

# A Comparative Analysis using Theme Based Review of Service Quality (SQ) Dimensions in Online and Offline Settings

## Vikas Kumar Tyagi

Assistant Professor  
Department of Management Studies  
Panipat Institute of Engineering and Technology

## Dr Sarvesh Kumar

Assistant Professor,  
School of Commerce and Management Studies,  
Central University of Himachal Pradesh,  
Dhauladhar Campus— II,  
Dharamshala, Himachal Pradesh

## Ashima Thakur

Assistant Professor,  
Department of Management Studies  
Panipat Institute of Engineering and Technology,  
Samalkha, Haryana

## Tarun Vashishat

Research Scholar,  
School of Tourism, Travel & Hospitality  
Management  
Central University of Himachal Pradesh,  
Dhauladhar Campus— II,  
Dharamshala, Himachal Pradesh

## Abstract

This study intends to extend a comparative investigation of service quality (SQ) dimensions in offline and online verticals. It was based on critically scrutinizing the non-exhaustive review of the literature by using papers published between 1984 and 2018. Broadly theme based literature methodology was used in this paper. The paper were selected from well-known databases. The review of selected studies on SQ exhibited that the SQ and its consequences are considerably reliant on the kind of service settings and also between online and offline service situations. This paper provides an extensive list of the significant dimensions from online and offline settings. Those were completely different, as expected. Quite a lot of studies analyzed SQ in an independent setting for online and offline separately. However, the researchers could not find any study contemplating both the settings together using this methodology of thematic literature review. This study may provide researchers and industry practitioners with new approaches to understanding SQ.

**Keywords:** Service Quality, Online Services, Offline Services, Literature Review.

## Introduction

The idea of service quality (SQ) was introduced by Grönroos (1984). Lovelock, Wirtz, & Chatterjee (2011) acknowledged SQ as a mark of intransigent standards and high achievements; or, conformance to the specifications, or, at affordable excellence. The concept of SQ varies depending upon the fluctuations of customer's demands. Due to different characteristics of services than products, such as inseparability, intangibility, perishability, and variability, it becomes difficult to measure quality in the service settings.

Quality is a momentous determinant of success for any organization, especially in the online setting, as a negative word of mouth travels faster in cyberspace than traditional settings (Cox & Dale, 2001). Moreover, online customer is more informed and have more options available to switch from one provider to another as every information is available just a click away. Therefore, it is even more imperative to control the online SQ, which was defined by Zeithamal, Bitner, Gremler, & Pandit (2011) as the magnitude to which a website supports effective and efficient service offerings, which has a vast range from

the search features to comparing the products and finally the delivery, followed by after sales services.

The online setting differs from the conventional setting context in several ways. In the online settings, the price differentiation is more manageable, even for the same customer using different platforms (APPs, or Website), companies can change price, real-time (by using different algorithms), which is not possible or easy in the traditional mediums. Operating cost for an online store is lesser than running an offline physical store of a similar scale. In an offline store, though the fixed cost is high, that may be considered as an asset in terms of real estate. Online retailing and social media have reduced the shelf life of fashion products impacting the fashion industry and its operations. Customers have become more aware as they have better access to information and knowledge; it has become easier for them to make comparisons on the basis of prices, discounts, features, preferred brand and finally make the buying decision. It is making the consumers more price-conscious and service-centric. An online store attracts a large number of eyeballs, but the conversion rate is much lesser.

The study is deliberated to execute a comparative analysis between the critical SQ dimensions in the online and offline settings, found through doing a review of the concerned research papers. Comparison is required as both the settings cannot be catered in the same way. The two are very contrasting platforms and attract two different genres of customers. Hence making it essential for the providers to understand the customers they want to attract and the needs

that they want to cater to, of the segmented markets.

The first section is the introduction, followed by section 2, which explains the approach used for research in this study. Section 3 presents a review of the past studies in both the online and offline settings. Section 4 outlines the Discussion followed by Section 5, explaining the conclusions and suggestions.

### Research Methodology

To bring originality along with uniqueness, this research does not follow any standard template or procedure established in past researches, but the methodology used in this study was greatly influenced by the works of Wee & Banister (2016) and Webster & Watson (2002). Broadly 'theme-based review' method was used in this study.

The study was based on the critical analysis of a non-exhaustive review of literature by including 55 papers published between 1984 and 2018 (year wise distribution given in Table:1) Year 1984 was selected as the idea of service quality (SQ) was introduced by Grönroos in 1984. Studies mentioned in Table: 2, 3, and 4 are extracted from well-known databases. The majority of the research papers used in this study were taken from the Journals like- 'Journal of Retailing, Managing SQ: An International Journal, Journal of Business Research, European Journal of Marketing, Journal of Service Research, and Journal of Services Marketing. 'Particularly the studies aiming at the construction of SQ measuring scales were taken into consideration.

**Table: 1 Distribution of the Articles (Year Wise )**

<b>Year</b>	<b>Number of Studies</b>	<b>Year</b>	<b>Number of Studies</b>
<b>2018</b>	3	<b>2005</b>	3
<b>2017</b>	1	<b>2004</b>	1
<b>2016</b>	3	<b>2003</b>	4

<b>2015</b>	<b>3</b>	<b>2002</b>	<b>9</b>
<b>2014</b>	<b>3</b>	<b>2001</b>	<b>3</b>
<b>2012</b>	<b>3</b>	<b>2000</b>	<b>1</b>
<b>2011</b>	<b>1</b>	<b>1996</b>	<b>1</b>
<b>2010</b>	<b>1</b>	<b>1994</b>	<b>1</b>
<b>2009</b>	<b>1</b>	<b>1991</b>	<b>1</b>
<b>2008</b>	<b>4</b>	<b>1988</b>	<b>2</b>
<b>2007</b>	<b>1</b>	<b>1985</b>	<b>1</b>
<b>2006</b>	<b>3</b>	<b>1984</b>	<b>1</b>

**Source: Author's calculation**

A large number of researches have been conducted on this topic; therefore, the researcher wanted to narrow down the scope precisely and compile the entire information at a single place. Besides finding independent researches on the online and offline verticals, the researchers did not find any such research focusing on the comparative analysis of the two contrasting settings by using a literature review, which lead to the current study.

#### **Literature Review**

Literature has been divided into three sections. Table 2

contains a review of SQ ambit in online settings. Table 3 contains a review of SQ dimensions in offline settings. Table 4 contains a review of the studies explaining SQ from the amplitude of the Indian context.

**Table: 2 Review of SQ Dimensions in Online Settings.**

<b>Author(s)</b>	<b>No. of dimensions</b>	<b>Dimensions</b>
<b>Yixin, Rahman, Haque, Osman, San, Subramaniam, &amp; Mohideen (2018)</b>	5	‘Performance, access, sensation, security, and information.’
<b>Blut (2016)</b>	4	‘Fulfillment, Website Design, Customer Service, Security/Privacy.’
<b>Davari, Iyer, &amp; Rokonzaman (2016)</b>	3	‘Price transparency, product quality, and website convenience.’
<b>Jiang, Jun, &amp; Yang (2016)</b>	5	‘Care, consistency, product portfolio, ease of use, and security.’
<b>Zemblytė (2015)</b>	4	‘Compensation, responsiveness/fulfilment, website operation, and reliability.’
<b>Zhang, Huang, He, &amp; Wang (2015)</b>	2	‘Service recovery and process quality.’
<b>Subramanian, Gunasekaran, Yu, Cheng, &amp; Ning (2014)</b>	1	‘Delivery of products’

<b>Zehir, Sehitoglu, Narcikara, &amp; Zehir (2014)</b>	4	<b>'Efficiency, system availability, fulfilment, and privacy.'</b>
<b>Bernardo, Marimon, &amp; del Mar Alonso-Almeida (2012)</b>	2	<b>'Hedonic And Functional Quality.'</b>
<b>Sejin Ha, Leslie Stoel (2012)</b>	4	<b>'Privacy/security, website content/functionality, customer service, and experience.'</b>
<b>Ding, Hu, &amp; Sheng (2011)</b>	4	<b>'e-SELFQUAL: perceived control, service convenience, service fulfilment, and customer service.'</b>
<b>Herington &amp; Weaven (2009)</b>	4	<b>'E-ServQual: personal needs, site 's organization, ease of use, and efficiency.'</b>
<b>Loonam &amp; O'loughlin (2008)</b>	10	<b>'Access, web usability, security, information quality, reliability, flexibility, trust, responsiveness, self-recovery, personalization.'</b>
<b>Sohn &amp; Tadisina (2008)</b>	6	<b>'Trust, tailored communication, ease of use, website content and functionality, reliability, and delivery speediness.'</b>
<b>Cristobal, Flavián, &amp; Guinaliu (2007)</b>	4	<b>'PeSQ: web -design, assurance, customer service, and order-management.'</b>

<b>Bauer, Falk, &amp; Hammerschmidt (2006)</b>	5	<b>'e-transqual: functionality or design, pleasure, process, reliability, and responsiveness.'</b>
<b>Collier &amp; Bienstock (2006)</b>	11	<p>'Process dimension: functionality, information - accuracy, design, privacy, and ease of use.'</p> <p>'Outcome dimensions: order -accuracy, order condition, and timeliness.'</p> <p>'Recovery dimension: interactive -fairness, procedural-fairness, and outcome-fairness.'</p>
<b>Fassnacht &amp; Koesel (2006)</b>	9	'The graphic quality, layout, attractiveness of selection, information -quality, ease of use, technical-quality, reliability, functional -benefits, emotional-benefits.'
<b>Lee and Lin (2005)</b>	4	'Website-design, reliability, responsiveness, and trust.'
<b>Parasuraman, Zeithaml, &amp; Malhotra (2005)</b>	7	<p>'E-S-QUAL: efficiency, fulfilment, privacy, and system availability.'</p> <p>'E-RecS-QUAL: responsiveness, contact, and compensation.'</p>
<b>Barnes &amp; Vidgen (2005)</b>	5	'eQual: usability, site design, information quality, empathy, and user's characteristics.'

<b>Long &amp; McMellon (2004)</b>	5	<b>‘Tangibility, assurance, responsiveness, purchasing process, and reliability.’</b>
<b>Cai &amp; Jun (2003)</b>	4	‘Website design and content, trust, prompt/reliable service, communication.’
<b>Chiang &amp; Dholakia (2003)</b>	1	‘Perceived price.’
<b>Santos (2003)</b>	11	‘Incubation-dimension: ease of use, appearance, structure, linkage, and layout.’  ‘Active-dimension: reliability, support, communication, security, efficiency, and incentives.’
<b>Wolfenbarger &amp; Gilly (2003)</b>	4	‘eTailQ: fulfilment, website design, privacy, and customerservice.’
<b>Aladwani &amp; Palvia (2002)</b>	4	‘Technical sufficiency, specific content, content quality, and web appearance.’
<b>Barnes, &amp; Vidgen (2002)</b>	5	‘WebQual: trust, usability, design, information, and empathy.’
<b>Francis &amp; White (2002)</b>	6	‘PIRQUAL: web -store functionality, product description, ownership condition, actual products delivered, customer service, and security.’
<b>Janda, Trocchia, &amp; Gwinner (2002)</b>	5	‘Performance, access, sensation, security, and information.’

<b>Loiacono, Watson, &amp; Goodhue (2002)</b>	12	<b>'WebQual: informational fit -to-task, tailored communications, ease of understanding, trust, response time, consistency of image, intuitive operations, visual appeal, innovativeness, emotional appeal, online completeness, and relative advantage.'</b>
<b>Madu &amp; Madu (2002)</b>	14	<b>'Performance, features, reliability, storage capability, serviceability, security and system-integrity, responsiveness, product/service differentiation, website policies, structure, aesthetics, reputation, assurance, and empathy.'</b>
<b>Ranganathan &amp; Ganapathy (2002)</b>	4	<b>'Information-content, design, security, privacy.'</b>
<b>Srinivasan, Anderson, &amp; Ponnaveolu (2002)</b>	8	<b>'Customization, contact interactivity, cultivation, care, community, convenience, choice, and character.'</b>
<b>Zeithaml (2002)</b>	4	<b>'e-SQ to measure SQ: efficiency (ease of website use), fulfilment, privacy, and technical reliability.'</b>
<b>Zeithaml (2002)</b>		<b>'Responsiveness, compensation, and contact for measuring service failure.'</b>

<b>Childers, Carr, Peck, &amp; Carson (2001)</b>	<b>3</b>	<b>'Enjoyment, usefulness, ease of use.'</b>
<b>Cox and Dale (2001)</b>	<b>6</b>	<b>'Communication, credibility, understanding, appearance, accessibility, and availability.'</b>
<b>Yoo &amp; Donthu (2001)</b>	<b>4</b>	<b>'SiteQual: aesthetic -design, processing speed, ease of use, and security.'</b>
<b>Szymanski &amp; Hise (2000)</b>	<b>5</b>	<b>'Convenience, product offering, site design, product information, and financial security.'</b>

*Source: Author's calculation*

**Table: 3 Review of SQ Dimensions in Offline Settings.**

<b>Author(s)</b>	<b>No. of dimensions</b>	<b>Dimensions</b>
<b>Farooq, Salam, Fayolle, Jaafar, &amp; Ayupp (2018)</b>	<b>5</b>	<b>'AIRQUAL: airline tangibles, terminal tangibles, personal services, empathy, and image.'</b>
<b>Lee &amp; Cheng (2018)</b>	<b>6</b>	<b>'GLSERV Scale: reliability, empathy, environmental communication, green energy saving, assurance, tangibles.'</b>
<b>Chuang, Hwang, Wong, &amp; Ho (2017)</b>	<b>6</b>	<b>'Courtesy, diversity, uniqueness, delicious food, comprehensiveness, and affordable consumption.'</b>

<b>Hossain, Dwivedi, &amp; Naseem (2015)</b>	9	<p><b>‘Station-quality (corporate image, tangibles, and accessibility)’</b></p> <p><b>‘Interaction-quality (reliability, responsiveness, assurance, and empathy)’</b></p> <p><b>‘Outcome-quality (functional benefits and tactical benefits).’</b></p>
<b>Dabholkar, Thorpe, &amp; Rentz (1996)</b>	5	‘RSQS: physical aspects, reliability, personal interaction, problem-solving, and policy.’
<b>Cronin Jr, &amp; Taylor (1994)</b>	5	‘SERVPERF: tangibles, reliability, responsiveness, assurance, and empathy.’
<b>Lehtinen &amp; Lehtinen (1991)</b>	5	<p>‘The first approach - physical quality, interactive quality, and corporate quality.’</p> <p>‘The second approach - process quality and output quality.’</p>
<b>Parasuraman, Zeithaml, &amp; Berry (1988)</b>	5	‘SERVQUAL: assurance, Reliability, Empathy, Tangibles, and Responsiveness.’
<b>Powers (1988)</b>	5	‘Tangibles, reliability, responsiveness, assurance, empathy.’

<b>Parasuraman, Zeithaml, and Berry (1985)</b>	<b>10</b>	<b>‘Tangibles, responsiveness, courtesy, reliability, communication, credibility, competence, security, understanding the customer, and accesses.</b>
<b>Grönroos (1984)</b>	<b>2</b>	<b>‘Technical quality and Functional quality.’</b>

**Table: 4 Review of SQ Dimensions in the Indian Context.**

<b>Author(s)</b>	<b>No. of dimensions</b>	<b>Dimensions</b>
<b>Kandulapati &amp; Shekhar Bellamkonda (2014)</b>	<b>4</b>	<b>‘Efficiency, fulfilment, privacy, and system availability.’</b>
<b>Bhattacharya, Gulla, &amp; Gupta (2012)</b>	<b>7</b>	<b>‘Citizen-centricity, transaction clarity, technical adequacy, usability, complete information, privacy and security , and usefulness of the information.’</b>
<b>Ghosh, Tripathi, &amp; Kumar (2010)</b>	<b>3</b>	<b>‘Convenience and merchandise mix, store atmospherics, and service.’</b>
<b>Sahadev &amp; Purani (2008)</b>	<b>4</b>	<b>‘Efficiency, fulfilment, system availability, privacy.’</b>

<b>Sureshchandar, Rajendran, &amp; Anantharaman (2002)</b>	5	'Services, human element, systematization, tangibles, social responsibility.'
--	---	---

*Source: Author's calculation*

Out of the total of 55 studies, 42 studies covered online SQ, and 13 covered offline service settings. The researchers also included five studies that focused only on Indian respondents. Around 100 dimensions were found exploring the service quality. This study tried to excerpt the dimensions which were most important from both online and offline settings. The dimensions mentioned above have helped the researchers in evaluating SQ, as they were observed to have a substantial impact on and act as a predictor of users' perceptions, attitudes, trust, purchase intentions, overall satisfaction, and loyalty. Broadly, these dimensions play a major role in defining the success or failure of the firm.

### Discussion

Researchers also studied the methodologies used by various researchers while the construction of the SQ scales and structuring the constructs. The study has also helped in finding out some fluctuations in the dimensions which resulted from the prior studies on online and offline SQ measurement. Well established scales such as AIRQUAL, eQual, E-RecS-QUAL, e-SELFQUAL, E-ServQual, E-S-QUAL, eTailQ, e-transqual, GLSERV, PeSQ, PIRQUAL, RSQS, SERVPERF, SERVQUAL, SiteQual, SiteQual, and WebQual were also studied in this research as mentioned in Table: 2 and 3.

### Methodological Aspects:

Probability, random sampling technique was used by only five studies out of 55, such as Subramanian et al., (2014); Zehir et al., (2014); and Cristobal et al., (2007); they studied specific limited population.

In the review process, it was found that 11 (20 per cent) out of the total 55 studies have covered only the students as respondents, restricting the area of research to only one segment of the market. Few of such researches were Zhang et al., (2015) and Ding, et al., (2011). The majority of the studies were conducted in the USA, followed by China, UK, and Australia. Both the aspects became a limitation to those studies as the results cannot be generalized to the larger population. As limiting and generalizing the results

may restrict the outcome to a specific population making it irrelevant for the others, who were not considered for the research. Therefore, researchers suggest that if the strategy is to be formulated for Indian consumers and executed in Indian markets, a future study must be performed from Indian perspective and by using a sample selected randomly. A generalized outcome from other markets should not be considered as a base for the Indian market, as this may misrepresent the results.

The sample size of 45 quantitative studies ranged between 116 (Yoo & Donthu, 2001) and 1211 (Srinivasan et al., 2002), mean of the samples was 442.48, and the medians of the sample were 302; in total, a total of 19012 respondents were analyzed indirectly through the literature review, these figures will help broadly to the future researches in finalizing their sample sizes.

Studies of SQ measurement explored in this review paper used a variety of methodologies - qualitative (Cox and Dale, 2001; Loonam & O'loughlin, 2008); quantitative (Blut, 2016; Cai & Jun, 2003); and mixed (Lee & Cheng, 2018). Among all the 55 studies, only 10 (18.18 per cent) studies used qualitative research; rest used quantitative studies.

Among the qualitative techniques most commonly used were focused group interviews, and the quantitative techniques included exploratory and confirmatory factor analysis. They were mostly considered for exploring and confirming the dimensions to measure SQ. Most of the recent studies such as- Farooq et al., (2018); Yixin et al., (2018); and Davari, et al., (2016), have used a non-parametric technique that is PLS-SEM for the analysis. Therefore, researchers prescribe this technique, as it has fewer restrictions, to be used in future studies.

Using qualitative methods, Parasuraman et al., (1985) identified ten factors to measure SQ in offline medium 'tangibles, responsiveness, competence, courtesy, reliability, communication, credibility, security, understanding the customer, and access'. The same researchers found the factors E-S-QUAL- 'efficiency, fulfilment, privacy, and system availability'. E-RecS-

QUAL- 'responsiveness, contact, and compensation' in 2005 by using quantitative methods in the online retail store settings.

### Dimensional and Structural Aspects of the SQ Constructs:

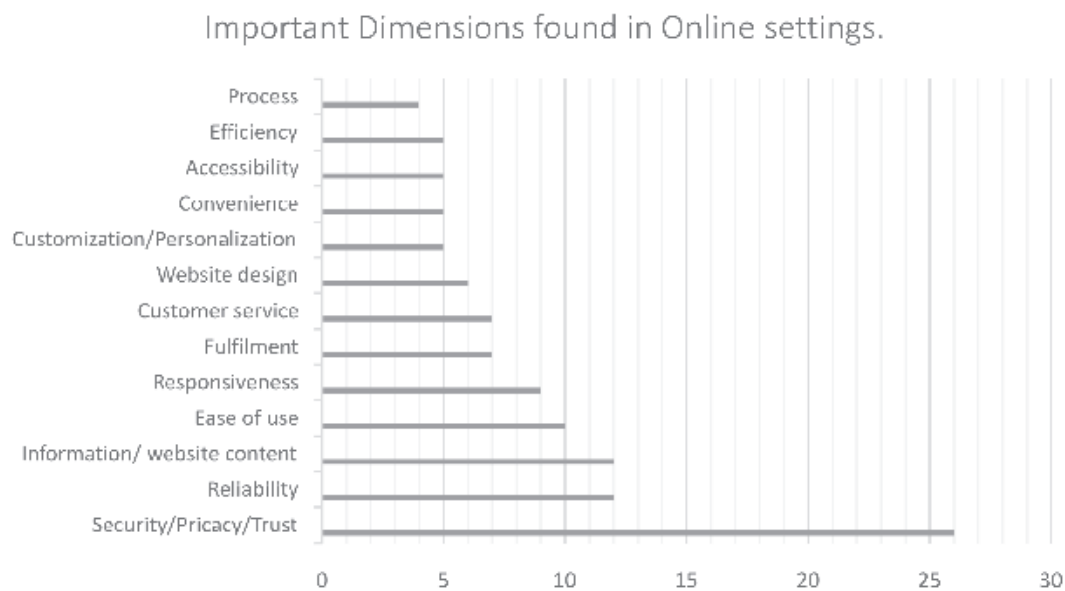
Out of the total of 55 studies, 42 studies covered online SQ, and 13 covered offline service settings. It also included five studies that focused only on Indian respondents. All of the studies in Table: 2, 3, and 4 found the construct of SQ to be mostly multidimensional, except two, where the number of dimensions was just one, by Subramanian et al., (2014) where factor found was, 'delivery of products' and by Chiang & Dholakia (2003) where 'Perceived price' was found. The maximum number of dimensions (14) were found in the study conducted by Madu & Madu (2002). The factors found by them were 'performance, aesthetics, website-policies, features, reliability, storage-capability, assurance, serviceability, responsiveness, system integrity, product/service differentiation, structure, reputation, and empathy.' It is clear from this exploration that there was no unanimity on the number and the characteristic of the factors in the scales measuring SQ, but generally, factors mentioned in Figure 1 and 2, resurface more regularly. Although these dimensions are not necessarily exhaustive and comprehensive.

It was found that in the online settings, the most

consistently or frequently found factor was security/privacy/trust followed by reliability, information/website content, and ease of use. Security refers to 'the safeguarding the personal and financial information of the customer' (Yoo and Donthu, 2001); reliability refers to 'the performance of a promised service in a correct and timely manner and to the delivery of intact and correct products (or services) at times convenient to customers as promised' (Yang and Jun, 2002); website content refers to 'adequacy and accuracy of the information users get when visiting an online retail web site' (e.g., Collier and Bienstock, 2006); ease of use refers to 'user-friendliness, especially concerning searching for information and placing the order (Yoo and Donthu, 2001).'

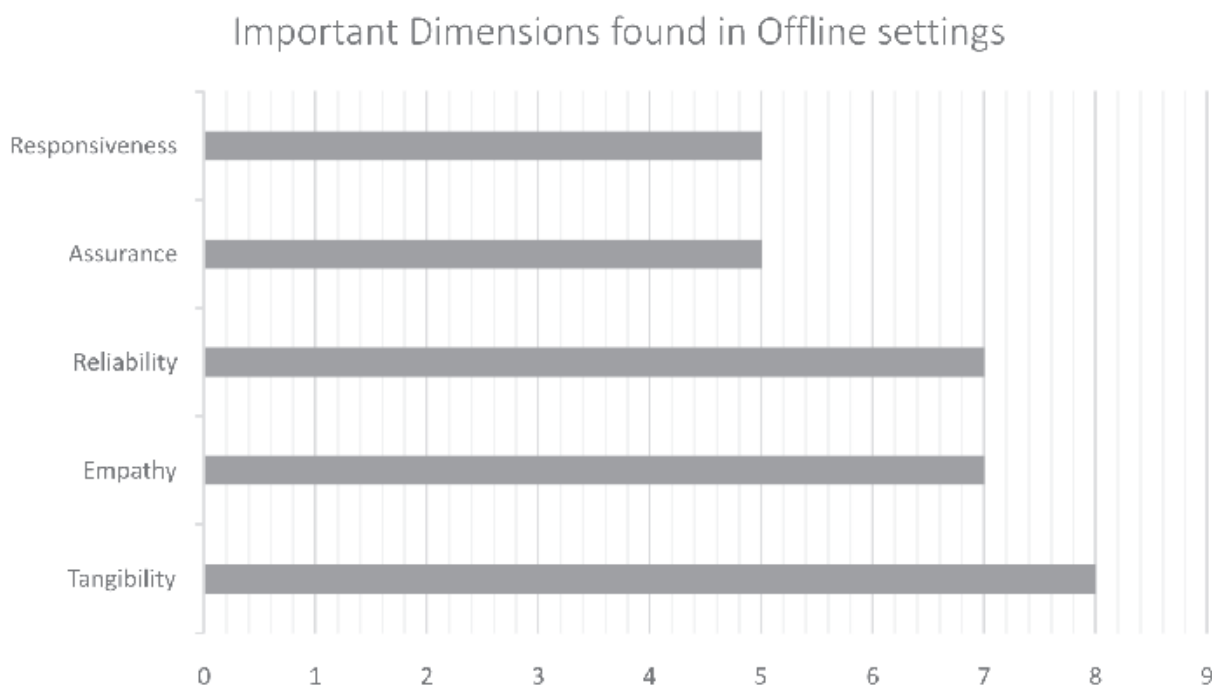
Some traditional factors of physical SQ are seemingly not applicable in the context of online SQ. In the offline settings, tangibility was found to be the most common factor, followed by empathy, reliability, and assurance. According to Parasuraman, et al., (1988), tangible refers to 'physical facilities, equipment, and personnel appearances of the service provider'; empathy refers to 'caring, tailored and adjusted attention the firm provides to its customers'; reliability here refers to 'ability to perform promised services dependably and accurately'; assurance refers to 'knowledge and civility of personnel and their ability to inspire trust and confidence in the customers'.

**Figure 1: Important Dimensions Found in Online Settings**



Number of studies (out of 42 Research Paper).

Source: Author's calculation

**Figure 2: Important Dimensions Found in Offline Settings**

Number of studies (out of 13 Research Paper).

*Source: Author's calculation*

### Conclusion and Suggestions

The outcomes of the study provide several recommendations for the business managers. One important takeaway is to identify the target customers, understand their needs and cater to the same, without generalizing. The clear understanding of the decisive SQ dimensions will help marketers in taking better decisions viz-a-viz online and offline settings. The paper can also significantly help firms in utilizing hybrid channels of distribution as the trend of both online and offline firms going omni-channel is slowly picking up; with Amazon, Future Group, Reliance and Walmart being the prime examples.

Businesses also need to understand that expectations and SQ dimensions in both online and offline settings are entirely different; therefore, they should work on designing specific strategies accordingly.

The study further concludes that different SQ dimensions play a significant role in different varieties of service settings. Therefore, no existing standard scale can accommodate the need nor is recommended. Researchers

suggest the managers to frame a separate scale for their organizational setting to obtain better results depending upon the target customers and their needs.

The researchers provide further suggestions to both online and offline businesses in light of the dimensions found in the study. The online businesses should a) work on the protection of the personal and financial information of the consumers; b) perform the promised services in an accurate and opportune manner; c) provide adequate and accurate information to the users; and d) make their websites user-friendly. Whereas, the traditional businesses should a) take care of the physical facilities, equipment, and personnel appearances; b) be caring and give individualized attention to its customers; c) perform promised services conscientiously and meticulously; and d) train their staff to be courteous and knowledgeable so they can inspire trust and confidence in the customers. These factors are obviously not exhaustive but most likely to affect perceptions, attitudes, trust, purchase intentions, overall satisfaction, and loyalty of the consumers.

Lastly, the results of this study can also provide a

framework for academicians to formulate hypothesis for a more comprehensive study in future.

## References:

- Akinci, S., Atilgan-Inan, E., & Aksoy, S. (2010). Re-assessment of ES-Qual and E-RecS-Qual in a pure service setting. *Journal of Business Research*, 63(3), 232-240.
- Aladwani, A. M., & Palvia, P. C. (2002). Developing and validating an instrument for measuring user-perceived web quality. *Information & Management*, 39(6), 467-476.
- Barnes, S. J., & Vidgen, R. (2005). The eQual approach to the assessment of e-commerce quality: A longitudinal study of Internet bookstores. In *Web Engineering: Principles and Techniques* (pp. 161-181). IGI Global.
- Barnes, S. J., & Vidgen, R. T. (2002). An integrative approach to the assessment of EC quality. *Journal of Electronic Commerce Research*, 3(3), 114-127.
- Bauer, H. H., Falk, T., & Hammerschmidt, M. (2006). E-TransQual: A transaction process-based approach for capturing service quality in online shopping. *Journal of Business Research*, 59(7), 866-875.
- Bernardo, M., Marimon, F., & Del Mar Alonso-Almeida, M. (2012). Functional quality and hedonic quality: A study of the dimensions of e-SQ in online travel agencies. *Information & Management*, 49(7-8), 342-347.
- Bhattacharya, D., Gulla, U., & Gupta, M. P. (2012). E-SQ model for Indian government portals: citizens' perspective. *Journal of Enterprise Information Management*, 25(3), 246-271.
- Blut, M. (2016). E-SQ: development of a hierarchical model. *Journal of Retailing*, 92(4), 500-517.
- Cai, S., & Jun, M. (2003). Internet users' perceptions of online service quality: a comparison of online buyers and information searchers. *Managing Service Quality: An International Journal*, 13(6), 504-519.
- Chiang, K. P., & Dholakia, R. R. (2003). Factors driving consumer intention to shop online: an empirical investigation. *Journal of Consumer Psychology*, 13(1-2), 177-183.
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behaviour. *Journal of Retailing*, 77(4), 511-535.
- Chuang, Y. F., Hwang, S. N., Wong, J. Y., & Ho, C. H. (2017). Important service quality of tourist retail services. *Journal of Quality Assurance in Hospitality & Tourism*, 18(3), 379-385.
- Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in e-retailing. *Journal of Service Research*, 8(3), 260-275.
- Cox, J., & Dale, B. G. (2001). Service Quality and EC: an exploratory analysis. *Managing Service Quality: An International Journal*, 11(2), 121-131.
- Cristobal, E., Flavián, C., & Guinaliu, M. (2007). Perceived e-SQ (PeSQ) Measurement validation and effects on consumer satisfaction and web site loyalty. *Managing Service Quality: An international journal*, 17(3), 317-340.
- Cronin Jr, J. J., & Taylor, S. A. (1994). SERVPERF versus SERVQUAL: reconciling performance-based and perceptions-minus-expectations measurement of service quality. *The Journal of Marketing*, 125-131.
- Davari, A., Iyer, P., & Rokonzaman, M. (2016). Identifying the determinants of online retail patronage: A perceived-risk perspective. *Journal of Retailing and Consumer Services*, 33, 186-193.
- Ding, D. X., Hu, P. J. H., & Sheng, O. R. L. (2011). e-SELFQUAL: A scale for measuring online self-service quality. *Journal of Business Research*, 64(5), 508-515.
- Farooq, M. S., Salam, M., Fayolle, A., Jaafar, N., & Ayupp, K. (2018). Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach. *Journal of Air Transport Management*, 67, 169-180.
- Fassnacht, M., & Koese, I. (2006). Quality of electronic services: conceptualizing and testing a hierarchical model. *Journal of Service Research*, 9(1), 19-37.
- Ghosh, P., Tripathi, V., & Kumar, A. (2010). Customer expectations of store attributes: A study of organized retail outlets in India. *Journal of Retail & Leisure Property*, 9(1), 75-87.
- Grönroos, C. (1984). A service quality model and its marketing implications. *European Journal of Marketing*, 18(4), 36-44.
- Herington, C., & Weaven, S. (2009). E-retailing by banks: e-SQ and its importance to customer satisfaction. *European Journal of Marketing*, 43(9/10), 1220-1231.
- Hossain, M. A., Dwivedi, Y. K. & Naseem, S. B. (2015). Developing and validating a hierarchical model of

- service quality of retail banks. *Total Quality Management & Business Excellence*, 26(5-6), 534-549.
- Janda, S., Trocchia, P. J., & Gwinner, K. P. (2002). Consumer perceptions of Internet retail SQ. *International Journal of Service Industry Management*, 13(5), 412-431.
- Jiang, L., Jun, M., & Yang, Z. (2016). Customer-perceived value and loyalty: how do key SQ dimensions matter in the context of B2C e-commerce? *Service Business*, 10(2), 301-317.
- Kandulapati, S., & Shekhar Bellamkonda, R. (2014). E-SQ: a study of online shoppers in India. *American Journal of Business*, 29(2), 178-188.
- Ladhari, R. (2010). Developing e-SQ scales: A literature review. *Journal of Retailing and Consumer Services*, 17(6), 464-477.
- Lee, G. G., & Lin, H. F. (2005). Customer perceptions of e-SQ in online shopping. *International Journal of Retail & Distribution Management*, 33(2), 161-176.
- Lee, W. H., & Cheng, C. C. (2018). Less is more: A new insight for measuring service quality of green hotels. *International Journal of Hospitality Management*, 68, 32-40.
- Lehtinen, U., & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *Service Industries Journal*, 11(3), 287-303.
- Loiacono, E. T., Watson, R. T., & Goodhue, D. L. (2002). WebQual: A measure of website quality. *Marketing Theory and Applications*, 13(3), 432-438.
- Long, M., & McMellon, C. (2004). Exploring the determinants of retail service quality on the Internet. *Journal of Services Marketing*, 18(1), 78-90.
- Loonam, M., & O'loughlin, D. (2008). Exploring e-SQ: a study of Irish online banking. *Marketing Intelligence & Planning*, 26(7), 759-780.
- Lovelock, C., Wirtz, J., & Chatterjee, J. (2011). *Service Marketing, People, Technology and Strategy* (7th ed.). Noida: Pearson.
- Madu, C. N., & Madu, A. A. (2002). Dimensions of e-quality. *International Journal of Quality & Reliability Management*, 19(3), 246-258.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. *Journal of Retailing*, 64(1), 12.
- Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213-233.
- Press Information Bureau. (2018). Contribution of various sectors to GDP. Ministry of Finance, Government of India, Press Information Bureau. Retrieved January 2, 2019, from <http://pib.nic.in/newsite/PrintRelease.aspx?relid=186413>
- Ranganathan, C., & Ganapathy, S. (2002). Key dimensions of business-to-consumer web sites. *Information & Management*, 39(6), 457-465.
- Sahadev, S., & Purani, K. (2008). Modelling the consequences of e-SQ. *Marketing Intelligence & Planning*, 26(6), 605-620.
- Santos, J. (2003). E-SQ: a model of virtual service quality dimensions. *Managing Service Quality: An International Journal*, 13(3), 233-246.
- Sejin Ha, Leslie Stoel, (2012). Online apparel retailing: roles of e shopping quality and experiential e shopping motives. *Journal of Service Management*, Vol. 23 Iss: 2, pp.197 - 215
- Sohn, C., & Tadisina, S. K. (2008). Development of e-SQ measure for internet-based financial institutions. *Total Quality Management*, 19(9), 903-918.
- Srinivasan, S. S., Anderson, R., & Ponnnavolu, K. (2002). Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41-50.
- Subramanian, N., Gunasekaran, A., Yu, J., Cheng, J., &

- Ning, K. (2014). Customer satisfaction and competitiveness in the Chinese E-retailing: Structural equation modelling (SEM) approach to identify the role of quality factors. *Expert Systems with Applications*, 41(1), 69-80
- Sureshchandar, G. S., Rajendran, C., & Anantharaman, R. N. (2002). The relationship between service quality and customer satisfaction—a factor specific approach. *Journal of Services Marketing*, 16(4), 363-379.
- Szymanski, D. M., & Hise, R. T. (2000). E-satisfaction: an initial examination. *Journal of Retailing*, 76(3), 309-322.
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, xiii-xxiii.
- Wee, B. V., & Banister, D. (2016). How to write a literature review paper? *Transport Reviews*, 36(2), 278-288.
- Wolfenbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predictingetail quality. *Journal of Retailing*, 79(3), 183-198.
- Yang, Z. (2001). Customer perceptions of service quality in internet-based electronic commerce. *Proceedings of the 30th EMAC Conference*, Bergen, pp. 8-11.
- Yang, Z., & Jun, M. (2002). Consumer perception of e-SQ: from internet purchaser and non-purchaser perspectives. *Journal of Business Strategies*, 19(1), 19.
- Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction. *International Journal of Service Industry Management*.
- Yixin, Z., Rahman, A., Haque, R., Osman, Z., San, L. H., Subramniam, P., & Mohideen, S. (2018). An Empirical Study on Consumers' Perceptions of Web service quality (W-SQ) on e-Auction Sites. *National Academy of Managerial Staff of Culture and Arts Herald*, (1), 1131-1138.
- 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.
- Zehir, C., Sehitoglu, Y., Narcikara, E., & Zehir, S. (2014). ES-quality, perceived value and loyalty intentions relationships in internet retailers. *Procedia-Social and Behavioural Sciences*, 150, 1071-1079.
- Zeithaml, V. A., Bitner, M. J., Gremler, D. D., & Pandit, A. (2011). *Services Marketing Integrating customer focus across the firm*. New Delhi: Tata McGraw Hill.
- Zeithaml, V. A. (2002). Service excellence in electronic channels. *Managing Service Quality: An International Journal*, 12(3), 135-139.
- Zemblytė, J. (2015). The Instrument for Evaluating E-SQ. *Procedia-Social and Behavioural Sciences*, 213, 801-806.
- Zhang, M., Huang, L., He, Z., & Wang, A. G. (2015). E-SQ perceptions: an empirical analysis of the Chinese e-retailing industry. *Total Quality Management & Business Excellence*, 26(11-12), 1357-1372.