



Analysis Of User-Satisfaction With E-Service Quality Of Ed-Tech Platforms In India

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ABSTRACT

ED Tech is expected to play a vital role in the Indian education system. The New Education Policy (NEP) 2020, has put special emphasis on online and digital education which will pave the way for ed tech to be integrated into the education system of India to deliver better services to users by customised solutions. By analysing user satisfaction with the service quality of online ed-tech platforms in India and taking this as the research objective, this paper follows a questionnaire survey to collect the data based on the experiences of online ed-tech platform users. Here six constructs are based on the service quality of ed tech platforms and the last one construct is based on user satisfaction are framed by the use of existing literature. The conclusion shows that the service quality of ed tech platforms has a positive influence on user satisfaction in some dimensions.

Keywords: Parallel analysis, Customisation, Service Quality, SERVQUAL, User-satisfaction, Ed Tech Platforms

1. INTRODUCTION:

Service quality is continuously expressed by marketers as a point of debate and interest is considered an important aspect for differentiation. Today consumers are not ready to adopt incompetent services as they want to access quality services that provide them satisfaction. The systematic quality assessment has become necessary to ensure the quality delivered at the correct level to support the e-learning requirement is fulfilled and accepted (Ozkan and Koseler,2009). This study suggested that to support the ed tech platforms and to determine user satisfaction, the service quality assessment is required. Ed-tech user's satisfaction depends on the internet connection, well-trained educators, and well-functioning platforms. This study suggested that the ed tech platform's function plays an important role in user satisfaction and these functions are directly connected to services. Hence service quality determination helps in judging the satisfaction of users.

The objectives of this study are:

- To determine the factors of service quality that influence user satisfaction towards adoption of ed-tech platform.
- To analyse the factors that are strongly associated with service quality dimension.
- To determine which factors of service quality strongly influence user satisfaction.

2. Literature Review and Theoretical Framework

Service quality is multidimensional (Brandy&Cronin,2001a; parsuraman et al.,1988) and dimensions can vary according to the different service industries (Pollack,2009). So, this study proves that different industries have different service quality dimensions.

Most of the service quality studies are based on two models: the Gronroos model and the Parsuraman, Zeithaml, and Berry model. The Gronroos service quality model states that good service quality is attained when the actual quality received fulfills the user's expectations, and that the expectations are based on several variables, including websites, word-of-mouth, company reputation, price, customer need, and internet communication. The service quality model was proposed as a disconfirmation paradigm by Parsuraman, Zeithaml, and Berry in 1985. They contend that the 10 aspects of service quality—reliability, responsiveness,

competence, access, courtesies, communication, credibility, security, comprehension, and tangibility—have an impact on both expected services and experienced services.

2.1 E-Service Quality Dimensions

According to Lee and Lin (2005), the definition of e-service quality is "overall customer evaluations and judgments regarding the excellence and quality of e-service delivery in the virtual marketplace". Various e-service quality dimensions were identified by various authors in various research, and they are listed in Table 2.1.

Table 1: E-Service Quality Dimensions

Barnes and Vidgen, 2002	Santos, 2003	Wolfenbarger and Gilly, 2003	Ribbink, van Riel, Liljander and Straukens, 2004	Lee and Lin, 2005	Parasuraman Zeithaml and Malhotra, 2005	Raman, Stephenaus, Alam and Kuppusamy, 2008	Swaid and Wigand, 2009
<ul style="list-style-type: none"> • Usability • Design • Information • Trust • Empathy 	<ul style="list-style-type: none"> • Ease of use • Appearance • Linkage • Structure and layout • Content • Reliability • Efficiency • Support • Communication • Security • Incentive 	<ul style="list-style-type: none"> • Fulfillment/reliability • Website design • Customer service • Security/privacy 	<ul style="list-style-type: none"> • Ease of use • E-scape (i.e. web site design) • Customization • Responsiveness • Assurance 	<ul style="list-style-type: none"> • Website design • Reliability • Responsiveness • Trust • Personalization 	Web site's entire customerbase: <ul style="list-style-type: none"> • Efficiency • Fulfillment • System availability • Privacy For customers with nonroutine encounters: <ul style="list-style-type: none"> • Responsiveness • Compensation • Contact 	<ul style="list-style-type: none"> • Ease of use • Appearance • Reliability • Customization • Communication • Incentive 	<ul style="list-style-type: none"> • Website usability • Information quality • Reliability • Responsiveness • Assurance • Personalization

(source: https://www.academia.edu/download/7262215/xew254_jukka_ojasalo.pdf)

2.2 Theoretical framework

The following figure depicts the various dimensions related to e-service quality:

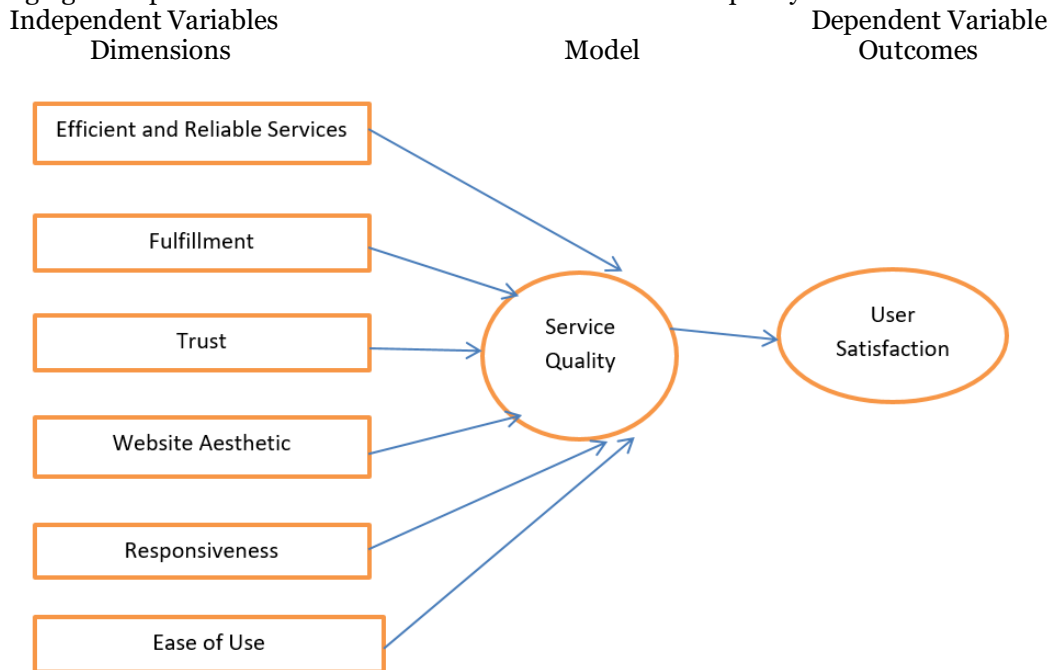


Figure 1. Research Model of the study

Dimensions of the model

Reliability: Reliability is the core of quality service (Berry et al,1994). Therefore, reliability is the most important dimension in judging the service quality of edtech platform. Reliability, according to Santos (2003), is the capacity to deliver the promised service precisely and consistently, including regular website updates, prompt customer care responses, and correctness in online transactions. A reliable ed-tech platform needs to provide required services to users, timely updation of their websites, prompt responses, and the right online dealing. Reliability, in the words of Wolfenbarger and Gilly (2003) is the accurate presentation and description of the product, as well as the timely delivery of the right item. So edtech companies are required to provide accurate descriptions of their services in the right manner at the right time to become reliable platforms.

Website Aesthetic: Websites play a crucial role in customer’s repurchase intentions (Zamzuri et al.2008). Hence, to increase user -satisfaction, the ed tech platform must ensure the website quality. Ribbink, van Riel,

Liljander, and Straukens (2004) explained that a website should be visually appealing. It proves that the website layout of the edtech platform should be user-friendly and all elements of the website should be easily understandable and attractive. Lee and Lin (2005) identified that the attraction that user interface design presents to clients is website design. The edtech platform websites should be appealing for the users. Customisation says the designs of websites for individual clients according to their consumption patterns and preferences which results in optimum online service (Ho&Lee,2007). Customisation manages the time factor and positively influences the perception of users about service quality. (Madu & Madu,2002;Srinivasan Anderson & ponnnavolu,2002).Here this study suggested that customisation is the important item with reliability construct in determining the service quality of an online platform.

Responsiveness: Responsiveness is the dimension, the same dimension as mentioned in SERVQUAL, has been measured by the promptness of a website which responds to customers in an online society (Kaynama & Black,2000; Madu & Madu,2002; Zeithamel et al.,2002). prompt response, quickly resolving to issues and web page service's browser compatibility are the issues that were conceptualised as components of this dimension. It explained that the edtech platform is required to give quick responses to their users and fast redress their grievances.

Trust: Consumer trust in the website has having direct and significant relation with the user's attitude toward the website (Chen and Dibb,2010). This study represents the effective relationship between user trust in the website and user satisfaction. Trust can be viewed as security assurance, reputation, web searching, fulfillment, technology, presentation, and interaction, according to Yoon (2020). According to Schlosser, White, and Lloyd (2006), a website's capacity to conduct online transactions will improve its functionality and level of credibility. While it is true that there is a high amount of risk associated with conducting business online, it is equally true that trust can help users and online edtech platforms forge close bonds.

Ease of Use: Ease of use, is defined as "the degree to which a person believes that using a particular system would be free from effort" (Johnston et al.,2015). This study explained that to evaluate a system, ease of use is an important factor to analyse which explains whether users can use the ed tech website services without a lot of effort. Raman, Stephenaus, Alam, and Kuppusamy (2008) suggested that easy-to-remember URL addresses, an organised layout, simple site navigation, clear and understandable content, and terms and conditions are all related to ease of use. This study proves that all elements i.e. simple web address, easy navigation, understandable content, and easy cum open terms and conditions, of ease of use, are important elements for edtech companies.

Fulfillment: One of the most crucial elements in determining the quality of a website is fulfillment. Customer happiness, according to Yang and Fang (2004), is built on keeping service agreements and delivering accurate orders. According to Bhatnagar, Misra, and Rao in 2000, Zeithaml et al. in 2002, Song, and Zinkhan (2003), fulfillment is a crucial factor in determining how well an online service is provided. Reliability and honesty have also been linked to fulfillment (Janita and Miranda 2013, Parsuraman et al. 2005).

3. RESEARCH METHOD:

This study aimed to analyze user satisfaction with the service quality of online ed tech platforms in India. The objective of this study is to determine the effect between variables built on a model equation based on relevant concepts (explanatory research). The primary data was collected using an online Google form questionnaire which was distributed by using various social media channels such as Instagram, Facebook, and WhatsApp groups. The demographic analysis conducted in this study was categorized based on gender, age, education, occupation, access to smartphones and/or computers, and level of access to ed tech platforms.

The data collection involves a combination of methods to support the quantitative analysis and give a substantial explanation. The researcher applied a 5-point Likert scale to draw the questionnaire to measure service-quality and user satisfaction.

This study analyses the relationship pattern of variables to determine the effect of dependent and independent variables. The dependent variable in this study was user satisfaction while the independent variable was the online ed tech platforms and their services.

In order to develop the user-satisfaction scale related to service quality of ed tech platforms, a detailed literature search was performed. A pool that consists of 25 items with 7 factors was established. In the scope of the reliability and validity studies of the scale, all analyses in the study were performed with the SPSS 22 package program. The responses were taken by the following 5-point Likert scale as: 5=Strongly Agree,4.=Agree,3= Neutral,2= Disagree and 1= Strongly Disagree.

The questionnaire data that can be processed for this study amounted to 100 questionnaires out of these 84 were received. The result showed that 69 percent of respondents were women and 31 percent of respondents were men. 82 percent of respondents were in the 19-25 age group and 9.5 percent with above 35 years age group which means that edtech platforms are used by all age groups for different purposes. 8 percent of respondents were from school level, 65.5 percent respondents were graduates,19 percent were postgraduate and 6 percent were professionals.

Based on the results of the questionnaires, 100 percent of respondents have access to smartphones and /or computers with 52.4 percent of respondents having access to the ed tech platforms at an extreme level, 42.9 percent at a moderate level, and approximately 4 percent of respondents at a low level.

4. Data Analysis:

- **Reliability Test:** Validity and reliability are the two fundamental elements in the evaluation of measurement instruments. Reliability is the instrument to measure internal consistency. Validity is the instrument which measures what it is intended to measure. Reliability is strongly connected to validity (Tavakol & Dennick, 2011).

The reliability test of the research instrument conducted was Cronbach's Alpha analysis with an alpha value >0.70 . In this study, the Cronbach alpha value is greater than 0.7 (the calculated value is 0.959) so the research instrument is considered reliable. Here we can say that the indicators (efficient & reliable services, fulfillment, security /trust, aesthetic, responsiveness, ease of use, and user satisfaction) are reliable.

Table 2: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.959	.960	25

- **Validity Test:** In order to determine the validity of the scale, the KMO and Bartlett Sphericity test values were measured. After this the exploratory factor analysis (EFA) was conducted for the construct validity and structure validity. To determine whether the data was suitable for factor analysis, KMO and Bartlett's Sphericity test was conducted. If the KMO value is greater than 0.50 and Bartlett's test is significant then factor analysis can be applied on the data group. In this study, the sampling adequacy factor of KMO was calculated to be 0.875 which proves that the data group is valid and Bartlett's test p value is .000 which shows that the test is statistically significant.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.875
Bartlett's Test of Sphericity Approx. Chi-Square	1758.046
df	300
Sig.	.000

The result of the table proves that the data is suitable for exploratory factor analysis.

- **Exploratory Factor Analysis (EFA):**

The 25 items were subjected to principal component analysis (PCA) using SPSS 22. Prior to performing PCA, the suitability of data for factor analysis was assessed. The sampling is adequate if the value of KMO test is greater than 0.5 (Field, 2000; Kaiser, 1974). The Kaiser –Meyer-Elkin value is 0.875 (see table 3) exceeding the recommended minimum value of 0.5 (Kaiser 1970, 1974).

In SPSS the strength of correlation can be measured by a Bartlett Test of Sphericity. The Bartlett's Test of Sphericity is statistically significant (See table 3), supporting the factorability of the correlation matrix. The factor scores are correlated therefore here we reject the null hypothesis that the original correlation matrix is an identity matrix.

Principal Component analysis publicized the existence of four factors with an eigenvalue greater than 1. The total variance of 70.285 percent (Table 4) is achieved from these four factors. The first-factor eigenvalue is 12.827 and explains 51.31 percent of the variance in the data, the second-factor eigenvalue is 2.122 and explains 8.5 percent of the variance, the third component eigenvalue is 1.426 with 5.7 percent of the variance and the last fourth factor shows eigenvalue 1.197 and 4.8 percent of the variance.

Table 4: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loading			Rotation Sums of Squared Loading		
	Total	Percent of Variance	Cumulative percent	Total	Percent of Variance	Cumulative percent	Total	percent of Variance	Cumulative percent
1	12.827	51.306	51.306	12.827	51.306	51.306	5.686	22.745	22.745
2	2.122	8.487	59.794	2.122	8.487	59.794	4.861	19.446	42.191
3	1.426	5.703	65.497	1.426	5.703	65.497	3.799	15.196	57.386
4	1.197	4.789	70.285	1.197	4.789	70.285	3.225	12.899	70.285
5	.857	3.426	73.711						
6	.820	3.281	76.992						
7	.734	2.938	79.930						
8	.651	2.603	82.533						

9	.556	2.225	84.758						
10	.521	2.082	86.840						
11	.454	1.817	88.657						
12	.426	1.705	90.362						
13	.385	1.539	91.901						
14	.302	1.209	93.110						
15	.257	1.028	94.138						
16	.238	.951	95.089						
17	.211	.844	95.933						
18	.208	.830	96.763						
19	.187	.748	97.511						
20	.151	.603	98.115						
21	.127	.508	98.623						
22	.115	.459	99.082						
23	.100	.399	99.481						
24	.076	.304	99.785						
25	.054	.215	100.000						

Extraction Method: Principal Component Analysis.

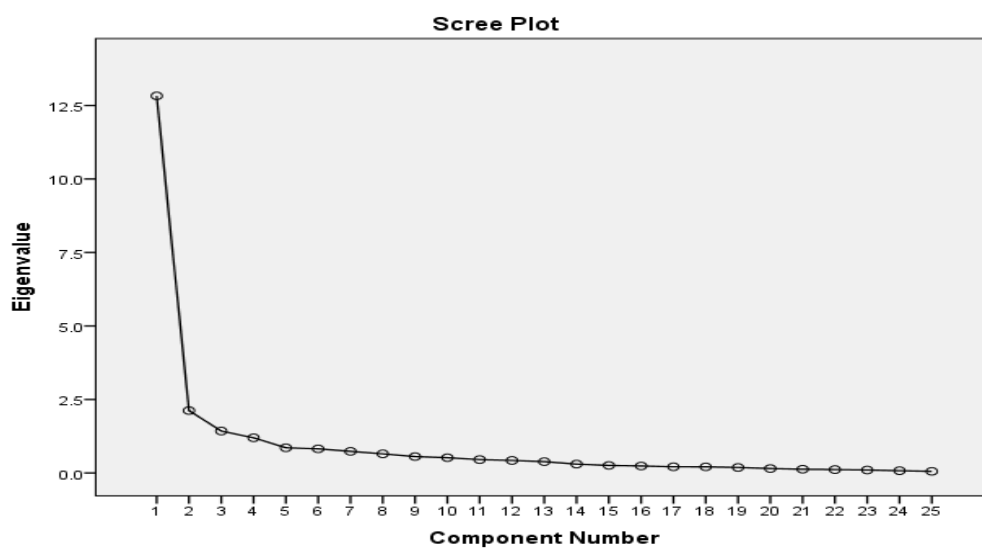


Figure 2: Scree plot with eigenvalues and component numbers

As shown in Table 4 total variance of 70.285 percent is achieved by four factors. To support in the understanding of these four factors, the promax rotation method (kappa 4) from the oblique rotation technique was conducted. In the oblique rotation technique, a pattern matrix is used for understanding and interpreting the factor (Pallant,2013).

The pattern matrix, structure matrix, and component correlation matrix have shown the patterns of loading, the structure of loading (cross-loading) and strength of the relationship between items and factors, and the existence of an unpretentious structure with four factors, representing strong item loading.

● **Parallel Analysis:**

Parallel analysis (PA) is an often recommended approach for the assessment of the dimensionality of a variable set (Timmerman &Seva,2011). The overall accuracy of PA was not satisfactory when factor representing eigenvalues were small, factor loadings were low and factor correlations were high. Here explained that Original PA be used to determine the number of factors but the estimated number of factors should not be taken as a fixed number and the factor with greater than one eigenvalue will be considered for factor estimation (Sangdon & Seungmin, 2019).

Table 4.1: Parallel Analysis

Component number	Eigenvalue from PCA	Value from parallel analysis	Decision
1	12.827	1.480	Accept
2	2.122	1.284	Accept
3	1.426	1.108	Accept
4	1.197	.981	Accept
5	.857	.862	Reject

By using parallel analysis, it was decided to retain only four factors for further investigation. As anticipated, these four factors emerge when the factor is analysed using the Promax (kappa 4) rotation principle as shown in Table 4.1. The Promax technique of rotation has been used from the oblique rotation principle. According to (Fabrigar et al.,1999) there is no ideal technique for oblique rotation, each and every one tends to create comparable results.

Table 4.2: Pattern and Structure Matrix with Communalities

Items	Pattern Matrix Components				Structure Matrix Components				Communalities
	1	2	3	4	1	2	3	4	
Access to material without interface advertising	.906	-	-	-	.831	.457	-	-	.698
Satisfied with the services provided by the Ed Tech platforms	.813	-	-	-	.900	.631	.500	.407	.821
Satisfied with the live online classes	.774	-	-	-	.865	.609	.425	.500	.770
Quickly resolves users problems	.745	-	-	-	.834	.662	-	-	.741
Satisfied with the quality and functionality of Ed Tech Platforms	.646	-	-	-	.837	.663	.550	-	.752
The services delivered through the Ed Tech websites are quick	-	.723	-	-	-	.763	.437	.554	.695
Ed Tech Platform Websites provides customization facilities to their users	-	.715	-	-	.417	.739	-	.464	.576
Feel safe in Ed Tech platforms dealings	-	.677	-	-	.632	.824	-	.528	.751
Confident in Ed Tech Platforms Services	-	.693	-	-	.660	.806	.536	-	.800
Ed Tech Platforms are trustworthy as no language barriers	-	.652	-	-	.627	.775	.500	-	.765
When the Ed Tech platforms promises to do something by a certain time,it does so	-	.672	-	-	.585	.772	-	.458	.726
The Ed Tech platforms Web page is visually pleasing	-	-	.892	-	-	-	.860	-	.694
The Ed Tech platforms web page is attractive	-	-	.860	-	.500	-	.892	-	.736
The Web pages of the Ed Tech platforms are always available for users	-	-	-	.818	.502	-	-	.858	.766
The Websites of Ed Tech platforms and their pages are easy to access and follow	-	-	-	.687	-	.582	-	.775	.676
The Web pages of the Ed Tech platforms runs in right way	-	-	-	.649	.554	.527	.424	.786	.666

Note: Bold Items indicate major factor loading.

There is a correlation between the extracted factors in oblique rotation technique and the results of this technique are pattern matrix which represents the pattern loading and convergent validity is assessed by looking for those converge items with high factor loading, structure matrix which represents the structure of loading and here discriminant validity is assessed by cross loading.

So two forms of construct validity i.e. convergent validity and discriminant validity were used and the measures used in this study have been found to have acceptable convergent and discriminant validities.

The table above shows that the pattern of correlation that three items of user satisfaction, six items of efficient reliable, and secured services, two items of Website aesthetic, and two items of fulfillment construct relate to their same constructs. Therefore, this correlation provides evidence that the items converge on their same constructs.

The table shows that discriminant validity was ensured as the relationship between items and the rest of the factors is very low or has no relation (see table 4.2, structure matrix). The result confirmed that the measures that should not related are in reality not related.

Table 4.3: Labeling of Factors

SERVICES	Factor Loadings
Factor 1: User Satisfaction	
Satisfied with the services provided by the Ed Tech Platforms.	.813
Satisfied with the live online classes.	.774
Satisfied with the quality and functionality of Ed Tech Platforms.	.646
Factor 2: Efficient reliable and secured Services	
The services delivered through the Ed Tech websites are quick.	.723
When the Ed Tech platforms promises to do something by a certain time, it does so.	.672
The Ed Tech platform's websites provide customization facilities to their users.	.715
Feel safe in Ed Tech platforms dealings.	.677
Confident in Ed Tech platforms services.	.693
Ed Tech platforms are trustworthy as no language barriers.	.652
Factor 3: Website Aesthetic	
The Ed Tech Platforms web page is attractive.	.860
The Ed Tech Platforms web page is visually pleasing.	.892
Factor 4: Fulfillment	
The websites of Ed Tech platforms and their pages are easy to access and follow.	.687
The web pages of the Ed Tech platforms run in the right way.	.649

The dimensions construct labels are efficient reliable and secured services, website aesthetic, fulfillment, and user satisfaction.

As shown in Table 4.3 the items are factored in familiar components:

1. Item 21, Item 22, and Item 25 are moving together and grouped in one cluster called the first factor: User satisfaction.
2. Item 1, Item 3, item 4, item 10, item 11, and Item 12 are grouped in a second cluster called the second factor: Efficient reliable, and secured services.
3. Item 13 and item 14 are grouped in a third cluster called the third factor: Website aesthetic.
4. Item 5 and item 7 are grouped in a fourth cluster called the fourth factor: Fulfillment.

To achieve the research objective, this study was conducted on software SPSS version 22 with principal component analysis (PCA) with an oblique rotation technique (Promax kappa 4). The twenty-five items with seven factors related to service quality of ed tech platforms were reduced to four components/factors using parallel analysis.

The total variance explained as 70.285 percent is achieved for the four factors. The first eigenvalue is equal to 12.827 and explains 51.306 percent of the variance in this study. The second component eigenvalue is equal to 2.122 and explains 8.487 percent of the variance, the third-factor eigenvalue is equal to 1.426 with an explained variance is 5.703 percent, and the fourth-factor eigenvalue is equal to 1.197 and the variance explained is 4.789 percent. The pattern matrix has shown the existence of an unpretentious structure with four factors displaying strong high factor loading.

The four factors were labeled as User satisfaction, Efficient reliable, and secured services, website aesthetic, and fulfillment. Furthermore, the items are factored in their underlying factor as for the user satisfaction three items, namely, Item 21, Item 22, and Item 25 are consistently moving together and grouped in one factor. Similarly efficient reliable and secured services group comprises six Items such as Item 1, Item 3, Item 4, Item 10, Item 11, and Item 12. Followed by a third factor with two Items namely, Item 13 and Item 14. The next factor is fulfillment with two Items such as Item 5 and

Item 7. Here 12 Items were dropped because of cross-loading, low loading, and no loading.

On the basis of such analysis, a new model based on service quality dimensions with four constructs are framed:

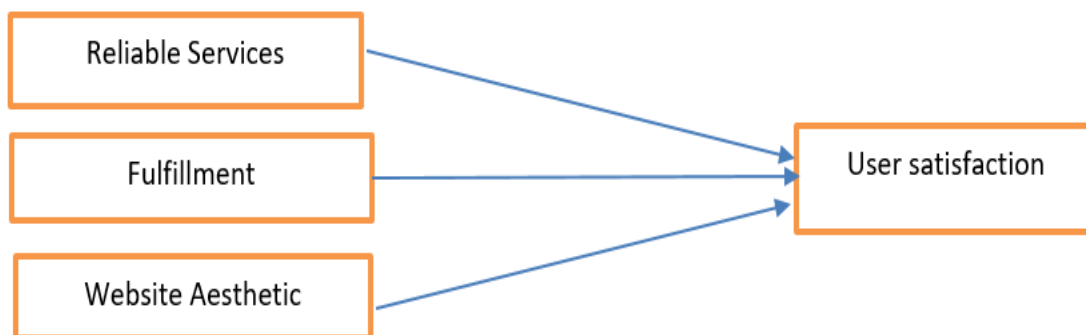


Figure 3: Conceptual Framework – Service Quality

The proposed model consists of four factors namely, reliable services, fulfillment, website aesthetic, and user satisfaction. Furthermore, the items are factored in their underlying factor as for the user satisfaction three items, namely, Item 21, Item 22, and Item 25 are consistently moving together and grouped in one factor. Similarly efficient reliable and secured services group comprises six Items such as Item 1, Item 3, Item 4, Item 10, Item 11, and Item 12. Followed by a third factor (Website aesthetic) with two Items namely, Item 13 and Item 14. The next factor is fulfillment with two Items such as Item 5 and Item 7. Here 12 Items were dropped because of cross-loading, low loading, and no loading.

The Hypotheses are proposed as below:

H1: Reliable service positively influences user satisfaction.

H2: Fulfillment positively influences user satisfaction.

H3: Website aesthetic is positively influenced user satisfaction.

The Partial Least Square- Structure Equation Modelling (SMART PLS SEM version 4) technique is used in this exploratory study. In order to establish reliability and validity, outer loadings of the items, Cronbach alpha, and the average variance extracted (AVE) should be evaluated. The structural model will be used for the assessment of the path coefficient.

The goal of the reliability test is to determine the instrument's internal consistency, which includes Cronbach's alpha. Taber (2016) states that a Cronbach's alpha value of 0.7 or higher indicates quality. (Hair et al., 2019; Randall et al., 2011) state that a composite reliable value of greater than 0.6 is required to be deemed dependable.

Every model item was dependable and met the threshold values, according to the table. According to Hair et al. (2019), the ideal range for factor loading levels is 0.5 to 0.7. Additionally, every factor loading value meets the threshold values. The AVE values are larger than 0.5, as indicated in Table, satisfying the threshold value. Consequently, the construct's validity and reliability are established.

Table 5: Measurement model result

Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Reliable Services	1	0.798	0.89	0.897	0.646
	3	0.788			
	4	0.717			
	10	0.861			
	11	0.827			
	12	0.825			
Fulfillment	5	0.844	0.682	0.698	0.757
	7	0.895			
Website-aesthetic	13	0.952	0.85	0.907	0.867
	14	0.91			
Satisfaction	21	0.917	0.878	0.879	0.804
	22	0.918			
	25	0.854			

To ascertain discriminant validity, one should look into the Heterotrait - Monotrait Ratio, Cross loadings, and the Fornell- Larcker criterion. The Fornell- Larcker criterion states that the square root of AVE (diagonal value) for each variable should be greater than the correlation of latent variables; this requirement is met in the current study as seen in Table 6. Each indicator's loadings should be greater than the loadings of the indicators

of the associated variables in terms of cross-loadings. Table indicates that the cross-loadings requirement has been satisfied.

Table 6: Fornall-Larcker criterion result

	Fulfillment	Reliable service	User satisfaction	Website aesthetic
Fulfillment	0.87			
Reliable service	0.649	0.804		
User satisfaction	0.587	0.716	0.897	
Website aesthetic	0.435	0.46	0.52	0.931

Table 7: Cross loading result

	Fulfillment	Reliable services	User satisfaction	Website aesthetic
Item 1	0.621	0.798	0.481	0.378
Item 3	0.493	0.788	0.558	0.213
Item 4	0.545	0.717	0.498	0.373
Item 10	0.594	0.861	0.637	0.289
Item 11	0.474	0.827	0.638	0.468
Item 12	0.438	0.825	0.612	0.493
Item 5	0.844	0.561	0.461	0.344
Item 7	0.895	0.571	0.555	0.409
Item 13	0.426	0.441	0.546	0.952
Item 14	0.379	0.415	0.403	0.910
Item 21	0.479	0.678	0.917	0.507
Item 22	0.56	0.653	0.918	0.431
Item 25	0.541	0.593	0.854	0.459

Structural Model Assessment

Following the assessment of the measurement model, the next step is the evaluation of the structural path for the evaluation of path coefficients (relationships amongst study constructs and their statistical significance). Here Fig. 4 and Table 8 represent the path coefficients and p-values for each hypothesis. This table noted that one out of three hypotheses was supported as the pathways between dependent and independent variables of one hypothesis is significant.

H1 (path coefficient= 0.161, p=0.259) explained that the relationship between fulfillment service dimension and user satisfaction is not supported and concluded that fulfilling users’ requirements does not make the users satisfied.

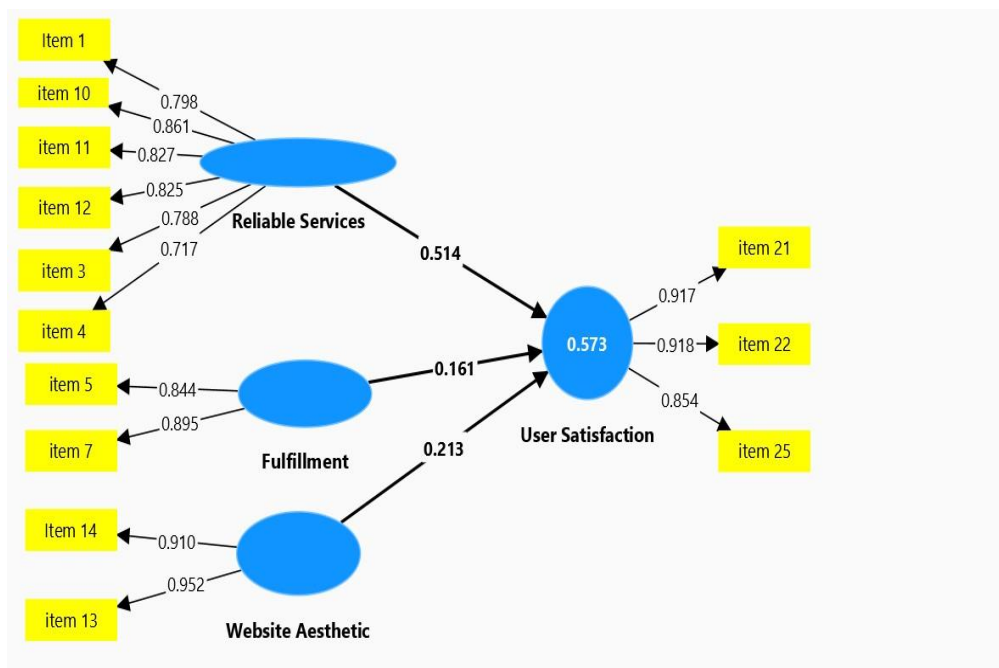


Fig. 4: Path Analysis

H2 (path coefficient = 0.514, $p= 0.000$), concluded that reliable service has a positive influence on user satisfaction in adopting the edtech platform.

H3 (path coefficient =0.213, $p=0.162$), resulted that website aesthetic dimension has no positive influence on user satisfaction.

Table 8: Hypotheses test result

Hypotheses	Path	Path Coefficient	P-Value	Decision
H1	Fulfillment → User satisfaction	0.161	0.259	Not supported
H2	Reliable service→ User satisfaction	0.514	0.000	Supported
H3	Website aesthetic →User satisfaction	0.213	0.162	Not supported

This study found that reliable services of ed tech companies have a high influence on user satisfaction in adopting edtech platforms. The fulfillment service quality dimension of ed tech platform has no significant influence on user satisfaction. Similarly, the website aesthetic service quality dimension is also not significant for the satisfaction of users.

Based on the result of the above analysis, it is concluded that factor i.e. reliable service are strongly influenced factor to user-satisfaction and positively associated to user satisfaction. So we can say that edtech companies are required to provide reliable services for the satisfaction of users.

5. Conclusion and implication:

As service quality is a multidimensional measure, it is important to determine which aspects of service quality are crucial to understanding user satisfaction to help edtech companies to make effective service quality improvement strategies. This study explores the linkage between service quality dimensions and user satisfaction.

Our results indicate that service quality dimensions (Reliability, Fulfilment, and Website aesthetic) have a significant positive influence on user satisfaction but reliable service are strongly influenced factor to user satisfaction. It is expected that the results of this study can be used by edtech companies so that they can structure their business strategies for better improvements in their services. Watson et al. (1998) explained that it is not a single-time task in the organization to focus on service quality dimensions for long-term benefits. There is a frequent need to have a standard continuous process for service quality improvement along with corresponding commitments to overall improvement in the organization.

As service quality is the most important factor in the business that affects the overall business performance, service quality management programs must be undertaken by the business. For instance, the Information Technology Infrastructure Library (ITIL) follows service management standards that will lead to improvement in service quality. The important components of ITIL are service delivery, application management, service support, and IT infrastructure management (Braun and Winter, 2007). In a nutshell, edtech companies are encouraged to implement service quality management procedures so that service quality can be improved and edtech companies' benefits can be raised.

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