Ittishal Educational Research Journal January 2025, Vol. 6, No. 01, p. 01 - 11 http://journal.ittishal.net/index.php/ierj https://doi.org/ 10.51425/ierj.v6i1.92

TRANSFORMATION OF EDUCATION ORGANIZATION MANAGEMENT IN THE DIGITAL AGE: MEETING THE CHALLENGES AND SEIZING THE OPPORTUNITIES

Bella Febrianti^{1,} Purnamaningtyas Kusuma Dewi^{2,} Yuliana Subastine^{3,} Bianca Ayu Prastika^{4,} Sucilia Tri Lestari^{5,} Lily Auliya Puspita^{6,} Lailati Rohmah⁷

1,2,3,4,5,6,7 Tiga Serangkai University, Indonesia

Correspondence: bellafebrianti4567@gmail.com, purnamakusumadewi@gmail.com, ysubastine@gmail.com, prastika37@gmail.com, suciliaemail@gmail.com, auliyalily28@gmail.com, lailatirohmah19@gmail.com

ABSTRACT

This research aims to identify and analyze the factors that influence the transformation of education in the digital era, as well as the role of management in improving the quality of education in this era. The method used in this research is a descriptivequalitative approach using library research. The results show that several factors affecting educational change in the digital era include the knowledge, skills and beliefs of members of educational organizations, as well as a supportive organizational environment. Information technology plays an important role in improving the efficiency, effectiveness and strategic development of education. Education management, which includes aspects of planning, organizing and evaluating, plays a key role in improving the quality of education in a sustainable manner. In addition, this study also found that the implementation of proper management and the development of a modern organizational culture are necessary to face the challenges in the digital education world. Some important steps that can be taken to improve the quality of education in the digital era are optimizing the use of technology, improving infrastructure, developing digital skills for educators, and implementing innovative learning approaches. This research makes an important contribution in enriching the literature on education management in the digital era and can serve as a foundation for more effective education policies and practices in the future.

Keywords: Education Transformation; Education Management; Information Technology; Digital Education; Education Quality

INTRODUCTION

The current digital era brings great challenges and opportunities for the management of various types of organizations, be it business, government, or social organizations. The ever-evolving digital technology, powered by data, algorithms, and artificial intelligence, creates many new opportunities, including in business models. The main challenge organizations face in the digital age is managing rapid and continuous change. Organizations that can adapt to these changes will have many opportunities, while those that lack flexibility will struggle in this digital era. Therefore, organizations must continue to innovate to improve efficiency and effectiveness and utilize digital technology to expand reach and increase the value provided to stakeholders (Munir & Zumrotus Su'ada, 2024).

Education is related to the development of individual potential in terms of worldview, life attitudes, and life skills. The development of these three things can be done both at school and outside school, such as in the family. At school, activities are carried out in an organized manner and follow the applicable rules, while outside school although there are clear plans and programs, their implementation is more flexible and tends to be weak (Akour & Alenezi, 2022).

The transformation of education in the digital era is inevitable given the rapid development of information and communication technology. This change creates a new paradigm in learning, affecting all aspects of education. The use of technology in education includes not only hardware and software, but also fundamental changes in the way education is delivered. An understanding of the dynamics of educational transformation in the digital era is very important to develop educational policies that are responsive to the times (Alenezi et al., 2023).

In recent years, the use of technology in education has grown rapidly. In addition to hardware such as computers and tablets, technology also includes apps and digital platforms that support the learning process. One of the main driving factors is the need to prepare young people for an increasingly digital and globalized society. Technology provides greater access to learning resources, allows students to learn outside the classroom, and opens up opportunities for more

interactive and personalized learning experiences (Rani et al., 2022).

The adoption of technology in education also supports the development of online learning platforms, allowing students to access course materials and assignments electronically. Technology also enables the implementation of innovative learning methods such as project-based learning, simulation, and the use of artificial intelligence to personalize learning. To improve the quality of education in the digital era, education management has a crucial role in organizing the implementation of various activities so that the goal of improving the quality of education can be achieved optimally (Atsfa Sari et al., 2024).

Education management is the process of planning, organizing, controlling and evaluating related educational activities. Success in education management is not only the responsibility of management but also involves all parties involved in educational activities. Management functions, such as planning, organizing, controlling, coordinating, and evaluating, must be applied to ensure the smooth and successful educational process (Bahar et al., 2024).

The purpose of this research is to analyze the transformation of educational organization management in the digital era in meeting challenges and seizing opportunities. Lack of research on approaches to developing digital competencies for educators in the digital age, especially in developing countries. Lack of evidence-based strategic guidance for sustainable digital transformation in different types of educational institutions. The purpose of this study is to analyze the transformation of educational organization management in the digital era in responding to challenges and seizing opportunities.

METHOD

This research uses a descriptive-qualitative approach with the literature study method as a way of collecting data (Sugiyono, 2017). This research aims to identify and select relevant literature sources that cover important aspects related to educational transformation in the digital era. These sources include journal articles and other academic references containing research results, theories and experts' views. Content analysis was conducted qualitatively by thoroughly reading the literature to

obtain key findings related to organizational management, impacts, challenges and opportunities in educational transformation in the digital era (Damayanto et al., 2022). Change management in education is essential to respond to the development of digital technologies, such as AI and digital platforms, which are changing learning methods. This includes updating curricula, strengthening educators' digital competencies and providing adequate infrastructure. However, challenges such as the digital divide, technology literacy and data privacy issues need to be addressed to ensure online learning is effective. An integrated change management approach is needed, encompassing planning, implementation, disciplined execution and continuous evaluation. Sustainability in hybrid learning demands a balance between online and offline methods, to support students' social skills development as well as optimal utilization of technology. The analysis of the literature is presented holistically with a focus on synthesizing findings that provide a comprehensive picture of the factors that influence change, the role of management in progress, the contribution of technology in educational transformation, and efforts to improve the quality of education in the digital era (Sabrina et al., 2024).

Research conducted by Nasution et al., (2024) shows that the digital era brings both challenges and opportunities for change management and education. Key challenges include infrastructure gaps, lack of educator skills, data security threats and the need to update curricula. On the other hand, opportunities include improving operational effectiveness and efficiency through information technology, access to global learning resources, personalization of learning, and the use of analytics and AI in HR management.

Research conducted by Mukrodi, H., (2020) shows that digital transformation is a particular need to improve the quality of education and organizational competitiveness. The efforts required include continuous training, development of an adaptive culture, investment in technology, and stakeholder engagement. Research conducted by Aqilah et al., (2022) shows that with the right strategy, educational organizations can optimize learning, support innovation, and improve educational

outcomes in the digital era.

Using a qualitative, literature-based approach, this research aims to provide an in-depth and detailed understanding of the topic, make a significant contribution to the literature, and provide a basis for recommendations for future educational policy and practice.

FINDINGS/RESULTS AND DISCUSSION

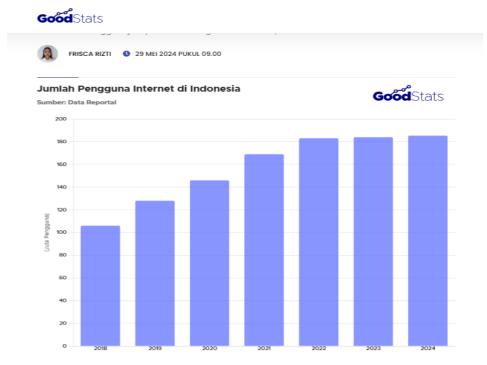


Figure 1. Internet users in Indonesia in 2024 Sumber: Good Stats

Factors Affecting Change

Change programs require the active participation of each individual to be willing and able to change their behavior for the success of the program. This success is highly dependent on factors that influence behavior and provide motivation for individuals to make changes. Internal variables such as beliefs, environment, and organizational vision are believed to have a major influence on a person's behavior. In addition, the potential for tangible gains or prevention of personal losses can also be an incentive to make changes (Bahar et al., 2024). Here are some factors that influence behavior change:

a. To be able to adapt to changes in the organization, organizational members need to

have sufficient knowledge. Knowledge is considered an important condition for the development of organizational members' behavior. Those who rely solely on old knowledge tend to have lower performance than those who constantly update their information.

- b. To perform a new task, one needs both physical and non-physical skills. Tasks that involve physical work, such as using a computer or machine, require physical skills, while non-physical skills are needed in tasks such as organizing a meeting or
- c. Management as the Key to Progress

Quality education requires good organization and implementation in an organization, and management is an important element in this regard. Educational institutions must have good management to produce quality human resources. This requires more attention than institutions that only manage goods or production (R a n i e t a l., 2022). Education quality management aims to maintain and improve the quality of education on an ongoing basis (Damayanto et al., 2022). In order for education management to meet the needs of stakeholders, systematic and efficient management is required. An effective vision in quality management requires the active participation of all stakeholders (Kaliannan et al., 2023).

According to (Ma'arif & Nursikin, 2024), the quality of education in Indonesia is measured through inputs, outputs, and outcomes. Quality education must ensure student readiness in an innovative and effective learning process, produce outputs that show high achievement, and produce graduates who are able to compete in the world of work with adequate salaries. Education organizations also need strong collaboration and commitment among their members. Creating a modern organizational culture is important to build discipline and responsibility among members, which in turn will improve the quality of education in a structured way. An effective educational institution must implement good cooperation among its members to achieve these goals (Purba & Saragih, 2023).

The Role of Technology in Education Transformation

Technology has become a major factor in transforming education, bringing about major changes in the way learning and teaching is done (Subroto et al., 2023). Technology has not only led to the introduction of new hardware and software, but also changed the whole learning paradigm. One of the impacts is increased access to educational resources that erase geographical boundaries and allow students to learn independently. Distance learning, which utilizes the internet and collaborative technologies, allows students to interact with fellow students from around the world (Wahyudi, 2023).

One important innovation is the application of artificial intelligence (AI) in learning, which allows learning management systems to adapt to the needs of individual students, provide additional material if needed, and provide more personalized feedback (Atsfa Sari et al., 2024). Technology also supports the administrative efficiency of educational institutions, allowing teachers to focus more on teaching, while other administrative tasks are managed more efficiently. While technology brings many benefits, it is important to pay attention to the access gap that exists between students and teachers in using technology. The education community should be able to make good use of technology to create an inclusive and flexible learning environment (Akour & Alenezi, 2022).

Efforts to Improve Education Quality in the Digital Age

Education has a crucial role in the development of a country, and in the midst of the development of the digital era, it is important to continuously improve the quality of education. The quality of education guarantees success in various aspects such as inputs, processes, outputs, and outcomes of education (Anwar & Saraih, 2024). Therefore, some important steps that can be taken to improve the quality of education in this digital era include:

a. Optimizing Technology in Learning

The utilization of online learning applications and platforms can improve student interaction and engagement in the learning process.

b. Improved Infrastructure and Access to Technology

Improved internet access and the provision of adequate digital devices are necessary for technology to be used optimally in education.

c. Teaching Quality Improvement

Teachers who have an understanding and skills in information and communication technology can deliver more effective and quality learning.

d. Digital Skills Development

Both teachers and students need to be trained in digital skills to be able to make the most of technology in learning.

e. Innovative Learning Approaches

Methods such as flipped classroom and blended learning can be used to make learning more interactive and engaging for students.

f. Monitoring and Evaluation of Learning

It is important to regularly evaluate the learning outcomes and make necessary improvements.

In addition, developing a curriculum that is flexible and in accordance with the times is also important to prepare students to face digital challenges (Purwantiningsih & Suharso, 2019). Improving the professionalism of educators in the digital era is equally important. With proper training and the formation of working groups, it is hoped that the quality of teachers can improve, which in turn will improve the quality of education (Elistiowati et al., 2021).

CONCLUSIONS

To address the challenges of managing educational organizations in the digital age, it is crucial for educational institutions to fully integrate technology across all operational and learning aspects. The implementation of learning management systems (LMS), cloud applications, and digital communication tools can enhance administrative efficiency, speed up the dissemination of learning materials, and broaden access to education. Additionally, it is essential to provide training for educators to effectively use technology and adopt innovative teaching methods, ensuring the continued quality of education while preparing students

for the rapidly changing digital landscape.

The digital era also presents significant opportunities for educational organizations to broaden their reach through distance or hybrid learning programs, offering more inclusive and equitable educational opportunities, especially for individuals in remote or underserved areas. By utilizing data analytics and artificial intelligence, educational institutions can personalize learning experiences, helping each student achieve their full potential. Moreover, fostering a collaborative culture among teachers, students, and parents will reinforce an adaptive education ecosystem that responds to technological advancements.

The digital era not only brings challenges, but also opens up opportunities for change management. Some of the factors that influence change include the knowledge, skills, beliefs of organizational members, and the organizational environment itself. The utilization of information technology can be divided into three categories, namely increasing efficiency, increasing effectiveness, and strategic improvements.

Management plays an important role in ensuring the smooth and continuous operation of an institution. Education, which aims to develop an individual's potential in areas such as outlook, character and skills, has become more relevant in the digital age. In this era, there is an urgent need to improve the quality of student learning, expand knowledge, as well as support self-directed learning initiatives encouraged by the government. In this context, management contributes to improving education standards.

ACKNOWLEDGMENTS

Praise be to God Almighty for His grace and mercy, so that I can complete this research well. I would like to express my deepest gratitude to various parties who have provided support, assistance, and motivation throughout the process of preparing this work. My thanks go to all parties involved in this research, who I cannot mention one by one, but who have made a significant contribution to the

smooth running of this research. Hopefully this research can provide great benefits for the development of science, as well as for all those who read it.

REFERENCES

- Akour, M., & Alenezi, M. (2022). Higher Education Future in the Era of Digital Transformation Mohammad Akour and Mamdouh Alenezi * Software. *Education Sciences*, 12(784), 1–13.
- Alenezi, M., Wardat, S., & Akour, M. (2023). The Need of Integrating Digital Education in Higher Education: Challenges and Opportunities. *Sustainability (Switzerland)*, 15(6), 1–12. https://doi.org/10.3390/su15064782
- Anwar, S., & Saraih, U. N. (2024). Digital leadership in the digital era of education: enhancing knowledge sharing and emotional intelligence. *International Journal of Educational Management*, *July*. https://doi.org/10.1108/IJEM-11-2023-0540
- Aqilah, N., Asra, K., Alwi, M., Latief, I., & Halik, A. (2022). MANAJEMEN STRATEGI ORGANISASI PENDIDIKAN DI ERA DIGITAL: TANTANGAN DAN PELUANG Organizational Strategy Management In The Digital Era: Challenges And Opportunities. 2(1).
- Atsfa Sari, A., Salsabila Nuromliah, H., Marlinda, S., & Marini, A. (2024). Tantangan Dan Peluang Implementasi Teknologi Dalam Manajemen Pendidikan Di Era Digital. *Cendikia Jurnal Pendidikan Dan Pengajaran*, 2(6), 196–204.
- Bahar, T., Nasyifa, N., Fadhillah, A., & Mukhlasin, A. (2024). Peran Manajemen Organisasi Dalam Kemajuan Pendidikan. *Dinamika Pembelajaran: Jurnal Pendidikan Dan Bahasa*, 1(3), 284–300.
- Damayanto, A., Anaconda Bangkara, A. S., Abidin, A. Z., Heryani, A., Maruf, I. R., Jenderal, U., & Yani, A. (2022). Management Challenges for Academic Improvement in Higher Education in the Digital Era. *Jurnal Pendidikan Islam*, *5*(2), 572–592. https://doi.org/10.31538/nzh.v5i2.2131
- Elistiowati, E., Ahyani, N., & Wardiah, D. (2021). Leadership of Schools in Improving the Quality of Education in the Digital Era. *Proceedings of the International Conference on Education Universitas PGRI Palembang (INCoEPP 2021), 565*(INCoEPP), 946–950. https://doi.org/10.2991/assehr.k.210716.188 https://data.goodstats.id/statistic/1853-juta-pengguna-internet-tercatat-di-indonesia-pada-2024-JFNoa

- Kaliannan, M., Darmalinggam, D., Dorasamy, M., & Abraham, M. (2023). Inclusive talent development as a key talent management approach: A systematic literature review. *Human Resource Management Review*, 33(1), 100926. https://doi.org/10.1016/j.hrmr.2022.100926
- Ma'arif, A. I., & Nursikin, M. (2024). Pendidikan Nilai di Era Digital: Tantangan dan Peluang. *Afeksi: Jurnal Penelitian Dan Evaluasi Pendidikan*, 5(2), 326–335. https://doi.org/10.59698/afeksi.v5i2.254
- Mukrodi, H., D. (2020). Pengembangan Sumber Daya Manusia di Era Digital. *Jurnal Bisnis Dan Pemasaran Digital*, 15-28. Yogyakarta: Andi.
- Munir, M., & Zumrotus Su'ada, I. (2024). Manajemen Pendidikan Islam di Era Digital: Transformasi dan Tantangan Implementasi Teknologi Pendidikan. *Journal of Islamic Education AndManagement*, 5(1), 1–13.
- Nasution, I., Kurnianingsih, D. A., & Batubara, F. (2024). *Peran Manajemen Organisasi Pendidikan di Era Digital : Tantangan dan Peluang. 8*, 25843–25853.
- Purba, A., & Saragih, A. (2023). Peran Teknologi dalam Transformasi Pendidikan Bahasa Indonesia di Era Digital. *All Fields of Science Journal Liaison Academia and Sosiety*, 3(3), 43–52. https://doi.org/10.58939/afosj-las.v3i3.619
- Purwantiningsih, A., & Suharso, P. (2019). Improving Teacher Professionalism Toward Education Quality in Digital Era. *Journal of Physics: Conference Series*, 1254(1). https://doi.org/10.1088/1742-6596/1254/1/012019
- Rani, G., Kaur, P., & Sharma, T. (2022). Digital Education Challenges and Opportunities. *Journal of Engineering Education Transformations*, 35(4), 121–128. https://doi.org/10.1109/ISPCC53510.2021.9609425
- Sabrina, A. N., Haludin, G., Sabina, N. K., Nursyifa, P., Januar, S. K., Tanjung, S. M., & Manajemen, P. S. (2024). MANAJEMEN PERUBAHAN DALAM LINGKUP PENDIDIKAN: PENYESUAIAN. 4(3), 785–793. https://doi.org/10.53363/buss.v4i3.275
- Subroto, D. E., Supriandi, Wirawan, R., & Rukmana, A. Y. (2023). Implementasi Teknologi dalam Pembelajaran di Era Digital: Tantangan dan Peluang bagi Dunia Pendidikan di Indonesia. *Jurnal Pendidikan West Science*, 1(07), 473–480. https://doi.org/10.58812/jpdws.v1i07.542

Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta. Wahyudi, A. (2023). Keterampilan yang Dimiliki oleh Tenaga Kerja dengan Tuntutan Teknologi. *Jurnal Bintang Manajemen (JUBIMA)*, 1(4), 99–111.