

SWOT Analysis of The Use of Digital Technology As an Innovation in Learning Media for Junior High School Students in Indonesia

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ABSTRACT

This research is qualitative with a descriptive approach, which aims to describe each of the main topics covered in this article, including digital technology and learning media. The data used in this study is secondary data obtained by the researcher from various credible sources, including scientific articles, books, and credible websites. The data used was first collected, selected, corrected, analyzed using a SWOT analysis tool, and conclusions were drawn. The conclusion in this article shows that the implementation or use of digital technology as a learning medium can be effective and beneficial for elementary school students due to its higher level of flexibility, greater enjoyment, and continued development. However, this implementation poses several threats and challenges, including excessive costs and the potential for misuse if not properly managed.

Keywords: SWOT Analysis, Digital Technology, Learning Media

ABSTRAK

Penelitian ini bersifat kualitatif dengan pendekatan deskriptif, yang bertujuan untuk mendeskripsikan setiap topik utama yang dibahas dalam artikel ini, termasuk teknologi digital dan media pembelajaran. Data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh peneliti dari berbagai sumber yang kredibel, termasuk artikel ilmiah, buku, dan situs web yang kredibel. Data yang digunakan pertama kali dikumpulkan, dipilih, diperbaiki, dianalisis menggunakan alat analisis SWOT, dan kesimpulan ditarik. Kesimpulan dalam artikel ini menunjukkan bahwa implementasi atau penggunaan teknologi digital sebagai media pembelajaran dapat efektif dan bermanfaat bagi siswa sekolah dasar karena tingkat fleksibilitasnya yang lebih tinggi, kenikmatan yang lebih besar, dan pengembangan yang berkelanjutan. Namun, implementasi ini menimbulkan beberapa ancaman dan tantangan, termasuk biaya yang berlebihan dan potensi penyalahgunaan jika tidak dikelola dengan baik.

Kata kunci: Analisis SWOT, Teknologi Digital, Media Pembelajaran

INTRODUCTION

Digital technology is a tool used and operated by a computer-centered system. This definition can also be referred to as wireless technology, utilizing a signal as a bridge between the system developer and the recipient. Signals in the digital world have many advantages, including speeds capable of exceeding the speed of light. This

system was never found in a system in ancient times, namely analog technology. In the world of communication, technology is often referred to as a very efficient, easy, and very dynamic message delivery without being hindered by anything, including distance and time. Digital technology is deeply embedded in human life today, one of which is the internet, which we use every day to exchange information and communicate (Wardana et al., 2024) .

In the Indonesian dictionary, technology has other meanings and understandings. It is a scientific method used to achieve a goal and is a form of applied science. Digital technology can be defined as a type of information technology that prioritizes computer/digital activities over human labor. However, it tends to emphasize effective and efficient processing and usage systems, especially since everything can be installed quickly and the processed data is read very quickly by computers. Essentially, digital technology is a fast and precise calculation system that can ultimately process various forms of information as numerical values. As time progresses, many technologies have improved in quality, both in terms of efficiency and increasingly large and sophisticated data capacities. One such improvement in technology is the speed of internet signals, where messages can now be sent and received in 0.001 seconds, demonstrating the rapid development of technology today (Restianty, 2018).

Advances in technology have brought about significant changes in everyday life, marked by the ease of interacting with anyone regardless of distance and time, and the fulfillment of other needs, such as becoming a field for humans to gain knowledge and earn income. In today's digital era, technology is not only associated with computers and mathematics, but also can assist various sectors, including agriculture, fisheries, information technology, and even education. Development is certainly a positive thing for human life who is able to utilize it well, but it can also backfire for someone who rejects this development (Adisti Diva Fahira, 2010).

Technology can also be defined as a means of fulfilling various human needs to sustain life, to obtain comfort and convenience without having to waste more energy. One way to do this is by purchasing something via the internet. This certainly has a positive impact on the needs of a person who cannot come to the store. This shows that with the existence of technology, humans can be more practical and efficient. Miarso in his book states that digital technology is one form of process to increase value. This process runs to produce a certain product, and technology can be developed into one part of an integral part that contains a certain system (Candrakanta, 2023).

Thus, it can be concluded that technology is one sign of the existence of knowledge developed by humans. Current technology is advancing so rapidly due to the flexibility of creative and innovative humans in building and improving scientific civilization as time goes by. The presence of technology in today's life has brought many changes, enabling humans to be more creative and create innovations and works to be shared with those in need. One benefit of using technology is the ability to market educational services digitally. This is indicated by the ability of digital technology to bring significant changes to educational institutions. With the presence

of digital technology, educational institutions can make the public aware of the school's existence without having to visit it first, providing efficiency and effectiveness for educational service customers. Therefore, websites and social media must be able to attract the attention of each user so that many marketing customers will visit and be interested in learning more about the educational institution. The changes currently being experienced in various industries, including education, agriculture, fisheries, and other sectors, through the use of digital technology to facilitate information access and create effectiveness and efficiency, is known as digital transformation. Technology has created many new innovations, including e-learning, e-banking, e-government, and several other sectors. This focus is on work efficiency and the use of databases for data processing, making it more practical and easy to use when needed urgently (Auladina, 2022). In addition to these benefits, researchers believe that digital technology can be useful as a learning medium for elementary school students in Indonesia. To confirm this, researchers used SWOT analysis techniques to determine this certainty.

RESEARCH METHODS

The introduction above demonstrates the researcher's mission to identify and assess the benefits of using digital technology as a learning medium for elementary school children in Indonesia (Rukin, 2019). The wording in this article indicates that this research is qualitative with a descriptive approach, which aims to describe each of the main topics covered in this article, including digital technology and learning media (Manzilati, 2017). The data used in this study is secondary data obtained by the researcher from various credible sources, including scientific articles, books, and credible websites (Abdurahman, 2016). The data used was first collected, selected, corrected, analyzed using a SWOT analysis tool, and conclusions were drawn (Sugiyono, 2019).

RESULT AND DISCUSSION

Digital Technology

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Many educational practitioners recognize the use of media as a significant aid to the learning process, both inside and outside the classroom, particularly in improving student achievement. The limited availability of learning media and the limited ability of teachers to create them means that the lecture method remains the most frequently used method. The word "media" comes from the Latin "*medius*," which literally means "middle," "introduction," or "intermediary." In Arabic, media is called "*wasail*," the plural form of "*wasilah*," which is synonymous with *al-wash*, which also means "middle." The word "middle" itself means being between two sides, so it is also called an intermediary (*wasilah*) or one that mediates between the two sides. Because of its position in the middle, it can also be called a messenger or connector, that is, one that delivers, connects, or channels something from one side to the other (Narto, 2014).

According to Heinich and his colleagues, the term medium is used as an intermediary that conveys information between a source and a receiver. Therefore, television, film, photographs, radio, audio recordings, projected images, printed materials, and the like are communication media. If the media carries messages or information that are instructional in purpose or contain teaching intentions, then the media is called learning media. However, it can be said that one of the main functions of learning media is as a teaching aid that also influences the climate, conditions, and learning environment arranged and created by the teacher. According to Hamalik, he stated that the use of learning media in the teaching and learning process can arouse new desires and interests, arouse motivation and stimulation of learning activities, and even bring psychological influences on students (Arsyad, 2018).

Based on the description of several limitations regarding the media above, the following are the general characteristics contained in each limitation (Nadila, 2021): 1) Educational media has a physical meaning which is currently known as hardware, namely something that can be seen, heard, or touched with the five senses. 2) Educational media has a non-physical meaning known as software, namely the message content contained in the hardware which is the content to be conveyed to students. 3) The emphasis of educational media is on visuals and audio. 4) Educational media has the meaning of a tool in the learning process both inside and outside the classroom. 5) Educational media is used in the context of communication and interaction between teachers and students in the learning process. 6) Educational media can be used en masse (for example: radio, television), large groups and small groups (for example: films, slides, videos, OHP), or individually (for example:

modules, computers, radio tapes/cassettes, video recorders). 7) Attitudes, actions, organizations, strategies, and management related to the application of a science.

The digital technology referred to by the researcher includes non-physical educational media (software), including learning applications or content intended for elementary school students. To determine the extent of digital technology's influence and effectiveness as a learning medium for elementary school students, the researcher used a SWOT analysis technique. The following are the results of the SWOT analysis in this article (Astuti & Ratnawati, 2020):

Table 1. SWOT Analysis

Strength	Weakness	Opportunity	Threat
More flexible	Requires fees	Students don't get bored easily	Too free and has the potential for abuse if not supervised
Exciting		More varied	
In line with the times		More exciting	

The third stage in the table above shows that the implementation or use of digital technology as a learning medium can be effective and beneficial for elementary school students due to its higher level of flexibility, greater enjoyment, and continued development. However, this implementation poses several threats and challenges, including excessive costs and the potential for misuse if not properly managed.

CONCLUSION

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