Digitalization, Webometrics, and Its Impact on Higher Education Quality During the COVID-19 Pandemic

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Abstract

The COVID-19 pandemic has highlighted the inadequacies of Indonesia's digital infrastructure for higher education, presenting a significant challenge. This article not only discusses the potential of digitalization in enhancing higher education but also addresses how it could undermine education quality. It identifies potential strategies to mitigate these issues. Employing a qualitative-explorative approach, this study gathers primary data from interviews and focus group discussions, complemented by secondary data from desk research. It concludes that digital methods aimed at lessening the pandemic's impact on higher education have inadvertently compromised educational quality. This is attributed partly to users' limited proficiency with necessary technologies and partly to infrastructure deficiencies, such as internet and cellular connectivity, leading to substantial obstacles in online learning. The article advocates for the creation of a dedicated institution to support the surge in demand for digital technology and infrastructure necessitated by the pandemic.

Keywords: Digitalization, COVID-19 Pandemic, Education Quality, Education Threats.

Z The adoption of digitalization as a primary strategy to counteract the impacts of the COVID-19 pandemic on higher education in Indonesia has inadvertently compromised the quality of education. The shift to learn-from-home policies, effectively eliminating all in-person interactions, has presented numerous challenges (Syah, 2020). These challenges are attributable to both infrastructural issues, such as network problems and limited access to cellular data, and psychological factors (Setiawan, 2020; Yudiawan, 2020; Wulandari & Agustika, 2020). These combined difficulties have led to a decline in the quality of higher education, a trend evident in the falling global rankings of Indonesian universities. For instance, the University of Indonesia experienced a decline from 693rd worldwide in 2020 to 729th in 2021 (Ministry of Education and Culture, 2020). Similarly, higher Islamic education institutions have seen notable drops in rankings; the State Islamic Institute of Bengkulu fell from 8536th in 2020 to 13,968th in 2021.

Most studies on the quality of higher education have adopted one of three distinct perspectives. From the first perspective, the quality of higher education is analyzed through a systemic lens, suggesting improvements through digitalization (Fitrah et al., 2018; Alawiyah, 2011; Bancin, 2017; Rifa'i, 2019; Suban, 2020;

Susilo and Rohman, 2017). This approach posits that systemic enhancements via digital technologies can lead to better educational outcomes. The second perspective centers on human resources as the cornerstone of educational quality, emphasizing the necessity of adept human resource management for quality assurance (Primayana, 2016; Ayuningsih, Muhtarom and Al Ngarifin, 2018; Ekawati, 2019; Kodiran, 2019). It underscores that the careful administration of human resources by educational leaders is vital (Primayana, 2016). The third perspective focuses on the significance of management policies and their execution in higher education, advocating for comprehensive quality management to ensure active participation and commitment from all stakeholders towards continuous improvement (Winarsih, 2017; Asikin, 2018; Widyanto, Merliana and Pranata, 2020; Priyanto, Tjalla and Indrajit, 2021). Despite these discussions, few studies have critically explored how digitalization might negatively impact the quality of education, highlighting a need for

This article aims to explore the impact of Indonesia's rapid shift to digital higher education during the COVID-19 pandemic. Contrary to expectations, this transition has not strengthened the educational system; instead, it has led to a decline in quality. This article addresses three critical questions: First, how was digitalization implemented in Indonesia to sustain higher education amidst the pandemic? Second, what factors have contributed to the negative impact of digitalization on the quality of education during this period? Third, what measures have been taken to mitigate this threat to educational quality? The exploration of these questions forms the core of our discussion.

This article argues that the quality of education has declined during the COVID-19 pandemic due to multiple factors. These include not just the ownership of digital devices but also the levels of technological literacy, and the availability of internet and cellular phone services, all of which are crucial for maintaining the communication and information flow essential for high-quality digital education across local, regional, national, and international contexts (Khairiah, 2020). Additionally, the shift from traditional, manual methods of quality assessment to digital formats has significantly impacted the learning process, affecting the connectivity, identities, and knowledge that are integral to it.

Literature Review

2.1. Education during the COVID-19 Pandemic

The novel coronavirus (SARS-CoV-2) was first detected in Wuhan, China, in December 2019 (Moulahoum et al., 2020). The COVID-19 pandemic has impacted various sectors of society, notably education, triggering a global crisis in this domain (Pasani et al., 2020; Xue et al., 2020). To mitigate the spread of the virus, numerous institutions have temporarily ceased in-person operations (Zhu and Liu, 2020). As a result, digital technologies have become pivotal (Nguyen and Kieuthi, 2020), with educational institutions relying on them to facilitate distance learning, ensuring the continuation of students' education(Al-Balas et al., 2020; Alqahtani & Rajkhan, 2020). This transition has led to substantial changes, necessitating both teachers and students to adapt to online learning methods and the digital platforms that support them (Chen et al., 2020).

This transition to online learning has introduced significant obstacles for both teachers and students. Access to digital platforms is often inadequate, many educators find themselves ill-equipped for online teaching, existing regulations are not designed for distance learning, and a general lack of technological proficiency prevails (Somaratne, 2016). Online learning, hastily adopted as a response to the COVID-19 pandemic, has been implemented with minimal planning, leading to difficulties for educators and students in adapting to this new mode of instruction (Handayani, 2020).

Challenges such as unstable internet connections, limited grasp of the material, and home environments unsuitable for learning have further hindered the effectiveness of online education (Habiba et al., 2020). Lopez et al. (2020) highlight that educational institutions' lack of preparedness for online instruction, underscored by a deficiency in human resources and digital infrastructure, exacerbates these challenges. In an era where digital connectivity is paramount, such infrastructural inadequacies amplify existing problems (Azorín, 2020; Abidah et al., 2020).

2.2. Digitalization

Education 4.0 represents a transformative shift in pedagogical approaches, moving away from the confines of traditional classroom settings (Efendi, 2018; Herwina, 2018). In the face of rapid societal and technological evolution, institutions are compelled to embrace digitalization (Hermawansyah, 2021). Digitization significantly facilitates learners' access to educational materials and experiences (Wang et al., 2013). The necessity for physical presence in the classroom diminishes, as students can now engage with lessons and communicate with teachers through internet-enabled devices such as computers and smartphones (Nazgul et al., 2020). This digital shift has given rise to various innovative learning methodologies, including e-learning, Computer-Assisted Instruction (CAI), Computer-Based Instruction (CBI), and e-teaching (Husain, 2014). Higher education institutions can enhance these models with academic information systems, allowing students the flexibility to learn anytime and anywhere, unbound by geographical or temporal restrictions (Barger, 2020).

Digitalization was envisioned as a means to enhance educational quality, and indeed, it has served this purpose in numerous instances (Seaman, Allen and Seaman, 2018). Concurrently, the COVID-19 pandemic necessitated a swift pivot to digital learning across many institutions (Ali, 2021), ushering in a new era of digital learning culture. However, this transition has demanded significant adjustments from students, teachers, and administrators alike (Iivari et al., 2020). The rapid introduction of novel learning methodologies has challenged both educators and their students to effectively incorporate technology into their educational practices, often presenting a steep learning curve (Iivari, Sharma and Ventä-Olkkonen, 2020). Despite these efforts, numerous digitization initiatives have fallen short; the lack of access to necessary technologies and the struggle to develop adequate connectivity, identity, and knowledge frameworks for quality assurance (as evaluated by Webometrics) remain significant barriers (Khairiah and Sirajuddin, 2019).

2.3. Quality of Higher Education

Higher education institutions are tasked with the pivotal goal of providing students with quality education, a necessity in the fiercely competitive global market that requires continuous self-improvement (Primayana, 2016; Winarsih, 2017). The quality of education hinges on a variety of factors, including the competence of educators, the efficiency of administrators, and the overall management of the educational system (Mokoginta, 2012). Without adequate quality assurance measures—that is, consistent and ongoing efforts to meet specific standards—the quality of education can diminish, failing to meet the expectations and needs of stakeholders (Alawiyah, 2011). Quality in higher education is often gauged against international benchmarks, with recent evaluations increasingly conducted online, focusing on four key criteria: impact (evaluating accessibility, usability, content, design, and security), presence, openness, and excellence (Marwiyah & Hartati, 2016).

To achieve and possibly surpass established standards of high-quality education, institutions must implement various internal and external quality assurance methods, either independently or in collaboration with other stakeholders (Fadhli, 2020). Beyond international acclaim, the caliber of education can also be evaluated through research outputs, international

partnerships, student-to-lecturer ratios, and contributions to industrial development (Khairiah and Sirajuddin, 2019). The assessment of education quality incorporates a range of overlapping principles, including those related to market competition and strategic positioning (Jarvis, 2014). Consequently, education quality encompasses both internal and external dimensions. Internal qualities might include an institution's success in achieving its vision and mission and fulfilling stakeholder expectations. In contrast, external qualities are often measured by the satisfaction levels of students and institutional partners.

Methodology

The research was conducted at the State Islamic Institute of Bengkulu, officially known as the Fatmawati Sukarno State Islamic University. This institution was selected due to its significant decline in international ranking during the COVID-19 pandemic, as measured by Webometrics, falling from 8,536th worldwide in 2020 to 13,968th in 2021.

The choice to focus on digitalization and its impact on the quality of education was driven by three key factors. First, the widespread attention from stakeholders to the challenges posed by digitalization on education quality underscores its significance to both institutions and their constituents. Second, there is a scarcity of studies addressing the adverse effects of digitalization on higher education quality, with existing research tending to identify challenges rather than analyze the specific impacts of digitalization during the COVID-19 pandemic. Third, examining the digitalization of higher education is crucial, as it has the potential to create or exacerbate disparities in access and outcomes. Considering these reasons, the researchers aimed to investigate the negative consequences of digitalization on the quality of education.

This study adopts a qualitative approach, engaging a diverse group of participants including lecturers, administrators (such as rectors, deans, program directors, and chairpersons), and technical/operational staff involved in the digitalization program. The aim was to explore lecturers' experiences with the digitalization program and to understand the roles, functions, and challenges faced by administrators and technical staff in quality assurance. Data collection encompassed in-depth interviews, focus group discussions, and document reviews. Interviews were conducted on-site at IAIN Bengkulu's various departments or via phone (voice/video calls). A total of eleven lecturers were interviewed, and a focus group discussion was held, including the rector, lecturers, and administrative staff, to gather insights into the institution's administration and quality assurance efforts.

Data analysis was carried out in three stages using two techniques. Initially, data were condensed to a manageable form. Subsequently, they were displayed in tables and graphs (with quotations) to illustrate findings. The final stage involved data verification, alongside the identification and analysis of trends. Following Zawacki-Richter and Naidu (2016), the study utilized descriptive and content analysis techniques, supported by Leximancer, a computer-assisted analysis tool.

Results

The COVID-19 pandemic has fundamentally altered global education systems, with a widespread shift towards digital technology to maintain learning continuity. However, this transition to digital platforms has negatively impacted many institutions, as evidenced by their declining rankings. This analysis will cover three key areas: (1) the digitalization of higher education amidst the COVID-19 pandemic; (2) the reasons why this digital shift has adversely affected the quality of education; and (3) the approaches implemented to counteract the negative consequences of digitalization during the pandemic.

4.1. The Digitalization of Higher Education During the COVID-19 Pandemic

Digitalization programs have been widely used to ensure the continuation of learning during the COVID-19 pandemic. However, the implementation of these programs has been fraught with difficulties, and many institutions have trouble meeting the standards used by Webometrics. In other words, digitalization has endangered higher education and degraded its quality.

This can be seen through the case of IAIN Bengkulu. First, it has been difficult for the institution to maintain an internet presence, as measured by the number of web pages from its domain indexed by Google. This was stated by the Rector of IAIN Bengkulu during the focus group discussion:

"Digitalization, such as SIAKAD, SAPTO, BKD-online, LITAPDIMAS, academic publications, OJS, SIMPEG, SLIM, has been limited for [our] lecturers, as seen in our Webometrics rankings of 437th (nationally), [or] 13,968th (internationally), far below the University of Bengkulu, which is ranked 52nd (nationally) [and] 4,371st (internationally). Of our 262 lecturers, only 16 (6.6%) have published an article in a reputable, SCOPUS-indexed, journal. This has caused our lecturers to have difficulty attaining professorship, and today we only have two professors. This, in turn, has made it difficult for us to recruit a rector for the 2021¬–2025 period, as the rector of a state Islamic university must be selected from at least three professors, per PMA No. 68 of 2015." (FGD, 2021)

The challenges faced by IAIN Bengkulu in establishing a strong internet presence are further compounded by the issues within its distance learning model. Effective distance learning necessitates that lecturers are proficient in utilizing digital tools and gadgets. However, a significant number of faculty members, especially those who are more senior, lack these essential skills. This gap in digital competency among lecturers was highlighted by multiple key

figures at the institution, including the deputy rector, the director of the Postgraduate School, and the deans of the Faculty of Islamic Education and the Faculty of Islamic Economics and Business:

"The use of digitalization to create a cyber university has offered us a distance learning model that demands lecturers who are professional, responsive, and capable of making research breakthroughs. However, in reality, many of our lecturers have difficulty conducting research and publishing academic papers, and so only 6.6% or so of our lecturers have published an article in an internationally reputed, SCOPUS-indexed journal. Exacerbating this, our senior lecturers—those who have worked for more than twenty years—tend to lack technological savviness and thus cannot operate digital programs. This is detrimental for education quality." (FGD, 2021)

Such difficulties were also identified by an administrative staff member at the Faculty of Islamic Education, who stated:

"The SIAKAD digitalization program is used to collate data on students and lecturers involved in the learning process. It includes such information as absences, classes taken, academic transcripts, exam schedules, tuition fees, and lecturer information. In the COVID-19 era, academic, administrative, and financial affairs have all been managed digitally, per the government's stay-at-home policies (LFH, WFH, PSBB, PPKM) that limit social activities. This affects human resources. For example, senior lecturers, those who have worked for more than twenty years, tend to be unfamiliar with digital technology and have difficulty with the program. At the same time, some features can't really be used, as our bandwidth of 550 Mbps is minimal, and internet access is not universally available, and this means it is difficult to ensure quality" (FGD, 2021)

Second, maintaining visibility and impact presents a challenge for institutions during the digital shift. These metrics are often gauged through a virtual referendum, quantified by the

volume of external links from third-party websites to an institution's domain. A higher count of such inbound links usually signifies greater prestige, superior academic performance, and the provision of valuable information. However, the transition to distance learning during the COVID-19 pandemic has led to diminished activity among students and lecturers, frequently attributed to restricted access to digital devices and internet connectivity. This issue was brought to light during a focus group discussion by the head librarian:

"Digital programs such as websites, Facebook, YouTube, Instagram, WhatsApp, e-mail, Twitter, and WBS can be used to communicate with students, lecturers, and the general public. Likewise, our library has made use of digital technologies such as e-books, and has created a digital repository of academic texts, a virtual or digital library, and the Senayan Library Information System (SLIMS, a publicly accessible online catalog). We have a search engine to help users find works in our catalog, and our e-library is registered with Indonesia One Search (IOS), an integrated catalog of the publicly accessible materials held by libraries, museums, and archives. This program has been less than effective during the COVID-19 pandemic, however, as students and lecturers have not been very active since the distance learning and work-from-home policies were implemented. [Because of these policies], they have had difficulty accessing digital devices, cellular phone services, and the internet." (FGD, 2021)

Third, the aspect of openness, defined by the availability and search engine indexing (such as Google Scholar) of documents in formats like Adobe Acrobat (PDF), Adobe PostScript (PS, EPS), Microsoft Word (DOC, DOCX), and Microsoft PowerPoint (PPT), has been inadequate. This shortfall can be largely attributed to the instability and unequal access to internet networks experienced during the COVID-19 pandemic. This concern was echoed by multiple respondents, including the Director of Quality Assurance, the General Chairman, the Chairman of Planning, Finance, and Accounting, and the Director of the Center for Linguistic, Islamic, and Cultural Research. An illustrative example mentioned by these individuals is as follows:

"Our use of the SAPTO digitalization program has been somewhat disrupted during the COVID-19 pandemic, as the BAN-PT assessors cannot conduct their field visits due to the stay-at-home policies that limit social activities. Communications are often interrupted or unclear, and so planned meetings often fall through. The SIMAMURAT application, meanwhile, has been ineffective. Our maximum bandwidth capacity is 550 Mbps, tiny, and so internet access cannot be distributed evenly to all of our faculties, institutes, units, and centers. The TOEFL CBTs and TOEAFL CBTs have also been disrupted by these technical difficulties, particularly our unstable and unevenly distributed internet access." (FGD, 2021)

Fourth, achieving excellence, gauged by the quantity of academic publications indexed in Google Scholar and Scimago Institution Rankings, has been challenging. This difficulty primarily stems from human resource constraints, especially the scarcity of lecturers proficient in using digital devices and technologies. The pandemic has limited lecturers' opportunities to engage in research and public service activities, hindering their ability to produce materials suitable for publication in open-access journals or for indexing by Google Scholar. This issue was highlighted during a focus group discussion by both the Director of Research and Public Service and the Director of Information Technology:

"Our digitalization program, the LITAPDIMAS application, covers research, academic publication, and public service. A major obstacle has been lecturers' unfamiliarity with the application, such that few have been able to obtain assistance for research and public service. Few have been involved in international

collaborations, global applications, or long-term research projects. Currently, in 2021, our lecturers have only conducted research in the areas of capacity building, interdisciplinary research, program development, and higher education development. It has thus been difficult for them to achieve Google Scholar indexing and open journal publication, both of which are measured by Webometrics to ascertain excellence. And so our State Islamic Institute is ranked 437th (nationally) and 13,968th (internationally)." (FGD, 2021)

The data presented clearly shows that the execution of digitalization programs, without adequate infrastructure and human resources (such as lecturers adept in digital technologies), has negatively impacted the quality of education.

4.2. Factors Compromising Education Quality during the COVID-19 Pandemic

The approach to digitalization taken by IAIN Bengkulu in response to the COVID-19 pandemic has emerged as a challenge to maintaining education quality at the institution. While digitalization was initially adopted as a strategic response to the abrupt need for distance learning, it has inadvertently compromised the quality of education. This decline can be traced back to several key factors, outlined in Table 1 below:

Table 1. Digitalization and Its Detrimental Effect on Education Quality: Factors

Informant	Lecturer Experience	Factor
R1	Difficulty accessing the internet during the implementation of the SIAKAD program; the network often encounters errors, and this makes the online learning process more challenging and less effective	Inadequate infrastructure
R2I	In e-learning, it is difficult to access learning materials [and] difficult to submit assignments. Some students cannot attend class, as they don't have the necessary technology, don't have data, or don't have a signal. This can be detrimental to the quality of our graduates.	Inadequate infrastructure
R3	SIAKAD, during the COVID-19 pandemic, has been difficult because of connectivity problems. Our classes must often be canceled, and so the learning process is ineffective.	Inadequate infrastructure
R4	SIAKAD, e-performance, and e-learning, none of them have been implemented maximally because of network problems. Some have also rejected digitalization because they fear that digital technology will erode their privacy, increase opportunities for conflict, cause health problems, and undermine their copyrights.	Inadequate infrastructure; concern regarding the negative effects of technology
R5	Lecturers' use of e-learning for teaching, research, writing, and publication is limited, as the networks are slow. Sometimes people have to wait all day, and even then there's no signal, and so they give up and forget about it. As such, it is difficult to realize the three goals of higher education.	Inadequate infrastructure
R6	The learning process is undertaken digitally using the SIAKAD program, including for comprehensive testing. The challenges faced… communication is difficult, as many students live in areas where the internet cannot easily be accessed. It is difficult to improve the quality of graduates.	Inadequate infrastructure
R7	Global advances in information technology have required campuses to improve themselves, to transform	Inadequate infrastructure; inadequate resources

	their products, processes, services, and environments, thereby creating equality for students. However, we have seen that the technology isn't ready, and there remain significant gaps in internet access.	
R8	The digitization necessitated by the COVID-19 pandemic has shown the key weaknesses of the campus system, the cyber university system, and distance learning: telecommunication networks are still not available universally.	Inadequate infrastructure
R9	Digitalization/SIAKAD remains difficult, as our human resources aren't ready… and then the technological factors, the internet access, and phone signal… so online learning is ineffective.	Inadequate infrastructure; inadequate resources
R10	A blended learning program, combining face-to-face learning with e-learning (video conferences, forums, and chatting)… there are still many obstacles for students who live in rural areas, far from the internet. They cannot readily access the internet, and so they cannot attend their classes or do their assignments.	Inadequate infrastructure
R11	The SIAKAD program, e-learning… it still cannot be applied easily, as the network is often slow, with many errors. And so I'm less motivated to work.	Inadequate infrastructure

Source: Interviews with Informants, 2021

The data indicates that the digitalization efforts undertaken by IAIN Bengkulu during the COVID-19 pandemic have negatively affected the quality of education offered. The apprehension regarding the potential adverse impacts of digitalization has impeded the effective deployment of digital programs. These efforts have been further obstructed by the lack of necessary infrastructure, including digital devices and stable internet connectivity, as well as the limited technological proficiency of the lecturers, operators, and students involved. Consequently, the institution has struggled to leverage the full potential of digital learning, leading to situations where many students are unable to engage in classes, access learning materials, or complete assignments. This array of challenges has resulted in a decline in motivation among both students and lecturers, further detracting from the efficacy of the educational process.

4.3 Strategies for Overcoming Threats to Education Quality

To counteract the negative impacts of digitalization on the quality of education, IAIN Bengkulu has implemented four key strategies. First, the administration allocated a budget of Rp3.4 billion to support research, publication, and public service initiatives, as well as to upgrade the campus's internet bandwidth from 150 Mbps to 550 Mbps. This enhancement is anticipated to boost the institution's ranking (Bagian Perencanaan dan Keuangan, 2021). Second, the rectorate set aside another Rp3.4 billion specifically for four areas of focus: (1) capacity building; (2) interdisciplinary research; (3) programmatic research and development; and (4) institutional research and development. The requirement for manuscripts arising from these efforts to be published in internationally or at least nationally accredited journals is intended to elevate IAIN Bengkulu's standing and its Webometrics ranking (LPPM, 2021).

Third, the various departments within IAIN Bengkulu have made concerted efforts to expand the usage of SIAKAD, their academic information system, among students, lecturers, staff, and administrators. SIAKAD is equipped with fifteen key features designed to streamline academic and administrative processes,

including: 1) program data management; 2) curriculum data management; 3) tuition fee and payment management; 4) semestral data management; 5) classroom management; 6) schedule and examination management; 7) lecturer evaluation monitoring; 8) lecturer data management; 9) student data management; 10) credit data management (KRS Online); 11) thesis defense management; 12) student portal (academic data); 13) lecturer portal (staff data); 14) feeder integration; and 15) integrated payment with IAIN Bengkulu's partner bank, BRI Bengkulu. The development and expansion of these features aim to enhance the institution's Webometrics ranking (Data Bagian Akademik, 2021).

Fourth, the Directorate of Quality Assurance at IAIN Bengkulu has been proactive in enhancing the institution's Webometrics ranking by increasing the presence of accredited bodies on campus. In 2021, the institution sponsored four lecturers to undergo auditor training based on the SNI ISO 21001:2018 standard, and several others participated in online assessor training (Data LPM, 2021). As of 2021, IAIN Bengkulu boasts publication of 32 journals, with 23 being nationally accredited, 3 undergoing the accreditation process, and 7 utilizing the Open Journal System (OJS). This marked an increase from the 22 journals published in 2020. The publication and accreditation of these journals are key to forging partnerships and enhancing the institution's prestige (Data KPJI IAIN Bengkulu, 2021). In efforts to further improve its Webometrics ranking, IAIN Bengkulu has upgraded its digital library, the Senayan Library Information System (SLIM), and established a repository for student theses. Graduates are encouraged to publish summaries of their theses in nationally accredited journals, promoting academic dissemination (Data Perpustakaan, 2021). Additionally, the institution has committed to upgrading its internet bandwidth from 150 Mbps to 550 Mbps. This expansion is aimed at providing stable internet access campus-wide, thus supporting a seamless experience for distance learning activities, such as Zoom meetings and webinars (Data Pusat Komunikasi, 2021).

Discussion

This article has demonstrated that digitalization, while often heralded as a panacea for the educational challenges induced by the COVID-19 pandemic, has adversely affected the quality of education at IAIN Bengkulu. This decline in quality is primarily due to the lack of necessary infrastructure (such as digital technologies and internet access) and limitations in human resources (including students and lecturers). A significant obstacle has been the deficiency in technological literacy among users, defined as the competency to utilize digital devices effectively (Iivari, Sharma and Ventä-Olkkonen, 2020). In response to these challenges and to mitigate the pandemic's negative impact, the institution has implemented several strategies. These include allocating funds for research, publication, and community service; introducing an academic information system (SIAKAD) for use by students, lecturers, staff, and administrators; augmenting the number of accredited bodies; and enhancing the digital library alongside developing a repository for theses and research products.

In the context of higher education, digitalization represents the integration of technology across various facets of the educational process, encompassing teaching methods, curriculum, administration, and the fostering of digital literacy and internet connectivity to shape the dynamic between educators and students (Barger, 2020). This transformation has revolutionized higher education, offering a pathway to achieve the openness and competitiveness that are vital in the current global landscape (Frolova, Rogach and Ryabova, 2020; Golovchin, 2021; Ronzhina et al., 2021). However, this shift from traditional classroom settings to online platforms means that the effectiveness of digitalization heavily relies

on the level of institutional preparedness (Efendi, 2018). In the absence of adequate infrastructure and human resources, the move towards digitalization is likely to compromise, rather than enhance, the quality of higher education.

This article highlights that institutions of higher education are ill-prepared for the shift towards digitalization, primarily due to a deficiency in essential infrastructure, such as digital devices and internet access, which are crucial for facilitating distance learning amidst the ongoing pandemic (Akbar and Noviani, 2019), The situation is exacerbated by the challenges faced by students and lecturers in effectively utilizing the required digital technologies. Technological literacy, defined as the knowledge and ability to use and operate digital devices, is indispensable for supporting the learning process during the COVID-19 pandemic (Abdul Latip, 2020). Moreover, the article points out that the pandemic has prompted a departure from the traditional single production model of higher education, which was characterized by an institutional framework built on shared commitments (Fadhli, 2020).

This article diverges from the examination of higher education quality through the three widely recognized perspectives: the role of digitalization as a determinant of higher education quality (Reknati and Sursina, 2019; Rukmini et al., 2021; Sanjaya and Nurfitriana Handayani, 2021), the significance of human resource management in ensuring quality assurance (Ekawati, 2019; Kodiran, 2019), and the impact of policies on education management (Csizmadia, Enders and Westerheijden, 2008; Horban et al., 2020; Mourato et al., 2021). Instead, it has focused on illustrating how, despite its intent to facilitate the continuity of higher education amidst the COVID-19 pandemic, digitalization has adversely affected the quality of education. It argues that digitalization has indeed revolutionized the educational landscape, but not without introducing challenges for students, lecturers, staff, and administrators, ultimately diminishing the overall quality of education. This piece contends that, contrary to expectations, digitalization has not enhanced but rather detracted from the quality of education.

The COVID-19 pandemic has drastically altered the educational landscape, necessitating the integration of digital technologies into teaching and learning practices. In response to government-mandated social distancing measures, traditional classroom instruction has shifted to distance learning, a change facilitated exclusively through digital means. However, this transition has introduced significant challenges for lecturers, students, and administrative staff, primarily due to the absence of essential infrastructure and a general lack of digital competencies. To enhance the quality of higher education under these circumstances, there is a critical need for a strategic action plan focused on providing digital devices and enhancing technological literacy among all stakeholders. Consequently, this article advocates for the creation of a specialized body dedicated to overseeing the digitalization efforts within the higher education sector during the ongoing COVID-19 pandemic.

Conclusion

Digitalization, frequently hailed as an answer to the challenges brought about by the COVID-19 pandemic, has, in fact, negatively impacted the quality of higher education. Following the Indonesian government's enforcement of learn-from-home policies, educational institutions have transitioned from traditional classroom settings to online learning platforms. This shift has adversely affected the quality of education due to various obstacles such as device ownership, internet connectivity, and the level of technological literacy among students and educators, all of which have constrained the effectiveness of online learning.

Employing an education management lens, this study has determined that digitalization has not enhanced the quality of higher education as

anticipated; instead, it has had a detrimental effect. The decline in education quality during the COVID-19 pandemic can be attributed to infrastructural inadequacies and the challenges faced by students and lecturers in utilizing digital technology, which have compromised the effectiveness and hindered the successful implementation of digitalization efforts.

This study is focused solely on IAIN Bengkulu, restricting the ability to generalize its findings. Moreover, the qualitative analysis employed centers on the institution's experiences with digitalization amidst the COVID-19 pandemic, indicating a need for broader research. Future investigations could benefit from adopting a mixed-methods approach, examining additional cases across various institutions. Such comprehensive research would aid in crafting targeted policies aimed at enhancing the quality of higher education.

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