Research article

Information and Communication Technology (ICT) for Developing Islamic Education in the Era of New Normal

Rizka Fauziah\textsuperscript{1}, Isa Anshori\textsuperscript{2}, Eni Fariyatul Fahyuni\textsuperscript{3}\textsuperscript{*}

\textsuperscript{1}Universitas Muhammadiyah Sidoarjo, Jl. Mojopahit 666 B Sidoarjo, Indonesia
\textsuperscript{2}Universitas Islam Negeri Sunan Ampel, Jl. Ahmad Yani No.117 Surabaya, Indonesia
\textsuperscript{3}Universitas Muhammadiyah Sidoarjo, Jl. Mojopahit 666 B Sidoarjo, Indonesia

ORCID
Eni Fariyatul Fahyuni: https://orcid.org/0000-0003-0701-7027

Abstract.
The present study examined the use of Information and Communication Technology (ICT) in Islamic education in the light of the new normal the COVID-19 pandemic has forced us to adopt. The researchers describe how ICT was used in the administrative management, information systems, communication, and learning processes at Islamic educational institutions during the COVID-19 pandemic. A systematic literature review was conducted on related articles sourced from Google Scholar, DOAJ, Research Gate, SINTA, Science Direct, and lens.org. The results showed that ICT in Islamic education had a positive impact and helped in the advancement of Islamic education. Although today, the pandemic is no longer an obstacle in the field of education, it triggered the importance of utilizing ICT in the education system.

Keywords: information and communication technology, Islamic education, new normal

1. Introduction

People worldwide face a significant change in their habits due to the Covid-19 pandemic, likewise with Indonesia. The Indonesian people now need to adjust all their activities to the conditions of the Covid-19 pandemic so that the activities carried out can continue to run smoothly. Thus, some changes must be implemented so that all activities can comply with the health protocols set by the government, such as wearing masks, washing hands, and maintaining distance. Changes that occurred during the Covid-19 pandemic era are now known as the ‘new normal,’ which is described as a situation that occurs after quite intense changes. The term ‘new normal’ also describes the current situation, which is more typical than the previous life \cite{1}.

The Covid-19 pandemic has awakened education stakeholders in Indonesia, including Islamic education \cite{2}, to build a strong and resilient education system during the current
health and economic crisis [3]. The term ‘new normal’ is used to facilitate learning activities in the education system. Based on the Ministry of Home Affairs No. 47 of 2021, the education process can be carried out face-to-face with a maximum capacity of 50% of the capacity of the learning room [4]. As a result, the learning carried out cannot be comprehensive because the capacity of the learning space is still limited.

The development of increasingly advanced communication and information technology is no longer an obstacle for the education system, especially Islamic education. It is a source of strength to grow. Information and Communication Technology (ICT) facilitates education to provide learning spaces wherever and whenever. Thus, learning can still be presented to 100% of students even though only 50% of class capacity is present. Learning with such a model is now better known as hybrid learning, which combines various models, approaches, and learning media with two online and offline systems. With hybrid learning, it is hoped that the designed learning can build students’ knowledge by providing better opportunities for students to increase creativity, fun, and challenges through technology-based learning (IT-integrated) [5].

In addition to facilitating the learning process, ICT also provides convenience in administration, information, and communication systems in Islamic education. ICT can collect and summarize information, record and store school financial data, and store other school administrative data [6]. Thus, school data related to administration, finance, and the learning process can be arranged more systematically and safely to facilitate the implementation of the education process. Even the internationalization of Islamic educational institutions can be realized [7].

To assess the use of ICT effectively and efficiently in the world of Islamic education, its necessary to pay attention to the benefits of technological developments. As is known, many assumptions state that technology seems to distance people from their religion, including Islam. Vice versa, religion is considered not to do with technological developments [8]. Thus, in its current development, ICT can integrate these two views into the same point of view; namely ICT can integrate Islamic religious values in education.

The problem formulation in this literature review is "How can the use of Information and Communication Technology (ICT) develop Islamic education in the new normal era?"
2. Methods

This article was prepared using the Systematic Literature Review (SLR) method. Article writing using the SLR methodology must be based on seven main aspects, namely as follows: (1) development and validation of review protocols/ publication standards/ reporting standards/ guidelines; (2) formulation of research questions; (3) systematic search strategy; (4) the quality of the assessment; (5) data extraction; (6) data synthesis; and (7) data demonstration. [9]. Researchers collected journal articles from Google Scholar, DOAJ, Research Gate, SINTA, Science Direct, and LENS.ORG to complement this study. The keywords in this paper are communication and information technology, Islamic education, the Covid-19 pandemic, and the new normal. The articles collected were articles published in the period 2020 to 2021. From various articles, the researchers selected 19 articles that were closely related to the keywords used. Furthermore, researchers categorize articles related to the use of Information and Communication Technology (ICT) in the learning process as well as administrative, information, and communication systems in several Islamic educational institutions to find out their use in the development of Islamic education in the new normal era during this Covid-19 pandemic.

3. Finding and Discussion

This article begins by conducting a literature review regarding the use of Information and Communication Technology (ICT) in education, especially Islamic education which has increasingly experienced significant developments since the Covid-19 pandemic. Researchers conducted an initial search using keywords based on research titles on Google Scholar and obtained as many as 18,700 articles. After that, the researcher chose approximately 50 references as research sources whose titles seemed relevant to this research. After making data reduction, finally, eight references were obtained for the introduction, one reference for the SLR method stage, and 19 main references for the literature review using this SLR method. This selection is based on the needs of the article content expected by the researcher, so the researcher must reduce some reference articles whose contents are considered less relevant. The number of references in this study is 28 references, of which 28 can be found on Google Scholar, three references can be found on DOAJ, 18 references can be found on Research Gate, seven references can be found on SINTA, one reference can be found on Science Direct, and 11 references can be found on LENS.ORG.
From the review conducted, it was found that the use of ICT is very necessary to support the activities of the education sector both in the learning process and in the administrative process. Even during a pandemic, an Islamic educational institution can still develop positively by maintaining the stability of leadership management and collaboration, increasing student and teacher network access to technology, maintaining the emotional stability of students and parents, and maintaining the financial health of educational institutions [3]. These things can be achieved using useful and targeted information and communication technology. In this new normal era, the performance of ICT is more visible. ICT facilitates Islamic education to maintain its stability and even improve its quality more than before. Furthermore, the author examines the use of ICT in developing Islamic education in the new normal era through a review of several articles presented in Table 1.

Based on Table 1, it can be seen that as many as 79% of journals discuss the use of ICT in the learning process, 31.6% on the use of ICT in the education administration system, 21% of journals discuss its relationship in developing Islamic values, and 48% discuss the benefits of ICT in developing individual skills. Furthermore, the use of ICT in the current new normal era is also shown by 38.4% of journals discussing the application of health protocols in educational institutions and 42% of journals discussing government policies in responding to the new normal era for the world of education.

Learning in the new normal era began with the emergence of government regulations that allowed schools to reopen but still with very strict restrictions and health protocols [10,11,12,16]. In its efforts to restore the health and economic recovery of the community, the government and society (especially in the Islamic education sector) utilize the use of communication and information technology to support all their activities so that time restrictions on community activities are no longer an obstacle [13,14,15]. The utilization of ICT in an Islamic educational institution is used in the learning process, which includes student learning activities [15,17,19] and the process of assessing student abilities [22,24] as well as in the institutional administration system as well [27,28], it can be seen in the use of various applications and supporting media, such as Youtube, E-learning, Sidikmu, and other applications that are intentionally designed to facilitate the administrative and learning process at school.

In practice, it turns out that ICT is not only used as a tool to do a job, but ICT can develop one's abilities, especially for actors in the education sector, both principals, teachers, students, and parents of students [18,21,23,25]. Thus, the use of ICT in developing Islamic education in the new normal era becomes an infrastructure that supports online and offline institutional activities by creating an environment that follows health
<table>
<thead>
<tr>
<th>Title and Authors</th>
<th>ICT in Learning System</th>
<th>ICT in Administration of Education System</th>
<th>ICT in Developing the Islamic Values</th>
<th>ICT used to develop Skills</th>
<th>Health Protocols in Education System</th>
<th>Government Policies in Education System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Management in the New Normal Era: A Literature Study [10]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Role of Educational Management in Managing Citizenship Learning in Technology Based Primary Schools in the Era New Normal [12]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Pandemic Indonesian Regional Development Planning, New Normal, New Orientation: The Case of West Java [13]</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovative Learning Media Based on e-Learning in the New Normal Era [14]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementasi Belajar dari Rumah dan Kesiapan Pemelajaran Tatap Muka di Madrasah [16]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Use of Youtube-Based Interactive Learning Media in Learning English in the New Normal Era [17]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madrasah Principal’s Leadership in the Face of an Era New Normal: Educational Technology Perspective [18]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring Model and Evaluation of ICT Utilization in The New Normal Era in Distance Learning in Madrasah [19]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Implementation of New Normal Online School in the Elementary School [20]</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementasi Sistem Informasi Pendidikan Muhimmadiyah (Sidikmu) dalam Layanan Administrasi Sistem Penilaian Al Islam, Kemuhimmadiyah dan Bahasa Arab (Ismuba) pada Era Industri 4.0 di Sekolah Dasar Muhimmadiyah 1 Krian, Sidoarjo [22]</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
Table 1: Search Results Related to the Utilization of Information and Communication Technology (ICT) in Developing Islamic Education in the Era of New Normal

<table>
<thead>
<tr>
<th>Title and Authors</th>
<th>ICT in Learning System</th>
<th>ICT in Administration of Education System</th>
<th>ICT in Developing Islamic Values</th>
<th>ICT used to develop Skills</th>
<th>Health Protocols in Education System</th>
<th>Government Policies in Education System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Learning: English Teachers’ Problems in Designing a Good Lesson Plan in New Normal Era at MAN Rejang Lebong [23]</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Impact of New Normal Regulation to the Implementation of SCL Approach in Secondary Level [25]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facing The New Normal Literacy: Information Technology Skill and Information Quality Strategy [26]</td>
<td></td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pembangunan Aplikasi Kepegawaian untuk SD Islam Terpadu Yasir di Cipondoh Tangerang [27]</td>
<td></td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementasi Aplikasi Sistem Informasi dan Administrasi Guru Agama (Siaga) dalam Meningkatkan Pelayanan Administratif di Seksi Pendidikan Agama Islam (PAIS) Kementerian Agama Kabupaten Lamongan [28]</td>
<td></td>
<td>✅</td>
<td>✅</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

protocols. The implementation is carried out through three stages: the habituation stage, the learning stage, and the development stage [20]. Through these stages, progress in the quality of information and the ability of individuals to adapt technological skills can develop people's technological literacy in the current new normal era [26], especially in the Islamic education sector.

4. Conclusions

The use of ICT in the world of Islamic education has a positive impact so that it brings significant changes to the progress of Islamic education. The new normal era during the Covid-19 pandemic has become a trigger for several Islamic educational institutions to further develop their potential by using information and communication technology. It can be seen from several Islamic educational institutions that are now competing to develop their institutional infrastructure, all of which involve the use of information and communication technology. In addition, a fairly positive response from the community
and educational policies that are currently very aggressive in involving the use of information and communication technology also play an important role in developing Islamic education in this new normal era.

Acknowledgments

Thanks for the support and prayers from family and friends at the Master of Islamic Education Management Department at Universitas Muhammadiyah Sidoarjo. The authors also thank the Universitas Muhammadiyah Sidoarjo, which has allowed the author to complete this paper. Thanks also for the suggestions and corrections from the reviewers so that this article becomes worthy of publication.

References


