

Role of AIOU Web TV in Motivating Students to Learn at the Postgraduate Level: A Quantitative Study

Saliha Khan*

Abstract

Web-TV systems are becoming increasingly significant in higher education for the delivery of information services. The two objectives of this quantitative research study were to: determine how students use and are satisfied with Allama Iqbal Open University's (AIOU) Web-TV-based services; and investigate the factors that impact and inspire students to use AIOU Web-TV-based facilities. A self-developed questionnaire with a survey-based structure was utilized to collect information from a sample of 120 AIOU students all over Pakistan, selected systematically from the population of the study. There were 100 valid questionnaires returned in response to the survey with a 83% response rate. Statistical tests were used to analyze the data. The findings showed that students made academic use of the Web-TV-based resources. The majority of students were satisfied with the web-TV services they utilized. The study provides suggestions that the university Web TV administration might utilize to improve AIOU web-TV-based capabilities for students.

Keywords: *AIOU, web TV, students, learning, motivation.*

*Ph.D. Scholar, National University of Modern Languages (NUML), Islamabad, Pakistan. Email: salihatalash@gmail.com

Introduction

Over the last decade, Pakistan's telecom business has expanded dramatically, improving ICT infrastructure and benefiting the economy as a whole. Because of the country's growing use of computers and the Internet, the majority of Pakistan's population consists of university students who use the Internet on a regular basis (Kayani et al., 2011).

As of October 2015, the total teledensity (cellular mobile + wireless local loop + fixed local loop) was 66.1%, up from 11.89% percent in 2004-2005, according to the Pakistan Telecommunication Authority (2015). Additionally, the number of people using the Internet is increasing every year (ISPAK, 2015). From 1.33 million in 2000 (when the country's internet penetration rate was 0.1%) to 18.5 million in 2010 (10.4%), Pakistan's internet user base increased significantly. The number of people using the internet increased significantly after that, reaching 34.3424 million users in June 2016 (Internet World Stats, 2016), or 17.8% of the population. In July 2015, there were also 14.6 million users of 3G and 4G mobile phones. Furthermore, it is estimated that 40 million smartphones would be in use worldwide by December 2016 (Baloch, 2016).

Higher education's quick use of digital technology has changed conventional classroom settings into dynamic, learner-centered platforms. Cutting-edge digital tools like Web-TV present fresh chances to raise student enthusiasm and engagement in Pakistan, where ICT infrastructure development is still uneven. However, little empirical study has examined the ways in which Web-TV enhances students' motivation and contentment in the setting of higher education in Pakistan. Using the Unified Theory of Adoption and Use of Technology (UTAUT) as a framework, this study closes that gap by investigating the variables impacting learners' adoption and efficient use of Web-TV. The study is important because it gives educators and policymakers evidence-based insights into how Web-TV might enhance digital teaching methods and promote pleasant learning experiences.

Literature Review

Several ICT initiatives had started at the national level with the intention of accelerating government facilities and improving higher education. In partnership with Telecom, the Federal Ministry of IT assigned the Information Technology Board the task of creating and managing e-government support for Federal Government Ministries and departments. Consequently, the nation was able to access a range of e-government services, including electronic tax return filing, online travel application processing, telemedicine, and more (Khan & Ahmad, 2015).

In accordance with government policy, the Higher Education Commission of Pakistan (HEC) has launched numerous important projects for the development of ICT infrastructure in the country's higher education sector. HEC established the Pakistan Education and Research Network (PERN) in 2002 with the goal of improving the country's communication infrastructure and offering rapid Internet and Intranet access to academic and research institutions nationwide. Later, PERN2 was established to improve networking and Internet capabilities in the tertiary education sector. The first ten facilities are cloud-based email solutions, eduroam, Turnitin originality checks, virtual private LANs, national video conferencing facilities, cloud-based email solutions, and fast-speed internet facilities. Currently, 150 affiliated universities and research centers use these facilities (Pakistan HEC, 2015a).

Web-based resources for academic literature delivery have improved higher education research and development. In 2004, the HEC developed the National Digital Library (NDL) Program for 150 public research institutes, universities, and organizations. The project's goal was to employ 30 trustworthy web databases to offer free online access to more than 20,000 full-text publications (Said, 2006).

As noted by Ameeq et al. (2018), distance education requires the use of alternative media for the delivery of teaching because it separates professors and students by time and place. Diverse technologies, such as videos and online lessons, have grown in popularity as a way to close this gap and speed up the learning process. Often referred to as a non-formal learning method, distance education is a relatively recent strategy in the field of education.

It has gone by several names throughout the years, such as open education, open learning, and distance teaching. This system has historically relied on a variety of distribution techniques, from postal courses or correspondence to electronic media like television, radio, and video/audio cassettes. To improve instruction and learning in distance learning, additional audio-visual aids have also been used (Ameeq et al., 2018).

Allama Iqbal Open University

The Pakistani Parliament passed Act No. XXXIX in 1974, establishing Allama Iqbal Open University as South Asia's first distance learning institution. By focusing on the government's educational plan, AIOU provides educational opportunities to 1.3 million students, the bulk of whom are enrolled in undergraduate programs. There are around 2000 courses (135 academic programs) supported by electronic media via TV, radio, and multimedia at 42 regional campuses and 1172 study centers

throughout Pakistan and the Middle East. Of these pupils, 57% are females.

The university offers courses in social sciences, humanities, education, sciences, Arabic, and Islamic education both locally and around the Middle East, with levels ranging from basic to PhD. The majority of academic programs were available via distance learning during the spring and fall semesters of each year (Allama Iqbal Open University, 2015a).

Since its inception, AIOU has been committed to the infrastructure development of technology required for the country's remote learning delivery system to function efficiently. The University recognized the need for ICT and Web TV platform infrastructure for both the main and regional campuses; therefore, it upgraded the existing Computer Center and founded the Directorate of ICT. This enabled the campuses to put up office automation, web-based capabilities, and video conferencing. The Institute of Educational Technology assists the media by giving Pakistan National Television, which broadcasts via satellite to over 45 countries, and FM radio with cutting-edge educational content at both low and high costs. AIOU also developed the Center for Instructional Development to provide a digital curriculum for various academic programs.

Rumble (2019) asserts that the term "correspondence" was only associated with written language, while the term "correspondence education" was considered limited because of the use of media in the classroom. In 1982, at the 12th World Conference on Correspondence Education (WCCE) in Vancouver, British Columbia, the term "distance education" was first used. By changing its name to the "International Council for Distance Education," the council granted the term "distance education" prominence on a global scale. "Distance education," according to Schlosser and Anderson (1994), "is education that either doesn't use the physical presence of the teacher authorized to provide it in the area where it's obtained or where the instructor is only there once or for certain tasks."

Web-TV-based Facilities

Since AIOU is a distance learning institution, its main channels of communication with its global and international remote learners are print and electronic media. Nonetheless, the primary objective of the university's website is to assist the local community. Data about the AIOU, a banner, a message from the vice chancellor, important announcements, news and events, and urgent information that needs to be gathered are the eight main elements of the content provided on the AIOU website (<http://www.aiou.edu.pk>).

Collected (such as exam results, date sheets, roll number slips, assignments, tutor search, AIOU email, AIOU library, help desk, and

assignment marks); information located within the AIOU (such as the activity calendar, AIOU alumni, FAQs, and degree tracking system); and contact information. According to Harpel-Burke (2006), a university website has three basic functions:

- (a) Marketing and promotion
 - (b) Online amenities, and
 - (c) As a medium of communication for both individuals and organizations.
- The university provides the following 24-hour facilities: web-based services via its website to achieve the following objectives:

- Information about student admissions;
- Downloadable reading, exam, and entrance materials; and
- Exam facilities.

The library's web-based facilities; information about regional campuses; solutions to frequently asked questions; personnel profiles of the administrative departments and faculties; Access to the HEC digital library, workshop data, instructor assignment information, job postings, the complaint management system, online radio, and the most recent events and news (Allama Iqbal Open University, 2015a).

Web technology has a lot to offer the educational community, but these advantages won't manifest until students accept and use the Internet. Akbar (2013) makes the observation that "an important factor that impacts the success of these technologies is students' acceptance as well as utilization of technologies introduced in their academic environments". Sandhu and Corbitt (2003) argue that while deciding which features to employ on a certain website, it is vital to consider the user's behavioral habits.

Web-TV-based facilities, such as Web portals, e-prints, e-journal platforms, digital libraries, and other Web-TV-based information systems, assist end users in completing their responsibilities. A variety of user studies have been undertaken in both rich (Simsek & Arat, 2015) and developing nations (Awwad & Al-Majali, 2015) to recognize the significance of Web-TV-based facilities in the higher education sector in recent times. According to Allahawiah (2013), the efficiency of Web-TV-based facilities appears to be influenced by how well their target audience uses them; conversely, low Web technology adoption and acceptability may result in reduced usability of Web-TV-based facilities (Al-Gahtani, 2014).

A survey of the local literature in Pakistan indicates that over the past decade, research has been done on a variety of topics pertaining to library websites, such as usability analysis, website usage, Web-TV based

facilities, log analysis, usability evaluation, content analysis, Web Online Public Access Catalogue (OPAC), user behavior during web searches, e-government, use of HEC digital libraries, and the application of Web 2.0 technologies in higher education settings (Arshad & Ameen, 2015). However, no research has looked into what motivates Pakistani university students to use the Internet. AIOU is a perfect case study for studying the phenomenon of Web service utilization because of its 1.3 million students, credible online education program, and online resources. Finding out how often and how satisfied students are using the AIOU Web-based resources is the aim of the survey. It also looks at the elements that influence how users interact with web-based services.

Development of Web-TV-based Facilities in Pakistan

In August 2000, the Pakistani government released its initial National IT Policy and Action Plan after realizing the significance of ICT (Pakistan Department of Science and Technology, IT & Telecommunications Division, 2000). With an emphasis on IT use (government, economy, and education), building infrastructure (software and hardware industry, Internet growth, technological parks, telecommunications), incentives (fiscal promotions and IT promotion), and laws and regulations, the policy describes the basic IT strategies. The policy paper's primary purpose is to take up the following concerns in IT education and training:

- The education sector will have to develop an IT-skilled workforce.
- Provide moderately priced computers as well as Internet access to universities, colleges, and schools.
- To facilitate information sharing, establish a network connecting all universities, colleges of engineering, medical schools, and other institutions of higher learning.
- Create digital libraries that provide quick access to information from around the world.
- Improving educational facilities by automating registration, testing, bookkeeping, and other school-related processes.
- Establish a robust technological foundation so that as many individuals as possible can access resources for remote learning.
- Provide monetary awards to foreign and domestic universities to stimulate the establishment of distance learning programs in Pakistan.

Institutions must ensure the availability of telecommunications facilities in order to provide better public services. To attain this goal, the Federal Ministry of Information Technology issued Telecom Policy 2015. The method aims to encourage more educational and medical institutions

across the country to get internet connectivity. The statement stressed the importance of offering communal access and creating Wi-Fi hotspots for public use, particularly for people who cannot afford private access to telecommunications infrastructure. Furthermore, the strategy emphasizes the ease of access to cutting-edge telecom infrastructure and applications, particularly in both underserved and unserved areas of the country. According to the Pakistan Ministry of Information Technology (2015), facilities may include e-commerce, e-government, e-health, e-agriculture, e-payments, e-banking, and e-education/learning. In addition to these, Pakistan Vision 2025 places a strong emphasis on the use of cutting-edge technologies to promote both traditional and remote learning in the country. The Pakistani government is spearheading the country's technological revolution through a number of initiatives aimed at enhancing human resources, integrating IT into public and commercial sector activities, and improving infrastructure. With ongoing government support and efforts, tremendous progress has been found in many areas, particularly the country's higher education system. In addition to the Federal Ministries of Information Technology and Science and Technology, a number of organizations and agencies in Pakistan are promoting the expansion of Web-based facilities. These organizations include the Electronic Government Directorate, Pakistan Software Export Board, Pakistan Computer Bureau, Computer community of Pakistan, and Pakistan Telecommunication Authority.

Web-TV-based facilities in the higher education sector

The Pakistani government had integrated modern management practices and new technologies into the country's higher education system in order to educate and upskill its workforce to global standards. Since its inception in 2002, HEC has made great progress, particularly in the field of ICT infrastructure in public universities across the country. PERN, PERN2, and NDL are world-renowned electronic books and databases. HEC created these three major programs to give all staff and students in Pakistan's governmental institutions, as well as other research and development organizations, access to online materials and high-speed Internet access. In addition to these activities, HEC is financing domestic and international conferences and workshops to promote digital culture in Pakistan (Pakistan HEC, 2015a).

As a result of these initiatives, university research cultures have grown stronger, and research outputs have greatly improved. Furthermore, these policies have created and promoted Web-TV-based services in Pakistan's higher education sector. Pakistan and the Azad Jammu and Kashmir area currently have 167 universities and degree-granting institutions in both the

private and public sectors (Pakistan HEC, 2015c). Every college and institution in the country provides students with web-TV-based resources 24 hours a day, seven days a week, to satisfy their information and academic demands. When Mairaj conducted a study on how frequently people accessed Pakistani university libraries' websites in 2013, she discovered that they were substantial sources of knowledge for them.

E-learning is a major component of virtual education, enabling students to gain from it. Many educators have supported e-learning, or virtual learning, arguing that the majority of educational e-learning apps are just exact replicas of conventional, in-person teaching techniques (Safdar, Javed, & Amin, 2020). This method encourages access to higher education by utilizing cutting-edge teaching techniques and approaches. The foundation of virtual education is a participatory and active learning strategy that engages students in their education through dialogue and introspection. According to Martín, Acal, (Martín, Homrani, and Mingorance (2021), this method works well for self-motivated and learning-oriented students who participate in the teaching process through constructive, cooperative, goal-oriented, and reflective activities.

From certificate programs to PhD programs, Allama Iqbal Open University (AIOU) offers distance education to the general public through a variety of delivery methods, including online, blended, and traditional distance learning. Through the use of several Moodle apps, the Aahgai Learning Portal maintains this technology-enabled learning environment while offering MPhil and PhD programs. The teachers and tutors employ a lot of applications, such as file, label, URL, large blue button, etc. While there are instances where students are content and involved, it was necessary for tutors and instructors to make use of programs that may maximize student involvement and raise satisfaction levels (Afzal, Ashfaq, & Mushtaq, 2024).

Theoretical framework of the study

According to Venkatesh et al. (2003), a number of factors directly influence user acceptability and usage behavior, including performance expectancy, effort expectancy, social influence, and facilitating conditions. The current competing theories have led to a redefinition of these four constructs. . PE specially refers to the level to which an individual thinks that using the system will make them to enhance their accomplishment at work. Such as the UTAUT theoretical model, behavioral objective determines how technology is basically used. Expected outcome, effort expectancy, social importance, and facilitating circumstance are the four main devise that directly influence the anticipated Feasibility of using the technology. Gender, Age, experience,

and voluntary use all moderate the effect of predictors (Venkatesh et al., 2003). EE Show how accessible, the system is. SI is the level to which an individual feels that important others think they ought to use the new method. FC indicate how much an individual believe there is an organizational and technological infrastructure in place to facilitate system use. Furthermore, the UTAUT model now contains essential moderators like experience, gender, age, and voluntariness.

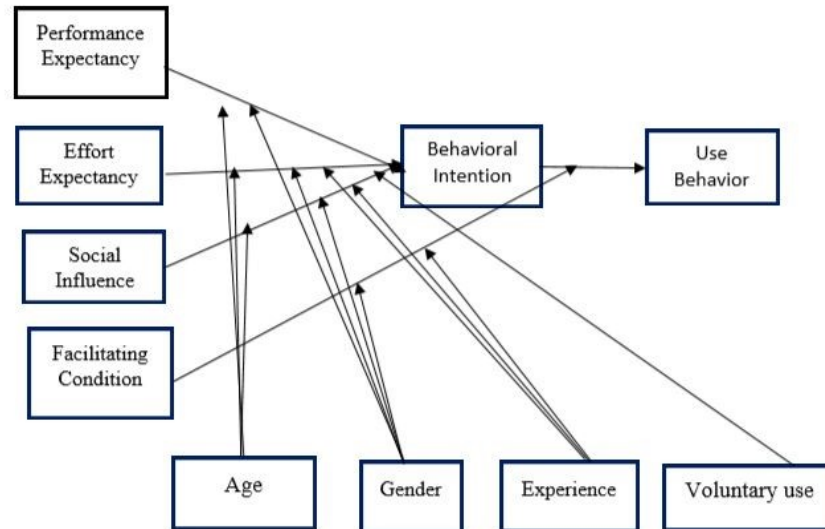


Figure 1. UTAUT model (Venkatesh et al., 2003)

Performance expectancy: Performance expectancy is defined as "believes that using the system will assist him or her achieve gains in job efficiency" (Venkatesh et al., 2003). Performance expectancy is based on a number of concepts from the Technology Acceptance Model (TAM), TAM2, Combined TAM and the Theory of Planning Behavior (CTAMTPB), Motivational Model (MM), Model of PC Utilization (MPCU), Innovative Diffusion Theory (IDT), and Social Cognitive Theory (SCT), including perceived usefulness, intrinsic incentive, job fit, relative advantage, and outcome expectations. It is the best measure of usage intention and is significant in both required and optional circumstances (Wang, Zhou, and Lu &2010; Thong, Venkatesh, & Xu, 2011).

Effort expectancy: A "level of ease connected with the application of the system" is the definition of effort expectation (Venkatesh et al., 2003). Because TAM, MPCU, and IDT have comparable definitions and scales,

effort expectation is based on perceived complexity and ease of use. After prolonged use of technology, the construct's impact becomes insignificant (Gupta, & Dasgupta, 2008; Jaiswal, & Chauhan, 2016).

Social Influence: According to Venkatesh et al. (2003), social influence is the extent to which an individual believes others think they should utilize the new system. Social influence is associated with subjective norms, social factors, and image constructs used in TRA, TAM2, TPB, CTAMTPB, MPCU, and IDT because they show how people modify their conduct to fit the perceptions of others. Social influence has a significant role while using technology (Venkatesh et al., 2003). Venkatesh (2003) asserts that people may use technology in a required setting more out of a need to fit in than out of personal preference.

Facilitating conditions are "the levels that an individual considers that the organizational and technical framework exists to facilitate the use of the system" is the definition of facilitating conditions (Venkatesh et al., 2003). Mutual compatibility, perceived behavioral regulation, and facilitating conditions constructs from TPB, CTAMTPB, MPCU, and IDT combine to generate the facilitating conditions construct. The intention to use is positively impacted by facilitating situations, although the effect fades after first use. Accordingly, the model suggests that use behavior is directly and significantly impacted by facilitating factors (Venkatesh et al., 2003). The reducing influences of age, gender, experience, and voluntariness of use define the strength of predictors on intention. Age has a moderating effect on all four indicators. Gender influences the relationships between performance expectancy, effort expectancy, and social influence. Experience modifies how strongly social influence, effort anticipation, and enabling variables interact. According to Venkatesh et al. (2003), voluntariness only regulates the relationship between intentional behavior and social impact.

Objective of the study

- 1) To determine how students use and are satisfied with Allama Iqbal Open University's (AIOU) Web-TV-based services.
- 2) To determine the effect of (AIOU) Web-TV-based services on demographic variables (age, gender, experience, and volunteer).
- 3) To investigate the factors that impact and inspire students to use AIOU Web-TV-based facilities.

Research Questions

- 1) What is the level of student satisfaction with AIOU's Web-TV-based postgraduate services?

- 2) What factors affect postgraduate students' motivation to use AIOU's Web-TV facilities?

Methodology

The study's purpose was to see how much the AIOU Web TV affects and satisfies students' motivation to continue their education using Pakistani theory. This section discusses the research design and methodological approaches, and the methods for obtaining and analyzing data are also described. The survey research approach was particularly helpful in gathering data for a quantitative exploratory investigation. According to Creswell (2009), survey research is used to quantitatively justify, analogize, or represent attitudes, beliefs, and actions. Using a survey study approach based on a questionnaire, the factors influencing students' use of AIOU Web-TV-based services and student satisfaction were investigated, taking into account the nature of the phenomenon being studied and the relevant literature. Because the study's population was geographically distributed throughout Pakistan, a survey research approach was recommended.

Data collection from such a huge sample would not have been possible using the systematic random sampling technique. This study only used descriptive statistics since it was planned as a descriptive study, with the goal of summarizing and presenting sample characteristics rather than testing hypotheses or determining causal correlations. The major goal was to describe patterns, trends, and impressions in the data, using measures of central tendency.

Inferential statistics are commonly employed when the goal is to forecast, generalize, or test hypotheses about a wider population using sample data. However, in this study, the emphasis was on characterizing the current situation rather than drawing population-level conclusions. As a result, descriptive statistics were the most appropriate analytical approach to correspond with the study's research objectives.

Population and Sample

The population of the study was distance post-graduate learners of M. Ed and other programs (Spring 2023 and onward). Out of the 120 respondents, 100 sent back their completed surveys. The data of the students (contacts, emails) were provided by the regional office of AIOU (Regional Office Timergara Dir Lower). Out of 120 students, 100 students were selected in the sample.

Method for Data Collection

Quantitative Research Approach was used. Descriptive research design. Using a survey study approach based on a questionnaire, the aspects

impacting students' utilization of AIOU Web-TV-based facilities and student satisfaction were examined. For this purpose, quantitative data were collected through a survey by employing a questionnaire from postgraduate students of AIOU, through Google Forms. The data of the students (contacts, emails) were provided by the regional office of AIOU (Regional Office Timergara Dir Lower). The enrolled students at AIOU were given the URL to an online Google form, which was used to collect empirical data by registered mail. Students submitted their replies directly through the web-based Google form. The respondents clearly understood the study's goal and committed to keeping the information they contributed confidential. Out of the 120 respondents, 100 returned their completed surveys. The research tool was developed by modifying pre-existing measures from studies pertaining to UTAUT. The questionnaire included items on learner motivation and satisfaction in addition to four parts that corresponded to UTAUT characteristics. The Likert scale, which ranges from "strongly disagree" to "strongly agree," has five points for each item. Three senior faculty members with expertise in educational technology reviewed the content to confirm its legitimacy. To guarantee clarity and improve phrasing, 30 students participated in a pilot study. Cronbach's alpha reliability study confirmed internal consistency by yielding acceptable values over 0.80 for all constructs.

Response Rate

A response rate of at least 75% was required for survey research (Connaway & Powell, 2017). The inquiry had a total response rate of 83% (100). According to the reviewed literature, several studies utilizing equivalent theoretical frameworks showed diverse response rates in their findings (90.3% for Chang et al., 2015; 93.8% for Jaradat & Banikhalel, 2013; 86% for Deng et al., 2011; 62.5% for Paola et al., 2011). This poll received a sufficient number of responses to allow for a quantitative analysis of the research theories.

Analysis of Data

To run statistical tests suitable for those levels of measurement, the survey instrument collected nominal data from the demographics part and ordinal data from the Web-TV-based facility student satisfaction sections. All statistical tests were conducted using SPSS (version 20.0).

Findings

Gender wise response

According to gender statistics, 63% of respondents were female and 37% of respondents were male (Figure 2).

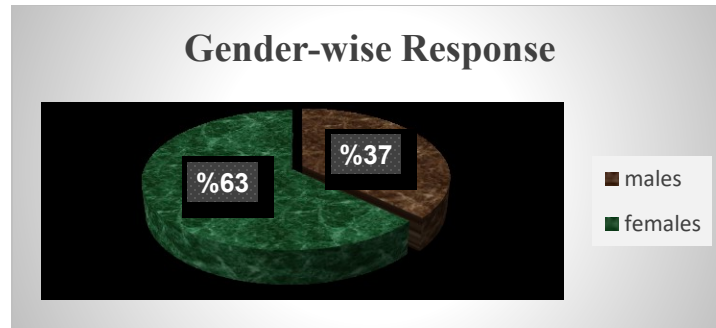


Figure 2. Respondents' gender wise distribution

Most of the respondents, or 46% of the students, were between the ages of 21 and 25, followed by 32%, 17%, and 26–30 years old and 31–35 years old, respectively, according to the age group study. The age range of only 5% of responders was 36–40. It is clear from this research that the majority of respondents 78% out of 100% were young and fell within the 21–30 age range (Figure 3).

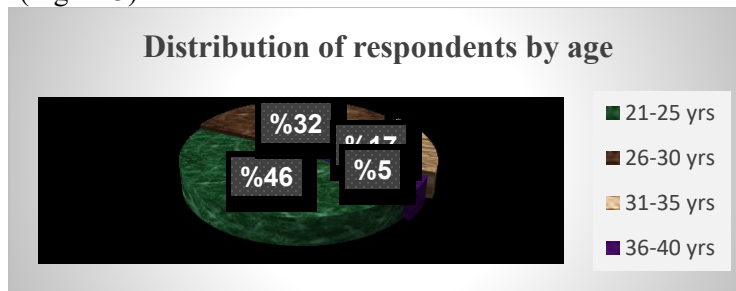


Figure 3. Respondents' age distribution

Figure 4 shows that the greatest number of respondents (67) in Pakistan were from rural areas, with 33 representing urban areas, according to the statistical analysis of location-wise responses.

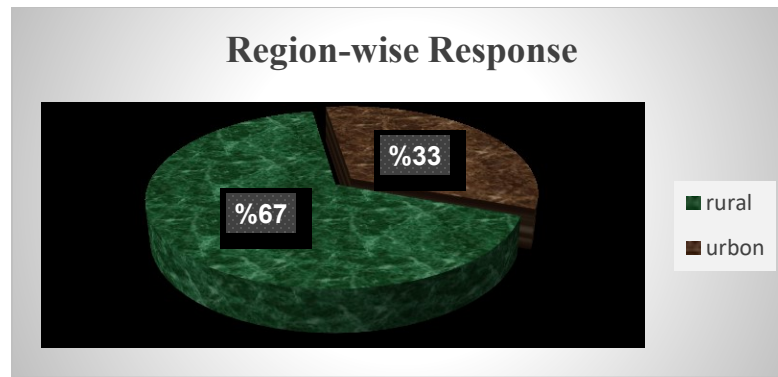


Figure 4. respondents' location-wise distribution

Respondent Satisfaction with AIOU's Web-Based Facilities

In the study on respondents' satisfaction with their use of AIOU Web-based facilities, students who participated in the survey were asked to score their level of satisfaction on a five-point Likert scale. Table 1.1 presents a descriptive study of respondents' satisfaction with the Web facilities, with the Web amenities arranged in order of average value. Table 1 shows descriptive data about user satisfaction with AIOU's web-based amenities.

Table 1

User satisfaction with AIOU's web-based amenities

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	mean
Q1	I am satisfied with AIOU web-TV	100	55	37	7	0	1	3.16
Q2	Web TV of AIOU provides me with interesting information on my studies	100	20	71	7	2	0	3.12
Q3	I will recommend the use of the Web TV service of AIOU to other students	100	21	59	18	2	0	3.09

Most of the students agreed as well as strongly agreed with the use of Web facilities, as could be seen from the means values illustrated in Table 1. These included satisfaction with AIOU web-TV (mean=3.16), the ability of Web TV to provide interesting information about studies (mean=3.12, and the recommendation of making use of AIOU web TV service to other students (mean=3.09).

Factors Influencing the Use of AIOU Web-Based Facilities by Students

The study's third component discusses the variables influencing how well students utilize AIOU's web-based facilities. Such as effort expectancy, performance expectancy, and social influence, facilitating conditions, and students' behavioral intention to usage and actual use are presented in this section.

Factors Influencing Students' Usage of AIOU Web-Based Facilities: Descriptive Statistics

Students who participated in the survey were asked to rate their agreement or disagreement with each of the study model's central claims on a five-point Likert-type scale that went from Strongly Disagree to Strongly Agree. The descriptive analysis of the responses pertaining to the variables influencing the students' utilization of AIOU Web-based facilities is presented in the Tables following.

Performance Expectancy

The descriptive analysis of the learner' perceptions of performance expectations is shown in the table 2. The majority of respondents agreed, and many of them strongly agreed that Web-based facilities were helpful in helping them complete their academic tasks swiftly and easily. Furthermore, they felt that by using the Web facilities, students could obtain the necessary information quickly, which improved their academic achievement. Table 2 presents descriptive statistics based on the opinions of 100 respondents regarding their performance expectations when using AIOU web-based facilities.

Table 2

Descriptive statistics about students' performance expectations when using AIOU web-based facilities

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	mean
Q4	I complete my schoolwork fast. by using the Web TV of AIOU	100	20	49	24	6	1	2.96
Q5	My academic performance enhance after using the Web TV of AIOU	100	23	47	27	2	0	2.93
Q6	I can access the required information on appropriate time by means of the Web TV of AIOU	100	18	57	21	4	0	3.01

Most of the students agree and strongly agree with the use of Web facilities, as can be seen from the means values shown in Table 2. Examples of these include using AIOU's web TV to complete academic tasks quickly (mean=2.96, improving academic performance (mean=2.93, and utilizing AIOU's web TV to obtain necessary information on time (mean=3.01).

Effort expectancy

The descriptive analysis of the students' perceptions of effort expectation is presented in Table 3. The majority of students concurred that using the Web facilities is simple, and they agreed firmly. Additionally, through the use of the AIOU website, the students were able to easily and rapidly access pertinent material online and obtain the necessary information well in advance.

Descriptive statistics also show that even on their first visit to the website, students had no trouble using the Web facilities. Table 3 presents

descriptive statistics based on the opinions of 100 respondents regarding the effort expected for utilizing AIOU Web-based facilities.

Table 3.

Descriptive statistics about the effort expected for utilizing AIOU Web-based facilities

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Q6	I can get the required information well in time by means of the Web TV of AIOU	100	18	57	21	4	0	3.01
Q10.	I can easily watch videos on the web TV of AIOU for my study purposes. It's easy for me to access	100	27	55	15	3	0	3.09
Q12.	relevant information online on the web TV of AIOU	100	20	58	16	6	0	3.03

Social influence

Most students concurred that their own conduct and that of their peers influenced how they used Web-based facilities (Table 4).

Table 4

Descriptive data of respondents' perceptions of how social influence affects their use of AIOU Web-based facilities (N=100)

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	mean
Q7.	I am motivated by myself to use the web TV of AIOU	100	18	57	21	4	0	3.01
Q8.	My friends motivate me to search for material on the web TV of AIOU.	100	27	55	15	3	0	3.09

Facilitating conditions

The descriptive analysis shown in Table 5 makes clear that over 50% of the respondents agreed or strongly agreed with the statement that they need a strong internet connection in order to download videos from AIOU's web TV. Overall, the information provided about the enabling conditions shows that the students had the tools they needed and could access AIOU Web-based facilities.

Table 5

Descriptive statistics based on the opinions of 100 respondents about how enabling conditions affect the use of AIOU Web-based facilities

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	mean
Q11.	I have a strong internet connection to download videos from the web TV of AIOU.	100	19	47	24	10	0	3.86

Students' intention to make use of AIOU Web-based facilities in a behavioral way

The students disclosed that their preferred method of obtaining knowledge is through Web-based facilities that facilitate instruction via mobile devices. Additionally, they would like to tell other students about these programs (Table 6).

Table 6

Descriptive statistics of respondents c about their behavioral intention to make use of AIOU Web-based facilities

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	mean
Q13.	Web TV of AIOU has provided education in our pockets through mobile phones I will recommend the use of the Web TV service of AIOU to other students	100	24	59	12	4	1	4.16
Q3.		100	21	59	18	2	0	3.90

Actual use of AIOU Web-based facilities

According to Table 7, most students who responding to the survey agreed or strongly agreed that the AIOU Web TV offers fascinating information about their academic pursuits. According to the actual use mean values (mean=3.12, the majority of respondents agreed that they utilized these Web-based resources for educational purposes.

Table 7

Descriptive statistics of respondents (N=100) regarding actually making use of AIOU Web-based facilities

	Statements	N	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	mean
Q2	Web TV of AIOU provides me with interesting information on my studies	100	20	71	7	2	0	3.12

Discussion

The subsequent section addresses research findings on the elements that influence the use of online TV facilities. According to the study's model, effort expectancy, performance expectancy, social effect, facilitating settings, and other factors all influenced students' intentional behavior to use AIOU Web-based services. The study's findings revealed that a variety

of factors, like social influence, performance expectations, effort expectations, and students' behavioral intents, influenced how students in a distance learning environment used AIOU Web-based facilities. The following section explores these difficulties.

According to Luo and Remus (2014), user satisfaction with Web-based facilities correlates with utilization volume. According to Byun and Finnie (2011), consumers may lose interest in adopting and using a website if the user interface is difficult to use. Likewise, Boling and (2013) stated that understandable instructions, rapid access, and help all increase user satisfaction regarding Web-based services. Iqbal (2014) went on to explain how information quality, system quality, effectiveness, and ease of use influence university students' behavior in Pakistan when selecting and using websites.

Performance Expectations

The following section addresses research findings on the elements impacting web TV facility utilization. According to the inquiry model, effort expectancy, performance expectancy, social influence, facilitating settings, and a variety of other elements all influenced students' behavioral intention to use AIOU Web-based facilities. The study's findings revealed that a variety of factors, such as social influence, performance expectations, effort expectations, and students' behavioral intents, influenced how students in a distance learning environment used AIOU Web-based facilities

The following section will go over these points. Venkatesh et al. (2003) provided an initial model that included performance expectancy as a key factor in determining behavioral intention. Numerous studies conducted in similar settings (Awwad & Al-Majali, 2015; Iqbal, 2014; Jaradat & Banikhalel, 2013; Chen, 2011; Deng et al., 2011) have found that performance expectancy has a positive influence on behavioral intention to use an information system.

Effort Expectation

The second determining factor, effort expectancy, was found to be strongly and directly correlated with students' behavioral intention to use AIOU Web-based facilities. The respondents agreed that AIOU's Web TV provided them with easy access to the information they needed. Users' familiarity with the Internet and satisfaction with most Web facilities may explain their ease of use of these sites. Users may lose interest in adopting and using a website if the UI is difficult to use (Byun & Finnie, 2011).

Social Influence

The number third variable, social impact, significantly demonstrated the students' behavioral intention to use the Web-based facilities. The study

on the usage of Web facilities in the Pakistani environment found that close friends and classmates had a positive effect on students' behavioral intentions. The discovery of social influence, like the other components, was consistent with Venkatesh et al.'s (2003) initial model. Several prior studies have shown that social influence has an impact on users' behavioral intentions (Chang et al., 2015; Jaradat & Banikhalel, 2013).

Facilitating Conditions

The fourth major characteristic of the theoretical model, enabling conditions, was discovered to be important in forecasting the real-world adoption of AIOU Web-based facilities. It means that students will be more likely to use Web resources if they have access to computers, the Internet, the necessary knowledge, skills, and online assistance. These components may also improve the level of user comfort. This result supported the original model's conclusions (Venkatesh et al., 2003). This finding is align with the findings of comparable studies, according to a review of the literature (Awwad & Al-Majali, 2015; Deng et al., 2011).

Student Behavioral Intentions

When assessing actual utilization of the AIOU Web-based facilities, it was revealed that the fifth factor, students' behavioral intention, was the most essential in the current inquiry model. According to this study, students will have favorable intentions to utilize Web-based services if they find them useful, easy to use, and socially impacted by those around them. More specifically, they will encourage other students to make use of these resources. The original Venkatesh et al. (2003) model supported the behavioral intention finding. Furthermore, a number of relevant studies conducted in various countries have supported the notion that behavioral intention to use influences actual use of Web-based facilities (Deng et al., 2011).

Conclusion

The use of web-TV-based systems to supply information facilities in the educational sector is growing in importance. Poor acceptance and underutilization of information technology have been major barriers to developing countries' ability to benefit from it. Targeting the country's outlying areas, AIOU is the only remote learning university in the country. Instead of traveling to the university's main campus or regional campuses, students mostly use their own resources (such as their mobile phone, home, place of employment, Internet café, or a relative's or friend's house) to access Web-TV-based amenities. Since the university's regional campuses are only located in the biggest cities in the country and lack Web

TV platform infrastructure, most students do not travel there to take advantage of the Web-TV-based amenities.

The descriptive assessment of the participants' experiences using the Internet and Web-TV services demonstrated that they were Internet literate and able to use the Web-TV facilities. The study's findings led to the following recommendations: It appears that the students used their resources mostly to access Web-TV facilities rather than the resources provided by the University's main campus and AIOU campuses. As a result, it is recommended that the Regional Directorate Campuses and the Directorate of ICT, both in charge of expanding the university's technical infrastructure, take additional steps to improve computer laboratories and Wi-Fi connectivity on regional campuses. Remote learners will be able to fully utilize Web-TV features as a result of such infrastructure enhancements. Web-TV-based facilities appear to have a good impact on students' academic achievement, which encourages them to use them more frequently. The university's IT department should seek to improve the usability and capacity of Web-TV services so that they can meet the information needs of both existing and potential users. The section may assess the enhanced Web-TV facilities with the help of the University's Research and Evaluation Center, which conducts user satisfaction surveys for the academic programs it delivers.

References

- Allama Iqbal Open University. (2015a). *About us*. <http://www.aiou.edu.pk/AboutUs.asp>.<http://www.aiou.edu.pk/AboutUs.asp>
- Ameeq, M., Hassan, M. M., & Jabeen, M. (2018). Appraisal of quality education and the role of teachers in the character building of students. *Research on Humanities and Social Sciences*, 8(17), 29–36.
- Ameeq, M., Hassan, M. M., Jabeen, M., & Fatima, L. (2018). Impact of teacher absenteeism on student achievement: A case of South Punjab District Muzaffargarh, Pakistan. *Education*, 9(16), 1–8.
- Afzal, M. T., Ashfaq, S., & Mushtaq, S. (2024). Revolutionizing distance learning through technology: A case study of Allama Iqbal Open University. *Pakistan Journal of Society, Education and Language*, 10(2), 139–157.
- Awwad, M. S., & Al-Majali, S. M. (2015). Electronic library facilities acceptance and use: An empirical validation of the unified theory of acceptance and use of technology. *The Electronic Library*, 33(6), 1100–1120. <https://doi.org/10.1108/EL-05-2014-0086>.
- Arshad, A., & Ameen, K. (2015). Usage patterns of Punjab University Library website: A transactional log analysis study. *The Electronic Library*, 33(1), 65–74. <https://doi.org/10.1108/EL-12-2012-0155>.
- Akbar, F. (2013). *What affects students' acceptance and use of technology* [Master's thesis]. Dietrich College of Humanities and Social Sciences, Carnegie Mellon University, Pittsburgh, PA, United States.
- Allahawiah, S. R. (2013). Factors affecting the use of e-facilities from user perspectives: A case study of Al-Balqa' Applied University. *Journal of Management Research*, 5(2), 45–64. <https://doi.org/10.5296/jmr.v5i2.3180>.
- Baloch, F. (2016, January 8). Telecom sector: Pakistan to have 40 million smartphones by the end of 2016. *The Express Tribune*. <https://tribune.com.pk/story/1023231/telecom-sector-pakistan-to-have-40-million-smartphones-by-end-of-2016>.

- Byun, D. H., & Finnie, G. (2011). Evaluating usability, user satisfaction, and intention to revisit for successful e-government websites. *Electronic Government, an International Journal*, 8(1), 1–19. <https://doi.org/10.1504/EG.2011.037749>.
- Creswell, J. W. (2009). Mapping the field of mixed methods research. *Journal of Mixed Methods Research*, 3(2), 95–108. <https://doi.org/10.1177/1558689808330883>
- Connaway, L. S., & Powell, R. R. (2017). *Basic research methods for librarians* (6th ed.). Santa Barbara, CA: ABC-CLIO.
- Chang, S. S., Lou, S. J., Cheng, S. R., & Lin, C. L. (2015). Exploration of usage behavioral model construction for university library electronic resources. *The Electronic Library*, 33(2), 292–307. <https://doi.org/10.1108/EL-09-2013-0158>.
- Chauhan, S. & Jaiswal, M. (2016). Determinants of acceptance of ERP software training in business schools: Empirical investigation using the UTAUT model. *The International Journal of Management Education*, 14(3), 248–262.
- Deng, S., Liu, Y., & Qi, Y. (2011). An empirical study on determinants of web-based question-and-answer facilities adoption. *Online Information Review*, 35(5), 789–798. <https://doi.org/10.1108/14684521111176507>.
- Gupta, B., Dasgupta, S. & Gupta, A. (2008). Adoption of ICT in a government organization in a developing country: An empirical study. *The Journal of Strategic Information Systems*, 17 (2), 140–154.
- Harpel-Burk, P. (2006). Medium-sized universities connect to their libraries: Links on university home pages and user group pages. *Information Technology and Libraries*, 25(1), 12–23. <https://doi.org/10.6017/ital.v25i1.3340>.
- Internet World Stats. (2016). *Internet usage statistics*. <http://www.internetworldstats.com/asia/pk.htm>.
- Iqbal, M. (2014). Factors affecting the students' selection and use of websites [Unpublished master's thesis]. University of the Punjab, Lahore, Pakistan.
- ISPAK. (2015). *Internet facts*. <http://www.ispak.pk>.

- Jaradat, M. I. R. M., & Banikhaled, M. (2013). Undergraduate students' adoption of website-service quality by applying the Unified Theory of Acceptance and Use of Technology (UTAUT) in Jordan. *International Journal of Interactive Mobile Technologies*, 7(3), 22–29. <https://doi.org/10.3991/ijim.v7i3.2559>.
- Kayani, M. B., Haq, M. E., Perwez, M. R., & Humayun, H. (2011). Analyzing barriers in e-government implementation in Pakistan. *International Journal for Infonomics*, 4(3), 494–500. <https://doi.org/10.20533/iji.1742.4712.2011.0059>.
- Khan, F. A., & Ahmad, B. (2015). Factors influencing electronic government adoption: Perspectives of less frequent internet users of Pakistan. *International Journal of Scientific & Technology Research*, 4(1), 1–10.
- Luo, M. M., & Remus, W. (2014). Uses and gratifications and acceptance of web-based information facilities: An integrated model. *Computers in Human Behavior*, 38, 281–295. <https://doi.org/10.1016/j.chb.2014.05.042>.
- Thong, J.Y.L., Venkatesh, V., Xu, X., Hong, S. & Tam, K.Y. (2011). Consumer Acceptance of Personal Information and Communication Technology Services. *IEEE Transactions on Engineering Management*, 58(4), 613–625.
- Rumble, G. (2019). *The planning and management of distance education*. London, UK: Routledge.
- Schlosser, C. A., & Anderson, M. L. (1994). *Distance education: Review of the literature*. Washington, DC: Association for Educational Communications and Technology.
- Safdar, G., Javed, M. N., & Amin, S. (2020). Use of the Internet for educational learning among female university students of Punjab, Pakistan. *Universal Journal of Educational Research*, 8(8), 3371–3380.
- Said, A. (2006). *Accessing electronic information: A study of Pakistan's digital library*. International Network for the Availability of Scientific Publications. https://www.inasp.info/sites/default/files/2018-04/accessing_electronic_information.pdf

- Sandhu, K., & Corbitt, B. (2003, August). User learning experience in web-based systems: A case study. In R. Kwan, E. W. T. Ng, & C. K. Kwan (Eds.), *International Conference on Web-Based Learning* (pp. 253–263). Springer. https://doi.org/10.1007/978-3-540-45153-4_49
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. <https://doi.org/10.2307/30036540>.
- Zhou, T., Lu, Y. & Wang, B. (2010). Integrating TTF and UTAUT to explain mobile banking user adoption. *Computers in Human Behavior*, 26(4), 760-767.

<p>Khan, S. (2025). Role of AIOU's web TV in motivating students to learn at the postgraduate level: A quantitative study. <i>Pakistan Journal of Distance and Online Learning</i>, 11(1), 61-86.</p>
