Impact of E-Service Quality on Consumer Purchase Behaviour in an On-line Shopping

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Abstract

E-commerce offers speed, convenience, and often cost effectiveness for today's busy shoppers. This study investigated the relationships between various characteristics of online shopping and consumer purchase behaviour. Businesses with the most experience and success in using e-commerce are beginning to realise that the key determinants of success or failure are not merely web site presence and low price but also include the electronic service quality (e-service). This paper investigated various key factors affecting e-service quality dimensions. Using those dimensions, examines the relationship among e-service quality and overall service quality, customer satisfaction and purchase intensions. This paper examines dimensions of e-service quality through web site design, reliability, responsiveness, trust and personalization.

Keywords: *Customer satisfaction, Electronic Commerce, Service quality, User Interface.*

1. Introduction

E-service is an emerging and rapidly evolving area with the advancement of technology. It is conceptualized as a subset of e-commerce and can be demonstrated as new technological innovation(s). E-services are today considered as the building blocks for the service oriented architecture. E-Services as a general field of inquiry includes considerations of both delivered service and delivery mode. It is more useful for service-based offerings that comprise information and access to information for making more standard goods-related e-Commerce purchases (Stafford & Gillenson, 2003).

E-services are a consequence of networked technologies. E-services are defined here as services that are produced, provided or consumed through the use of technological networks such as Internet-based systems and mobile solutions. E-services can be produced by consumers, businesses, and governments and can be accessed via a wide range of information appliances (Hoffman 2003). The three main characteristics of e-services are:

1. The service is accessible via the Internet or other electronic networks
2. The service is consumed by a person via the Internet or other electronic networks
3. There might be a fee that the consumer pays the provider for using the e-service, or it may be free as in case of government services.

Traditionally services are based on personal interactions, often face-to-face interactions, but in e-services, the production, consumption or provision of services takes place through the intermediation of Internet-based or mobile networks. Most common e-services are e-ticketing, online banking or online retailing. Other forms of e-services are e-learning such as online courses or online medical advice, e-libraries providing electronic access to journal articles or book chapters and information and location services.

Based on this, e-services can be classified as:
- Business-to-Business
- Business-to-Consumer
- Government-to-Business or To-Consumer
- Consumer-to-Consumer

The advent of e-services has raised a number of challenges for knowledge intensive service organizations. In e-services the key determinants of success or failure are not just the web presence or low price rather how companies are able to offer and deliver high quality services. Price and promotion are no longer drawing the purchase decisions of consumers. Consumers are also evaluating the e-service quality (e-SQ). E-service quality is the extent to which e-commerce providers effectively and efficiently manage customer interactions involving searching, shopping, purchasing and order fulfilment. E-service quality is defined as seven dimensions that form two-scales: a core-SQ scale and a recovery scale (Ziethmal, 2002). Four dimensions of core e-

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SQ are efficiency, reliability, fulfillment and security. The recovery scale includes the personal service aspects like responsiveness, compensation and contact.

Many researchers have been studied consumer buying patterns and trends. Level of consumer satisfaction is determined by the quality of services/e-service, the price level and the purchase process. Nine service quality factors that affect e-SQ (Wang and Huarng, 2002) are:

1. General feedback on the web site design
2. Competitive price of the product
3. Merchandise availability
4. Merchandise condition
5. On-time delivery
6. Merchandise return policy
7. Customer support
8. E-mail confirmation on customer order
9. Promotion activities

As to the actual product sold in eServices provision, Ryan and Valverde examine customer motivations and customer behavior related to e-Services purchase and utilization. Motivated by the growing interest in online commerce, particularly e-services, they focus their study on examining the factors that contribute to e-*service*, the relationships among these factors and the consumers' behaviour and attitude toward *e*-services. After examining all the e-service quality dimensions they concentrated on web site design, reliability, responsiveness, trust and personalization, and moreover examining how the research model based on these dimensions work, which are significantly related to customer purchase intensions.

2. Purpose of the study

Today, technological advancement has diminished the boundaries of the market parse. Consumers are becoming more knowledgeable as well techno-savvy. They require everything at their end, at their convenience, with their own preferences. On-line shopping has acted as an answer to their quest for convenience. It not only takes into consideration the timely delivery but also shows the change in consumer purchase behaviour, preferences and attitude. The competitive pressures are forcing organizations to deliver the services differently. Order winning e-service features apparently become qualifiers suddenly. While understanding e-service quality is highly relevant to the strategic and tactical planning it is necessary to identify which e-service dimensions serve as determinants of e-service quality. With the phenomenal growth of e-services, one must aim to better understand the dimensions, divers, and consequences of quality

and customer behaviour in the online domain across various industry sectors.

3. Framework for the study

The study been done by reviewing the several researchers' perspective and their different methodologies. Further to understand various dimensions of e-service quality, comparative evaluation of various models has been done. The study majorly focused on assembling and synthesizing what is currently known about e-service quality delivery. Collectively, the extant literature suggests that e-SQ is a multidimensional construct. Finally, identifies issues for future research based on the critical analysis of literature.

4. Evaluation of models

The present study is an attempt to review various research models for the consumers' relational purchasing behavior in an online shopping context. Chung-Hoon Park and Young-Gul Kim investigated the relationships between various characteristics of online shopping and consumer purchase behaviour. The research model they developed consists of the online store attributes that influence consumers' perception of an online store. Researchers considered that the constructs information satisfaction and relational benefit as key mediating factors affecting the consumers' shopping behaviour.
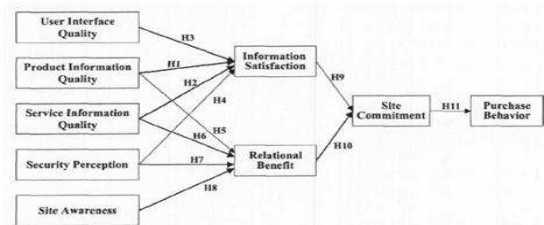

Source: Chung-Hoon Park, Young-Gul Kim (2003)

Figure 1: Research Model Investing the Relationships between Various Characteristics of Online Shopping and Consumer Purchase Behaviour

Researchers found the key affecting factors of user interface quality, product and service information quality, security perception and site awareness to have significant effect on consumers' site commitment. Furthermore, information satisfaction and relational benefit play a significant mediating role on consumers' relationship purchasing behaviour.
Janjaap Semeijn; et al., 2005; studied the models and tested combined effects of online and offline service components on customers' purchase intentions. The major intention of the study was to determine the relative contribution of online quality

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and offline fulfilment in creating overall customer satisfaction and further their loyalty. Research concluded that offline fulfilment is as important in determining the overall satisfaction as online quality. This suggested company should focus a large proportion of their resources in the area of offline fulfilment.
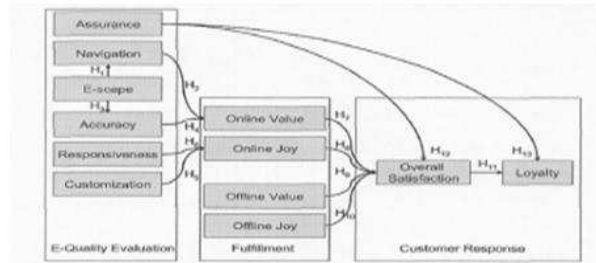
Source: Janjaap Semeijn; et al (2005)

Figure 2: Conceptual Framework for Understanding Effects of Online and Offline Service Components on Customers' Purchase Intentions.

Gwo-Guang Lee and Hsiu-Fen Lin developed a research model to examine the relationship among the e-service quality dimensions and overall service quality, customer satisfaction and purchase intentions. This study attempts to derive the instrument dimensions of e-service quality through modifying the SERVQUAL model to consider the online shopping context, and develops a research model to examine how e-service quality dimensions affect overall service quality, customer satisfaction and purchase intentions.(Gwo-Guang Lee & Hsiu-Fen Lin,2005)
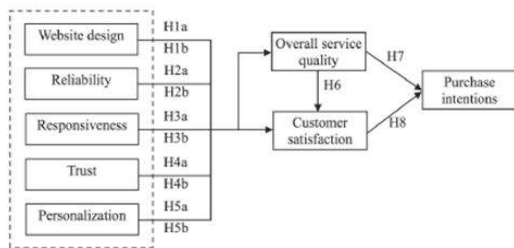

Source: Gwo-Guang Lee, Hsiu-Fen Lin (2005)
Figure 3: e-Service Quality Dimensions

This study identified the dimensions web site design, reliability, responsiveness, and trust affect overall service quality and customer purchase intentions. However the personalization dimension is not significantly related to overall service quality and customer satisfaction.

Zeithamal et al., compared the assessment of E-SQ with traditional service quality from both the customer's and the organization's perspective. Zeithamal et al., suggested a means-end approach whereby they suggested the overall construct of e-SQ in terms its dimensions, the attributes that

comprise each dimensions and the specific concrete cues that signal each attribute.
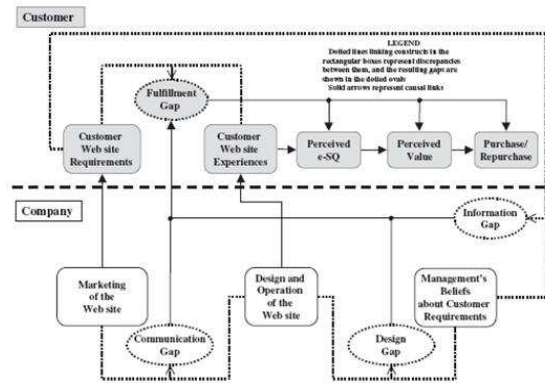
Source: Zeithamal et al. (2002)
Figure 4: Conceptual Model for Understanding and Improving E-Service Quality (e-SQ)

Jessica Santos (2003) proposed and discussed conceptual model of key determinants of e-service quality as follows. Model proposed that e-service quality dimensions are of two types: incubative and active for increasing hit rates, stickiness, and customer retentions.   An incubative dimension includes ease of use, appearance, linkages, structure and layout, and content. The active dimension includes reliability, efficiency, support, communication, security and incentives.
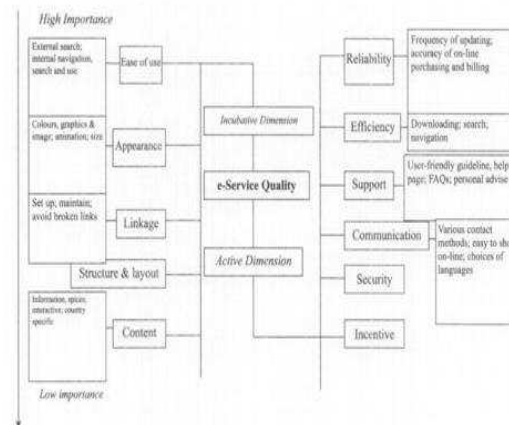
Source: Jessica Santos (2003)
Figure 5: A Model of e-service quality

Zhu et al. studied the impact of IT-based services on customer perceptions of service quality. Researchers proposed a service quality model that links customer perceived IT-based service options to traditional dimensions. The model focuses on the linkages among the service dimensions as measured by SERVQUAL, the constructs representing the IT-based service quality, preferences towards traditional services, experiences in using IT-based services, and perceived IT policies. The impacts of these constructs on perceived service quality and customer satisfaction are also specified.
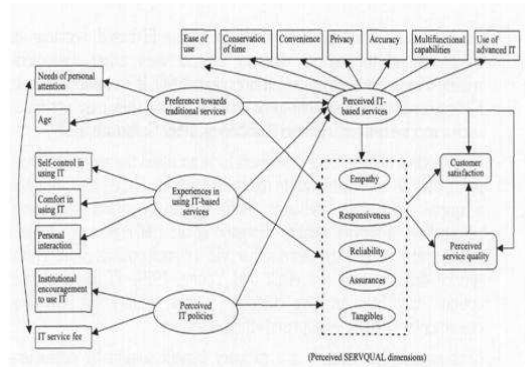
Source: Zhu et al. (2002)
Figure 6: IT-based Service Quality Model.

5. Research issues

From the assessment of various models of e-service quality dimensions in context with online shopping several future directions exist. E-service quality affects the number of variables such as value, attitude, expectations etc. which in turn may also guide purchasing intentions and behavior. It may be interesting to develop theoretical framework to establish linkages between e-service quality and customer purchase behaviour in online shopping context. Further the other variables such as price, promotions and loyalty programs on customer purchase behavior should be evaluated.

The sample employed should be representative of the general population of online shoppers. Various e-service quality dimension models must be evaluated across product diversification. Evaluation of how value and joy are created as part of the total e-experience is required.

The e-service delivery is also influenced by technical and functional quality aspects; hence the research can be conducted on understanding the customer's perception and satisfaction with respect to these quality dimensions. E-services are highly dependent on information technology, its understanding and adoption. The research can be further extended to study the competition vis-à-vis market growth keeping in point the investments required for development and usage of IT and up to what level IT should be used. The behavior and the outcomes are guided by the e-SQ and TR hence the further study is needed to understand a shift in the delivery process of services from traditional to online services.

6. Conclusions

The goal of the study was to assemble and synthesize what is currently known about e-service quality, its dimensions and the attributes that comprise each dimension. The literature in the field of e-service quality has developed sequentially with continuous upgradation and learning from the findings and observations of earlier researches.

It is observed that the e-service quality outcome and measurement is dependent on type of service, situation, time, need, privacy and other factors. E-SQ is a multidimensional construct and the content what constitutes e-SQ varies. Also e-service quality, as perceived by customers, is much more than having a state-of-the-art website.

The other factor that is important in context of online shopping is technology readiness (TR) of customers. TR is a good predictor of people's technology-related behaviors and preferences. Thus interrelation of Technology readiness, e-SQ and online shopping behaviour is necessary as it depends on the efficiency and accessibility of the technology. Customer's expectations and perceptions towards on-line shopping changes with respect to time, efficiency, competitive environment, safety, security, support, ease of use, etc. Thus, consumer's TR plays an important role in forming their perception with regard to e- SQ. This demands for continuous efforts and learning in context of understanding the interrelation between consumer purchase behaviour, on-line shopping and e-service quality.

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