

# **Application of Information Technology as an Islamic Education Innovation in Indonesia: a Case Study in MTs Hasyim Asy'ari**

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## **Abstract**

*This article aims to understand the concept of using information technology in Islamic education. Through the study of understanding textually and contextually. Existing problems are answered through library research. the result of the article is Information technology is a whole system for managing results to give rise to added value. The use of information technology is very useful in bridging the revolution in the world of Islamic education in Indonesia such as MTs Hasyim Asy'ari. The integration of information and communication technology in Islamic education improves the quality of education in schools. Some examples of the use of technology that can be utilized in learning Islamic religious education are audio technology, visual technology, visual-audio technology, and internet-based technology. all of that can be used in improving the quality of Islamic religious education.*

**Keywords:** technology, information, Islamic education

## **A. Introduction**

Education is a conscious and systematic effort carried out by educators to influence students so that they have behavior and character that are by educational ideals. When viewed from Islamic education, education has a goal to help humans get a meaningful life to achieve happiness in life in this world and the hereafter<sup>1</sup>.

Education is said to be a process that requires a programmed system and clear goals so that goals are easy to achieve. Education is an activity process design that has a solid foundation and clear direction and goals.<sup>2</sup> The reforms taking place at this time have paved the way for educators and educational technology to review the problems that arise in the field of education today. If in the past there were many problems regarding education that were not resolved, then today the matter of education is becoming more complex, because over time. So we are obliged to review all the actions taken.<sup>3</sup>

The current era of Reformation and Globalization is marked by the development of science and information technology, which has a great influence

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<sup>1</sup> Achmad Munib, *Pengantar Ilmu Pendidikan* (Semarang : UPT MKK UNNES, 2004)

<sup>2</sup> Mahmudah, U. Suhartono,& Rohayana AD. A robust data envelopment analysis for evaluating technical efficiency of Indonesian high schools. *Jurnal Pendidikan IPA Indonesia* (Indonesian Journal of Science Education). 2018;7(1):114-21.

<sup>3</sup> Kismiati, R.N., Mustakim, Z. and Mahmudah, U., 2022, November. Efforts To Recognize The Danger Of Bullying Against Children Through Sociodrama At Bendan Kergon Village, Pekalongan City. In *INTERNATIONAL CONFERENCE ON ISLAM, LAW, AND SOCIETY (INCOILS) 2021* (Vol. 1, No. 2).

on human life. Education cannot be separated from the development of science and technology, on the other hand education also requires technology in order to be able to achieve educational goals effectively and efficiently. It is necessary to innovate in the world of education, not only in the field of curriculum and facilities and infrastructure, but also in the development of information technology which is integrated into learning activities. So that these innovations can advance education in schools.

Innovation in the field of education cannot be separated from the consequences of advances in information technology.<sup>4</sup> Information technology in the world of education is capable of giving birth to e-learning which can assist or complement learning facilities and media. By using e-learning, learning becomes effective and efficient because it uses information media that can be used to access much of the information needed. Information technology can be implemented in various subjects in the world of education, one of which is in Islamic education. This was stated by Nurzayanah<sup>5</sup> if information technology can be developed in Islamic educational institutions so that it is able to produce educational concepts that are able to provide benefits to students, educators and education managers. made more attractive. Information technology in the field of education, especially Islamic education, has had an impact on accelerating digital literacy in Indonesian education.

In this case, it means that Islamic religious education is a subject that not only provides knowledge but also teaches morals to students. Therefore, Islamic religious education teachers have a considerable responsibility for the achievement of the learning objectives, because providing material in class is not enough to convey messages, but also must instill moral awareness in students. So that various efforts in learning Islamic religion must have a meaning that must be based on a better system. The device must have careful planning in order to achieve learning objectives, with a sound strategy and relevant evaluation tools<sup>6</sup>.

Islamic Education is a conscious and planned effort to prepare students to understand Islamic teachings as a whole and be able to live and practice what they have learned and can be used as a guide for social life. In this paper, it will be explained how information technology as a tool for Islamic education reform in Indonesia and how the impact of the application of information technology.

## **B. Methods**

The method used in this research is a case study conducted at MTs Hasyim Asy'ari and carried out during the learning process.

## **C. Discussion**

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<sup>4</sup> Fatimah, S., Mufti, Y. and Mahmudah, U., 2021, December. Analisis Kebutuhan Pengembangan Aplikasi Android berbasis Potensi Lokal sebagai Media Pembelajaran Sains. In *SEMAI: Seminar Nasional PGMI* (Vol. 1, No. 1, pp. 224-237).

<sup>5</sup> Zalik Nurzayanah, *Pemanfaatan Teknologi Informasi Dalam Pendidikan Agama Islam* (Tamadun – FAI UMG, XIX) hlm. 77.

<sup>6</sup> Hamdan Suyuti, *Teknologi Pembelajaran PAI* (Jurnal Pendidikan Agama Islam, Vol. 6, No. 2, Desember 2021), p. 71

Information technology is a means, media, system and method for obtaining, storing, processing and disseminating information that can be accounted for.<sup>7</sup> In the world of education, information technology is very useful and important. Not only in certain subject areas, but covers all subject areas including Islamic education. Islamic education is included in the Indonesian National Education system. Islamic education itself in the world of education plays a very important role in building the character of students and behaving in accordance with the faith considering that Indonesian people embrace Islam.<sup>8</sup>

Islamic education should underlie other education to be used as a benchmark in order to shape the character and personality of students and build the morale of the nation<sup>8</sup>. In this case, the government has made various efforts to improve the quality of education, including Islamic education, but the results have not been maximized.

To perfect the application of Islamic education in the world of education, the integration of information technology is needed. Information technology is not only a tool used as a teaching medium but can be said to be educational technology. This educational technology can be interpreted as the development, application and evaluation of systems, techniques and tools that aim to support teaching and learning activities. PAI learning is the main thing because within the scope of MTs Hasyim Asy'ari most of the students live in the pesantren environment, so that students have more time to study religion, both at the pesantren and at school. This requires that schools must be able to develop innovations so that students are not bored in participating in learning, one of which is by developing information technology.

Information technology in learning Islamic religion has a very important role, so that in its application various internet-based technological innovations are developed that facilitate understanding that can be accepted by students and make it easier for educators to convey learning. With the application of technology, the learning process experiences a more innovative shift, such as<sup>9</sup>:

1. Learning becomes more centered on students while educators act as facilitators. This change is marked by the growing development of learning media that can be accessed independently or individually.
2. Increasing practical use of information and communication technology in all aspects of education.

Innovation in the world of education is very visible from several ways of teaching teachers in class, where previously teachers taught more to the conventional method or better known as the lecture method. As the innovation of information technology increases, more media are developed to transfer knowledge to students. Innovation and development of information technology can also be felt by Islamic religious education. With this development, students do not only listen to the teacher from the beginning of learning to completion so that

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<sup>7</sup> Fatimah, S., Budiono, Mahmudah, U. and Syahidi, K., 2021. Pendampingan Kegiatan Belajar di Rumah Melalui Media Pembelajaran Inovatif di Masa Pandemi COVID-19. *KREASI: Jurnal Inovasi dan Pengabdian kepada Masyarakat*, 1(1), pp.75-82.

<sup>8</sup> Abdul Majid, *Pendidikan Agama Islam Berbasis Kompetensi* (Bandung: Remaja Rosda Karya)

<sup>9</sup> Munir, *Kurikulum Berbasis Teknologi Informasi dan Komunikasi* (Bandung: Alfabetha)

boredom occurs which is shown by reactions from students such as sleepiness, talking outside of learning material with friends, even doing other activities outside of learning activities such as drawing or other activities. Given the importance of Islamic religious education in the world of education, learning is not only taught solely to abort obligations but to instill proper meaning in students. This is where the development of information technology innovation plays an important role as a reform tool for Islamic religious education. Several forms of implementation of Islamic religious education technology, including<sup>10</sup>:

1. Learning media. Learning media has a broader understanding as a tool for conveying learning material to students to build students' interest and enthusiasm in participating in learning. Even though the media is used as a conveyer of learning material, the media should be adapted to the conditions of students and not only be attractive but able to play an active role in learning to improve students cognitive abilities.

2. Administrative. Managing school administration can utilize technology such as being able to process and obtain administrative data properly, both school data, educator and student data. Also administration related to teaching and learning activities

3. Learning resources. Utilizing information technology as a learning resource can be used in a way that is used to maximize the teaching and learning process. Such as using the internet to find the information needed so that students are given the convenience of accessing e-books, e-journals, e-learning, and so on. This learning resource can use students cellphones or school facility computers.

This information technology is one of the consequences of globalization. Information technology in the present has become a part of life and in the world of education, even information technology has many choices given. although MTs Hasyim Asy'ari is located in a village, this school applies information technology to maximize the learning process. No exception, in teaching Islamic religious learning, some examples of the benefits obtained are being able to easily access e-education on the internet / internet-based learning. Some examples of the use of technology in Islamic religious learning, such as<sup>11</sup>:

1. Visual-based information technology

- a. One of them is using PowerPoint media when teaching in class. Through this application, teachers are assisted in conveying the material to be delivered. Teachers can write down important points in the application and explain them in detail. In addition, students also do not feel bored because they see and not only hear.

- b. The teacher can display pictures according to the material being studied. As in the matter of eating manners, the teacher can display pictures when eating along with pictures of good eating procedures according to the beliefs and readings.

2. Audio-based information technology

The use of this media can improve students listening skills

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<sup>10</sup> Rusman, *Pembelajaran Berbasis Teknologi Informasi dan Komunikasi* (Depok: Grafindo Persada)

<sup>11</sup> Zalik Nuryana, Op.Cit, p.80

### 3. Information technology based on visual-audio

Teachers can display learning videos according to the material to be conveyed. At least students can visualize or imagine the learning material in the real world. For example fasting material, the teacher can show illustrations of how to fast and how the verses regulate fasting. In addition, learning seems more interactive. An example of interactive learning is that students assess the film characters Nusa and Rara in learning Islamic religion.

### 4. Internet-based information technology

#### a. E-mail

The use of e-mail is very effective so it is very useful in reducing paper usage. Remembering that paper is made using trees, so with email, at least it helps to reduce global warming. As has been done by MTs Hasyim Asy'ari, especially in Islamic religious education subjects, students submit assignments via the teacher's email. In addition to reducing global warming, email really helps teachers complete their administrative tasks, namely making assessments. By using e-mail, teachers can correct or assess students' work not only at school, but wherever the teacher is. And not many books piled up on the teacher's desk.

#### b. Whatsapp groups

In this day and age, information is not only always glued to a piece of invitation paper, but it's easier to use notifications via WhatsApp groups. Likewise in learning, the use of this whatsapp group began to be used when Indonesia was hit by the co-19 pandemic. Students can submit assignments via the whatsapp group. In addition, the information obtained is very fast and at the same time. Likewise with educators, it becomes easier to send files or send notifications.

#### c. Web blog, youtube and e-learning

The web blog itself can be described as a teacher's personal newspaper. The web can be filled according to the wishes of the teacher. Upload all Islamic religious education learning materials to the website. Teachers can also announce the results of student scores through the website as a whole and can be accessed not only by students but students' parents can also monitor student progress. Apart from the website, there is also a new technology used for learning, namely YouTube. Teachers can make learning videos and students can access and learn not only at school, but wherever they are. This simplifies and is very time efficient in the teaching and learning process.

There is a need for awareness of the importance of change and development in Islamic religious education, so as to encourage Islamic religious education teachers to always learn to improve and develop their competence. Because, as technology develops, innovations in the world of education are increasingly advanced, so that in Islamic religious learning itself innovations are needed that can be made and even developed by teachers to create more innovative PAI learning.

The current millennial era is very closely related to internet-based technology, so that the use of internet technology-based innovation is a very attractive and efficient means for the development of current learning media. MTs Hasyim Asy'ari students are students who mostly live in a pesantren environment and in a

very Islamic atmosphere, it is very important for students to master and follow technological developments even though they are in a pesantren environment. Students should also be able to sort out positive things that can be taken in the development of information technology.

#### **D. Conclusion**

Based on the description above, the conclusions are: 1) Information technology is a means and infrastructure for conveying messages, processing, and even interpreting information in a meaningful way. The application of information technology in Islamic religious education is an attempt to make learning more innovative and attract students' interest in participating in class learning. 2) Islamic religious teaching and learning activities have a very important role, this can be seen from the importance of instilling religious learning since students are still in basic education. So that the application of information technology is very useful for visualizing and making learning more effective and efficient; 3) Some examples of the application of technology used in learning Islamic religious education in MTs Hasyim Asy'ari to improve the quality of learning, namely: visual technology, audio technology, visual-audio technology, and internet-based technology; and 4) At present, many internet-based technologies are used. One of the most widely used today is YouTube. because, many develop a blend of visuals and audio so that it is easy to understand and very accessible.

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