LIMITATIONS OF THE DIGITAL LEARNING TOOLS
OF THE 21ST CENTURY

Annotation. This paper takes a step forward and investigates into the higher education industry of Latvia and seeks to understand the labyrinth of the teachers & students with the use of digital learning platforms such as «Learning Management Software», (LMS) and for this particular article the LMS platform investigated is (Moodle), in one particular higher education institution (HEI) of Latvia, International College of Cosmetology (ICC). The research tries to analyze the limitations students’ & teachers’ face during the exercise of such digital tools in their daily routine and what do they demand or seek more from such LMS platforms. Based upon the analysis of the results, a potential new LMS modification is suggested that will help to suffice the current Latvian HEIs’ need and demands with the changing educational trends and help the academics, stakeholders attached to the educational sector incorporate an LMS platform that is based and formulated on the study of the local market & people.

Keywords: LMS, digital learning, education, labyrinth, teachers, students

Introduction. The amalgamation and innovative use of digital technologies, in educational learning practices have now developed in to a priority policy across Europe. Digitalization of learning practices has been widely accepted as well as supported by various member states of the European Union. The digitalization of education is a vital point for Europe’s vision 2024, which specifically focuses on projects such as the digital agenda and innovation agenda, jobs, new skills and many more. The Advisory Group on Learning and Teaching of European Union in respect
towards higher education specifically underlines that technology boosts and opens new ways of organizing and structuring digital learning and teaching practices (EHEA, 2021). The old contemporary way of learning practices is now paving way to the new digital learning practices across the globe. Moreover, the students have become more tech savvy and expect a very interactive way of learning via variety of technological tools, most common of them are cell phones, laptops, high speed internet. Therefore, it is equally important for the educational institutions engaged in providing higher education in Europe and specially in Latvia to understand the importance of digital learning practices and take examples from other countries failures and success in an aim to implement digital learning technologies in higher education.

The 21st century today demands an educational structure which caters to the demands and skills of the new generation in this digital age (OECD, 2019). As per Ferri and colleagues (Ferri.et.al, 2020, pp. 2-3) it is mentioned that a digital learning system implemented properly acts as a very crucial support structure for the delivery of modern constructive coaching. Rehman and colleagues (Rahman.et.al, 2019, pp. 1533-1534) further establish facts that to cater the need of and support the «Digital Technologies», the LMS sounds easy and faster way of education, especially in the times of current Pandemic that has made the entire education industry switch to online mode of education”, however adapting to these digital technologies is not always easy. However, Zanjani and colleagues (Zanjani.et.al, 2017, p. 19) argue that many colleges and universities that have the LMS platform of learning have reported lack of motivation and interest among the students and teachers to use them to their potential, another issue is that these LMS need a training in order to understand how to use and exploit them to their optimum for greater results. The transformation of any organization from that of an «Old School» to the new digital age sounds easy but is actually not that simple. Colleges/universities/organizations that have previously tried the digital transformation with old contemporary methods reported that the results were not great or satisfactory. As per Abita and colleagues (Abitia.et.al, 2021, pp. 1-4) it is stated that the common myth in today’s world is that, everyone is tech
savvy and thus its always presumed by LMS designers that the potential end user is going to adapt to the learning tool whilst they explore it. However, it is often not the case and the end user either ends up needing lots of help, or finding themselves in a jeopardy of using such tools ending up in a lack of motivation as well as enthusiasm.

**Literature.** According to Paul & colleagues (Paul.et.al, 2018, pp. 13-15), The notion for digital education is modifying hastily and therefore it is a difficult topic to debate upon. On a common perspective digital education is perceived as a «practice where technologies play an important role and is instrumental in exercising the delivery of education, mainly encompassing the systems that enable educational practices, areas that are accountable as well as devoted towards technology and the promotion of the same, binding the education system as a whole which involves digital learning as well. It is about how digital learning can be felicitated by the appropriate application of digital technologies in educational management, leadership as well as administration management». Paul & colleagues (Paul.et.al, 2018), further identifies that digital education is a theory as well as an exercise of educational advances towards the attainment of effective teaching & learning. Digital Education is beneficial in the advancement of the employment of technologies in the company’s administration human resources, as well as technology and services management. Thus, the notion of digital education is regarding towards the technologies in education systems and theoretical dealings of the policies in the direction of the educational elevation and growth. Which comprises of improved and strengthened teaching and learning activities.

According to Paul & colleagues (Paul.et.al, 2018) digital education and learning can possibly be defined as that wide idea that is mainly concerned with the educational matter, where learning is primarily focused by the means of digital tools and technologies. Nowadays it is seen that digital learning is essentially needed in various spheres of the educational sector. For example, many educational bodies are already practicing the use of it religiously such as, higher educational institutes, various public and private universities & colleges etc. However, it is mostly seen been exercised mainly in highly developed countries and taking this opportunity even
schools have started to practice it to some extent. The widely circulated and accepted form of digital learning are flexible learning classroom technologies, electronic course content, digital-textbooks, various learning analytics to measure a learner’s performance, as well as digital learning objects. Digital learning is also termed as educational technology and this when incorporated in teaching is known as technology enhanced learning. This mode of learning is basically concerned with application of the educational practices that aids in the medium of transfer of knowledge amongst the learners.

As stated by the Lonik (Lonik, 2017), in order to achieve the perfect outcome from the digital learning platform one needs to incorporate ICT, information and communication Technology to a great extent and that is when the real efficiency of this platform is achieved. As mentioned above that study materials, presentations, time tables, assignments etc. must be done via the means of technological tools available and hence, as per Devis & colleagues (Devis.et.al, 2020) Learning Management System (LMS) emerges as an answer to the 11 major elements of digital learning mentioned by the author (Lonik, 2017). According to Devis & colleagues (Devis.et.al, 2020, pp. 74-76) LMS is a tool that is answering many attributes to the educational advancements on the digital sphere. Nowadays under the belt of LMS, various learning, teaching, administration and school management functions are carried out. Because of its versatility to support various aspects of technology and blend education with it LMS supported digital learning is conducted in many schools across the globe. According to Devis & colleagues (Devis.et.al, 2020), because of the versatility of LMS and its perfect utilization of technology it has become the ideal tool/ platform for various schools, high schools, colleges & universities to practice the use of it in their digital format of learning and education. Moodle is one such kind of LMS which is widely used and liked by many educational institutions.

As per Rahman & colleagues (Rahman.et.al, 2019) further warns that although LMS’s have huge capabilities and are widely answering most of the educational or learners needs they do come with certain limitations. One of the major limitations LMS’s faces now a day is the limitation of open source access. Open source access
means free to use, tweak and modify the platform according to an individual or organizational need. Further, LMS’s are designed by software companies that one needs to buy from and often the monopoly is between few companies and the end user still not able to tweak thing according to their specified needs. The LMS’s still lack the global community involvement and some of the other limitations are.

**Limitations:**

1. LMS still lacks in allowing an individual to have flexible determined goals as a learner in the educational process. The involvement is missing and the flexibility to tweak or modify.

2. LMS still lacks the method of inclusive learning which allows learner to connect outside the learning organization such as family & friends (for moral, educational and boost support). Involving parents with student’s study work can help learners, in many ways and so would give an idea to parents to understand what areas their kids are struggling and which course or subject they can help their kids with or should get what proper books, gadgets, tools for the kids to overcome such difficulties and develop skills.

3. LMS still lacks a well-planned individual approach and most of the reporting generated by the LMS are usually on the overall sectoral performance or of the particular group. The reports generated of the learner’s performance is according to the course module designed or set by the teacher where there are limited options for the learner to choose his or her adaptive way of learning thus, these reports generated give an overall general view but not detailed.

4. LMS’s are still not able to integrate by many other software’s or tools, this needs to be overcome as there is a huge number of avenues to be explored that can make the LMS very interactive and interesting with cooperation & collaboration.

5. LMS’s still lack the in-depth professional personal support of the teacher, LMS’s should allow a place where a teacher can personally collaborate on consultation hours thus solving issues personally yet over the use of technology.

6. LMS’s most of them are either bought by one-time fees or have to be renewed on yearly basis and the cost for having such software’s in an organization is not cheap.
and therefore not many organizations can afford such. Further, the more advanced or integrated LMS is the costlier the subscription gets and the cost of its maintenance and service.

**Methodology.** This article contributes to this research segment by presenting a practical case study of the ICC in Riga, Latvia. ICC is an HEI engaged in providing higher education in cosmetology. The primary digital learning platform used in ICC is Moodle. Therefore, it is necessary to evaluate the efficiency of Moodle with the stakeholders of ICC, to understand the intended learning outcome (ILO) is achieved & the labyrinth of teachers & students in terms of using Moodle. ICC has incorporated MOODLE in their digital learning management system to compete with the technological advancements and at the same time deliver the ILO to the stakeholders. There is however, difference when it comes to the ILOs’, of stakeholders as each and every stakeholder has different expectations and learning outcomes. For instance, teachers, have their own goals and agendas where as students main aim is to access the learning materials and get knowledge by these digital educational tools. Similarly, management and course designers have their own expectations that MOODLE must answer.

**Model.** According to Govender & Grange (2018), Technology Acceptance Model (TAM) is the most extensively exercised as well as approved and validated model, that is being used to determine how the acceptance of new technology will be treated or taken in any given organization. However, the HEIs in order to incorporate the LMS into their institutions need to validate the LMS acceptance with the TAM model, as most of the researchers in the past have validated the technology by the use of theoretical models such as TAM or either by experimental validations. TAM is a well-organized and acknowledged trustworthy tool that is useful in forecasting the users’ approach towards the acceptance of numerous new and modern technologies that are infused into the market regularly. However, Govender & Grange (Grange.et.al, 2018) stresses that although TAM is widely acknowledged and trusted within the users of the business field, its implementation in the education field has been restricted. The HEI’s in order to incorporate the LMS into their institutions need
to validate the LMS acceptance with the TAM model, as most of the researchers in the past have validated the technology by the use of theory model such as TAM or either by experimental validations.

**Research sampling.** Research involves 2 purposeful samples: in total 90 students of ICC and 2 teachers were approached. All 90 students were active learners of aesthetic cosmetology and therapeutic massages second-year 2nd semester. The students were using Moodle for more than a year for learning & teachers for more than 3 years for teaching. Moodle is the main digital learning platform for ICC, apart from Moodle, Panopto & Visible Body, Zoom, Team Up types of digital platforms are used at ICC. Students were specifically asked questions regarding Moodle. Since they have been using Moodle to access lecture recordings, examinations, and quizzes during the Pandemic and after, it is more than a year they are engaged with the practice of Moodle for learning and the perfect respondents to measure & validate the acceptance of technology by a user.

**Research question.** What are the limitations in the current Moodle Platform of ICC? What improvements are required to make it more interactive & easy?

**Research methods.** The data has been obtained with the aid of primary as well as secondary sources. 1) data collection – learners’ survey (closed and open questions), The questionnaire helped in gathering information about students’ perspectives towards «Digital Learning Practice» and the limitations they face with Moodle. It further, helped in analyzing the interactiveness of the Moodle platform at ICC and what necessary changes the students suggest. (2) structured interview with two teachers of ICC was conducted. The interview reflected the perspective of teachers towards digital learning & teaching practice and how they adapt towards it. The interview also highlighted the labyrinth the teachers face in daily routine whilst exercising the practice of Moodle for learning purpose. Further, the interview reflected the teachers ease of acceptance and work with the Moodle platform and how they adapt to it.

**Research process.** Students who participated in the survey answered questions regarding their skills with information & technology, the time they spend daily on
digital learning tools, the current Moodle's interactivity, and possible improvement feedback for the LMS. Students, accepted the fact that the current Moodle Layout is very complicated and thus drives less enthusiasm to use it on a daily basis. Further, the students also highlighted their ability with technological skills and mentioned that due to the fact not all students are having high technological skills, most of the potential from the Moodle layout cannot be harnessed unless proper onboarding is provided. The teachers answered interview questions about technology complications, regular switching from one digital learning platform to another, and struggle with content creation, training provided by the management for practicing digital learning tools. Teachers, also stated that the complication with the current layout is the integration, limitations as most of the classes are moved as online, there is a huge void in the current layout that does not allow to attach, link or integrated study materials from other platforms.

**Research period:** May-2020 to Nov-2021.

**Discussion.** Both the teachers & students agreed that onboarding for any new technology incorporated by the ICC is provided by experts. However, teachers claimed that due to the fact current Moodle is a bit tricky and also not all functions are open for teachers it is difficult for them to explore & learn on their own. The content creation for the Moodle platform in an interactive & adaptable way is difficult as lack of time & skills to tweak, modify things in the digital learning environment. Difficult to have one content for all digital learning platforms thus difficulty in integration. The students emphasized that they seek interactivity in the current LMS that is Moodle. This highlights the fact that if the LMS is interactive it generates motivation to explore more and thus ease the difficulty by self-exploration.

**Conclusion.** LMS is a great tool to support digital learning, however, it needs to be designed in a simplified and unified way supporting easy integrations to other digital learning platforms. In case of ICC, the college needs to completely re-evaluate the effectiveness of their Moodle layout, take into consideration the stakeholders’ expectations and results and restructure the layout of the Moodle platform. As the world is going hybrid and the blended form of education is mostly replacing
classroom form of education, it is equally important for ICC, to make appropriate technological upgrades and necessary integration so that the adaptive learning is carried out with ease with less interference. This study provides a base to any HEI using Moodle as their LMS platform for digital learning, and can take lessons from ICC before implementing Moodle. HEIs must validate their LMS platform with the TAM methodology so that the right technology is infused in the right environment with the acceptance of the stakeholders of the HEI, towards making digital learning, successful, effective, interactive, and supportive.

References


