

WEB SITE QUALITY MEASUREMENT IN HIGHER EDUCATION INSTITUTIONS: A CASE STUDY OF HIMACHAL PRADESH UNIVERSITY SHIMLA

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Abstract

Higher education can be seen as a focal point of knowledge and its application, an institution that makes a great contribution to economic growth and development through fostering innovation and increasing higher skills. Himachal Pradesh University Shimla is the leading Government University in the state of Himachal Pradesh and plays an important role in delivering higher education in the State. The majority of the government and private colleges in the State are affiliated with the University. The University has both conventional and professional colleges affiliated with it which are nearly 355. The HPU has stakeholders in Lakhs and the majority of them are students of different levels across the state. In the present scenario, the quality of services delivered by government / public institutions largely depends upon the quality of its website. Hence, the objective of the present paper is to measure the service quality of the website of the HPU and to provide policy inputs to the administration for its improvement. The data was collected through a self-administrated questionnaire from 480 respondents. The data has been analyzed with the help of factor analysis and descriptive statistics such as mean, standard deviation and skewness. In the present study, five service quality factors of the HPU website have been identified. These factors are responsiveness, technical adequacy and efficiency, appearance, information and security. Hence, it is suggested that HEI should consider all these factors while developing their web portals as these factors have a significant role in service delivery to the stakeholders. Further, it is also concluded from the study that mean scores of two service quality factors i.e. responsiveness and technical adequacy and efficiency has been found near 2. It makes clear that all users are not satisfied with these factors. As far as to mean scores of service quality factors such as appearance, information and security are concerned these have been found near 4. It reveals that the majority of users are satisfied with these factors. This paper will have important policy implications regarding citizen service delivery and based on the findings of the study it is suggested to HEI's in general and HPU in particular that there is an urgent need to improve the responsiveness and the technical adequacy and efficiency of the websites. Further, it is recommended that queries and complaints be addressed and resolved promptly, a proper mechanism for addressing the complaints and queries, complaint register facility, frequently asked questions (FAQ's), discussion forums and other common platforms, search mechanism/ option, facility of customization, compatibility with different mobile platforms and support to all the web browsers should be provided. It is also suggested that there should be a display message on the homepage in advance regarding the maintenance/ updating of the website so that users can be well aware of the non-availability of the website.

Keywords: Service Quality, Website, HEI, HPU, responsiveness, technical adequacy.

INTRODUCTION

Information and Communication Technology is playing an important role in the customer satisfaction of the businesses and services provided by government agencies. It helps in providing fast and cheaper services to the users. During the recent pandemic COVID-19, ICT has played a vital role in providing services and information to the users at their doorsteps. In the present scenario, web portals have become the face of organizations. A web portal is an entry point to the structured content hosted by the organisation about their services and products, which can be accessed with the help of ICT. As far as the educational organizations are concerned, web portals are of the utmost importance as all the student-related information and activities are performed through these. The service quality factors of websites of educational institutes significantly affect the satisfaction level of the students. These factors include quality of information, completeness of the information, ease to use the website, navigation, appearance, customization of the website, security and privacy, responsiveness etc.

Higher education can be seen as a focal point of knowledge and its application, an institution that makes a great contribution to economic growth and development through fostering innovation and increasing higher skills. The Himachal Pradesh University was founded on 22nd July 1970. It is the leading Government University in the state of Himachal Pradesh and all the Govt. and private colleges in the State are affiliated with the University. It is accredited with an 'A' grade by the NAAC in the year 2016. The University has both conventional and professional colleges affiliated with it which are nearly 355. These include 128 Government Under Graduate and Post Graduate Colleges, 6 Govt. Sanskrit Colleges, 51 Government Aided/ private colleges running UG/PG Courses, 2 Research Institutes, 74 Colleges of Education, 10 Law Colleges, 6 Medical Colleges, 2 Ayurveda Colleges, 5 Dental Colleges, One Homeopathic College, 41 Nursing Colleges, 12 Biotechnology and Microbiology Colleges. In addition to this University College of Business Studies, the University Institute of Legal Studies, Himachal Pradesh University Department of Evening Studies are its constituent colleges. The H.P. University Department of Evening Studies erstwhile HPU Evening College was established to cater for the needs of economically weaker sections. Admission to the college is restricted to employed men following the principle of earning while learning the women are exempted from this condition. Himachal Pradesh University also has a Regional Centre located at Dharamshala in Distt. Kangra. The Himachal Pradesh University set up a Directorate of Correspondence Courses immediately after its establishment in 1970. The University has played a pioneering role in launching the programme of distance education at the undergraduate and postgraduate levels. It was the first University in

India to impart instruction at undergraduate and postgraduate levels in social sciences, humanities, commerce and teacher training through the mode of distance education. The Directorate of Correspondence Courses gradually adopted the multi-media approach to impart instructions and has been renamed the International Centre for Distance Education and Open Learning (ICDEOL). It is located within the campus of the University. The Regional Centre of the University was set up in July 1992 at Dharamshala in Kangra district. The Centre has a school of legal studies and offers postgraduate courses in disciplines of science, arts and humanities. On the website of HPU Shimla, students can do many operations such as online registration, accessing information regarding admissions, hostel allotments, results, exam schedules, online payment of fees, etc. The University of Himachal Pradesh has users in Lakhs and the majority of them are students of different levels across the state. On the website of HPU Shimla, students can do many operations such as online registration, accessing information regarding admissions, hostel allotments, results, exam schedules, online payment of fees, etc. The University of Himachal Pradesh has users in Lakhs and the majority of them are students of different levels across the state. In the present scenario, the quality of services delivered by government / public institutions largely depends upon the quality of its website. Hence, the present study aims at measuring the service quality of the website of the Himachal Pradesh University and to provide policy inputs to the administration for its improvement.

There are several factors of service quality of websites namely efficiency, entertainment, community driven, privacy, user-friendliness, efficiency and navigability which affect users satisfaction. Focusing on the above views, the main problem of the present study is: “Are users satisfied with the service quality delivered by the website of HPU Shimla?” The primary purpose of the present study is to measure the service quality of the Himachal Pradesh University website. The present study considers the effects of different service quality factors on customer satisfaction and loyalty. The present study will be useful to the University as it will help in identifying the service quality factors which affect the satisfaction of users of the HPU website. This will be helpful for the University to focus on such factors to satisfy their customers. Hence, the present study will provide invaluable information and suggestions to University for the improvement in the service quality of its website. The scope of the present study is restricted only for one year as the primary data was collected through a questionnaire during the year 2021. The study will mainly focus on users’ perceptions regarding services being rendered by the website of HPU Shimla. Therefore, it is important to measure the quality of its website.

LITERATURE REVIEW

Bell and Tang (1998) identified service quality factors which include accessibility, content, structure, ease to use, navigability, usefulness, graphics and unique features. Rose, Khoo and Straub (1999) concluded in their study that features such as speed of downloading information, user interface, and search facilities, security, and standards of the internet significantly affects the quality of a website. Huizingh (2000) found that content and design are two crucial aspects of web quality evaluation. Wan (2000) mentioned four website quality attributes: information, friendliness, responsiveness, and reliability. Aladwani and Palvia (2002) suggested an integrated website quality model consisting of general content, specific content, technical quality, and appearance quality dimensions. Bai et al. (2008) showed that website quality had a direct and positive effect on customer satisfaction and purchase intentions. Kim and Niehm (2009) reported that website quality dimensions such as interactivity, online completeness, ease of use, and entertainment significantly impact perceived information quality. Cebi (2013) put forth a new method named the quality evaluation model (QuEM), which included fuzzy set theory, the decision-making trial and evaluation laboratory method (DEMATEL), and generalized Choquet integral techniques. Karl Markos Biswas (2019) revealed that the service quality of a website significantly and positively affects customers' satisfaction. Kausar Fiaz Khawaja (2020) concluded that students use the University website for obtaining information and use it frequently if it is easy to use, and good in appearance. Aminal Islam (2020) concluded that there are significant negative differences between service perception and service expectation in higher education services for all cases.

RESEARCH DESIGN:

On basis of the review of the existing literature, it appears that the different studies on service quality of websites have been conducted so far, but no research has been undertaken yet to study the service quality of the HPU website and satisfaction level of users of HPU website. The present study is aimed to fulfil this requirement. The primary purpose of the present study is to measure the service quality of the Himachal Pradesh University website. Therefore, the statement of the problem under the study that has been selected is "A STUDY ON MEASURING THE SERVICE QUALITY OF HIMACHAL PRADESH UNIVERSITY WEBSITE".

SCOPE OF THE STUDY

The present study has been carried out to measure the service quality of the Himachal Pradesh University website. The work is confined mainly to the 10 districts of Himachal Pradesh. Out of the total of 12 districts of Himachal Pradesh two districts, Lahaul Spiti and Kinnaur have not been taken in the study. The scope of the present

study is restricted only for one year as the primary data was collected through a questionnaire during the year 2021. Further, only students are taken as a sampling unit and employees and other stakeholders are not considered in the sample. The survey to measure the service quality of the Himachal Pradesh University website has been conducted based on various factors like demographic factors, age, gender, area of residence, education and stream of study.

OBJECTIVES OF STUDY:

The main objective of the present study is to identify the significant service quality factors being considered by the users and to evaluate users' perception regarding services being rendered by the website of HPU Shimla.

RESEARCH METHODOLOGY

In research methodology sampling technique, size of the sample, methodology of data collection and analysis of data adopted for proposed study are discussed.

TOOLS AND TECHNIQUES OF DATA COLLECTION

For accomplishing the objectives of the study, both primary and secondary data are utilized.

Secondary data: Secondary data is collected from internal and external sources. Internal sources of secondary data include published records of the University. Further, external sources of secondary data include government publications, websites, foreign government publications, journals, books etc.

Primary data: Primary data in the form of the response of users which is of immense importance and backbone of the study are obtained from students of affiliated colleges and University Campus with the help of a questionnaire. The present research is designed to find out the users' satisfaction with the quality of services rendered by the website of HPU Shimla. User's from different geographical areas, streams, age groups, religions and genders were contacted and interviewed through personal contact methods.

Interview: To have first-hand information to know the user's perception towards services being rendered by the website of HPU Shimla, the information was collected through interviews.

Personal Observations: The information which was not obtained through questionnaires and personal interviews was obtained through direct personal observation. Sometimes, the respondents do not reveal the answers to various

questions honestly. Therefore, the investigators observed from proximity the reality on the ground, which helped to study the problems more scientifically.

Questionnaire: The primary data was collected with the help of questionnaires. In the present study, the Likert scale was developed and a five-point rating scale is applied using numerical scores ranging from 1 to 5 for questions. The data was collected through a self-administrated questionnaire, which was developed in the following stages:

(a) Identifying variables and developing first draft: Different demographic variables, various dimensions related to service quality, user's satisfaction and loyalty were specified as variables for this study. These were identified based on previous researches done in India and abroad.

(b) Content validity: 10 experts and 10 users were requested to fill the questionnaires for suggestions, improvement and content validity.

(c) Pilot survey: After making necessary changes in the first draft of the questionnaire a pilot survey was done on 50 users to find out the level of understanding and make rectification in the errors in the final draft of the questionnaire.

(d) Finalizing the questionnaire: After the pilot survey, questions were deleted, added and modified in terms of language.

(e) Reliability check: The reliability of the questionnaire was measured in terms of Cronbach's alpha or Coefficient alpha. Cronbach's alpha varies from 0 to 1 and an average of 0.6 or less generally indicates unsatisfactory internal consistency reliability.

SAMPLING PROCEDURE:

Sampling is a process of selecting units from a population and a way to represent the population. Since it is difficult to collect data from the entire population due to budget and time constraints, hence obtaining a sample is important. Sampling methods are classified as either probability or representative sampling and non-probability or judgmental sampling. For the present study, a multi-stage sampling method has been used.

- In the first stage, the study area is divided into 10 districts of the State of Himachal Pradesh. Two districts Lahaul Spiti and Kinnaur are left due to time and cost factors. Further, to provide representation to these districts students from the HPU campus have been taken into the sample.

- At the second stage, from each selected district, two colleges/ institutions where both UG and PG courses are being run is selected by using random sampling. Thus, total number of colleges/ institutions will be $10 \times 2 = 20 + 1$ (Campus of HPU Shimla) = 21.
- At the third stage, 20 users from each selected college and institution from the districts are selected with the technique of quota sampling. Further, from the HPU campus, 80 students were selected providing preferences to the students belonging to districts of Lahaul Spiti and Kinnaur. While taking the sample from each college/ institution in this stage convenience sampling is used. Further, in this stage sample has been selected keeping in view representation to various demographic variables. Thus, total sample constitutes $20 \times 20 = 400 + 80$ (students of HPU campus) = 480 respondents.

ANALYSIS AND INTERPRETATION OF DATA:

Data analysis comes after the data collection. It is done to make sense of the study and to reach certain findings. Keeping in view the nature of the study, the data collected have been analysed and interpreted with the help of the following methods:

1. Mathematical Methods: In the present study, the data collected was analysed with the help of mathematical methods such as simple average and percentage methods where needed.

2. Statistical Methods: Statistical methods provide an indispensable tool for collecting, organizing, analyzing and interpreting data expressed in numerical terms. The statistical methods used in the present study are, Arithmetic Mean, Standard Deviation, Measures Of Skewness Or Asymmetry, Cronbach's Alpha, Levene's Test, t-Test. Factor Analysis. Factor analysis is a general name denoting a class of procedures primarily used for data reduction and summarization. In the present research, there are large numbers of variables, which are considered for measuring the service quality of the HPU website. The relationships among these interrelated variables are examined and represented in terms of a few factors, which helps in grouping the variables with similar characteristics together. Therefore, factor analysis has been used as a tool for achieving the first objective of the study i.e., to identify the significant service quality factors being considered by the users. The t-test is used to compare two mean or averages. To study, whether the difference in the satisfaction level of users irrespective of their demographic features is statistically significant or not, the test of significance between the means of two independent samples (t-test) has been used. The significance of the t-value is found with the help of the 't' value, which indicates the critical value of the 't' ratio necessary to reject the null hypothesis at the given level of significance with a particular degree of freedom.

ANALYSIS AND INTERPRETATION OF THE SERVICE QUALITY FACTORS OF HPU WEBSITE BEING CONSIDERED BY THE USERS:

To achieve the first objective of the study, a scale has been developed comprising of forty variables. These statements are measured on a five-point Likert scale i.e., **(1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree and (5) Strongly Agree**. Based on responses provided by the students, factor analysis has been done to extract the factors from the observed variables which affect the service quality of the HPU website.

DESCRIPTIVE STATISTICAL ANALYSIS OF FACTORS AFFECTING THE SERVICE QUALITY OF THE HPU WEBSITE:

Table 1 explains, the descriptive statistics for factors affecting the service quality of the HPU website. The table shows the values of mean, standard deviation, skewness and kurtosis for forty variables. Further, the table depicts that the mean values are found higher than 4 for the statements S8 to S15. Therefore, it can be said that these are the most important variables which affect the satisfaction level of users of the website of HPU in a positive manner. In the case of skewness, most values are concentrated on the right of the mean with extreme values to the right, so it can be said that distribution is negatively skewed.

Table 1: Descriptive Statistical Analysis of Factors Affecting the Service Quality of HPU Website

Sr. No.	Statements	N	Mean	Standard Deviation	Skewness
S1	The website provides reliable information	480	3.994	.1883	-.842
S2	The website provides updated and latest information	480	3.998	.2284	-.148
S3	The website provides complete and detailed information	480	3.994	.2093	-.596
S4	The information provided by the website is relevant	480	3.992	.2141	-.737
S5	The information provided by the website is accurate	480	3.998	.2094	-.198
S6	The information provided by the website is in an appropriate format	480	3.992	.2141	-.737
S7	This website provides necessary and useful information	480	3.992	.1937	-1.025
S8	The text is in an appropriate size and has proper use of fonts	480	4.017	.2137	1.484
S9	The WebPages are easy to read	480	4.008	.2328	.557
S10	The website has an attractive display and visually appealing	480	4.017	.2324	1.120
S11	There is considerable contrast between the font colours in the background-colour	480	4.017	.2324	1.120
S12	The style is consistent throughout the entire website	480	4.021	.2320	1.407
S13	The website is well designed and has an organized interface	480	4.021	.2320	1.407

S14	There is a proper use of multimedia in the website	480	4.017	.2324	1.120
S15	The relevant keywords are used in title tags, heading tags, meta-descriptions, etc.	480	4.015	.2089	1.400
S16	There is ease of navigation in the website	480	1.987	.2139	-1.108
S17	The website helps me reach all required parts very quickly	480	1.983	.2324	-1.120
S18	All the links on the pages work accurately	480	1.979	.2320	-1.407
S19	There is a search option available in the website	480	1.981	.2277	-1.350
S20	The website features can be customized according to users' needs	480	1.977	.2363	-1.455
S21	The website works on all mobile platforms	480	1.990	.2189	-.856
S22	All the payment options are working accurately for online transactions	480	1.981	.2277	-1.350
S23	The website works very quickly and WebPages loads promptly	480	1.983	.2324	-1.120
S24	The website never becomes down	480	1.977	.2450	-1.286
S25	When you enter the website, all the WebPages work properly	480	1.992	.2141	-.737
S26	Queries and complaints are addressed and resolved promptly	480	1.983	.2232	-1.283
S27	The Frequently Asked Questions (FAQ's) are provided on the website	480	1.981	.2367	-1.184
S28	The website provides email ID's for all queries and complaints	480	1.979	.2320	-1.407
S29	The website provides confirmations on my email/phone	480	1.981	.2367	-1.184
S30	The website provides opportunities to contact with other users (through blogs/discussions forums etc.)	480	1.979	.2320	-1.407
S31	The University accepts responsibility and takes control in the event of service failure of website/ payment gateway	480	1.973	.2268	-1.973
S32	The website describes reasons for service failure (if any)	480	1.977	.2363	-1.455
S33	The website has excellent complaint handling procedures to satisfy needs in case of service failure	480	1.981	.2367	-1.184
S34	The website has Follow-up services to users	480	1.979	.2320	-1.407
S35	The website has efficient and effective feedback between the University and the stakeholders	480	1.985	.2280	-1.045
S36	The website provides security to complete transactions	480	3.950	.2182	-4.142
S37	There is sense of security in delivering personal information	480	3.946	.2266	-3.952
S38	The website provides confidentiality for user's information	480	3.946	.2266	-3.952
S39	The website provides adequacy of security features	480	3.950	.2182	-4.142
S40	The website does not disclose my private information to the third party	480	3.954	.2093	-4.357

KMO AND BARTLETT'S TEST

Table 2 depicts that the Kaiser-Meyer-Olkin measure is 0.960, which implies that the sample is adequate and factor analysis is appropriate for data. Bartlett's test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix in which each variable correlates perfectly with itself but has no correlation with other variables. Further, the table shows that Bartlett's test of sphericity is significant, that is its associated probability is less than 0.05. It is 0.000, i.e. the significance level is small enough to reject the null hypothesis. This means that the correlation matrix is not an identity matrix.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin		.960
Bartlett's Test of Sphericity	Approx. Chi-Square	23716.465
	df	780
	Significance	.000

TOTAL VARIANCE

Table 3 explains the total variance. Further, the table shows all the factors extractable from the analysis along with their Eigen-values, the per cent of variance attributable to each factor, the cumulative variance of the factor and the previous factors. The table reveals that the first factor accounts for 21.818% of the variance, the second factor 21.076%, the third factor 15.174%, the fourth factor 14.180% and the fifth factor 9.775%. All the remaining factors are not significant.

Table 3: Total Variance Explained

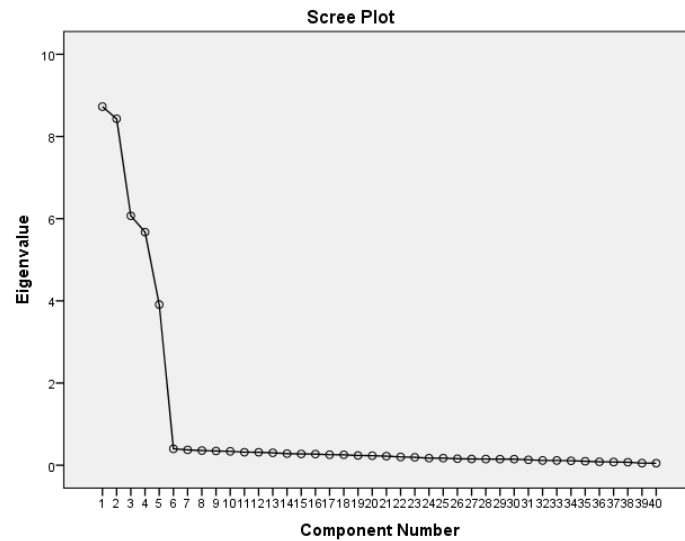
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.727	21.818	21.818	8.727	21.818	21.818	8.710	21.776	21.776
2	8.430	21.076	42.894	8.430	21.076	42.894	8.439	21.097	42.873
3	6.070	15.174	58.068	6.070	15.174	58.068	6.065	15.163	58.036
4	5.672	14.180	72.247	5.672	14.180	72.247	5.672	14.179	72.215
5	3.910	9.775	82.022	3.910	9.775	82.022	3.923	9.807	82.022
6	.400	1.000	83.022						
7	.374	.935	83.957						
8	.358	.896	84.853						
9	.347	.868	85.721						
10	.338	.845	86.566						
11	.317	.793	87.359						
12	.317	.793	88.152						

13	.303	.758	88.910					
14	.282	.705	89.615					
15	.275	.687	90.302					
16	.271	.677	90.979					
17	.257	.642	91.620					
18	.255	.637	92.257					
19	.237	.592	92.849					
20	.232	.581	93.430					
21	.221	.553	93.983					
22	.202	.505	94.488					
23	.192	.481	94.969					
24	.172	.430	95.400					
25	.172	.430	95.830					
26	.159	.397	96.226					
27	.152	.380	96.606					
28	.150	.376	96.982					
29	.149	.373	97.355					
30	.149	.373	97.728					
31	.133	.332	98.059					
32	.116	.291	98.350					
33	.116	.290	98.641					
34	.109	.272	98.913					
35	.097	.243	99.156					
36	.084	.211	99.367					
37	.079	.197	99.564					
38	.074	.184	99.748					
39	.051	.127	99.875					
40	.050	.125	100.000					

Extraction Method: Principal Component Analysis.

SCREE PLOT:

Figure 1 shows the Scree Plot, it is a graph of the Eigen-values against all the factors. The graph is useful for determining how many factors to retain. Further, the graph depicts that the curve begins to flatten between factors fifth and sixth. Therefore, only five factors have been retained.



ROTATED COMPONENT MATRIX:

Table 4 exhibits the results of the rotated component matrix. Further, the table reports that five-factor are extracted through factor analysis i.e., Responsiveness, Technical Adequacy and Efficiency, Appearance, Information, and Security. The rotation reduces the number of factors on which the variables under investigation have high loadings.

Table 4: Rotated Component Matrix^a

	Component				
	1	2	3	4	5
S26	.975				
S35	.960				
S34	.949				
S28	.949				
S30	.944				
S33	.934				
S32	.934				
S27	.930				
S29	.930				
S31	.819				
S16		.967			
S21		.954			
S19		.927			
S22		.927			
S23		.921			
S17		.917			
S20		.916			
S18		.904			
S24		.886			
S25		.859			

S15			.929		
S8			.913		
S11			.864		
S14			.853		
S12			.852		
S13			.852		
S9			.848		
S10			.847		
S1				.961	
S7				.942	
S5				.900	
S3				.893	
S4				.878	
S6				.878	
S2				.845	
S40					.920
S39					.885
S36					.885
S37					.873
S38					.862

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.^a
 a. Rotation converged in 4 iteration.

Further, Table 4 reports the loading of different statements on identified four factors.

Following variables are loaded on factor 1 i.e., **Responsiveness**: Queries and complaints are addressed and resolved promptly, the website has efficient and effective feedback between the University and the stakeholders, the website has Follow-up services to users, the website provides email ID's for all queries and complaints, the website provides opportunities to contact with other users (through blogs/discussions forums etc.), the website has an excellent complaint handling procedures to satisfy needs in case of service failure, the website describes reasons for service failure (if any), the Frequently Asked Questions (FAQ's) are provided in the website, the website provides confirmations on user's email/phone, the University accepts responsibility and taking control in the event of service failure of website/payment gateway.

The variables which are loaded on factor 2 i.e., **Technical Adequacy and Efficiency** are as follow: There is the ease of navigation in the website, the website works on all mobile platforms, there is a search option available on the website, all the payment options are working accurately for online transactions, the website works very quickly and WebPages loads promptly, the website helps me reach all required parts very quickly, the website features can be customized according to users' needs, all the links in the pages work accurately, the website never becomes down and when the website is logged on, all the web pages work properly.

In factor 3 i.e., **Appearance** following variables are loaded: The relevant keywords are used in title tags, heading tags, meta-descriptions, etc., the text is in the appropriate size and has proper use of fonts, there is considerable contrast between the font colours in the background colour, there is a proper use of multimedia in the website, the style is consistent throughout the entire website, the website is well designed and has an organized interface, the WebPages are easy to read and the website has an attractive display and visually appealing.

The variables which are loaded on factor 4 i.e., **Information** are as follow: The website provides reliable information, This website provides necessary and useful information, The information provided by the website is accurate, The website provides complete and detailed information, The information provided by the website is relevant, The information provided by the website is in the appropriate format and The website provides updated and the latest information.

In factor 5 i.e., **Security** following variables are loaded: The website does not disclose my private information to the third party, the website provides adequacy of security features, the website provides security to complete transactions, there is a sense of security in delivering personal information and the website provides confidentiality for user's information.

RELIABILITY STATISTICS:

The results of reliability statistics have been presented in Table 5. The reliability of the construct is determined by computing Cronbach's alpha. Cronbach's coefficient alpha value of 0.6 is considered acceptable for exploratory purposes, 0.7 is considered adequate, and 0.8 is good for confirmatory purposes. Further, the table reveals that the Cronbach alpha value based on standardized items obtained is 0.878 which shows high reliability of the scale. The overall reliability and validity of the scale as depicted by Cronbach alpha is well above 0.7, therefore it is valid to use this scale.

Table 5: Reliability Statistics

Cronbach's Alpha	No. of Items
0.878	40

SERVICE QUALITY FACTORS AND USERS SATISFACTION:

It is clear from Table 6 that the majority of the respondents are satisfied with the service quality factors such as appearance., information and security of the HPU Website as the mean score of the statements covered under these factors are near 4. Further, it is also evident from the table that the mean score of the statements which are covered under service quality factors such as Responsiveness and Technical

Adequacy and efficiency is near 2, which shows that users are not satisfied with these factors.

Table6: Mean Score of Service Quality Factors

Factors Identified	Statements Covered under the factor	Range of Mean Score
Responsiveness	S26 to S35	1.973 to 1.985
Technical Adequacy and Efficiency	S16 to S25	1.977 to 1.992
Appearance	S8 to S15	4.008 to 4.021
Information	S1 to S7	3.992 to 3.998
Security	S36 to S40	3.946 to 3.954

CONCLUSIONS AND SUGGESTIONS:

Higher education plays an important role in the economic growth of developing countries through fostering innovation and increasing higher skills. HPU Shimla is the leading Government University in the state of Himachal Pradesh and plays an important role in delivering higher education in the State. The University of Himachal Pradesh has stakeholders in Lakhs and the majority of them are students of different levels across the state. In the present scenario, the quality of services delivered by government / public institutions largely depends upon the quality of its website. Hence, the main objective of the present study is to evaluate users' perception regarding services being rendered by the website of HPU Shimla. The data was collected through a self-administrated questionnaire from 480 respondents. The scope of the present study is restricted only for one year i.e. 2021. The data has been analysed with the help of factor analysis and descriptive statistics such as mean, standard deviation and skewness. In the present study, five service quality factors of the HPU website have been identified. These factors are responsiveness, technical adequacy and efficiency, appearance, information and security. Hence, it is suggested that HEI should consider all these factors while developing their web portals as these factors have a significant role in service delivery to the stakeholders. Further, it is also concluded from the study that means scores of two service quality factors i.e. responsiveness and technical adequacy and efficiency has been found near 2. It makes clear that all users are not satisfied with these factors. As far as to mean scores of service quality factors such as appearance, information and security are concerned these have been found near 4. It reveals that the majority of users are satisfied with these factors. This paper will have important policy implications regarding citizen

service delivery and based on the findings of the study following suggestions are being made to Higher Education Institutions in General and Himachal Pradesh University in particular:

- Queries and complaints be addressed and resolved promptly. Complaint Register facility can be provided on the website and a proper mechanism should be followed to address the complaints and queries so received.
- The frequently asked questions (FAQ's) should be provided on the website so that the users can get help related to some common queries.
- The email ID's and phone numbers for different queries should be different and system-generated emails and SMS should be sent to the users along with unique complaint IDs so that the queries and complaints can be referred at a later stage.
- The website should provide discussions forums, blogs and other common platforms where users can resolve and raise their common issues and problems. Further, universities can be benefitted from their feedback, suggestions etc.
- There is an urgent need to integrate different portals of the University, so that users may not lead in trouble regarding filling of examination forms, downloading results, applying for admission in a new course, applying for registration and migration, online fee payments etc.
- The website should provide a search mechanism so that users can easily access the desired part of the website.
- The website should be customized according to users' needs, such as the language of the website can be changed to Hindi also, a majority of the users belong to rural areas of Himachal Pradesh.
- The website should be compatible with different mobile platforms and also it should work on all web browsers.
- All the payment options such as UPI, Payment Apps should be provided for online transactions in addition to Internet banking and Debit/Credit Cards.
- The website should in advance display a message on the homepage regarding the maintenance/updating of the website so that users can be well aware of the non-availability of the website.

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