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E-Leadership: Concept and Influence of Digital Leadership

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Article Information	ABSTRACT
	This article explores the transformative role of Information and Communication Technology (ICT) in education, with a specific focus on Universitas Negeri Padang. Central to this transformation is the concept of E-Leadership, a pivotal approach to leadership in the digital age. E-Leadership is characterized by the strategic application of technology to lead, manage, and communicate within educational institutions. This paper delves into how E-Leadership at Universitas Negeri Padang has facilitated increased accessibility and flexibility in learning, catalyzed educational transformation, fostered effective collaboration, and spurred innovation in university management. It also addresses the new challenges and skill sets required for effective digital leadership in higher education. The discussion culminates with insights on how leaders at Universitas Negeri Padang can employ E-Leadership strategies to harness technological advancements, thereby achieving more responsive and innovative educational outcomes. Through this analysis, the article underscores the significance of E-Leadership in navigating the evolving landscape of digital education.

How to Cite:

1. INTRODUCTION

Leadership is the most important element in education, entering the digital era like today's leaders must be fast and responsive in adapting to the times. Evolution in leadership is included in educational leadership as a result of the huge development in the field of advanced information such as internet email, video conferencing, groupware systems in the late 1990s. This evolution requires educational leaders to be proactive, taking steps to implement technology while preparing knowledge and information related to technology.

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However, the context of educational leaders shows that many school leaders have low and increasing levels of knowledge and skills in leadership technology.[1].

In the ever-evolving digital era, the leadership paradigm in education is undergoing significant changes. The emergence of the concept of E-Leadership, or leadership in a digital context, has opened the door to a deep transformation in the university environment. The focus is no longer only on the ability to lead conventionally, but also on mastering technology as a catalyst for change. E-Leadership refers to leadership in a digital or online context[2]. In a university context, this can include using technology to lead, manage and communicate effectively. The impact of digital leadership at Universitas Negeri Padang or other educational institutions can include several aspects: increased accessibility and flexibility, learning transformation, collaboration and effective communication, innovation in university management, new challenges and leadership skills, information security, and human resource empowerment.[3].

The rapid development of information and communication technology in the current 4.0 era is changing the way of working, universities as centers of higher education can no longer avoid the waves of digital transformation that are sweeping. The leadership paradigm in educational institutions has changed, and the concept of E-leadership has emerged as a key pillar in guiding universities through this change. The tradition of leadership in education is often associated with physical presence, face-to-face meetings, and more manual process-oriented policies[4]. However, with the arrival of E-leadership, university leaders at Universitas Negeri Padang can embrace a more innovative and technology-centric approach. E-leadership brings fundamental changes in the way universities interact with students. Digital platforms such as online discussion forums, online-based learning, and mobile applications have become essential tools to create deeper engagement and ensure a more responsive educational experience[5].

Human resource management within the university has also been transformed through E-leadership[6]. Computerized employee management systems, digital training, and the use of artificial intelligence for staff selection are examples of how technology is shaping the way universities manage and develop their human potential[7]. Leaders at Universitas Negeri Padang need to be ready to embrace change and drive innovation. From paradigm shifts to human resource management adapted to the digital era, leaders are not just about following trends, but rather creating new directions for the future of higher education.

The digital age is changing people's perception of life and work at a rate that rivals the industrial revolution. Changes in the social order in the process of digitalization are connectivity, data transfer and the use of social media that are almost used in everyday life. The accessibility of information technology is getting easier, access to big data and its management is also getting easier. Digital leadership is a combination of leadership styles in utilizing digital information technology in realizing digital transformation in an

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organization. Digital leaders must have characteristics and behaviors that enable them to achieve digital transformation goals[8].

2. RESEARCH METHODS

This research uses a qualitative approach, using the literature review method. This study was conducted to examine the concept and influence of digital leadership at Universitas Negeri Padang. Data was collected through previous literature derived from previous studies, journals, and books related to the research problem.

3. RESULTS AND DISCUSSION

3.1. Basic Concepts of Leadership in Education

Leadership is the process of influencing individuals or groups of people to do something voluntarily so as to create the desired goal. In other words, in the leadership process, there is a function of the leader who gives influence, there are followers (members) who receive influence and there are activities and there is a situation where the leadership takes place[9]. Leadership is sometimes understood as the power to move and influence people. In modern development, the success or failure of an organization is largely determined by the quality of leadership possessed by people who are appointed or given responsibility as leaders in the organization[10].

Educational leadership is a readiness, ability possessed by someone in the process of influencing, encouraging, guiding, directing, and mobilizing others who have to do with the implementation and development of education and teaching so that all activities can run effectively and efficiently in achieving educational goals. Furthermore, leadership is the ability of the art of influencing human behavior and the ability of the art of influencing human behavior and the ability to guide several people to coordinate and direct with a specific purpose and purpose[11].

Educational leadership is a sense of ability and readiness in a person to carry out the functions and objectives of leadership itself, which can influence, encourage, invite, guide, move, direct, and if necessary force others in the group they lead to be able to accept the influence given. Leadership is a set and series of abilities, as well as the personality traits of the leader, including authority, to be used as a means in order to convince those led so that they want and can carry out the tasks assigned to them by influencing them[12].

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3.2. Roles and Functions of Leadership in Education

3.2.1. The Role of Leadership in Education

The role of leadership in education is crucial in shaping and improving the quality of the education system. Leadership in education does not only focus on administrative management, but also involves a deep influence on learning, teaching and individual development.[13]. Here are some important leadership roles in education:

3.2.1.1. Establishment of education vision and mission

Educational leaders are responsible for formulating the mission and vision of the school or educational institution. This vision provides the long-term direction and goals to be achieved by the entire educational community.

3.2.1.2. Promoting a positive education culture

Leadership plays a key role in shaping a positive school culture. This involves creating a supportive, inclusive and empowering environment that encourages collaboration and a spirit of togetherness among all members of the educational community.

3.2.1.3. Improving the quality of teaching and learning

The role of educational leaders in identifying and promoting effective teaching practices involves developing professional development programs for teachers, monitoring classrooms, and implementing innovations in teaching.

3.2.1.4. Resource management

Education leaders manage resources, including budgets, facilities and personnel. Decisions regarding resource allocation should be based on educational goals and needs.

3.2.1.5. Performance monitoring and evaluation

Educational leaders are responsible for monitoring and evaluating the performance of all levels of the organization. This involves making decisions based on test results, evaluation and performance data.

A leader in an educational institution who acts as an innovator must certainly have good relationships or communication in his environment. As well as always exploring new thoughts, being able to provide the right example, and being able to create a good

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atmosphere within the educational institution. The head of the educational institution acts as a motivator for both educators and students in the educational institution environment, of course, must have the right strategy.[14].

3.2.2. Functions of leadership in education

The leadership function in education encompasses various aspects that affect the quality of the education system as a whole. Educational leadership is not just about administration, but also involves profound influence on teaching, learning and individual development. A leader should use the special abilities and interests of the group members, deliberate for consensus, and decide on the best outcome.[15].

3.2.2.1. Formulate vision and mission

Leadership is responsible for formulating the vision and mission of the school or educational institution. The vision and mission provide the long-term direction and strategic goals that guide the entire educational community.

3.2.2.2. Employee coaching and development

A key function of educational leaders is to coach and develop staff, including educators and other employees. This involves developing training programs, supporting in professional development, and providing constructive feedback.

3.2.2.3. Promoting a positive education culture

Leadership plays a role in shaping a positive educational culture. This includes creating a supportive, inclusive and empowering environment and encouraging a spirit of togetherness and collaboration among members of the education community.

3.2.2.4. Promoting the quality of teaching, learning and service

Educational leader function to improve the quality of teaching, learning and service in their institutions. This involves identifying and promoting effective teaching practices, supporting educators in developing their skills and improving service to the wider community.

3.2.2.5. Resource management

Resource management functions include budget allocation, facilities management and efficient deployment of resources. Leadership must make decisions based on educational goals and needs.

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3.2.2.6. Work monitoring and evaluation

Educational leaders are responsible for monitoring and evaluating the performance of educators, staff and learners. This involves monitoring academic progress, evaluating teaching methods and providing constructive feedback.

3.2.2.7. Innovative leadership

Educational leaders act as agents of change and innovation. They should stimulate and support the adoption of technology, innovative teaching methods, and new strategies that can improve the effectiveness of education and service.

3.2.2.8. Communication and public relations

Leadership plays a key role in building good relationships with parents, communities and other stakeholders. Effective communication is key to building community support and engagement.

3.2.2.9. Crisis management

Leadership must be prepared to manage crisis situations or urgent challenges with effective and responsive policies. This includes the ability to make quick and efficient decisions in emergency situations.

3.2.2.10. Role as a behavior model

Educational leaders must model the behavior followed by the entire educational community. They set the standards of ethics, integrity and responsibility expected of all members.

3.2.3. Changes in the Digital Age in Education

Changes in the digital age involve profound transformations in many aspects of life, including the way we work, learn, communicate and integrate. Changes in the digital age provide many opportunities, but also bring new challenges. Society must continue to adapt to technological developments and consider their impact on daily life, the economy and culture[16]. Here are some of the key changes that have occurred in the digital age.

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3.2.3.1. Information and communication technology (ICT)

The most striking changes have occurred in the development of information and communication technology. The internet, mobile devices, big data, artificial intelligence, and other technologies are changing the way we access information, communicate, and collaborate.

3.2.3.2. Digitization and Automation

The process of digitization and automation is spreading to various sectors, replacing routine work with technology. This affects industry, infrastructure, manufacturing, and other sectors by creating new efficiencies and productivity.

3.2.3.3. Online education and distance learning

Education is undergoing significant changes with the advent of online learning and distance courses. Students can access learning materials from home, and online platforms provide access to various educational resources.

3.2.3.4. Industrial revolution 4.0

Industry 4.0 brings the integration of advanced technologies such as the internet of things (IoT), robotics, and artificial intelligence into production and manufacturing processes. It creates a smarter and spacious factory[17].

3.2.3.5. Social media growth

Social media plays a huge role in shaping the way we communicate and share information. It enables global connectivity and provides a platform to interact, share views and build networks.

3.2.3.6. Cyber security and privacy

With digital growth comes new challenges related to cybersecurity and data privacy. Companies and individuals must pay attention to the security of their information in the face of cyber threats.

3.2.3.7. Online community engagement

Global citizens are increasingly engaging online in political, social and economic activities. Online campaigns, social activism, and public participation through digital platforms are becoming common phenomena.

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3.2.3.8. Lifestyle changes

Our lifestyles are influenced by digital technology, including our entertainment, content consumption habits, and the way we interact with our surroundings.

3.2.4. Digital Leadership in Education

Changes in the digital era have a significant impact on leadership in education. Leadership in education in the digital era needs to adapt to technological changes, new learning paradigms, and increasingly complex societal demands. Leadership in the digital era requires flexibility, adaptation skills, and commitment to ensure that education remains relevant and beneficial to the emerging generations in this digital environment[18]. The following are some important aspects of leadership in education in the digital era:

3.2.4.1. Technology and innovation

Leadership in education must be able to integrate technology and drive innovation in learning. This involves implementing digital solutions, using online learning platforms and ensuring that teachers and students have sufficient access to technology.[19].

3.2.4.2. Digital skills development

Education leaders need to provide support for digital skills development for staff and teachers. This includes regular training, workshops and professional development initiatives to ensure that all members of the education community can benefit.

3.2.4.3. Data management and analysis

In the digital age, data is critical. Educational leadership must be able to manage student data, analyze test results, and use data to make strategic decisions that can improve the quality of learning.

3.2.4.4. Digital safety and security

In the digital age, digital security is a crucial issue. Education leaders need to ensure student data security, engage staff in cyber security training, and implement policies that support a safe digital environment.

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3.2.4.5. Online learning quality monitoring

In an online learning environment, education leaders need to monitor and evaluate the quality of learning continuously. They should collaborate with teachers to identify best practices and address challenges as they arise.[20].

3.2.5. Digital Leadership in Universitas Negeri Padang

Leaders at Universitas Negeri Padang (UNP) can adopt e-leadership with planned strategic steps. First, they must formulate a clear vision of the role of technology in improving education and university operations. This includes the integration of technology in curriculum, research, and administration. Furthermore, training and development for lecturers and staff is key. Universitas Negeri Padang (UNP) must organize in-depth training on the use of the latest technology in education. Additionally, ensuring a strong technology infrastructure is essential to support online activities, such as distance learning and video conferencing. Policies that support innovation and collaboration with industry and other educational institutions must also be implemented. Higher education institutions must take a student-oriented approach, prioritizing the student learning experience through access to online resources and interactive platforms. Regular evaluation and feedback will foster continuous improvement, and leaders must be adaptive, encouraging a culture of innovation in the use of technology. With these steps, Universitas Negeri Padang can optimize the use of technology to improve educational quality and operational efficiency.

4. CONCLUSION

The digital era brings fundamental changes in the leadership paradigm in education, including at Universitas Negeri Padang. The concept of E-Leadership is key in dealing with this digital transformation, requiring leaders to be proactive, responsive to technological developments, and able to integrate innovation in all aspects of leadership.

Leaders at Universitas Negeri Padang must be able to manage change by recognizing the enormous influence of information and communication technology in learning, human resource management, and interaction with students. The use of digital platforms, online learning and E-leadership strategies are important to create a responsive, inclusive and innovative educational environment.

In addition, digital transformation is also changing the paradigm of human resource management within universities, with the use of computerized systems and artificial intelligence. Leaders need to be prepared to embrace change, lead innovation and create new directions for the future of higher education.

By understanding and adopting the concept of digital leadership, Universitas Negeri Padang can continue to evolve according to the demands of the times. Effective leaders in

the digital era are not just following trends, but also driving change that has a positive impact on learning, resource management and the overall university experience.

REFERENCES

[1] E. Kusumawati, "Kepemimpinan Digital dalam Pendidikan: Sebuah Analisis Bibliometrik," *JET J. Educ. Teach.*, vol. 4, no. 2, pp. 252–260, 2023, doi: 10.51454/jet.v4i2.254.

[2] V. Steven Vianaldo Purnomo and S. Augusto Tejasukmana, "Pengaruh Digital Leadership terhadap Kinerja Perusahaan Startup di Jawa Timur," *Bus. Account. Rev.*, vol. 9, no. 2, 2021, [Online]. Available: https://publication.petra.ac.id/index.php/akuntansi-bisnis/article/view/13404

[3] R. Hughes, "Time for leadership development interventions in the public health nutrition workforce," *Public Health Nutr.*, vol. 12, no. 8, p. 1029, 2009, doi: 10.1017/S1368980009990395.

[4] M. Apriliansyah, "Kepemimpinan Transformasional Dosen di Dunia Pendidikan yang Berlandaskan Revolusi Industri 4.0," *J. Econ. Bus. UBS*, vol. 12, no. 4, pp. 2378–2388, 2023, doi: 10.52644/joeb.v12i4.298.

[5] S. Purwoko, A. Rokhman, and Tobirin, "E-Leadership : Konsep Dan Pengaruh Kepemimpinan Digital Dalam Transformasi Digital Di Sektor Pemerintahan," *Leasersh. Public Trust*, pp. 170–181, 2022.

[6] N. Nuryanta, "Pengelolaan Sumber Daya Manusia (Tinjauan Aspek Rekrutmen dan Seleksi)," *el-Tarbawi*, vol. 1, no. 1, pp. 55–69, 2008, doi: 10.20885/tarbawi.vol1.iss1.art5.

[7] S. Maryati and M. I. Siregar, "Kepemimpinan Digital dalam meningkatkan kinerja organisasi peran Teknologi Informasi dan Komunikasi," *Owner*, vol. 6, no. 4, pp. 3616–3624, 2022, doi: 10.33395/owner.v6i4.1176.

[8] N. W. Lestari, "Studi Kepemimpinan Digital Dan Kepemimpinan Kreatif Yang Mempengaruhi Inovasi Di Umkm Jatimulya Bekasi Jawa Barat," *Parameter*, vol. 5, no. 2, pp. 97–106, 2021, doi: 10.37751/parameter.v5i2.152.

[9] O. S. Seni, "Kepemimpinan Pendidikan Di Sekolah," *Atma Reksa J. Pastor. dan Kateketik*, vol. 5, no. 2, p. 25, 2021, doi: 10.53949/ar.v5i2.119.

[10] H. Afriansyah, "Kepemimpinan Pendidikan- h afriansyah."

[11] I. Fatonah, "Isti Fatonah," *J. Tarb.*, vol. 10, no. 2, pp. 109–125, 2013.

[12] Y. kartika sari, "Kepemimpinan Pendidikan," *Insa. J. Pemikir. Altern. Kependidikan*, vol. 11, no. 1, pp. 19–33, 2019, doi: 10.24090/insania.v11i1.93.

[13] R. Afandi, "Kepemimpinan dalam Pendidikan Islam," vol. 18, 2013, doi: https://doi.org/10.24090/insania.v18i1.1446.

[14] M. Hidayatul Nadwah, "Jurnal Pendidikan Agama Islam Peran Kepemimpinan Kepala Sekolah Di," *J. Pendidik. Agama Islam*, pp. 157–164, 2023.

[15] R. Hayati, D. Armanto, and Y. Kartika, "Kepemimpinan Pendidikan," *J. Manaj. dan Budaya*, vol. 3, no. 2, pp. 32–43, 2023, doi: 10.51700/manajemen.v3i2.450.

[16] V. L. Ngongo, T. Hidayat, and Wijayanto, "Pendidikan di Era Digital," *Pros. Semin. Nas. Pendidik. Progr. Pasca Sarj. Univ. PGRI Palembang*, vol. 2, pp. 628–638, 2019, [Online]. Available: https://jurnal.univpgri-palembang.ac.id/index.php/Prosidingpps/article/view/3093

[17] I. Yustanti and D. Novita, "Pemanfaatan E-Learning bagi para Pendidik Di Era Digital 4.0 Utilization of E-Learning for Educators in Digital Era 4.0', Prosiding Seminar Nasional Program

Pascasarjana Universitas Pgri Palembang," *J. Univ PGRI Palembang*, vol. 12, no. 1, pp. 338–346, 2019, [Online]. Available: https://jurnal.univpgri-palembang.ac.id/index.php/Prosidingpps/article/view/2543

[18] R. A. Praditya, "Kepemimpinan Transformational, Transaksional dan Digital Pada Universitas: A Mini Review Article," *Int. J. Soc. Policy …*, vol. 03, no. 01, pp. 19–23, 2022, [Online]. Available: https://ijospl.org/index.php/ijospl/article/view/95%0Ahttps://ijospl.org/index.php/ijospl/article/download/95/57

[19] S. Susanty, "Inovasi Pembelajaran Daring Dalam Merdeka Belajar," *J. Ilm. Hosp.*, vol. 9, no. 2, pp. 157–166, 2020, doi: 10.47492/jih.v9i2.289.

[20] A. S. AJIATMOJO, "Penggunaan E-Learning Pada Proses Pembelajaran Daring," *Teach. J. Inov. Kegur. dan Ilmu Pendidik.*, vol. 1, no. 3, pp. 229–235, 2021, doi: 10.51878/teaching.v1i3.525.