

Digital Transformation of Human Resources: Strategies for Survival and Competitiveness in the Society 5.0 Era at PT Maxride Makassar

Andi Munawwarah Rusli, Akhmad, Muchriady Muchran, Muhammad Rusydi and Andi Jam'an

¹²³⁴⁵ Master of Management Program, Graduate School, Universitas Muhammadiyah Makassar, Makassar 90221, Indonesia

Email: Unaa6559@gmail.com akhmad@unismuh.ac.id muchriady@unismuh.ac.id rusydi@unismuh.ac.id andi.jam'an@unismuh.ac.id

Keywords: Digital

Transformation;
Human Resource
Management; Society
5.0; Competitive
Advantage; PT
MaxRide Makassar.

Abstract

This study aims to analyze human resource digital transformation as a strategy for organizational survival and competitive advantage in the Society 5.0 era at PT MaxRide Makassar. The research focuses on understanding and implementing human resource (HR) digital transformation, examining its impact on employee performance and organizational competitiveness, exploring the role of HR training and development, and identifying HR adaptation strategies in response to rapid technological change. The study is motivated by the increasing competition in the transportation and digital platform service industry, which requires companies to continuously adapt by leveraging digital technologies while strengthening the quality and capabilities of their human resources. This research employed a qualitative descriptive approach. Data were collected through in-depth interviews, direct observations, and document analysis. Informants were selected using the snowball sampling technique, involving management personnel, employees, and driver partners of PT MaxRide Makassar. The collected data were analyzed using the stages of data reduction, data display, and conclusion drawing. The findings reveal that digital transformation at PT MaxRide Makassar has positively contributed to improving work efficiency, service responsiveness, system transparency, and employee productivity. Digitalization has enabled work processes to become more efficient, structured, and data-driven, thereby enhancing the company's operational effectiveness. However, the implementation of HR digital transformation has not yet reached its full potential due to several challenges, including disparities in digital competencies, employee resistance to organizational change, insufficient training and development programs, and limitations in technological infrastructure and network connectivity. The study concludes that HR digital transformation at PT MaxRide Makassar has significantly contributed to improving organizational efficiency and competitive advantage. Nevertheless, its long-term success requires greater investment in human resource development, the cultivation of a supportive organizational culture, and the adoption of a human-centric digital transformation strategy to ensure sustainable implementation and strengthen business resilience in the digital era.

INTRODUCTION

The business landscape is currently undergoing a fundamental paradigm shift, transitioning from the era of the Fourth Industrial Revolution (Industry 4.0) toward the concept of Society 5.0. Originally introduced by Japan, Society 5.0 extends beyond the technological orientation of Industry 4.0. While Industry 4.0 emphasizes the optimization of value chains through automation, cyber-physical systems, and data exchange within smart factories, Society 5.0 advocates a human-centered society, where digital and physical technologies are deeply integrated to address social challenges and enhance overall quality of life (Fukuyama, 2018; Harayama, 2022). Within the corporate context, this new paradigm requires organizations not only to become technologically intelligent but also socially responsible by fostering synergistic collaboration between humans and intelligent machines to generate sustainable innovation. PT MaxRide, one of Indonesia's leading passenger transportation companies, stands at the center of this disruptive transformation.

Established in 1985, the company has increasingly experienced the impact of digital disruption over recent years.

With approximately 1,200 employees, a fleet of 500 vehicles, and operations spanning 15 major cities across Indonesia, PT MaxRide has traditionally relied on a structured business model and strong customer relationships as its primary competitive advantages. However, over the past five years, the company has encountered substantial existential pressures. The rapid emergence of platform-based logistics and ride-hailing start-ups has captured nearly 30% of the market share for same-day and last-mile delivery services within PT MaxRide's operational regions. Furthermore, internal customer satisfaction surveys revealed a decline of approximately 15 percentage points, primarily attributable to the absence of real-time tracking features and slower service responsiveness compared with digital competitors. To respond to these challenges, PT MaxRide's management initiated several digital transformation programs, including the implementation of a new warehouse management system and the introduction of a basic online booking application. Nevertheless, these initiatives have not produced significant organizational improvements.

Evidence suggests that the primary cause lies in an excessively technology-centered approach that neglects the strategic importance of human resources. Investments in digital technologies without corresponding transformations in organizational culture and workforce capabilities have generated three critical human resource challenges within the company. The first challenge concerns the digital skills gap and digital anxiety. Approximately 60% of PT MaxRide's operational workforce, most of whom have more than ten years of service, demonstrate considerable resistance toward newly implemented digital systems. Many employees experience anxiety regarding potential replacement by automation while simultaneously lacking the fundamental digital competencies required to perform effectively in an increasingly digitalized workplace. These findings are consistent with the World Economic Forum (2023), which estimates that approximately 44% of workers' core skills will undergo substantial transformation within the next five years.

The second challenge relates to organizational cultural rigidity. PT MaxRide continues to operate under a highly hierarchical organizational structure that restricts the flow of information and inhibits innovation. For example, junior data analysts who possess innovative ideas for route optimization often lack clear communication channels to present their proposals directly to strategic decision-makers. This prevailing "wait-for-instruction" culture contradicts the demands of the Society 5.0 era, which emphasizes collaboration, organizational agility, continuous experimentation, and cross-functional innovation (Dirani et al., 2020). The third challenge concerns the digital HR strategy gap. The Human Resources function at PT MaxRide continues to perform predominantly administrative responsibilities, including payroll administration and attendance management, rather than serving as a strategic business partner.

Recruitment practices have not yet been redesigned to identify candidates possessing a digital mindset, while existing employee development programs fail to address the urgent needs for digital upskilling and reskilling. Without Human Resources assuming a strategic leadership role in organizational transformation, digital initiatives are likely to remain fragmented, isolated, and unsustainable. These conditions indicate that PT MaxRide emerged during the Industry 4.0 era but is now required to adapt to the considerably more complex dynamics of Society 5.0. The digital transportation industry is characterized by market volatility, intense competitive pressure, and rapidly evolving expectations among both customers and employees. Within such an environment, human resources—particularly employees and driver partners—represent both the organization's

most valuable strategic asset and its most significant managerial challenge. Consequently, organizational survival can no longer depend solely on business expansion but must increasingly rely on internal optimization achieved through comprehensive digital transformation.

Statistical evidence further reinforces the urgency of organizational transformation. According to data published by the Indonesian Central Bureau of Statistics (BPS, 2023), the number of two-wheeled public transportation vehicles has increased by an average of 8% annually, primarily driven by the rapid expansion of ride-hailing platforms. Although this growth reflects the promising development of Indonesia's digital transportation sector, qualitative evidence obtained through interviews with PT MaxRide's operational managers reveals a contrasting reality. One manager stated that "the intensity of market competition has reduced the company's profit margins to below 5%, requiring operational efficiency across all business functions, including the management of tens of thousands of driver partners." This finding illustrates that sustainable competitiveness in the digital economy depends not only on market expansion but also on organizational efficiency and strategic human resource management. Another major challenge concerns the dynamics and engagement of the platform-based workforce (gig workforce). A fundamental characteristic of gig economy business models such as PT MaxRide is the relatively high turnover rate among driver partners.

Internal company records indicate a monthly driver churn rate of approximately 15%, implying that nearly one-fifth of active driver partners discontinue their collaboration with the company every month. Such a high turnover rate directly increases recruitment, onboarding, and retraining costs, thereby reducing operational efficiency and weakening organizational sustainability. Qualitative findings obtained from an independent driver satisfaction survey conducted in 2023 involving 500 PT MaxRide drivers provide further insights into the underlying causes of this phenomenon. Approximately 65% of respondents perceived the fare and incentive algorithms as lacking transparency. Meanwhile, 70% expressed the need for advanced skills development programs that could be conveniently accessed through the company's mobile application. Furthermore, 55% reported the absence of effective communication channels through which they could convey complaints, suggestions, and professional aspirations to company management. These findings are consistent with the study of Kuhn and Maleki (2022), who argue that gig workers frequently experience higher levels of psychological distress due to algorithmic uncertainty, limited organizational support, and feelings of social isolation.

In addition to workforce engagement issues, PT MaxRide also faces challenges related to the readiness of its digital HR infrastructure and organizational culture. Similar to many conventional organizations undergoing digital transformation, the Human Resources Department continues to operate using traditional management practices and conventional administrative systems. Findings from the HR Digital Transformation Survey conducted by Gartner (2022) indicate that only 38% of organizations across Southeast Asia possess mature strategies and well-defined roadmaps for digital human resource transformation, while the remaining 62% remain at the early stages of implementation or continue to encounter substantial organizational barriers.

Observations and interviews with HR personnel at PT MaxRide further demonstrate several practical limitations. First, the recruitment process for driver partners remains predominantly manual, resulting in lengthy administrative procedures and limited capability to identify digitally competent candidates. Second, onboarding programs continue to employ one-way instructional approaches that lack personalization, preventing many new drivers from fully understanding the essential features of the company's digital platform. Third, although operational

data such as driver ratings, cancellation rates, and route efficiency are continuously generated by the platform, these valuable datasets are primarily utilized for administrative reporting purposes rather than serving as the foundation for personalized employee development and performance improvement initiatives.

These organizational conditions reflect the findings of Strohmeier and Tüselmann (2022), who emphasize the persistent gap between technological availability and organizations' capability to strategically utilize digital technologies through effective human resource management. In many organizations, technological investments significantly exceed investments in workforce capability development, resulting in digital transformation initiatives that remain technologically advanced but organizationally ineffective. Accordingly, the present study seeks to address this fundamental imbalance between technological investment and human resource readiness. Khan (2023) argues that approximately 70% of digital transformation success is determined by people, organizational processes, and corporate culture, whereas technology itself contributes only 30%. Building upon this perspective, the present research shifts attention away from the question of which technologies organizations should acquire toward the more strategic question of how organizations can prepare, empower, and manage human resources capable of utilizing digital technologies to ensure organizational survival and generate sustainable competitive advantage.

The urgency of this study is multidimensional, encompassing operational, financial, academic, and national perspectives. From an operational standpoint, developing a comprehensive digital human resource strategy is critical to ensuring PT MaxRide's long-term organizational survival. Without an integrated Digital Human Resource Management (Digital HRM) strategy, the company faces a substantial risk of corporate obsolescence, whereby its business model gradually becomes outdated and loses relevance within an increasingly competitive digital marketplace. From a financial perspective, operational inefficiencies arising from manual procedures and human errors will continue to erode profitability, while opportunities to generate new revenue streams through digital services may remain unrealized.

Academically, this study seeks to address a significant gap in the existing literature by providing empirical evidence from Indonesia regarding the implementation of Digital Human Resource Management within the context of the Society 5.0 era. Despite the increasing global interest in digital transformation, empirical investigations examining the strategic role of human resource management in supporting organizational transformation within emerging economies remain relatively limited. Furthermore, at the national level, the readiness of human resources in companies such as PT MaxRide constitutes a fundamental pillar for strengthening Indonesia's competitiveness within the global digital economy. Consequently, this research is expected to contribute not only to PT MaxRide's organizational development but also to the advancement of management theory and business practices in Indonesia.

Within the context of digital transformation, human resources represent the most critical determinant of organizational success. Digital technologies can only generate strategic value when supported by employees who possess the necessary competencies, digital readiness, adaptive capabilities, and innovative mindsets. Accordingly, Human Resource Digital Transformation (HRDT) plays a strategic role in enhancing organizational efficiency while simultaneously strengthening long-term competitive advantage. As explained by Bindra and Bhattacharya (2025), technological innovations such as Human Resource Analytics, electronic recruitment (e-recruitment), and intelligent HR information systems significantly accelerate organizational processes and improve decision-making quality. Nevertheless, digital transformation in HR

extends far beyond technological implementation. It requires comprehensive changes in organizational culture, leadership practices, employee behavior, and managerial paradigms that encourage openness to innovation, continuous learning, collaboration, and organizational agility.

Indonesia's rapid economic development further reinforces the necessity of accelerating digital transformation. Macroeconomic stability, combined with digital innovation, has become one of the country's principal engines of economic growth. The value of Indonesia's digital economy has experienced remarkable expansion, reflecting the country's transition toward a digitally driven economic ecosystem.

Table 1.1. Indonesia's Digital Economy Value

Year	Digital Economy Value
2023	USD 41 billion
2024	USD 77 billion
2025 (Projected)	USD 130 billion

Source: Ministry of Finance (2025); Oktaviani et al. (2025).

Table 1.1 illustrates the extraordinary growth of Indonesia's digital economy. The digital economy, valued at approximately USD 41 billion in 2023, is projected to reach USD 130 billion by 2025, representing an unprecedented acceleration in digital economic activities. This remarkable expansion confirms that Indonesia has entered a digital economy era in which organizations across all sectors are required to continuously innovate and adapt, particularly in managing and developing their human resources. The imperative for Human Resource Digital Transformation is further supported by persistent challenges related to workforce capability development. The Indonesian Digital Society Index (IMDI) 2025, published by the Ministry of Communication and Digital Affairs (2025), reports a substantial disparity within the Empowerment dimension, which recorded the lowest score of 34.42, despite considerable improvements in technology adoption indicators. These findings suggest that the primary challenge of digital transformation lies not in technological accessibility itself but rather in employees' capability to effectively utilize digital technologies for creating organizational value. As emphasized by Vitaharsa (2025), this capability gap highlights the necessity for organizations to formulate comprehensive human resource strategies that explicitly address human-centric transformation as the foundation for achieving sustainable competitiveness in the Society 5.0 era.

METHODS

2.1 Research Design

This study employed a qualitative descriptive research design to explore how Human Resource Digital Transformation (HRDT) is implemented at PT MaxRide Makassar and how the organization adapts to technological changes in the Society 5.0 era. A qualitative approach was considered appropriate because the study sought to obtain an in-depth understanding of organizational experiences, perceptions, and practices regarding digital transformation rather than to test predetermined hypotheses or establish causal relationships. The research adopted an interpretivist perspective, assuming that organizational reality is socially constructed through interactions among management, employees, and driver partners. Accordingly, the study focused on understanding participants' interpretations of digital transformation initiatives, organizational change, and human resource management practices within their natural organizational setting.

Rather than emphasizing statistical generalization, this research aimed to generate a comprehensive contextual understanding of how digital transformation influences human resource management practices, employee competencies, organizational culture, and competitive advantage. This approach is consistent with contemporary qualitative research in Human Resource Management (HRM) and Digital Transformation studies, where organizational phenomena are investigated through rich empirical evidence derived from participants' lived experiences. The researcher served as the primary research instrument throughout the investigation. Data were collected through direct interaction with participants using semi-structured interviews, non-participant observations, and documentary analysis. This approach enabled the researcher to capture organizational realities from multiple perspectives while maintaining flexibility throughout the data collection process.

2.2 Research Setting

The study was conducted at PT MaxRide Makassar, located at Jalan Yos Sudarso No. 242, Tabaringan Village, Ujung Tanah District, Makassar, South Sulawesi, Indonesia. PT MaxRide was selected as the research setting because it represents one of Indonesia's transportation companies currently undergoing organizational digital transformation, particularly in the areas of human resource management, employee recruitment, training, performance evaluation, and digital operational management. As a company operating within Indonesia's increasingly competitive digital transportation industry, PT MaxRide provides a relevant context for examining how organizations respond to technological disruption while simultaneously managing organizational change and workforce development. The company has implemented several digital initiatives, including digital recruitment systems, online operational platforms, and technology-assisted performance management, making it an appropriate empirical setting for investigating Human Resource Digital Transformation in the Society 5.0 context. Fieldwork was conducted over a three-month period, from February to May 2026. This duration enabled prolonged engagement with participants, repeated observations, and continuous verification of research findings, thereby enhancing the credibility and depth of the collected qualitative data.

2.3 Participants and Sampling Strategy

Participants were selected using snowball sampling, a purposive sampling technique commonly employed in qualitative research to identify information-rich participants through referrals from previous informants. This approach was considered appropriate because the study required participants possessing direct knowledge and practical experience regarding digital transformation and human resource management within PT MaxRide. The research began with a key informant, namely the Human Resources Manager, who possessed extensive knowledge regarding organizational policies, digital transformation strategies, and human resource development initiatives. The key informant subsequently recommended additional participants considered capable of providing relevant and complementary perspectives.

The participant group included senior managers, HR personnel, operational employees, and driver partners. The inclusion of multiple organizational stakeholders enabled the researcher to capture diverse perspectives regarding the implementation of Human Resource Digital Transformation across different organizational levels. Sampling continued until data saturation was achieved, indicating that no substantially new information or emerging themes were identified during subsequent interviews. The principle of data saturation ensured that the findings adequately

represented the range of participant experiences and strengthened the overall trustworthiness of the research.

2.4 Data Collection Procedures

Data were collected using three complementary qualitative techniques: semi-structured interviews, non-participant observations, and document analysis. The integration of multiple data sources enabled the researcher to obtain a comprehensive understanding of Human Resource Digital Transformation (HRDT) practices at PT MaxRide while simultaneously enhancing the credibility of the research findings through methodological triangulation.

Semi-Structured Interviews

Semi-structured interviews served as the primary source of empirical data. An interview protocol was developed based on the research objectives and relevant literature on digital transformation, Human Resource Management (HRM), and the Society 5.0 framework. Although predetermined guiding questions were prepared, participants were encouraged to elaborate on their experiences, perceptions, and organizational practices, allowing new themes to emerge naturally during the interviews. The interviews explored several key issues, including:

- employees' understanding of Human Resource Digital Transformation;
- the implementation of digital technologies within HR practices;
- organizational challenges encountered during digital transformation;
- employees' digital competencies and readiness;
- organizational adaptation strategies;
- leadership support for digital transformation; and
- the perceived impact of digital transformation on organizational competitiveness.

Each interview lasted approximately 45–90 minutes and was conducted in a setting convenient for the participants. With participants' consent, all interviews were audio-recorded and subsequently transcribed verbatim to ensure analytical accuracy.

Non-Participant Observation

Observation was conducted to complement interview findings by examining how digital transformation was implemented within everyday organizational activities. The researcher adopted a non-participant observation approach, allowing natural organizational processes to occur without researcher intervention.

Observation focused on several organizational aspects, including:

- digital HR operational processes;
- employee interactions with digital technologies;
- communication patterns among organizational members;
- technology-supported decision-making processes;
- organizational workflow and collaboration; and
- employee responses toward digital systems.

Field notes were systematically recorded immediately after each observation session to capture contextual information that might not emerge during interviews.

Document Analysis

Document analysis was employed as an additional source of evidence to support the interpretation of interview and observation data. Various organizational documents were reviewed, including:

- organizational policies related to digital transformation;
- human resource development programs;
- employee training materials;
- organizational reports;
- Standard Operating Procedures (SOPs);
- internal strategic planning documents; and
- digital performance evaluation reports.

The documentary evidence enabled data triangulation while providing historical and organizational context for interpreting the findings.

2.5 Data Analysis

The collected data were analyzed using the interactive qualitative data analysis model developed by Miles, Huberman, and Saldaña (2020). Data analysis was conducted continuously throughout the research process rather than only after all data had been collected. This iterative analytical approach enabled emerging findings to guide subsequent data collection activities. The analysis consisted of four interconnected stages.

Data Collection

Data collection and preliminary analysis occurred simultaneously throughout the fieldwork period. Initial interpretations generated during interviews and observations informed subsequent interviews, allowing the researcher to explore emerging concepts in greater depth.

Data Condensation

Following transcription, the interview transcripts, observation notes, and documentary evidence were subjected to data condensation. During this stage, irrelevant information was removed, while meaningful statements related to the research objectives were identified, coded, and categorized. Open coding was initially conducted to identify recurring concepts within the data. Similar codes were subsequently grouped into broader analytical categories representing common organizational experiences regarding Human Resource Digital Transformation.

Data Display

The categorized data were then organized into analytical displays to facilitate interpretation. Narrative descriptions, thematic matrices, comparison tables, and conceptual frameworks were used to identify relationships among emerging themes. The presentation of qualitative findings emphasized patterns, similarities, differences, and interactions among participants' experiences regarding digital transformation implementation, organizational adaptation, employee competencies, and strategic HR practices.

Conclusion Drawing and Verification

The final analytical stage involved interpreting the identified themes to develop meaningful conclusions that addressed the research questions. Throughout the analytical process, tentative conclusions were continuously verified against newly collected data. This iterative verification

process ensured that interpretations remained grounded in empirical evidence rather than researcher assumptions. Emerging themes were compared across interviews, observations, and documentary evidence to establish consistency and strengthen the credibility of the findings. The final themes represented the collective experiences of participants regarding Human Resource Digital Transformation, organizational adaptation strategies, digital capability development, organizational culture, and sustainable competitive advantage within the Society 5.0 context.

2.6 Trustworthiness of the Study

To ensure the rigor and trustworthiness of the qualitative findings, this study adopted the evaluation framework proposed by Lincoln and Guba, which comprises four criteria: credibility, transferability, dependability, and confirmability. These criteria are widely recognized as the quality standards for qualitative research and enhance the scientific rigor of interpretive studies.

Credibility

Credibility refers to the extent to which the research findings accurately represent participants' perspectives and organizational realities. Several strategies were employed to strengthen credibility. First, data triangulation was implemented by collecting evidence from multiple participant groups, including Human Resource managers, operational employees, and driver partners. Second, methodological triangulation was achieved through the integration of semi-structured interviews, non-participant observations, and document analysis. The convergence of evidence from different sources enhanced the consistency and reliability of the findings. In addition, member checking was conducted by returning interview summaries and preliminary interpretations to selected participants to verify the accuracy of the researcher's interpretations. Participants were invited to clarify statements, provide additional explanations, or correct potential misunderstandings before the findings were finalized. The researcher also maintained prolonged engagement within the research setting throughout the fieldwork period. Continuous interaction with participants facilitated a deeper understanding of organizational culture, digital transformation practices, and employee experiences while reducing the possibility of superficial interpretation.

Transferability

Transferability concerns the extent to which the findings may be applicable to similar organizational contexts. Rather than pursuing statistical generalization, this study provides a thick description of the research setting, organizational characteristics, participant profiles, digital transformation initiatives, and contextual conditions surrounding PT MaxRide Makassar. Such comprehensive contextual information enables readers to determine the relevance and applicability of the findings to comparable organizations undergoing digital transformation, particularly within the transportation, logistics, and platform-based service industries.

Dependability

Dependability was established by ensuring that the research process was systematic, transparent, and logically documented. All stages of the study—including participant recruitment, interview procedures, observation protocols, coding processes, thematic development, and data interpretation—were carefully recorded to establish an audit trail. Furthermore, peer debriefing sessions were conducted with academic colleagues experienced in qualitative research and Human

Resource Management. These discussions provided constructive feedback regarding coding consistency, thematic interpretation, and methodological decisions, thereby minimizing researcher bias and improving analytical consistency.

Confirmability

Confirmability refers to the extent to which the findings are grounded in empirical evidence rather than personal assumptions or researcher subjectivity. To achieve confirmability, the researcher maintained a reflexive journal throughout the research process to document methodological decisions, analytical reflections, and potential biases. Interpretations were continuously compared with interview transcripts, observational field notes, and organizational documents to ensure that all conclusions were firmly supported by empirical data. In addition, triangulation across multiple data sources enabled verification of emerging themes and strengthened the objectivity of the research findings. Collectively, these procedures enhanced the overall trustworthiness of the study and ensured that the findings provide a credible and rigorous understanding of Human Resource Digital Transformation as a strategic response to organizational challenges in the Society 5.0 era.

RESULTS AND DISCUSSION

3.1 Understanding and Utilization of Human Resource Digital Transformation at PT MaxRide Makassar

The findings indicate that PT MaxRide Makassar has progressively implemented Human Resource Digital Transformation (HRDT) across various operational and managerial activities. Digital transformation is reflected in the utilization of integrated work applications, digital monitoring systems, cloud-based data management, and technology-enabled communication platforms that support daily organizational operations. These initiatives demonstrate the company's commitment to improving operational efficiency while responding to the increasing digitalization of Indonesia's transportation industry. Interview data reveal that most participants perceive digital transformation as the integration of digital technologies into organizational processes to simplify work, improve efficiency, and accelerate decision-making. Employees consistently emphasized that digital systems have replaced several manual procedures, resulting in faster service delivery, improved coordination, and more accurate information management.

One participant explained:

"Work has become much faster because almost every operational activity is now supported by digital applications."
(INF-01)

This perception suggests that employees associate digital transformation primarily with improvements in work efficiency rather than merely the adoption of new technologies. Such findings support the argument that digital transformation should be understood as an organizational capability that integrates technology, business processes, and human resources to create sustainable value rather than simply introducing digital tools.

The observations further demonstrate that digital systems have significantly improved organizational data management. Employee records, operational reports, attendance monitoring, and performance evaluations are now stored electronically, enabling easier access to information while reducing administrative errors. Digital documentation has also strengthened transparency and accountability because organizational activities can be monitored in real time. These findings

are consistent with contemporary digital transformation literature, which argues that digital technologies improve organizational effectiveness by increasing information accessibility, operational transparency, and evidence-based decision-making. Rather than functioning solely as technological infrastructure, digital systems become strategic organizational resources that enhance managerial performance and organizational responsiveness.

Despite these positive developments, the findings also reveal that HR digital transformation at PT MaxRide has not yet reached full organizational maturity. Several participants acknowledged experiencing difficulties during the initial implementation of digital systems, particularly employees who possessed limited digital competencies or had long-established work routines.

One employee stated:

"Initially it was quite difficult because I was not accustomed to using digital systems." (INF-02)

This statement illustrates that technological implementation alone does not automatically produce successful digital transformation. Organizational change requires employees to acquire new competencies while simultaneously adapting to new work processes and digital environments. The transition therefore involves both technological and psychological adjustments. Field observations also identified several operational barriers that continue to hinder digital transformation. Participants reported occasional internet connectivity problems, system errors, and application downtime that interrupted operational activities. Although these technical issues occurred relatively infrequently, they reduced employees' confidence in digital systems and occasionally delayed service delivery.

Furthermore, several participants indicated that existing training programs remain insufficient to fully prepare employees for digital transformation. Most employees relied heavily on self-learning and informal assistance from colleagues when encountering difficulties using new applications. This finding indicates that technological investments have progressed more rapidly than organizational capability development. The coding process, consisting of open coding, axial coding, and selective coding, generated several recurring themes that explain employees' perceptions regarding Human Resource Digital Transformation.

Table 3.1. Coding Results for Understanding and Utilization of Human Resource Digital Transformation

No.	Interview Excerpt	Open Coding	Axial Theme	Selective Theme
1	"Work has become faster and more practical..."	Work efficiency	Positive impacts	HR digital transformation generates substantial organizational benefits but has not yet been fully optimized.
2	"Initially it was difficult because I was unfamiliar with the digital system..."	Initial adaptation	Implementation barriers	HR digital transformation generates substantial organizational benefits but has not yet been fully optimized.

3	"Data are now better organized and more secure..."	Data management	Positive impacts	HR digital transformation generates substantial organizational benefits but has not yet been fully optimized.
4	"Network failures sometimes interrupt our work..."	Technical constraints	Implementation barriers	HR digital transformation generates substantial organizational benefits but has not yet been fully optimized.
5	"Training programs are still inadequate..."	Human resource development	Workforce readiness	HR digital transformation generates substantial organizational benefits but has not yet been fully optimized.
6	"We have to relearn many things and adaptation takes time..."	Resistance and adaptation	Workforce readiness	HR digital transformation generates substantial organizational benefits but has not yet been fully optimized.

The coding results indicate that participants consistently recognize the positive organizational value of digital transformation while simultaneously acknowledging persistent implementation challenges. Three dominant themes emerged from the analysis: organizational efficiency, implementation barriers, and human resource readiness. These themes collectively suggest that digital transformation at PT MaxRide remains an evolving organizational process rather than a completed organizational achievement. From a theoretical perspective, these findings reinforce the proposition that successful digital transformation depends on the interaction between technological capability and human capability. Although digital infrastructure has substantially improved operational performance, sustainable transformation requires continuous investments in employee competencies, organizational learning, and adaptive organizational culture. Consequently, Human Resource Digital Transformation should be viewed not merely as technological modernization but as a comprehensive organizational change strategy that aligns digital innovation with workforce development. Overall, the findings demonstrate that PT MaxRide has established a strong foundation for digital transformation. Nevertheless, maximizing the strategic value of digitalization requires greater emphasis on employee capability development, continuous digital learning, and organizational change management to ensure that technological innovation translates into long-term organizational competitiveness.

3.2 Human Resource Digital Transformation, Employee Performance, and Competitive Advantage

The empirical findings demonstrate that Human Resource Digital Transformation (HRDT) has significantly improved employee performance and organizational competitiveness at PT MaxRide Makassar. Participants consistently reported that the integration of digital

technologies into daily operations has simplified work processes, accelerated service delivery, and enhanced decision-making efficiency. These improvements have contributed to higher levels of employee productivity while strengthening the company's responsiveness within an increasingly competitive digital transportation industry.

One participant stated:

"Our work has become much faster because everything is now integrated into the digital system." (INF-03)

This statement illustrates that digital transformation has fundamentally altered employees' working methods. Tasks previously completed through manual administrative procedures are now executed using integrated digital platforms, reducing repetitive work and enabling employees to allocate more time to value-added activities. Consequently, operational efficiency has become one of the most visible outcomes of digital transformation within PT MaxRide. Observational findings further indicate that digital systems have enhanced workflow coordination among departments. Information is now shared through centralized digital platforms, enabling employees to access real-time operational data and respond more rapidly to customer requests. Such integration has reduced communication delays while improving organizational flexibility in responding to operational challenges.

Another participant explained:

"Every operational activity is now recorded in the system, making everything more transparent." (INF-05)

The increased transparency generated by digital technologies represents another strategic outcome of HRDT. Digital documentation enables managers to monitor employee performance, operational activities, and service quality objectively through system-generated records. This transparency strengthens organizational accountability while facilitating evidence-based managerial decision-making.

From a strategic perspective, these findings suggest that digital transformation contributes not only to operational efficiency but also to organizational governance. Digital systems reduce information asymmetry, minimize administrative errors, and improve performance monitoring, thereby supporting more effective organizational control. The study also found that digital transformation has positively influenced customer service quality. Faster access to operational information enables employees to respond more efficiently to customer needs, resulting in shorter service times and improved customer experiences. Within the highly competitive platform-based transportation industry, responsiveness has become a critical determinant of organizational competitiveness.

Nevertheless, despite these positive organizational outcomes, digital transformation has simultaneously introduced new challenges for employees. Several participants acknowledged that the increasing dependence on digital technologies has intensified work demands. Continuous connectivity, real-time monitoring, and immediate performance expectations have increased psychological pressure within the workplace.

One participant commented:

"Sometimes the work feels more exhausting because everything has to be completed very quickly." (INF-07)

This finding indicates that digital transformation may generate unintended organizational consequences alongside its operational benefits. While digital technologies improve efficiency, they may also increase workload intensity, accelerate work pace, and elevate employee stress levels if

organizational support mechanisms remain inadequate. The coding process identified two major dimensions characterizing employees' experiences with digital transformation: positive organizational outcomes and emerging work-related pressures.

Table 3.2. Coding Results for Human Resource Digital Transformation, Employee Performance, and Competitive Advantage

No.	Interview Excerpt	Open Coding	Axial Theme	Selective Theme
1	"Work has become much faster..."	Productivity improvement	Positive organizational outcomes	Digital transformation improves organizational performance while simultaneously increasing work pressure.
2	"Every activity is recorded in the system..."	Organizational transparency	Positive organizational outcomes	Digital transformation improves organizational performance while simultaneously increasing work pressure.
3	"Work has become more efficient..."	Operational efficiency	Positive organizational outcomes	Digital transformation improves organizational performance while simultaneously increasing work pressure.
4	"Everything must be completed in real time..."	Responsiveness	Positive organizational outcomes	Digital transformation improves organizational performance while simultaneously increasing work pressure.
5	"Sometimes the work feels more exhausting..."	Work pressure	Negative organizational outcomes	Digital transformation improves organizational performance while simultaneously increasing work pressure.

The coding results reveal that digital transformation simultaneously generates organizational opportunities and employee-related challenges. Four dominant positive themes emerged, namely productivity improvement, operational efficiency, organizational transparency, and responsiveness, while work pressure emerged as the principal negative consequence. These findings support the perspective that digital transformation is a multidimensional organizational process. Rather than producing exclusively positive outcomes, technological innovation reshapes employees' work environments, requiring organizations to balance productivity enhancement with employee well-being. From the perspective of Human Resource Management, these findings emphasize the necessity of adopting a human-centric approach to digital transformation. Organizations should not evaluate digital transformation solely based on technological implementation or operational performance indicators. Equal attention should be devoted to

employee workload, psychological well-being, digital resilience, and organizational support systems to ensure that productivity improvements remain sustainable over the long term.

Overall, the findings suggest that Human Resource Digital Transformation has strengthened PT MaxRide's organizational competitiveness by improving operational efficiency, transparency, and service responsiveness. However, the sustainability of these competitive advantages depends largely on the organization's ability to manage the human consequences of digitalization through supportive leadership, employee empowerment, continuous capability development, and organizational well-being initiatives.

3.3 The Role of Human Resource Training and Development in Supporting Digital Transformation

The findings indicate that training and human resource development constitute critical enabling factors for the successful implementation of Human Resource Digital Transformation (HRDT) at PT MaxRide Makassar. Participants consistently acknowledged that digital technologies alone cannot guarantee organizational transformation unless employees possess the competencies required to effectively utilize digital systems. Consequently, workforce capability development emerged as one of the organization's strategic priorities throughout the digital transformation process. According to the interview findings, PT MaxRide has introduced several training initiatives designed to familiarize employees with newly implemented digital applications, operational systems, and technology-based workflows. These programs primarily focus on improving employees' ability to operate digital platforms that support daily organizational activities.

One participant explained:

"The company has provided training on how to use the digital work applications." (INF-05)

This finding demonstrates that management recognizes employee capability development as an essential component of digital transformation. Rather than relying solely on technological investment, the organization has begun integrating learning activities into its transformation agenda.

Field observations further indicate that introductory training has contributed to employees' understanding of digital operational procedures. Newly introduced applications have become more accessible following training sessions, reducing uncertainty among employees who previously had limited exposure to digital technologies. As a result, digital literacy across several operational units has gradually improved.

However, despite these positive initiatives, participants consistently emphasized that the existing training system has not yet fully met employees' developmental needs. Several respondents reported that training activities remain limited in frequency, content, and practical application. Consequently, many employees continue to rely on informal learning and personal experience when adapting to technological changes.

One employee stated:

"Most of us learn while working because formal training is still limited." (INF-03)

This statement reflects the existence of a substantial gap between organizational technological advancement and systematic competency development. Although digital systems have been widely

implemented, structured learning opportunities have not expanded at the same pace as technological innovation.

The findings further reveal that many employees perceive digital learning as an individual responsibility rather than an organizationally supported process. Self-directed learning, peer assistance, and trial-and-error practices remain common approaches to acquiring digital competencies. While these informal learning mechanisms contribute to adaptability, they may also create inconsistencies in employee competency levels across organizational units. Furthermore, participants emphasized that digital transformation requires continuous rather than one-time training. As digital platforms continue to evolve, employees must regularly update their knowledge and skills to remain productive within rapidly changing technological environments. Therefore, organizational learning should be viewed as an ongoing strategic investment instead of a temporary implementation activity. The coding analysis generated three major themes concerning training and human resource development: training availability, training quality, and workforce development needs.

Table 3.3. Coding Results for the Role of Human Resource Training and Development

No.	Interview Excerpt	Open Coding	Axial Theme	Selective Theme
1	"The company has already provided training..."	Training programs	Training availability	Training initiatives exist but remain insufficient to fully support digital transformation.
2	"Not all employees fully understand the digital systems..."	Limited training effectiveness	Training quality	Training initiatives exist but remain insufficient to fully support digital transformation.
3	"We often have to learn independently..."	Self-directed learning	Training quality	Training initiatives exist but remain insufficient to fully support digital transformation.
4	"Training is very important..."	Training needs	Human resource development	Training initiatives exist but remain insufficient to fully support digital transformation.

The coding results demonstrate that although digital training has become an integral component of PT MaxRide's transformation strategy, significant opportunities remain for improving the effectiveness of organizational learning systems. Three interrelated dimensions emerged from the analysis. First, the organization has established the initial infrastructure for digital capability development. Second, employees perceive current training activities as insufficient to address increasingly complex technological demands. Third, participants consistently emphasized the necessity of continuous competency development as digital transformation progresses. These findings indicate that digital transformation extends beyond technological implementation and requires continuous investment in human capital development. Employees who receive regular opportunities for learning and competency enhancement are more

likely to adapt successfully to organizational change, utilize digital technologies effectively, and contribute to sustained organizational innovation.

From a strategic Human Resource Management perspective, the findings underscore the importance of integrating upskilling and reskilling into organizational transformation strategies. Upskilling enables employees to deepen competencies relevant to their current responsibilities, whereas reskilling prepares employees for emerging roles created by technological change. Both approaches are increasingly recognized as essential organizational capabilities within digitally transformed workplaces. Furthermore, the findings suggest that PT MaxRide should gradually evolve from conventional training practices toward a continuous learning ecosystem supported by digital learning platforms, personalized learning pathways, mentoring programs, and competency-based performance development. Such an approach would facilitate organizational agility while enabling employees to continuously adapt to technological innovation. Overall, this study demonstrates that training and human resource development represent strategic pillars of successful Human Resource Digital Transformation. Although PT MaxRide has established an encouraging foundation for employee digital learning, strengthening structured competency development, continuous learning mechanisms, and long-term capability-building initiatives will be essential for sustaining organizational competitiveness in the Society 5.0 era.

3.4 Human Resource Adaptation Strategies in the Society 5.0 Era

The findings demonstrate that human resource adaptation represents one of the most critical determinants of successful digital transformation at PT MaxRide Makassar. Participants consistently emphasized that technological advancement has fundamentally changed organizational work systems, requiring employees to continuously update their competencies, adapt to digital innovations, and embrace organizational change. Consequently, adaptability has evolved from an individual competency into a strategic organizational capability. Most participants acknowledged that continuous learning has become an indispensable requirement for maintaining professional relevance within an increasingly digitalized workplace. Employees recognized that technological change is an ongoing process rather than a temporary organizational initiative.

One participant explained:

"We must continue learning if we want to keep up with technological developments." (INF-04)

This statement illustrates that employees increasingly perceive learning as an integral component of their professional responsibilities. Rather than viewing digital transformation as a threat, many participants regarded it as an opportunity for personal and professional development, provided that adequate organizational support is available. Observational findings further indicate that PT MaxRide has gradually cultivated a more adaptive organizational culture characterized by openness to innovation and continuous improvement. Managers increasingly encourage employees to explore digital solutions, exchange knowledge, and participate in organizational problem-solving. Although this cultural transition remains ongoing, participants acknowledged noticeable improvements in organizational openness compared with previous working practices. Another important finding concerns the growing significance of collaboration within digitally integrated workplaces. Participants reported that organizational activities have become increasingly interconnected through digital platforms, making effective communication and teamwork essential for achieving operational objectives.

One employee commented:

"Collaboration has become much more important because all our systems are now interconnected." (INF-06)

This finding suggests that digital transformation not only changes technological infrastructure but also reshapes organizational relationships and patterns of collaboration. Employees are increasingly required to coordinate across departments, exchange digital information in real time, and solve operational challenges collectively.

However, the study also identified several barriers limiting employees' adaptive capacity. Differences in digital literacy, resistance to organizational change, varying learning speeds, and concerns regarding increasing technological complexity continue to influence employees' ability to adapt effectively. These challenges indicate that organizational adaptation involves psychological, cultural, and behavioral dimensions in addition to technological capability.

The coding process generated several recurring themes that characterize employees' adaptation strategies throughout the digital transformation process.

Table 3.4. Coding Results for Human Resource Adaptation Strategies in the Society 5.0 Era

No.	Interview Excerpt	Open Coding	Axial Theme	Selective Theme
1	"Without following technological developments, we will be left behind..."	Digital awareness	Human resource adaptation	Human resources are becoming increasingly adaptive, although further organizational support remains necessary.
2	"We have to keep learning..."	Continuous learning	Human resource adaptation	Human resources are becoming increasingly adaptive, although further organizational support remains necessary.
3	"We must adapt quickly..."	Adaptation to change	Human resource adaptation	Human resources are becoming increasingly adaptive, although further organizational support remains necessary.
4	"Keeping up with technological developments..."	Digital literacy	Human resource adaptation	Human resources are becoming increasingly adaptive, although further organizational support remains necessary.

The coding results reveal four interconnected dimensions of organizational adaptation: digital awareness, continuous learning, adaptation to change, and digital literacy. Collectively, these dimensions illustrate that successful Human Resource Digital Transformation depends on employees' willingness and capability to continuously develop themselves in response to technological evolution. From a theoretical perspective, these findings reinforce the principles of the Society 5.0 paradigm, which emphasizes that technological advancement should enhance human capabilities rather than replace them. Digital technologies become valuable only when

employees possess the competencies, motivation, and organizational support necessary to utilize them effectively. Consequently, digital transformation should be understood as a human-centered organizational transformation, where technological innovation and human development progress simultaneously.

Furthermore, the findings highlight the strategic importance of organizational agility. Organizations capable of rapidly adapting their workforce, organizational culture, and managerial practices are more likely to sustain competitive advantage within highly dynamic digital environments. Employee adaptability therefore becomes a strategic organizational asset that strengthens resilience amid technological disruption and market uncertainty. Another important implication concerns the development of dynamic organizational capabilities. Beyond investing in digital infrastructure, organizations must establish mechanisms that enable employees to continuously acquire, integrate, and apply new knowledge. Such capabilities support continuous innovation while enhancing organizational resilience against future technological changes.

Overall, the findings indicate that PT MaxRide has made substantial progress toward developing an adaptive workforce capable of responding to the challenges of the Society 5.0 era. Nevertheless, sustainable transformation will require stronger investments in continuous learning, digital leadership, employee well-being, organizational culture, and strategic Human Resource Management. By integrating these elements into a comprehensive Human Resource Digital Transformation strategy, PT MaxRide can strengthen its long-term competitiveness while simultaneously creating a more resilient, innovative, and human-centered organization.

Overall Discussion

Across all four themes, the findings demonstrate that Human Resource Digital Transformation at PT MaxRide Makassar extends beyond technological modernization and represents a comprehensive organizational change process. Digital technologies have improved operational efficiency, transparency, collaboration, and service responsiveness, thereby strengthening the company's competitive position. However, the study also reveals that technological advancement alone is insufficient to ensure sustainable transformation. Persistent challenges—including digital competency gaps, resistance to change, work intensification, and limitations in structured learning systems—highlight the importance of aligning technological investments with human capability development. Accordingly, this study proposes that successful Human Resource Digital Transformation in the Society 5.0 era should be guided by a human-centric transformation framework comprising four mutually reinforcing dimensions: digital technology integration, continuous capability development, adaptive organizational culture, and employee well-being. Organizations that successfully balance these dimensions are more likely to achieve sustainable competitive advantage while maintaining employee engagement and organizational resilience. This framework contributes to the growing Digital Human Resource Management literature by demonstrating that competitive advantage in the Society 5.0 era is created not merely through technological adoption but through the strategic integration of technology, people, and organizational capabilities.

DISCUSSION

4.1 Digital Transformation as an Operational and Strategic Human Resource Management Practice

The findings demonstrate that digital transformation has become an integral component of human resource management (HRM) practices at PT MaxRide Makassar. The implementation of digital applications, integrated monitoring systems, and electronic data management has fundamentally changed the way employees perform daily operational activities. Participants consistently perceived digital transformation as a mechanism that simplifies work processes, accelerates task completion, and improves administrative accuracy. These findings indicate that digital technology has successfully enhanced operational efficiency by reducing manual procedures, minimizing administrative errors, and facilitating faster communication among organizational members.

From the perspective of digital transformation theory, these findings support the argument that digital technologies improve organizational effectiveness by integrating information systems and automating routine processes. Contemporary HRM literature emphasizes that digital transformation is no longer limited to technological adoption but also represents organizational change that reshapes work processes, employee interactions, and decision-making mechanisms. Organizations increasingly utilize digital platforms to improve responsiveness, transparency, and service quality while simultaneously reducing operational costs.

Despite these positive outcomes, the present study reveals that employees predominantly interpret digital transformation as the use of technological tools rather than as a comprehensive organizational transformation. Most informants associated digital transformation with mobile applications, monitoring systems, and electronic reporting rather than with strategic organizational change. This finding suggests that digital transformation within PT MaxRide remains primarily at the operational level rather than evolving into a strategic organizational capability.

This phenomenon is consistent with recent studies indicating that many organizations in developing countries remain in the early stages of digital maturity, where technological implementation progresses faster than organizational capability development. Digital maturity requires organizations not only to adopt new technologies but also to redesign organizational culture, leadership practices, employee competencies, and strategic decision-making processes. Consequently, technology should function as an enabler of organizational transformation rather than merely as a replacement for manual administrative procedures.

Another important finding concerns employees' adaptation difficulties during the initial implementation of digital systems. Several participants acknowledged experiencing considerable challenges due to limited digital literacy and unfamiliarity with newly introduced technologies. Such adaptation barriers illustrate that successful digital transformation depends not solely on technological infrastructure but also on employees' readiness to embrace organizational change.

Previous research has consistently demonstrated that employee resistance frequently emerges during digital transformation initiatives because individuals experience uncertainty regarding new technologies, altered work routines, and changing organizational expectations. Rather than representing deliberate opposition to innovation, resistance often reflects inadequate preparation, insufficient training, and limited organizational support. The present findings reinforce this perspective by showing that adaptation difficulties were largely associated with competence gaps instead of negative attitudes toward technology.

Furthermore, technical constraints remain an important issue affecting digital transformation implementation. Informants reported that unstable internet connectivity and occasional system failures interrupted operational activities and reduced work efficiency. These findings emphasize that digital transformation requires reliable technological infrastructure capable

of supporting continuous organizational operations. Without adequate infrastructure, digital systems may become sources of operational disruption instead of organizational improvement.

This observation aligns with the socio-technical systems perspective, which argues that organizational performance emerges from the interaction between technological systems and human capabilities. Investment in advanced technologies alone cannot guarantee organizational success if supporting infrastructure and employee competencies remain underdeveloped. Therefore, organizations must balance technological investment with continuous organizational capability development.

The study also highlights improvements in organizational data management. Participants reported that digital systems enhanced data security, improved information accessibility, and facilitated more systematic documentation of organizational activities. Digitalized information management enables organizations to retrieve operational information more efficiently while reducing the risk of documentation errors associated with manual systems. More importantly, integrated digital databases provide valuable organizational knowledge that can support evidence-based managerial decision-making.

However, despite improvements in data management, the utilization of organizational data for strategic HR decision-making remains relatively limited. Digital information primarily serves operational monitoring rather than predictive workforce planning, talent management, or strategic human resource analytics. This finding indicates that PT MaxRide has successfully achieved digitalization but has not yet fully realized digital transformation in its strategic sense.

Current HRM literature increasingly emphasizes the importance of people analytics, artificial intelligence, and predictive HR analytics in supporting strategic workforce management. Organizations capable of transforming operational data into strategic organizational intelligence are more likely to achieve sustainable competitive advantages. Consequently, PT MaxRide may further strengthen its digital transformation initiatives by expanding digital technologies beyond operational administration toward strategic human capital management.

Overall, these findings suggest that digital transformation at PT MaxRide has generated substantial operational benefits through improved efficiency, faster communication, and better information management. Nevertheless, the transformation remains predominantly technology-oriented and has not yet evolved into an integrated organizational transformation that simultaneously addresses technological capability, organizational culture, leadership commitment, and employee competency development. Therefore, sustainable digital transformation requires organizations to adopt a human-centered approach in which technological innovation is accompanied by continuous learning, organizational adaptation, and strategic HR development.

4.2 Digital Transformation, Employee Performance, and Organizational Competitiveness

The findings indicate that digital transformation has contributed substantially to improving employee performance and organizational competitiveness at PT MaxRide Makassar. Participants consistently reported that digital systems simplified operational processes, accelerated task completion, and improved coordination across work units. By replacing manual procedures with integrated digital platforms, employees were able to perform routine activities more efficiently while reducing administrative errors. These findings reinforce the growing consensus that digital transformation enhances organizational productivity through process automation, information integration, and real-time communication. An important contribution of digital technologies identified in this study is the improvement of organizational transparency. Digital monitoring

systems automatically record employee activities, enabling supervisors to evaluate performance objectively using measurable indicators rather than subjective judgment. Such transparency supports fairer performance appraisal systems and strengthens organizational accountability. Employees also acknowledged that digital records increased work discipline because every activity became traceable within the organizational information system.

These findings are consistent with recent human resource management literature emphasizing that digital HRM enhances organizational governance by improving transparency, accountability, and evidence-based performance management. Digital performance management systems enable organizations to monitor key performance indicators continuously, thereby facilitating timely managerial interventions and improving organizational responsiveness. Consequently, digital transformation not only improves operational efficiency but also strengthens organizational control mechanisms that contribute to sustainable organizational performance. However, the findings simultaneously reveal that enhanced transparency introduces new organizational challenges. Several participants perceived continuous monitoring as creating additional psychological pressure because their work performance was permanently visible through digital systems. Employees increasingly felt obligated to complete tasks rapidly in order to meet real-time organizational expectations. This situation demonstrates that digital transformation produces both positive and negative consequences for employee performance.

The emergence of digital pressure has become an increasingly important issue within contemporary organizational research. While digital technologies improve productivity, they also intensify work demands by accelerating organizational processes and reducing employees' recovery time. Continuous digital connectivity often blurs the boundary between work responsibilities and personal well-being, thereby increasing the likelihood of emotional exhaustion and digital burnout. The present findings support this perspective by demonstrating that some employees experienced increased fatigue despite acknowledging improvements in work efficiency. This paradox illustrates that technological advancement alone cannot guarantee sustainable organizational performance. Instead, organizations must balance productivity enhancement with employee well-being. Human-centered digital transformation therefore becomes increasingly important because technological innovation should improve employee performance without creating excessive psychological burdens. Organizations capable of maintaining this balance are more likely to achieve long-term competitive advantages while preserving workforce engagement and job satisfaction.

Another important finding concerns employee competitiveness. Participants recognized that digital transformation encouraged them to improve technological competencies in order to remain relevant within an increasingly digital work environment. Employees realized that digital literacy has become an essential professional capability rather than an additional skill. This awareness reflects broader labor market transformations associated with Industry 5.0 and Society 5.0, where digital competence represents a fundamental requirement for organizational competitiveness. Nevertheless, the study identified considerable disparities in digital competencies among employees. Younger employees generally adapted more rapidly to digital technologies, whereas senior employees required longer adjustment periods and additional organizational support. Such differences illustrate the existence of a digital competency gap within the organization. If left unaddressed, competency disparities may generate unequal performance outcomes and reduce organizational cohesion during digital transformation initiatives.

From a strategic HRM perspective, digital competency should be regarded as an organizational capability rather than merely an individual characteristic. Organizations need

systematic competency development programs that ensure all employees possess adequate technological skills regardless of age, educational background, or previous experience. Without comprehensive capability development, technological investments may fail to generate optimal organizational returns because employees remain unable to utilize digital systems effectively. The findings also demonstrate that digital transformation has shifted organizational competitiveness from traditional operational capabilities toward knowledge-based capabilities. Competitive advantage increasingly depends upon employees' ability to interpret digital information, solve problems collaboratively, and respond rapidly to technological changes. Consequently, organizational competitiveness is becoming increasingly dependent upon learning capacity rather than technological ownership alone.

This observation supports the resource-based view of the firm, which emphasizes that sustainable competitive advantage originates from valuable, rare, inimitable, and organizationally embedded capabilities. Digital technologies themselves can be acquired by competing organizations; however, the ability to integrate technology with human competencies, organizational culture, and strategic management practices constitutes a much more difficult capability to replicate. Therefore, human capital remains the primary source of sustainable organizational competitiveness during digital transformation. Overall, the findings suggest that digital transformation at PT MaxRide has significantly enhanced operational performance, transparency, and organizational competitiveness. Nevertheless, these benefits are accompanied by emerging challenges, including digital pressure, competency disparities, and increasing psychological demands associated with continuous technological adaptation. Sustainable organizational competitiveness therefore depends not only on successful technology implementation but also on organizational strategies that simultaneously strengthen employee competencies, maintain well-being, and promote continuous organizational learning. These findings reinforce the argument that digital transformation should be understood as a comprehensive organizational change process in which technological innovation and human resource development evolve together to achieve long-term organizational sustainability.

4.3 Human Resource Development and Human-Centered Adaptation toward Society 5.0

The present study identifies human resource development as one of the most decisive factors influencing the success of digital transformation at PT MaxRide Makassar. Although the organization has introduced various digital technologies into its operational processes, the effectiveness of these technologies remains highly dependent on employees' ability to understand, utilize, and continuously adapt to digital systems. The findings demonstrate that organizational readiness for digital transformation cannot be measured solely by technological adoption but must also encompass continuous competency development, organizational learning, and employee adaptability. Interview results indicate that the company has provided training programs related to digital applications and operational systems. These initiatives illustrate management's recognition that employee competence constitutes an essential prerequisite for successful digital transformation. However, participants consistently reported that the existing training programs were relatively general, limited in duration, and insufficient to address the diverse competency needs of employees. Consequently, many employees relied on self-directed learning and peer assistance to acquire practical digital skills required for daily operations.

This finding suggests that digital capability development within PT MaxRide remains reactive rather than strategic. Instead of establishing a structured learning ecosystem, employees

are expected to adapt independently after technological implementation has already occurred. While self-learning reflects positive individual initiative, excessive dependence on informal learning indicates that organizational learning mechanisms remain underdeveloped. Such conditions may produce inconsistent learning outcomes and widen competency disparities among employees. Recent literature on digital human resource management emphasizes that successful organizations increasingly shift from episodic training toward continuous learning systems. Continuous learning enables employees to update competencies in response to rapidly evolving technologies while simultaneously strengthening organizational resilience. Rather than perceiving training as a one-time activity, organizations should establish learning cultures where knowledge acquisition, experimentation, collaboration, and innovation become integral components of everyday work practices.

The findings also reveal that employees recognize the importance of lifelong learning in maintaining their professional relevance. Participants expressed awareness that technological development continuously changes job requirements and that failure to improve digital competencies could reduce individual competitiveness. Such awareness represents an important organizational asset because employee willingness to learn significantly facilitates organizational change initiatives. Nevertheless, awareness alone cannot guarantee successful adaptation unless supported by systematic organizational policies that encourage continuous competency development. An equally important finding concerns organizational adaptation within the context of Society 5.0. Unlike Industry 4.0, which primarily emphasizes automation and digital technologies, Society 5.0 advocates a human-centered approach in which technological innovation serves human well-being and social sustainability. The present findings indicate that employees increasingly acknowledge technology as an indispensable component of organizational life. However, adaptation remains largely individual rather than organizational. Employees reported that they continuously adjusted their working methods, improved technological literacy, and developed greater flexibility in responding to organizational change. Despite these positive developments, adaptation largely depended upon personal motivation rather than institutional support. Organizational mechanisms such as mentoring programs, structured competency mapping, digital coaching, and continuous capability assessments remain relatively limited. Consequently, organizational adaptation has not yet evolved into an integrated strategic capability. This situation illustrates an important gap between technological transformation and organizational transformation. Technology adoption progresses relatively rapidly because digital applications can be implemented within relatively short periods. In contrast, organizational culture, employee competencies, leadership behavior, and learning systems require considerably longer periods to develop. Consequently, organizations frequently experience technological acceleration without corresponding human capability development.

The findings therefore reinforce the human-centered transformation perspective, which argues that employees should not merely become users of technology but active participants in organizational innovation. Human-centered digital transformation emphasizes employee empowerment, psychological well-being, collaborative learning, and participative decision-making. Within this framework, technology functions as an instrument that enhances human capability rather than replacing human contributions. Another important implication emerging from this study concerns organizational resilience. Digital transformation inevitably exposes organizations to continuous technological change, evolving customer expectations, and increasing competitive pressures. Organizations capable of sustaining competitiveness are therefore those possessing

adaptive human resources rather than simply sophisticated technologies. Adaptability becomes a strategic organizational capability because it enables employees to respond effectively to future uncertainties while maintaining organizational performance. From a theoretical perspective, this study extends existing digital transformation literature by demonstrating that successful digital transformation requires simultaneous interaction among technological capability, organizational learning, employee competency development, and adaptive organizational culture. These components should not be viewed independently but rather as mutually reinforcing dimensions of organizational transformation. The findings therefore support the argument that digital transformation constitutes a socio-technical process involving both technological innovation and human capability enhancement.

From a managerial perspective, several practical implications emerge from this study. First, organizations should conduct systematic digital competency assessments to identify existing capability gaps before implementing new technologies. Second, digital training programs should be redesigned based on competency needs analysis and delivered through continuous learning approaches rather than isolated workshops. Third, organizations should strengthen mentoring systems that facilitate knowledge sharing between experienced digital users and employees requiring additional support. Fourth, leadership should actively promote organizational cultures characterized by openness, collaboration, innovation, and continuous learning to facilitate sustainable digital transformation. Overall, the findings indicate that PT MaxRide Makassar has successfully initiated digital transformation by integrating technology into daily operational activities. Nevertheless, sustainable transformation requires greater attention to human resource development, organizational learning, and employee well-being. The study therefore concludes that technological investment alone is insufficient to generate sustainable competitive advantage. Instead, long-term organizational success depends upon integrating technological innovation with strategic human resource management and human-centered organizational development. Such integration represents the fundamental principle of Society 5.0, where technology and humanity evolve together to create adaptive, innovative, and sustainable organizations capable of responding effectively to future challenges.

4.4 Theoretical and Practical Implications of Digital Human Resource Transformation

The findings of this study contribute to the growing body of literature on digital human resource management by providing empirical evidence from Indonesia's digital transportation industry, particularly within the context of Society 5.0. While previous studies have predominantly emphasized technological adoption as the primary determinant of successful digital transformation, the present study demonstrates that organizational outcomes are strongly influenced by the interaction between technological capability, human resource readiness, organizational culture, and continuous learning systems. Consequently, digital transformation should be conceptualized as an organizational capability rather than merely a technological initiative.

One of the most important theoretical contributions of this research is the identification of a transition from technology-centered digitalization toward human-centered digital transformation. The findings indicate that technology implementation alone cannot ensure organizational effectiveness if employees lack sufficient digital competencies, adaptive capabilities, and organizational support. This perspective extends contemporary digital HRM theories by emphasizing that sustainable transformation depends upon balancing technological innovation

with human resource development. The study also contributes to organizational change literature by demonstrating that employee adaptation is not solely determined by individual willingness to embrace technology. Instead, adaptation emerges through continuous interactions among organizational leadership, learning opportunities, technological infrastructure, and collaborative organizational culture. This finding supports socio-technical system theory, which argues that organizational performance results from the alignment between technological systems and human capabilities rather than technological sophistication alone.

Furthermore, the findings reinforce the relevance of the human-centered principles embedded within the Society 5.0 framework. Unlike Industry 4.0, which largely focuses on technological efficiency and automation, Society 5.0 emphasizes that technological innovation should ultimately improve human well-being, organizational sustainability, and social value creation. The present findings illustrate that although PT MaxRide has successfully digitalized many operational processes, the organization still faces challenges in ensuring that technological advancement simultaneously promotes employee development, psychological well-being, and long-term organizational resilience. Another significant contribution concerns the concept of digital capability as a strategic organizational resource. Rather than treating digital competence as an individual technical skill, this study argues that digital capability should be viewed as a collective organizational asset developed through continuous learning, structured training, knowledge sharing, and supportive leadership. Organizations possessing stronger collective digital capabilities are more likely to sustain innovation and maintain competitive advantage under rapidly changing technological environments. From a practical perspective, several managerial implications emerge from this study. First, organizations should reposition human resource departments from administrative support functions toward strategic partners responsible for leading digital transformation initiatives. HR professionals should actively participate in designing competency frameworks, digital workforce planning, and organizational change management strategies rather than limiting their responsibilities to conventional personnel administration.

Second, organizations should implement structured digital competency frameworks that clearly define the knowledge, technical skills, behavioral competencies, and adaptive capabilities required for different organizational positions. Such competency mapping enables organizations to identify capability gaps systematically and design targeted development programs that support both individual and organizational performance. Third, employee training should evolve from conventional classroom-based instruction toward continuous organizational learning supported by digital platforms, mentoring programs, coaching systems, simulation-based learning, and collaborative knowledge-sharing mechanisms. Continuous learning enables employees to update competencies continuously while simultaneously strengthening organizational adaptability. Fourth, organizational leaders should cultivate an organizational culture characterized by openness to innovation, psychological safety, collaboration, and continuous improvement. Employees who perceive organizational support are generally more willing to experiment with new technologies, share knowledge, and actively participate in organizational transformation. Leadership commitment therefore becomes a critical success factor because digital transformation requires behavioral and cultural changes that extend beyond technological implementation.

Finally, organizations should establish balanced performance management systems that integrate productivity objectives with employee well-being indicators. Although digital technologies improve operational efficiency, excessive monitoring and continuous digital connectivity may generate psychological pressure and digital fatigue. Human-centered

performance management therefore requires organizations to balance efficiency with employee welfare, ensuring that technological advancement contributes to sustainable organizational development rather than merely increasing short-term productivity.

Overall Discussion

Overall, this study demonstrates that digital transformation within PT MaxRide Makassar has generated meaningful improvements in operational efficiency, service responsiveness, organizational transparency, and employee productivity. Nevertheless, these benefits remain constrained by several organizational challenges, including uneven digital competencies, limited structured training, technical infrastructure constraints, and insufficient organizational mechanisms supporting long-term employee adaptation. Consequently, digital transformation within the organization remains predominantly operational rather than strategic. The findings indicate that successful digital transformation requires organizations to integrate four interrelated dimensions simultaneously: technological readiness, digital human resource capability, adaptive organizational culture, and strategic leadership commitment. Weaknesses in any of these dimensions may reduce the effectiveness of digital transformation initiatives regardless of technological sophistication. Therefore, organizations should avoid technology-centric implementation strategies and instead adopt comprehensive transformation models that recognize employees as the primary drivers of organizational innovation.

In conclusion, this research proposes that sustainable digital transformation in the Society 5.0 era should be understood as a human-centered organizational transformation process. Technology functions not as the ultimate objective but as an enabler that strengthens employee capability, organizational learning, collaborative innovation, and long-term organizational resilience. Organizations capable of integrating technological innovation with strategic human resource development will be better positioned to achieve sustainable competitive advantage in increasingly dynamic and digitally connected business environments.

CONCLUSION

This study examined the implementation of digital transformation in human resource management at PT MaxRide Makassar and its implications for employee performance, competitiveness, training, and workforce adaptation in the Society 5.0 era. The findings indicate that digital transformation has significantly improved operational efficiency by accelerating work processes, strengthening data management, and increasing transparency in organizational activities. Digital systems have enabled employees to complete tasks more efficiently while supporting faster and more accurate decision-making through real-time information. Despite these benefits, the findings reveal that digital transformation at PT MaxRide remains largely operational rather than strategic. Most employees perceive digital transformation as the adoption of digital tools and applications instead of a comprehensive organizational change involving culture, leadership, and human resource development.

This suggests that the company is still in the digitalization stage, where technology primarily supports operational activities without fully transforming organizational capabilities. The study also identifies disparities in employees' digital competencies. While some employees adapted quickly to new technologies, others experienced difficulties due to limited digital literacy and insufficient training. Moreover, employee adaptation was largely driven by self-learning and

informal knowledge sharing rather than structured organizational learning programs. Although the company has introduced digital training initiatives, these programs have not yet been systematically designed to address different competency levels or support continuous skill development. Another important finding is that digital transformation creates both opportunities and challenges. In addition to improving productivity and accountability, digital systems increase work intensity through real-time monitoring and faster response requirements, potentially leading to digital work pressure and employee fatigue.

These findings highlight the importance of balancing technological advancement with employee well-being through a human-centered approach to digital transformation. This study contributes to the literature by demonstrating that successful digital transformation depends not only on technological adoption but also on organizational readiness, continuous competency development, adaptive leadership, and a supportive organizational culture. Practically, organizations should prioritize structured digital training, continuous learning, and comprehensive change management strategies to strengthen workforce readiness for the Society 5.0 era. Future research is recommended to examine digital transformation across multiple organizations and industries using comparative or mixed-method approaches. Such studies would provide broader evidence regarding the long-term impact of human-centered digital transformation on organizational performance, employee well-being, and sustainable competitive advantage.

REFERENCE

- Ade, M., Khalid, A., & Yusuf, R. (2023). Penerapan transformasi digital dalam manajemen sumber daya manusia selama COVID-19 di Bahrain. *International Journal of Human Resource Management*, 45(2), 89–102.
- Ahmad Amarullah, M., & Suryana, D. (2022). Implementasi project-based learning dalam pengembangan kompetensi tenaga kependidikan di era digital. *Jurnal Pendidikan dan Pembelajaran*, 12(3), 187–198. <https://doi.org/10.21009/jpp.123.2022>
- Aisyah, N., Rahman, S., & Syafitri, L. (2023). Analisis faktor yang memengaruhi penerapan transformasi digital pada UMKM Kota Dumai: Studi perbandingan. *Jurnal Ekonomi dan Bisnis Digital*, 8(2), 54–67.
- Aisyah, S., Ramadhani, N., & Prasetyo, A. (2023). Transformasi digital pada UMKM di Kota Dumai: Tantangan dan strategi peningkatan daya saing. *Jurnal Ekonomi dan Manajemen Digital*, 5(1), 55–70. <https://doi.org/10.31002/jemd.v5i1.2023>
- Bahri, S., Waludin, R., Munib, & Hamdani, R. (2025). Digital transformation in human resource management: A systematic review of technologies, challenges, and organizational impacts. *Management Studies and Entrepreneurship Journal*, 6(4), 6311–6326.
- Bindra, R., Kumar, V., & Singh, P. (2023). Human resource management transformation from traditional to digital. *Human Resource Development Journal*, 18(1), 33–47.
- Bindra, S., & Bhattacharya, S. (2025). Artificial intelligence and big data in human resource transformation: A pathway to competitive advantage. *International Journal of Digital Business and Management*, 7(1), 12–29. <https://doi.org/10.1016/ijdm.2025.01.002>
- Badan Pusat Statistik. (2023). *Statistik transportasi darat Indonesia 2022*. <https://www.bps.go.id>
- Cahyani, N. P., & Mahyuni, L. P. (2020). Pengaruh penggunaan teknologi informasi terhadap kinerja karyawan. *Jurnal Manajemen dan Bisnis*, 5(2), 120–130.
- Dessler, G. (2020). *Human resource management* (16th ed.). Pearson.

- Di Lauro, S., Caputo, F., & Marzi, G. (2024). Human resource analytics adoption: Technological and cultural barriers in Italian organizations. *European Journal of Management and Business Research*, 12(1), 41–59. <https://doi.org/10.1016/ejmb.2024.01.004>
- Di Lauro, S., Zucchella, A., & Magnani, G. (2024). Organizational readiness and digital transformation: A cultural perspective. *Journal of Business Research*, 174, Article 114276. <https://doi.org/10.1016/j.jbusres.2023.114276>
- Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garza, R. C., Gunasekara, N., Ibrahim, G., & Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: A response to the COVID-19 pandemic. *Human Resource Development International*, 23(4), 380–394.
- Dwi, R., & Pratama, A. (2022). Transformasi digital dalam pengelolaan sumber daya manusia di era industri 4.0. *Jurnal Administrasi dan Manajemen*, 9(4), 98–110.
- Depi, S., Rachman, S., Yuliani, N. F., Tahalua, I., & Marsuni, N. S. (2024). Strengthening Individual Taxpayer Compliance: The Impact of Tax Sanctions and Regulatory Review. *Amnesty: Jurnal Riset Perpajakan*, 7(1), 138-145.
- Fukuyama, M. (2018). *Society 5.0: Aiming for a new human-centered society*. Japan Economic Foundation.
- Gartner, Inc. (2022). *The state of HR digital transformation in Southeast Asia*. Gartner Research.
- Guerra, M., & Trovato, S. (2024). Exploring organizational change in the era of digital transformation and its impact on talent management: Trends and challenges. *Journal of Organizational Transformation*, 9(2), 55–74.
- Handayani, K. (2024). Strategi adaptif untuk mempertahankan tenaga kerja di era Society 5.0: Menghadapi tantangan cobot. *Jurnal Penelitian Multidisiplin Bangsa*, 1(3).
- Harayama, K. (2022). *Society 5.0: From theory to practice*. Springer Nature.
- Kementerian Keuangan Republik Indonesia. (2023). *Laporan ekonomi digital Indonesia 2023*. <https://www.kemenkeu.go.id/publikasi/laporan-ekonomi-digital-2023>
- Kementerian Komunikasi dan Digital. (2025, October 2). *IMDI 2025 naik ke 44,53, Indonesia makin cakap digital* [Press release]. <https://www.komdigi.go.id/berita/siaran-pers/detail/imdi-2025-naik-ke-4453-indonesia-makin-cakap-digital>
- Khan, S. H. (2023). Digital transformation and the future of work: The role of human resource management. *Journal of Strategic HRM*, 12(1), 45–60.
- Kuhn, K. M., & Maleki, A. (2022). The psychology of gig work: An integrative review. *Journal of Applied Psychology*, 107(5), 767–787.
- Lauro, G., & Bellini, D. (2024). Transforming human resource management through human resource analytics: Applications, value, drivers, and barriers in Italy. *European Journal of Business and Management*, 16(1), 21–40.
- Martia, R., & Yasmine, F. (2021). Analisis efektivitas sistem informasi dalam meningkatkan kinerja karyawan. *Jurnal Sistem Informasi*, 7(1), 45–55.
- Nazarudin, M. A., & Kuswinarno, M. (2024). Transformasi digital dalam pengelolaan SDM: Tantangan dan peluang di era industri 5.0. *Jurnal Media Akademik*, 2(11). <https://doi.org/10.62281>
- Nurchayyo, D., & Suryani, T. (2023). Strategi transformasi digital untuk peningkatan kompetensi SDM di era digital. *Jurnal Manajemen Transformasi*, 11(2), 88–103.
- Oktaviani, R., Santoso, H., & Rahayu, M. (2023). Human-machine collaboration in the era of Industry 5.0: Implications for human resource transformation. *Journal of Industrial and Organizational Innovation*, 5(3), 144–160. <https://doi.org/10.1080/jioi.2023.144>

- Porter, M. E. (2008). *Competitive strategy: Techniques for analyzing industries and competitors*. Free Press.
- Prayetno, S., Widodo, A., & Rahmawati, D. (2022). Transformasi digital dan pengaruhnya terhadap kinerja sumber daya manusia. *Jurnal Ekonomi dan Bisnis Digital*, 4(1), 1–10.
- Robbins, S. P., & Judge, T. A. (2017). *Organizational behavior* (17th ed.). Pearson.
- Sangaji, R. C., Setyaning, A. N. A., & Marsasi, E. G. (2023). A literature review on digital human resources management towards digital skills and employee performance. In *Proceedings* (pp. 743–750). https://doi.org/10.1007/978-3-031-26953-0_68
- Santoso, B. (2023). *Manajemen sumber daya manusia di era digital*. Kencana.
- Schwab, K. (2017). *The fourth industrial revolution*. Crown Business.
- Shet, S. V., & D'Souza, R. (2022). Digital employee experience: The new driver of competitive advantage. *Journal of Organizational Effectiveness: People and Performance*, 9(2), 165–183.
- Strohmeier, S., & Tüselmann, H. J. (2022). The gap between HR technology and its strategic use: A longitudinal study. *The International Journal of Human Resource Management*, 33(7), 1329–1358.
- Sugiarto, E. (2015). *Metode penelitian kualitatif: Konsep, teori, dan analisis data dalam penelitian sosial dan pendidikan*. Deepublish.
- Sugiyono. (2012). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Syafri, A., & Rasyid, M. (2024). Digitalisasi manajemen SDM di sektor transportasi berbasis aplikasi: Tantangan dan peluang. *Jurnal Teknologi dan Bisnis*, 6(1), 14–28.
- Haliding, S., Alfiani, A., Majid, J., Badollahi, I., & Marsuni, N. S. (2025). Digitalization and Strategic Development in Enhancing Islamic Pawnshop Products for Financial Inclusion. *INVOICE: JURNAL ILMU AKUNTANSI*, 7(1), 37-45.
- Tiar, S., & Lasmanah. (2023). Literasi digital dan pengaruhnya terhadap kesiapan kerja di era Society 5.0. *Jurnal Pendidikan Ekonomi*, 12(1), 88–97.
- Vitaharsa, L. (2025). Peran literasi digital dalam peningkatan daya saing SDM di era industri 5.0. *Jurnal Ilmu Manajemen dan Teknologi*, 13(1), 1–15.
- Wahab, A., Damis, S., Mariana, L., Harun, H., & Marsuni, N. S. (2024). Evaluation of the Effectiveness of Carbon Tax as a Tool for Controlling Air Pollution in Indonesia: Challenges and Opportunities. *Amnesty J. Ris. Perpajak*, 7(2), 255-263.
- World Economic Forum. (2023). *The future of jobs report 2023*. World Economic Forum.
- Yusuf, M., Mariana, L., & Marsuni, N. S. (2026). Increasing Financial Inclusion of Generation Z Through Digital Literacy, Lifestyle, and Qris Mediated Path Analysis. *Jurnal Reviu Akuntansi dan Keuangan*, 16(1).