Advances in Economics, Business and Management Research, volume 112
International Conference on Business, Economic, Social Science, and Humanities – Economics, Business and Management Track (ICOBEST-EBM 2019)

Online Learning as a Learning Innovation and New Business Models in the World of Education

Eddy Soeryanto Soegoto
Departemen Manajemen
Universitas Komputer Indonesia
Bandung, Indonesia

Zulkifli Ismail
Departemen Ilmu Sosial dan Ilmu Politik
Universitas Komputer Indonesia
Bandung, Indonesia
zulkifliismail@email.unikom.ac.id

Natasha Puspa Dewi
Departemen Sastra Inggris
Universitas Komputer Indonesia
Bandung, Indonesia

***Abstract*—The purpose of Online-Learning research is as a form of learning innovation and new business models in the world of education to find out the effectiveness of learning through E-learning methods and social-economic impacts. As the time passes, internet and the development of the world of technology are developing rapidly which affected all aspects of life as a whole. The development of technology, especially the internet, currently affects various aspects of the field and education is one of them. The form of innovation in the use of technology in the field of education is through long distance learning systems. The method used in this research was a comparative causal research method or ex post facto research through a Case Study in order to collect data which then be reviewed. The results of this study act as a benchmark for any impact that will be generated by the E-Learning system both in social and economic aspects worldwide. With the nuances of learning through the use of technology, it will provide experience and new dynamics in the teaching and learning process for each individual.**

Keywords—Online Learning, Business Model, Education

I. INTRODUCTION

Dynamics of change that continue to develop affects almost all aspects of human life. Education is one of those who experienced this change. The transition from traditional to modern slowly began to be replaced and facilitated by technology due to the need for the demands of the times and maintain a competitive advantage, so that access is more accessible to related parties. Learning through technology or online media provides experience and offers exciting new opportunities in disseminating learning at the diverse of environments and populations. Over the past decade, the number of online courses and programs has also grown rapidly. Along with the increasing demand for online learning in a higher education institution that strive to provide and facilitate the online learning model. Because online learning offers new experiences and opportunities, many businesses try to take advantage of these opportunities to facilitate and make a form of new business models in the world of technology-based education.

In a 2011 survey of the results of online learning, The Babson Survey Research Group shows a growing trend in the proportion of students taking online courses. At the global level it hits >6.1 million in 2010. A third of all students in higher education institutions attend at least one online course [1]. In a study, it produces a mixed course method that combines face-to-face experience with web-based learning experiences named blended learning. Blended learning combines a variety of environmental learning and approaches for teaching and learning such as asynchronous learning networks, web-improved teaching platforms, and digital online learning tools. The three main technological components needed for hybrid courses including infrastructure, instructional, and learning technology [2]. However, this aspect is not only sufficient to support the learning process. It is because the transformation of learning models from traditional to online learning environments is not enough only through a technology approach but also an understanding of the need to change students' pedagogical approaches in teaching and learning to meet the instructional needs by student [3]. This is similar to the phrase by Jacobsen, et al. it said "the real challenge is to develop fluency in teaching and learning with technology, not just with the technology itself". Whereas, in this study, we emphasize more control over students through online media. It is because the convenience offered by this online learning method compared to vulnerabilities that occur against misuse of facilities such as lack of effectiveness for students' flexibility and easy access. Therefore, instead of using this facility to learn, many students used it as an excuse to not learn [4]. In addition, this study emphasizes the new economic aspects that arise from the utilization of new business opportunities in the education world facilitated by technology.

The rapid growth in online education has been offset by a large number of studies, as evidenced by the recent search for Education Research Information Center resulting in nearly 13,000 hits. Most of this research is focused on online education outcomes for students. Anderson, in his book titled "Theory and practice of online learning", argues that the consequences of online education that most often discussed in the literature can be categorized into three research paradigms, there are utopian technology (supporting), dystopian (criticism), and utilitarian (skeptical).

Advocates of online education claims that it is a new fundamental reform which brings the promise of more democratic education by increasing access and removing time barriers, as well as geographical location [5]; truly global classrooms where students can connect classmates around the world. However, the most researched online course system problem is the large number of students who did not attend school learning activities even when they are officially registered. It said that the percentage has a dropout rate of almost 50% [6]. In addition, another problem is they are not expressing their level of satisfaction in online learning. In fact, the biggest benefit from online learning are it can be learned anywhere and anytime. It becomes the official slogan for online education created by the National Association of State Education Councils [7]. Therefore, this research aims to find out the effectiveness of learning through the E-learning method as well as the social and economic impacts that arise. The method used was a comparative causal research method or ex post facto research through a Case Study to collect data to be reviewed.

II. METHODS

The method used was causal research methods of comparative or ex-post-facto research through case studies by collecting data from writing, books, journals, articles, documents, and data collection of research results that have been done. It is to find out how the model of learning innovation through E-Learning can have a major influence on the learning process and the effectiveness as well as the use of technology in this education can open new business opportunities to give a big influence in economic aspects.

III. RESULTS AND DISCUSSION

3.1. Technological Developments in Education

Entering the 21st century, UNESCO in the journal titled "The International Commision on Education for the Twenty First Century" suggested that continuing education is needed in learning process through four pillars, they are (1) learning to master science, (2) learning to master skills, (3) learning for self development, and (4) learning to live as the concept of knowledge in application to the community [8].

To implement these four pillars, instructors as related stakeholders are required to master and apply information technology and communication in the learning system through the growing use of ICTs. There are changes in the learning process such as the differences in place, tools, and facilities from physical to online or virutal [9]. Therefore, in the future, learners will use notebook, laptop, and computers as a tool for their learning process. However, those will replace books in the learning process. This will show that the completeness of each student will begin to be replaced with technological nuances in helping the learning process.

3.2. Historical Context of Online Distance Education Development

We could see the historical context of online distance education development as shown in Table I below.

TABLE I. HISTORICAL CONTEXT OF ONLINE DISTANCE EDUCATION DEVELOPMENT

Era	Focus	Educational Characteristic
1975 - 1985	Programming; Drill and practice; Computer-assisted learning CAL	Behavioral approaches to learning and instruction; programming to build tools and solve problems; Local user-computer interaction.
1983 - 1990	Computer-Based Training Multimedia	Use of older CAL models with interactive multimedia courseware; Passive learner models dominant; Constructivist influences begin to appear in educational software design and use.
1990 - 1995	Web Based Education and Training	Internet-based content delivery; Active learner models developed; Constructivist perspectives common; Limited end-user interactions.
1995 - 2005	e-Learning	Internet-based flexible courseware delivers; increased interactivity; online multimedia courseware; Distributed constructivist and cognitivist models common; Remote user-user interactions.
2005 -present	Mobile Learning and Social networking	Interactive distance courseware distributed online through learning management systems with social networking components; learning that is facilitated via a wireless device such as a PDA, a smart phone or a laptop; learning with portable technologies where the focus is on the mobility of the learner.

3.3. The Positive Influence of Technology on the Effectiveness of Education

Technology has a significant influence, especially in terms of positive education, including emerging electronic media as a tool in facilitating the learning process such as the procurement of internet networks, computer laboratories in schools, and other supporting tools. It provides a new social impact on students, namely the source of knowledge that is not only obtained from the teacher but also on the internet. Every student can get new knowledge they may not get from the teacher. Nonetheless, the teacher needs to be an educator as well as directing students in the learning process. Because

the teacher has a very important role in directing, each student so that the tools that should be used in helping learning are not misused.

With the new learning system model that use technology, new learning methods will also emerge for students and teachers. Hence, the presence of new methods can facilitate students in understanding each subject matter.

When the old or conventional learning system is done in physical contact and face to face, with the presence of technology and other instruments that are directly related. Students will be able to carry out learning activities anywhere and anytime. Especially with the rise of online learning systems. So that the effectiveness of time will arise from this. The emergence of technology will also bring social influences such as the effectiveness of the needs of educational facilities. Because in education there are certainly many things that must be prepared such as the use of paper, photocopies, exam questions and others. so that the existence of technology will make it easier in learning activities and in the context of the environment it will also have a fairly good impact such as reducing paper use [10] [11].

3.4. The Negative Influence of Technology on the Effectiveness of Education

In addition to provide a positive impact on the effectiveness of learning and other social impacts, technology in education field also has a negative effect. In addition, the negative influence is the reduction in the number of teacher's duty because the e-learning system is individual and can be done anywhere and anytime. Therefore, it will be a new problem because it replaced the role of the teacher [12]. Hence, available facilities are not used to support the learning process but used on things that are not important. In addition, the availability of unlimited information might be a problem of unnecessary use of time for students. Consequently, the internet will bring new social problems to the world of education. In addition, another negative influence is the emergence of a new social order in the community. Individualistic and apathetic influences are detrimental to technology and reduce the level of socialization of students in the environment.

3.5. Economy Impact of E-Learning

Entrepreneurship activities are aspects that have a major impact on society. Entrepreneurial education is a new field in higher education that began in the 1970s but actually developed in the 1980s. with the development of technology, many new business models emerged education field. Apart from technological factors that almost play a role in every life, business in the education field is an instrument that is quite influential in economic aspects [13]. Many parents are willing to pay dearly for the best education for their children. Due to the urgent need for education for everyone, the entrepreneurship business of education provides solutions to every problem of education and juxtaposed with the times on technology that offers effectiveness and ease of learning. Therefore, this activity has a significant economic impact. Moreover, the model of educational entrepreneurship is often referred to as the Massive Open Online Course (MOOCs) which interpreted in "Connectivism and Connective knowledge". The idea of opening online content that offers a learning system is the same as online learning. Udemy.com is one of the MOOCs that began in 2010. This platform is a facilitator for everyone who has the skills and knowledge with specified qualifications to open their own learning courses. This platform provides an opportunity for everyone who has the knowledge to become an educational entrepreneur to make his own money by teaching that knowledge to others through virtual media such as videos and others.

This is easy for every student who wants to explore certain knowledge with a learning system through video and the use of electronic media. Through the payment system of students who want to join, this site provides new experiences about ease of learning without limitations, interacts with various groups and individuals from various countries, and each registrant can interact with mentoring around subject matter and discuss. By paying a certain amount, students can learn through this site. The payment system obtained by the mentor is also determined by this site with a revenue sharing system between the mentor and the site owner. The system through MOOCs has evolved since the first generation 2008, namely cMOOCs that focuses on knowledge creation, innovation, creativity, autonomy, and connectivity. The second generation upgraded this system through xMOOCs in 2012 with a more structured system, support a centralized discussion forum, evaluation of each student's participant development that indirectly requires each student to master each lesson that is followed. Since 2010, the United States Department of Education in its "Meta-Analysis and Review of Online Learning Studies" concluded that online students are on average better than conventional students are face to face. In addition, the second generation of xMOOCs is the last generation in a learning system that is expected to bring change to millions of students around the world because this learning system lacks social boundaries and discrimination such as race, nationality, religion, finance, and age. As long as participants meet the specified criteria, they can follow the learning process [14].

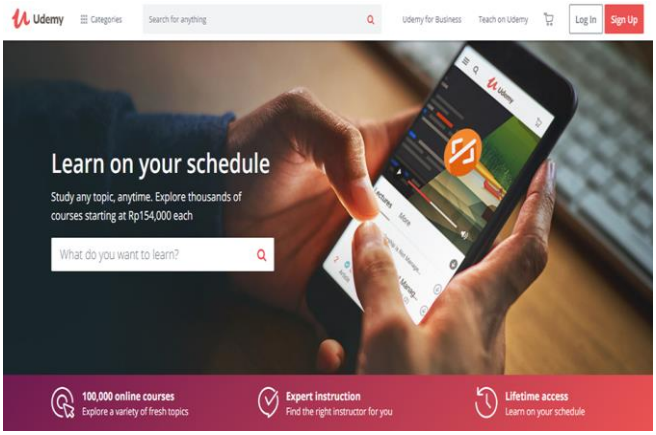

Fig. 1. The front view of the Udemy.com site
Source. Udemy.com site

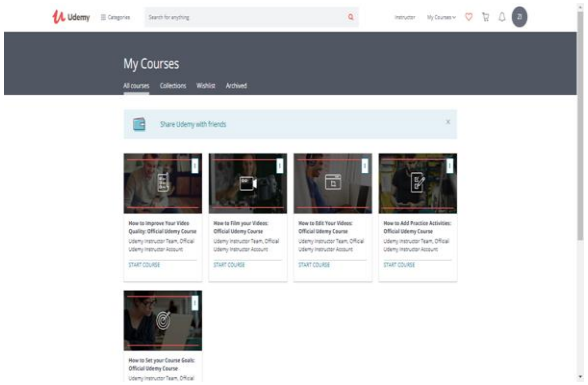

Fig. 2. Display of participant or student menus
Source. Udemy.com site

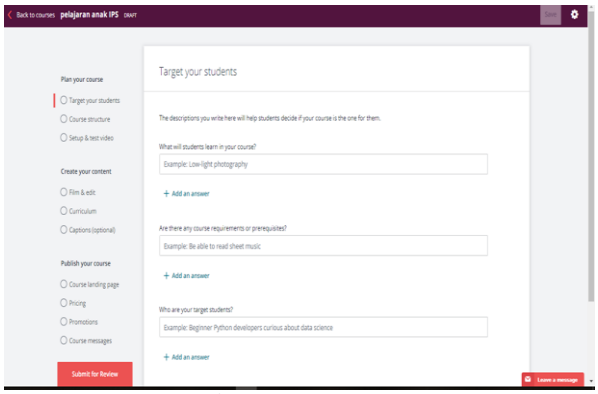

Fig. 3. Display of the Mentor menu
Source. Udemy.com site

IV. Conclusion

The use of technology makes it easy for all aspects of life and education. However, as the technology applies the same way with a tool in the context, things are not supposed to be minimized. In addition, to facilitate the learning system and influencing the effectiveness of teaching and learning, the use of technology in education brings considerable economic influence to life.

Acknowledgment

The author wants to show his gratitude to Universitas Komputer Indonesia that have provided insight and expertise that are very helpful in research.

References

[1] http://www.babson.edu/academics/faculty/provost/babson-survey-research-group/
[2] Garrison, D., & Kanuka, H. Blended learning: Uncovering its Transformative Potential in Higher Education. The Internet and Higher Education, (2004), 7(2), 95-105.
[3] Olapiriyakul, K., & Scher, J. M. A Guide to Establishing Hybrid Learning Courses: Employing Information Technology to Create a New Learning Experience, and a Case Study. The Internet and Higher Education, (2006), 9(4), 287-311.
[4] Jacobsen, M., Clifford, P., & Friesen, S. Preparing Teachers for Technology Integration: Creating a Culture of Inquiry in the Context of Use. Contemporary Issues in Technology and Teacher Education, (2002), 2(3). Retrieved June 15, 2009, from http://www.citejournal.org/vol2/iss3/currentpractice/article2.cfm
[5] Anderson, T. (Ed.) The Theory and Practice of Online Learning. Canada: Marquis Publishing, (2004).
[6] Stanford-Bowers, D.). Persistence in Online Classes: A Study of Perceptions among Community College Stakeholders. Journal of Online Learning and Teaching, (2008), 4 (1).
[7] National Association of State Boards of Education. Any Time, Any Place, Any Path, Any Pace, (2001).
[8] http://www.unesco.org/education/pdf/15_62.pdf
[9] Hariningsih. Teknologi Informasi.Yogyakarta :Graha Ilmu, (2005).
[10] Jared, K., & Terry, T. K. Towards Best Practices in Online Learning and Teaching in Higher Education, (2010), 6(2), 534.
[11] Suripto, Fatmasari R., dan Purwantiningsih. “Penggunan Teknologi Informasi dan Komunikasi dan Dampaknya Dalam Dunia Pendidikan”. Makalah disajikan dalam seminar Citizen Journalism dan Keterbukaan Informasi Publik untuk Semua, Jakarta, (2010).
[12] Sudibyo, Lies.. “Peranan dan Dampak Teknologi Informasi dalam Dunia Pendidikan di Indonesia”. Jurnal Widyatama Universitas Veteran Bangun Nusantara Sukoharjo, (2011), Vol. 20, No.2: 175-185.
[13] Katz, J. A. and S. Peters, “Understanding the Entrepreneur in the Growth Process of SMEs”, The International Journal of Entrepreneurship and Innovation Management, (2001), 1(3/4), 366–380,
[14] U.S Department of Education. Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies. Washington, D.C.: Department of Education, (2009).