

# MEDIATING ROLE OF SATISFACTION BETWEEN ATTITUDE AND USAGE CONTINUITY INTENTION OF LEARNERS WITH RESPECT TO ELEARNING

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## ABSTRACT

*The purpose of this study is to explore the mediating role of satisfaction on attitude and usage continuity of higher education students in National Assessment and Accreditation Council accredited institutes in India in the context of an elearning environment. To investigate the issue, we collected data from 634 students in the elearning environment. The data were collected from a self-administered online questionnaire and analysed using the Smart PLS 4 software program to validate the stated hypotheses. The indicators revealed that there is a good model fit between measurement model and the data (SRMR = 0.056,  $d_{ULS} = 0.375$ ,  $d_G = 0.166$ , and  $NFI = 0.924$ ). We used inferential statistical approaches to test the consistency and validity of the suggested measurement and structural model. The analysis revealed that attitude has an effect on usage continuity with a  $P$  value of 0.000. With a  $P$  value of 0.000 and VAF of 87%, the results also suggested that satisfaction can operate as a full mediating variable (indirect only mediating variable type) in the association between attitude and usage continuity. This study highlights the function of satisfaction in the attitude and usage continuity relationship, which has previously been investigated separately and only partially. The results of our research offer new insights into how higher education institutions can promote continuance satisfaction in order to continue students in elearning.*

**Keywords:** *elearning, satisfaction, usage continuity, attitude*

## 1. INTRODUCTION

Traditional perspectives on education and society highlight the significance of education in changing the individual's quality of life and position in the economy, social structure, and government (Carnoy, 2017). Elearning is increasingly becoming the standard for modern education as information and communication technology progresses. A few studies have found that, in some cases, online learning is better than in classroom learning (Alghizzawi et al., 2019). Elearning ensures that students are fully engaged in their learning by incorporating texts, videos, sound recordings, interactive sharing, and visual aids. It

also improves the quality of teaching and learning, highlights the need for higher education institutions to maintain a competitive advantage, and provides students with access to education and training in this globalizing marketplace (Islam et al., 2015). According to a review of comparative research, online distance education was more effective in terms of students learning information technology skills and increasing their familiarity with technology (Wei & Chou, 2020). Elearning became indispensable for education and training because of the COVID-19 pandemic, which sparked an increased use of digital devices, online resources, social media technology, and elearning activities

(Demuyakor, 2020). Bhuasiri et al. (2012) found that elearning is the most widespread method for providing study material in colleges and universities throughout the world. As an estimate, the elearning industry market will grow at a compound annual growth rate (CAGR) of 12% from 2024 to 2032 (Bleich, 2021). More current forecasts suggest that China and India will be unable to meet traditional higher education demand in their respective countries, but China's long-term demand would exceed the global higher education market's enrolment capacity (Olsen, 2015). Elearning platforms are becoming increasingly relevant in today's technology environment. As a result of this rapid technical development in the education sector, numerous elearning programs have emerged that students can easily access. Satisfaction in education can influence not only a student's level of enjoyment but also the effectiveness of the knowledge they get (Leisterer & Gramlich, 2021).

Even though there are many diverse tools, it is difficult for elearning to be integrated into a complicated system that is flexible, time scalable, and capable of lasting. A further concern in the modern classroom is the link between students' interests and the technology for elearning. The growing popularity of online courses in higher education has significant implications for classroom practice and student achievement. Numerous studies have found a link between students' engagement and performance and academic success. The learner's attitude is critical to the success of any elearning delivery technique (Arbaugh, 2000).

Higher education in India is currently undergoing a major transformation as a result of increased accessibility to it. Underdeveloped countries have faced difficulties adopting elearning technology due to professional and student reluctance, as well as a lack of appropriate supporting conditions (Abdullah & Toycan, 2017). To successfully integrate elearning in the Indian education system, the characteristics that shape students' attitudes about elearning must first be understood. Thus, it is critical to investigate the different elements that influence students' use of elearning to make it a more efficient instructional and educational tool in education (Sharma & Chandel, 2013; Syed et al., 2021), and to investigate information system quality metrics to better understand user intentions (Mohammadi, 2015).

The purpose of this study is to better understand the learner's attitude on elearning and to create and validate a model for implementing elearning practises. The model will be advantageous and applicable to various universities' and colleges' elearning systems. We examined various adoption theories to better understand the acceptance of elearning platforms by teachers and students, who are the two most important stakeholders in elearning.

Higher education in the India is currently undergoing a major transformation as a result of increased accessibility to elearning. Knowledge is being created and implemented in the higher education setting through innovative methods of obtaining and sharing information, and through rapid technological changes. Educational institutions offer online classes or courses that combine online elements with face-to-face course delivery. Almost all courses at universities are delivered using web-based technology to facilitate course content delivery, assessments, and assignments. Because of the increasing importance of online learning programmes, it is critical to understand the advantages and disadvantages of them as perceived by learners and to improve them to successfully integrate online learning. This study attempts to identify the relationship between attitude, satisfaction, and usage continuity of elearning in various higher educational institutes in India. We focus on whether satisfaction mediates the proposed relationship in the same way or if it is different for each student. This study has direct implications for governments, regulatory organisations, and businesses that develop elearning platform as well as administrators implementing these platforms. Further, we focus on progress in implementing the elearning system and the resulting influence on the learners.

There has been little research on elearning in developing countries, which limits our knowledge of why students in these countries are so keen about this teaching method. Elearning in India was quite limited prior to the COVID-19 pandemic. Unpredictably, people began using elearning and have become enamoured with it due to the numerous benefits and conveniences it offers. Over the years, developed countries have conducted various empirical studies showing that social presence factors have a greater impact on learner satisfaction than internal factors (Quadir et al., 2022), whereas

emerging nations such as India have done less to investigate the elements that interest students in elearning platforms. Thus, the current study is an attempt to understand the role satisfaction has on attitude and usage continuity intention of the students in north India.

The second section is a review of the literature and the subsequent construction of hypotheses that results in an integrated conceptual framework that will be tested using empirical data. Section three explains the methodology of the study and section four discusses the data analysis and results. Section five presents a broad overview of the findings and a discussion of them. The last two sections discuss the study's limitations and future directions for research.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The goal of the current study is to investigate how attitude and satisfaction lead to continuous usage of elearning by students. Elearning is seen as an effective response to the students desire for just-in-time delivery of learning content at an inexpensive cost to the institution (Küsel et al., 2020). The higher education system is one of the most important tools for enriching society in terms of value, knowledge, and culture, as well as for empowering the economy by producing specialised knowledge and well-trained labour. A country will save both time and money if it understands all of the challenges in elearning before implementing it, but there is always a difference between underdeveloped, developing, and developed countries in terms of elearning implementation and growth.

Underdeveloped countries face lot of challenges in delivering online technical courses like nonexistent or poor IT infrastructure, unstable electricity, and high internet cost (Ugochukwu-Ibe & Ibeke, 2021). Developing countries have faced difficulties in adopting elearning technology due to professional and student reluctance, and a lack of appropriate supporting conditions (Abdullah & Toycan, 2017). This a lack of motivation and active participation on the part of users in developed countries results in higher dropout rates for elearning (Levy, 2007).

Salloum and Shaalan (2019) based their research on the unified theory of acceptance and use of technology model. Their results show that

social influence, performance anticipation, and conducive learning environments were all significant variables of behavioural intention for students to utilize an elearning system. Syed et al. (2021) conducted quantitative research using PLS-SEM and found that utilizing a high-quality learning management system has a favourable effect on Elearning implementation. The effective use of elearning systems in the higher education system is hampered by the operational risks associated with information and communication technology, which include faculty experience with elearning, opposition to change, and the quality of the learning management system. One purpose of this study was to determine how operational risks impact the acceptance of elearning in institutions of higher learning.

Eom and Ashill (2016) investigated the critical success factors required for elearning to completely achieve its potential. Their study is based on learner-centered theories and focuses on important success elements in university online education. Their results indicate that the most important factors of user happiness and learning outcomes are course design, teacher, and conversation (Eom & Ashill, 2016). Cidral et al. (2018) discovered in a study conducted in Brazil that the main drivers of elearning success, measured in terms of user perceived satisfaction, were information quality, system quality, instructor attitude toward elearning, diversity in assessment, and learner perceived interaction with others. Communicativeness was the most important predictor of learner performance in an elearning setting (Pérez-Pérez et al., 2020).

Understanding the factors that influence elearning achievement remains a difficult task. There is an issue with identifying the essential elements that influence elearning acceptability and readiness in implementing elearning in educational settings (Golonka et al., 2014; Latip et al., 2022). Research could reveal other factors that influence students' willingness and acceptance (Domingo et al., 2023).

### 2.1 *Impact of Attitude on Satisfaction and Usage Continuity*

Nugroho et al. (2019) claimed that the use of instructional technology helps change the students' attitudes and has a substantial impact on their learning in the classroom. Users attitudes in the online environment impact learning and learning

outcomes, as discussed by Liaw et al. (2008). The usage of elearning requires a favourable attitude toward its utilization. In their investigation, Hassanein et al. (2021) discovered that supervisors' attitudes toward technology have an impact on their emotional responses to its use. Teachers play a significant role in educational activities, therefore the attitudes of instructors have significant impact on elearning outcomes (Bossman & Agyei, 2022). Employee learning satisfaction is significantly influenced by the four variables technology, educational content, motivation, and attitude (Navimipour & Zareie, 2015). According to Hofmeister and Pilz (2020), system evaluation should take instructors' views about elearning into account to properly and efficiently explain user behaviours in online courses. Based on this, we formulated the following hypotheses:

- H1: Attitude has a significant impact on Usage Continuity.
- H2: Attitude has significant impact on Satisfaction.

### 2.2 Satisfaction and Usage Continuity

Satisfaction is an affective state that is the emotional reaction to a product or service experience (Spreng & Chiou, 2002). The behaviour of a user to continue using a service after accepting it is defined as continuation intention (Bhattacharjee, 2001). Education satisfaction can affect not only a student's degree of satisfaction, but also the effectiveness of the knowledge they receive (Allen et al., 2002; Wang, 2003). Elearning satisfaction encompasses characteristics of information systems as well as the more traditional definition of customer satisfaction in this context (Daultani et al., 2021). When a person compares their acceptance of a product or service with their perception of its performance, they are said to be satisfied. Another definition of satisfaction is when a person feels delight or disappointment with the product or service (Hsu & Chiu, 2004). Additionally, Dağhan & Akkoyunlu (2016) discovered that satisfaction can affect the intention to continue. Based on this, we formulated the following hypotheses:

- H3: Satisfaction has significant impact on Usage Continuity.
- H4: Satisfaction acts as a mediator between Attitude and Usage Continuity.

### 3. METHODOLOGY

In order to statistically describe the attributes and relations between specified variables, empirical research employs statistical models, theories, and hypotheses as a method of systematic examination (Mensah et al., 2021). To get deeper insights into how attitude affects satisfaction and usage continuity, this study used PLS-SEM4 due to the model's complexity and predictive nature (Rasoolimanesh & Ali, 2018). This study also employed the Smart PLS 4.0 software suite to carry out PLS-SEM. The product of coefficients approach with bootstrapping was used to address the mediator. The mediating effect was analyzed on the basis of P values and indirect effect, whereas magnitude of mediation was calculated by finding VAF values.

This study investigated the role of satisfaction as a moderator in the relationship between learners' attitude and usage continuity intention with regard to elearning. Before applying the SEM, we first established a survey instrument, and the resulting data were then subjected to normality, reliability, and validity testing.

This study is descriptive in style to better analyze the repercussions of the learner's reaction to elearning usage continuity. Cluster and convenience sampling were done to collect data from users of elearning programs (undergraduate and postgraduate students) in selected National Assessment and Accreditation Council accredited, private and government institutes and universities in Punjab, India.

We used a structured questionnaire for data collection that was designed in two sections. The first section contained the demographic variables, and the second section contained three constructs with 15 items in each. The responses were collected

Table 1.  
Constructs, Items, and Source

Construct	Item Number	Total Items	Source
Attitude	ATT1, ATT2, ATT3, ATT4, ATT5	5	Webster & Hackley, 1997; Soong et al., 2001; Gattiker & Hlavka, 1992
Satisfaction	SAT1, SAT2, SAT3, SAT4	4	Arbaugh, 2000; Eom & Ashill, 2016
Usage Continuity	UC1, UC2, UC3, UC4, UC5, UC6	6	Mathieson, 1991; Demet et al., 2011; Liu et al., 2010



Table 2.  
Factor Loadings, Average Variance Extracted, and Composite Reliability of Constructs

S.No	Construct	Item	Scale items	Outer Loadings (more than 0.70)	AVE (more than 0.5)	Composite Reliability (more than 0.7)	Cronbach's alpha (0.7)
1.	Attitude	ATT1	I am confident to use elearning services.	0.794	0.718	0.927	0.901
		ATT2	I feel comfortable to use E learning.	0.833			
		ATT3	I prefer learning using online platforms.	0.854			
		ATT4	Elearning is a viable alternative to traditional learning methods.	0.882			
		ATT5	I believe it is convenient to go online.	0.877			
9.	Satisfaction	SAT1	Performance of elearning services are satisfactory.	0.774	0.764	0.928	0.895
		SAT2	My decision to adopt elearning was sensible.	0.912			
		SAT3	I found elearning services very effective.	0.904			
		SAT4	I feel very pleasant concerning my elearning services.	0.898			
10.	Usage Continuity	UC1	In the future, I intend to use the elearning services on a frequent basis.	0.841	0.690	0.930	0.910
		UC2	I will highly recommend others to use it .	0.867			
		UC3	I found the elearning services to be simple to consume.	0.867			
		UC4	I am willing to register as many online courses as I can.	0.851			
		UC5	I think most of the people will learn to use elearning services very quickly.	0.858			
		UC6	I will continue using elearning even if I have to invest on technological upgrades.	0.869			

Note: ATT=Attitude, SAT=Satisfaction, UC=Usage continuity

using a 7-point Likert scale with anchors ranging from *strongly disagree* (1) to *strongly agree* (7). The scale items used in the research were derived from the relevant literature, as shown in Table 1.

A pilot study was carried out with the assistance of three industry experts for content and face validity (Parrott, 1991). Later, we implemented grammatical and linguistic adjustments. Eventually, 650 respondents were given the revised and updated questionnaire, and 634 fully completed the forms, which were used for data analysis.

The results to the study's hypotheses are explored in detail in the next section.

#### 4. DATA ANALYSIS AND RESULTS

There were two stages to the data analysis process. First, a descriptive analysis of the respondents' demographic profiles was carried out, and we found that 46.5% of participants were males and 53.5% were females. The respondents' average age was reported to be between 15 and 25 years.

We then tested the hypotheses using structural modelling validation processes, which are

separated into four parts. The goal of first part was to use bootstrapping processes, including Cronbach's alpha, discriminant validity, composite reliability,  $R^2$ , and AVE indicators, to verify that the measurement model fits the data. The second section examined the validity and reliability of the path analysis constructs. The third section was concerned with determining the model's structural relevance based on the significance of path coefficients,  $t$ -values, and model fit, and the fourth section was concerned with model validation by sample adequacy using G-power approaches. The statistical methods and results are explained in detail in the following section.

#### 4.1 Measurement Model Assessment

We used Smart PLS 4 software to test the proposed conceptual model (Henseler et al., 2009). Statistical indicators such as reliability, factor loadings, and validity tests were included in the measurement model (Hulland, 1999). The factor loadings for all constructs in the study ranged from 0.774 to 0.912. The  $R^2$  value was 65.9%, which is relatively significant (Cohen, 1988). Cronbach's alpha and composite reliability tests revealed that the items' internal consistency was significant (Konting et al, 2009), with all values equal to or higher than 0.60. Subsequently, in order to maintain the reliability of the measurement model, we investigated variables' convergent and discriminant validity. If a construct's manifest variable passes the discriminant validity test, it is solely related to one latent variable. Furthermore, the value of its cross-loading with other constructs should be less than the value of the relevant latent variable. Table 2 shows that all the factor loadings are more than 0.70, which are acceptable (Vinzi et al., 2010).

Well-designed reliability and validity criteria were used to evaluate the lower-order constructs of this measurement model. First, Cronbach's alpha and CR scores were used to assess internal consistency. Second, AVE, factor loadings, and composite reliability scores were used to assess convergent validity. Finally, the HTMT test was used to assess discriminant validity (Sarstedt et al., 2017; Sarstedt et al., 2019).

We also discovered that the latent variable's calculation of the average variance explained (AVE) as a result of measurement errors was significant. Latent constructs used in the study satisfy

the criteria of having at least 50% of the variance, i.e., that AVE should be higher than 0.50 (Henseler et al., 2009). The statistical results in Tables 3 and 4 demonstrate the convergent and divergent validity of the measurement model in terms of quality and applicability.

Table 3.  
Convergent Validity

	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)	$R^2$
ATT	0.902	0.906	0.72	
SAT	0.895	0.897	0.763	0.479
UC	0.929	0.929	0.738	0.659

Note: ATT=Attitude, SAT=Satisfaction, UC=Usage continuity

Table 4.  
Discriminant Validity

	ATT	SAT	UC
ATT			
SAT	0.772		
UC	0.655	0.886	

Note: ATT=Attitude, SAT=Satisfaction, UC=Usage continuity

#### 4.2 Constructs Reliability and Validity Assessment

The Heterotrait-Monotrait (HTMT) criterion and Fornell and Larcker were used to evaluate the model's discriminant validity. Considering the analysis by Fornell and Larcker (1981), the square root of AVE was greater than the correlations for all reflective constructs, demonstrating appropriate discriminant validity across all model constructs. Additionally, the HTMT results demonstrated that all values met the requirement of being less than 0.90 (Gold et al., 2001). These results demonstrated that all the constructs satisfied the study's requirements for internal consistency, convergent validity, and discriminant validity. These results were in line with prior research using the DeLone and McLean model (Holsapple & Lee-Post, 2006; Lee-Post, 2009; Ojo, 2017).

#### 4.3 Structural Model Assessment

Structural model was used to analyze the four hypotheses.  $R^2$ , also referred to as the coefficient of determination, reflects the degree of variation assigned in the independent variable via the dependent variable to examine the strength of

correlations in variables. For an  $R^2$  value to be significant, it must be greater than 0.26 (Cohen et al., 2003). The  $R^2$  value in the current study was 0.695, which was above the required level. We learned that the structured model was effective at describing the usage continuity as mediated by satisfaction. To determine the efficacy of model  $R^2$ ,  $t$ -value and path coefficients are the major metrics used in PLS-SEM (Chin, 1998). The bootstrapping algorithm was applied to 5,000 samples to determine the model's reliability. The proper  $t$ -value for the two-tail test at the 5% level of significance was determined to be 1.96 by Hair et al. (2014). Table 5 displays the bootstrapping findings.

Results of the structural model analysis are displayed in Figure 1. The study of the overall structural model shows that the relationship between learners' attitude and their usage continuity was significant at the level of 0.077 ( $t = 2.062$ ), supporting hypothesis H1, that Attitude has a significant impact on Usage Continuity. The path coefficient from Attitude to Satisfaction, which is 0.692 ( $t = 33.545$ ), confirms hypothesis H2, that increasing Satisfaction with learner's Attitude is significant. Hypothesis H3 is supported since the path coefficient from Satisfaction to Usage Continuity is 0.756 ( $t = 19.622$ ), which is above the significant level.

Figure 1.  
Path Coefficient and Factor Loadings



Source: Authors' findings using PLSSEM

#### 4.4 Analysis of Mediation Effect

The independent variable may significantly explain the hypothetical mediating variable, and the initial value of the link between the independent and the dependent variable changes significantly after adding the mediating control path. PLS relies heavily on the mediation effect test. Three conditions must be completed in order to pass it (Baron & Kenny, 1986).

Although the Sobel test (Helm et al., 2010) is frequently used to examine the possibility of a mediation effect, it requires unreliable metrics for calculating. To address this, we utilized Preacher and Hayes' (2008) bootstrapping method in the current investigation to determine the proportion of variance that was explained by VAF. Complete mediation is suggested when the VAF is greater than 80%. Only partial mediation is suggested in the case of 20% VAF. There is no mediation effect when VAF is less than 20%. As calculated below, the VAF value of Satisfaction was 87%, therefore it shows that Satisfaction fully mediates Attitude and Usage Continuity, hence hypothesis H4 is supported.

Table 5.  
Structural Path Coefficients

	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Relation
ATT-> SAT	0.693	0.021	33.545	0	Significant
ATT-> UC	0.076	0.037	2.062	0.039	Significant
ATT-> SAT-> UC	0.525	0.033	15.661	0	Significant

Note: ATT=Attitude, SAT=Satisfaction, UC=Usage continuity  
 VAF=IDE/TE  
 (IDE=Indirect Effect, TE=Total Effect)  
 $IDE = 0.692 * 0.756 = 0.523152$   
 $TE = 0.077 + (0.692 * 0.756) = 0.600152$   
 $VAF = 0.523152 / 0.600152 = 0.87$

The model fit is shown in Table 6, and the results indicate that Standardized Root Mean Squared Residual (SRMR) was less than 0.08 and the indices were greater than the advised thresholds (Hair et al., 2017; Hensler et al., 2016). There were no multicollinearity problems, according to our assessment of the multicollinearity using variance inflation factors (VIF), and the values were less than 5.

Table 6.  
Model Fit

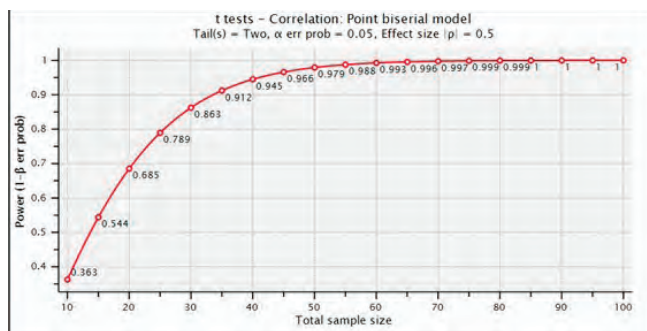
	Saturated model
SRMR	0.056
d_ULS	0.375
d_G	0.166
Chi-square	584.181
NFI	0.924

#### 4.5 Model Validity

Validation of model was very important for its applicability and novelty. The model's stability was determined by utilising the G power test to determine sample size adequacy (Kornbrot, 1997). The power test (1-b) is used to determine the stability of a given model while taking into account the parameters and sample size utilised in data processing (Chin, 1998). Faul et al. (2009) offer software tools for calculating the power of the proposed model.

With a sample size of 85, the proposed model attained maximum power (1-b), 100%, which is more than the real study's sample size of 634, shown in Figure 2. Therefore, the sample size used in the present study can be considered enough for achieving the requisite power and predicted results, thus supporting the model's validation.

Figure 2.  
G Power Output



Source: Authors' findings using GPower3.1

## 5. FINDINGS AND DISCUSSION

This study examines satisfaction is introduced as a mediating variable between attitude and usage continuity and the direct relationship between attitude and usage continuity. On the basis of prior studies, we formulated four hypotheses to address the study's goal. Out of these four hypotheses, three were based on direct hypothesis and one was based on indirect hypothesis. Finally, to accomplish the goal of the current study, data were analysed using the statistical tool. The findings of the analysis demonstrated the validity of all four hypotheses. According to the results of the first hypothesis test, there is a substantial association between the variables under consideration. The findings support the theoretical framework developed by previous research. According to the results of the second hypothesis test, satisfaction plays a

significant mediating function in the relationship between attitude and usage continuity. In line with the current study, Sun et al. (2008) showed that the key factors influencing students' satisfaction with learning include learner computer anxiety, user attitude toward elearning, course flexibility, course quality, perceived usefulness, perceived ease of use, and assessment diversity. The outcomes of this and our study can help institutions strengthen their use of elearning and increase learner satisfaction.

In previous research, such as DeLone and McLean (2003) and Chang (2013), satisfaction was handled as an intervening variable, with emphasis on the variable's direct role. Prior to launching elearning, educational administrators invested in improving learners' and facilitators' technological competencies, the quality of the elearning environment, and the use of quality learning tools to increase learner satisfaction. Rajeh et al., (2021) suggested that the best indicator of students' intention to continue was satisfaction, attitudes, and subjective norms. Our findings indicate that efforts should be made to use simple and practical elearning platforms in order to boost students' contentment and intention with online learning.

In order to ensure the successful and efficient use of such teaching modalities, students should get training, be motivated, and building their confidence. Institutions should develop practical and pertinent elearning experiences based on their students' interests. Policymakers recognise the significance of having important interfaces required by students for them to have effective learning experiences. Effective planning is required to ensure that the information technology used is appropriate, user friendly, and well supported within the institution. Policymakers should incorporate computer skills training into the curriculum to improve the computer proficiency of the majority of students. The results and the implementation of this model allows policymakers to implement an altogether new model that makes online learning possible. As a result, the findings of this study cannot be generalised to any single nation, as our recommendations can be implemented by all underdeveloped, developing, and developed nations.

## 6. IMPLICATIONS

The current study has significant implications for the educational community. It can help



educational institutions in implementing elearning systems that will consider various factors related to user satisfaction. The findings of this study will significantly help improve student satisfaction. Policymakers in developing countries should incorporate computer skills training into educational programmes to improve the skills proficiency of a large number of learners. This study will also help organisations adopting information systems because several aspects need to be taken into account while making decisions about adopting a system. The findings can also aid elearning platform developers in understanding the factors that contribute to student satisfaction, consequently allowing them to develop various software features. According to Rahman et al. (2020), with satisfaction serving as the mediator, attitude significantly influenced consumers' usage behaviour. System adoption may be strongly impacted by user satisfaction (Bhattacharjee & Premkumar, 2004).

## **7. LIMITATIONS AND FUTURE SCOPE**

This study has a few shortcomings. First, it used questionnaires in which the responses were predetermined and there was little room for respondents to provide answers that reflect their true feelings about a topic, which diminishes the questionnaire's value as data collection instruments. Future researchers can perform integration using different and better data collection techniques. For example, convergence could be used by future researchers to obtain the data. Also, combining objective and subjective data would be done.

Second, this study only employs one kind of system, i.e., the educational domain. Future studies can be conducted in industrial domains to expand the type of information system as a research object. The generality of the results can be improved by using different types of elearning in various industrial settings. Adding these variables can be optimized for an industrial context. Third, to validate the findings, the model's applicability in various geographical and industrial situations must be validated. Despite these constraints, this study has implications for both academics and other stakeholders.

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## APPENDIX

<b>Attitude</b>									
S.No	Statement	Item	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
1.	I am confident to use elearning services.	ATT1							
2.	I feel comfortable to use elearning.	ATT2							
3.	I prefer learning using online platforms.	ATT3							
4.	Elearning is a viable alternative to the traditional pen-and-paper technique.	ATT4							
5.	I believe it is simple to go online.	ATT5							

<b>Satisfaction</b>									
S.No	Statement	Item	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
1.	Performance of elearning services are satisfactory.	SAT1							
2.	My decision to adopt elearning was sensible.	SAT2							
3.	I found elearning services very effective.	SAT3							
4.	I feel very pleasant concerning my elearning services.	SAT4							

<b>Usage Continuity</b>									
S.No	Statement	Item	Strongly Disagree (1)	Disagree (2)	Somewhat Disagree (3)	Neutral (4)	Somewhat Agree (5)	Agree (6)	Strongly Agree (7)
1.	In the future, I intend to use the elearning services on a frequent basis.	UC1							
2.	I will highly recommend others to use it.	UC2							
3.	I found the elearning services to be simple to consume.	UC3							
4.	I am willing to register as many online course as I can.	UC4							
5.	I think most of the people will learn to use elearning services very quickly.	UC5							
6.	I will continue using elearning even if I have to invest on technological upgrades.	UC6							

The datasets generated during and/or analysed during the current study are not publicly available but are available from the corresponding author on reasonable request.