

Impact of Internet Service Quality on Customer Satisfaction Special Reference to Internet Service Providers During COVID – 19 Period

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ABSTRACT

Customers may switch to a different service provider if they are displeased with the standard, hence tracking service quality is crucial for a firm. The influence of Internet Service Quality (ISQ) on Customer Satisfaction will be studied in detail by the researcher. The relevance of this study is highlighted by the current COVID-19 scenario in Sri Lanka, where government laws and restrictions have been implemented to promote work from home, online learning, and online entertainment. Previous research in other countries have looked at the impact of ISQ on customer satisfaction; however, to our knowledge, no such study has been conducted in Sri Lanka. Furthermore, earlier study looked at a variety of scenarios, including the discovery of research gaps; however, in the context of COVID-19, the research gaps were identified. Past research identifies the following factors which impact ISQ: Tangibility, Assurance, Empathy, Reliability, Responsiveness and Price. This study was carried out as a deductive study and a quantitative method was employed. The convenience sample approach was used to collect 505 responses by distributing a questionnaire survey to consumers in Sri Lanka's Western region. Statistical Package for Social Science (SPSS) version 23 was used to analyze the data. The studies indicated that Internet Service Quality and Customer Satisfaction



had a favorable association. The study was also able to provide insights for ISP management by emphasizing areas of ISQ that can satisfy their customer base, as well as actions that might be implemented in response to the observed practice gaps.

Keywords: Customer Satisfaction, Internet Service Quality, Mobile Telecommunication Industry (MTI), Service Quality

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1. INTRODUCTION

Once after the COVID-19 pandemic erupted in early 2020, it confronted the foundations of society and economic standards around the world. Countries started banning one by one public safety agreements and social distancing measures bringing daily life to Remote work, online education, video calling and digital banking (2021). Pandemic situation has done a big impact on the society with the result of social distancing. According to 2021 statistics Sri Lankan population is around 21.46 million, mobile connections over 30.41 million which is 141.7% from the total population, internet users are 10.90 million. 2021 statics of internet users shows considerable increment compared to 2020 year that is 7.9% (Digital 2021:Sri Lanka, 2021). Since study focuses on internet service providers, the statistics show that there is a significant shift in internet usage Digital 2021:Sri Lanka (2021) which results high competition among the Internet service providers. Competition makes busy players and sometimes it keeps ignoring the actual customer needs which leads the customers for dissatisfaction (Oliver, 1997). The important thing is to make any company a huge part of its success with customers. Anderson & Srinivasan (2003) believe that customer satisfaction is a positive reaction of customers to their buying experience. Satisfaction as a concept has been extensively studied in the literature. Reichheld, Teal, & Smith (1996) emphasized the role and role of contentment. According to Oliver (1997) satisfaction is "the consumer's answer to fulfillment". Gilbert & Veloutsou (2007) defines the term expectation as a preconceived view or



belief about the provision of a service, which serves as a reference or standard point for judging product performance. The process of measuring customer satisfaction is complicated. Customer satisfaction is subjective in nature and varies from customer to customer, so it is difficult to create a standardized dimension toolkit for this phenomenon (Oliver, 1997). Previous researchers believes that quality is becoming more and more important, it is the main function of gaining a competitive benefit, it is an important success factor for any modern service company (Anderson & Srinivasan, 2003). Further this difficulty has been minimized with the development of service model introduced by Parasuraman , Zeithaml, & Berry (1988) which was known as SERVQUAL model. Researcher has developed the service quality model with the contribution of Joudeh & Dandis (2018) by adding price dimension to the SERVQUAL model.

- Tangibles: physical facilities, appearance of personnel, equipment.
- Reliability: capacity to provide the assured service reliably, accurately and dependably.
- Responsiveness: will serve customers and deliver prompt service
- Assurance: employees' knowledge and politeness and their capacity to inspire trust and confidence.
- Empathy: ability of the company to provide thoughtful and customized attention to its customers.
- Price: ability and willingness of consumers to pay for a particular product or service

2. RESEARCH PROBLEM

Due to the prevailing Covid 19 situation in Sri Lanka, people need better Internet services as they are working online. When considering the studies which have been done in Sri Lanka, there are a lot of studies done on service quality for different service sectors like Hotels, Banking, Education institutes; (Jayawardhena, 2016) except the study done by Dharmadasa & Gunawardhana (2017) related to the communication industry and those studies have helped the relevant sectors for their



development. But we were unable to find that commitment towards the Internet service quality of Telecommunication industry, the reason is a lot of service providers are struggling in their financial perspective even though the industry is developing. As a result of that, Internet service providers try to merge with other service providers, for example Etisalat and Hutchison (Dharmadasa & Gunawardhana, 2017). Researchers propose this scenario happens because service providers lack knowledge in retaining the customers. Therefore, researchers intend to fill the practice gap through this study which will support the Telecommunication services develop their service commitments towards financial performance and lack of literature pays the way to add new knowledge for the future researchers for their future studies.

Through the above justification researcher intends to find answers for the below main research objective,

• To identify the impact of Internet Service quality on Customer Satisfaction

Sub research objectives,

- To find the impact of Tangibility in Service quality on Customer satisfaction.
- To find the impact of Reliability in Service quality on Customer satisfaction.
- To find the impact of Responsiveness in Service quality on Customer satisfaction.
- To find the impact of Assurance in Service quality on Customer satisfaction.
- To find the impact of Empathy in Service quality on Customer satisfaction.
- To find the impact of Prices in Service quality on Customer satisfaction.

Therefore, researcher intends to investigate the impact of Internet Service quality on Customer Satisfaction in Telecommunication industry in Sri Lanka.



3. LITERATURE REVIEW

3.1. Customer Satisfaction

Oliver R. L. (1980) studied the concept of satisfaction in the service industry and built the most popular model based on the "expectancy uncertainty model". The model argues that actual performance is measured according to the customer's initial expectations to assess satisfaction Chiou & Spreng (1996) defines "uncertainty" as the calculation of "difference scores" (specifically, the difference between expected performance evaluations and perceived performance evaluations). Anderson & Srinivasan, (2003) also ensures that it is not asserted as "a difference between postpurchase evaluation and post-use evaluation of product or service performance and pre-purchase expectations". Confirmation occurs when the performance matches up to the initial expectations; no more or less (Erevelles & Leavitt, 1992). On the other hand, once the actual performance is deemed to be worse than the initial expectations of the service, there will be a 'negative disconfirmation. Here, customers are not satisfied, and the trend of re-purchasing products or services in the future is rare (Zammit, 2000). When actual performance is viewed as exceeding the customer's initial expectations, consumer is very satisfied or even 'happy'. This positive experience reinforces consumers' inclination towards the brand. Above studies show the importance of considering customer satisfaction for sustaining the customer base within the company.

3.2. Service Quality

Concept of Service Quality According to Abdullah & Afshar (2019), quality is a nebulous and elusive idea. It is critical to distinguish between products and services due to their distinct qualities. The former is more concrete, in the shape of a thing; the latter is intangible, in the form of real performance (Abdullah & Rahman, 2015). It is a process, not a product, which is one of the most important and unique aspects of services. As a result, service businesses don't sell anything, but they do have engaging processes. Because services are intangible, it is difficult for suppliers to



describe them and for consumers to assess them (Ali et al. 2021). Parasuraman, Zeithaml, & Berry (1988) proposed a better approach for measuring service quality termed the SERQUAL model.

3.3. The SERVQUAL Model

SERVQUAL model is a broadly used model for determining service levels across industries and requires similar responses to different business conditions. Asubonteng , McCleary , & Swan (1996) notes that in view of the fierce competition and the strong focus on environmental factors, service standards have become more important. If service quality is to become the basis of marketing policy, it should be able to be calculated and made feasible by companies; SERVOUAL has become a very common method. It has been widely exposed to marketing literature and industry for an almost reliable study of service efficiency (Jayawardhena, 2016). Parasuraman , Zeithaml, & Berry (1985) originated a metric called service quality, since there are many models (metrics) used to calculate levels of service and customer satisfaction, which are usually too general or temporary to be implemented in the hotel industry. By the way, the SERVQUAL model, which requires efficiency, responsiveness, integrity, reputation, access, courtesy, connectivity, assurance, empathy, and tangibles, has 10 factors of service quality during continuous study in the grounds of service quality. The follow-up study by Parasuraman, Zeithaml, & Berry (1985) changed the determinants of service quality and explicitly derived five service efficiency criteria, such as tangibility, reliability, responsiveness, Assurance, and empathy.

3.4. Validity of Using SERVQUAL Model

At the Anderson Cancer Center, Macaulay & Cook (1994) used the SEVQUAL model to assess service levels. This tool is suitable for patients with multiple diseases, including comparison of preferences and experience. Patients consider waiting time and billing accuracy to be important. It strongly demonstrates that consumer preferences may have a significant impact on measuring the quality of a company's



operations. In their research, Pariseau & McDaniel (1997) used service quality to determine consistency and meaning for each dimension: assurance, durability, empathy, responsiveness, and tangibility to assess consensus among participants' opinions. To improve service efficiency, service quality can be used to measure results and it has been greatly developed. Galloway analyzed the efficacy of SERVQUAL in assessing the level of service in the education service (Galloway, 1988). The effectiveness of SERQUAL tested by Bojanic & Rosen (1998) through their extensive research on the catering industry as a method for assessing service quality has been shown to be effective in defining consumer expectations of service quality in a restaurant model tool. Li, Tan, & Xie (2003) noted that a firm's ability to obtain service quality consistency depends on defining service characteristics and required standards, as well as prioritizing service characteristics. Service quality assessment tools, such as service quality, established a linear and symmetric connection among differences in service superiority and general service quality. Douglas & Connor (2003) studied the balance between consumers' quality preferences and managers' and employees' perceptions of customer expectations. Because in the dynamic hotel market, customers control the company's secrets of sustainable development and profitability, so service standards are an important tool for gaining a competitive advantage, it is important to calculate quality to determine if the industry is providing the service that customers want. Therefore, the above empirical evidence shows the significance of using SERVQUAL model for this study.

SERVQUAL model presented by Parasuraman et al. (1985), mainly investigates identifying the gap among expectation and experience. (Iwaarden & Wiele, n.d.) also described this model emphasizes on five generic dimensions (RATER Metric) and listed as follows,

3.4.1.Reliability

Service providers need to ensure that the information provided to customers is accurate and correct, and to share relevant information with customers in a timely manner within the given deadline as promised (Joudeh & Dandis, 2018).



3.4.2.Assurance

Knowledge and courtesy of the employees and their ability to inspire trust and confidence of the customers in terms of meeting their expectations and address concerns competently (Jayawardhena, 2016).

3.4.3.Tangibles

Tangibility entails physical evidence of the service where the concept refers to the physical facilities and appearance that of stores, personnel, equipment and tools includes in a service facility in which attracts the customers in repurchase the product or service (Parasuraman, Zeithaml, & Berry, 1988).

3.4.4.Empathy

Caring and individualized attention that the firm provides to its customers, the customized solutions available with organization and acknowledging specific concerns (Joudeh & Dandis, 2018).

3.4.5.Responsiveness

Willingness to help customers and provide prompt service through multiple service channels (email, phone, social media) and acknowledge complaints immediately (Joudeh & Dandis, 2018).

Besides the SERVQUAL model, researcher has used model developed by Joudeh & Dandis (2018) in his study. Therefore, price dimension has been added to with SERVQUAL model.

4. CONCEPTUALIZATION AND OPERATIONALIZATION

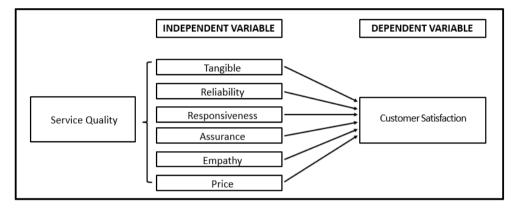
4.1. Conceptualization

Conceptual framework consists of two main variables, independent variable (Internet Service Quality) and dependent variable (Customer Satisfaction). Independent



variable has sub variables those are, Tangible, Reliability, Responsiveness, Assurance, Empathy and Price. The price component was not in the SERVQUAL model but it was included in the framework to exploit accurate information from the respondents (Uchenna & Yew, 2008; Safi & Alagha, 2020).

Figure 1: Conceptual Framework Source: Uchenna & Yew (2008); Safi & Alagha (2020)



4.2. Hypothesis Development

H1: There is a positive relationship between Internet Service Quality and Customer Satisfaction.

H1a: There is a positive relationship between Tangibles and Customer Satisfaction

Tangibles are frequently utilized by service providers to reinforce their reputation, give congruity, and sign quality to client, most organizations unite together tangibles with other in order to establish a service quality technique for the company which results to give a first impression on the service that they are going to receive (Anwar & Balcioglu, 2016). This impression directly impacts on the satisfaction of the customers (Anwar k., 2017)

H1b: There is a positive relationship between Reliability and Customer Satisfaction

Reliability depicts whether a service supplier follows assured promises and how precious it is in the actions. The significant importance lies in fulfilling promptly the customer's requests (Hameed & Anwar, 2018). Reliability "reflects the service



provider's ability to perform service dependably and accurately". It includes "doing it right the first time" and as for the customer it is one of the most significant dimensions as cited in (Anwar & Ghafoor, 2017). When companies can deliver their promise while performing their service dependably and accurately then it will direct the customers for satisfaction (Hameed & Anwar, 2018).

H1c: There is a positive relationship between Responsiveness and Customer Satisfaction

"Being willing to help" - refers to the organization's readiness to settle happened issues and availability to provide fast service. It is important to respond to all customer requests, otherwise the request can turn into a complaint Service suppliers' capability to ensure that they are providing with a service on time is a basic part of service quality for major customers. This dimension underscores mindfulness and immediacy in managing customers' appeals, questions, complaints and other issues (Ali, Gardi, Othman, & Ahmed, 2021).

H1d: There is a positive relationship between Assurance and Customer Satisfaction

Trust refers to the expertise, skills, politeness and willingness of employees to instill trust in consumers (Parasuraman, Zeithaml, & Berry, 1985). The consumer should feel safe when he or she consumes different services from a hotel and would like to feel secure during his stay (Anwar & Louis, 2017). Also based on the study of consumers should feel safe in all financial transactions; therefore, employees should be trustworthy (Hameed & Anwar, 2018). Researchers have proven that trustworthiness holds much power on making a considerable change in the customer satisfaction.

H1e: There is a positive relationship between Empathy and Customer Satisfaction

Caring and individualized attention that the firm provides to its customers, the customized solutions available with organization and acknowledging specific concerns. This is the area that the most of the company's neglect. Ali, Gardi, Othman, & Ahmed (2021) identified that even if any product or service holds the expected



quality and features, it requires to stress the concern on how the product or service will be their solution for their purpose. Anwar k. (2017) has proven that the understanding of customers has a direct impact on customer satisfaction in hotel industry and Joudeh & Dandis (2018) in Internet Service providers.

H1f: There is a positive relationship between Prices and customer Satisfaction

Price is one part of the marketing mix, which is a value of certain goods attached to goods or services that are being traded in the market (Uchenna & Yew , 2008). The compatibility of good or bad prices can be seen from the consumer's response to the price offered, accepted, or rejected. In telecommunications services, prices are the top priority of consumers in choosing service providers in addition to service quality. The price increase offered by cellular operators can affect a consumer. The research of Manilall, Chengedzai, & Tshepiso (2014) that prices show a significant positive effect on customer satisfaction. In other words, prices affect customer satisfaction. Research Sujuan, Qiying, & Weiqi (2017) also shows that the market has a high sensitivity to prices, changes in price increases are very sensitive to the level of customer satisfaction. The result is that appropriate pricing can affect the increase in customer satisfaction and can attract new customers.

5. METHODOLOGY AND DATA ANALYSIS

5.1. Methodology

The core purpose of this study is to understand the level of Impact of Internet Service excellence on Customer satisfaction during Covid 19 period in Western province of Sri Lanka. This research aims to examine the influence of an independent variable on its dependent variable. Therefore, this research will be carried out as a correlation study (Sekaran, 2003). A quantifiable study will be approved out under this research via a survey method to collect information from the sample who consume Internet services of Internet service providers. This study was also conducted with a deductive approach because it discussed the influence of Internet Service quality on Customer



satisfaction, a theory that already exists. Based on this, theoretical basic research hypotheses were developed; Research is being carried out to test those hypotheses. According to Sunders (2009) for this study the "survey" method was chosen as the research strategy. Thus, the time limit of the current study can be defined as a single snapshot / cross section meaning that the data were only collected once (Sahay, 2016). The study population of the study is the people live in the western province of Sri Lanka and by considering previous literature articles, the researchers have taken their sample between 500 and 900 therefore the researcher has decided to select a sample of over 500 respondents which are represented by both male and female individuals from Sri Lanka (Joudeh & Dandis, 2018; Eze, Ismail, Sin, & Siang, 2008). In here the researcher intends use the sampling technique as non-probability convenience sampling and data will be collected through a distribution of online questionnaire among the respondents. Dimensions of the study will be measured on the five-point Likert scale. Which is ranging from 1 to 5 where 1=Strongly Disagree,5= Strongly Agree.

5.2. Data Analysis

5.2.1.General Characteristics

Distribution of Gender

The total number of respondents that were involved in the research accounts to 505. Based on the categorization according to gender of the respondents involved in the study, it was evident that most of the respondents were Female accounting to 63.8% and Male respondents accounting to 36.2%.

	Frequency	Percent	Valid Percent	Cumulative Percent
16-20 years	46	9.1	9.1	9.1
21-25 years	200	39.60	67.3	76.4
26-30 years	140	27.72	20.0	96.4
31-40 years	101	20.0	3.2	99.6

Table 4.1 Distribution of Age



above 40 years	18	3.5	.4	100.0
Total	505	100.0	100.0	

(Source: SPSS 23 Analyzed Data)

According to the above table 39.60% answers were given by the people who are in the age 21 - 25 years. And the second highest value is 27.72%, they were aged between 26 - 30 years. Most of the time, in this age category people are studying in universities or doing higher education.

Table 4.2 Type of Connection

	Frequency	Percent	Valid Percent	Cumulative Percent
Fiber Optic	68	13.5	13.5	13.5
Wireless Router	295	58.4	58.4	71.9
Hotspot	3	.6	.6	72.5
ADSL Cable connection	75	14.9	14.9	87.3
Mobile data	26	5.1	5.1	92.5
Dongle	35	6.9	6.9	99.4
4G Wired Router	3	.6	.6	100.0
Total	505	100.0	100.0	

(Source: SPSS 23 Analyzed Data)

According to the above table shows the type of connections used by respondents. 295 respondents are using wireless router connections, as a percentage 58.4%. Although, 14.9% of respondents are using ADSL cable connection as their internet connection. That shows that most of the respondents are likely to get a faster internet connection for their work.

Table 4.3 Distribution of Internet Service Providers

	Frequency	Percent	Valid Percent	Cumulative Percent
SLT/Mobitel	248	49.1	49.1	49.1
Dialog	217	43.0	43.0	92.1
Bell 4G	12	2.4	2.4	94.5
Hutch	17	3.4	3.4	97.8
Airtel	11	2.2	2.2	100.0
Total	505	100.0	100.0	

(Source: SPSS 23 Analyzed Data)



Table shows most of the respondents are using SLT/ Mobitel. As a percentage 49.1% and 43% of respondents are Dialog users.

	Frequency	Percent	Valid Percent	Cumulative Percent
Prepaid	157	31.1	31.1	31.1
Post paid	348	68.9	68.9	100.0
Total	505	100.0	100.0	

(Source: SPSS 23 Analyzed Data)

According to the above details 68.9% respondents are postpaid package users. As a number 348 respondents.

	Frequency	Percent	Valid Percent	Cumulative Percent
5 to 20 GB	67	13.3	13.3	13.3
20 to 40 GB	146	28.9	28.9	42.2
40 to 60 GB	104	20.6	20.6	62.8
60 to 80 GB	95	18.8	18.8	81.6
100+ GB	93	18.4	18.4	100.0
Total	505	100.0	100.0	

Table 4.5 Size of Package

(Source: SPSS 23 Analyzed Data)

Based on the categorization according to the size of the package of the respondents involved in the study, it was evident that a majority of the respondents were 20 to 40 GB package users accounting to 28.9 % and 40 to 60 GB package users' respondents accounting to 20.6%.

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 500	35	6.9	6.9	6.9
500 - 1000	79	15.6	15.6	22.6
1000 - 2000	227	45.0	45.0	67.5
2000 - 3000	95	18.8	18.8	86.3
3000 - 4000	33	6.5	6.5	92.9
4000 - 5000	18	3.6	3.6	96.4
5000 above	18	3.6	3.6	100.0
Total	505	100.0	100.0	



(Source: SPSS 23 Analyzed Data)

According to the above table shows the price of packages used by respondents. 225 respondents are using 1000 - 2000, as a percentage 45%. Although, 18.8% of respondents are using 2000 – 3000 as their internet connection.

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 1mb	86	17.0	17.0	17.0
1 – 4mb	200	39.6	39.6	56.6
4 – 8mb	130	25.7	25.7	82.4
8 – 12mb	63	12.5	12.5	94.9
Above 12mb	26	5.1	5.1	100.0
Total	505	100.0	100.0	

(Source: SPSS 23 Analyzed Data)

According to the above table describe the Average speed of internet service providers. Most of the respondents have between 1 - 4mb speeds. It shows as a percentage 39.6% and 2^{nd} highest value is 25.7% percent. There is an average speed between 4 – 8mb.

Valid Cumulative Frequency Percent Percent Percent One Year 117 23.2 23.2 Two Years 83 16.4 16.4 Three Years 105 20.8 20.8 Four Years 68 13.5 13.5 More than Four Years 132 26.1 26.1 100.0 100.0 Total 505 100.0

Table 4.8 How long you use internet service provider

(Source: SPSS 23 Analyzed Data)

Table shows the use time of service providers that can be considered as respondents' loyalty. According to those 132 respondents, they get the service from the same service provider for more than four years and it as a percentage 26.1%. And also, 23.2% percent of respondents are getting their service since last year. Maybe with the pandemic situation.

Table 4.9 Reason for Shifting



23.2

39.6

60.4 73.9 ISSN 1800 – 4989 (Print) ISSN 2719 – 2598 (Online)

	Frequency	Percent	Valid Percent	Cumulative Percent
Lower competitive Price	47	9.3	19.0	19.0
Speed of Service	144	28.5	58.1	77.0
Promotion offers	32	6.3	12.9	89.9
Customer Service	12	2.4	4.8	94.8
Coverage	8	1.6	3.2	98.0
Data Consumption	1	.2	.4	98.4
Separate Internet Connection for Work and Education	4	.8	1.6	100.0
Total	248	49.1	100.0	

(Source: SPSS 23 Analyzed Data)

According to the above table 58.1% of respondents changed their service provider because of the speed of the service. Respondents are considering the speed more than the price. 19% of respondents are considering the price and have changed their service provider. Therefore, respondents are considering speed more than the prices of the service provider.

5.2.2.Descriptive Statistics

Table 4.10: Descriptive	Statistics of All	Variables
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	Tangibility	Reliability	Responsiven ess	Assurance	Empathy	Price	Satisfaction
Mean	3.2770	3.0360	2.9505	3.2094	3.0371	3.1363	3.0198
Std. Error of Mean	.05029	.05378	.05304	.05291	.05342	.05272	.05552
Median	3.5000	3.0360	3.0000	3.2500	3.0371	3.1363	3.0198
Mode	4.00	4.00	2.00	4.00	4.00	3.00	1.00
Std. Deviatio n	1.1301 3	1.2085 1	1.1920 2	1.1889 5	1.2004 0	1.1846 7	1.2476 1
Variance	1.277	1.461	1.421	1.414	1.441	1.403	1.557
Skewnes s	470	116	.001	371	144	235	146
Std. Error of Skewnes s	.109	.109	.109	.109	.109	.109	.109



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Kurtosis	596	995	993	827	961	859	-1.005
Std. Error of Kurtosis	.217	.217	.217	.217	.217	.217	.217
Range	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Minimu m	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Maximu m	5.00	5.00	5.00	5.00	5.00	5.00	5.00

Tangibility denotes the highest mean value the 3.27 representing those users among respondents agree with the Tangibility factor of Internet service providers that have a significant impact on their decision making referring with service provider, responses have dispersed from the mean value by 1.13 amount of standard deviation. All the independent variables ranged among 2.95 to 3.27 of mean value. And customer Satisfaction stated a mean value of 3.01 which has dispersed from the mean value amounting 1.24 of standard deviation and lies at the acceptable range.

Reliability

Reliability Statistics	
Cronbach's Alpha	N of Items
0.980	30

(Source: SPSS 23 Analyzed Data)

Total Number of 30 items were disclosed 0.980 Cronbach's α value and it was greater than 0.7. Therefore, it proved the reliability of this research questionnaire. Therefore, there is a higher level of internal consistency of the measure.

Table 4.12 Reliability Statistics as per the Variables

	Cronbach's Alpha	N of Items
Tangibles	0.923	4
Reliability	0.950	5
Responsiveness	0.927	4
Assurance	0.932	4
Empathy	0.952	5
Prices	0.906	4
Customer Satisfaction	0.948	4

(Source: SPSS 23 Analyzed Data)



Considering the independent and dependent variables, Tangibles, Reliability, Responsiveness, Assurance, Empathy, Prices and Customer satisfaction respectively state 0.923, 0.950, 0.927, 0.932, 0.952, 0.906 and 0.948 of Cronbach's Alpha values and all of those values are greater than 0.7. Therefore, the extent to which the questionnaire of this study remains the same, and the questionnaire or the measurement continue to be stable over time and the similarity of measurements within a given time period is ensured.

Validity Test

Table 4.13 KMO and Bartlett's Test of all items

Kaiser-Meyer-Olkin Measure of	.972		
Bartlett's Test of Sphericity	st of Sphericity Approx. Chi-Square		
	Df	435	
	Sig.	.000	

(Source: SPSS 23 Analyzed Data)

In order to test the validity of the measures KMO and Bartlett's test were conducted. sample is deemed to be adequate if the value of KMO is greater than 0.5, in Bartlett's test Taking a 95% level of Significance p-value (Sig.) of .000 < 0.05 considered the valid range. Therefore, in this study, total validity is way beyond 0.5 and it validates the outcomes of the study.

Variable	Kaiser-Meyer-Olkin	Measure	of	Sampling	Bartlett's	Test
	Adequacy				(Sig)	
Tangibles	0.831				0.000	
Reliability	0.908				0.000	
Responsiveness	0.845				0.000	
Assurance	0.862				0.000	
Empathy	0.901				0.000	
Prices	0.839				0.000	
Satisfaction	0.861				0.000	

Table 4.13 KMO and Bartlett's Test variable wise

(Source: SPSS 23 Analyzed Data)

Considering the dependent and independent variables, Customer satisfaction, Tangibles, Reliability, Responsiveness, Assurance, Empathy and Prices respectively state 0.861, 0.831, 0.908, 0.845, 0.862, 0.901 and 0.839 of Kaiser-Meyer-Olkin



(KMO) values and all and all of those values are greater than 0.5, Further all the variables stated 0.000 of Bartlett's Test (sig) values which are on the acceptable range.

Multicollinearity Analysis

	Model	Collinearity	Collinearity Statistics		
Model		Tolerance	VIF		
	(Constant)				
	Final Tangibility	.364	2.751		
	Final Reliability	.267	3.749		
1	Final Responsiveness	.304	3.286		
	Final Assurance	.242	4.127		
	Final Empathy	.292	3.430		
	Final Price	.389	2.573		

(Source: SPSS 23 Analyzed Data)

Basically, the multicollinearity can be measured using fault-tolerant linear and VIF values. Linear tolerance measurement if the tolerance exceeds 1 it can be considered as a polyline. Likewise, there is no formal way to measure the VIF value for determining the incidence of multi-linear relationship. It is recognized that VIF values exceeding 10 which are multi-linear. When illustrating the above table, it depicts independent variables Tangibility, Reliability, Responsiveness, Assurance, Empathy, Price respectively states 0.364, 0.267, 0.304, 0.242, 0.292, 0.389 collinearity Tolerances which are lesser than the value 1, similarly independent variables state 2.751, 3.749, 3.286, 4.127, 3.430, 2.573 of VIF values which are lesser than the 10, Thus, it can conclude there is no any multicollinearity situation in the independent variables of the study.



Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.849 ^a	.721	.718	.66241		
a. Predictors: (Constant), Final Price, Final Tangibility, Final Responsiveness, Final Empathy, Final Reliability, Final Assurance						

Table 4.15 Model Summary

Source: (SPSS 23, Analyzed Data)

R Square represents the Coefficient of Determination which measures the proportion of variation in one variable that is explained by the other. R square of the model is obtained as 0.721. Hence it can be identified that 27.9% of unexplained variations are involved in the model. Therefore, 72.1% of the dependent variable can be explained from the independent variables Tangibility, Reliability, Responsiveness, Assurance, Empathy and Price.

Model		Sum of Squares	Df	Mean Square	F	Sig.	
	Regression	565.974	6	94.329	214.979	.000 ^b	
1	Residual	218.514	498	.439			
	Total	784.488	504				
a. Dependent Variable: Final Satisfaction							
b. Predictors: (Constant), Final Price, Final Tangibility, Final Responsiveness, Final							
Empat	hy, Final Relia	bility, Final Assu	rance				
b. Pred Empat	endent Variable dictors: (Consta	e: Final Satisfacti nt), Final Price, I bility, Final Assu	on Final Tangib	ility, Final Resp	onsiveness,	Final	

Table 4.16 ANOVA

Source: (SPSS 23, Analyzed Data)

The ANOVA table revealed that the F value is 214.979 therefore it is clear that the model is fitted since the calculated F value is greater than the F statistic value. The P value is 0.000, which is less than 0.05. It illustrates that the overall model applied can be statistically significant and predict the dependent variable. Further table revealed that out of 784.488 of the sums of squares, 565.974 of variation can be explained by regression where 218.514 of variation of dependent variable Customer Satisfaction is explained by the residual. Thus, it can be concluded that



the model is fitted because a relatively considerable portion is explained by regression.

Model		Unstandardized Coefficients		Standardized Coefficients		G.		
		В	Std. Error	Beta	t	Sig.		
1	(Constant)	052	.096		537	.592		
	Final Tangibility	003	.043	002	064	.949		
	Final Reliability	.192	.047	.186	4.068	.000		
	Final Responsiveness	.093	.045	.089	2.070	.039		
	Final Assurance	.155	.050	.148	3.075	.002		
	Final Empathy	.275	.046	.265	6.047	.000		
	Final Price	.283	.040	.269	7.096	.000		
a. Dependent Variable: Final Satisfaction								

Table 4.17 Coefficients of Multiple Regression

Source: (SPSS 23, Analyzed Data)

Multiple regression model can be construct as follows,

$$Y = a + \beta 1 X 1 + \beta 2 X 2 + \beta 3 X 3 + \beta 4 X 4 - \beta 5 X 5 + \beta 6 X 6 + \beta 7 X 7 + \beta 8 X 8 + \varepsilon \qquad \dots (4.1)$$

- Y = Dependent variable = Customer Satisfaction
- X1 = Independent Variable 1 = Tangibility
- X2 = Independent Variable 2 = Reliability
- X3 = Independent Variable 3 = Responsiveness
- X4 = Independent Variable 4 = Assurance
- X5 = Independent Variable 5 = Empathy
- X6 = Independent Variable 6 = Price
- a = constant value
- \in = Error β 1, β 2, β 3, β 4, β 5, β 6, β 7, β 8,

$$Y = -.052 - 0.003X1 + 0.192X2 + 0.093X3 + 0.155X4 - 0.275X5 + 0.283X6 + \varepsilon$$



5.2.3.Hypothesis Testing

To test the hypothesis of the current study, linear regression and multiple regression analyses have been adopted. Hypothesis can be tested by using the R, R Square P value (sig level) and the Coefficient (B) therefore R and R square results taken from simple linear regression tables and coefficient values have taken from the multiple linear regression tables. The below table depicts the summary results of regression analyses.

Hypothesis	Relationship	Status	Justification
H1a	Not significant	Rejected	R= 0.653
			R square= 0.427
			P-value= 0.949
			Coefficient= -0.003
H1b	Positive significant	accepted	R= 0.745
			R square= 0.555
			P-value= 0.000
			Coefficient= 0.192
H1c	Positive significant	accepted	R= 0.720
			R square= 0.518
			P-value= 0.039
			Coefficient= 0.093
H1d	Positive significant	accepted	R= 0.763
			R square= 0.582
			P-value= 0.002
			Coefficient= 0.155
H1e	Negative significant	accepted	R= 0.776
			R square= 0.603
			P-value= 0.000
			Coefficient= -0.275
H1f	Positive significant	accepted	R= 0.751
			R square= 0.563
			P-value= 0.000
			Coefficient= 0.283
H1	Positive significant	accepted	R= 0.839
			R square= 0.704
			P-value= 0.000
			Coefficient= 1.009

Table 4.18 Hypothesis Testing

Source: (SPSS 23, Analysed Data)



H1a: There is a positive relationship between Tangibility and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.653, R square= 0.427, P-value= 0.949, Coefficient= -0.003. There is no significant relationship between Tangibility and Customer Satisfaction. Therefore, null hypothesis is accepted and alternatively H1a is rejected. As a conclusion study found that Tangibility has no impact on Internet Service Quality on Customer Satisfaction special reference to ISPs.

H1b: There is a positive relationship between Reliability and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.745, R square= 0.555, P-value= 0.000, Coefficient= 0.192. There is a positive significant relationship between Reliability and Customer Satisfaction. Therefore, the null hypothesis is rejected and alternatively H1b is accepted. As a conclusion study found that Reliability has a significant positive impact of Internet Service Quality on Customer Satisfaction special reference to ISPs.

H1c: There is a positive relationship between Responsiveness and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.720, R square= 0.518, P-value= 0.039, Coefficient= 0.093. There is a positive significant relationship between Responsiveness and Customer Satisfaction. Therefore, null hypothesis is rejected and alternatively H1c is accepted. As a conclusion study found that Responsiveness has a significant positive impact of Internet Service Quality on Customer Satisfaction special reference to ISPs.

H1d: There is a positive relationship between Assurance and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.763, R square= 0.582, P-value= 0.002, Coefficient= 0.155. There is a positive significant relationship between Assurance and Customer Satisfaction. Therefore, null hypothesis is rejected and alternatively H1d is accepted. As a conclusion study found that Assurance has a



significant positive impact of Internet Service Quality on Customer Satisfaction special reference to ISPs.

H1e: There is a positive relationship between Empathy and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.776, R square= 0.603, P-value= 0.002, Coefficient= 0.155. There is a positive significant relationship between Empathy and Customer Satisfaction. Therefore, the null hypothesis is rejected and alternatively H1e is accepted. As a conclusion study found that Empathy has a significant positive impact of Internet Service Quality on Customer Satisfaction special reference to ISPs.

Hlf: There is a positive relationship between Price and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.751, R square= 0.563, P-value= 0.000, Coefficient= 0.283. There is a positive significant relationship between Price and Customer Satisfaction. Therefore, the null hypothesis is rejected and alternatively H1f is accepted. As a conclusion study found that Price has a significant positive impact of Internet Service Quality on Customer Satisfaction special reference to ISPs.

H1: There is a positive relationship between Internet Service Quality and Customer Satisfaction.

According to the findings in the table, it indicates that R=0.839, R square= 0.704, P-value= 0.000, Coefficient= 1.009. There is a positive significant relationship between Internet Service Quality and Customer Satisfaction. Therefore, null hypothesis is rejected and alternatively H1e is accepted. As a conclusion study found that Internet Service Quality has a significant positive impact of Internet Service Quality on Customer Satisfaction special reference to ISPs.



6. CONCLUSION AND RECOMMENDATIONS

6.1. Theoretical Implications

This study was done to analyze the Impact of Internet Service Quality of Internet Service Providers on Customer Satisfaction in Western province of Sri Lanka. The Basis for the study is increasing demand for Internet services due to the Covid impact and when considering the studies which have been done in Sri Lanka, there are a lot of studies done on service quality for different service sectors like Hotels, Banking, Education institutes etc. But we were unable to find that commitment towards the Telecommunication industry. A lot of service providers are struggling in their financial perspective even though the industry is developing. As a result of that, Internet service providers try to merge with other service providers, for example Etisalat and Hutchison (Dharmadasa & Gunawardhana, 2017). Researcher propose this scenario happens because service providers lack knowledge in retaining the customers.

Therefore, as a solution for this scenario, researcher intended to find a better solution for retaining and attracting customers. According to Oliver, Emotional expression in the satisfaction response. Satisfaction: A behavioral perspective on the consumer (1997) Customer Satisfaction is a concept which can support the businesses to grow and retain customers while satisfying. Satisfaction depends on Customer expectations and Gilbert & Veloutsou (2007) defines the term expectation as a preconceived view or belief about the provision of a service, which serves as a reference or standard point for judging product performance. Even though Customer Satisfaction is an old concept still it is practical and fundamental when it comes to Consumer Behavior (Joudeh & Dandis, 2018).Outcomes of the study has proven that the Customer Satisfaction concept is an overwhelming practical and suitable concept for the study which enables us to determine solutions for the context.

Customer Satisfaction as an isolated concept cannot solve the issue or create the atmosphere for Satisfaction, therefore it does need a concept or variable which can



impact significantly. There were much researches researcher could find on different independent variables which drives Customer Satisfaction. Brand experiences on Customer Satisfaction by Almohaimmeed (2020), Digital marketing on Customer satisfaction by Oladipupo (2021) etc. are few examples. But with the empirical evidence and proper justifications (Eze, Ismail, Sin, & Siang, 2008; Joudeh & Dandis, 2018), researcher decided to establish the model with Internet plus Service Quality because research context is Internet Service providers. In here Internet plus Service quality means, SERVQUAL model of Service quality introduced by Parasuraman, Zeithmal, & Berry (1988) was modified by adding Price dimension. Service quality is the base for this Internet Service quality model which has five dimensions Tangibility, Reliability, Responsiveness, Assurance and Empathy. As a modification and to gain additional value to the study researcher added Price dimension to the SERVQUAL model with the support of study done by Joudeh & Dandis (2018). Model was successfully analyzed through Multiple regression analysis with the support of article Harpe (2015) which highlights that Likert scale data can be considered as Ordinal data when they are in the form of Items but it is not the same when the Items are computed to create a variable, it can be considered as an Interval data. Therefore, the study was done using Mean and standard deviation values.

According to the study, except the Tangibility dimension all the other dimensions depict a significantly positive relationship towards dependent variable Customer Satisfaction. Researcher was unable to find any empirical evidence on rejecting Tangibility therefore researcher has concluded that customers are not concerned about the Tangibility aspect as the study has done on Internet Service quality. But researcher propose that this area should be further researched in a Qualitative way to grasp the implicit meaning. Modification of the Service quality model was successful as the Price dimension depicted a significant positive relationship towards Customer satisfaction, therefore this explanatory variable can articulate to the future studies as well.



6.2. Managerial Implication

The study of Impact of Internet Service Quality of Internet Service Providers on Customer Satisfaction in Western province of Sri Lanka is providing information for managerial decision making. According to the findings of the study, there is a significant relationship between Internet Service Quality of ISP on Customer Satisfaction. And also, findings have proven that there is a significant positive relationship between independent variables (Reliability, Assurance, Responsiveness, Empathy and Price) except Tangibility variable and dependent variable (Customer Satisfaction). Therefore, managers can focus on each independent variable to get an idea about the behavior of those variables towards the predicted variable Customer Satisfaction which will help to determine remedies for the issue of switching behavior of customers by attracting and retaining (Dharmadasa & Gunawardhana, 2017).

Furthermore, with the prevailing COVID 19 situation in Sri Lanka, most of the people are working through the online platform to adhere to the social distance criteria imposed by the government. Hence, the need for Internet facilities became a must for the students who are engaging in different levels of education and for employees as well. As mentioned in the above paragraph, the tangibility variable was rejected from the analysis, and this would be helpful to make strategies in future. Because it depicts that people do not give much attention to the Tangibility aspect of the Internet Service provider. Tangibility aspect generally includes the physical evidence of the Service provider whether they are using modern looking equipment, Interiors, Exteriors and their online presence like ISP website, Apps etc.

Through this study Service providers can understand the current level of Service they are delivering to their customer base and at the same time ISP can determine whether they are continuing the right path with what kind of perception in the consumer's mind. Using that information, ISPs can select their future strategy or what should be changed in the current strategy to compete with the industrial competitors. On the other hand, Service providers should focus on Reliability, Responsiveness,



Assurance, Empathy and Price. Because these are the dimensions that affect their customers.

First limitation of the study is responses were collected through an online questionnaire because it is convenient during the COVID 19 period but there may be errors on decoding the questions by the respondents therefore it should be done through an offline questionnaire or virtual face to face interview while describing the meaning of the research and questions included in it. Second one is, this study has been carried out as a cross sectional study which means one-time study, but it would be more precise through a longitudinal study. Furthermore, the study on identifying the impact of Internet Service Quality on Customer Satisfaction has a much weightage due to lack of empirical evidence on the model of Internet Service Quality which was modified using SERVQUAL model introduced by (Parasuraman, Zeithmal, & Berry, 1988). Hence, more studies should be done in this arena to fill the empirical gap. For innovative researchers, this study can be further improved in different directions as examples,

Researchers can suggest different dependent variables such as brand loyalty, brand evangelism etc. or more dependent variables for the prevailing issue in ISP sector.

Studies can be further developed within the context of ISP rather than concentrating on Customer Satisfaction and Internet Service quality because Telecommunication sector is a sector which has not been studied thoroughly (Dharmadasa & Gunawardhana, 2017).

In the study Internet Service quality has successfully shown the significant impact to the study, this concept can be used with different contexts, independent and dependent variable for the studies of future researchers.



7. REFERENCES

- Safi, F. O., & Alagha, M. S. (2020). The Relationship Between Service Quality And Customer Satisfaction: Applied Study on Private Telecom Services in India.
- Abdullah, N. N., & Afshar, P. A. (2019). Investigating research and development costs on the profitability of Iranian industries. *Journal of Organizational Behavior Research.*, 1-14.
- Abdullah, N. N., & Rahman, M. F. (2015). The Use of Deliberative Democracy in Public Policy Making Process. *Public Policy and Administration Research*, 221-229.
- Ali, B., Gardi, B., Othman, B. J., & Ahmed, A. S. (2021). Hotel Service Quality: The Impact of Service Quality on Customer Satisfaction in Hospitality. *International Journal of Engineering, Business and Management (IJEBM)*, 14-28.
- Almohaimmeed, B. (2020). Impacts of Brand experiences on Customer satisfaction and Electronic Word of mouth. *VILNIUS TECH Press*, 695-703.
- Anderson, R. E., & Srinivasan, S. S. (2003). E-satisfaction and e-loyalty: A contingency framework. *Psychology & marketing*, 123-138.
- Anwar, G., & Balcioglu, H. (2016). The relationship between transformational leadership characteristics and effectiveness: A case study of construction companies in Erbil. *International Journal of Science Technology and Management*, 250-256.
- Anwar, k. (2017). Analyzing the conceptual model of service quality and its relationship with guests'satisfaction: A Study Of Hotels In Erbil. *The International Journal of Accounting* and Business Society, 1-16.
- Anwar, K., & Ghafoor, C. (2017). Knowledge management and organizational performance: A study of private universities in Kurdistan. . *International Journal of Social Sciences & Educational Studies*, , 4(2), 53.
- Anwar, K., & Louis, R. (2017). Factors Affecting Students' Anxiety in Language Learning: A Study of Private Universities in Erbil, Kurdistan. . *International Journal of Social Sciences & Educational Studies*, 4(3), 160.
- Asubonteng, P., McCleary, K., & Swan, J. (1996). SERVQUAL revisited: a critical review of service quality. *Journal of Services Marketing*, Volume: 10 Issue: 6.
- Bojanic , D., & Rosen , R. L. (1998). Measuring Service Quality in Restaurants: an Application of the Servqual Instrument.
- Chiou, J. S., & Spreng , R. A. (1996). The reliability of difference scores: A re-examination. Journal of Consumer Satisfaction Dissatisfaction and Complaining Behavior, 9, 158-167.
- (2021). COVID-19 Impact on Internet Performance, Case Study of Afghanistan, Nepal, and Sri Lanka. Internet Society.



- Dharmadasa, S. A., & Gunawardhana, N. (2017). Impact of service quality on Customer satisfaction with special reference to Telecommunication Industry in Sri lanka. *Researchgate*, 26-58.
- *Digital 2021:Sri Lanka*. (2021, February 12). Retrieved from DATAREPORTAL: https://datareportal.com/reports/digital-2021-sri-lanka
- Douglas , L., & Connor, R. (2003). Attitudes to service quality the expectation gap". *Nutrition & Food Science*, Vol. 33(4).
- Erevelles, S., & Leavitt, C. (1992). A comparison of current models of consumer satisfaction/dissatisfaction. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 5(10), 104-114.
- Eze, U. C., Ismail, H. B., Sin, T. K., & Siang, P. Y. (2008). ISPs' Service Quality and Customer Satisfaction in the Southern Region of Malaysia. *Researchgate*, 290-299.
- Galloway. (1988). Quality perceptions of internal and external customers- a case study in educational administration. *The TQM Magazine*, Volume: 10 Issue: 1.
- Gilbert, G. R., & Veloutsou, C. (2007). A cross-industry comparison of customer satisfaction. *Journal of Services Marketing*, 20(5), 298-308.
- Hameed, A. A., & Anwar, K. (2018). Analyzing the Relationship between Intellectual Capital and Organizational Performance: A Study of Selected Private Banks in Kurdistan. *International Journal of Social Science & Educational Studies*, 4(4), 39.
- Harpe, S. E. (2015). How ro analyse Likert and other rating scale data. *Science Direct*, 836-850.
- Iwaarden, J. V., & Wiele, T. V. (n.d.). Erasmus Research Institute of Management (ERIM). Retrieved from A Study On The Applicability Of SERVQUAL Dimensions of Web Sites: https://www.researchgate.net/publication/4751845_A_Study_On_The_Applicability_O f_SERVQUAL_Dimensions_Of_Web_Sites
- Jayawardhena, N. (2016). Impact of Service Quality of Internet Banking on Customer Satisfaction. 5th Annual International Research Conference, Faculty of Management and Commerce- SEUSL, 379-388.
- Joudeh, J. M., & Dandis, A. O. (2018). Service Quality, Customer Satisfaction and Loyalty in an Internet Service Providers. *Researchgate*, 108-120.
- Li, Y. N., Tan, K. C., & Xie, M. (2003). Managing service quality: applying utility theory in the prioritization of service attributes. *International Journal of Quality & Reliability Management*, Volume: 20 Issue: 4.
- Macaulay, S., & Cook, S. (1994). Empowerment the key to quality service. *Managing Service Quality*, Volume: 4 Issue: 4.



- Manilall, D., Chengedzai, M., & Tshepiso, D. (2014). The Impact of Packaging, Price, and Brand Awareness on Brand Puasty: Evidence from The Paint Retailing Industry. *Acta Commercii*, 194-203.
- Oladipupo, N. (2021). Impact of Digital marketing on Customer Satisfaction. *Researchgate*, 71-105.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 460-469.
- Oliver, R. L. (1997). Emotional expression in the satisfaction response. Satisfaction: A behavioral perspective on the consumer, 291-325.
- Oliver, R. L. (1997). Satisfaction: A behavioral perspective on the consumer. *New York, NY: McGraw-Hill, Inc.*
- Parasuraman, A., Zeithaml, V., & Berry, L. (1985). A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 49.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL; a multiple-item scale for measuring consumers' perceptions of service quality. *Journal of Retailing*, 64(1).
- Parasuraman, A., Zeithmal, V. A., & Berry, L. L. (1988). Servqual: A Multiple-Item Scale for Measuring Consumer Perceptions of service quality. *Journal of Retailing*, 12-40.
- Pariseau , S. E., & McDaniel , J. R. (1997). Assessing service quality in schools of business. International Journal of Quality & Reliability Management, Volume: 14 Issue: 3.
- Reichheld, F., Teal, T., & Smith, D. K. (1996). The loyalty effect (Vol. 1, No. 3). *Harvard Business School Press*, 78-84.
- Sahay, A. (2016). Peeling Saunder's Research Onion. Researchgate.
- Sekaran, U. (2003). Research Methods for Business: A Skill-Building Approach. 4th Edition. John Wiley & Sons, New York.
- Sujuan, W., Qiying, H., & Weiqi, L. (2017). Price and Quality-Based Competition and Channel Structure with Consumer Puasty . *European Journal of Operational Research*, 52-84.
- Sunders, M. (2009). Understanding research philosophies and approaches. *Researchgate*, 19-30.
- Uchenna , C. E., & Yew , S. P. (2008). ISPs' Service Quality and Customer Satisfaction in the Southern Region of Malaysia.
- Woodruff, R. B., & Gardial, S. (1996). Know your customer: New approaches to understanding customer value and satisfaction. *Wiley. Cambridge, MA: Blackwell Publishers, Inc.*

