

# A Study of Influence of E-Service Quality on Customers' loyalty towards online Shopping

Parveen Kumar Garg<sup>1</sup>, Dr. Sunita Sukhija<sup>2</sup>

<sup>1</sup> Research Scholar, University College of Commerce & Management, Guru Kashi University, Talwandi Sabo,

<sup>2</sup> Associate Professor, University College of Commerce & Management, Guru Kashi University, Talwandi Sabo,

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## ABSTRACT

Customer satisfaction is becoming an area of great interest for companies and customer satisfaction has a direct impact on the profitability of a company. This paper develops to examine the relationship among e-service quality & loyalty dimensions and overall service quality & loyalty, customer satisfaction and purchase intentions. Online customers thus expect higher levels of service quality than traditional channels customers. Without that, the customers can easily switch to other online shops by clicking the mouse in the C2C e-business model. So, making full use of limited resources, improving the service quality and the customer satisfaction, then maintaining the customer loyalty are particularly important. The present research study has used non-probability convenience sampling research methods include Multivariate test to study the impact of service quality & service loyalty of on-line marketers on customers, information quality, website usability, reliability, responsiveness, assurance and personalization respondent's behaviour and benefits and services of online shopping. Simple percentage analyses have been used in the analysis. The paper integrates previous literature on service quality and customer loyalty and develops valid and reliable measures of performance based e-store customer service quality and e-store customer loyalty.

**Key Words:** online shopping, e-service quality, service loyalty, customer satisfaction, customer perception.

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## I INTRODUCTION

The online growth rate indicates that the online channel will play a keener role in consumers' shopping activities. Inarguably, online channel present different experiences even when the same product are purchased from different e-retailer. In the last few years, a significant growth has been noticed in the internet- based service. Consumers have limited time and limitless choice. However, consumer can assess a virtually product in a single click. They would naturally connect to the internet merchant who meet their requirement and provide quality service. A number of researchers have made the point that the purpose of measuring service quality and gap is to prove information to upgrade customer loyalty. To deliver a better service quality, manager of the companies with web presence must first understand how the customer perceives and assess online customer service. With the speedy development of the Internet and Globalization of market, the retail sector has become an increasingly competitive and active business environment. Today's product and services are quickly changing to digital form and presented through the Internet. In the competitive environment, it is important for the online retailer to take care of their customers better than competitor and provide better solution to their problems.

Therefore, to achieve competitive advantage and differentiate strategies by offering superior service quality, it is necessary for online service providers to uncover what attributes customer utilize in their assessment of overall service quality and satisfaction and which attribute are important. E-satisfaction can be defined as the fulfillment of a consumer with respect to his or her prior purchasing experiences with a given retail-oriented website according to Anderson and Srinivasan's (2003) definition. In the context of e-commerce, IS and marketing researchers have been interested in re-examining customer satisfaction. However, the essential importance of customer satisfaction and its consequent impacts appear to remain intact even in this environment (Evanschitzky, Iyer, Hesse and Ahlert, 2004). Satisfaction in online marketing is customer perception of their internet experience as compared to their experience with traditional offline service provider or retail stores. As customer satisfaction specify the degree of a customer's positive feeling about a service provider, it is essential for service providers to understand customers' perception of their services. Customer satisfaction is a key judgment predecessor for customer loyalty. This relationship would seem to be relevant to Internet e-commerce .Satisfied customers tend to have higher usage of services, and obtain stronger repurchase intention. Customers' satisfactions with a certain e-service provider are expected to increase their willingness to make more online purchasing from that service provider. Rust and Zahorik stated that greater customer satisfaction leads to

greater intent to repurchase. According to Anderson and Sullivan, a high level of customer satisfaction will decrease the perceived need to switch service provider, thereby rising customer repurchase and ultimately enhancing profitability of the organization. Henig and Klee further argued that satisfaction will positively influence commitment. A high level of satisfaction provides the customer with repeated positive reinforcement that will create commitment and loyalty.

## II REVIEW OF LITERATURE

**Parasuraman et al. (1988)** has been widely tested as a means of measuring customer perceptions of service quality. The SERVQUAL model contains five dimensions, namely tangibles, reliability, responsiveness, assurance and empathy. Furthermore, during the past decade, SERVQUAL model has been tested for measuring service quality in e-commerce settings (Devaraj et al., 2002; Kim and Lee, 2002; Li et al., 2002; Kuo, 2003; Negash et al., 2003). Previous studies on the measurement of e-service quality focused only on the application of the SERVQUAL model by rewording the original scale items. However, in the service quality field, service researchers need to pay more attention to customer evaluations of e-services, because methods of measuring service quality differ between e-commerce and physical marketplace service (Parasuraman and Grewal, 2000).

**Yoo and Donthu (2001)** developed a nine-item SITEQUAL scale for measuring site quality on four dimensions: ease of use, aesthetic design, processing speed, and security. SITEQUAL does not capture all aspects of the purchasing process and therefore does not constitute a comprehensive assessment of a site's service quality.

**Van Riel et al. (2001)** proposed that the SERVQUAL scale items would have to be reformulated before they could be used meaningfully in the online shopping context. Thus, this study aims to identify the main influence on online shopping service quality, using a modified version of the SERVQUAL model. Research is required on the influence of e-services on all customer responses, such as perceived service quality, customer satisfaction and purchase intentions (Parasuraman and Grewal, 2000; Jeong et al., 2003). Understanding the determinants of service quality, customer satisfaction and purchase intentions for online shopping is important for both marketing researchers and online stores managers. Moreover, previous studies have revealed that service quality in online environments is an important determinant of the effectiveness of e-commerce (Yang, 2001; Janda et al., 2002). However, few studies have examined the relation among different dimensions of e-service quality in predicting overall service quality, customer satisfaction and purchase intentions for online shopping.

**Parasuraman and Malhotra (2002)** express a similar view of WEBQUAL, highlighting that this instrument focuses mostly on the technical quality of the website itself, rather than with the provision of service quality through the website. They also point out that in a buying situation, when the user is typically goal-oriented and motivated by an intention to purchase a product or service, the entertainment-related criteria of the website, such as Flow or innovatively dimensions of WEBQUAL, are not relevant. Zeithaml, Parasuraman and Malhorta (2002) suggest that WEBQUAL is the scale that is mostly usable for web designers, who need to determine ways of improving a website to positively affect the interaction perceptions of users.

Research over the past two decades has demonstrated that service quality influences consumption decisions, but only recently these findings have been applied to e-commerce (Yang and Jun, 2002; Wolfinbarger and Gilly, 2003). For example, service quality measures have been applied to assess the quality of virtual community web sites (Kuo, 2003), satisfaction with e-commerce channels (Devaraj et al., 2002), and determinants of web site success (Liu and Arnett, 2000).

**Cox and Dale (2001)** argue that there are at least two differences between physical service environment and electronic service environment that are key factors in suggesting that electronic environment the interaction between a customer and a business mostly uses a computer as the interface. There are almost no human elements as such in a service delivered over the Internet, apart from customer service personnel reached by email or telephone. Secondly, companies are able to customise their service to individuals, particularly when they interact directly with the customer. For a Web based interface, the opportunity to customise the service is not automatic because the Web site must first glean customer information and must then process this information to provide customisation. From these findings it would seem that while there could be a link between e-store service quality and e-store customer loyalty, should it exist, the drivers and strength of such a relationship in an e-store environment, need to be investigated.

**Park and Kim (2003)** found that a consumer's commitment to an e-store is highly related to information satisfaction and relational benefit. At the same time, they found that information satisfaction and relational benefit are significantly affected by product and service information quality, user interface quality, and security perception. This implies that information about an on-line store is an important factor that affects each customer's site loyalty and purchase behaviour.

**Wolfenbarger and Gilly (2003)** used online and offline focus groups, a sorting task, and an online-customer-panel survey to develop a 14-item scale called eTailQ. The scale contains four factors: Web site design, reliability/fulfillment, privacy/security, and customer service. Wolfenbarger and Gilly’s goal of creating a scale to measure customer perceptions of e-tailing quality is excellent. Although two of their dimensions—security/privacy and reliability/fulfillment—show strong face validity and highly descriptive of the items they represent, the other two dimensions appear less internally consistent and distinct. These dimensions need to be tested further.

**Parasuraman et al. (2005)** using the means-end framework as a theoretical foundation, constructed a multiple-item scale for measuring the service quality. Two stages of empirical data collection revealed that two different scales were necessary for capturing electronic service quality. The basic E-S-QUAL scale developed in the research is a 22-item scale of four dimensions: efficiency, fulfillment, system availability, and privacy. The second scale, E-S-QUAL, is salient only to customers who had non routine encounters with the sites and contains 11 items in three dimensions: responsiveness, compensation, and contact.

**Hou Xingqi (2008)** thinks that service quality is customer’s subjective cognition, not objective evaluation, it is the evaluation on service providers after comparing the gap between the desired service quality in advance and the actual service quality consumers receive.

**Zou Jianping (2010)** divided the express delivery service quality into communication quality, order quality, delivery quality, arrival quality and order discrepancy handling quality in the study of express service quality.

**Yao Dan (2011)** thinks that no matter the evaluation from multidimensional or overall, the connotation of customer loyalty should not only reflect the customer’s behaviour characteristics (such as repeat purchase), but also the emotional characteristics of customer loyalty (such as customer’s love of for products or service, and the love should be positive, active and sustainable).

**Lin Xiaorui (2012)** divided the express delivery service quality into interaction of logistics service quality, operation of the logistics service quality and cost of logistics service quality.

### III OBJECTIVE OF THE STUDY

1. To analyze the service quality and service loyalty in online shopping.

#### Hypothesis of the Study

H<sub>01</sub>: There is no significant difference between service quality and service loyalty towards online shopping.

#### Research Design

Sr.No	Description	Contents
1	Problem Statement	A Study of Influence of E-Service Quality On Customers’ loyalty towards Online Shopping
2	Group of Problems	Objective of the Study
3	Area of Population	Punjab (Bathinda, Patiala, Ludhiana, Jalandhar, Amritsar)
4	Sampling Technique	Convenience Sampling
5	Data Collection	Primary Data
6	Research Variables	11 Variables
7	Sample Size	500 respondents
8	Respondents	Business persons, Service persons, Students.

#### Data Analysis

Apart from that demographic information, respondents were asked to rate their opinion according to five point Likert rating scale, with rating five being “Strongly Agree” and one being “Strongly Disagree”.

Analysis of data has been using various descriptive and inferential statistical tools like Frequency distribution, Percentage, Arithmetic Mean, Standard Deviation Reliability Analysis (Cronbach’s Alpha). For hypothesis testing and analyzing significant difference Analysis of Variance test using General Linear Model (Multivariate Analysis) applied employing SPSS 22.

**Data Analysis and Interpretation**  
**Demographic Analysis**

In this section, demographic analysis was performed for the variables Age, Gender, Marital Status, Monthly Income, Occupation category & Education category among all 500 respondents those who participated in research. The following table gives the frequency distribution of the respondent for different categories of each demographic variables discussed. The analysis of below table showed, among 500 respondents, 93% of respondents belongs to age group (20-40), only 3.6% belongs to age group (40-60) & only 3.4% belongs to age group (> 20). Male (80.6 %) were more than the female ( 19.4%) but among all majority i.e. 16 % of the respondents were married and compare it to 84% were found to be single.

**Table2: Summary of Demographic Profile**

		Frequency	Percentage %
<b>Age</b>	< 20	17	3.4
	≥20<40	465	93
	≥40	18	3.6
<b>Gender</b>	Male	403	80.6
	Female	97	19.4
<b>Marital Status</b>	Single	420	84
	Married	80	16
<b>Average Monthly Income</b>	No Income	28	5.6
	15000-25000	78	15.6
	25001-35000	338	67.6
	35001-45000	48	9.6
	45001 and above	8	1.6
<b>Occupation</b>	Business/Self Employed	33	6.6
	Service/Executive	429	85.8
	Student	29	5.8
	any other, specify	9	1.8
<b>Education Level</b>	High school degree or Less	8	1.6
	Bachelor degree	75	15
	Master degree	408	81.6
	Ph.D degree	9	1.8

In average monthly income 67.6 % described themselves from (25000-35000), 15.6% (15000-25000), 9.6% (35000-45000), 5.6 % (No income), 1.6% (45000 and above).

In occupation category, 1.8% of the respondent classified themselves to others category as compare to 85.8% (Service/Executive) category & 6.6% (Business Class) & 5.8% (Student).

In education category, 1.6 % of the total respondents were up to the school level of their education compare to 1.8 % (doctorate), 15 % (Graduates), 81.6 % (Post graduates).

The following were the pictorial distribution of the demographic variables Age, Gender, Marital Status, Monthly Income, Occupation category & Education category.

**Reliability Analysis**

To assess internal consistency of the items for each of the theoretical concepts, a Cronbach’s Alpha was computed for each factor assessing that the items were measuring the same concept. While desired  $\alpha$  levels were 0.70 (Stevens, 2002; Vogt, 1998). This study has overall construct Cronbach’s alpha ( $\alpha$ ) = 0.707 where is considered as acceptability and reliability.

**Findings of the study**

**1. Trust the security of online payment methods such as credit card.**

This study has evaluated that 70 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “trust the security of online payment methods such as credit card” because it is found that successful implementation of firewalls, which work as barrier between the internet and connected computer, ensure that only those granted permission can obtain access to the information on the computer (Mean=

4.09, SD= 0.718). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age group ( $p = 0.502$ ), different genders ( $p= 0.164$ ), different monthly income ( $p= 0.933$ ) towards the statement that trust the security of online payment methods at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ).

**2. Trust the e-tailor privacy policies specified on their web sites.**

This study has evaluated that 44 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “trust the e-tailor privacy policies specified on their Web sites” because it is found that it is in well-formatted sections that make policy easy to read & helps to build trust on online shopping. But some of the respondents are not in agreement w.r.t research statement “trust the e-tailor privacy policies specified on their Web sites” because it is found that it is a complex and technical statement into pages of legal jargon (Mean= 3.37, SD= 1.164). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different genders ( $p= 0.136$ ), different monthly income ( $p= 0.560$ ) towards the statement that trust the e-tailor privacy policies specified on their web sites at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different age group ( $p = 0.000$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that trust the e-tailor privacy policies specified on their web sites.

**3. Respondent likely to shop online if product return were easier.**

This study has evaluated that 26 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “likely to shop online if product returns were easier” because it is found that a ‘no questions asked return policy’ is considered as one of the game-changers of the Indian ecommerce industry. But some of the respondents are not in agreement w.r.t research statement “likely to shop online if product returns were easier” because it is found that it affects returns rating of the seller and make financial loss for sellers.(Mean= 3.14, SD= 1.066). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age group ( $p = 0.448$ ), different genders ( $p= 0.634$ ) towards the statement that likely to shop online if product returns were easier at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different monthly income ( $p= 0.000$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that likely to shop online if product returns were easier.

**4. When shopping on the Internet, Respondent is satisfied with the delivery system.**

This study has evaluated that 25 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “When shopping on the Internet, Respondent is satisfied with the delivery system” because it is found that e-commerce sites have order tracking system which is very helpful to the customers to track their order. But some of the respondents are not in agreement w.r.t research statement “When shopping on the Internet, Respondent is satisfied with the delivery system” because it is found that delivery personnel often turn up at our homes when we are at work or out somewhere as there's no way to fix a particular time slot for the delivery to take place (Mean= 3.07, SD= 1.026). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age group ( $p = 0.147$ ), different monthly income ( $p= 0.443$ ) towards the statement that respondent is satisfied with the delivery system at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different genders ( $p= 0.024$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that respondent is satisfied with the delivery system.

**5. Satisfied with the return policy of Internet shopping.**

This study has evaluated that 18 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “satisfied with the return policy of Internet shopping” because it is found that return policy of e-commerce sites are transparent to their customers. But some of the respondents are not in agreement w.r.t research statement “satisfied with the return policy of Internet shopping” because it is found that it affects returns rating of the seller and make financial loss for sellers.(Mean= 3.00, SD= 0.967). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age group ( $p = 0.336$ ) towards the statement that satisfied with the return policy of internet shopping at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different genders ( $p= 0.016$ ), different monthly income ( $p=0.010$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that satisfied with the return policy of Internet shopping.

**6. Satisfied with service recovery.**

This study has evaluated that 17 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “satisfied with service recovery” because it is found that Service providers rectify the problem that leads to a service failure and affect the level of customer satisfaction. But some of the respondents are not in agreement w.r.t research statement “satisfied with service recovery” because it is found that the absence or limited human interaction makes the online environment less conducive to development of trust which may impact consumers' post recovery satisfaction.(Mean= 3.54, SD= 0.789). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different genders ( $p = 0.558$ ) towards the statement that satisfied with service recovery at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different age groups ( $p= 0.000$ ), different monthly income ( $p=0.004$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that satisfied with service recovery.

**7. It gives consistent service every time.**

This study has evaluated that 39 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “It gives consistent service every time” because it is found that ecommerce

sites have support center & online chat corner which are providing continuously service to their customers. But some of the respondents are not in agreement w.r.t research statement “It gives consistent service every time” because it is found that company’s brand image is driven by combination of promises made and promises kept but sometimes it’s not happened.(Mean= 3.46, SD= 1.078). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age groups ( $p = 0.140$ ), different monthly income ( $p=0.781$ ) towards the statement that gives consistent service every time at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different genders ( $p= 0.006$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that gives consistent service every time.

**8. It helps respondent to get out of the difficult situation.**

This study has evaluated that 16 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “It helps Respondent to get out of the difficult situation” because it is found that customer care listen the problem of customer very carefully, acknowledged and understood than give the solution to get out of difficult situation. But some of the respondents are not in agreement w.r.t research statement “It helps Respondent to out of the difficult situation” because it is found that sometimes customer care doesn’t give the solution on the same time where it become difficult for the customer to get out of that situation.(Mean= 3.57, SD= 0.937). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age groups ( $p = 0.270$ ), different genders ( $p=0.928$ ) towards the statement that helps respondents to out of the difficult situation at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different monthly income ( $p= 0.002$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that helps respondents to out of the difficult situation.

**9. It clears respondent's doubt, when there is need for it.**

This study has evaluated that 18 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “It clears Respondent's doubt, when there is need for it” because it is found that in case of return the items, irrational charges, unclear payment reconciliation etc. all issues or doubts are cleared by online sellers.(Mean= 3.29, SD= 0.933). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age groups ( $p = 0.360$ ), different genders ( $p=0.751$ ), different monthly income ( $p= 0.681$ ) towards the statement that clears respondent's doubt, when there is need for it at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ).

**10. It guides/counsel/advice Respondent of the foreseen risk.**

This study has evaluated that 17 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “It guides/counsel/advice Respondent of the foreseen risk” because it is found that potential of gaining or losing of value of any product would counselled to customers. But some of the respondents are not in agreement w.r.t research statement “It guides/counsel/advice Respondent of the foreseen risk” because it is found that somewhere ecommerce seller unable to guide of foreseen risk to e-customers for that customers bears the loss(Mean= 3.32, SD= 0.779). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different age groups ( $p = 0.462$ ), different genders ( $p=0.150$ ) towards the statement that it guides/counsel/advice Respondent of the foreseen risk at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different monthly income ( $p= 0.047$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that it guides/counsel/advice respondent of the foreseen risk.

**11. Customer care listens to respondent in case they have complaints.**

This study has evaluated that 39 per cent of the respondents (age-wise, gender-wise, income wise) are in the agreement w.r.t research statement “Customer care listen to Respondent in case they have a complaint” because it is found that ecommerce seller listen complaint of customers through support center, online chat, provide timely response and give the right solution.(Mean= 3.73, SD= 0.771). Statistically, the results of independent samples levene's test show that there is no significant difference among the respondents of different genders ( $p = 0.432$ ), different monthly income ( $p=0.749$ ) towards the statement that customer care listen to respondent in case they have a complaint at 0.05 level of significance by accepting the hypotheses ( $H_{01}$ ). Based on the different age group ( $p= 0.032$ ) differ significantly and rejected the hypotheses ( $H_{01}$ ) that customer care listen to respondent in case they have a complaint.

## CONCLUSION

- [1.] It is concluded that successful implementation of firewalls, which work as barrier between the internet and connected computer, ensure that only those granted permission can obtain access to the information on the computer.
- [2.] It is concluded that it is in well-formatted sections that make policy easy to read & helps to build trust on online shopping.
- [3.] It is concluded that a ‘no questions asked return policy’ is considered as one of the game-changers of the Indian ecommerce industry.
- [4.] It is concluded that e-commerce sites have order tracking system which is very helpful to the customers to track their order.
- [5.] It is concluded that return policy of e-commerce sites are transparent to their customers.

- [6.] It is concluded that service providers rectify the problem that leads to a service failure and affect the level of customer satisfaction.
- [7.] It is concluded that e-commerce sites have support center & online chat corner which are providing continuously service to their customers.

## REFERENCES

- [1]. A. Parasuraman and Arvind Malhotra (2000), "A Conceptual Framework for Multiple-item Scale for Measuring Consumer Perception of Service Quality", *Journal of Retailing*, 64 (1), 12-40.
- [2]. Cho, Y., I. Im, J. Fjermestad and S. Hiltz, "The Impact of Product Category on Customer Dissatisfaction Cyberspace", *Business Process Management Journal*, Vol. 9, No. 5:635- 651, 2003.
- [3]. Cox, J., & Dale, B. G. (2001). Service quality and e-commerce: an exploratory analysis. *Managing Service Quality: An International Journal*, 11(2), 121-131.
- [4]. Devaraj, S., Fan, M., & Kohli, R. (2002). Antecedents of B2C channel satisfaction and preference: validating e-commerce metrics. *Information systems research*, 13(3), 316-333.
- [5]. Du, Y., & Tang, Y. (2014). Study on the Development of O2O E-commerce Platform of China from the Perspective of Offline Service Quality. *International Journal of Business and Social Science*, 5(4).
- [6]. Jiang, J., G. Klein and S. Crampton, "A Note on SERVQUAL Reliability and Validity in Information System Service Quality Measurement" *Decision Sciences*, Vol. 31, No. 3: 725-744, 2000.
- [7]. Kuo, Y. F. (2003). A study on service quality of virtual community websites. *Total Quality Management & Business Excellence*, 14(4), 461-473.
- [8]. Lee, G. and H. Lin, "Customer Perceptions of E-Service Quality in Online Shopping", *International Journal of Retail and Distribution Management*, Vol. 33, No. 2:161-176, 2005.
- [9]. Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-service quality in online shopping. *International Journal of Retail & Distribution Management*, 33(2), 161-176.
- [10]. Negash, S., Ryan, T., & Igbaria, M. (2003). Quality and effectiveness in web-based customer support systems. *Information & management*, 40(8), 757-768.
- [11]. Parasuraman, A. and D. Grewel, "The Impact of Technology on the Quality-Value-Loyalty Chain: A Research Agenda", *Journal of the Academy of Marketing Science*, Vol. 28, No. 1:168-174, 2000.
- [12]. Parasuraman, A., Leonard L. Berry and ValarieA. Zeithaml (1988), "SERVQUAL: A
- [13]. Parasuraman, A., V. Zeithaml and L. Berry, "SERVQUAL: A Multi-Item Scale for Measuring Consumer Perception of Service Quality", *Journal of Retailing*, Vol. 64, No. 1:2-40, 1998.
- [14]. Parasuraman, A., V. Zeithaml, V. and A. Malhotra, "E-S-Qual: A Multiple-Item Scale for Assessing Electronic Service Quality", *Journal of Service Research*, Vol., 7, No. 3:213-233, 2005.
- [15]. Park, C. H., & Kim, Y. G. (2003). Identifying key factors affecting consumer purchase behavior in an online shopping context. *International journal of retail & distribution management*, 31(1), 16-29.
- [16]. Ribbink, D., Van Riel, A. C., Liljander, V., & Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the internet. *Managing Service Quality: An International Journal*, 14(6), 446-456.
- [17]. Wolfinbarger, M. and M. Gilly, "E-TailQ: Dimensionalizing, Measuring and Predicting Etail Quality", *Journal of Retailing*, No. 27:183-198, 2003.
- [18]. Xingqi, H. (2008). The Study on Service Quality Customer Satisfaction and Loyalty. Shandong University.
- [19]. Yang, Z., S. Cai, Z. Zhou and N. Zhou, "Development and Validation of an Instrument to Measure User Perceived Service Quality of Information Presenting Web Portals", *Information and Management*, Vol. 42, No. 4:575-589, 2005.
- [20]. Yi, M. and Y. Hwang, "Predicting the Use of Web-Based Information Systems: Self-Efficacy, Enjoyment, Learning, Goal Orientation, and the Technology Acceptance Model", *Human-Computer Interaction*, Vol.59, No. 4:59:431-449, 2003.
- [21]. Yoo, B., & Donthu, N. (2001). Developing a scale to measure the perceived quality of an Internet shopping site (SITEQUAL). *Quarterly journal of electronic commerce*, 2(1), 31-45.