

Learning Management System

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Abstract: Education is considered as the shaping tool of people. In a developing country like India, education is very important to provide students with practical knowledge and experience. However, during tough situations like that of the pandemic will make in-class education really impossible. There comes the use of online platforms. The systems that are used for the learning of students and for the communication of teachers in a virtual environment are called Learning Management Systems (LMS). The LMS allows students and teachers to obtain quality education at low cost even without coming in real. These LMS were really helpful to cut the overall time wasted on factors like transportation, in between shifting, and much more. Learning Management Systems are created with various factors in mind, which can change according to the needs of various institutions. In this paper, the approach to design a LMS is based on the common needs that any institution would require.

Keywords: in-class education, LMS, low cost, virtual platform.

1. Introduction

Learning Management Systems are helpful in reducing the development time of organizations, and also to reserve, control training content, and to keep track and to evaluate learner performance. In simple words, they are a must for teaching people. However, one of the toughest problems faced by firms is the applying and adoption of a new Learning Management System, which is very complicated and tricky. Selection of the right LMS for the organization and using it is a massive investment in time, energy, and cost. The main objectives of Learning Management System practices are to help apply a winning strategy from scratch. These carefully adopted top LMS can help people in every step of the process.

2. LITERATURE SURVEY

Chirag Patel, Mahesh Gadhavi, Dr. Atul Patel, has proposed "A survey paper on e-learning based learning management Systems (LMS)" International Journal of Scientific and Engineering Research • June 2013. The paper carefully defines the model of their LMS was designed with the help of referring Moodle. The LMS has a primary focus on three main topics such as quizzes, forums, and assignments. It uses the web-mining approach. The paper also discusses some of the factors contributing to the selection, applying and difficulties in the working area. Renu Sabharwal, MdRahat Hossain, RiteshChugh, Marilyn Wells, has proposed "Learning Management Systems in the Workplace: A Literature Review", In 2018 IEEE International Conference on Teaching, Assessment and Learning for Engineering. The objective of this paper is to improve the userfriendliness of the Learning Management System. To enhance the usage of LMS for employee training, usability must be explored. This research paper provides a narrative literature review. Narrative studies are generally based on the availability of literature or the author's selection. Jennifer Watson, has proposed "Learning Management Systems in Higher Education- The University of Alabama". Deeper learning principles can be utilized in a variety of ways in a learning management system, Virtual chat, discussion boards and announcement postings all allow for the social learning element, encouraging interaction between faculty and students. Interactive tests with immediate feedback facilitate active learning where practice and real world tasks are emphasized. Carefully chosen hyperlinks to websites let students explore additional information in a contextual way, integrating the knowledge into the student's world. First, the selection process and implementation of a course management system is a basis for consideration. Next, integrating the course management system into theoretical approaches commonly used in face to face courses presents challenges. Lastly, managing the conflicting needs and expectations regarding the experience in the learning management system is another element of this significant issue.

Darren Turnbull, Ritesh Chugh& Jo Luck (2020), has proposed "Learning management systems: a review of the research methodology literature in Australia and China", International Journal of Research & Method in Education 2020. The methodology adopted in this review, draws on the strengths of two main approaches to literature reviews: narrative and systematic. Narrative review is a critical analysis of the literature of a chosen topic. Narrative reviews are broad in nature and do not describe in detail the methods employed to collect and analyze the literature selected for examination. Systematic reviews are characterized by explicit, transparent methods that can be reproduced. Nor Azura Adzharuddin and Lee Hwei Ling, Member, have proposed "A Study of the Effectiveness of Learning

Management System on Student Engagement, Motivation and Performance in Higher Education". The Objective of this paper sought to explore the effects of LMS on student engagement, motivation and performance by comparing students who have access to LMS Moodle with those students who do not have access to LMS Moodle, to study the Effectiveness of LMS for student engagement, motivation and performance, study to effectiveness of the extent of use of LMS features on student Engagement, Motivation and Academic Performance in the Experimental Group. Since the present study aims at studying the effectiveness of LMS Moodle on Student Engagement, Motivation and Performance, the Experimental method being the most suitable has been selected. The Research Design used for this study was the Experimental method posttest only design; it will help to fulfill the objectives of the study. Easy to install, use and the wide support that is given by the open source community. The amount of time spent in Moodle, may not be an important factor but what they do in that time that is quality of time spent on the LMS is what is helping the experimental group to get engaged, motivated and perform better. Sarachandran Nair. C1 and Dr. Rajendra Patil2, has proposed "Construction and Validation of the Learning Management System Success Scale in the Higher Education Setting in Global Journal of Business and Social Science Review". The methods of education have become outdated and a large number of institutions have started to move towards the new learning management systems for skills needed for the students. The paper uses a quantitative method on 379 responses from a variety of universities students on education from India and Maldives. Iuliana Dobre, has proposed "Learning Management System-Based Evaluation to Determine Academic Efficiency Performance- Sustainability 2020". The objective of this paper is to evaluate a model for which architecture design, configuration, metadata, and statistical coefficients were obtained using four Learning Management Systems (LMSs). That allowed us to determine reliability, accuracy and correlation. using and integrating the factors that other researchers have previously used, only using isolated models, such as Anxiety-Innovation (AI),

Utility and Use (UU), Tools Learning (TL), System Factors (SF), Access Strategies (AS), Virtual Library (VL), and Mobile Use(MU). Hala Jamal & Ameera Shanaah, has proposed "Learning Management System success: Increasing Learning Management System usage in higher education in sub-Saharan Africa" in International Journal of Education and Development using Information and Communication Technology(IJEDICT), 2015. The objective of this paper is to investigate whether the adoption of LMS is fulfilling their potential through analyzing the literature published on LMS usage from across the region. The article concludes by proposing strategies that can help institutions make more effective use of their LMS. It is important to ensure that LMS implemented in sub-Saharan Africa are successful given the fact that any failures of LMS implementations are likely to be high on account of the limited availability of resources. Improving usability of LMS Developing and uploading quality learning materials Enhancing support services Reviewing relevant policies Increase awareness of Making use of mobile LMS applications Complementing with Social Media, It supplement traditional face-toface delivery where faculty members develop and share digital learning materials via the Internet. Joel S. Mtebe, has proposed "Learning Management Systems: The Game Changer for Traditional Teaching and Learning at Adult and Higher Education Institutions in Global Journal of HUMAN-SOCIAL SCIENCE": G Linguistics & Education Volume 19 Issue 6 Version 1.0 Year 2019. The paper has concentrated on the need to explore the influence of the learning management system in old methods of teaching in higher educational organizations. The approach of the paper is via qualitative research method. The paper has taken their model form the platform called Moodle to check the performance and efficiency.

N. Partheeban and Dr. N. Sankar Ram, have proposed "The Role of Learning Management Systems in Educational Environments: An Exploratory Case Study". The aim of this research is to explore the role of LMS integrated with classroom education from the user's perspectives. In particular, we aim to identify and explain patterns of learning

and teaching activities using LMS, which is in our case, it refers to Blackboard in a blended learning context. The use of LMS facilitates communication with students through managing course materials, assignments, and announcements. It reduced face-to-face contacts between teachers and students, and some activities, which are an important part of the learning process. Radoslava Kraleva, Mehrudin Sabani, Velin Kralev, has proposed "e-Learning Management System Using WebServices -ICICES2014 -S.A.Engineering College, Chennai, Tamil Nadu, India". E - Learning fulfils the thirst of knowledge and offers online content that can be delivered for the learner at anywhere, anytime and any age through a wide range of e-learning solutions e - learning management system with web services oriented framework and SOA. This system supports the cross browser and is fully integrated with different databases. The system can facilitate personalized delivery of contents based on the individual learner's knowledge and learning preferences. It will provide participants with an extensive list of summaries of related resources that they can choose to read, Lack of Practical Training. E - Learning is a great tool to get accessible and paperless course material and guides. Sonia Sachdeva, Dr. Kavita, has proposed "Learning Management System (LMS) among University Students: Does It Work?" In International Journal of e-Education, e-Business, e-Management and e-Learning, Vol. 3, No. 3, June 2013. LMS might encounter some problems, It's all part and parcel of learning and using a whole new system altogether, lecturers have an easier time reaching out to their students out of class hours and can instantly update them over the LMS about issues regarding their coursework. It is an environment with digital software, which is designed to control the user. LMS might encounter some problems, it's all part and parcel of learning and using a whole new system altogether. Subburaj Alagarsamy, Margret Vijay, has proposed "A Study on Impact of LMS of students of a university college in Sultanate of Oman" in IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 2, No 2, March 2012 It is an environment with digital software, which is designed to control the user Learning intercession and

delivering learning material and sources to students. Students with better basic skills in the internet perceived the internet to be supportive of learning environment by using the internet for their learning tasks and also generally had better attitudes toward using the internet to improve their studies learning task enhance effectiveness in learning and increase learning productivity is more important than the easy to use, There is also a problem of the extent of security of online learning programs. The authenticity of a particular student's work is also a problem as online just about anyone can do a project rather than the actual student itself. Fatih Soykana, Burak Şimşeka, has proposed Learning Management Systems for higher education - an overview of available options for Higher Education Organizations in The 6th International Conference Edu World 2014 "Education Facing Contemporary World Issues", 7th - 9th November 2014 The first part of this paper presents the main challenges which have to be faced by HEOs when selecting and implementing a LMS, as well as the second part of the paper is dedicated to a rundown of the main alternatives available for HEOs from the main families of LMSs. Low cost solution. specialized software licenses, maintenance involved from the user side. Extremely mobile solutions do not require a face-to-face interface. Possible to personalize the education as required and as necessary and also capable to provide personalized and instant feedback to users able to take the advantage of the latest achievements made available by the ICT technologies developments and also which will prove sufficient flexibility from the point of view of resources involved (hardware, software, human, financial) keeping those to the lowest level possible. Ana Paula Lopes, has proposed "Learning Management system in Higher Education" - July 2014 The increase in the usage of laptops and the internet has increased the opportunities for students and teachers to communicate, share, and collaborate more easily. The paper finds out that there are two communication tools asynchronous and synchronous. With the help of the assessment tools, the contents can be stored in one place. The paper concludes by telling that for a LMS obtain positive outcomes, learning the

management systems have to be adjusted to one's particular institutional framework.

. OBJECTIVE

The objective of this project is to incorporate all the three important elements such as video streaming, audio, power point, pdf at one place. This project overcomes the problem of going to several websites for attending classes. It also eases the student and teacher interaction by involving both students and teachers through an interactive-friendly user system. Learning Management System objective categorize into three; they are Video streaming ,which creates an virtual classroom for educational purposes or for online meeting, E-Content where we can store and retrieve lecture tutorials, video lectures and e-content materials in pdf.

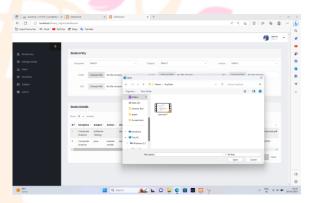


FIGURE 1: Upload of video

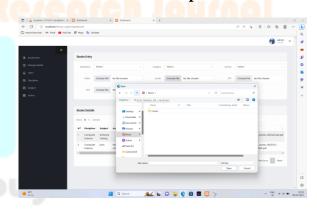


FIGURE 2: Upload of audio

4. METHODOLOGY

In LMS. PHP is the basic languages that the project is developed. It mainly focuses on three activities: video streaming, e-content and Evaluation. Improving usability of LMS. Developing and uploading quality learning materials. On the user's

side, students have to register their ID by selecting username and password by providing necessary details. Then each user profile will be maintained by the user when desired. Details of the person, along with their username and password, will be saved in the database. After registration, the student can log in to the LMS homepage. Students can access their course information; materials like pdfs and e-content materials, etc. And also attend the test for evaluation purposes.



FIGURE 3: Home page for admin

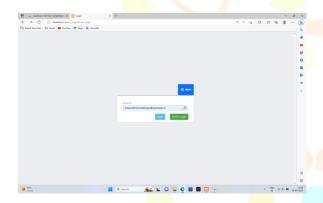


FIGURE 4: Home page for user

5. Conclusion:

The major objective of the research is to investigate the factors influencing the learning management system success among students. From this study, several major conclusions can be drawn. First, technology characteristics which are system quality and information quality were the major factors affecting the success of the learning management system. Information quality had a better impact compared with system quality. Second, personality characteristic which is readiness for online learning had a very weak impact in the learning management system. Therefore, readiness for online learning is not a success factor. Third, system use had a high impact

in the user satisfaction which means that motivating the students to use the system increase the students' satisfaction which lead to the success of the system. Fourth, user satisfaction and system use directly impact the students' outcome. Both the two variables worked as the engine for LMS success. Five, information quality through system use had the second most influencing impact in the LMS success. In other words, high value toward perceived usefulness goes beyond this consideration. Therefore, there are still wide possibilities for future research to investigate the effects of other attributes. Information quality had the highest impact in the learning management system success. It is important to enhance this factor by motivating lecturers to prepare better material for students to understand, to upload appropriate and relevant contents that fit best to the students' expectations. Also, system quality had a good impact in the learning management system success. It is recommended to develop the system to be more user-friendly, to add tools and services for interaction and to make the system attractable with modern look and rich features. Motivating the students to use the system is important by forcing them to frequently use the system and making the system part of the continuous learning process. This could be achieved by adding new features and by motivating lecturers to be more active in the system. Increasing system use will enhance the students' satisfaction which will increase the LMS success. In general LMS success can be enhanced by increasing the quality of the content and the features of the system. Students must be motivated by lecturers to use the system by making all offclass activities via the LMS system.

References:

- 1. Chirag Patel, Mahesh Gadhavi, Dr. Atul Patel, "A survey paper on e-learning based learning management Systems (LMS)", International Journal of Scientific & Engineering Research, Volume 4, Issue 6, June-2013.
- 2. Sabharwal, R, Chugh, R, Hossain MR & Wells, M, 2018, 'Learning Management Systems in the Workplace: A Literature Review', In 2018 IEEE International Conference on Teaching, Assessment

- and Learning for Engineering (TALE), 4-7 December, Wollongong, Australia, pp. 387-393, doi: 10.1109/TALE.2018.8615158.
- 3. Jennifer Watson, The University of Alabama, "Literature Review: Learning Management Systems in Higher Education."
- 4. Nor Azura Adzharuddin and Lee Hwei Ling, Member, IACSIT, "Learning Management System (LMS) among University Students: Does It Work?", International Journal of e-Education, eBusiness, e-Management and e-Learning, Vol. 3, No. 3, June 2013.
- 5. Sarachandran Nair. and Dr. Rajendra Patil, "A Study on the Impact of Learning Management Systems on Students of a University College in Sultanate of Oman", IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 2, No 2, March 2012.
- 6. Iuliana Dobre, "Learning Management Systems for higher education an overview of available options for Higher Education Organizations", The 6th International Conference Edu World 2014 "Education Facing Contemporary World Issues", 7th 9th November 2014.
- 7. Hala Jamal & Ameera Shanaah, "The Role of Learning Management Systems in Educational Environments: An Exploratory Case Study."
- 8. Joel S. Mtebe, "Learning Management System success: Increasing Learning Management System usage in higher education in sub-Saharan Africa", International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2015, Vol. 11, Issue 2, pp. 51-64.
- 9. N. Partheeban and Dr.N.SankarRam, "e-Learning Management System Using WebServices", ICICES2014.
- 10. Radoslava Kraleva, Mehrudin Sabani, Velin Kralev, "An Analysis of Some Learning Management Systems", International Journal on Advanced Science Engineering and Information Technology August 2019.

- 11. Sonia Sachdeva, Dr. Kavita, "E-Learning System in Indian companies, scope and future: A comparative study", International Journal of Engineering and Innovative Technology (IJEIT) Volume 6, Issue 12, June 2017.
- 12. Subburaj Alagarsamy, Margret Vijay, "Construction and Validation of the Learning Management System Success Scale in the Higher Education Setting", Global Journal of Business and Social Science Review 2019.
- 13. Fatih Soykan, Burak Şimşek, "Examining studies on learning management systems in SSCI database: A content analysis study", 9th International Conference on Theory and Application of Soft Computing, Computing with Words and Perception, ICSCCW 2017, 24-25 August 2017.
- 14. Darren Turnbull, Ritesh Chugh and Jo Luck, "Learning Management Systems: An Overview", August 2019.
- 15. Ana Paula Lopes, "Learning management systems in higher education," Conference 7th-9th July 2014, Barcelona, Spain.
- 16. Brenda Juárez Santiago, Juan Manuel Olivares Ramírez, et al. "Learning Management SystemBased Evaluation to Determine Academic Efficiency Performance", Sustainability 2020.
- 17. Dr. Lester Reid, "Learning Management Systems: The Game Changer for Traditional Teaching and Learning at Adult and Higher Education Institutions."
- 18. Taralynn Harthell and Steve Chi-Yin-Yuen, "Video Streaming in Online Learning", AACE Journal, 2006.
- 19. Irfan Syamsuddin, "Review on Intelligent Video Streaming Schemes for Cloud Computing", 5th Int'l Conf. on Advances in Science, Engineering, Technology and Natural Resources (ICASETNR17) Aug 2016.