



## Customer expectation and quality of product from FMCG and Service quality of online shopping in Bengaluru

GK Venkatesha<sup>1</sup>, Dr. Govindappa D<sup>2</sup>

<sup>1</sup> Assistant Professor, Department of Commerce, Government First Grade College, Ramanagara, Karnataka, India

<sup>2</sup> Associate Professor, Department of Commerce, Maharani Arts, Commerce & Management College, Bangalore, Karnataka, India

### Abstract

Electronic-commerce enables buying and selling of products online with the use of internet. The conventional method of shopping which involved visiting a particular store, physically examining the product and then paying for it after being satisfied with the applicability of the product is slowly being replaced by e-commerce. The trends of e-commerce are only getting better day by day with new features that enable second hand sales on e-commerce portals, wide range of product categories, sales of the intangible services, and so much more. The trend of shopping online is catching up for various reasons like convenience, home delivery, product comparison, price comparison, safe and easy payment, timely and safe delivery of products, easy returns etc. The current empirical study attempts to explore and study the service quality (tangibility, reliability, responsiveness, assurance and empathy) dimensions that affect the customer's perception towards services offered by Unishopy (e-tailer) in Bengaluru city. In order to realise the stated objectives the researchers have employed SERVQUAL model developed by Parasuraman *et al* (1988) and collected the data from 160 respondents. The validity of the questionnaire was adjudged, using Cronbach's coefficient ( $\alpha$ ) was calculated to test the reliability and internal consistency of the responses. In the second phase, normality of the data and frequency distribution have been conducted and extrapolated by using inferential statistics. In the last phase, a robust multiple regression model has been run to identify the major determinants of service quality. The survey results revealed that Tangibility, Assurance, Empathy and Responsiveness were the major determinants of service quality in online retail sector. Out of the chosen variables the very important quality dimension is Empathy followed by Assurance, Responsiveness and Tangibility.

**Keywords:** servqual model, e-service quality, customer satisfaction, ecommerce, tangibles

### 1. Introduction

The age old practice of trade which came into existence after human evolution has only evolved for the better ever since. The traditional methods of buying and selling have undergone innovations of different kinds with passing of time. One such trade innovation is the introduction of electronic commerce (e-commerce). Electronic commerce, the brainchild of Michael Aldrich is defined differently by different researchers. One of the broad definitions given out by OCED (April 2000) conveys that, electronic transaction is the purchase or sale of goods and services be it between individuals; between businesses and individuals or between different business carried out over computer brought about networks while the payments for the purchases can be made online or offline. The foundation of e-commerce was laid down with the development of EDI (electronic data interchange). The Value added networks also known as EDI networks are virtual private networks (VPN) that are utilized by technologically advanced business firms offering internet based services. Among reputed providers of this form of network are AT&T, IBM Global services (Anthony Ferraro). Apart from enabling the movement of data through the networks, it is also the responsibility of these providers to ensure the safety of the data. Currently, the main concerns of internet are security and reliability. Despite these concerns, internet revolution has turned every country productive and challenging (Ben Thompson).

Electronic commerce indulges in buying and selling of wide variety of products and services belonging to different sectors

like, agricultural products, health care products, FMCG goods, personal care products, banking services etc. Business under every sector is witnessing new paradigms to match with the electronic commerce requirements. E-commerce is of the following types – B2B, trade between two different businesses/ companies; B2C, trade between business and consumer; B2G, the commerce between business and public sector/ the government; C2C, the trade between different individuals or consumers. Information technology, the backbone of electronic commerce has been a support system for the existence of e-commerce. The information technology in India has contributed up to 5.19% to the GDP with close to 2.3 million employees working for this sector (Devendera Agarwal (2012)). The definition given out by (Wigand) conveys that electronic commerce involves seamless application of IT and communication technology throughout the business activity.

The essentials for any business to be a player in the virtual market are descriptive company website accessible on the world wide web; Product catalog that describes and pictorially depicts the wide range and products or services offered by the business, database that maintains the client details, a virtual shopping cart that allows customers to purchase the shortlisted product, payment processing options. Apart from these requirement, e-commerce is multidisciplinary in nature and involves all fields like marketing, finance, supply chain management, business management and customer relationship management for handling customer queries, delivery management; through

outsourced reliable courier partner for the delivery of the online transacted products. Businesses put together these individual components to establish a successful electronic business. Thus, electronic commerce is seen having several advantages like convenience, wide range of quality products, offers and discounts, home delivery facility, product reviews and comparison etc., besides disadvantages like intangibility of products, authenticity of the seller, payment security etc. Irrespective of these disadvantages, e-commerce has become a household preference with its worldwide retail sales increasing to 24.6% according to Emarketer report (2017). The ecommerce sector has witnessed massive growth over the years with the establishment of renowned e-commerce companies like Amazon, EBay, Flipkart, Snapdeal and so on. According to emarketer report published on July 18, 2017, it is stated that “Worldwide retail e-commerce sales will reach \$2.290 trillion in 2017, making up 10.1% of total retail sales. This share will surpass 16% by 2021, when sales will hit \$4.479 trillion.” Indicating the worldwide retail e-commerce sale and growth expected over the years.

The structure of the present research paper is as follows. Section two discusses the review of previous researches done relating to the chosen topic. Section three briefly outlines the aims and objectives of the study and the methodology employed for the analysis. Section four briefs the analysis of the data collected and in the last phase a brief discussion has been presented, conclusion drawn and the findings of the study have been compared with the possible evidence.

## 2. Literature review

According to Lewis, (1989) Service quality is considered as a vital factor of competitiveness. Consequently, the service providers are expected to render high quality of service in order to gain high customer satisfaction. Therefore, the important issue and challenge facing the contemporary service industry is rendering high quality services to retain the customers (Hung *et al.*, 2003). During the past few decades, service quality has become a foremost area of attention to practitioners, managers and researchers because of the quality services rendered by a service provider which has a profound influence on business performance and customer satisfaction. Consequently, a lot of prominence has been given to the quality of service through various researches carried out in different industries like, the hospitality and tourism industry (Thomson and Thomson (1995); Shergill (2004); Davidson (2003 b)<sup>[21]</sup>; Markovic and Raspor (2010); Molah and Jusoh, (2011); Gunaratne (2014); Asirifi *et al.* (2014)<sup>[7]</sup>; (Reuland *et al.* (1985)), banking sector (Sudhahar and Selvam (2007); Mont and Plepys, (2003); La Barbera and Mazursky, (1983); Yang and Fang, (2004); Van Iwaarden *et al.*, (2003); Sadek *et al.*, (2010); Iwaarden *et al.* (2003); Ananth *et al.*, (2011)<sup>[3]</sup>; Kumar *et al.*, (2009); Malhotra & Mukherjee, (2004); Angur *et al.*, (1999)<sup>[5]</sup>; Fogli (2006). Insurance sector, Berry (1995)<sup>[11]</sup>; Toran, (1993); Richard and Allaway, (1993); Clow and Vorhies, (1993)<sup>[17]</sup>; Crosby and Cowles, (1986)<sup>[20]</sup>; Slattery, (1989). Sherden (1987); King, (1992); Walker and Baker, (2000); Friedman, (2001a), (2001b); Cooper and Frank, (2001)<sup>[18]</sup>; Goswami, (2007). Healthcare sector, Zabada *et al.*, (1998); Headley and Miller, (1993); Kilbourne *et al.* (2004); Sasser *et al.*, (1978); Freeman and Dart, (1993); Lynch and Mackay, (1985); Jabnoun N, Chaker M., (2003). At airlines industry, (Kloppenborg and Gourdin, (1992); Shostack, (1977); Lovelock, Patterson, and Walker, (2004); Ostrowski,

O'Brien, and Gordon (1993); Dennett, Ineson, Stone, and Colgate (2000); (Miller, 1993); Ott (1993); Ostrowski *et al.* (1993); (Brown and Bitner, 2007)<sup>[14]</sup>; Jin-Woo Park, Rodger Robertson and Cheng-Lung Wu., (2005), Fitzsimmons & Fitzsimmons (2001)); Public sector, (Gowing & Lindholm, (2002); Gupta *et al.*, (2005); (Petrick, 2002); Ridakhurshid *et al.* (2012)), Service quality in Indian Railways (Sathyanarayana (2017)), Service quality for online shopping, (Zeithaml, V.A., Parasuraman, A., and Malhotra, A (2000); Zha J., Ju F. and Wang L. (2006); Alam, S. S. and N. M. Yasin, (2009)<sup>[2]</sup>; XiaoyingGuo, Kwek Choon Ling & Min Liu (2012); Than, C.R., and Grandon, E. (2002); Loiacono, E. T., Watson, R. T. & Goodhue, D. L. (2002)).

As expressed by researchers like Rust and Oliver (1994) customer perceptions towards experiences arising out of service has been an important factor to determine the success of the organization. Understanding of consumer expectancies and perceptions towards the service rendered by the organization is essential for the organization to bring about any kind of change in the organization. Organizations function in tune with the changing economic scenario, technological changes and market changes trying to get an edge over the competitors with sole purpose of attaining and retaining customers.

Providing with quality services and experiences to customers is of top priority of any company in order to meet customer satisfaction and retention (Zeithaml *et al.*; (2006)). The SERVQUAL model that has been extensively used to value the consumer perceptions of service quality was developed by Parasuraman *et al* (1988). However, the framework for understanding the consumer perceptions of quality, price and value in order to understand the gap between the consumer expectancies and service rendered by the organization was given by Zeithaml (1988). Service quality evaluation is concerned about understanding the components of service such as physical environment quality, interaction quality and outcome quality (Brandy and Cronin, (2001)). As per Cronin and Taylor (1992)<sup>[19]</sup> the purchase intention of customer is governed by the quality service provided by the e-commerce company. The consumer loyalty is directly linked to the customer satisfaction attained by the product and the service quality. (Lee (1998)). Service quality is an essential component for determination of customer's value perception; this further helps in determining customer satisfaction; hence, consumers perceive greater value for money whenever high quality service is experienced. (Oh, 2000). As per Tam (2000) service quality and customer satisfaction are interlinked. Since it is understood that service quality can be modified to attain customer loyalty, service quality is researched on by the following researchers (Dukart, 1998; Leal & Pereira, (2003)<sup>[25]</sup>; Umbrell, (2003); Parasuraman, Zeithaml, & Berry, (1985)<sup>[11]</sup>, (1988), (1994)). Service quality is also known to increase profits of the organization since it is directly associated with loyalty of customer and customer satisfaction. (Baker & Crompton, 2000; Leal & Pereira, 2003; Zeithaml&Bitner, 2000) (Kivela, Inbakaran, & Reece (1999) and Koutroumanis (2005)). Thus, on understanding the importance and impact of service quality, organizations undergo frequent evaluation of the quality of services provided by them in order to make beneficial changes in the service process for the betterment of the organization. The service quality expectancies of customers need to be thoroughly understood by the service providers in order to serve their customers with better quality.

The service quality aspect involves various factors like flexibility, price, accessibility, easy navigation, trust, privacy, security which later went on to be categorized under the five elements of SERVQUAL model which are, tangibility, reliability, assurance, empathy, and responsiveness. (Parasuraman, A., Zeithaml V.A. and Arvind, M. (2005)).

Studies conducted by Bai (2008); Anderson & Srinivasan (2003); Par & Kim (2003); Jeong (2003) concluded that customer satisfaction leads to change in the attitude and in turn it has a positive impact on loyalty, purchase intention and repeat purchase behaviour from the perspective of e-commerce firms. Couple of studies for example, Reibstein (2002); Chiang & Dholakia (2003), Eroglu (2003) and Goswami & Mishra (2009) conclude that low perceived price displayed on the website is the major determinant for online purchasing behaviour. According to these studies price perception shares a positive relationship with overall customer satisfaction.

There are many factors that researchers have identified as determinants of a consumer's buying decision (Goldsmith, Bridges, and Freiden, (2001); Jarvenpaa and Todd, (1996-97)). Jarvenpaa and Todd categorized these factors into four dimensions of consumer perception as: product perception (Dillon and Reif, (2004)); Monroe and Krishnan, (1985); Aaker, (1991), shopping experience (Arnold *et al.* (2005); Kerin, *et al.*

(1992), perceived risk (Bauer (1967)), and service quality (Carman (1990); Teas (1993); Knutson *et al.* (1991); Getty and Thompson (1994); Stevens *et al.* (1995) Parasuraman, Zeithaml *et al.* (1985)). These constructs are surveyed below. In another study by Eroglu *et al.* (2003) found that the website layout plays a significant role in customers' satisfaction. According to Santos (2003) e shopping is gaining popularity because of the advantage of comparing the product technical features and process online than traditional channels. Majority of the empirical studies tried to investigate the major attributes of web-stores for their successful online shopping performance, for example, Jarvenpaa and Todd, (1997); Liu and Arnett, (2000); Szymanski and Hise, (2000); Elliot and Fowell, (2000); Park and Kim, (2003) etc. Based on the literature survey, we can categorize web-stores for (i) visual merchandising attribute; (ii) customer service and promotions; (iii) navigation and convenience, for smooth usage, interface and web layout design aspect (Dimitrios I. Maditinos & Konstantinos Theodoridis (2008) and (iv) security perception, which deals with safety of transactions made while placing online orders and when making e-payments (Hoque & Lohse (1999); Ramin Azadavar (2011)). The review of literature on the chosen topic, thus throws light on facts relating to the gap in the research. Few researchers have attempted to define and model service quality from the perspective of e-retailing segment. The subsequent growth in electronic commerce over the years has pushed every industry to function online. Majority of the business are compelled to have an online presence. This in turn has led to establishment of new e-commerce companies. The present study is carried out on one such e-commerce start-up company. It is essential to get an understanding of the various factors influencing the functioning and growth of the company. The performance of the organization can only be understood by exploring the customer satisfaction levels. To do so, the SERVQUAL model/instrument is applied to this study. Limited published research is available in service quality from the context of e retailing. This means that the

issue of service quality in the e retailing sector is a largely unknown factor, making this study exploratory in nature. The present research would make an addition to existing literature on measurement of service quality by collecting first-hand information from the service recipients by using SERVQUAL scale with little modification with respect to their perceived service quality. Current empirical research is going to cover this gap by addressing the most important of SERVQUAL in electronic commerce.

### 3. Research Design

#### Objectives of the study

The following are the main objectives of the current empirical study:

1. To study the service quality (tangibles, reliability, responsiveness, assurance and empathy) dimensions that affects the customer's perception towards services offered by Unishopy (e-tailer) in Bengaluru city;
2. To explore the relationship between the demographic factors such as (Age, Gender, Occupation, Qualification and Income ) and the various dimensions of service quality;
3. To study the interrelationship among the various dimensions (tangibles, reliability, responsiveness, assurance and empathy) of the service quality rendered by the Unishopy (e-tailer) in Bengaluru city;
4. To study the service gap on the basis of respondents' perceptions (P) from respondents' expectations (E) and to rank the most dominant service quality dimension that influences customer's satisfaction.
5. To offer suggestions based on this research.

#### Hypothesis of the study

- H1: There is no significant relationship between the demographic factors (Age, Gender, Occupation, Qualification and Income) of the respondents and various dimensions (Tangibles, Reliability, Responsiveness, Assurance and Empathy).
- H2: There is no significant correlation among the variables chosen for the purpose of the study.
- H3: There is no significant relationship between independent variables (Tangibility, Reliability, Responsiveness, Assurance and Empathy) and Overall Service Satisfaction.

#### Nature of study, universe of study and population

The study is exploratory in nature as it endeavors to uncover the latent behavioral aspects of online shoppers who bought goods frequently from Unishopy with respect to the perceptions (P) and expectations (E) of service quality rendered by the e-tailer. The universe of the study is the customers who frequently buys goods from Unishopy. The study is based on the empirical survey of 160 respondents from Bengaluru city.

#### Primary data source

First-hand information was obtained from respondents through a structured questionnaire. An interview schedule was constructed based on SERVQUAL model to elicit information from the respondents. For the purpose of the study, SERVQUAL scale developed by Parasuraman *et al.*, (1985; 1988) has been incorporated with some modification. As per this scale the five major dimensions of service quality that have been considered are: (a) reliability; (b) assurance;

(c) tangibility; (d) empathy and (e) responsiveness. According to SERVQUAL scale, service quality gap can be computed by applying the following formula: Service Quality Gap = Perceived Service (P) – Expected Service (E)

The researchers chose an interview schedule since the respondent has to be coaxed to answer the questions put forth in the questionnaire. Moreover the researchers had a stringent requirement for the data to be pure and in all senses comprehend the very spirit of the questionnaire and thus the research. The researchers could also clarify any doubts to the respondent and explain the objective of each question whenever the respondent raised doubts. Before scaling for full research, the researchers initiated a pilot study with 50 respondents. These collected responses to questionnaire were analysed to determine whether the data collected helps the researchers to fulfil the objectives of the study, apart from testing the validity of the questions put across to the respondents. The validity of the questionnaire was adjudged, using Cronbach's coefficient ( $\alpha$ ) which was calculated to test the reliability and internal consistency of the responses. Cronbach's coefficient, having a value of more than 0.7 is considered adequate for such exploratory work. The values of  $\alpha$  in this study for the framed questions were found to be .842, .869, .824, .784, .818 and .864 for the chosen variables.

It implies that there is a high degree of internal consistency in the responses to the questionnaire. The sample size taken for the purpose of the study was 160 respondents. Sampling technique used was convenience sampling.

**Plan of analysis**

The collected data has been collated using SPSS software and MS Excel. In the first phase, frequency distribution was drawn to gain insight into respondents' perception about the services offered by the service provider with respect to five dimensions viz., tangibility, reliability, responsiveness, assurance and empathy. In the second phase, normality of the data and reliability statistics have been investigated and extrapolated by using inferential statistics. In the last phase, a multiple regression model has been run to identify the major determinants of service quality. Based on the analysis of the collected data a brief summary of findings has been made and a meaningful conclusion has been drawn.

**4. Data Analysis**

The purpose of the investigators in creating Table 1 is to present the demographic profile of the respondents taken for the study purpose.

**Table 1:** Demographic profile of the respondents

Variables	Categories	No of respondents	Percentage
Gender	Male	74	46.25
	Female	86	53.75
	Below 30	110	68.8
	31-40	32	20.0
	41-50	14	8.8
Age	51 and above	4	2.5
	Married	74	46.25
Marital Status	Unmarried	86	53.75
	Matriculation	8	5.00
	Diploma	15	9.38
	College but not graduate	12	7.50
	Graduation	82	51.24
Qualification	Post Graduate	43	26.88
	Self employed	44	27.50
	Salaried	52	32.50
	Professionals	24	15.00
Occupation	Home makers	14	8.75
	Students	26	16.25
	Below 500000	52	32.5
	500001-1000000	68	42.5
Annual household income	1000001-1500000	22	13.8
	Above 1500001	18	11.3

**Analysis:** It is evident from the above table 1 that 46.25 % of the respondents were male and balance 53.75 percent of the respondents were female. This indicates that female respondents were slightly higher than male respondents. However, 68.8% of the respondents belong to age group less than 30, followed by 20% belong to age bracket of 31-40, 8.8% of the respondents belong to the age group of 41-50 and balance 2.5% of the respondents belong to the age group of 51 and above. This indicates that majority of the respondents belong to the age group less than 30. 53.75% of the respondents chosen for the purpose for the study were married and remaining 46.25 % were married.

From the above table we can observe that 51.24% of the respondents were graduates, followed by 26.88 % of them were postgraduates, 9.38% were diploma holders, 7.5% of

the respondents were college students but not graduate and remaining 5% were others.

32.5% of the respondents chosen for the purpose of the investigation were salaried, followed by 27.50 % of the respondents were self-employed, 16.25 % of the respondents were students, 15% of the respondents were professionals and remaining 8.75% of them were homemakers. From the above slab we can witness that 42.5% of the respondents have an annual household income between 5,00,001 – 10,00,000, followed by 32.5% of the respondents had an annual household income of below Rs. 5,00,000, 13.8% of the respondents have had annual income between 10,00,001-15,00,000 and remaining 11.3% of the respondents have had an annual household income above Rs.15,00,001.

**Table 2:** Table showing reason behind online shopping

S. No.	Categories	No of respondents	Percentage	Percentage
1	Convenience	138	86.25	23.39
2	Time saving	156	97.5	26.44
3	Offers and discounts	144	90.00	24.41
4	Returns and replacements	68	42.5	11.53
5	Privacy while purchasing	28	17.5	4.75
6	Others	56	35.00	9.49
Total		590		100
Sl. No	Categories	No of respondents	Percentage	Percentage
1	Wide range of products and description	157	98.13	17.12
2	New trends in fashion	135	84.38	14.72
3	Product review by consumers	145	90.63	15.81
4	Product comparison	144	90.00	15.70
5	Price comparison	125	78.13	13.63
6	Offers and discounts	147	91.88	16.03
7	Others	64	40.00	6.98
Total		917	100	100

**Analysis:** From the above table, we can observe that 26.44% of the respondents prefer to shop online because it is time saving, 24.41% of them prefer shopping online for the offers and discounts, 23.39% prefer shopping online because of the convenience, 11% prefer shopping online for the returns and replacements, 4.75% of the respondents prefer online shopping for the privacy while purchasing and 9.49% respondents have chosen other reason for shopping online.

From the table 2, we can observe that 17.12% of the respondents opt for online shopping for the wide range of products description feature, 16.03% of the respondents prefer offers and discounts feature, 15.81% of the respondents prefer the product review by consumer feature, 15.7% prefer product comparison feature, 14.72% prefer new trends in fashion feature, 13.63% of the respondents prefer the price comparison feature while the remaining 6.98% of the respondents were interested in other features of ecommerce.

It was evident from the field survey that, 48.8% of the respondents prefer Amazon for shopping online, 20% respondents prefer flipkart, 13.8% of the respondents prefer Myntra for shopping online, 12.5% respondents prefer Unishopy, 1.3% of the respondents prefer Big-cartle, 1.3% of the respondents prefer Jabong, 1.3% prefer Limeroad, and the remaining 1.3% of the respondents prefer none of these sites for shopping online.

**Table 3:** Table showing sources of knowledge of unishopy

Sl. No	Categories	No of respondents	Percentage
1	Online ads	24	15.00
2	Friends and relatives	72	45.00
3	Social networking media	46	28.80
4	Others	18	11.30
	Total	160	100.00

From the above table, we can observe that 45% of the respondents came to know about Unishopy through friends and relatives, 28.8% of the respondents came to know through social networking media, 15% of the respondents came to know about Unishopy through online ads and the remaining 11.3% of the respondents got to know about Unishopy through other sources. From the current filed investigation it was found that 7.5% of respondents shop for

computers/laptops and accessories, 30% of the respondents shop for mobile and mobile accessories, 52.5% of the respondents shop for clothing, 10% shop for other products. Once again the current empirical study we can infer that 40% of the respondents prefer cash/card on deliver mode of payment, 36.3% of the respondents prefer credit/debit card mode of payment, 12.5 % of the respondents prefer net banking for payment, 5% of the respondents prefer wallets mode of payment, 3.8% them prefer paying through payment gateways and the remaining 1.3% of the respondents have opted for other modes of payment. From the field survey, we can observe that 52.5% of the respondents prefer shopping online for clothing (apparel and accessories), 30% of the respondents prefer mobile and mobile accessories, 10% of the respondents prefer other products while the remaining 7.5% of the respondents prefer computer/laptop accessories. From the current study we found that 2.5% of respondents are influenced by quality of the product, 2.5% of the respondents are influenced by quantity, 1.3% by ease of navigation, 3.8% by advertisements, 3.8% by recommendations from friends\relatives, 3.8% respondents are influenced by reputation of e-sellers, 7.5% by personal experience, 1.3% by price alone, 10% by discounts /special offers, 2.5% of the respondents are influenced by guarantee/warrantee, 3.8% are influenced by home delivery, 2.5% by online reviews, 2.5% by wide array of products, 1.3% with easy to place order feature, 2.5% by cash on delivery, 3.8% of them are influenced by it saves my time feature, 2.5% are influenced by the feature online shopping is endorsed by the rating of the customers, 3.8% of the respondents are influenced by the return policy

The aim of the researchers here is to comprehend the effect of various demographic factors collected from the respondents on the selected variables. The research query for the researchers here is to know whether the demographic factors share any relationship with the chosen variables. For this purpose the researchers constructed the following hypothesis and used a Pearson Chi-Square test to prove or disprove the hypothesis.

H0: There is no significant influence of demographic factors of the respondents on the variables taken up for the study purpose.

**Table 4:** Test of significance

Variable 1	Variable 2	Chi Square Value	P value	Results
Age	F1 Tangibility	90.971	.000	Reject
	F2 Reliability	94.057	.000	Reject
	F3 Responsiveness	58.121	.025	Reject
	F4 Assurance	62.860	.020	Reject
	F5 Empathy	57.473	.005	Reject
	DV Overall Satisfaction	67.334	.034	Reject
Gender	F1 Tangibility	31.008	.006	Reject
	F2 Reliability	22.399	.033	Reject
	F3 Responsiveness	22.673	.020	Reject
	F4 Assurance	17.371	.237	Accept
	F5 Empathy	14.734	.324	Accept
	DV Overall Satisfaction	27.394	.000	Reject
Qualification	F1 Tangibility	55.121	.084	Accept
	F2 Reliability	112.142	.000	Reject
	F3 Responsiveness	77.389	.020	Reject
	F4 Assurance	75.079	.000	Reject
	F5 Empathy	65.076	.013	Reject
	DV Overall Satisfaction	172.598a	.000	Reject
Occupation	F1 Tangibility	117.145	.000	Reject
	F2 Reliability	119.412	.000	Reject
	F3 Responsiveness	106.894	.000	Reject
	F4 Assurance	151.567	.000	Reject
	F5 Empathy	146.691	.000	Reject
	DV Overall Satisfaction	186.585	.000	Reject
Annual household income	F1 Tangibility	74.524	.001	Reject
	F2 Reliability	53.352	.031	Reject
	F3 Responsiveness	51.559	.000	Reject
	F4 Assurance	59.998	.017	Reject
	F5 Empathy	90.204	.000	Reject
	DV Overall Satisfaction	116.630	.000	Reject

Analysis: The results from Pearson Chi square for Tangibility with age, gender, occupation and annual household income is less than the set level therefore, we can reject the null hypothesis. However, for qualification it is greater than the set level hence, we cannot reject the null hypothesis. For the second variable tangibility p value is less than the set level of five percent with age, gender, qualification, occupation and annual household income therefore, we can reject the null hypothesis. For the third variable responsiveness the computed p value is less than the set level of five percent with age, gender, qualification, occupation and annual household income therefore, we can reject the null hypothesis. However, for variable four assurance the computed p value is less than the set level of five percent with age, qualification, occupation and annual household income therefore, we can reject the null hypothesis. But, for qualification it is greater than the set level hence, we cannot reject the null hypothesis. For variable five empathy the computed p value is less than the set level of five percent with age, qualification, occupation and annual household income therefore, we can reject the null hypothesis. However, for qualification it is greater than the set level hence, we cannot reject the null hypothesis. For the dependent variable the p value is less than the set level of five percent with age, gender, qualification, occupation and annual household income therefore, we can reject the null hypothesis.

**Gap score – Servqual model**

In the next phase, to assess the service quality gaps (both perceptions and expectations from the respondents) on online purchasing service quality, Gap analysis has been done. For this purpose, gaps were calculated by using the SERVQUAL

approach by subtracting respondents’ perceptions (P) from respondents’ expectations (E) as  $G = E - P$ . The results are presented in the following table:

**Table 5:** The average (mean) values of the perception and expectation - servqual model

Dimension	Perception	Expectation	Gap Score
Tangibility	3.1467	4.527	1.3803
Reliability	3.7617	4.5112	0.7495
Responsiveness	3.5765	4.2734	0.6969
Assurance	3.821	4.6613	0.8403
Empathy	3.9135	4.3121	0.3986
Average Servqual score	3.64388	4.457	0.81312

**Regression model**

For the purpose of the study, a multiple regression model was run to test the hypothesis. The following multiple regression model has been used to test the theoretical relationship between the Overall Service Satisfaction as perceived by the respondents with five factors (Tangibility, Reliability, Responsiveness, Assurance and Empathy).

$$Y \text{ (Overall Service Satisfaction)} = a + b_1 X_1 \text{ (Tangibility)} + b_2 X_2 \text{ (Reliability)} + b_3 X_3 \text{ (Responsiveness)} + b_4 X_4 \text{ (Assurance)} + b_5 X_5 \text{ (Empathy)} + \epsilon \dots\dots\dots (1)$$

Where,

Y = (Overall Service Satisfaction)

X is the vector of explanatory variables in the estimation model  $X_1 = \text{Tangibility}$

$X_2 = \text{Reliability}$

$X_3 = \text{Responsiveness}$   $X_4 = \text{Assurance}$

X5 = Empathy

a = constant intercept term of the model b = coefficients of the estimated model

C = error component

**Table 6:** Regression statistics

<b>R</b>	<b>.916</b>
R Square	.839
Adjusted R Square	.791
Std. Error of the estimate	0.213
F	61.533
F Significance	.000
Durbin –Watson	1.901

**Table 7:** Table showing regression results Unstandardized Standardized Collinearity Statistics

Dimension	Unstandardized Coefficients		Standardized Coefficients	T	Sig	Collinearity Statistics	
	B	SE	Beta			Tolerance	VIF
Constant	1.152	1.215		.948	.344		
Tangibility	.195	.066	.206	2.935	.004	.440	2.273
Reliability	.063	.087	.060	.722	.471	.315	3.170
Assurance	.253	.086	.217	2.925	.004	.394	2.535
Empathy	.333	.107	.260	3.119	.002	.311	3.215
Responsiveness	.296	.100	.209	2.969	.003	.437	2.289

Intercept is  $\alpha$  in the set equation. Standard error measures the variability in approximation of the coefficient and lower standard error means coefficient is closer to the true value of coefficient. Overall outcome (Service Quality) is a dependent variable and Tangibility, Reliability, Assurance, Empathy and Responsiveness are independent variables. Results show that independent variables Tangibility, Reliability, Assurance, Empathy and Responsiveness have positive coefficients i.e. they have a direct relationship with Overall outcome (Service Quality).

**Test of Hypothesis**

In order to assess the relationship between the independent variable (s) and dependent variable, the researcher has established the following hypothesis and to prove or disprove the hypothesis the researcher has employed multiple regression model.

Null Hypothesis (H0) There is no significant relationship between independent variables (Tangibility, Reliability, Assurance, Empathy and Responsiveness) and dependent variable (Overall Service quality).

Results show that P-value is less than 0.05 at 5% level of significance for Tangibility, Assurance, Empathy and Responsiveness therefore, the null hypothesis is rejected. This indicates that the overall outcome (Service Quality) has significant relationship with Tangibility, Assurance, Empathy and Responsiveness Results show that P-value is more than 0.05 at 5% level of significance for Reliability so the null hypothesis is accepted, which signifies that Service Quality has no significant relationship with Reliability.

**Table 8:** The relative weights of the factors

Factor	Relative weights in percentage
Empathy	0.273109244
Assurance	0.227941176
Responsiveness	0.219537815
Tangibility	0.216386555
Reliability	0.06302521

It is evident from the above table No. 8 that the very

important quality dimension is Empathy with a relative weight of 27.3 percent, followed by Assurance with 22.7 percent, Responsiveness with 21.95 percent, Tangibility with 21.63percent and Reliability with 6.30 percent.

**Inference**

From the above analysis, one can infer that Overall Satisfaction is highly dependent on the predictors or explained by the independent variables Tangibility, Reliability, Responsiveness, Assurance and Empathy, which means there is an impact of independent variables on the dependent variable Overall Service Satisfaction. It is evident from the above table that F value is 61.533 with a significance value of.000. Therefore, we can reject the Null hypothesis.

**5. Discussion and conclusion**

The current study entitled “The effects of individual dimensions of service quality in Unishopy using SERVQUAL model” has been undertaken with an intention to explore the service quality (tangibles, reliability, responsiveness, assurance and empathy) dimensions that affect the customer’s perception towards services offered by the online web portal Unishopy. In order to realize the stated objectives, the researchers framed a structured SERVQUAL questionnaire with two parameters such as perception and expectations of service quality provided by the online retailer. The research instrument was pretested and administered on 160 respondents. The validity of the questionnaire was adjudged, using reliability statistics, Cronbach alpha coefficient. The values of  $\alpha$  in this study for the various dimensions were found to be.842,.869,.824,.784, 818 and.864. It implies that there is a high degree of internal consistency in the responses to the questionnaire. The current study revealed the following major findings: Female respondents were slightly higher than male respondents. Majority of the respondents belong to age group less than thirty. 51.24% of the respondents chosen for the study purpose were graduates. Majority of the respondents chosen for the purpose of the investigation were salaried and self-employed. Majority of the respondents have an annual household income between 5, 00,001 – 10, 00,000. Majority of the respondents prefer shopping online because it is time saving, convenience and to avail the offers and discounts. Major chunk of the respondents prefer Amazon, Flipkart, Big-cartle, Unishopy and Myntra for shopping online. Majority of the respondents are of the opinion that wide range of products and description available online compared to traditional shopping, followed by new trends in fashion, the product review by customer, product comparison feature,



price and comparison. 16.3% of the respondents were interested in offers and discounts. For majority of the customers the sources of knowledge about Unishopy was online advertisements and through friends and relatives. Majority of the respondents shop for clothing and other products like mobile, mobile accessories and laptops. Forty percent of the respondents pay through cash on delivery, followed by credit/debit card. Before buying any product online the major factors that influence them to place an order were quality of the product, ease of navigation, advertisements, recommendations from friends and relatives, reputation of e-sellers, personal experience, home delivery and discounts /special offers.

**Tangibility:** 80 respondents have agreed to “The website is user-friendly”, 48 respondents stayed neutral, 6 respondents strongly disagreed with the Mean of 3.17 and standard deviation of 0.872. 84 respondents have agreed to “The layout of the website is visually appealing.” However, 48 respondents expressed neutral opinion with the mean of 3.54, standard deviation of 0.868. 80 respondents agreed to “the website is well organized and enables easy navigation.” 56 chose neutral with the Mean of 3.63 and Standard deviation of 0.799. 87 respondents have agreed to “A wide variety of products and offers are available all at one place which reduces time in frequently relocating pages.” 42 opted to stay neutral with the Mean of 3.55 and standard deviation of 0.882. 90 respondents agreed to item five “The content presented on the website is visible and clear.” 44 chose to stay neutral with the mean of 3.68 and Standard deviation of 0.805. For the statement “The products are aptly categorized and Offers and discounts are brought to the notice of the customers on visiting the Unishopy site.” 98 respondents agreed, 24 have strongly agreed with the mean of 3.81 and Standard deviation of 0.762.

**Reliability:** To the statement “The website facilitates smooth refund process for failed transactions.” 74 respondents agreed, 50 stayed neutral with the mean of 3.74 and standard deviation of 0.865. For item two “The website offers timely information even during peak hours.” 76 respondents agreed, 56 stayed neutral with the mean of 3.70 and Standard deviation of 0.783. For item R3 “The refund process is satisfactory” 78 respondents agreed, 54 chose neutral with the mean of 3.68 and standard deviation of 0.789. For item four “The website facilitates easy cancellation procedure and does not consume time.” 72 respondents agreed, 32 strongly agreed with the mean of 3.80 and Standard deviation of 0.845. For item 5 “the products delivered are satisfying in terms of quality, timely delivery, proper packaging.” 76 respondents agreed, 42 stayed neutral with the mean of 3.80 and Standard deviation of 0.860.

**Assurance:** 96 respondents agreed to item one “the products sold on Unishopy assured.” however, 22 strongly agreed with the Mean of 3.79 and Standard deviation of 0.804. 78 respondents agreed to A2 “Products damaged during transaction are timely replaced”, but 20 have strongly agreed with the mean of 3.64 and Standard deviation of 0.843. 92 respondents agreed to “The products are delivered on\before the expected date of delivery” however, 36 stayed neutral with the mean of 3.85 and Standard deviation of 0.762. For item four “Unishopy protects my debit/credit card information and provides safe and secure payment gateway.” 92 respondents agreed, 30 of them strongly agreed with the mean of 3.89 and Standard deviation of 0.809. However, for the last item “There is absolute trust ensured in safeguarding

user’s information while transacting.” 88 respondents agreed, 44 stayed neutral with the mean of 3.85 and Standard deviation of 0.729.

**Empathy:** 70 respondents have agreed with E1 “The customer grievances are handled with politeness by Unishopy.” However, 48 have stayed neutral with the Mean of 3.76 and standard deviation of 0.872. For second item E2 “Unsuccessful transactions are quickly acted upon to reduce the inconvenience caused.” 74 respondents agreed with it but, 52 respondents have stayed neutral with the mean of 3.58 and Standard deviation of 0.851. For item E3 “Exorbitant delivery charges are taken care of.” 94 respondents have agreed, 54 have expressed neutral opinion, with the mean of 3.70 and Standard deviation of 0.602. For item E4, “Wrong monetary transactions are addressed with top most priority.” 84 respondents have agreed, 56 respondents stayed neutral with the mean of 3.73 and Standard deviation of 0.709. For statement E5 “It answers all possible queries relating to Pre-booking, order placing, delivery till refund.” 98 respondents have agreed, 30 have expressed neutral opinion with the mean of 3.90 and Standard deviation of 0.702.

**Responsiveness:** For item RE1 “Service provider helps me quickly resolve my complaints.” 86 respondents have agreed, 50 have stayed neutral with the Mean of 3.64 and standard deviation of 0.765. To RE2 “Service provider enables one to carry out transactions 24x7 without any server issues.” 84 respondents have agreed however, 38 have expressed neutral opinion with the mean of 3.71 and Standard deviation of 0.866. For RE3, “If one encounters a problem during the course of a transaction, Unishopy shows sincere interest in resolving it.” 90 respondents have agreed to this statement and 46 have expressed neutral opinion with the mean of 3.68 and Standard deviation of 0.723. For item RE4, “The prices are made changes according to the current rates, offers and discounts.” 82 respondents have agreed however, 50 have stayed neutral with the mean of 3.79 and Standard deviation of 0.722.

**Service Quality:** For S1, “I will recommend this site to whoever seeks my advice about online purchase” 96 respondents have agreed however, 44 have expressed neutral opinion with the mean of 3.78 and Standard deviation of 0.653. For item S2, “I find the overall services delivered by Unishopy satisfactory.” 92 respondents have agreed to this statement and 48 have expressed neutral opinion with the mean of 3.66 and Standard deviation of 0.726. To S3, “The progress made by Unishopy in today’s day has strongly influenced the customer’s mindset towards online shopping.” 58 respondents have agreed however, 64 have stayed neutral with the mean of 3.35 and Standard deviation of 0.860. For item S4, “The complaints lodged against website are resolved on time.” 64 have expressed neutral opinion, and 60 have agreed with the mean of 3.53 and Standard deviation of 0.839. For statement S5, “The overall booking process and delivery of the ordered products are designed by Unishopy is satisfactory.” 92 respondents have agreed however, 42 have expressed neutral opinion with the mean of 3.78 and Standard deviation of 0.744. For S6, “The care expressed by Unishopy staff in addressing customer’s needs and problems are satisfactory.” 84 respondents have agreed to this statement, however, 40 have expressed neutral opinion with the mean of 3.90 and Standard deviation of 0.737

### **Recommendations to the Service Provider**

On observing the trend from the analysis carried out, the following suggestions can be give out to Unishopy. It is



observed through the research that majority of the customers for Unishopy are youngsters. It is necessary for Unishopy to provide wide range of trending products to gain more customers of that age group. Website is the main component of e-commerce. Thus, website maintenance and management should be of a priority to Unishopy. The website has to made user friendly and secure. Unishopy should have a dedicated social networking marketing team to attract customers and also to be known to more number of people. Since majority of the sample respondents representing the population prefer cash/ card payment, Unishopy can give out offers and discounts on card/net banking mode of payment in order to get more customers to pay instantly. From the background of the study, we can conclude by saying that the consumer preferences and expectancies from Unishopy are largely dependent on various aspects like the quality of products, the strong online presence, the payment methods adopted, the ease of usage of website, etc. Unishopy should focus on increasing their services, securing payment methods and also have a strong marketing strategy to sustain and grow in the rapidly growing ecommerce market.

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