 years and above had a frequency of 6 (10.0%).

**Table 4.1: Age of Respondents**

<b>Age Groups</b>	<b>Frequency</b>	<b>Percent</b>
23 – 27 years	18	30.0
28 – 32 years	16	26.7
33 – 37 years	20	33.3
38 years and above	6	10.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

#### 4.2.3 Race of Respondents

In term of race, Malay had the highest frequency of 52 or 86.7% and then followed by Chinese 4 or 6.7% and Indian 4 or 6.7% of respondents. The frequency analysis data of respondent's race is shown in **Table 4.2**.

**Table 4.2: Race/Ethnic Groups of Respondents**

<b>Race/Ethnic Groups</b>	<b>Frequency</b>	<b>Percent</b>
Malay	52	86.7
Chinese	4	6.7
Indian	4	6.7
<b>Total</b>	<b>60</b>	<b>100.0</b>

#### 4.2.4 Educational Level of Respondents

Based on educational level, most of UUM staff had a bachelor degree (40.0%), followed by certificate level (36.7%) and then diploma (13.3%). Further, the lowest frequency is master level which was only 6 respondent or 10.0%. The information of this educational level is shown in **Table 4.3**.

**Table 4.3: Educational Level of Respondents**

<b>Education level</b>	<b>Frequency</b>	<b>Percent</b>
Certificate	22	36.7
Diploma	8	13.3
Degree	24	40.0
Master	6	10.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

#### **4.2.5 Marital Status of Respondents**

The marital status of students is shown in **Table 4.4**. It shows that the majority of the respondents are married (73.3% or 44) and 26.7% or 16 respondents were single.

**Table 4.4: Marital Status of Respondents**

<b>Marital Status</b>	<b>Frequency</b>	<b>Percent</b>
Single	16	26.7
Married	44	73.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

#### 4.2.6 Monthly Income of Respondents

The result of monthly income of respondents is shown in **Table 4.5**. It shows that 43.3% of the respondents (26 respondents) have incomes below between RM1500 to RM2499 and 36.7% of the respondents (22 respondents) have income between RM1000 to RM1499. On the other hand, 16.7% of the respondents (10 respondents) have incomes between RM2500 to RM4999. Then 3.3% of the respondents (2 respondents) are in less than 1000.

**Table 4.5: Monthly Income of Respondents**

<b>Monthly Income (RM/Month)</b>	<b>Frequency</b>	<b>Percent</b>
Less than 1000	2	3.3
1000 – 1499	22	36.7
1500 – 2499	26	43.3
2500 – 4999	10	16.7
<b>Total</b>	<b>60</b>	<b>100.0</b>

#### 4.3 MEAN AND STANDARD DEVIATION OF THE COLLECTED DATA

Descriptive analysis which includes the mean and standard deviation will be used to measure the percentage of variables and also be used to describe the mean of dependent and independent



variables. In this study, descriptive analysis for the dependent and independent variables are attained and recorded from **Table 4.6** to **Table 4.8**. It provides summary statistics for continuous, numeric variable, the mean, standard deviation and number of respondents (N). All variables are evaluated based on a 5-point scale. The results show that the mean on online customer satisfaction was 3.24 with SD=0.51. Then, for the quality of advertising was 3.66 with SD=0.86 and for product/service quality variable, the mean is 3.77 with SD=0.66.

#### **4.3.1 Online Customer Satisfaction**

**Table 4.6** shows mean and standard deviation scores of dependent variable “Online Customer Satisfaction”. Overall average mean for Online Customer Satisfaction is 3.24. The first item “The internet now day is prominent strategy” scored the highest mean while the fifth item “I feel satisfied spend my money via the internet for shopping” gained lowest mean of 1.93.

**Table 4.6: Mean and Standard Deviation of Items Measuring Online Customer Satisfaction**

<b>Items</b>	<b>Mean</b>	<b>Std. Deviation</b>
The internet now day is prominent strategy.	4.10	0.80
The internet is safe.	3.10	0.91
The internet saving cost and time.	3.93	0.73
The internet applications supporting the shopping process.	3.83	0.74
I feel satisfied spend my money via the internet for shopping.	1.93	0.73
I frequently was using internet service in a month.	2.57	0.93
<b>Average (Online Customer Satisfaction)</b>	<b>3.24</b>	<b>0.51</b>

#### 4.3.2 Quality of Advertising

**Table 4.7** presents the mean and standard deviation of independent variable “Quality of Advertising”. The average mean score of this variable is 3.66, while the lowest mean score is 3.40 of the item “Pop-up advertisements provide me with useful information for my purchasing decision” and the highest mean score is 3.90 of the item “Advertisement can improve in selling products online”.

**Table 4.7: Mean and Standard Deviation of Items Measuring Quality of Advertising**

Items	Mean	Std. Deviation
I think advertising online is very informative.	3.80	0.95
Pop-up advertisements provide me with useful information for my purchasing decision.	3.40	1.03
The information that I received online impacts my purchasing decision.	3.63	0.92
I enjoy being informed about new products via in my e-mail address.	3.67	0.98
I would like a greater variety of products sold online.	3.57	1.03
Advertisement can improve in selling products online.	3.90	1.08
<b>Average (Quality of Advertising)</b>	<b>3.66</b>	<b>0.86</b>

### 4.3.3 Product/Service Quality

Table 4.8 shows the results of the score and standard deviation for the independent variable “Product/Service Quality”. The last item “Quality product is a major concern in online shopping” is scored the highest mean of 4.03, while the lowest have a two items. Item fourth “Overall products that are sold online provide me with a much greater value than product sold in real time” (3.53) and item fifth “I prefer purchasing products from the same e-tailor online” (3.53) equally scored mean value.

**Table 4.8: Mean and Standard Deviation of Items Measuring Product/Service Quality**

Items	Mean	Std. Deviation
Product/service quality is impact my purchase decision in online shopping and my satisfaction.	3.83	1.08
Products sold online are cheaper than in real-time.	3.93	0.94
Product quality is one of the major criteria from time to time to shopping online.	3.73	0.86
Overall products that are sold online provide me with a much greater value than product sold in real time.	3.53	0.85
I prefer purchasing products from the same e-tailor online.	3.53	0.89
Quality product is a major concern in online shopping.	4.03	0.96
<b>Average (Product/Service Quality)</b>	<b>3.77</b>	<b>0.66</b>

## 4.4 INFERENCE STATISTICS

Inferential statistical analysis always involves the process of sampling and the selection of a small group assumed to be related to the population from which it is drawn (Best & Kahn, 2003). According to Leary (2004), inferential statistics are used to draw conclusions about the reliability and generalize of one's finding. In this study, multiple regressions were used to test the hypothesis. Multiple regressions are a technique that can be used to explore the relationship between one continuous dependent variable and a number of independent variables or predictors. Therefore, Pearson Correlation was used to find the correlation between each of the variables.

### 4.4.1 Correlation Analysis

The Pearson correlation will be used to measure the significance of linear bivariate between the independent and dependent variables thereby achieving the objective of this study (Sekaran, 2003). Variable association refers to a wide variety of coefficients which measure the strength of a relationship. Correlation is a bivariate measure of association (strength) of the relationship between two variables. It varies from 0 (random relationship) to 1 (perfect linear relationship) or -1 (perfect negative linear relationship). It is usually reported in terms of its square ( $r^2$ ), interpreted as percent of variance explained (Hair *et al.*, 2006).

**Table 4.9** displays the results of the correlation analysis of this study. The relationship between online customer satisfactions is tested against quality of advertising. The results indicate that there is a positive and significant relationship between the two variables ( $r=.749$ ,  $N=60$ ,

$p < .01$ ). According to “Guilford Rule of Thumb”, the level of correlation shows that there is a very high correlation between online customer satisfaction and quality of advertising. The relationship between online customer satisfaction and product/service quality as well is a positive and significant with record ( $r = .658$ ,  $N = 60$ ,  $p < .01$ ). The strength of correlation coefficient for these two variables is high.

Furthermore, variable of quality of advertising had a positive and significant relationship with online customer satisfaction and product/service quality that each has a value ( $r = .749$ ,  $N = 60$ ,  $p < .01$ ) and ( $r = .816$ ,  $N = 60$ ,  $p < .01$ ). The strength of correlation coefficient for these variables is very high. Then, the findings in **Table 4.9** also indicated that product/service quality was significantly correlated with customer satisfaction and quality of advertising. The results indicate that there is a positive and high relationship between quality and customer satisfaction ( $r = .658$ ,  $N = 60$ ,  $p < .01$ ) while relationship between product/service quality and quality of advertising had a positive and very high relationship ( $r = .816$ ,  $N = 60$ ,  $p < .01$ ).

**Table 4.9: Correlation Analysis**

	<b>Customer Satisfaction</b>	<b>Quality of Advertising</b>	<b>Product/Service Quality</b>
Customer satisfaction	1	.749(**)	.658(**)
Quality of advertising	.749(**)	1	.816(**)
Product/service quality	.658(**)	.816(**)	1
			60

\*\*. Correlation is significant at the 0.01 level (2-tailed)

#### 4.4.2 Regression Analysis

This section presents an analysis and discussion of the relationship between intention to use as dependent variable and the two independent variables using a multiple regression technique. Regression in the form of multiple regressions is one of the most widely used techniques when the research question is to predict a single continuous dependent variable by set of continuous and or categorical independent variables (Genser *et al.*, 2007).

In this study, regression analysis is used to test two hypothesized relationship among the variables. First is relationship between online customer satisfactions and quality of advertising and secondly is relationship between online customer satisfactions and product/service quality. The results of the analysis are as follows:

##### **Hypothesis 1: There Is a Positive Relationship between Online Customer Satisfaction And Quality of Advertising.**

The first regression analysis was carried out to determine the relationship between advertisement and customer satisfaction when they make purchase decision in online shopping. The regression output is presented in **Table 4.10**. The result showed that the adjusted R squared ( $R^2$ ) value was 0.561. This indicates that 56.1 percent of the variance in online customer satisfaction has been significantly explained by the quality of advertising. The model was also significant with F value=73.977; sig. F=0.000. Hence, quality of advertising is found to be positively related to customer satisfaction with ( $\beta = .749$ ;  $p > 0.05$ ). Therefore, **hypothesis 1 is accepted.**

**Table 4.10: Regression between Online Customer Satisfaction and  
Quality of Advertising**

Independent variable	B	SE B	$\beta$
Quality of advertising	.449	.052	.749

Note:  $R^2 = .561$ ;  $F = 73.977$ ; Sig.  $F = 0.000$ ;  $p < 0.05$   
 B= Unstandardized coefficient beta;  
 SEB= Standard Error of regressions coefficient;  
 $\beta$ = Beta coefficient.

**Hypothesis 2: There Is a Positive Relationship between Online Customer Satisfaction  
And Product/Service Quality.**

Furthermore, the second regression analysis was carried out to determine the relationship between product/service quality and customer satisfaction when they make purchase decision in online shopping. The regression output is presented in **Table 4.11**. The result showed that the adjusted R squared ( $R^2$ ) value was 0.433. This indicates that 43.3 percent of the variance in online customer satisfaction has been significantly explained by the product/service quality. The model was also significant with F value=44.279, sig.  $F = 0.000$ . Hence, product/service quality is found to be positively related to customer satisfaction with ( $\beta = .658$ ;  $p > 0.05$ ). Therefore, **hypothesis 2 is accepted.**

**Table 4.11: Regression between Online Customer Satisfaction and  
Product/Service Quality**

Independent variable	B	SE B	$\beta$
Product/Service Quality	.511	.077	.658

Note:  $R^2 = .433$ ;  $F = 44.279$ ; Sig.  $F = 0.000$ ;  $p < 0.05$

B= Unstandardized coefficient beta;

SEB= Standard Error of regressions coefficient;

$\beta$ = Beta coefficient.

## 4.5 CONCLUSION

This chapter has presented the statistical results and the findings of this study. Statistical analysis was taken through the use of SPSS software for computational accuracy. The analysis was carried out using descriptive analysis, correlation and regression analysis. All of the findings was supported the hypotheses, thus answering the research questions. Conclusion and recommendation of the study is presented in the next chapter.



# 5

## **DISCUSSION, RECOMMENDATIONS AND CONCLUSION**

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### **5.0 CHAPTER INTRODUCTION**

The previous chapter presents the results of data analysis intended to test the research model for this study. This section is the last chapter for this study which discusses the further findings of the study and recommendations for future research are suggested. Lastly, conclusion of the overall for this study also will be provided.

### **5.1 DISCUSSION**

The ultimate goal of this study as discussed in chapter one is to examine the factors affecting online customer satisfaction especially in internet purchasing and their relationship. There are

two objectives in this study. Firstly, to determine which factor more contribute in online customer satisfaction among staff in UUM. Secondly is to examine the relationship between online customer satisfaction and quality of advertising, and product/service quality. Hence research questions were answered with the objectives and subsequently hypothesis were developed. After the questionnaires administration and the subsequent analysis that followed based on the correlation between the variables, the result will be discussed.

Descriptive analysis method was taken in order to determine the response rate and demographic characteristic of the respondents such age, gender, monthly income and so much more. Descriptive analysis also was conducted to define the respondent preference towards the survey responses. Additional information such as mean and standard deviation also is obtained from this analysis. Then, the data were analyzed using Pearson correlation and multiple regression analysis to answers all the objectives of the study.

**Table 5.0** below showed summarizes the findings of this research.

**Table 5.0: Summary of the Research Findings**

<b>No.</b>	<b>Research Questions</b>	<b>Research Objectives</b>	<b>Hypotheses</b>	<b>Analysis Description</b>
1	Is there any relationship between qualities of advertising and online customer satisfaction among staff in UUM?	To determine the influence of quality of advertising on online customer satisfaction among staff in UUM.	<b>H1:</b> There is a positive relationship between online customer satisfaction and quality of advertising.	H1 Accepted (Regression Analysis)
2	Is there any relationship between product/service quality and online customer satisfaction among staff in UUM?	To determine the influence of product/service quality on online customer satisfaction among staff in UUM.	<b>H2:</b> There Is a Positive Relationship between Online Customer Satisfaction And Product/Service Quality.	H2 Accepted (Regression Analysis)

Based on the finding, most of the respondent are female with 76.7% and 23.3% are male respondents. The target age groups are from 23 to 38 and above years old where the most of highest respondents is is at the age of 33 till 37 years old with 33.3%. Majority of the

respondents are Malay with 86.7% and then followed by Chinese and Indian with values 6.7%. In term of the education level, most of UUM staff had bachelor degree (40.0%), followed by certificate level (36.7%), diploma (13.3%) and then the lowest frequency is master level that recorded only 6 respondent or 10.0%. Further, the majority of the respondents are married (73.3%) and 26.7% respondents were single with average monthly incomes are from less than RM1000 to RM4999, and the highest income is below RM2499 with (43.3%). In the following discussion, results of each objective are reviewed and compared with previous study.

#### **5.1.1 Factor Influence Customer Satisfaction in Online Shopping**

After analyzing the data collected, it can be concluded that quality of advertising factor is positively influence in online customer satisfaction. Quality of advertising is very important because its provide product and service information to customers. The availability of information considers not only product or service but also convenience and personalization for retaining customers. It depends on the degree to which information can be employed by customers to predict their probable satisfaction with subsequent purchases. Consequently, the success of online stores will be determined by the ability to tailor their information to meet the customers' needs (Kolesar and Galbraith, 2000).

Based on the finding analysis, it was found that online customer satisfaction and quality of advertising is positively related. This is shown by regression analysis that revealed quality of advertising is to be significantly effect to customer satisfaction with ( $\beta = .749$ ;  $p > 0.05$ ). The strength of correlation coefficient for these variables also is very high ( $r = .749$ ). This means that

customer satisfaction towards online shopping will be affected by quality of advertising and if the advertising quality is high, customer satisfaction also will be increase.

Therefore, this is consistent with Liu and Arnett (2000) that quality of advertising affect online customer satisfaction. Liu and Arnett (2000) also pointed out that the higher the information quality on a website, the higher the user satisfaction, perceived benefits and level of system use. Besides, the result of this study also is supported with Levine *et al.*, (2000), that defined the consumer has to come to expect interactive links with banner advertisement and web links that provide access to the depth of information desired with the ability to purchase when they feel the time is right. Information such as discounted product and compiling special offers from several different companies selling the same product and displaying them to the public could increase customer satisfaction (Khanh & Kandampully, 2002).

In the other hand, online customer satisfaction and product/service quality also is positively related. This is shown by regression analysis that revealed product/service quality is to be significantly effect to customer satisfaction with ( $\beta = .658$ ;  $p > 0.05$ ). The strength of correlation coefficient for these variables also is high ( $r = .658$ ). This means that customer satisfaction towards online shopping will be affected by product/service quality and if the product/service quality is high, customer satisfaction also will be increase.

The result of this study is supported by Sureshchandar *et al.*, (2002) that stated service quality and customer satisfaction has been investigated, and results have shown that the two constructs are indeed independent, but are closely related, implying that an increase in one is

likely to lead to an increase in the other. Service quality is a component of customer satisfaction (Zeithaml and Bitner, 2003). Besides, Spreng and Mackoy (1996) tested a model developed by Oliver (1993). Oliver's model integrates the two constructs, and suggests among other thing that perceived service quality is an antecedent to satisfaction. Spreng and Mackoy results indicate that, as predicted, service quality leads to satisfaction.

## **5.2 MANAGERIAL IMPLICATION**

Customer satisfaction is important if the business organization wish to have higher profit and sales. Managers' use of customer satisfaction measures to improve organizational performance has become an imperative in today's business environment. Satisfaction with service quality is related to bottom line results. Sophisticated indices are being developed to assess the quality of service of large, multi-product companies, industries and economic markets. The use of such measurement tools could help store managers find new ways to gain and retain customers through their own continuous improvement practices. Increasing customer satisfaction has been found to lead to higher future profitability (Anderson *et al.*, 1994).

Another important implication of this study relates to personalization and online customer privacy. As internet technologies become increasingly sophisticated and web sites can deliver more targeted content, demand for personalization continues to grow (Gurau *et al.*, 2003). If online providers understand what dimensions customers utilize to judge quality and form their satisfaction, they will then be in a favorable position to monitor and improve company performance. They can facilitate firms in detection of the weaknesses and strengths of their

online services. Moreover, Anton (1996) also stated that when marketer can increase customer satisfaction, business organization will get benefit as below:

- i. Increased purchases of the existing product,
- ii. Cross-purchase of your other products,
- iii. Price premium due to appreciation of your added-value services,
- iv. Reduced operating cost because of familiarity with your service system,
- v. Positive word-of-mouth in terms of referring other customers to your company.

### **5.3 RECOMMENDATIONS FOR FUTURE RESEARCH**

Opportunities for future study have emerged as a result of this study. In addition to overcoming the limitations of data gathering, additional research is needed to observe the relationships between customer satisfaction and information quality and product/service quality towards online shopping. Researcher would like to suggest to other researchers who might continue to do the same or similar area study. The few factors that are:

- i. In future, research may be done through doing survey on larger number of customers who use online shopping and try to understand their satisfaction level on the basis of proxy determinants as level of satisfaction is a cardinal approach. Means, researcher need to adding the size of sample because a proper sampling design and size helps the researcher to draw conclusions that would be

generalized to the population of interest. Furthermore, a more representative sample selection will increase the validity of the study.

- ii. Extended the scope of study. This study is conducted in UUM staff either academician or non-academician, means just focus staff in education sector setting so the findings only applied to this sector and not to other sectors. The findings might be different if it is conduct in another sector or other level of people that participate in this future study. Besides, future research also recommended extending the application of the online customer satisfaction survey to other industries such as banking, entertainment, health care, hotels, and the like.
- iii. To increase one's ability to make causal inferences, the use of a longitudinal study is highly recommended.
- iv. In this study, only two factors that affected the online customer satisfaction are being investigated, namely, quality of the information and product/service quality. Besides these factors, there might be other factors such as customer experience that can influence the customer satisfaction, which are not being considered in this study. Future research could include other variables such as customer experience and branding to predict satisfaction. According to Janiszewski (2009), the consumer's satisfaction or dissatisfaction is consequences of consumption or service experiences and Higgins (1999) stated that branding is a relationship that is



built on understanding and satisfaction. In addition, branding also can provide opportunities for differentiation and customer satisfaction (Sharon, 2003).

- v. The study of factor affecting online customer satisfaction is very widespread and many factors that can be discussed. In the future study, researcher can focus quality of the website design as an independent variable that influences the customer satisfaction. This variable is a most important factor because shopping at an online store is different with shopping in actual shop. Online shopping is like shopping through a paper catalog because both involve mail delivery of the purchases and in both cases customers cannot touch or smell the items (Spiller and Lohse, 1997). So, the promise of electronic commerce and online shopping depends to a great extent, on user interfaces and how people interact with computers (Hoque and Lohse, 1999; Griffith *et al.*, 2001).

Besides, Zhang, von Dran, Small, and Barcellos (1999, 2000), and Zhang and von Dran (2000) make an attempt to evaluate website quality from user satisfaction and dissatisfaction perspective. Their studies show that website design features can be regarded as hygiene and motivator factors that contribute to user dissatisfaction and satisfaction with a website. Then, Lee *et al.*, (2001) also obtain the similar findings in their recent study of web design factors affecting consumer satisfaction.

- vi. The growth of the internet and online shopping will continue, and future research can replicate similar studies solely involving online shoppers, measuring actual purchase behaviors instead of intentions. This procedure is designed to understand if there are any significant difference in the perceptions of e-service quality of internet users and internet purchasers.

#### **5.4 CONCLUSION**

In summary, this study focused on an exploratory investigation of the factor affecting online customer satisfaction among UUM staff either academicians or non-academicians. This study has met all the three objectives; the first is to identify the factors affected online customer satisfaction among staff in UUM and the second is to examine the relationship between online customer satisfaction and advertisements. Then, the last objective is to examine the relationship between online customer satisfaction and product/service quality. Although this study has its own limitations, it has contributed in making the findings to see whether such variables influence the other.

Furthermore, the research questions lead to the objectives of this study to which hypothesis were developed and tested using the correlations and regression to which the result indicates the various significance and otherwise of the relationships. Based on data analysis and discussion that mentioned, hence this study can be concluded that the promotion and product/service quality are key determinant of customer satisfaction through purchase decision on online shopping. All variables are supported in customer satisfaction. Finally it could be

concluded that, there is a significant positive relationship between the promotion and product/service quality to customer satisfaction. Recommendations were also provided to improve this study in the future especially in term of online customer satisfaction.

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# APPENDIX I

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## THE QUESTIONNAIRE



**UNIVERSITI UTARA MALAYSIA**  
**COLLEGE OF BUSINESS**  
**Research Questionnaire**

Dear Sir/Madam/Ms:

My name is Sukma Binti Pea and a student of University Utara Malaysia. As part of the course requirement for an MBA from University Utara Malaysia (UUM), I am conducting a study to investigate **the factor affecting of online customer satisfaction**. The objective of this study is to identify the factors affected online customer satisfaction and examine their relationship.

Your participation on this evaluation is voluntary. All responses to this survey are anonymous; there is no way for your responses to be linked to you. **Responses on individual surveys are confidential**; only excellent opportunity for you to express your opinions about customer satisfaction in online shopping environment.

I know that your time is valuable and hope that you will take the time (an estimated 10-15 minutes) to complete the survey. Please note completion of the survey implies consent to participate. Thank you very much for you time and assistance.

Regards,  
Sukma Binti Pea  
College of Business  
University Utara Malaysia

## **Questionnaire:**

### **Section A: *Personnel Details***

Please mark [v] at the relevance space

1. Gender

<input type="checkbox"/>	Male
<input type="checkbox"/>	Female

2. Age

<input type="checkbox"/>	18-22 years
<input type="checkbox"/>	23-27 years
<input type="checkbox"/>	28-32 years
<input type="checkbox"/>	33-37 years
<input type="checkbox"/>	38 and above

3. Race

<input type="checkbox"/>	Malay
<input type="checkbox"/>	Chinese
<input type="checkbox"/>	Indian
<input type="checkbox"/>	Others _____

4. Educational level

<input type="checkbox"/>	Certificate
<input type="checkbox"/>	Diploma
<input type="checkbox"/>	Degree
<input type="checkbox"/>	Master Degree
<input type="checkbox"/>	PhD

5. Marital status

<input type="checkbox"/>	Single
<input type="checkbox"/>	Married
<input type="checkbox"/>	Widow
<input type="checkbox"/>	Divorce

6. Monthly income (RM/Month)

<input type="checkbox"/>	Less than 1000
<input type="checkbox"/>	1000 – 1499
<input type="checkbox"/>	1500 – 2499
<input type="checkbox"/>	2500 – 4999
<input type="checkbox"/>	5000 and above

**Section B:** The following items refer to the online shopping behaviors. Please answers your questions based on your practice:

No.	To what extend do you believe the following statements are valid in your shopping intention.	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	The internet now day is prominent strategy.	1	2	3	4	5
2	The internet is safe.	1	2	3	4	5
3	The internet saving cost and time.	1	2	3	4	5
4	The internet applications supporting the shopping process.	1	2	3	4	5
5	I feel satisfied spend my money via the internet for shopping.	1	2	3	4	5
6	I frequently was using internet service in a month.	1	2	3	4	5

**Section C:** The following items refer to the factor affecting online customer satisfaction. Please answers your questions based on your practice:

1	Strongly Dissatisfied (STD)
2	Dissatisfied (D)
3	Somehow Satisfied (SS)
4	Satisfied (S)
5	Strongly Satisfied (STS)

**Advertisement impact online shopping**

1	I think advertising online is very informative.	1	2	3	4	5
2	Pop-up advertisements provide me with useful information for my purchasing decision.	1	2	3	4	5
3	The information that I received online impacts my purchasing decision.	1	2	3	4	5
4	I enjoy being informed about new products via in my e-mail address.	1	2	3	4	5
5	I would like a greater variety of products sold online.	1	2	3	4	5
6	Advertisement can improve in selling products online.	1	2	3	4	5

**Product/service quality impact online shopping**

7	Product/service quality is impact my purchase decision in online shopping and my satisfaction.	1	2	3	4	5
8	Products sold online are cheaper than in real-time.	1	2	3	4	5
9	Product quality is one of the major criteria from time to time to shopping online.	1	2	3	4	5
10	Overall products that are sold online provide me with a much greater value than product sold in real time.	1	2	3	4	5
11	I prefer purchasing products from the same e-tailor online.	1	2	3	4	5
12	Quality product is a major concern in online shopping.	1	2	3	4	5

**.....THANKYOU FOR YOUR COOPERATION.....**



# APPENDIX II

## OUTPUT OF SPSS ANALYSIS

### 1) Frequencies Analysis: Demographical Characteristic

#### Statistics

		gender	age	race	edu.level	m.status	income
N	Valid	60	60	60	60	60	60
	Missing	0	0	0	0	0	0

#### Frequency Table

##### Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	14	23.3	23.3	23.3
	female	46	76.7	76.7	100.0
	Total	60	100.0	100.0	

##### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23 - 27 years	18	30.0	30.0	30.0
	28 - 32 years	16	26.7	26.7	56.7
	33 - 37 years	20	33.3	33.3	90.0
	38 and above	6	10.0	10.0	100.0
	Total	60	100.0	100.0	

### Race

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid malay	52	86.7	86.7	86.7
chinese	4	6.7	6.7	93.3
indian	4	6.7	6.7	100.0
Total	60	100.0	100.0	

### Educational level

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid certificate	22	36.7	36.7	36.7
diploma	8	13.3	13.3	50.0
degree	24	40.0	40.0	90.0
master	6	10.0	10.0	100.0
Total	60	100.0	100.0	

### Marital status

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid single	16	26.7	26.7	26.7
married	44	73.3	73.3	100.0
Total	60	100.0	100.0	

### Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid less than 1000	2	3.3	3.3	3.3
1000 - 1499	22	36.7	36.7	40.0
1500 - 2499	26	43.3	43.3	83.3
2500 - 4999	10	16.7	16.7	100.0
Total	60	100.0	100.0	

## 2) Descriptive Analysis

### Online Customer Satisfaction

#### Descriptive Statistics

	N	Mean	Std. Deviation
b1	60	4.1000	.79618
b2	60	3.1000	.91503
b3	60	3.9333	.73338
b4	60	3.8333	.74029
b5	60	1.9333	.73338
b6	60	2.5667	.92730
Valid N (listwise)	60		

### Quality of Advertising

#### Descriptive Statistics

	N	Mean	Std. Deviation
c1	60	3.8000	.95314
c2	60	3.4000	1.02841
c3	60	3.6333	.91996
c4	60	3.6667	.98577
c5	60	3.5667	1.03115
c6	60	3.9000	1.08456
Valid N (listwise)	60		

### Product/Service Quality

#### Descriptive Statistics

	N	Mean	Std. Deviation
c7	60	3.8333	1.07619
c8	60	3.9333	.93640
c9	60	3.7333	.86095
c10	60	3.5333	.85304
c11	60	3.5333	.89190
c12	60	4.0333	.95610
Valid N (listwise)	60		

### Descriptive Statistics

	N	Mean	Std. Deviation
SATISFACTIO N	60	3.2444	.51482
ADVERTISEM ENT	60	3.6611	.85864
QUALITY	60	3.7667	.66327
Valid N (listwise)	60		

### 3) Reliability Analysis

#### i. Reliability analysis on customer satisfaction

Scale: ALL VARIABLES

#### Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Exclude d(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

#### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.703	.722	6

### Inter-Item Correlation Matrix

	b1	b2	b3	b4	b5	b6
b1	1.000	.219	.766	.661	.186	-.170
b2	.219	1.000	.364	.325	.263	.292
b3	.766	.364	1.000	.791	.307	.007
b4	.661	.325	.791	1.000	.229	-.058
b5	.186	.263	.307	.229	1.000	.356
b6	-.170	.292	.007	-.058	.356	1.000

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
b1	15.3667	6.948	.467	.624	.653
b2	16.3667	6.609	.445	.228	.660
b3	15.5333	6.423	.694	.754	.585
b4	15.6333	6.745	.585	.639	.619
b5	17.5333	7.372	.410	.223	.671
b6	16.9000	8.024	.125	.257	.768

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
19.4667	9.541	3.08889	6

### ii. Reliability analysis on quality of advertising

### Case Processing Summary

		N	%
Cases	Valid	60	100.0
	Exclude d(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.928	.928	6

### Inter-Item Correlation Matrix

	c1	c2	c3	c4	c5	c6
c1	1.000	.671	.649	.649	.600	.833
c2	.671	1.000	.731	.602	.742	.584
c3	.649	.731	1.000	.648	.759	.778
c4	.649	.602	.648	1.000	.623	.698
c5	.600	.742	.759	.623	1.000	.688
c6	.833	.584	.778	.698	.688	1.000

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
c1	18.1667	19.056	.790	.774	.914
c2	18.5667	18.690	.764	.721	.918
c3	18.3333	19.006	.834	.756	.909
c4	18.3000	19.197	.738	.553	.921
c5	18.4000	18.481	.789	.685	.914
c6	18.0667	17.758	.832	.838	.909

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
21.9667	26.541	5.15182	6

iii. Reliability analysis on product/service quality

**Case Processing Summary**

		N	%
Cases	Valid	60	100.0
	Exclude		
	d(a)	0	.0
	Total	60	100.0

a Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.805	.803	6

**Inter-Item Correlation Matrix**

	c7	c8	c9	c10	c11	c12
c7	1.000	.695	.317	.246	.377	.631
c8	.695	1.000	.314	.342	.327	.684
c9	.317	.314	1.000	.474	.409	.382
c10	.246	.342	.474	1.000	.466	.103
c11	.377	.327	.409	.466	1.000	.297
c12	.631	.684	.382	.103	.297	1.000

### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
c7	18.7667	10.216	.649	.548	.754
c8	18.6667	10.734	.689	.630	.745
c9	18.8667	12.050	.510	.362	.786
c10	19.0667	12.538	.426	.417	.803
c11	19.0667	11.928	.505	.320	.787
c12	18.5667	11.097	.601	.589	.766

### Scale Statistics

Mean	Variance	Std. Deviation	N of Items
22.6000	15.837	3.97961	6

## 4) Correlations Analysis: relationship between all variables

### Correlations

		SATISFAC TION	ADVERTI SEMENT	QUALITY
SATISFACTIO N	Pearson	1	.749(**)	.658(**)
	Correlation			
	Sig. (2-tailed)		.000	.000
ADVERTISEM ENT	N	60	60	60
	Pearson	.749(**)	1	.816(**)
	Correlation			
QUALITY	Sig. (2-tailed)	.000	.000	.000
	N	60	60	60
	Pearson	.658(**)	.816(**)	1
	Correlation			
	Sig. (2-tailed)	.000	.000	
	N	60	60	60

\*\* Correlation is significant at the 0.01 level (2-tailed).



5) **Regression Analysis: relationship between satisfaction and advertisement**

**Variables Entered/Removed(b)**

Mode 1	Variables Entered	Variables Removed	Method
1	ADVERT ISEMEN T(a)	.	Enter

a All requested variables entered.

b Dependent Variable: SATISFACTION

**Model Summary**

Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.749(a)	.561	.553	.34421

a Predictors: (Constant), ADVERTISEMENT

**ANOVA(b)**

Mode 1		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.765	1	8.765	73.977	.000(a)
	Residual	6.872	58	.118		
	Total	15.637	59			

a Predictors: (Constant), ADVERTISEMENT

b Dependent Variable: SATISFACTION

### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.601	.196		8.161	.000
	ADVERTISEM ENT	.449	.052	.749	8.601	.000

a. Dependent Variable: SATISFACTION

### 6) Regression Analysis: relationship between satisfaction and quality

#### Variables Entered/Removed(b)

Model	Variables Entered	Variables Removed	Method
1	QUALITY(a)	.	Enter

a. All requested variables entered.

b. Dependent Variable: SATISFACTION

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.658(a)	.433	.423	.39101

a. Predictors: (Constant), QUALITY

#### ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.770	1	6.770	44.279	.000(a)
	Residual	8.867	58	.153		
	Total	15.637	59			

a. Predictors: (Constant), QUALITY

b. Dependent Variable: SATISFACTION

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.321	.293		4.501	.000
	QUALITY	.511	.077	.658	6.654	.000

a. Dependent Variable: SATISFACTION

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