The Impact of E-learning on Business Education

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Abstract With the introduction of the Internet and other types of electronic communication and information distribution, online education has developed over the course of its development, with four major periods in the process. E-learning's growing popularity in business, management, and education has contributed to increased levels of both productivity and efficiency in these fields. It also gives students the opportunity to learn at their own pace, gives them more control over their schedules and locations, reduces the costs of infrastructure and transportation, and saves money. The implementation of e-learning is a time-consuming and complicated process that requires information technology, emotional intelligence, and human resources. It is important to approach it in a logical manner because it might have both positive and bad consequences. This study demonstrates the factors that are necessary for e-learning, as well as the theoretical literature evaluation and the good and negative effects of e-learning.

Keywords E-learning · Online learning · Blended learning · Business education

1 Introduction

Starting in the 1990s with the introduction of the Internet and the World Wide Web, the present iteration of online education has evolved with the rise of the Internet and other forms of electronic communication and information dissemination. An outline of the four distinct eras in the development of online learning. In the first stage, which started in the 1990s, colleges with established distance learning programs, such as Penn State Global Campus and University of Maryland College, swiftly adapted their curriculum for online delivery using the possibilities given by the Internet. Massive enrollment increase occurred during the second wave of online education (2000–2007). In 2008, over 4.6 million U.S. students took at least one online course. A new type of online

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education known as "Massive Open Online Courses" (MOOC) emerged during the third phase (2008–2013), often known as the MOOC phenomenon. Phase four is the period after 2012 (Kumar et al. 2019). The unanticipated impact of the COVID-19 outbreaks, as well as the resulting obligation to ensure physical distance, has resulted in an increase in the prevalence of online courses. Even prior to the COVID-19 outbreak, digital alternatives to traditional education were a promising reality, with global EdTech investments totaling US$18.66 billion in 2019. Despite the fact that running a university is difficult in general, this is the case (Hargitai et al. 2021).

The term "e-learning," which may also refer to "online learning," has developed and come to signify numerous things in the fields of business, management, and education (Yawson and Yamoah 2020). What is meant by "business education" is the collection of pedagogical and business abilities required to instruct students in the ways of thinking, doing, and knowing about business. There is little room for dispute that ICT may be used to great advantage in the field of business education, particularly with regards to enhancing productivity and efficiency (Oladeji 2021). Google Classroom, Zoom, Microsoft Teams, and other online tools have been used to have discussions with students, record lectures, and tests (Makhlouf and Alani 2022). Throughout the last five years, the share of institutions that provide online degrees went from 25 to 37%, as stated in the study. While online MBA programs are expanding, there has been even greater growth (over 67% and 80%, respectively) in online specialty graduate and undergraduate programs (Kumar et al. 2019).

The integration of E-Learning components and remote educational technology has been found to increase the level of self-directed learning among students in the process of content mastery. This, in turn, leads to an improved quality of education by leveraging the vast and constantly expanding global educational resources available (Awwad et al. 2023). Teachers now have the option of posting downloadable lecture notes and student assignments on the web. Students' comprehension greatly benefits from the implementation of e-learning. As a bonus, e-learning can improve students' academic performance (Hermawan et al. 2021). Computer-based learning is more effective than traditional teaching approaches in imparting information and skills to students. An undeniable catalyst for interactive learning, ICT plays a pivotal role in this regard (Awwad et al. 2023). Moreover, e-learning offers various advantages in higher education, including students' freedom of schedule and location, savings on infrastructure and transportation costs, and the chance to learn at their own pace. Students are more engaged and work together better when they use a mix of digital tools. The smaller learning units that are common in e-learning can help students understand the subject better and remember it longer (Hargitai et al. 2021).

Despite all the effort put into making e-learning work, there are still several variables that might undermine its effectiveness as a remote learning method (Hermawan et al. 2021). Earlier research concentrated on topics including desire to use, adoption, usability, course content, and personalization; satisfaction was first studied systematically beginning in 2007. Success in e-learning was then investigated, as was the impact of individual student characteristics on the efficacy of e-learning (Yawson and Yamoah 2020). A large body of e-learning research, however, has improved our understanding of the satisfaction, information quality, service quality, utility,

and system quality that are crucial to the success of e-learning programs (Yawson and Yamoah 2020). E-learning requires the availability of information technology that facilitates a seamless learning process. Information technology associated with internet networks and their utilization Emotional intelligence is required to implement e-learning for an entire semester because it is associated with movement, self-control, and self-recognition. (Hermawan et al. 2021). HR also plays a crucial role in assuring the successful implementation of e-learning. Another factor that determines the success of online education is the course's level of difficulty.

The use of e-learning in schools has both positive and negative outcomes, such as a potential decrease in students' ability to interact socially, an increase in exam fraud, the need for costly technology investments, and the development of new, potentially prohibitively expensive digital skills among both students and teachers (Hargitai et al. 2021). Introducing an E-Learning system into the educational practice of a traditional university is a time-consuming and complex process that calls for a methodical approach that accounts for the following: infrastructure development; the design and development of technical, technological, organizational, and methodological conditions conducive to E-Learning; the staffing of the process of designing, implementing, and co-conducting automated training process management systems (Awwad et al. 2023). Also, Students need more inspiration to study from home since it's incredibly boring. Particularly if there are individual or group duties that must be completed (Hermawan et al. 2021).

2 Literature Review

Enhanced learning methods, tactics, and strategies, along with the proliferation of ICT and the acceleration of technical development, gave rise to the emergence of e-learning in the nineteenth century (Benabdallah 2022). E-learning is gaining popularity in both business and academia. AlDhaen (2023) predicts that the value of the worldwide e-learning industry would rise to $65 billion by 2023. Forecasts put the value of the global LMS market at $18.44 billion in 2025, up from $5.05 billion in 2016 (Panigrahi et al. 2018).

2.1 *Business and E-learning*

Business may have existed before civilization. Globalization involves business. Business helps countries from all around the world trade, share services, and engage. E-learning is one way that globalization has impacted company formats. E-learning is crucial to corporate growth, diversity, and productivity (Saad et al. 2022). Business education "studies applications of mathematics, economics and behavioral sciences to problems in the production and distribution of goods and services" (McFarland 2017). Business and entrepreneurial education is insufficient. When this knowledge

is many people's only way out of poverty, it's much more concerning. Only 27% of Mexican adults had a good job, defined by Gallup as 30 or more hours per week for a regular paycheck. Experiential e-learning can teach business and entrepreneurship (McFarland 2017).

Business and entrepreneurship education promotes regional and social economies through universities. Business and management schools shape students' business and entrepreneurial skills and society's business roles. Training and development are important, but management education in tertiary education is part of the national curriculum and not limited to firm training (Beqiri and Beqiri 2021) Economic growth, convergence, and wealth depend on education (Costandi et al. 2019). Recent benchmarking surveys demonstrate that many US and Canadian organizations, large and small, use e-learning to improve IT skills, which is vital for staying technologically sophisticated. Nestle, a global company, trains employees in leadership, teamwork, and communication through an online learning system. Banks like Bank of America teach interpersonal skills online. E-learning adds business value. In many firms, experienced and committed staff resign due to technological illiteracy, which is seen as a loss of value (Saad et al. 2022). Organizations now use E-learning to teach every employee new trends instead of paying professionals or holding physical classes (Saad et al. 2022). However, time management is the most important issue for working professionals learning online. Online learning benefits today's fast-paced, competitive workplace. Online training helps experienced workers advance their professions. Online learning helps professionals learn new skills without taking time away from work. Because it's cheap and can train a lot of people at once, many organizations and individuals prefer this type of education (Saad et al. 2022).

2.2   E-learning Advantages

An organization's geographically spread team can train together online, increasing competitiveness. Online tools let students learn at their own speed (Panigrahi et al. 2018). Thus, online training benefits language learners, teachers, administrators, academic institutions, and universities by increasing autonomy and self-confidence (Benabdallah 2022). Several studies have found that online or blended learning strategies can improve students' technology perceptions by making digital flexible learning material easy to access and use and enabling autonomous learning styles (Alhalwaki & Hamdan 2019). Online education can help students build global networks. E-learning also forces teachers and researchers out of their comfort zones, making them more successful. For graduate students seeking to expand their skills, an online education platform may offer specialized degree courses not offered at their local higher education institution (Alami and El Idrissi 2022). E-learning also reduces the projected instructor shortage, overcrowding, construction costs, enrollment, profits, a friendlier learning environment, reduced bias for reusing or reselling course materials, access to the developing world and geographically isolated, technology costs, revenue loss due to transfer credits, and Blended learning increases student–teacher

contact and decreases online transactional distance (Al-Rawi et al. 2021). Online education requires more self-discipline than classroom instruction. Since instructors rarely interact with students, keeping them enrolled and engaged is difficult (Panigrahi et al. 2018). Employers may utilize e-learning success indicators to monitor trainee progress (Saad et al. 2022). It can encourage hesitant workers to complete online courses. E-learning among workers could be influenced by rewards.

2.3   E-learning Factors

E-learning effectiveness depends on the instructor/course organizer, IT infrastructure, institution support, and students (Costandi et al. 2019). The teacher helps children learn and practice using different computer operating systems (Benabdallah 2022). E-learning is dominated by technology; hence some studies attribute its problems to inadequate internet connectivity, a lack of technological tools, and a lack of literacy in using modern technologies like computers, laptops, cameras, printers, and scanners. Thus, it's crucial to master didactics and psycho-pedagogy to use those new technologies (Benabdallah 2022). E-learning success depends on students' positive attitudes toward it, regardless of how advanced the technology is (Alami and El Idrissi 2022). The digitization of management education may give rise to concerns regarding privacy, security, and the digital divide, which may be influenced by social and cultural barriers (Alhalwaki & Hamdan 2019).

2.4   E-learning Drawbacks

Despite the benefits to access, quality, and cost that online education provides, its adoption and implementation are challenged by resistance from within institutions. Staff members report issues with e-learning programs such as a lack of focus, insufficient time, too much effort to adapt, inadequate knowledge, and resistance to change (Panigrahi et al. 2018). E-learning limits human interaction between students and teachers (Costandi et al. 2019). The interview revealed that network lectures lack interaction (Mandasari 2020). The current state of E-Learning in this Higher School is in its nascent stage. The instructors utilize Moodle to send assignments to students or conduct videoconferences. However, there seems to be a lack of consideration towards the factors that motivate or demotivate students to actively participate in the learning process. Additionally, the potential challenges that may impede the teaching/learning process have not been adequately addressed (Benabdallah 2022). Online learning presents various obstacles for instructors and students. Lecturers must produce slides, instructional materials, learning videos, discussion forums, and student post-tests. Interviews with numerous lecturers showed that uploading required more preparation than face-to-face learning. Lecturers must check student assignments/post-tests personally and in groups. Online studying is convenient, but

instructors must prepare and review student assignments (Mandasari 2020). Self-discipline is essential because learning weakens without face-to-face connection (Costandi et al. 2019). E-learning has various drawbacks, including professor training expenses, faculty resistance to change, employer mistrust, high entrance prices, administrative issues, and loss of geographic competitive advantage (Grandzol and Grandzol 2006).

2.5   Theoretical Literature Review

Online developers must understand learning methods to choose the best ones. Strategies should excite learners, enable learning, build the full person, accommodate individual differences, promote meaningful learning, foster interaction, etc. (McFarland 2017). Online course development needs faculty to go beyond replicating the classroom. Given the advantages and drawbacks of online learning, faculty must rethink how to attain learning goals. E-learning as a reliable educational model lacks national pedagogical engineering. E-learning deployment can be difficult (Alami and El Idrissi 2022). Online education literature proposes searching for educational approaches that boost student learning, faculty intellectual progress, and academic production (Grandzol and Grandzol 2006). If done successfully, professors can improve pedagogy both online and, in the classroom (Grandzol and Grandzol 2006). Self-regulated, problem-based, and collaborative learning are the most common online or blended learning pedagogies, according to bibliometric study (Katal et al. 2023). Self-regulated learning incorporates cognitive, metacognitive, behavioral, motivational, and emotional/affective components. It includes goal planning, self-monitoring, self-instruction, and self-reinforcement. Problem/project-based learning (PBL) allowed students to work in groups to solve authentic problems or projects under the guidance of teachers (Katal et al. 2023). Students with better learning motivation, self-regulated learning strategies, attitudes, and behavior may understand the MOOC experience better. Collaborative learning improves student learning and problem-solving by encouraging peer support.

E-learning has restrictions, and students' future attitudes toward using it as a study tool are unknown. It emphasizes research student acceptability criteria (Alami and El Idrissi 2022). Fred Davis' technological Acceptance Model (TAM) introduced technological acceptance, adoption, and post-accept. TAM has dominated most previous models. Most of these researches focused on the two most important constructs—reported ease of use and perceived usefulness. where computer self-efficacy, innovativeness, computer anxiety, perceived enjoyment, social norm, content, and system quality are added to the TAM model (Al-Maroof et al. 2021). Researchers have examined numerous aspects besides PU and PEoU that affect technology adoption. These are: Perception of interaction (PoI): The TAM framework is extended with construct PoI to accommodate continuous system usage rather than users' early adoption of IT, Cognitive absorption: The three dimensions of cognitive absorption (the level of involvement), temporal dissociation, heightened enjoyment,

and focused immersion are different for individuals and affect both PU and PEoU to determine 1technology adoption, self-distraction, Cognitive age, Social neophyte, Self-efficiency assesses users' abilities to do tasks. Self-efficiency in class is linked to the e-learning system. Teachers' capacity to use technology efficiently and greatly impacts classroom instruction (Al-Maroof et al. 2021).

Cognitive and non-cognitive learning outcomes are separated. Ng (2023). Cognitive learning: management educators may help students grasp language acquisition and industry 4.0 disruptive technologies. Students would learn about future trends, business-shaping technology, applications, and ethics. Non-cognitive learning: instructor abilities, staff competency, reputation, and access can affect student satisfaction in higher management education. To maximize learning outcomes in online learning platforms, self-efficacy, virtual competence, engagement, design interventions, and others should be considered before designing and delivering content (Panigrahi et al. 2018). Csikszentmihalyi's flow theory explains user motivation. Users are motivated by their cognitive state of efficiency and motivation. Users are immersed in an activity in flow theory. Self-motivation is one of the finest strategies to learn and encourages people to enjoy their activities (Al-Maroof et al. 2021).

2.6   Prior Studies in E-learning

E-learning saves time and eliminates transaction costs, according to empirical research (Głodowska et al. 2022). Respondents also valued environmental and ecological issues. E-learning has negatives include difficulties concentrating and a lack of interpersonal skills needed for real-world work. Thus, e-learning should supplement face-to-face instruction. This study emphasizes the need to weigh the pros and cons of e-learning to establish a well-rounded education system. At the Higher School of Management, (Alami and El Idrissi 2022) (2020–2022) conducted a quantitative and qualitative study. 60 first-year students—male and female from varied learning environments—were randomly selected from 100 participants. A questionnaire and interviews identified technological, pedagogical, and organizational problems faced by the participants, including a lack of technology skills, inadequate internet connectivity and speed, and no physical support from their academic institution. Another intriguing discovery was that teachers and students lacked digital tool abilities, which led to online learning resistance and tension and anxiety. Due to a lack of student–teacher connection, the investigated teaching model was less effective, leading to a preference for classroom-based teaching over e-learning to better meet academic and professional standards (Benabdallah 2022). Business school research of 466 students from 2381 students reported a 96% response rate and 448 correctly answered questionnaires. The study found that peer advice and rewards can boost students' e-learning platform awareness. Students' technological expertise and experience greatly affect such platforms' use. The study also reveals that technology acceptance in e-learning depends on satisfaction. E-learning's perceived usefulness influences acceptance decisions, according to empirical findings (AlAmi

and El Idrissi 2022). Survey research was descriptive. Bahraini community data was collected from February 1 to February 19, 2021, using an online poll. The goal was to evaluate the community's reaction to online and mixed learning methods. 30.48% of individuals rated excellent computer abilities, 34.29% very good, 24.76% good, 7.14% ordinary, and 3.33% weak. E-learning technology capacities were analyzed using the acquired data (Al-Rawi et al. 2021). (Hermawan et al. 2021) studied 205 Accounting Program students at the Faculty of Business Law and Social Sciences, University Muhammadiyah Sidoarjo. E-learning improved pupils' accounting understanding. E-learning implementation was significant at $0.000 < 0.05$, supporting the hypothesis (E Learning Influences Accounting). E-learning may improve accounting comprehension for Universitas Muhammadiyah Sidoarjo students. A significant Abu Dhabi public institution conducted a study in 2019. 2015–2018 Business Faculty students answered 78 questions. After evaluating the questionnaires, E-learning was determined to help business students more than traditional teaching methods. E-learning may help business studies, as shown by this substantial outcome (Sandybayev 2020). Despite the COVID-19 pandemic's challenges, e-accounting education may not harm the educational process. Online learning offers flexibility and accessibility, but presenting financial statements and practical applications to teachers may be problematic. Various teachers have adjusted their approaches for online learning, and there are various tools and technology to aid. E-accounting education's performance depends on several elements, including the quality of instruction, student resources, and educators' and students' willingness to adopt new learning methods (Makhlouf and Alani 2022.

3 Conclusion

Online education has evolved with the rise of the Internet and other forms of electronic communication and information dissemination, with four distinct eras in the development. E-learning has become increasingly popular in business, management, and education, enhancing productivity and efficiency. It also offers students freedom of schedule and location, savings on infrastructure and transportation costs, and the chance to learn at their own pace. E-learning requires information technology, emotional intelligence, HR, and a time-consuming and complex process to implement. It has both positive and negative outcomes, and requires a methodical approach.

This study aims to demonstrate the impact of online e-learning on business education in Bahrain, using a data sample of people under three categorizes and one and a half years after the COVID-19 epidemic. E-learning is the use of Internet and digital technologies to create experience that educate fellow humans, and is gaining popularity in both business and academia. It combines online and face-to-face learning, and is predicted to reach $65 billion by 2023. E-learning is essential for corporate growth, diversity, and productivity. It can teach business and entrepreneurship, promote regional and social economies, and add business value.

Time management is the most important issue for working professionals learning online. Online training increases competitiveness, autonomy and self-confidence, reduces instructor shortage, overcrowding, construction costs, enrollment, profits, a friendlier learning environment, reduced bias for reusing or reselling course materials, access to the developing world, technology costs, revenue loss due to transfer credits, and increases student–teacher contact. E-learning presents obstacles for instructors and students, including professor training expenses, faculty resistance to change, employer mistrust, high entrance prices, and administrative issues. Online course development needs faculty to rethink how to attain learning goals, and self-regulated, problem-based, and collaborative learning are the most common pedagogies. E-learning has limitations, and researchers have examined factors that affect technology adoption, such as perception of interaction, cognitive absorption, self-efficacy, virtual competence, engagement, design interventions, and flow theory.

E-learning can save time and eliminate transaction costs, but has negatives such as difficulty concentrating and lack of interpersonal skills. Studies have found that peer advice and rewards can boost students' e-learning platform awareness, and that technology acceptance in e-learning depends on satisfaction. E-accounting education may not harm the educational process, depending on the quality of instruction, student resources, and educators' and students' willingness to adopt new learning methods.

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