THE READINESS, ACCEPTANCE, SUCCESS AND CHALLENGES FOR ONLINE LEARNING IN UNIVERSITIES DURING THE PANDEMIC

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ABSTRACT

The closure of learning institutions due to the COVID-19 pandemic has impacted not only the students but also the teachers and school leaders. In response to school closures, the use of online, e-learning and distance learning platforms have remained a key option available for the continuation of learning. Since the beginning of the COVID-19 pandemic, universities around the world are taking rapid actions to ensure students learning continuity and secure the well-being of their students. The rationale was to examine the readiness, acceptance, success and challenges for online learning in universities during the pandemic. The paper established that e-learning comes with some challenges that must be addressed by universities before successful implementation can be fully realized. The paper also established that the Covid-19 pandemic has positively increase e-learning uptake in universities. Effective training is a key determinant for adopting online learning in educational institutions.

Key words: **Covid-19 pandemic, e-learning, online learning, distance learning, students learning continuity, readiness for online learning, acceptance of online learning**

INTRODUCTION

The deadly and infectious disease Corona Virus also known as Covid-19 has deeply affected the global economy. This tragedy has also shaken up the education sector, and this fear is likely to resonate across the education sector globally. The Covid-19 pandemic outbreak forced many schools and colleges to remain closed temporarily. Several areas are affected worldwide and there is a fear of losing this whole ongoing semester or even more in the coming future. Various schools, colleges, and universities have discontinued in-person teaching. As per the assessment of the researchers, it is uncertain to get back to normal teaching anytime soon. As social distancing is preeminent at this stage, this will have negative effects on learning opportunities. Educational units are struggling to find options to deal with this challenging situation. These circumstances make us realize that scenario planning is an urgent need for academic institutions (Rieley, 2020).

The urgent imperative to ‘move online’, caused by the recent Covid-19 pandemic (Chan, 2020), has added to the stresses and workloads experienced by university faculty and staff who were already struggling to balance teaching, research and service obligations, not to mention the work-life balance (Houlden & Veletsianos 2020). Teaching staff of all backgrounds and ages have had to prepare and deliver their classes from home, with all the practical and technical challenges this entails, and often without proper technical support.

Consequently, different countries worldwide have introduced various solutions during the pandemic to continue education progression (Hodges & Fowler, 2020). Online libraries support, TV broadcasts, guidelines, resources, video lectures, and online channels were introduced in at least 96 countries. To increase the coverage of the school lessons to the population, ministries of education around the world broadcasted live transmission of lessons

through TV channels in different subjects nationwide (Tang et al., 2021). Several arguments are associated with online learning. Accessibility, affordability, flexibility, learning pedagogy, life-long learning, and policy are some of the arguments related to online pedagogy. It is said that online mode of learning is easily accessible and can even reach to rural and remote areas. It is considered to be a relatively cheaper mode of education in terms of the lower cost of transportation, accommodation, and the overall cost of institution-based learning. The severe explosion of Corona Virus disease makes this paper add one more argument in terms of online learning, that is, online learning serves as a panacea in the time of crisis.

Theoretical Framework

The Unified Theory of Acceptance and Use of Technology (UTAUT) model forms a basis of this study. The model is made up of eight models and their extensions on user intentions to use information technology, with four core determinants of intention and usage, and up to four moderators of key relationships. Venkatesh and Davis (2000) identified factors that can be seen as external factors and the core factors of the technology acceptance models. There are many external factors that have been evaluated by scholars. Among them, subjective norms, relevance, self-efficacy, enjoyment, computer anxiety, and facilitating conditions have constantly been shown to have a significant impact on the users' cognition that ultimately leads to the use or non-use of e-learning. Unlike external factors, there are few core factors such as perceived ease of use, perceived usefulness, attitudes, and use intention that are integral parts of most of the acceptance models.

Readiness for Online Learning in Universities during the Pandemic

Zou, Li and Jin (2021) have defined readiness for online learning or e-readiness as a measure of students' inclination toward online delivery modes versus F2F instruction, their competence and tendency to utilize electronic communication, and their ability to undertake self-directed learning. Several studies concluded the significance of e-readiness in online learning from different perspectives. Giovannella, Marcello and Donatella (2020) claimed the success of online learning entirely relied on learners' and teachers' readiness levels, which seems to be absolute. Abd Samad, Ahmad, Harun, Noor, Ismail, Rahman and Justin (2018) believed low readiness level was the main reason for failure in online learning. Students' e-learning readiness was proved statistically as a significant predictor of their satisfaction for online instruction. Therefore, assessing readiness for online learning is highly relevant prior to delivering a course online either fully or hybrid and promoting readiness is essential for successful online learning experiences.

Rana, Ardichvili and Polesello (2016) defined self-directed learning, another component, as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. Learner control, which is also an important factor in online

learning readiness, is defined as the degree to which a learner can direct his or her own learning experience and process. Motivation can be divided into two categories: intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable and extrinsic motivation, which refers to doing something because it leads to a separable outcome (Farazkish & Montazer, 2020). Motivation towards online learning means having intrinsic and extrinsic desire in using online learning. Another essential dimension for overcoming the limitations of online communication is online communication self-efficacy, being defined as how well the learners can express their feelings and measuring the level of understanding of the communication language and culture.

Concerning instructors, teaching online requires a reconstruction of their roles, responsibilities, and practices. Understanding the level of teacher readiness for online teaching in an institution is a key component in the journey to successfully facilitating online courses and programs (Torun, 2020). The level of online instructors' e-readiness was evaluated using three scales: technical readiness, lifestyle readiness and pedagogical readiness to the e-learning system environment and it was found that the cohort surveyed were more technologically ready than in lifestyle and pedagogically (Yilmaz, 2017).

Perception of Online Learning in Universities during the Pandemic

Perceived ease of use is a key dimension that affects both behavioural intention and attitudes towards e-learning. Bączek, Zagańczyk-Bączek, Szpringer, Jaroszyński and Wożakowska-Kapłon (2021) defined perceived ease of use as "the extent to which a person considers that the use of a system is free of effort. Accordingly, when users perceived a system to be easy to use, they are more likely to accept it. Previous studies confirmed a significant association between perceived ease of use and perceived usefulness, attitudes, and behavioural intention in the context of e-learning. For example, Mukhtar, Javed, Arooj and Sethi (2020) identified a positive relationship between the perceived ease of use and perceived usefulness. Many researchers hypothesised that perceived ease of use of e-learning increases with the perception of how enjoyable the e-learning system is and the intention to use the system.

Nugroho, Basari, Suryaningtyas and Cahyono (2020) defined perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance". According to Baber (2020), perceived usefulness has a positive influence on the user's acceptance of various systems. An individual's behavioural intention to use systems is also positively affected by the perceived usefulness. However, in the context of e-learning, perceived usefulness is redefined as "the extent to which a student believes that the e-learning system may help to improve his or her academic performance, by facilitating the whole learning process in general and the completion of learning-related tasks in particular. Perceived usefulness is deeply embedded with factors including location/place, preferred time, feelings towards learning, and learning style when it comes to the e-learning systems (Allo, 2020).

Status of ICT Infrastructure in Kenyan Universities

The Government of Kenya has over the years improved the regulatory environment to promote growth of the ICT sector and increase availability of broadband Internet in the country. In 1999, the government established the Kenya Education Network Trust (KENET), a National Research and Education Network that promotes the use of ICT in Teaching, Learning and Research in Higher Education Institutions in Kenya. The main aim of KENET is to interconnect all the universities, tertiary and research Institutions in Kenya by setting up a cost effective and sustainable private network with high speed access to the global Internet. KENET currently provides Internet bandwidth to 90 member institutions and 150 campuses, including all large research institutions in Kenya (Bariu, 2020).

According to Makokha and Mutisya (2016), the networked PCs available per 100 students ratio was 3.8 in Kenyan universities, which was considered quite low. The e-readiness survey also indicated that 16,174 student lab computers were available for 423,664 students at the 30 universities and only 17% of students accessed computers from their campuses. On the other hand, 53% of students owned over 200,000 laptop computers in the 30 universities. It was therefore recommended in the report that universities should invest in student computer labs to serve the students who are unable to purchase laptop computers or those who may not wish to carry their laptop computers to university campuses. The e-readiness survey further revealed that universities in 2013 achieved Internet bandwidth of 4.0 Mb/s per 1,000 students compared to only 0.431Mb/s per 1,000 students in 2008.

Hadullo, Oboko and Omwenga (2018) however pointed out that although all universities are inter-connected to the national fiber backbone network, universities are not investing sufficiently in their internal campus backbone and wireless network infrastructure that will make it easier for students to use their own laptops and smartphones on campus to access learning materials and other student services. Equally, apart from the low PC ratio, the students considered the campus networks slow and unstable.

Challenges of Online Learning in Universities during the Pandemic

Online learning has so much of time and flexibility that students never find time to do it. Personal attention is also a huge issue facing online learning. Students want two-way interaction which sometimes gets difficult to implement. The learning process cannot reach its full potential until students practice what they learn. Sometimes, online content is all theoretical and does not let students practice and learn effectively. Mediocre course content is also a major issue. Students feel that lack of community, technical problems, and difficulties in understanding instructional goals are the major barriers for online learning (Nartiningrum & Nugroho, 2020).

In a study, students were found to be not sufficiently prepared for balancing their work, family, and social lives with their study lives in an online learning environment. Students were also found to be poorly prepared for several e-learning competencies and academic-type competencies. Also, there is a low-level preparedness among the students concerning the

usage of Learning Management Systems (Farrah & al-Bakry, 2020). In Kenya, internet connectivity is still low. Only 40% of the population uses the internet. A recent survey in 12 universities found just 19,000 out of 500,000 students enrolled for open and distance learning. Only a handful of universities have well developed IT infrastructure and the personnel to manage such systems.

The country also suffers from frequent power outages. This is aggravated by lack of standby generators or alternative sources of power. With no power, no work can be done. During the online exams in my institution, a prolonged power blackout led to the postponement of an entire examination session (Irfan, Kusumaningrum, Yulia & Widodo, 2020). For online learning to be successful, massive investments are needed in digital platforms, cloud-based systems and automation. The existing IT infrastructure needs an upgrade in capacity. The investments in digital infrastructure should go hand in hand with the retraining of staff.

A huge hurdle in achieving all of this is the funding gaps. Public universities are grappling with a decline in funding. In the 2021-2022 fiscal year, the higher education budget was reduced by US$37 million. Government austerity measures, staff layoffs, a freeze on employment and increased student enrolment will further strain the universities' finances. Private universities are equally struggling with lower student numbers (Hermanto & Srimulyani, 2021). Covid-19 pandemic had triggered a number of Universities to improve on their budgetary allocation towards e-learning activities. These have been made possible through vehement of funds which were meant for other projects to the e-learning kitty. Major universities have negotiated for their staffs, low rate data bundles which they can use effectively for both Lecturer and Students. Some of the Universities have also engaged on capacity building and staff training which have been done at a lower cost or generally free.

Lack of relevant technical skills on e-learning and e-content development by the teaching staff is a challenge hindering the implementation of e-learning in public universities. This emanates from inadequate training in e-learning skills among the majority of the teaching staff. In most cases, only a few of the teaching staff have been adequately trained on e-learning skills and some have been assigned the role of e-learning champion to replicate the same skills to other teachers, yet they fail to train their colleagues. E-learning skills for lecturers and relevant e-content are critical components necessary for successful implementation of e-learning, as such, public universities need to a lot of effort on them for better e-learning implementation outcome.

Teachers require training on the technical use and operation of the e-learning environment (Houlden & Veletsianos 2020). The training should cover basic knowledge and skills for handling e-learning hardware and software, and the skills to select critically the right media in a learning process. Teachers should also be aware of the new technologies that were developed and could be integrated into the daily teaching and learning practice.

Conclusion

This paper raises several issues that need to be addressed for the successful implementation of online learning in universities during the pandemic. The study concluded that e-learning infrastructure alone is not adequate to support the successful implementation of e-learning. In some universities, there are no reliable internet connection to support e-learning programs most of the time as required which brought many frustrations to both the teaching staff and students. The paper also concluded that internet bandwidth was not sufficient in most of the universities as it is below 100Mbps. Adequate awareness had not been done by most universities concerning the available learning management systems leading to such systems being underutilized. The paper concluded that most universities did not have e-learning policies to guide the implementation of e-learning systems. Also, the deep involvement of all stakeholders is likely to strengthen the use of e-learning on higher education institutions.
Covid-19 pandemic that has since led to learning institution closure globally, in just weeks could be seen to propagate e-learning as a means of carrying on with learning. This was to ensure that learning in various institutions proceed uninterrupted

Recommendations

Against the background of an unprecedented need to switch to online learning, there is need for (1) students to be able to fully accept and adapt to the increasingly rapid changes in technology; (2) lecturers to receive sufficient training; (3) institutions to have e-learning readiness as part of their overall strategy; (4) adequate financial support; (5) the right culture for e-learning, encompassing both social and psychological preparedness and the attitudes of all stakeholders. Meanwhile, eLearning can also extend beyond individuals to include institutions' policies, strategies, and practices in developing or supporting students' implementation of the tools of online learning.

REFERENCES

Abd Samad, N., Ahmad, W. M. R. W., Harun, H., Noor, S. N. F. M., Ismail, A., Rahman, M. W. A., & Justin, R. (2018). The Readiness Level of Using e-Learning Among Teacher Graduate Programme (TGP). In *MATEC Web of Conferences* (Vol. 150, p. 05004). EDP Sciences.

Allo, M. D. G. (2020). Is the online learning good in the midst of Covid-19 Pandemic? The case of EFL learners. *Jurnal Sinestesia*, *10*(1), 1-10.

Baber, H. (2020). Determinants of students' perceived learning outcome and satisfaction in online learning during the pandemic of COVID-19. *Journal of Education and e-Learning Research*, *7*(3), 285-292.

Bączek, M., Zagańczyk-Bączek, M., Szpringer, M., Jaroszyński, A., & Wożakowska-Kapłon, B. (2021). Students' perception of online learning during the COVID-19 pandemic: a survey study of Polish medical students. *Medicine*, *100*(7).

Bariu, T. N. (2020). Status of ICT infrastructure used in teaching and learning in secondary schools in Meru County, Kenya. *European Journal of Interactive Multimedia and Education*, *1*(1), e02002.

Chan, R. Y. (2020). Studying coronavirus (COVID-19) and global higher education: Evidence for future research and practice. *Available at SSRN 3622751*.

Farazkish, M., & Montazer, G. (2020). Assessment of students' perceptual readiness for e-learning in Iranian universities. *Technology of Education Journal (TEJ)*, *15*(1), 101-117.

Farrah, M., & al-Bakry, G. H. (2020). Online learning for EFL students in Palestinian universities during corona pandemic: Advantages, challenges and solutions. *Indonesian Journal of Learning and Instruction*, *3*(2).

Giovannella, C., Marcello, P., & Donatella, P. (2020). The effects of the Covid-19 pandemic on Italian learning ecosystems: The school teachers' Perspective at the steady state.

Hadullo, K., Oboko, R., & Omwenga, E. (2018). Status of e-learning quality in Kenya: Case of Jomo Kenyatta University of agriculture and technology postgraduate students. *International Review of Research in Open and Distributed Learning*, *19*(1).

Hermanto, Y. B., & Srimulyani, V. A. (2021). The challenges of online learning during the covid-19 pandemic. *Jurnal Pendidikan Dan Pengajaran*, *54*(1), 46-57.

Hodges, C. B., & Fowler, D. J. (2020). The COVID-19 Crisis and Faculty Members in Higher Education: From Emergency Remote Teaching to Better Teaching through Reflection. *International Journal of Multidisciplinary Perspectives in Higher Education*, *5*(1), 118-122.

Houlden, S., & Veletsianos, G. (2020). Coronavirus pushes universities to switch to online classes—but are they ready. *The Conservation*.

Irfan, M., Kusumaningrum, B., Yulia, Y., & Widodo, S. A. (2020). Challenges during the pandemic: use of e-learning in mathematics learning in higher education. *Infinity Journal*, *9*(2), 147-158.

Makokha, G. L., & Mutisya, D. N. (2016). Status of e-learning in public universities in Kenya. *International review of research in open and distributed learning*, *17*(3), 341-359.

Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. *Pakistan journal of medical sciences*, *36*(COVID19-S4), S27.

Mukhtar, K., Javed, K., Arooj, M., & Sethi, A. (2020). Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era. *Pakistan journal of medical sciences*, *36*(COVID19-S4), S27.

Nartiningrum, N., & Nugroho, A. (2020). Online learning amidst global pandemic: EFL students' challenges, suggestions, and needed materials. *ENGLISH FRANCA: Academic Journal of English Language and Education*, *4*(2), 115-140.

Nugroho, R. A., Basari, A., Suryaningtyas, V. W., & Cahyono, S. P. (2020, September). University students' perception of online learning in Covid-19 pandemic: A case study in a translation course. In *2020 International Seminar on Application for Technology of Information and Communication (iSemantic)* (pp. 225-231). IEEE.

Rana, S., Ardichvili, A., & Polesello, D. (2016). Promoting self-directed learning in a learning organization: tools and practices. *European Journal of Training and Development*.

Rieley, J. B. (2020). Corona Virus and its impact on higher education. *Research Gate*.

Tang, Y. M., Chen, P. C., Law, K. M., Wu, C. H., Lau, Y. Y., Guan, J., ... & Ho, G. T. (2021). Comparative analysis of Student's live online learning readiness during the coronavirus (COVID-19) pandemic in the higher education sector. *Computers & Education*, *168*, 104211.

Torun, E. D. (2020). Online distance learning in higher education: E-learning readiness as a predictor of academic achievement. *Open Praxis*, *12*(2), 191-208.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, *46*(2), 186-204.

Yilmaz, R. (2017). Exploring the role of e-learning readiness on student satisfaction and motivation in flipped classroom. *Computers in Human Behavior*, *70*, 251-260.

Zou, C., Li, P., & Jin, L. (2021). Online college English education in Wuhan against the COVID-19 pandemic: Student and teacher readiness, challenges and implications. *PloS one*, *16*(10), e0258137.