

# CHALLENGES AND PROSPECTS OF ISLAMIC EDUCATION INSTITUTIONS AND SUSTAINABILITY IN THE DIGITAL ERA

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#### Abstract

Educational institutions are places for educational activities that aim to change lives for the better. The development of digital technology requires educational institutions to establish and develop the education system continuously. This article explores the challenges and prospects of Islamic educational institutions and their sustainability in the digital technology era. The method used for this article is the qualitative inductive content analysis method. The findings are 1) Political changes, economic changes, and socio-cultural changes in society require Islamic education institutions to upgrade the institutional system and control all institution's activities. 2) Islamic education institutions' prospects include improving human resources and service quality, effectiveness and efficiency of financial management, and emphasizing promotion costs. 3) The future of Islamic education institutions, namely the sustainability of the institution's existence, the sustainability of the quality level of the institution, and the sustainability of invested resources.

Keywords: Challenges, Prospect, Islamic Educational Institutions, Sustainability, Digital era.

## Abstrak

Lembaga pendidikan merupakan tempat berlangsungnya kegiatan proses mendidik manusia yang mempunyai tujuan utama adalah mengubah kehidupan manusia ke arah yang lebih baik. Perkembangan digital teknologi memberikan tuntuan kepada lembaga pendidikan untuk senantiasa melakukan inovasi-inovasi dan mengembangkan sistem pendidikan. Tujuan penulisan artikel ini adalah untuk mengeksplorasi tantangan dan prospek lembaga pendidikan Islam dan keberlanjutannya di era digital teknologi. Metode analisis yang digunakan adalah analisis konten induktif untuk mengidentifikasi tema utama dan area pengaruh pada literatur yang dibahas. Hasil temuan-temuan studi ini adalah sebagai berikut: 1) Perubahan politik, perubahan ekonomi dan perubahan sosial budaya di masyarakat adalah tantangan yang menuntut supaya lembaga pendidikan Islam genelakukan kontrol terhadap seluruh aktivitas. 2) Prospek lembaga pendidikan Islam yaitu peningkatan SDM dan mutu pelayanan, efektifitas dan efisiensi manajemen keuangan, dan penekanan biaya promosi. 3) Masa depan lembaga pendidikan Islam yaitu keberlanjutan tingkat kualitas Lembaga, keberlanjutan investasi sumber daya.

Kata Kunci: Tantangan, Prospek, Lembaga Pendidikan Islam, Keberlanjutan, Era Digital

#### INTRODUCTION

Nowadays, computers are everywhere and have changed people's lives. Computers and the internet can radically change the world of education. Computers and the internet have changed the way of teaching, the way of learning, the way of communication, the way of politics, and most aspects of human interaction.<sup>1</sup> The modern education system focuses on implementing educational strategies that meet the standards of technological development.<sup>2</sup>

Islamic education faces many challenges for the advancement of Islamic education along with the development of technology.<sup>3</sup> To answer this, researchers from various countries also participate in conducting research related to Islamic curriculum, Islamic learning methods, and others that aim to develop Islamic education in the digital era. The study of Sutiah & Supriyono develops software-based Islamic learning media to improve learning achievement and motivation.<sup>4</sup> Mardiana & Anggraini examined the effectiveness of websites in Islamic education.<sup>5</sup> Al-Gumaei et al. investigated the integration of ICT into Islamic teaching and learning in the UAE.<sup>6</sup> Related to the reconstruction of the Islamic education curriculum in the current era of advanced technological developments is also being researched by Yusmaliana & Widodo.<sup>7</sup>

Many researchers in Islamic Education study the development of Islamic education in the digital era, specifically learning media, learning methods, and Islamic curriculum. Based on data from publisher Elsevier on June 16, 2021, there were 29 research articles related to Islamic education and 100 articles selected randomly using Harzing's Publish or Perish application. All of them are related to learning, learning methods, and the Islamic curriculum in the digital era. The gap in this research and one of the essential parts that are still rarely studied is Islamic education institutions in the digital era.

Muslim countries, including Indonesia, have a rich history of intellectual traditions and educational institutions, which have developed for 1400 years.<sup>8</sup> Islamic educational institutions

<sup>&</sup>lt;sup>1</sup> Antonio M. Battro and Kurt W. Fischer, "Mind, Brain, and Education in the Digital Era," *Mind, Brain, and Education* 6, no. 1 (March 2012): 49–50, https://doi.org/10.1111/j.1751-228X.2011.01137.x.

<sup>&</sup>lt;sup>2</sup> A. V. Shutaleva, A. A. Kerimov, and Y. V. Tsiplakova, "Humanization of Education in Digital Era," *Perspectives of Science and Education* 42, no. 6 (December 30, 2019): 32–44, https://doi.org/10.32744/pse.2019.6.3.

<sup>&</sup>lt;sup>3</sup> Moch Tolchah and Muhammad Arfan Mu'ammar, "Islamic Education in The Globalization Era; Challenges, Opportunities, and Contribution of Islamic Education in Indonesia," *Humanities & Social Sciences* Reviews 7, no. 4 (October 7, 2019): 1031–37, https://doi.org/10.18510/hssr.2019.74141.

<sup>&</sup>lt;sup>4</sup> S Sutiah and S Supriyono, "Software Testing on The Learning of Islamic Education Media Based on Information Communication Technology Using Blackbox Testing," ... (International Journal of Information System & ... 3, no. 36 (2020): 254–60, http://ijistech.org/ijistech/index.php/ijistech/article/view/57.

<sup>&</sup>lt;sup>5</sup> Dina Mardiana and Daniar Chandra Anggraini, "The Effectiveness of Utilising Web-Learning Media towards Islamic Education Learning (PAI) Outcome in the Era of Industrial Revolution 4.0," *International Journal of Innovation, Creativity and Change* 8, no. 1 (2019): 80–96.

<sup>&</sup>lt;sup>6</sup> Gubran Saif Al-Gumaei, Khadeegha Alzouebi, and Hamdy Ahmed Abdelaziz, "The Islamic Studies Teachers' Perception of Integrating ICT Into the Teaching and Learning in the UAE Public Schools," *International Journal of Technology Diffusion* 10, no. 2 (April 2019): 69–82, https://doi.org/10.4018/IJTD.2019040104.

<sup>&</sup>lt;sup>7</sup> Desfa Yusmaliana and Hendro Widodo, "Reconstruction of Islamic Education Curriculum in The Disruption Era," *IJISH (International Journal of Islamic Studies and Humanities)* 2, no. 1 (April 14, 2019): 50–57, https://doi.org/10.26555/ijish.v2i1.748.

<sup>&</sup>lt;sup>8</sup> Yahia Baiza, "Islamic Education and Development of Educational Traditions and Institutions," in *Handbook* of *Islamic Education* (London: Springer, 2018), 77–97, https://doi.org/10.1007/978-3-319-64683-1\_7.

have an essential role in improving the quality of education.<sup>9</sup> The development of Islamic educational institutions has become a fluctuating trend as technology advances.

Data from the Ministry of Religious Affairs for the 2019/2020 academic year shows that the national data for Islamic educational institutions total 82,418 institutions, specifically 78,408 as private institutions and 4,010 as public institutions.<sup>10</sup> Based on the data on the number of Islamic educational institutions which demand every Islamic education institution anywhere, in order to be able to empower the components of the institution to improve good quality and be able to compete.

Islamic educational institutions require careful planning to improve quality and be able to compete in the digital era. Before preparing a plan, it is necessary to study the challenges, prospects, and sustainability of Islamic Educational Institution. Therefore, the purpose of this study is to examine the challenges, prospects, and sustainability of Islamic educational institutions.

# METHOD

This article used the qualitative method that uses inductive content analysis to identify the main theme and areas of influence on the literature covered.<sup>11</sup> This article explored the challenges and prospects of Islamic educational institution and their sustainability in the digital era. The data sources used are secondary data, namely texts from books, national and international journals, and other reliable sources.

# **RESULTS AND DISCUSSION**

# CHALLENGES OF ISLAMIC EDUCATION IN THE DIGITAL ERA

The development of the times often changes the pattern of the economic, social, and cultural life of people in a region or country. The impact of changes in the digital era of technology can cause social shocks.<sup>12</sup> Facing the digital era requires the best preparation. One of the preparations that can be done is to maintain the continuity of the educational path and make it relevant to the times so that it can answer the needs of the community and be able to read the signs of the times. Education in this country is also expected to be able to answer or meet the needs of the community and can catch the signs of the times. However, the problem faced by Islamic educational institutions to be competent in the digital world is not as easy as turning the palm of the hand.<sup>13</sup>

Educational institutions are places for educational activities that aim to change human life for the better. Tudor said there are three types of Islamic Educational Institutions, namely

<sup>&</sup>lt;sup>9</sup> Arief Efendi, "Peran Strategis Lembaga Pendidikan Berbasis Islam Di Indonesia," *El Tarbawi* 1, no. 1 (2008): 1–12.

<sup>&</sup>lt;sup>10</sup> Kementerian Agama Republik Indonesia, "Data Statistik Pendidikan Islam," 2020, http://emispendis.kemenag.go.id/dashboard/?content=data-statistik.

<sup>&</sup>lt;sup>11</sup> Jane Forman and Laura Damschroder, "Qualitative Content Analysis," 2007, 39–62, https://doi.org/10.1016/S1479-3709(07)11003-7.

<sup>&</sup>lt;sup>12</sup> Richard D. Waters and Kevin D. Lo, "Exploring the Impact of Culture in the Social Media Sphere: A Content Analysis of Nonprofit Organizations' Use of Facebook," *Journal of Intercultural Communication Research* 41, no. 3 (November 2012): 297–319, https://doi.org/10.1080/17475759.2012.728772.

<sup>&</sup>lt;sup>13</sup> Akmal Hawi, "Tantangan Lembaga Pendidikan Islam," *Tadrib: Jurnal Pendidikan Agama Islam* 3, no. 1 (August 30, 2017): 143, https://doi.org/10.19109/Tadrib.v3i1.1388.

Formal Islamic Education Institutions, Non-Formal Islamic Education Institutions, and Informal Islamic Education Institutions.<sup>14</sup> Table 1 has an explanation regarding the types of institutions.

Islamic Educational	Description	Example
Institutions		
Formal	A structured educational	MI, MTs, MA,
	institution starts from primary	Islamic College
	(elementary) education, secondary	
	education, to higher education	
Non-Formal	Not a formal educational	Boarding school,
	institution that is organized in a	homeschooling
	structured and tiered manner	
Informal	The space of educational	Quran recital, TPA
	institutions focuses on the family	
	and the community	

**Table 1**. Types of Islamic Educational Institutions

#### **Challenges of Islamic Educational Institutions on Politics**

Table 1 shows that Indonesian Islamic education institutions offer diversity and are multicultural. This diversity encourages outrageous acts and fanaticism that threaten the stability of diverse societies and provides stimulus and legitimacy to the emergence of extreme and radical attitudes in thinking and acting.<sup>15</sup>

Indonesian Islamic educational institutions are considered the headquarters of a fundamental understanding of Islam which later became the source of radical movements in the name of Islam.<sup>16</sup> Radical groups target Islamic educational institutions to spread their knowledge. Therefore, it is a challenge for Islamic institutions to prevent the spread of radicalism.<sup>17</sup>

Radicalism in educational institutions can develop from educators to students, from institutional leaders to teachers, and from the community or parents of students to teachers and institutions with various forms of intimidation.<sup>18</sup>

The internet has a significant influence in disseminating information to the public on issues of radicalism, resulting in the public being propagated against radical cases spread on

<sup>&</sup>lt;sup>14</sup> Sofia Loredana Tudor, "Formal – Non-Formal – Informal in Education," *Procedia - Social and Behavioral Sciences* 76 (April 2013): 821–26, https://doi.org/10.1016/j.sbspro.2013.04.213.

<sup>&</sup>lt;sup>15</sup> Zulfatul Safaati, "Persepsi Guru PPKn SMA Wilayah Lamongan Tentang Radikalisme Di Indonesia," *Kajian Moral Dan Kewarganegaraan* 5, no. 03 (2017); Arsip Widodo, "Moderation of Islamic Education as an Effort to Prevent Radicalism (Case Study of FKUB Singkawang City, Kalimantan, Indonesia)," *Nadwa* 13, no. 2 (2019): 271–94.

<sup>&</sup>lt;sup>16</sup> Asril Asril, "Membangun Kesadaran Inklusif-Multikultural Untuk Deradikalisasi Pendidikan Islam," *At-Ta'lim: Media Informasi Pendidikan Islam* 15, no. 2 (2017): 282–301.

<sup>&</sup>lt;sup>17</sup> Masnur Alam, "A Collaborative Action in the Implementation of Moderate Islamic Education to Counter Radicalism," *International Journal of Innovation, Creativity and Change* 11 (2020).

<sup>&</sup>lt;sup>18</sup> Muhammad Saekan Muchith, "Radikalisme Dalam Dunia Pendidikan," *ADDIN* 10, no. 1 (February 1, 2016): 163, https://doi.org/10.21043/addin.v10i1.1133.

the internet.<sup>19</sup> Data from the Ministry of Communication and Informatics dated April 3, 2021, shows that 20,543 contents indicated the understanding of terrorism radicalism spread on Indonesian social media.<sup>20</sup> It proves that many terrorist groups use digital technology for da'wah and create exclusive online sites as a medium for coordinating acts of terror between them.

The digital era makes it easy to receive information related to radicalism.<sup>21</sup> Radicalism, especially in religion, is growing in the educational environment towards students, teachers, lecturers, and other groups of educators. Apart from psychological reasons, the reason for the development of radicalism is chauvinism towards religion and a partial understanding of religion.

The challenge for Islamic education institutions in the digital era is to upgrade technology-based religious education following the progress of the times and control all technology-based educational activities to minimize the entry of radicalism.<sup>22</sup> Islamic Educational Institutions need human resources, both heads of institutions, teachers, and staff who can use and utilize technology as required to increase students' cognitive, affective, and psychomotor abilities following the correct Islamic religious principles.

# Challenges of Islamic Educational Institutions to the Economy

Education has a role in the economic growth of a country.<sup>23</sup> Statistics Indonesia (BPS) in February 2021 recorded that there were 8.75 million unemployed in Indonesia.<sup>24</sup> The problem of creating graduates who are ready to work has always been a task that must be completed by educational institutions. Through Islamic education institutions, it is expected to be able to create quality human resources and have an Islamic mental attitude that is ready to compete in the world of work in the digital era of technology.

The development of an educational infrastructure that supports rapid technological change is needed along with the economic growth of a country.<sup>25</sup> Technological advances have an impact that must be faced by the world of education, including 1) Lack of

<sup>&</sup>lt;sup>19</sup> Birgit Bräuchler, "Islamic Radicalism Online: The Moluccan Mission of the Laskar Jihad in Cyberspace," *The Australian Journal of Anthropology* 15, no. 3 (December 2004): 267–85, https://doi.org/10.1111/j.1835-9310.2004.tb00098.x.

<sup>&</sup>lt;sup>20</sup> Leski Rizkinaswara, "Kominfo Blokir 20.453 Konten Terorisme Radikalisme Di Media Sosial," Direktorat Jenderal Aplikasi Informatika, 2021, https://aptika.kominfo.go.id/2021/04/kominfo-blokir-20-453-konten-terorisme-radikalisme-di-media-sosial/.

<sup>&</sup>lt;sup>21</sup> Nurdin Nurdin, "Radicalism on World Wide Web and Propaganda Strategy," *Al-Ulum* 16, no. 2 (2016): 265–88; Athik Hidayatul Ummah, "Digital Media and Counter-Narrativeof Radicalism," *Jurnal Theologia* 31, no. 2 (2020): 233–56.

<sup>&</sup>lt;sup>22</sup> Evi Satispi and Taufiqurokhman Taufiqurokhman, "Islamic Education Policy Strategy in Indonesia's Digital Era," in *Proceedings International Conference BKSPTIS 2018*, 2018.

<sup>&</sup>lt;sup>23</sup> Laura Marquez-Ramos and Estefanía Mourelle, "Education and Economic Growth: An Empirical Analysis of Nonlinearities," *Applied Economic Analysis* 27, no. 79 (September 2, 2019): 21–45, https://doi.org/10.1108/AEA-06-2019-0005.

<sup>&</sup>lt;sup>24</sup> Indriana Damaianti and Ruli Mochammad Chaerudin, "The Minimum Wage and Its Implications to The Open Unemployment Rate Covid-19 Pandemic in West Java," in *Journal of International Conference Proceedings (JICP)*, vol. 4, 2021, 71–75.

<sup>&</sup>lt;sup>25</sup> Yeongjun Yeo and Jeong-Dong Lee, "Revitalizing the Race between Technology and Education: Investigating the Growth Strategy for the Knowledge-Based Economy Based on a CGE Analysis," *Technology in Society* 62 (August 2020): 101295, https://doi.org/10.1016/j.techsoc.2020.101295.

information technology-based infrastructure; 2) Educational institutions use used multimedia tools; 3) The high cost of procuring and using technology-based facilities.<sup>26</sup>

Aside from creating graduates ready to compete in the digital era, the challenge for educational institutions is to provide affordable school fees for the community with suitable facilities following technological advances. To achieve this target, the government assists, such as Operational Assistance Fee (BOS) and Smart Indonesia Card (KIP). Even the community itself assists in the form of *zakat*, *infaq*, and *shadaqah* (ZIS).<sup>27</sup>

Various kinds of assistance for educational institutions are to institutions from the government and the community. Iqbal & Khalid supported that a Muslim's wealth must be for good, such as scholarships for Islamic education institutions and building the people's economy.<sup>28</sup> Islamic educational institutions must uphold the principles of justice, the principle of trust, honesty, deliberation, and openness as a form of management of Islamic educational institutions in the face of rapid technological and economic development.

#### Challenges of Islamic Educational Institutions on the Social Culture

Technology in education should not only be seen as a tool or learning media but must also as a tool or media that shapes social culture.<sup>29</sup> Socio-cultural change is a phenomenon that occurs in society following the times. One of the causes of socio-cultural changes in a community is technology.<sup>30</sup>

The decline of moral values in children is a severe problem for the government, society, and educational institutions. Technology changes students' lifestyles; for example, they play games on their smartphones every day until they forget to eat and socialize.<sup>31</sup> Educational institutions must control technology in education because it can change socio-cultural changes to create an adequate generation.

Besides providing provisions for cognitive abilities, the purpose of Islamic education is also to give students requirements, namely *aqidah* (faith), *budiyah* (worship) and morals and their application in everyday life.<sup>32</sup> Digitization of Islamic education is expected to build the

<sup>&</sup>lt;sup>26</sup> Amin Akbar and Nia Noviani, "Tantangan Dan Solusi Dalam Perkembangan Teknologi Pendidikan Di Indonesia," *Prosiding Seminar Nasional Pendidikan Program Pascasarjana Universitas Pgri Palembang* 2, no. 1 (2019): 18– 25.

<sup>&</sup>lt;sup>27</sup> Muhammad Afief Mubayyin, "Pengalokasian Dana Zakat Untuk Meningkatkan Sarana Dan Prasarana Pendidikan (Studi Kasus Di Lazis UII)," 2018; Indah Wahyu Ningsih et al., "Manajemen Pembiayaan Pendidikan Lembaga Filantropi Yatim Mandiri Dalam Pemberdayaan Mahasiswa Yatim (Study Analisis Program MEC)," *JIIP - Jurnal Ilmiah Ilmu Pendidikan* 4, no. 8 (December 8, 2021): 859–69, https://doi.org/10.54371/jiip.v4i8.357.

<sup>&</sup>lt;sup>28</sup> Tanveer Iqbal and Mubashra Khalid, "Islamic Educational Approach to Environment Protection : A Strategic Approach for Secure and Peaceful World," *International Journal of Business and Social Science* 1, no. No. 3 (2010): 182–91, http://ijbssnet.com/journals/Vol.\_1\_No.\_3\_December\_2010/19.pdf.

<sup>&</sup>lt;sup>29</sup> Anita L. Cloete, "Technology and Education: Challenges and Opportunities," *HTS Teologiese Studies / Theological Studies* 73, no. 4 (April 21, 2017), https://doi.org/10.4102/hts.v73i4.4589.

<sup>&</sup>lt;sup>30</sup> Sarah Strauss, Stephanie Rupp, and Thomas Love, *Cultures of Energy: Power, Practices, Technologies* (Routledge, 2016).

<sup>&</sup>lt;sup>31</sup> Jan M Lloyd, Laura A Dean, and Diane L Cooper, "Students' Technology Use and Its Effects on Peer Relationships, Academic Involvement, and Healthy Lifestyles," *NASPA Journal* 46, no. 4 (October 1, 2009): 695–709, https://doi.org/10.2202/1949-6605.5040.

<sup>&</sup>lt;sup>32</sup> Abdurahman Abdurahman, "Implikasi UUSPN Terhadap Pendidikan Islam," *AL-TANZIM: Jurnal Manajemen Pendidikan Islam* 1, no. 1 (2017): 19–35; Mahmudi Mahmudi, "Pendidikan Agama Islam Dan Pendidikan Islam Tinjauan Epistemologi, Isi, Dan Materi," *TA'DIBUNA: Jurnal Pendidikan Agama Islam* 2, no. 1 (May 21, 2019): 89, https://doi.org/10.30659/jpai.2.1.89-105.

nation's character that upholds social values such as tolerance, togetherness, cooperation, and mutual respect following the principles of Islamic teachings.

Digitalization provides convenience, transparency, and accountability from an institutional or school administration perspective.<sup>33</sup> Teaching and evaluation materials can also be packaged quickly. Of course, it must support by good employee skills. Therefore, institutions or schools are expected to provide a more significant portion of the adverse effects of technology on the behavior of students who tend to socialize less. Technology can provide more knowledge to students and reduce moral values and social behavior. For example, cyberbullying is currently being felt by school-age teenagers. Both perpetrators and victims of cyberbullying feel the psychological impact and decline in moral values and social behavior. <sup>34</sup>

## PROSPECTS OF ISLAMIC EDUCATION IN THE DIGITAL ERA

The modernization of Islamic education has led to the emergence of thousands of modern Islamic religious education institutions widespread in urban and rural areas in Indonesia. This can be seen from the Ministry of Religious Affairs data for the 2019/2020 academic year that there are 82,418 Islamic Education Institutions.<sup>35</sup>

The rate of technology adoption is overgrowing in the educational environment.<sup>36</sup> Therefore, the integration between elements in educational institutions are expected to be able to take advantage of technological advances to encourage the ability to innovate and have competitiveness in the world of education

#### Improvement of Human Resources

Improvement of human resources can be made through several activities, namely 1) providing information technology for employees, 2) utilizing tech-savvy employees, and 3) building and developing work systems based on information technology.<sup>37</sup>

Factors that inhibit and support human resources' performance, such as the availability of internet access, must be appropriately managed so that employees can work optimally.<sup>38</sup> Digitalization of educational institutions provides speed and convenience in

<sup>&</sup>lt;sup>33</sup> Doni Winarso et al., "Digitalisasi Dan Cashless Payment Untuk Meningkatkan Layanan Keuangan Pada SMK Muhammadiyah Bangkinang," *Abdiformatika: Jurnal Pengabdian Masyarakat Informatika* 1, no. 2 (2021): 75–81.

<sup>&</sup>lt;sup>34</sup> Gary W. Giumetti and Robin M. Kowalski, "Cyberbullying Matters: Examining the Incremental Impact of Cyberbullying On Outcomes Over and Above Traditional Bullying in North America," in *Cyberbullying Across the Globe* (Cham: Springer International Publishing, 2016), 117–30, https://doi.org/10.1007/978-3-319-25552-1\_6.

<sup>&</sup>lt;sup>35</sup> Indonesia, "Data Statistik Pendidikan Islam."

<sup>&</sup>lt;sup>36</sup> Binesh Sarwar et al., "Usage of Social Media Tools for Collaborative Learning: The Effect on Learning Success With the Moderating Role of Cyberbullying," *Journal of Educational Computing Research* 57, no. 1 (March 16, 2019): 246–79, https://doi.org/10.1177/0735633117748415.

<sup>&</sup>lt;sup>37</sup> Margarita Angelidou, "Four European Smart City Strategies," *Int'l J. Soc. Sci. Stud.* 4 (2016): 18; M. Chodzirin, "Pemanfaatan Information and Communication Technology Bagi Pengembangan Guru Madrasah Sub Urban," *Dimas: Jurnal Pemikiran Agama Untuk Pemberdayaan* 16, no. 2 (December 7, 2016): 309, https://doi.org/10.21580/dms.2016.162.1095.

<sup>&</sup>lt;sup>38</sup> Dyan Eka Pamungkas and Sukarman Sukarman, "Transformasi Dunia Pendidikan Di Sekolah Dasar Dalam Masa Pandemi Covid-19," *Jurnal Review Pendidikan Dasar: Jurnal Kajian Pendidikan Dan Hasil Penelitian* 6, no. 3 (2020): 211–19; Binti Zulfiana, Teguh Triwiyanto, and Raden Bambang Sumarsono, "Kerjasama SMK DAN CISCO System Dalam Meningkatkan Mutu Pembelajaran Teknik Komputer Jaringan," *Jurnal Administrasi Dan Manajemen Pendidikan* 1, no. 1 (February 28, 2018): 87–95, https://doi.org/10.17977/um027v1i12018p87.

working.<sup>39</sup> Improving the quality of human resources for Islamic educational institutions is expected to offer opportunities to compete and outperform modern institutions in education. **Finance** 

In the implementation of education, one of the important components is the cost of education.<sup>40</sup> Without cost, the education process cannot run optimally. Financial management of educational institutions is divided into three, namely: first, the *otorisator* is an official who has any authority to make decisions regarding revenues or expenditures. Second, the *ordinator* is the official authorized to apply for financing based on the author's decision. Third, the treasurer is in charge of receiving, storing, and disbursing money.<sup>41</sup>

The digital era of technology provides convenience in managing tuition fees.<sup>42</sup> Prior to the existence of m-banking, the educational institution's website contained information on the bill for the financial management of an educational institution, which was done manually. Even if financial reporting is done manually, although using a computer, the data input method is still manual. Unlike today, the use of a website or application makes it easier to carry out transactions and financial reporting. This makes work more effective and efficient.

Digitization of Islamic educational institutions also has a good process related to institutional finance, if implemented optimally, even though at the beginning it incurs high costs, the effectiveness and efficiency of digital work can reduce the cost of adding employees, employee operational costs. In the long term, it can save the operational expenses of educational institutions, so that these costs can be diverted for the development of more modern facilities and infrastructure. Islamic educational institutions can be institutions that are not traditional but modern in terms of infrastructure.

#### Service Production

The production of the services of an educational institution can be interpreted as something that an educational institution gives to another party that does not transfer property rights and has no form. Alma stated that in general, the production of educational services, it has the following characteristics: 1) Intangibility, emphasizing the benefits (graduates of educational institutions), creating an education brand name, using the name of someone famous to increase trust; 2) Inseparability, working in large groups, working fast, training staff and educators to be able to build the trust of students, parents, community and government. 3) Variability quality control strategies follow the times, both in curriculum development and learning methods.<sup>43</sup>

<sup>&</sup>lt;sup>39</sup> Sigit Priatmoko, "Memperkuat Eksistensi Pendidikan Islam Di Era 4.0," *TA'LIM: Jurnal Studi Pendidikan Islam* 1, no. 2 (2018): 221–39.

<sup>&</sup>lt;sup>40</sup> Rahmadani1 Irsan2 Arif Rahman, "Analysis of Cost Needs for Junior High Schools Education Facilities in Tanjung Tiram Subdistrict Regency of Batu Bara," in *The 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020)* (Atlantis Press, 2020), 411–15.

<sup>&</sup>lt;sup>41</sup> Febie Saputra, "Kedudukan Bendahara Pasca Berlakunya Undang-Undang Nomor 1 Tahun 2004 Tentang Kebendaharaan Negara," *Yuridika* 30, no. 3 (September 4, 2015): 285, https://doi.org/10.20473/ydk.v30i3.1888.

<sup>&</sup>lt;sup>42</sup> Nima Jafari Navimipour and Zeynab Soltani, "The Impact of Cost, Technology Acceptance and Employees' Satisfaction on the Effectiveness of the Electronic Customer Relationship Management Systems," *Computers in Human Behavior* 55 (February 2016): 1052–66, https://doi.org/10.1016/j.chb.2015.10.036.

<sup>&</sup>lt;sup>43</sup> Buchari Alma, Pemasaran Stratejik Jasa Pendidikan (Bandung: Alfabeta, 2003).

The era of digital technology provides promising prospects for Islamic educational institutions to improve the service and quality of the institute.<sup>44</sup> Education services that should be provided face to face can be provided through online media.<sup>45</sup> The service time required is relatively shorter. Educational institutions can provide services through technology whenever and wherever the stakeholders are.

#### Marketing

The development of digital technology makes educators provide online-based learning in delivering material to students. As a result of online education, a virtual community is created in the student learning environment.<sup>46</sup> The existence of a virtual community makes it easier for educational institutions to promote their institution products. In addition to convenience, it is able to reduce promotional costs, and is effective and on target.

Digital marketing processes and marketing strategies have a significant impact.<sup>47</sup> The development of digital marketing media can enable the brand of Islamic Education Institutions, which was previously known only in the local community, to be known nationally and even internationally.

# SUSTAINABILITY OF ISLAMIC EDUCATION INSTITUTIONS IN THE DIGITAL ERA

The rapid development of international schools in various countries does not eliminate the existence of Islamic educational institutions. The reason is not because of being in an Islamic or non-Islamic country, but because of the ability of Islamic educational institutions to adapt and maintain sustainability in the face of a changing world that changes over time. Internal and external factors influence the future of educational institutions.<sup>48</sup> 1) internal factors, namely human resources as education managers, include programs, education

<sup>&</sup>lt;sup>44</sup> St. Wardah Hanafie Das, Abdul Halik, and Amaluddin -, "Paradigm of Islamic Education in the Future: The Integration of Islamic Boarding School and Favorite School," *Information Management and Business Review* 8, no. 4 (September 23, 2016): 24–32, https://doi.org/10.22610/imbr.v8i4.1390; Maria José Sousa and Álvaro Rocha, "Digital Learning: Developing Skills for Digital Transformation of Organizations," *Future Generation Computer Systems* 91 (February 2019): 327–34, https://doi.org/10.1016/j.future.2018.08.048.

<sup>&</sup>lt;sup>45</sup> Jong Bae Kim, "Sustainable Utilization of Personal Identification Services in Non-Face-to-Face Online Education Services in the Corona Era," *Review of International Geographical Education Online* 11, no. 8 (2021): 2040– 53; Abu Elnasr E. Sobaih, Ahmed M. Hasanein, and Ahmed E. Abu Elnasr, "Responses to COVID-19 in Higher Education: Social Media Usage for Sustaining Formal Academic Communication in Developing Countries," Sustainability 12, no. 16 (August 12, 2020): 6520, https://doi.org/10.3390/su12166520.

<sup>&</sup>lt;sup>46</sup> James W. Peltier, William Drago, and John A. Schibrowsky, "Virtual Communities and the Assessment of Online Marketing Education," *Journal of Marketing Education* 25, no. 3 (December 21, 2003): 260–76, https://doi.org/10.1177/0273475303257762.

<sup>&</sup>lt;sup>47</sup> P.K. Kannan and Hongshuang "Alice" Li, "Digital Marketing: A Framework, Review and Research Agenda," *International Journal of Research in Marketing* 34, no. 1 (March 2017): 22–45, https://doi.org/10.1016/j.ijresmar.2016.11.006.

<sup>&</sup>lt;sup>48</sup> Ashraf A M Salama et al., "The Role of Administrative Procedures and Regulations in Enhancing the Performance of The Educational Institutions-The Islamic University in Gaza Is A Model," 2018; Marco Seeber et al., "Why Do Higher Education Institutions Internationalize? An Investigation of the Multilevel Determinants of Internationalization Rationales," *Higher Education* 72, no. 5 (November 29, 2016): 685–702, https://doi.org/10.1007/s10734-015-9971-x.

personnel, and employee recruitment systems.<sup>49</sup> 2) external factors, namely globalization, democratization, and Islamic liberalism.<sup>50</sup>

Islamic educational institutions ranging from primary level to universities are introduced to strategic issues in maintaining digital-based institutional management. One of the strategic issues is sustainable development education.<sup>51</sup> There are three aspects in educational institutions' sustainability: guaranteeing the institution's existence, ensuring the level of quality, and sustainability of invested resources.<sup>52</sup>

#### Institutional Existence Guarantee

Competition between Islamic and non-Islamic educational institutions is getting more challenging in the digital era.<sup>53</sup> The power of technology makes competitiveness very high.<sup>54</sup> The change from the traditional education management system to digital education management is urgently needed to maintain the sustainability of the institution's existence.<sup>55</sup>

Through the internet, people can easily access information related to educational institutions. If an educational institution does not have a superior field in its institution, the community will not send their families to study at the institution.

#### **Quality Levels Guarantee**

Quality Islamic educational institutions can look for graduates who can compete in the competition to continue higher education levels and competition in the world of work in this digitalization era. <sup>56</sup> Heads of institutions, teachers, and educational staff are always required to

<sup>&</sup>lt;sup>49</sup> Robert L Mathis et al., Human Resource Management (Cengage Learning, 2016).

<sup>&</sup>lt;sup>50</sup> Mustapha Kamal Pasha, Islam and International Relations: Fractured Worlds (Routledge, 2017).

<sup>&</sup>lt;sup>51</sup> Maria Hedefalk, Jonas Almqvist, and Leif Östman, "Education for Sustainable Development in Early Childhood Education: A Review of the Research Literature," *Environmental Education Research* 21, no. 7 (October 3, 2015): 975–90, https://doi.org/10.1080/13504622.2014.971716; Iwona Ocetkiewicz, Barbara Tomaszewska, and Anna Mróz, "Renewable Energy in Education for Sustainable Development. The Polish Experience," *Renewable and Sustainable Energy Reviews* 80 (December 2017): 92–97, https://doi.org/10.1016/j.rser.2017.05.144.

<sup>&</sup>lt;sup>52</sup> Alyson Warhurst, "Sustainability Indicators and Sustainability Performance Management," *Mining, Minerals and Sustainable Development [MMSD] Project Report* 43 (2002): 129.

<sup>&</sup>lt;sup>53</sup> Firman Mansir, "The Leadership of Personnel Management in Islamic Education: Emerging Insights from an Indonesian University," *Edukasia Islamika*, June 29, 2020, 1, https://doi.org/10.28918/jei.v5i1.2349; Ali Nurdin, "Modernization of Islamic Higher Education in Indonesia at A Glance: Barriers and Opportunities," *International Journal of Multicultural and Multireligious Understanding* 8, no. 3 (March 3, 2021): 288, https://doi.org/10.18415/ijmmu.v8i3.2490.

<sup>&</sup>lt;sup>54</sup> Hasan Baharun, "Management Information Systems in Education: The Significance of e-Public Relation for Enhancing Competitiveness of Higher Education," in *Journal of Physics: Conference Series*, vol. 1175 (IOP Publishing, 2019), 12151.

<sup>&</sup>lt;sup>55</sup> Shivangi Dhawan, "Online Learning: A Panacea in the Time of COVID-19 Crisis," *Journal of Educational Technology Systems* 49, no. 1 (September 20, 2020): 5–22, https://doi.org/10.1177/0047239520934018; John Loonam et al., "Towards Digital Transformation: Lessons Learned from Traditional Organizations," *Strategic Change* 27, no. 2 (March 2018): 101–9, https://doi.org/10.1002/jsc.2185.

<sup>&</sup>lt;sup>56</sup> Safrul Muluk et al., "Developing Generic Skills at an Islamic Higher Education Institution Curriculum in Aceh, Indonesia," *Higher Education, Skills and Work-Based Learning* 9, no. 3 (August 12, 2019): 445–55, https://doi.org/10.1108/HESWBL-06-2018-0064; Akmal Mundiri, "Organizational Culture Base On Total Quality Management In Islamic Educational Institution," *ADRI International Journal Of Islamic Studies and Social Sciences* 1, no. 1 (2017); Tolchah and Arfan Mu'ammar, "Islamic Education in The Globalization Era; Challenges, Opportunities, and Contribution of Islamic Education in Indonesia."

upgrade related management, curriculum, teaching materials, etc.<sup>57</sup> In addition, to develop the quality of institutions based on the evaluation results.

# Sustainability of Invested Resources

Conduct training and certification activities for academic staff, educators, and school principals to provide information on the latest issues related to education in the digital era.<sup>58</sup> There are essential things in the development of Human Resources in education, namely professionalism, competitive power, functional competence, participatory excellence, and cooperation.<sup>59</sup>

# CONCLUSION

The challenges of Islamic educational institutions in the digital era are political, economic, and socio-cultural changes. This change requires Islamic educational institutions to upgrade the institutional system to keep up with the times and control all activities in Islamic educational institutions. The prospect of Islamic educational institutions in the digital era is the improvement of human resources and the quality-of-service institutions to compete with other educational institutions. They are increasing the effectiveness and efficiency of the Institution's financial management. Emphasis on promotion costs and brand introduction of Islamic education institutions to the national and international community. The sustainability of the Institution's existence, the sustainability of the Institution's quality level, the sustainability of invested resources are essential aspects for the future of Islamic education institutions.

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<sup>&</sup>lt;sup>58</sup> Ediyanto Ediyanto et al., "Inclusive Education in Indonesia from The Perspective of Widyaiswara in Center for Development and Empowerment of Teachers and Education Personnel of Kindergartens and Special Education," *IJDS*: *Indonesian Journal of Disability Studies* 4, no. 2 (December 5, 2017): 04–116, https://doi.org/10.21776/ub.IJDS.2017.004.02.3; Wayan Maba et al., "Conducting Assessment Instrument Models for Teacher Competence, Teacher Welfare as an Effort to Enhance Education Quality," *International Research Journal of Management, IT and Social Sciences* 5, no. 3 (2018): 46–52.

<sup>&</sup>lt;sup>59</sup> Peter Hart, "Reinventing Character Education: The Potential for Participatory Character Education Using MacIntyre's Ethics," *Journal of Curriculum Studies*, October 30, 2021, 1–15, https://doi.org/10.1080/00220272.2021.1998640; Pudji Lestiyani, "Analisis Persepsi Civitas Akademika Terhadap Konsep Merdeka Belajar Menyongsong Era Industri 5.0," *Jurnal Kependidikan: Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan, Pengajaran Dan Pembelajaran* 6, no. 3 (November 6, 2020): 365, https://doi.org/10.33394/jk.v6i3.2913.

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