

Managing Employees in the Digital Era: Adaptation Strategies and Competency Development

Kania Laelawati¹, Yulianah²

Universitas Kebangsaan Republik Indonesia

Article Info	ABSTRACT
<p>Keywords: Employee Management, Digital Era, Adaptation Strategy, Competency Development, Human Resources.</p>	<p>The development of digital technology has brought significant changes to the world of work, particularly in how companies manage human resources. This study aims to analyze employee adaptation and competency development strategies in the digital era to remain relevant and competitive. The research method used is a descriptive qualitative approach, reviewing literature and in-depth interviews with managers and employees at several digital-based companies. The results of this study indicate that employee management in the digital era requires an adaptation strategy that emphasizes competency development, both technical and soft skills. The application of technology in recruitment, training, performance management, and administration has been proven to increase organizational efficiency and effectiveness. However, the success of HR digitalization is greatly influenced by employee readiness to adapt, company support through reskilling and upskilling, and the creation of a flexible, collaborative work culture oriented towards continuous learning. Thus, companies that are able to integrate aspects of technology, organizational culture, and competency development will be better prepared to face the challenges and global competition in the digital era.</p>
<p>isiThis is an open access article under the CC BY-NC license</p> 	<p>Corresponding Author: Kania Laelawati Universitas Kebangsaan Republik Indonesia kania_laelawati@fe.ukri.ac.id</p>

INTRODUCTION

The rapid development of digital technology has brought significant transformations to various industrial sectors, including human resource (HR) management. Digitalization is now a top priority for organizations to increase efficiency, accelerate work processes, and create sustainable innovation (Alieffiansyah et al., 2024). The use of technologies such as big data, artificial intelligence (AI), and cloud computing enables companies to manage employee information more accurately and in an integrated manner. This not only facilitates data-driven decision-making but also provides opportunities for companies to design more effective HR development strategies (Ayyasy & Maelani, 2024).

In this context, human resource development plays a strategic role in ensuring employee competencies remain relevant to the increasingly dynamic needs of the industry. The application of digital technology in HR encompasses various aspects, from online recruitment systems and training through e-learning platforms to performance management using real-time digital applications (Mahmudah et al., 2024). This transformation requires employees to

adapt quickly, master digital skills, and develop critical and creative thinking skills. Without continuous competency development, employees risk experiencing a skills gap, which can reduce organizational productivity and competitiveness (Nugis & Sanggarwati, 2024).

Not all employees have the same level of readiness to adapt to digital technology developments. Differences in educational background, work experience, and digital literacy levels often influence the speed and success of this adaptation (Nauli et al., 2025). This competency gap can become a serious obstacle to the digitalization of human resources if not managed properly. Employees who struggle to master new technologies risk decreased productivity and even loss of work motivation. Therefore, companies must be able to identify employee readiness levels early on so they can design competency development and coaching strategies tailored to individual and organizational needs (Wahyudi et al., 2023).

On the other hand, the implementation of HR digitalization is not only about technology, but also closely related to aspects of change management. Employee resistance to change often arises from feelings of uncertainty, discomfort, or concerns about job security amidst automation (Sangapan et al., 2025). The transition from manual processes to digital systems requires a significant adjustment period and full support from management. Companies need to provide facilities in the form of intensive training, mentoring, and clear communication regarding the objectives of digital transformation so that employees feel more prepared and confident in facing it (Alwy, 2021).

In addition to challenges related to differences in employee adaptability and resistance to change, employee management in the digital era is also closely related to organizational culture. Digital transformation is driving the emergence of a new work culture that emphasizes flexibility, virtual collaboration, and the use of technology in almost every work activity (Firdaus & Kuswinarno, 2024). Phenomena such as remote working, flexible working hours, and digital platform-based communication are becoming common patterns that are changing the way employees interact with the organization. However, this cultural shift is not always smooth, as some employees may feel alienated from the traditional work environment or experience a skills gap in utilizing technology (Saputri et al., 2024).

Reskilling and upskilling have also become urgent needs for many organizations amidst the rapid development of digital technology. Employees cannot simply rely on old skills; they need to continually update and enhance their competencies to remain relevant to increasingly complex job demands (Yulianah, 2024). Through digital training programs, e-learning, workshops, and coaching, companies can help employees master new skills while deepening existing ones. These programs focus not only on technological mastery but also include soft skills such as adaptability, digital communication, critical thinking, and cross-team collaboration (Yulianah, 2025).

Previous studies have emphasized that the success of HR management in the digital era is determined not only by the implementation of technology, but also by employee readiness and an organizational culture that supports change. Research by Bondarouk & Brewster (2016) shows that HR digitization through a Human Resource Information System (HRIS) can improve administrative efficiency and strategic decision-making. Meanwhile,

Siagian (2024) emphasized that the digital era requires organizations to invest in reskilling and upskilling to reduce employee skills gaps. This finding aligns with the findings.

Beyond skills, other research emphasizes the importance of organizational culture in supporting digital transformation. According to Denner, Püschel, & Röglinger (2018), companies that successfully implement HR digitalization are those that are able to build a flexible, collaborative, and innovation-driven work culture. A study by Sudibjo (2020) in Indonesia also supports this, stating that implementing remote working and using digital platforms increases employee productivity, but must be balanced with effective change management policies to overcome resistance.

Based on this review, it can be seen that previous research has focused more on the technical aspects of HR digitalization or on a specific aspect such as reskilling, organizational culture, or change management. However, there is still a research gap in understanding the integration of adaptation strategies, competency development, and organizational culture as a whole in managing employees in the digital era. Therefore, this study aims to contribute by comprehensively examining how companies can manage employees through adaptation strategies integrated with competency development, thereby creating adaptive, innovative, and highly competitive human resources.

METHOD

This research uses a literature study method with a qualitative descriptive approach. Literature study or literature review is a research method conducted by reviewing, examining, and analyzing various literature relevant to the research topic (Sugiyono, 2019). The literature used includes books, scientific journals, research reports, articles, and trusted online sources that discuss issues related to employee management in the digital era, adaptation strategies, and competency development. This method was chosen because it is able to provide a broad and in-depth perspective, thus helping researchers understand the development of previous research, find patterns, and identify emerging trends in HR management in the digital era. Thus, this research can build a strong theoretical foundation and enrich conceptual understanding of the topic studied.

A qualitative descriptive approach was chosen because it aims to provide a systematic, factual, and accurate explanation of the phenomena occurring, without manipulating research variables. The main focus is to describe the characteristics, strategies, and challenges faced by organizations in managing employees in the digital era. Through an analysis of various literature (Nasution, 2020), this study seeks to produce a comprehensive overview of employee adaptation and competency development practices, while also identifying knowledge gaps (research gaps) that still require further research. The research results are expected to contribute both theoretically to the development of HR management science and practically as a reference for organizations in designing employee management strategies in the digital era.

RESULTS AND DISCUSSION

Adaptation Strategy

Application of Technology in Human Resource Management

1. Recruitment and Selection

The use of technology in recruitment and selection has brought significant changes to the workforce recruitment process. Online platforms like LinkedIn, Indeed, and Glassdoor enable companies to reach potential candidates more widely, quickly, and efficiently. Through automated search features and specific criteria filters, companies can target candidates based on position requirements, making the initial screening process more effective than traditional methods. Digitization can reduce recruitment costs and time, while expanding access to a global workforce.

Furthermore, advances in analytical technology also support objectivity in the selection process. Data-driven algorithms are used to analyze candidate profiles, assessing suitability based on experience, skills, and personality, thereby reducing biases that often arise in manual selection. For example, the use of an Applicant Tracking System (ATS) helps automatically screen thousands of job applications, ensuring only the best candidates advance to the next stage. Thus, technology-based recruitment not only improves efficiency but also improves the quality of selection results.

2. Performance Management

Technology-based performance management systems enable organizations to track employee performance in real time. Through specialized software, companies can set measurable work goals, monitor progress, and provide ongoing feedback. This approach transforms performance evaluations from annual to dynamic and ongoing. Transparency allows employees to track their own progress, while managers have accurate data to assess team productivity.

Furthermore, technology also helps identify employee strengths and weaknesses more objectively. The collected data can be used to design career development programs tailored to individual potential. For example, an employee who demonstrates high performance in data analytics can be directed to a development path related to big data or AI. In this way, the system serves not only as an evaluation tool but also as a strategic tool for career development and employee retention.

3. Training and Development

Digital transformation has also brought about significant changes in the way employee training and development is conducted. Through Learning Management Systems (LMS), companies can provide a variety of online courses, interactive modules, and learning materials that can be accessed anytime and anywhere. This allows employees to learn independently according to their individual needs and pace. This approach is far more flexible than conventional training, which requires a specific time and location.

Besides flexibility, digital training systems are also more personalized. Learning algorithms can tailor materials based on each individual's skill needs. For example, marketing employees can be directed to digital marketing courses, while technical employees receive training on coding or data analysis. In this way, companies not only improve employee skills

in general but also ensure the competencies they develop are relevant to the organization's strategic needs.

4. Administration and Payroll Management

Digitization in employee administration and payroll plays a crucial role in improving operational efficiency. Human Resource Management (HRM) software automates various administrative tasks, such as employee data recording, attendance, payroll calculations, and benefits. This reduces the risk of human error and saves time previously spent on repetitive administrative tasks.

Furthermore, the use of HRM software also increases transparency and accuracy in managing employee entitlements. This system allows employees to access payslips, request leave, and track their entitlements independently through a digital portal. This allows HR to focus more on strategic functions, such as talent development and human resource planning. This change not only increases efficiency but also creates a more modern and professional work experience for employees.

Transparent Change Management

1. Open and Honest Communication

Open and honest communication is key to managing change in the digital age. Companies must be able to clearly communicate the goals, benefits, and impacts of change to all stakeholders, including employees at all levels. With consistent and transparent information, employees will understand the direction of organizational policies and feel better prepared for the transformation process. This is crucial to minimizing uncertainty, which often leads to anxiety and resistance.

In addition to communicating objectives, organizations also need to explain the potential challenges and risks that may arise during the change process. This realistic approach not only builds trust but also prepares employees mentally for various eventualities. When employees feel involved and not "left in the dark," they tend to be more open, prepared, and proactive in supporting the success of digital transformation.

2. Stakeholder Engagement

Active stakeholder involvement, especially employees, is crucial for creating a sense of ownership in the company's changes. By providing opportunities for employees to voice their opinions, input, and concerns, the organization demonstrates that their voices are valued. This engagement can be achieved through discussion forums, surveys, or regular meetings that provide space for participation.

When employees feel heard, they are more likely to believe that the changes being made are not solely in the interests of management, but also for the common good. This sense of appreciation can increase employee motivation and commitment to supporting change implementation. Thus, stakeholder engagement is no longer a mere formality but a crucial strategy for creating a collaborative culture that strengthens the success of digital transformation.

3. Sustainable Information

Providing ongoing information is crucial for maintaining employee trust and engagement in the change process. Information about progress, achievements, and

challenges encountered should be provided regularly to keep all parties informed. Continuous communication allows employees to understand the latest developments and adapt their roles to meet the organization's needs.

Additionally, companies need to ensure open and accessible communication channels, such as official emails, internal apps, or online forums. Through these channels, employees can ask questions, provide feedback, and raise concerns directly. This transparency helps foster a stronger sense of engagement while also reducing the spread of rumors or inaccurate information that can undermine the spirit of change.

4. Clarity of Governance and Roles

Clarity in governance is crucial to ensure that the change process is structured and directed. Companies need to establish change management mechanisms, including who is responsible for each stage, how the process will be monitored, and how success will be evaluated. With clear governance, all parties can understand how the change will be implemented, thereby minimizing confusion on the ground.

Beyond governance, clarity regarding the roles, responsibilities, and expectations of each individual is also crucial. Employees need to know the specific contributions expected of them in the change process. This not only increases their sense of responsibility but also strengthens collaboration across departments because everyone understands their position and function. This allows for more effective, measurable, and results-oriented implementation of change.

Work Flexibility

1. Flexible Working Hours

Flexible working hours give employees the freedom to determine their working hours according to their personal needs and optimal productivity. This approach allows employees to work outside of conventional business hours, provided they still meet their targets and responsibilities. This not only increases work motivation but also helps employees adjust their work schedule to suit their lifestyle.

With flexible working hours, companies can encourage employees to be more responsible in managing their time independently. Furthermore, this flexibility can increase job satisfaction because employees feel more valued and trusted. Ultimately, this can also positively impact employee retention, reduce stress, and encourage long-term productivity.

2. Remote Working or Hybrid Working

Remote working, or a combination of in-office and off-site work (hybrid working), has become a major trend in the digital age. This flexible work location utilizes communication and collaboration technologies to ensure employees remain productive without being constantly in the office. This approach has proven effective in increasing efficiency, reducing transportation costs, and opening up opportunities for companies to recruit talent from diverse geographic locations.

However, implementing remote or hybrid working also requires a well-thought-out management strategy. Companies need to establish clear rules regarding working hours, reporting mechanisms, and employee availability. Furthermore, it's crucial to build a culture of

trust and open communication to ensure smooth collaboration, even when employees aren't always physically present.

3. Work-Life Balance

Work flexibility isn't just about hours or location, but also about work-life balance. Organizations that provide employees with the space to balance professional responsibilities with personal needs are better able to create physically and mentally healthy employees. This is crucial for reducing the levels of burnout that often occur in modern workplaces.

With policies that support work-life balance, employees can feel more satisfied and loyal to the company. Programs such as extended leave, shorter working hours, or work-from-home policies in certain situations are concrete examples of organizational support for employee work-life balance. As a result, employees can work with greater focus, motivation, and contribute optimally to the organization.

4. Use of Technology Supports Flexibility

Work flexibility won't be effective without adequate technological support. Companies need to provide various digital platforms, such as project management applications, cloud storage, and online communication systems to support remote collaboration. This technology allows employees to work anytime and anywhere without being restricted by location constraints.

Furthermore, technology can be used to transparently monitor performance without invading employee privacy. For example, using a real-time performance dashboard can help managers see work progress without requiring excessive oversight. With the right technology, flexible work can balance organizational needs and employee interests.

Competency Development

1. Focus on Digital Skills

In the digital era, digital skills have become a key competency that every employee must possess to adapt to rapid technological developments. Digital literacy encompasses the ability to use software and collaboration applications, as well as understanding digital-based workflows. Furthermore, an understanding of data analytics is becoming increasingly important as companies now rely heavily on data to make informed and strategic decisions. With these skills, employees are able to manage, analyze, and interpret data, thereby adding value to the organization.

Besides data analytics, cybersecurity expertise is equally important. Digital threats such as hacking, data breaches, or cyberattacks can significantly impact a company's bottom line. Therefore, employees need to be equipped with a basic to intermediate understanding of digital security practices, including the use of secure passwords, data encryption, and information access policies. By focusing on these digital skills, companies not only increase productivity but also protect their information assets from the risk of digital threats.

2. Technology-Based Training

The use of technology in employee training opens up significant opportunities to improve the effectiveness and efficiency of learning. Through e-learning platforms, employees can access training materials anytime and anywhere, allowing them to learn at

their own pace and according to their needs. This provides much-needed flexibility in the digital age, especially for employees with busy work schedules. Furthermore, e-learning can present interactive materials in the form of videos, simulations, and quizzes, making the learning process more engaging and easier to understand.

Blended learning is also an effective approach because it combines the advantages of online learning with face-to-face training. With this method, employees can gain conceptual understanding online, then deepen their skills through hands-on practice in offline sessions. This combination creates a more comprehensive and applicable learning experience. With the support of technology-based training, companies can ensure that competency-building programs are more structured, accessible, and sustainable.

3. Culture of Continuous Learning

Building a culture of continuous learning is a crucial strategy in navigating dynamic technological change. Companies need to create a work environment that encourages employees to continuously learn, experiment, and update their skills without fear of failure. This can be achieved by providing access to various learning resources, such as digital libraries, online courses, and opportunities to attend seminars or workshops. With this culture, employees will be more proactive in developing themselves and aligning their competencies with the organization's needs.

Beyond providing resources, management also plays a crucial role in providing concrete examples as role models for learning. When company leaders actively participate in training or update their skills, this inspires and motivates employees to do the same. A culture of continuous learning can ultimately enhance innovation, foster creativity, and strengthen an organization's competitiveness amidst the challenges of the uncertain digital era.

4. Soft Skills Development

In addition to technical skills, developing soft skills is also crucial in developing employees who are ready to face the challenges of the digital era. Skills such as effective communication, adaptability, critical thinking, and problem-solving help employees stay relevant amidst rapid technological change. Effective communication, for example, allows ideas and information to be conveyed clearly in teamwork, much of which is now conducted virtually. Meanwhile, adaptability allows employees to be more flexible in the face of changing work processes or the implementation of new technologies without feeling overwhelmed.

Furthermore, critical thinking and problem-solving skills also play a crucial role in supporting informed decision-making based on analysis of available information. Furthermore, cooperation and collaboration are key to success in modern organizations, which increasingly rely on cross-team and cross-departmental collaboration. With strong soft skills, employees can contribute more effectively, maintain harmonious working relationships, and increase collective productivity in achieving organizational goals.

5. Mentoring and Collaboration

Mentoring programs are an effective strategy for supporting employee competency development in the digital age. Through mentoring, junior employees can receive direct guidance from seniors or more experienced experts, enabling faster and more targeted transfer of knowledge and skills. Furthermore, mentoring provides moral support, motivation,

and the opportunity for employees to discuss work challenges more personally, ultimately boosting their confidence and readiness to face change.

In addition to mentoring, cross-functional collaboration is also a crucial factor in enriching employee insight and experience. Involving employees from different departments in a project encourages the exchange of diverse ideas and broadens perspectives in problem-solving. This type of collaboration not only enhances creativity but also strengthens an inclusive culture of collaboration within the organization. By implementing mentoring and collaboration, companies can create a dynamic learning ecosystem, accelerate adaptation, and foster continuous innovation.

CONCLUSION

The development of digital technology has fundamentally changed the way organizations manage employees, from recruitment and training to performance management, to administration and payroll. The digitalization of human resources not only brings efficiency but also requires employees to adapt quickly to change. Challenges such as skills gaps, resistance to change, and the need for a new work culture emphasize the need for organizations to develop comprehensive employee management strategies to remain competitive in the digital age. To address these challenges, competency development strategies are a top priority. Reskilling and upskilling through e-learning programs, blended learning, coaching, and mentoring can help employees acquire new skills while strengthening existing ones. Soft skills such as effective communication, critical thinking, adaptability, and teamwork must also be enhanced. Furthermore, work flexibility through time management, hybrid models, technology support, and attention to work-life balance have been shown to increase employee satisfaction, productivity, and loyalty to the organization. Therefore, it can be concluded that employee management in the digital age requires an integrated approach that encompasses technology mastery, skills development, and the creation of an adaptive and collaborative work culture. Organizations that are able to manage change through open communication, stakeholder engagement, and a culture of continuous learning will be better prepared to face the dynamics of the global market. Ultimately, adaptation strategies and employee competency development are not only a necessity but also a key foundation for the organization's future sustainability and competitiveness.

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