

HUMAN RESOURCES TRAINING AND DEVELOPMENT IN THE DIGITAL ERA

Jajat Sudrajat¹, Ibar Adi Permana²

¹Politeknik Tri Mitra Karya Mandiri

²Politeknik Tri Mitra Karya Mandiri

*Corresponding Author:

jajat@tmkm.ac.id

Abstract

This article raises the theme of the importance of training and development of Human Resources (HR) in the digital era. Rapid technological changes require organizations to continue developing employee skills to be able to adapt to changing work environments. We discuss key concepts related to HR training and development, including the use of digital technology, innovative learning strategies, and the integration of artificial intelligence in development programs. Additionally, this article highlights the strategic role of training in increasing productivity, employee satisfaction, and an organization's ability to compete in the digital marketplace. By exploring various aspects of HR training and development in the digital era, this article provides an in-depth look at how organizations can optimize the potential of their human resources in the face of the ongoing technological revolution. An effective HR training and development strategy in the digital era must be personalized, technology-based, and support a culture of continuous learning. By implementing the right strategies, organizations and individuals can ensure they have the skills and knowledge needed to achieve success in the digital era

Keywords: HR training, HR development, digital era

1. INTRODUCTION

Human resources (HR) are assets that must be built and developed to contribute their best to the company's sustainability. For business purposes, companies must be able to enhance the skills and professionalism of human resources. Quantity and quality are two aspects of human potential that must be demonstrated. Quality can only be achieved through human resource training and development, which is necessary because human resources are the most influential factor in the quality of an organization or company.

Companies need training and development programs to improve the abilities, knowledge, and experience of their employees (Harayati, 2019).

Development is an activity aimed at preparing responsible employees with better career paths in a company or organization, while training is an activity that can be used to acquire, improve, and develop the productivity potential of employees, resulting in more disciplined employees with better skills and specific competencies. If a business or organization does not fully utilize the development function, it can lead to issues such as employees not meeting the company's operational standards, lack of discipline, or even a lack of appreciation for their leadership roles. In their efforts to address these complex issues, management can engage in HR development, improve internal conditions, and strive to strengthen themselves while developing and enhancing resilience to face increasing competition. Companies must improve performance through HR training and development (Supardi, 2018). Companies already have a culture of training and development. Training is not necessary, but development is a conceptual ability (Gustiana, Hidayat, & Fauzi, 2022).

In the digital era, talents face many challenges, including training and developing competencies. First, employees must adapt because technological advancements are happening so rapidly. The need for new knowledge about data technology, data analysis, and the ability to adapt to technological changes is increasing. Additionally, given that many companies are engaging in remote work, human resources must also have the ability to communicate and collaborate virtually.

The widespread use of digital tools and applications also underscores the importance of training and developing human resource competencies in the digital era. Human resources must understand the technology that supports recruitment processes, such as online job search platforms, algorithm-based employee selection, and video conference interview techniques. This also applies to employee management, with digital tools such as online performance management systems, e-learning training, and collaboration through online project platforms.

Training and development of human resource competencies in the digital era are not limited to technical aspects; they also include individual and leadership development.

Employees need to be educated about leadership in the digital age, have skills to manage virtual teams, provide motivation to employees online, and build an inclusive work culture in the digital world.

2. RESEARCH METHOD

In this article, a descriptive analysis method is utilized, which analyzes and explains recent phenomena or issues by referencing published literature. Collecting information from various written sources, careful reading, and noting relevant information are integral parts of the information collection process, known as literature review. To ensure the regularity and completeness of the found data, managing research material also becomes a crucial skill. This literature review employs the method of qualitative descriptive analysis literature study. Based on relevant references, this research outlines or explains the challenges of human resources (HR) competencies in facing the changes of the digital era.

3. RESULTS AND DISCUSSION

Training

Training is the process of enhancing individual abilities to help achieve organizational goals, according to Mathis (2002). Therefore, this process is tied to various organizational training goals, which can be viewed broadly or narrowly. Training does not always provide employees with the knowledge and skills needed for their current jobs. Sometimes a distinction is made between training and development; the former is broader and focuses on helping individuals acquire new skills beneficial for their current and future jobs. Furthermore, Simanjuntak (2005) states that training is part of HR investment, or human investment, aimed at improving employee skills and abilities, thereby enhancing employee performance.

Training usually employs programs designed to meet job needs and is delivered in a relatively short time to instill job skills. Ivancevich (2008) defines training as "an effort to improve employee performance in their current job or other jobs they may hold." Here

are some crucial aspects of its definition: training is "a systematic process to change the work behavior of an individual/group of employees to improve organizational performance." Training focuses on the skills and abilities required for current jobs. It is oriented towards the present and helps employees master specific skills and abilities needed to succeed in their jobs. Gary Dessler (2009) describes training as "the process of teaching new or existing employees the basic skills they need to perform their jobs."

Training is one way to enhance the quality of human resources in the workplace. As job demands can change due to changes in the work environment, strategies, and other factors, employees need to be trained. According to Handoko (2000, p.104), training is intended to improve mastery of various skills and techniques related to specific and routine job execution. Employees are trained to start their current jobs. "Training is the process of teaching new or existing employees the basic skills they need to perform their jobs" (Dessler in Agusta & Susanto, 2013, p.1). Schuler and Jackson (2006) and Mondy (2008) both agree that the purpose of training and development is to instantly enhance performance in the current job roles. They emphasize improving employee skills by increasing knowledge and skills relevant to tasks and responsibilities undertaken.

Human Resources Development

Human resources (Sunarmintyastuti & Suprpto, 2019, p.105) are defined as the abilities possessed by each individual determined by their mental and physical capabilities. All activities they undertake depend on human resources. Although there are many options and aids in using advanced equipment during task execution, it would not be effective without the active role of human resources. However, according to Hasibuan (2003, p.244), human resources are a combination of someone's physical and mental abilities. Individual descent and environment shape their behavior and characteristics, while the desire to fulfill their needs drives their work achievements.

According to Krismiyati (2017, p.44), human resources development is a collection of systematic and planned actions intended to provide facilities to company employees with the ability to meet current and future job demands. However, according to Tarigan and Nasution (2014, p.147), human resources development is the process of preparing

individuals to undertake larger responsibilities related to their tasks and functions within the company by enhancing their intellectual abilities to perform better. Therefore, human resources development is a consciously taken action to encourage employees to perform better.

According to Mc Clelland (1973) cited by (Zainal et al., 2015, p.230), competency-based human resources development has six competency indicators, including: 1) Skills, which are the ability or capacity to do something well, while 2) Knowledge is the information possessed or mastered by someone in a specific field; 3) Social role is the projection of an individual to others (external personality); 4) Self-image is the image an individual has of themselves (internal personality); 5) Trait is a relatively consistent characteristic that influences an individual's behavior; and 6) Motive is the basic thought or intention that influences an individual's behavior.

Jackson et al. (2018) state that the concept of development encompasses a series of steps designed to improve skills, to anticipate challenges that may arise in the future of the organization. Therefore, these development activities are often recognized as career development efforts or leadership skill enhancements.

The Digital Era for Human Resources

The digitalization process of human resources has resulted in a significant transformation in how we utilize and manage the workforce. Paradigm shifts in performance management, employee development, and recruitment are brought about by this digital era. Human resource strategies rely on the use of technologies such as artificial intelligence, data analytics, and online platforms.

Moreover, more flexible work models and employee engagement through various digital channels have become more common in the modern era. Therefore, human resources continue to evolve in response to changing technologies and dynamic market demands. Since 2011, businesses have entered the era of Industry 4.0, also known as the era of digitization. Ensuring that the workforce can keep up with technological advancements and adapt to rapid changes is a major challenge in human resource management. Therefore, companies and organizations must have human resources capable of analyzing data and thinking critically.

Digitalization must now be implemented by all businesses. According to Purnama n.d., in a study on the implementation of digitalization of human resource activities, most human resource management elements are still in the early stages of local digitization. However, most elements related to training and development have undergone digitalization.

Digitalization not only affects how people learn professional skills and knowledge. Nevertheless, the process also has a significant impact on the primary goals of training and development. Confronting business leaders with the challenge of adapting to the changing digital paradigm is the main goal of professional training and development. Simply put, digitalization is the process of changing technology from analog to digital.

Technically, digitalization can be defined as the process of describing images, sounds, signals, and objects by transforming them into a set of numbers represented as discrete values, according to Khan (2016). Conversely, Collin et al. (2015) state that most industries, including telecommunications, banking, media, medical, education, and healthcare, have reached a point where the application of digital technology has become a mandatory transformation. This digitalization of data has a significant impact.

With the development and advancement of current technology, the situation has become more challenging for individuals and groups to adapt. This situation is worsening. Even ten years ago, many sought-after roles were in Industry 4.0. As a result, the skills needed to perform these roles have not yet fully formed. Research results indicate that modern and digital technology erases the differences between current job types. While 15% of employees state that they rarely or never stop working, most workers now frequently check their emails or phones to find out about their work.

Human Resources Competency in the Digital Era

In the digital era, employees need to develop various competencies to adapt to rapid changes in technology and business demands. Here are some important employee competencies in the digital era (Fajriyani et al., 2023):

- a) Digital skills, including: 1) Digital literacy, namely the ability to understand and use digital technology effectively. 2) Ability to use devices, namely being able to operate and utilize various digital devices such as computers, tablets and gadgets.

- b) Problem solving abilities, consisting of: 1) Data analysis, able to collect, analyze and interpret data to support decision making. 2) Creativity is the ability to think creatively and provide innovative solutions to problems.
- c) Adaptability, there is 1) Flexibility, namely the ability to adapt to rapid changes in the work environment and technology. 2) Lifelong learning which means motivation to continue learning and developing new skills throughout your career.
- d) Digital communication skills, including: 1) Ability to communicate effectively virtually: able to communicate clearly and effectively via digital media, such as email, chat and video conferences. 2) Social media literacy: the ability to use and understand social media platforms for professional purposes.
- e) Collaboration capabilities, consisting of: 1) Virtual collaboration capabilities: able to work together effectively with geographically separated teams via online collaboration tools. 2) Digital networking skills: able to build and maintain professional networks through digital platforms.
- f) Digital time management skills, namely being able to manage time efficiently in a work environment full of digital distractions. Balance between the digital world and the real world, so that harmony and balance in everyday life.
- g) Digital security capabilities, more on understanding cyber security, namely understanding digital security risks and implementing security practices to protect information and data.
- h) Digital leadership capabilities, including 1) Innovative leaders, namely being able to lead and support innovation in the use of technology to achieve company goals. 2) Data-based decision-making ability is being able to make decisions based on data and analysis.
- i) Project management capabilities, in digital project management, HR is able to plan, organize and manage projects using digital tools and methodologies.
- j) Digital ethics, understanding the ethics of using technology, namely understanding and applying ethical principles in the use of technology and data.

Challenges of Human Resources Training and Development in the Digital Era

Organizations must provide appropriate training and education to enhance the competencies of their human resources to face the challenges of human resource competencies in the digital era. They also need to pay attention to technological developments and follow existing trends to remain competitive with other companies.

The development of technology has both positive and negative effects, with many jobs being replaced by innovation. Digital interaction and integration in human resources and the workforce bring about changes in recruitment and workforce orientation. Currently, education and recruitment will largely shift to online systems. To improve workforce productivity and streamline the employee performance evaluation process, human resource management must promptly utilize technology. Digital interaction with the workforce includes evaluating technological knowledge and structured teaching to search for and measure virtual human resources or workforce skills.

The main objectives are human resource management strategies to face the era of digitization and the actions that can be taken to address these issues. Comprehensive and sustainable human resource development involves education, high competence, creativity, innovation, and independence. Both performance, group effectiveness, knowledge transfer, leadership, employee support, and work strategies are all elements that must ensure organizational climate support. Human resources must continually improve their abilities to compete and survive in the face of challenges caused by changes in the global environment, including the impact of digitization.

The digital era presents various opportunities and new challenges for organizations and individuals. One of the main challenges is the need to improve the skills and knowledge of human resources to keep up with rapid technological advancements. Training and development of human resources are key to addressing this need, but there are several challenges faced in its implementation, including:

1. Cost: The cost of HR training and development can be a burden for organizations, especially for small and medium organizations. These costs can include the cost

- of training programs, fees, and the cost of lost employee work time during training.
2. Time: Finding time for training amidst busy work can be a challenge for employees. This can cause employees to be reluctant to take part in training or unable to participate in training optimally.
 3. Availability of training programs: Training programs that suit the needs of the organization and employees may not always be available. This can cause training to be ineffective or not provide maximum benefits for employees.
 4. Speed of technological change: Technology is developing very rapidly, so training programs designed today may be outdated in a few months or years. This can result in employees not having the skills needed to keep up with the latest technological developments.
 5. Employee motivation: Not all employees have the same motivation to participate in training and development. This can cause employees not to take training seriously or not be able to take full advantage of training.

HR Training and Development Strategy in the Digital Era

The digital era brings significant transformation to the world of work, requiring organizations and individuals to adapt and improve their digital skills. Human resource training and development is the key to answering this need. Here are some strategies that can be implemented:

1. Personalization:
 - a. Create training programs that suit employees' individual learning needs and styles.
 - b. Use an online learning platform that provides a wide selection of training programs and learning content.
 - c. Give employees the opportunity to choose the training program they want.
2. Micro learning:
 - a. Use short learning methods and focus on specific topics.
 - b. Create learning content that is easily accessible and can be learned in a short time.

- c. Take advantage of mobile applications and online learning platforms to support micro learning.
3. Technology-based learning:
 - a. Use technologies such as virtual reality (VR), augmented reality (AR), and gamification to make training more engaging and interactive.
 - b. Take advantage of online learning platforms and social media to support learning.
 - c. Use chatbots and artificial intelligence (AI) to provide assistance and support to employees during training.
 4. On the Job Training:
 - a. Give employees the opportunity to learn directly on the job.
 - b. Create mentoring and coaching programs to help employees develop their skills.
 - c. Provide regular, constructive feedback to employees to help them improve their performance.
 5. Continuous learning culture:
 - a. Create a positive and open learning culture within the organization.
 - b. Encourage employees to continue learning and developing themselves.
 - c. Reward employees who demonstrate a commitment to learning.

4. CONCLUSION

Training and development of human resources (HR) in the digital era are urgent needs to address the challenges and opportunities that arise with technological advancements and changes in the business world. With rapid changes, employees need to have the skills and knowledge required not only to survive but also to thrive in an increasingly complex work environment. In this context, training and development strategies should be designed holistically, encompassing both technical and soft skills. The use of technology as a tool for providing training and learning is essential to ensure that employees can access the necessary information and skills quickly and efficiently. Effective HR training and development strategies in the digital era should be personalized, technology-based, and support a culture of sustainable learning. By

implementing the right strategies, organizations and individuals can ensure they have the skills and knowledge needed to succeed in the digital age.

Furthermore, it is crucial to create a learning culture within the organization, where innovation and experimentation are valued, and failure is considered an opportunity for learning. Mentoring programs and internal collaboration also become crucial elements in supporting knowledge transfer among employees. With continuous evaluation of training programs, organizations can ensure that their investments yield the desired results and that employees are truly prepared to face the demands of the digital era. HR training and development are not just about preparing employees for current tasks but also ensuring that they have adaptive skills and critical thinking abilities to face future changes. Thus, companies capable of creating a dynamic and responsive learning ecosystem to technological developments will have a significant competitive advantage in this digital era. With skilled, innovative, and learning-ready employees, organizations can achieve success in facing challenges and leveraging opportunities in this ever-changing business world.

References

- Adiawaty, S (2019). Kompetensi Praktisi Sdm Menghadapi Era Indusri 4.0. *Jurnal Manajemen Bisnis*, Vol. 22 No. 2 / 2019, 115 - 120.
- Agustina, T. (2019). Pengaruh Kompetensi SDM Terhadap Kinerja Karyawan PT. Semen Padang. *Jurnal Ilmiah Manajemen Dan Bisnis*, 13(1), 1-11.
- Al-Hattami, A., & Al-Balushi, S. (2021). The Impact of Digital Learning on Training and Development in the Workplace. *International Journal of Advanced Research in Management and Social Sciences*, 10(1), 1-10.
- Apriliana S.D dan Nawangsari, E.R. (2021). Pelatihan Dan Pengembangan Sumber Daya Manusia (SDM) Berbasis Kompetensi. *Forum Ekonomi*, 23 (4) 2021, 804-812.
- Damingun. (2017). Pengembangan Sumber Daya Manusia Berbasis Kompetensi. *Jurnal Ekonomi dan Manajemen*. Volume 11 Nomor 2, Juli 2017, 1 - 8.

- Haryanto, J., & Nurhayati, I. (2019). The Competency of Human Resources in the Era of Industry 4.0: A Review of Literature. *Journal of Business and Behavioural Entrepreneurship*, 2(2), 60-68.
- Hidayat, R. (2021). Strategi Pengembangan SDM pada Era Industri 4.0. *Jurnal Manajemen dan Pemasaran Jasa*, 14(1), 1-16.
- Kusuma, Fanila Kasmita. (2021). Implementasi Manajemen Sumber Daya Manusia (MSDM) Berbasis Kompetensi Di Era Digital. Vol.15 No.10 Mei 2021, 5579 – 5590. <http://ejurnal.binawakya.or.id/index.php/MBI>
- Lee, C. S. (2018). HR challenges in the digital era. *Asia Pacific Journal of Human Resources*, 56(3), 336-347.
- Mardikanto, T., & Rahardjo, W. (2018). *Era Digital: Transformasi Bisnis, Pendidikan, dan Kebudayaan*. PT. Gramedia Pustaka Utama.
- Mathis, R. L., & Jackson, J. H. (2019). *Human Resource Management: Essential Perspectives*. Cengage Learning.
- Mitrofanova, EA, Konovalova, VG, & Mitrofanova, AE (2019). Peluang, Masalah dan Keterbatasan Transformasi Digital Manajemen SDM. Dalam V. Mantulenko (Eds.), *Prosiding Ilmu Sosial dan Perilaku Eropa* (hal. 1717-1727). Samara: Akademi Masa Depan. doi:10.15405/epsbs.2019.03.174
- Muslimin, I. (2019). Tantangan SDM di Era Industri 4.0. *Jurnal Ekonomi Bisnis dan Kewirausahaan*, 2(2), 139-148.
- Okeke, C. C., & Onah, F. C. (2022). The Role of Training and Development in Enhancing Employee Performance in the Digital Age. *International Journal of Scientific Research and Management*, 10(2), 1-10.
- Purwanto, A., & Rukayah, S. (2018). Kompetensi SDM dalam Perspektif Era Revolusi Industri 4.0. *Jurnal Riset Manajemen Sains Indonesia (JRMSI)*, 9(1), 67-85.
- Rusman. (2022). *Tantangan Sumber Daya Manusia di Era Globalisasi*.
- Saeffulloh, M. (2019). Tantangan SDM dalam Menghadapi Era Digital. *Jurnal Manajemen Dan Bisnis*, 16(1), 1-12. <https://dinastirev.org/>
- Schwalbe, K. (2018). *Information Technology Project Management*. Cengage Learning.
- Wibowo, A. (2019). Penguatan Kompetensi SDM dalam Menghadapi Perubahan Revolusi Industri 4.0. *Jurnal Manajemen*, 23(1), 44-57.

- Yuniarti, D. (2018). Digital Era: Challenges and Opportunities for Human Resource Management. *Journal of Human Resource and Leadership*, 2(2), 1-15
- Zhu, C., & Chen, S. (2020). A Review of Training and Development Strategies for Employees in the Digital Age. *International Journal of Frontiers in Sociology*, 23(3), 1-10.