A STUDY ON PERCEIVED E-SERVICE QUALITY (PESQ) AND ITS EFFECT ON CONSUMERSATISFACTION AND WEB SITE LOYALTY ON CUSTOMERS IN DAKSHINA KANNADA DISTRICT OF KARNATAKA

¹Mr. ZOHEB ALI K, ²Dr. RashmiKodikal

¹Asst. Professor,²Research Guide ¹Department of management studies, ¹P A College of Engineering, Mangalore, India.

Abstract: Increasing turnover of e-commerce in India points out the significance of the study on ecommerce web sites. The purpose of this paper is to examine the effects of service quality and satisfaction on three consumer behavioral intentions, namely word - of - mouth, site revisit, and purchase intentions in the context of internet shopping. The authors conducted an empirical study and data were collected from online shoppers in Dakshina Kannada district of Karnataka The findings show that e-service quality dimensions have significant influences on buyer's decision. Besides, buyer's decision is positively associated with their satisfaction, and their satisfaction is positively associated with loyalty intentions. Practitioners should carefully consider their web site's attributes. They should make their sites easy - to - use and easy - to - navigate and place extra emphasis on providing fast, accurate, and uncluttered information through their web sites. Also they should direct marketing activities with the aim to enhance satisfaction from e - shopping, particularly regarding the service encounter incidents..

IndexTerms- Customer services quality, Customer loyalty, Customer satisfaction

1 Introduction

The Internet commerce industry has gone through an initial period of focusing on new customers to the present stage of both retaining and attracting customers. Instant price comparisons on the Web, brought by powerful search engines, make non-price competitive advantages, such as service quality, ever more critical in retaining and attracting customers^{1,2}. What brings online customers back, primarily, is a sense of loyalty that comes from an Internet company and offering better service than anyone else

To offer better services, it is necessary for Internet companies to investigate what existing and potential customers expect for service quality. In the context of Internet commerce, existing customers are those who have utilized the Internet as a channel to purchase products and services. Potential customers, for Internet commerce industry as a whole, are generally those who have utilized the Internet as a source to search for information about desired products and services but have never purchased through the Internet (i.e., they prefer to purchase through traditional channels). For purposes of this study, these two types of consumers are coined "Internet purchasers" and "Internet non-purchasers", respectively.

The ideal action for Internet companies is to improve and maintain all service quality attributes that satisfy both existing and potential customers' needs and wants. However, given that both large and small online companies have limited resources, priorities must be set among alternative service attributes in making investment decisions based on a company's

business strategies. If online companies can understand the similarities and differences of key service quality dimensions perceived by Internet purchasers and Internet non-purchasers, different service offering strategies can be applied to retain existing Internet customers and attract potential customers. Therefore, it is necessary to understand both Internet purchasers' and non-purchasers' perceptions of service quality attributes related to Internet purchasing.

Nevertheless, no empirical attention has been given to examining the service quality attributes in the context of Internet commerce from the perspectives of Internet purchasers and Internet non-purchasers. This article, therefore, intends to expand the body of knowledge relating to the service quality construct within the Internet commerce context. Three specific research questions are investigated:

- * What are the important service quality dimensions that impact a online buyer?
- *To analyze the relationship between e service quality, loyalty and trust?

In the current scenario due to the advent of modern technologies functions of various gadgets are being clubbed together into single devices which is supported by telecom firms with stable internet connection. Because of these reasons more people from every corner of our country have started to rely on them and this increased penetration in the market has made it a compulsion for them to study the customers. The success of every firm depends on the customers and their level of satisfaction. This study was done to identify the relationship between customer satisfaction, customer's perceived service quality, loyalty and trust

THEORETICAL BACKGROUND II.

Relationship between customer perceived service quality, customer satisfaction, trust and customer loyalty is one of the important factor that determines about the company's sustainability in the market. Success of any company will be based on its services and how customer accepted the services. If the services is not up to the mark, then customer will show a negative feedback about the company. Customer Satisfaction will be derived on the basis of customer's perception about the service provided. The promises that company does will create a standard perceived level of trust in every customer's mind, such that the customer will have a positive feedback before purchasing the product. When they consume the product or services the post-purchase behavior will result the actual perception of the service.

If a customer need to be loyal than the product/ service need to meet promises made to customers. The blind promises will bring a temporal customer rather the loyal one. The marketer need to be concentrated on customer's retention than making high profit. To retain the customer marketer, have to be more conscious about customers' expectations. Customer always concentrate on different factors so to create much potential customer all these factors need to be understood.

Variables selected for the study:

• E service quality

E service quality is the perception of quality of the service which has been delivered. E service quality plays a paramount role in understanding what customer wants from a service provider.

Loyalty

For a firm to be successful it need to be able to have a good number of loyal customers. Loyalty is the level of customer's relationship with the firm. A firm is always able to make maximum profit out of these repeat customers.

Trust

Trust refers to the level of reliability the customers have in transacting with the firm. The more the trust level the better risk customers will be willing to take to transact with the organization.

III. LITERATURE REVIEW:

Reviewing the studies done reveal that loyalty was much influenced by increase in the customer satisfaction. Some study gave the idea about how perceived trust played an important role in customer satisfaction. Perceived trust and satisfaction becomes driving force in order to achieve the loyalty of the customers.

Eduard Cristobal et al (2007)³ opined that perceived quality is a multidimensional tool which includes web design, customer service, assurance and order management; that perceived quality influences on satisfaction; and that satisfaction influences on consumer loyalty. Moreover, no differences in these conclusions were observed if the total sample is divided between buyers and information searchers. .Jessica Santos, (2003)⁴ said service quality is increasingly recognized as an important aspect of electronic commerce (e-commerce). Because the online comparison of the technical features of products is essentially costless, feasible, and easier than comparisons of products through traditional channels, service quality is the key determinant for successful e-commerce. Gwo-Guang Lee(2005)⁵ suggests that to enhance customer purchase intentions, online stores should develop marketing strategies to better address the trustworthiness, reliability, and responsiveness of web-based services. Online stores can devote valuable corporate resources to the important e-service quality attributes identified by this study. Joel E Collier (2006)⁶ said that previous research in e-service quality has primarily focused on the interaction of the consumer and the Web site while missing the big picture that e-service quality is composed of more than Web site interactivity.. Contrary to previous service quality studies, formative instead of reflective indicators are used to conceptualize e-service quality. This study found empirical support for the use of formative indicators and the three-dimensional approach to conceptualizing e-service quality SwinderJanda et al (2002)⁷ in the study tied to understand service quality using two studies. Study 1 utilizes qualitative depth interviews to identify five dimensions important to consumers in their assessment of the quality of Internet retailers. These are termed performance, access, security and information. Study 2 quantifies the five dimensions using multi-item scales, and conducts a survey to assess the reliability and validity (convergent, discriminant, and nomological) of these dimensions Zhilin Yang et al (2015)7 in their study said that company working hard for getting customer loyalty should concentrate more on customer satisfaction and perceived value. When the customer gets all their perceived values, they will be satisfied and it will create loyalty. Francis MungaiMuturi et al(2014)8 was of the opinion that customer perceived value and perceived price were the two important factors which customer gives important while buying a service operator.

IV. **OBJECTIVE OF THE STUDY:**

- Identify the factors which determine E service quality
- To identify the customer loyalty and customer satisfaction towards e commerce sites
- To identify the relationship between customer satisfactions, perceived trust and loyalty towards the service provider.

V. RESEARCH METHODOLOGY:

The study "A study on Perceived e-service quality (PeSQ) and its effect on consumer satisfaction and web site loyalty on customers in Dakshina kannada district of Karnataka" was conducted in Karnataka state of India. The researchers conducted the empirical investigation using a structured questionnaire. Considering the total number of questions in the questionnaire (26), the sample size shall be 100 which are randomly distributed among different taluks of the district. The research is diagnostic in nature and proposes to identify parameters that lead to customer satisfaction. The researcher has formulated and tested various hypotheses that are framed based on the topic of study.

VI. RESULTS AND DISCUSSION

Demographic Variables

Table 1 Demographic characteristics and online shopping behavior

Gender		%		
	Male	27		
	Female	73		
Age	18–20	10		
	21–25	62		
	26–30	20		
	31-40	3		
	Above 41	5		
Education	High school	4		
	Bachelor's degree	64		
	Master's degree	25		
	Diploma	2		
	Others	5		
Most frequently bought item from the online retailer	Apparel	47		
	Electronic goods	20		
	Groceries	3		

Household goods	10
Sports equipment	3
Books and Cds	12
Others	5

From the details given above we can infer that most of the people who prefer are youngsters and mid aged people, so the company's should focus their effort in targeting these segments. It also can be understood that most of the customers are educated so all the marketing efforts can easily reach the target market. By understanding the products purchased it can be concluded that most of them prefer online sites only for apparels and electronic items.

Service quality dimensions

Mean Standard deviation Gap deviation When they promise to do something within a certain time, they do it 1.034752 1.37 1.38 1.38 1.389 1.096622 1.631 1.631 1.392	Customer service				
When a customer has a complaint or grievance, it is dealt with rapidly and effectively The service is performed properly first time 4.021 0.901504 0.979 The company provides its customers with a tailor-made service 3.369 1.096622 1.631 The stated delivery period is adhered to, at the time agreed on 3.608696 1.099016 1.392 Web design The product and its features are correctly presented 3.760 0.987 1.24 The web site information is regularly updated 3.782 0.958 1.218 The pages load quickly 3.891 1.053 1.109 The contents are easily found in the web site (case of navigation) 3.847 1.047 1.153 Assurance Full information on product features and services offered 4.043 0.863 0.957 An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these		Mean		Gap	
The service is performed properly first time		3.630	1.034752	1.37	
The company provides its customers with a tailor-made service 3.369 1.096622 1.631 The stated delivery period is adhered to, at the time agreed on 3.608696 1.099016 1.392 Web design The product and its features are correctly presented 3.760 0.987 1.24 The web site information is regularly updated 3.782 0.958 1.218 The pages load quickly 3.891 1.053 1.109 The contents are easily found in the web site (ease of navigation) 3.847 1.047 1.153 Assurance Full information on product features and services offered 4.043 0.863 0.957 An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these		3.456	0.976797	1.44	
The stated delivery period is adhered to, at the time agreed on Web design The product and its features are correctly presented 3,760 0,987 1,24 The web site information is regularly updated 3,782 0,958 1,218 The pages load quickly 3,891 1,053 1,109 The contents are easily found in the web site (ease of navigation) Assurance Full information on product features and services offered 4,043 0,863 0,957 An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured 3,739 0,970 1,261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e Elements of security are incorporated and the customer is made aware of these	The service is performed properly first time	4.021	0.901504	0.979	
The product and its features are correctly presented 3.760 0.987 1.24 The web site information is regularly updated 3.782 0.958 1.218 The pages load quickly 3.891 1.053 1.109 The contents are easily found in the web site (ease of navigation) 3.847 1.047 1.153 **Assurance** Full information on product features and services offered 4.043 0.863 0.957 An image of reliability and trustworthiness in one's transactions is transmitted 3.782 0.935 1.218 The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these	The company provides its customers with a tailor-made service	3.369	1.096622	1.631	
The product and its features are correctly presented 3.760 0.987 1.24 The web site information is regularly updated 3.782 0.958 1.218 The pages load quickly 3.891 1.053 1.109 The contents are easily found in the web site (ease of navigation) Assurance Full information on product features and services offered An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these	The stated delivery period is adhered to, at the time agreed on	3.608696	1.099016	1.392	
The product and its features are correctly presented 3.760 0.987 1.24 The web site information is regularly updated 3.782 0.958 1.218 The pages load quickly 3.891 1.053 1.109 The contents are easily found in the web site (ease of navigation) Assurance Full information on product features and services offered An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these	Web design				
The pages load quickly The contents are easily found in the web site (ease of navigation) Assurance Full information on product features and services offered An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e Elements of security are incorporated and the customer is made aware of these 1.053 1.1047 1.153 1.1047 1.153 1.218 1.218 1.218 1.261 1.044 1.044 1.044 1.044 1.044 1.044		3.760	0.987	1.24	
The contents are easily found in the web site (ease of navigation) Assurance Full information on product features and services offered An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 1.045 1.153 1	The web site information is regularly updated	3.782	0.958	1.218	
Assurance Full information on product features and services offered 4.043 0.863 0.957 An image of reliability and trustworthiness in one's transactions is transmitted 3.782 0.935 1.218 The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily 3.956 0.810 1.044 Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these 1.045 1.305	The pages load quickly	3.891	1.053	1.109	
Full information on product features and services offered A.043 0.863 0.957 An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured 3.739 0.970 1.261 Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these	The contents are easily found in the web site (ease of navigation)	3.847	1.047	1.153	
An image of reliability and trustworthiness in one's transactions is transmitted The confidentiality of customer data is ensured Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 Clear information on how to make the purchase e 4.195 1.218 1.218 1.218 1.218 1.218 1.261 1.044 1.044 1.044 1.045 1.045 1.305	Assurance			•	
The confidentiality of customer data is ensured Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 Clear information on how to make the purchase e 4.195 Clear information on how to make the purchase e 3.695 1.045 1.305	•	4.043	0.863	0.957	
Confirmation, once the purchase has been made, that the operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.810 1.044 Clear information on how to make the purchase e 4.195 0.683 1.045 1.305	· ·	3.782	0.935	1.218	
operation has been carried out satisfactorily Clear information on how to make the purchase e 4.195 0.683 0.805 Elements of security are incorporated and the customer is made aware of these	The confidentiality of customer data is ensured	3.739	0.970	1.261	
Elements of security are incorporated and the customer is made aware of these 1.045 1.305		3.956	0.810	1.044	
aware of these	Clear information on how to make the purchase e	4.195	0.683	0.805	
Order management	• •	3.695	1.045	1.305	
	Order management				

The option to modify and/or defer at any time, without commitment	3.565	1.05	1.435
the purchasing process Contains information on product availability when purchasing	3.956	0.782	1.044

Customer service deals with the analysis of various variables regarding the service delivered to the customers. From this it can be inferred that organization must focus on involving customers on a larger scale. Gap score of 1.631 shows the need for customization and a gap of 1.44 shows that customer grievance handling mechanism has to be improved.

Web design deals with the design and arrangement of layout of website. Overall the e commerce sites performed very well on this dimension and some improvements is required on display of features and other information of the product that is with a gap of 1.24.

Assurance deals with a positive declaration and intention to give confidence or a promise which is adhered to in a prompt manner. Here by analyzing the various gap scores it has been found that the providers have to focus on using various measures to enhance the feeling of security among the customers that is with a gap of 1.304 and also firms should focus on maintaining an image of trustworthiness and confidence among the clients with a respective gap of 1.218 and 1.261.

Order management deals with the mechanism of giving purchase order and tracking the order till delivered. By analyzing the above statement it can be understood that customers would like better features whre more autonomy is given to modify or defer the transaction whenever required.

Comparison between dimensions

Dimension	Mean	Percentage
Customer service	3.616	72.32%
Web design	3.82	76.4%
Assurance	3.901	78%
Order management	3.765	75%

From the cross comparison among the variables it can be found that the we site are able to instill a sense of assurance in the minds of the customers, to make sure they remain competitive in this era of cut throat competition every organization should focus on achieving continuous progress. They should try to give improved service so that it increases the overall satisfaction which can lead to loyalty. Retention is the most difficult thing and they have to focus on every dimension and continue achieving greater satisfaction in all these dimensions to be more successful.

Analysis of Loyalty Trust and Satisfaction

E-loyalty	MEAN	STANDARD
		DEVIATION
I will recommend this online company to other people	4	1.048
I would recommend this company's web site to others	3.97	0.925
I intend to continue using this online company	3.478	0.795

I prefer this online company above others	3.891	0.870
E-satisfaction		
I am generally pleased with this company's online services	3.913	0.807
The web site of this online company is enjoyable	3.717	1.06
I am very satisfied with this company's online services	3.804	0.773
I am happy with this online company	3.826	0.872
E-trust		
I am prepared to give private information to online companies	3.913	1.37
I am willing to give my credit card number to most online	2.89	1.44
companies		
It is not a problem to pay in advance for purchased products	3.13	1.21
over the internet		
Online companies are professionals in their transaction	3.56	0.99
Online companies intend to fulfill their promises	3.47	0.954

Loyalty refers to the relationship between its customers and the firm. From the above data we can infer that most of the customers are of the opinion that they will spread positive word of mouth and intend to use their services I future but score of 3.87 tells that there is still chance of losing customers, so the firm has to make sure they keep most customers intact by engaging more with them with better offering. By analyzing the satisfaction component we can say that most customers are happy but still there is scope for improvement values in the range of 3.7 to 3.9 suggest that more effort should be put to achieve better satisfaction. trust deals with how customers rely on the firm in their transaction with them, a score of 2.89 says that people are not willing to purchase online using credit or debit cards and cash on delivery is what motives them to purchase. It also can be understood that these firms have to become more professional in dealing with the clients that is with a score of 3.56.

Correlation between Loyalty Trust and Satisfaction

	Service quality	loyalty	satisfaction	trust
Service	1			
quality				
loyalty	0.6078	1		
satisfaction	0.746239	0.6934	1	
trust	0.437618	0.468551	0.571366	1

From the above data we can understand that service quality and satisfaction is highly correlated to each other with a value of 0.74 followed by service quality and loyalty. But when we analyze trust we can understand that trust has low relationship with service quality and loyalty and it impact satisfaction in a moderate way. By this we can understand that even though customers are happy and loyal with the organization they need not trust the organization, so company should put in separate efforts even with loyal set of customers.

Theoretical and managerial implications

This study provides several valuable implications. From a theoretical perspective. We conceptualize and measure E service quality to encompass diverse aspects of online transaction and offline fulfillment, not limiting its evaluation to consumers' online experience. Further, we investigate the relationship between service quality, trust, satisfaction and loyalty

From a managerial perspective, it is noteworthy that e-loyalty is based on both e-satisfaction and e-trust, and the antecedents of those two constructs are distinct. In addition, the results indicate that e-trust not only has a direct impact on e-loyalty but also has an indirect influence through e-satisfaction, confirming the previous notion of the fundamental role of e-trust in the e- loyalty development model. Since an online transaction is perceived to be associated with higher risk, trust has been considered as a critical component in online retailing context. Therefore, online retailers should realize that to build e-loyalty and e-satisfaction, there has to be a prior development of e-trust. In examining a holistic view of I quality that considers the entire online transaction experience, this study provides insightful marketing suggestions for online retailers. In building e-trust, our study results suggest fulfillment/reliability to be the most powerful factor that influences the development of e-trust. In an online setting, a question can be raised whether online retailers should invest in redesigning and enhancing the functionality of the website, or give priority to improving their offline. Based on our findings which indicate that offline experience is more important than the functionality of the website, offline fulfillment is the area where companies should focus a large proportion of their resources. After the fulfillment/reliability dimension, security/privacy is found to be the second most important factor in increasing e-trust.

Overall, it is critical for the online retailers to realize the relationships among E service quality, e-satisfaction, and e-trust in the development of e-loyalty. When consumers interact with online retailers, they perceive that they are interacting with an organization through a technical interface, evaluating not only the retailer's website performance but also the entire purchase experience that extends to offline fulfillment. Therefore, our results can help online retailers realize the role of all four distinct dimensions of E service quality in building e-satisfaction, e-trust, and e-loyalty.

2 References

- 1. Jarvenpaa SL, Todd PA. Consumer Reactions to Electronic Shopping on the World Wide Web. *Int J Electron Commer*. 1996;1(2):59-88. doi:10.1080/10864415.1996.11518283
- 2. Liu C, Arnett KP. Exploring the factors associated with Web site success in the context of electronic commerce. *Inf Manage*. 2000;38(1):23-33. doi:10.1016/S0378-7206(00)00049-5
- 3. Guinalíu M, Flavián C, Cristobal E. Perceived e-service quality (PeSQ): Measurement validation and effects on consumer satisfaction and web site loyalty. *ManagServQualInt J*. 2007;17(3):317-340. doi:10.1108/09604520710744326
- 4. Santos J, Boote J. A theoretical exploration and model of consumer expectations, post-purchase affective states and affective behaviour. *J ConsumBehav*. 2003;3(2):142-156. doi:10.1002/cb.129
- 5. Lee G, Lin H. Customer perceptions of e-service quality in online shopping. *Int J Retail DistribManag*. 2005;33(2):161-176. doi:10.1108/09590550510581485

- Collier JE, Bienstock CC. Measuring Service Quality in E-Retailing. J Serv Res. 2006;8(3):260-275. doi:10.1177/1094670505278867
- Zhang Y, Tang J, Yang Z, Pei J, Yu PS. COSNET: Connecting Heterogeneous Social Networks with Local and Global Consistency. In: Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining. KDD '15. New York, NY, USA: ACM; 2015:1485–1494. doi:10.1145/2783258.2783268
- Muturi FM, Wadawi JK, Owino EO. Antecedents of Customer Perceived Value: Evidence of Mobile Phone Customers in Kenya. 2014. http://41.89.49.13:8080/xmlui/handle/123456789/1225. Accessed April 5, 2019.

