

VIRTUAL UNIVERSITY'S NEW LEARNING MANAGEMENT SYSTEM (LMS) : STUDENT EXPERIENCES

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ABSTRACT

Conventional education has taken on a new meaning in the last several years. It's no longer necessary to be in class to learn, due to the internet and modern technologies. If you're online, you can obtain a great education anytime and whenever you choose. A new age has dawned with the advent of online schooling. With the advent of learning management systems and a rise in home computer use, more and more students and teachers are turning to online learning environments. Learning management system implementation is a significant decision for every higher education institution. Student-faculty engagement may be encouraged through virtual chats, discussion forums and announcement publishing. The purpose of this study was to uncover issues caused by the new LMS, which affected student academic performance. This study was done utilising a quantitative research method. Three campuses in the district of Sahiwal were selected as the study population for the virtual university, which enrolled 200 students. Simple random selection was used to choose 120 students for the research sample. For data collection, a self-developed questionnaire was used. Descriptive statistics, such as percentage frequency, were utilised. Findings from the study revealed that students must be notified before any changes are made to the Learning Management System (LMS). Some of their academic activities will also be affected by this new structure. It was concluded that majority of students were having problems adjusting to the virtual university of Pakistan's newest learning management system. There was a consensus among students that the new system was less user-friendly than the old one. Videos showing students how to use a new Learning Management System were also recommended by the researchers (LMS).

KEYWORDS:

LMS, Performance. Virtual university, academic activities

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INTRODUCTION

The most cutting-edge university is now the Virtual University of Pakistan. It provides pupils with online education. Students at this university can study in the comfort of their own homes. Quality and advanced education is provided at the virtual university. In terms of course substance, no other university can match VU. An LMS is a web-based comprehensive platform offered by virtual universities. The Learning Management System (LMS) is a comprehensive framework that provides students with a wide range of useful materials. Included in these resources are video lectures and course content (reports, hyperlinks, etc).

ICT has altered many facets of modern life. Education and learning have also been impacted by ICT due to the integration of different educational technologies like computers, the internet, and smartphones. The Learning Management System (LMS) is a kind of e-learning platform, and the truth is that it is an endless process. There are no restrictions on the unit of time in this case. Geographical limitations do not apply to it. Through the implementation of a Learning Management System (LMS), learning may be both cost-efficient and effective. The Learning Management System (LMS) organises e-learning information in a single place that allows unrestricted access to e-learning resources. Using a Learning Management System (LMS), you can efficiently monitor student development and performance. Learning management systems (LMS) are designed to reduce the expenses associated with learning and development (L&D). A student's learning management system (LMS) may be used for scholarly activities, and he can also submit his questions on the LMS's MDB. The material for an LMS has been structured in a logical manner. If a student requires any course-related material, he can get it through his LMS. It is possible for teachers to change course content if there is an update. This allows students to see updated information. It's important for institutions to know exactly what they want to accomplish before investing in a learning management system. Iqbal (2011) suggested in addition to organisational goals and objectives, a learning management system should have a user-friendly graphical interface with an easily navigable course repository, course administration capabilities with the ability to interact among users and provide evaluation and feedback, as well as the student's profile and teaching methodology. Constructivist concepts with an emphasis on genuine activities, cognitive realism, and suspension of disbelief can assist in creating additional possibilities for an authentic experience within a learning management system. Constructing a learning management system that promotes deeper learning is difficult in the internet world (Herrington, 2006). Student inquiries are answered, and student performance is evaluated by administrators using the LMS. Throughout the semester, students take quizzes and participate in graded activities, such as assignments and GDBs, and these activities are reviewed by instructors in a systematic manner.



STATEMENT OF THE PROBLEM

There is a lack of ICT infrastructure at Pakistan's institutions, yet Virtual University relies on the latest technology. There is a full online education system at VU's doorstep, with no time or space restrictions. This institution provides students with a great education in the comfort of their own home or workplace. A top distance-learning university. As all processes are now conducted online, the demand for an integrated LMS is greater than ever. Teachers/instructors and students both utilise LMS. For the student, it is a way to access their learning materials, while for teachers, it is a way to keep track of their students' progress. Students' progress in a specific course is evaluated by the teacher, who announces, assigns, and administers quizzes. An LMS is a learning management system (LMS) where students perform academic activities and administrators oversee or evaluate these activities.

Virtual University has introduced some new features to its LMS and reorganised the entire layout of the LMS. This change was made to make it easier for students to utilise the LMS, according to the authors. This, however, did not occur in this instance. Our primary goal in this study is to investigate the difficulties that virtual university students are facing due to the latest version of the learning management system (LMS). This study also recognised the difficulties students faced as a result of this new addition or modification. If this new method has an influence on students' academic performance, it was also examined in this study.

RESEARCH OBJECTIVE

The main research objectives of the study are to:

1. To identify problems created by the new LMS and impact on students' academic activity.
2. To explore how this new LMS version affects student academic performance.

SIGNIFICANCE OF THE STUDY

If you have a huge audience to reach and a lot of content to offer, Learning Management Systems are an essential component in the planning and development process of your eLearning. This study's results are significant for students because they allow students to access their learning materials, while for teachers, it is a means to keep track of their students' development. In a certain course, the instructor evaluates the students' progress through announcing, assigning, and administering quizzes as well as evaluating these actions without delay.

REVIEW OF THE RELATED LITERATURE

As a whole, technology and learning management systems have seen significant changes in the last 15 years. It was in the 1990s when course management systems were first launched, and they've grown over time into what we now call learning management systems. Nowadays, learning management systems are nearly universally used in higher education institutions. To provide class information in the last 10 years, online learning management systems (OLMS) have supplanted previous methods such as live satellite or closed-circuit television (Falvo & Johnson, 2007). In higher education, Learning Management Systems (LMS) have become increasingly popular due to the creation and spread of the Internet (Chung, Pasquini 2013).

Online learning may be accomplished via the use of learning management systems (Almaiah et al., 2020). It has been noted by Kulshrestha and Pandey (2013) that LMS (learning management system) is becoming a highly effective interface for registration, controlling course context, assessing students through assignments and examinations, as well as institutional administration, assessment, and report production. You may create electronic learning materials, courses, and databases to track student progress. It's a great tool for educational institutions! (Paulsen, 2003). E-learning, virtual learning, and online education are all connected to learning management systems (LMS). Student attitudes about the use of e-learning platforms have been shown to be influenced by university preparedness (Al-araibi et al., 2019). The majority of education is now delivered through computers, the internet, and online courses, as well as, more recently, mobile phones. Educational technologists use a range of technological tools to transition education from the industrial era to the information age. Instructors and students may both benefit from these web-based or mobile software solutions for teaching and learning online.

A lot depends on how well e-learning is received by learners and how much the instructor's impact is felt. According to Selim (2007), ICT (Information and Communication Technology) is the foundation of Pakistan's first institution, The Virtual University, Pakistan. Only two institutions in Pakistan offer remote learning programmes. The university's virtual doors opened in 2002. Virtual University had set up a learning management system to offer courses on the internet, and it was working well.

There is a programme that allows the institution to keep track of all enrolled students and their progress (Javed, 2002). In 2016, the University of Education in Pakistan established a Learning Management System. The Virtual University of Pakistan was used as a source of inspiration for the software. To support learning and instruction at an institution, it was made available to students. This is a relatively new tool for instructors, and its primary goal is to help users acquire new information. However, there is a disconnect between the content and the user interface of this tool (Freire, 2012). Online learning, virtual learning, and online education all fall under the umbrella of learning management systems (LMSs). LMSs were by far the most often used equipment in higher education. These frameworks have also been the subject of debate among scientists since they were originally introduced. While the study rapidly analysed and discussed these difficulties, it posited that the causes for these issues are hypothetical, instructional, and mechanistic. There are a lot of problems with LMS, namely the underutilization of

intelligent highlights and poor student engagement. As a result of the rigid framework and dependence on instructor-focused techniques, pupils are unable to execute their jobs effectively (Alhazmi & Rahman, 2012). In the field of education, Learning Management Systems (LMSs) are web-based learning technologies that allow for the production, management, and distribution of clearly material. As a result of their research, Taat and Francis(2020) found the following factors affect student acceptance of e-learning: system usability, lecturers' characteristics and the system's quality, information quality, and technical support.

Learning management systems (LMSs) are expected to play an important role in modernising and supporting education and learning in an increasingly computerised world. During the covid-19 pandemic, A high degree of awareness among students and lecturers, a desire for a high level of information technology help, and support from management authorities were all important elements for E-learning, according to Alqahtani and Rajkhan (2020). Leveraging learning management systems (LMS) allows teachers to focus on preparing essential academic activities while allowing students better access to electronic resources to improve and expand their learning. Learning and offering successful critiques are two of the most important results of the learning examination. An LMS is commonly used to provide web-based and face-to-face learning opportunities for students.

A broad range of test chances and record-keeping space are made available to us through it. Online learning is defined as exposing course tools on the internet via Learning Management Systems (LMS); it can be used as part of a blended learning environment, where students use online learning for a portion of class time before moving on to discussions, skills practise, lectures, or projects (Schneider & Council: 2020). A study conducted by Snoussi (2019) looked at the difficulties that institutions encounter while implementing a learning management system in four private universities in the United Arab Emirates. Education and learning in an increasingly computerised environment will be supported and modernised with the help of learning management systems (LMSs). Yetik et al. (2020) showed the impact of open learning techniques on the delivery of communication courses; researchers demonstrated how Web-based course delivery technology has created an excellent platform for teaching practical media and journalism courses such as LMS.

RESEARCH METHODOLOGY

Virtual university students encounter in their studies led to the development of a learning management system that has been upgraded. Descriptive research design was used to obtain data from the virtual university students. This study was conducted using quantitative research methods.

POPULATION

The study's population was drawn from the three virtual university campuses in Sahiwal district. 200 students from the university's three campuses comprised the study's population.

SAMPLING TECHNIQUE AND SIZE

Simple random sample technique (Lottery method) was used to choose students from Virtual University Sahiwal Campus (VSWL01), Benazeer Institute of Information Technology (PCHW01), and The National College of Commerce and Information Technology (NCCIT01) (PCHW02).

INSTRUMENTATION FOR THE DATA COLLECTION

A questionnaire was utilised as a tool to collect data. The questionnaire was comprised of closed-ended questions that addressed the study's goals. The responders were asked thirteen closed-ended questions. Among the issues were the substance of the LMS and a decline in interest. Additionally, there were some comparisons made regarding the effects of academic activity. Quick and easy data collection is possible with the aid of an online survey. The questionnaire was distributed to virtual university students as part of an online survey.

DATA ANALYSIS

When the aim of the study is to provide survey participants' answers in order to answer research questions, descriptive statistics are the suitable analysis.

Table 1: Using the latest versionof LMS giving me the problems

| | Frequency | Percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 12 | 10 |
| Disagree | 32 | 26.7 |
| Neutral | 21 | 21 |
| Agree | 29 | 17.5 |
| Strongly Agree | 4.2 | 21.7 |

The table above displays the results of the survey, as well as the varied choices made by the virtual university students. There were 12 students who strongly disagreed, and the percentage of these students was 10%, 32 students disagreed, and the percentage of these students was 26.7 percent, 21 students neutral, and the percentage of these students was 17.5 percent, 29 students agreed, with a percentage of 24.2 percent, and 26 students strongly agreed, with a percentage of 21.7 percent.

Table 2: Using the latest version of LMS proving to be challenging

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 21 | 17.5 |
| Disagree | 29 | 24.2 |
| Neutral | 37 | 30.8 |
| Agree | 26 | 21.7 |
| Strongly Agree | 07 | 5.8 |
| Total | 120 | 100 |

Above table displays the results of the survey, as well as the varied choices made by the virtual university students. Virtual university students are made up of 21 students who strongly disagree and have a 17.5 percent disagreement rate, 29 students who strongly disagree and have a 24.2 percent disagreement rate, 37 students who are neutral and have a 30.8 percent disagreement rate, 26 students who agree and have a 21.7 percent disagreement rate, 7 students who strongly agree, and have a 5.8 percent disagreement rate.

Table 3: Studies and semester activities suffer from the new version of LMS

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 16 | 13.3 |
| Disagree | 29 | 24.2 |
| Neutral | 25 | 20.8 |
| Agree | 38 | 31.7 |
| Strongly Agree | 12 | 10 |
| Total | 120 | 100 |

Table 3 displays the responses of respondents, as well as the various alternatives chosen by virtual university students. 16 students were Strongly Disagree and the percentage of these students was 13.3 percent, 29 students were Disagree and the percentage of these students was 24.2 percent, 25 students were Neutral, and the percentage of these students was 20.8 percent, 38 students were Agree and the percentage of these students was 31.7 percent, and 12 students were Strongly agree.

Table 4: New version of LMS is very hard to use

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 18 | 15 |
| Disagree | 25 | 20.8 |
| Neutral | 28 | 23.3 |
| Agree | 35 | 29.2 |
| Strongly Agree | 14 | 11.7 |
| Total | 120 | 100 |

According to table 4the virtual university students selected a wide range of various possibilities. 18 students strongly disagreed with the university and the percentage of these students was 15%, 25 students disagreed with the university and the percentage of these students was 20.8 percent, 28 students were neutral, and the percentage of these students was 23.3 percent, 35 students agreed, and the percentage of these students was 29.2 percent, and 14 students strongly agreed with the university and the percentage of these students was 11.7 percent.

Table 5: Faced problem during uploading assignments on new LMS version

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 19 | 15.8 |
| Disagree | 28 | 23.3 |
| Neutral | 25 | 20.8 |
| Agree | 37 | 20.8 |
| Strongly Agree | 11 | 9.2 |
| Total | 120 | 100 |

Table 5 displays the responses of respondents, as well as the various alternatives chosen by virtual university students. 19 students were Strongly Disagree and the percentage of these students was 15.8 percent, 28 students were Disagree and the percentage of these students was 23.3 percent, 25 students were Neutral, and the percentage of these students was 20.8 percent, 37 students were Agree and the percentage of these students was 30.8 percent, and 11 students were Strongly agree.

Table 6: I watched video lectures and reading on new version of LMS with ease

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 16 | 13.3 |
| Disagree | 22 | 18.3 |
| Neutral | 25 | 20.8 |
| Agree | 44 | 36.7 |
| Strongly Agree | 13 | 10.8 |
| Total | 120 | 100 |

Table 6 displays the responses of respondents, as well as the different alternatives chosen by virtual university students. 16 students were Strongly Disagree and the percentage of these students was 13.3 percent, 22 students were Disagree and the percentage of these students was 18.3 percent, 25 students were Neutral, and the percentage of these students was 20.8 percent, 44 students were Agree and the percentage of these students was 36.7 percent, and 13 students were Strongly agree.

Table 7: New version of LMS affects my academic activity positively

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 14 | 11.7 |
| Disagree | 26 | 21.7 |
| Neutral | 28 | 23.3 |
| Agree | 31 | 25.8 |
| Strongly Agree | 21 | 17.5 |
| Total | 120 | 100 |

Table 7 illustrates respondents' responses as well as the various choices chosen by virtual university students. 14 students strongly disagreed, accounting for 11.7 percent of virtual university students; 26 students disagreed, accounting for 21.7 percent of virtual university students; 28 students were neutral, accounting for 23.3 percent of virtual university students; 31 students agreed, accounting for 25.8 percent of virtual university students; and 21 students strongly agreed.

Table 8: New version of LMS has more student engagement than older one

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 12 | 10 |
| Disagree | 25 | 20.8 |
| Neutral | 39 | 32.5 |
| Agree | 28 | 23.3 |
| Strongly Agree | 16 | 13.3 |
| Total | 120 | 100 |

Table 8 displays the responses of respondents, as well as the many alternatives chosen by students at virtual university. 12 students were Strongly Disagree and accounted for 10% of virtual university students, 25 students were Disagree and accounted for 20% of virtual university students, 39 students were Neutral and accounted for 32.5 percent of virtual university students, 28 students were Agree and accounted for 23.3 percent of virtual university students, and 16 students were Strongly Agree and accounted for 16 percent of virtual university students.

Table 9: New LMS increased face to face teaching

| Option | Frequency | Percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 17 | 14.2 |
| Disagree | 35 | 29.2 |
| Neutral | 25 | 20.8 |
| Agree | 24 | 20 |
| Strongly Agree | 19 | 15.8 |
| Total | 120 | 100 |

Table 9 displays the responses of respondents, as well as the various alternatives chosen by virtual university students. 17 students were Strongly Disagree and the percentage of these students was 14.2 percent, 35 students were Disagree and the percentage of these students was 29.2 percent, 25 students were Neutral, and the percentage of these students was 20.8 percent, 24 students were Agree and the percentage of these students was 20 percent, and 19 students were Strongly agree and the percentage of these students was 20 percent.

Table 10: New version of LMS has less distracting and irrelevant materials

| Option | Frequency | Percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 17 | 14.2 |
| Disagree | 35 | 29.2 |
| Neutral | 25 | 20.8 |
| Agree | 24 | 20 |
| Strongly Agree | 19 | 15.8 |
| Total | 120 | 100 |

Table 10 displays the responses of respondents, as well as the many alternatives chosen by students at virtual university. 12 students were Strongly Disagree and accounted for 10% of virtual university students, 26 students were Disagree and accounted for 21.7 percent of virtual university students, 25 students were Neutral and accounted for 20.8 percent of virtual university students, 41 students were Agree and accounted for 34.2 percent of virtual university students, and 16 students were Strongly Agree and accounted for 16 percent of virtual university students.

Table 11: The LMS providing new features to assess learners' interests

| Option | Frequency | Percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 15 | 12.5 |
| Disagree | 21 | 17.5 |
| Neutral | 29 | 24.2 |
| Agree | 39 | 32.5 |
| Strongly Agree | 16 | 13.3 |
| Total | 120 | 100 |

Table 11 displays the responses of respondents, as well as the many alternatives chosen by students at virtual university. 15 students were Strongly Disagree and 12.5 percent of them were virtual university students, 21 students were Disagree and 17.5 percent of them were virtual university students, 29 students were Neutral and 24.2 percent of them were virtual university students, 39 students were Agree and 32.5 percent of them were virtual university students, and 16 students were Strongly Agree.

Table 12: The count of the new LMS is not helpful

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 08 | 6.7 |
| Disagree | 23 | 19.2 |
| Neutral | 33 | 27.5 |
| Agree | 39 | 32.5 |
| Strongly Agree | 17 | 14.2 |
| Total | 120 | 100 |

Table 12 displays the responses of the respondents, as well as the various alternatives chosen by virtual university students. 8 students were Strongly Disagree and the percentage of these students was 6.7 percent, 23 students were Disagree and the percentage of these students was 19.2 percent, 33 students were Neutral, and the percentage of these students was 27.5 percent, 39 students were Agree and the percentage of these students was 32.5 percent, and 17 students were Strongly Agree and the percentage of these students was 14.2 percent.

Table 13: I lost interest in online education due to new version of LMS

| Option | frequency | percentage |
|-------------------|-----------|------------|
| Strongly Disagree | 15 | 12.5 |
| Disagree | 30 | 25 |
| Neutral | 24 | 20 |
| Agree | 39 | 32.5 |
| Strongly Agree | 12 | 10 |
| Total | 120 | 100 |

Table 13 displays the responses of respondents, as well as the various alternatives selected by virtual university students. 15 students were Strongly Disagree and the percentage of these students was 12.5 percent, 30 students were Disagree and the percentage of these students was 25%, 24 students were Neutral, and the percentage of these students was 20%, 39 students were Agree and the percentage of these students was 32.5 percent, 12 students were Strongly agree and the percentage of these students was 10%.

FINDINGS

- Half the students in the study believe the new version of LMS is very hard to use.
- The findings of the study reveal that they are facing login problems in the new LMS.
- A majority of the students believe that the content of the new LMS is not helpful.
- The findings of the study reveal that they lost interest in online education due to the new version of LMS.
- The findings of the study uncovered that the Learning Management System provides new features to assess learners' interests.
- A majority of the students believe that the new version of LMS has fewer distracting and irrelevant materials.
- A majority of the students have the opinion that they watched video lectures and readings on the new version of LMS with ease.
- A majority of the students think that there is no option for face-to-face teaching.
- Half of the respondents believe that the new version of LMS has more student engagement than the older one.
- Majority of the students believes that new version of LMS affect their academic activities positively.
- Half population of the study have opinion that uploading and downloading materials is relatively easy in new LMS.

DISCUSSION

Choosing a learning management system for a university is a big deal. The cost is a significant consideration. After deciding on a learning management system, many higher education professionals question how to best utilise it to improve

student and instructor learning. The findings of (Herrington, 2006) Using a learning management system may make creating a richer learning experience difficult. Using a learning management system to help students discover answers fast may help them become more self-reliant and in control of their own education (Iqbal, 2011). Results of research backed up by (Almaiah et al., 2020).

Adzharuddin & Ling (2013) further on the LMS's operation and issues, confirming the findings. According to Vord and Pogue (2012), several aspects of online education take much longer per student than in a traditional classroom. New features may be added if they suit the needs of various learners. As learning management systems grow increasingly prevalent in higher education, future and present research should concentrate on enhancing their functionality for students, instructors, and institutions. Snoussi (2019) studied the challenges universities in the UAE have while adopting a learning management system at four private institutions. Alqahtani and Rajkhan (2020) found that high levels of awareness among students and teachers, as well as high levels of IT assistance, backed up the study's findings. Weaver, Spratt, & Nair, (2008).also confirmed the study results that quality of learning management system impact on students' academic achievement. Meriem, & Youssef, (2019) results of the study back up the results of this study that factors influencing e-learning adoption like change in LMS.

CONCLUSION

The researchers concluded that the vast majority of students were having problems adjusting to the virtual university of Pakistan's newest learning management system. The new features of the LMS caused confusion among students. Even the rapid adoption of the technology resulted in additional difficulties. According to students, all modifications to the Learning Management System must be communicated to them in advance (LMS). This new organisational structure will also have an effect on some of their scholarly efforts. Students of both sexes are experiencing comparable problems with the new learning management system. Additionally, there is a clear connection between the new LMS and the academic activities of students. The new system, pupils agreed, was less user-friendly than the previous one. This happened as a consequence of log-in issues with the new system, which resulted in pupils losing out on academic activities.

RECOMMENDATIONS

1. Students should be notified when the learning management system undergoes modifications.
2. Students' issues may be resolved via the provision of video tutorials on how to utilise a new Learning Management System (LMS).
3. Technical support should be accessible 24 hours a day in the new LMS to help students with any technical problems they may have with the system.
4. To make life simpler for students, the new version of the LMS should be designed with distance learners in mind.

DELIMITATION OF THE STUDY

Because only Virtual University changed LMS, the sample size is too small to draw any general conclusions. As a result, future research should have a larger sample size and include students from a wider range of academic fields. In addition, a long-term research is needed to have a better understanding of how expectations and views about LMS e use have changed since it was initially introduced.

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