



Human Resources and Digital Transformation in Education: Driving Innovation and Sustainability

Reyhana Nur Azizah*, Sofia Nisa Ulyantika, Melyna Wijaya Putri, Junaidah, Septuri

Universitas Negeri Islam Raden Intan Lampung, Indonesia

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***Correspondence Address:**

reyhananur121@gmail.com

Abstract:

This research is motivated by the increasing need for educational institutions to carry out digital transformation effectively, while its success is still highly dependent on the readiness of human resources. This research aims to analyze the role of teachers, education staff, and school managers in encouraging innovative and sustainable digital transformation in schools. The research uses a qualitative, case-study approach. Data is collected through semi-structured interviews, observations, and documentation, then analyzed through data condensation, data reduction, data presentation, and verification. The study's results show that digital transformation is effective when human resources possess digital literacy, pedagogical awareness, adaptability, and institutional support. The use of LMS, e-learning, interactive media, and AI is not even necessary, as there are still differences in competencies among educators. In conclusion, technology cannot be the main driver of change without adequate human capacity. Theoretically, these findings expand the study of digital education management by placing human resources at the center of innovation success, rather than just technology users. This research contributes to strengthening the human-centered perspective on digital transformation in education and provides a practical basis for developing continuing education innovations in modern Islamic boarding school-based schools.

INTRODUCTION

Education has a fundamental role in shaping human quality and societal sustainability. In a global context, education is not only seen as a means of knowledge transfer, but also as an instrument of social, economic, and cultural development (Kohli, 2023; Zervas & Triantari, 2025). Through education, individuals acquire critical thinking skills, digital literacy, work skills, and character needed to adapt to the changing times (Maria & Susan, 2024; Srisawat et al., 2023). The importance of education is increasingly evident when society faces technological acceleration, economic competition, global crises, and changes in work patterns that demand new competencies. Quality education is able to expand life opportunities, reduce social inequality, and encourage community participation in development (Karmakar et al., 2026; Vader et al., 2025). However, the quality of education is not only determined by the curriculum or facilities, but is highly dependent on the quality of the human resources who manage it. Teachers, education staff, school principals, and managers of educational institutions are the main actors who determine the success of educational transformation (Tiwari et al., 2024; Zhang & Chen, 2024). Therefore, research on human resources and digital transformation in education

is important because it touches on the basic problems of society, namely how education is able to produce innovative, adaptive, and sustainable human beings.

Digital transformation has changed the way people learn, work, communicate, and access information (Dai et al., 2024). This change brings great opportunities to the world of education because digital technology can expand access to learning, speed up administration, enrich learning resources, and create a more flexible learning experience (Wesonga & van der Westhuizein, 2026; Yadav et al., 2025). Online learning platforms, Learning Management Systems, artificial intelligence, big data, immersive technologies, and interactive media have opened up new possibilities for schools and colleges to improve the quality of educational services. However, the benefits of technology will not be achieved if education human resources do not have adequate readiness. Digitalization requires teachers who are able to integrate technology into learning, education personnel who are able to manage data and digital systems, and institutional leaders who are able to build a culture of innovation (Belanova & Popok, 2025). Thus, digital transformation in education is not solely a matter of technological devices, but a matter of human readiness. This research is important because it places educational human resources at the center of the success of innovation and sustainability of digital transformation.

The general problem behind this research is that there is still a gap between the demands of digital transformation and the readiness of educational human resources. Many educational institutions have adopted digital technology, but their use is still technical, administrative, or simply trend-following (C. Wang et al., 2024). In many schools, technology has not been fully integrated into meaningful learning strategies. Some teachers still have difficulty choosing the right digital media, arranging technology-based learning, managing online classes, and evaluating learning outcomes digitally. Education personnel also face challenges in managing data, information systems, and technology-based administrative services (Karmakar et al., 2026). As a result, digital transformation does not always result in a significant improvement in the quality of education. In some cases, digitalization actually widens the gap between institutions that have technology-ready human resources and institutions that do not have adequate capacity. This problem shows that digital transformation requires a comprehensive strengthening of human resources so that technology really becomes a tool for quality improvement, not just a symbol of modernization.

The phenomenon that occurs in the field shows that the success of educational digitalization is highly dependent on the ability of humans to understand, manage, and utilize technology. Many educational institutions have provided digital devices, internet networks, learning applications, and online administration systems, but their utilization has not been evenly distributed. Some teachers are able to use technology to create interactive, personalized, and collaborative learning, while others still use technology to replace whiteboards or share materials digitally (Adnan et al., 2024; Dalelo et al., 2023). A similar phenomenon also occurs in the management of educational institutions. Student data, attendance, evaluation, and academic services are starting to be digitized, but not all education personnel have strong data analysis and management skills (Huang, 2025). This condition shows that digitalization does not automatically produce innovation. Innovation arises when human resources have digital literacy, pedagogical creativity, adaptability, and institutional support (Tawil & Tarawneh, 2025; Xu et al., 2025). Thus, the field phenomenon emphasizes the need for studies that place humans as the main factor in the digital transformation of education.

A number of previous studies have discussed the importance of teacher competence in improving the quality of education. Teachers are seen as the main actors who play the role of facilitators, motivators, guides, evaluators, and innovators in the learning process (Duarte et al., 2025; Sadiq et al., 2024). The literature on 21st century education emphasizes that teachers need to master pedagogic, professional, social, personality, and digital competencies in order to be able to answer the needs of modern students (Xinh et al., 2025). Some studies also show that teachers with better technological skills tend to be able to create more engaging learning, increase student engagement, and expand access to learning resources (Berardinetti et al., 2025; Karacaoğlu, 2025). However, most of these studies still place teacher competence as an individual issue, rather than as part of the broader education human resource ecosystem. In fact, digital transformation requires not only competent teachers, but also skilled education personnel, visionary school leadership, an open organizational culture, and a sustainable institutional support system. This is where the position of this research becomes important to expand the discussion from personal competence to the readiness of educational human resources institutionally.

Other literature discusses the digital transformation of education in terms of technology, such as the use of Learning Management Systems, e-learning, artificial intelligence, augmented reality, blended learning, and school information systems (Goto & Goto, 2026). The study shows that technology can improve efficiency, flexibility, personalization of learning, and the quality of educational services. However, many studies still tend to focus on the benefits of technology, application features, or the effectiveness of certain learning media. Studies that link digital transformation with human resource readiness, work culture, institutional innovation, and educational sustainability still need to be strengthened (Avdiu et al., 2025). The weakness of previous research lies in the tendency to see digitalization as a technological agenda, rather than a human-centered organizational change process. As a result, aspects of teacher resistance, competency gaps, digital workloads, inequality of access to training, and the sustainability of technology use have not been widely discussed in an integrated manner. This gap is important to be solved because the success of digital transformation of education is highly determined by the readiness of human resources in transforming technology into innovative learning and management practices.

The novelty of this research lies in the placement of human resources as the main drivers of digital transformation of education, not just technology users. This research offers the perspective that innovation and sustainability of education cannot be achieved only through the provision of digital devices, applications, or technological infrastructure. Digital transformation requires human resources who are able to think adaptively, develop new learning strategies, manage data ethically, build collaboration, and create a culture of innovation in the educational environment. The state of the art of this research is in an effort to connect three main aspects, namely the quality of educational human resources, digital transformation, and the sustainability of institutional innovation. With this approach, the research not only sheds light on how technology is used, but also how humans shape, direct, and sustain digital change in education. This novelty is important because many failures in the digitalization of education are not caused by weak technology, but by a lack of human readiness, lack of organizational support, and an unsustainable culture of innovation.

Based on this description, the problem of this research is centered on how educational human resources play a role in driving innovative and sustainable digital transformation. An important question that arises is the extent to which the readiness of teachers, education staff, and managers of educational institutions is able to support the meaningful use of technology in learning and education management. The main argument of this study is that the digital transformation of education will only succeed if educational human resources have digital competence, pedagogical awareness, adaptability, and adequate institutional support. Technology can be a tool for innovation, but humans remain the determinants of the direction, quality, and sustainability of change. Thus, the contribution of this research lies in strengthening the perspective of human-centered digital transformation in education. This research is expected to make a theoretical contribution to the study of education management and digital transformation, as well as a practical contribution for educational institutions in building human resources that are ready to face change, encourage learning innovation, and maintain the sustainability of education quality.

RESEARCH METHODS

This research uses a qualitative approach with a case study type. This approach was chosen because the research seeks to understand in depth the role of human resources in the digital transformation of education in the context of certain educational institutions. Case studies are used to examine phenomena in a specific, contextual, and comprehensive manner, especially when the boundaries between the phenomenon being studied and the institutional social context cannot be strictly separated. In this study, digital transformation is not only understood as the use of technology, but also as a process of change involving the readiness of teachers, education staff, school leadership, organizational culture, and learning management strategies. Therefore, the case study design is considered relevant because it is able to explore the experiences, understandings, practices, and challenges faced by school residents in implementing educational digitalization. Through this approach, the research is expected to be able to produce a complete picture of how education human resources play a role in encouraging innovation and sustainability of digital transformation.

The location of this study is SMA TMI Roudlotul Qur'an Metro City. The location was chosen because this school has institutional characteristics that are relevant to the focus of research, namely the need to develop the quality of educational human resources in the face of digital transformation. As a secondary education institution, the school is in demand to adapt the learning process, administrative management, and educational services to technological developments. The selection of this location is also based on the consideration that digital transformation in schools does not only depend on the availability of devices, but also on the readiness of teachers, education staff, and school managers to utilize technology effectively. By making this school a research location, this study can contextually describe how educational human resources respond to digital changes, the challenges faced, and the strategies carried out to maintain the quality of education.

The data collection techniques in this study were carried out through interviews, observations, and documentation. Interviews are conducted in a semi-structured manner to relevant informants, such as principals, vice principals, teachers, education staff, and other parties involved in the use of educational technology in schools. Interviews are used

to explore the views, experiences, readiness, challenges, and strategies of informants in facing digital transformation. Observations were made to see firsthand the practice of using technology in learning, school administration, institutional communication, and other educational activities. Documentation is carried out by examining various documents related to digital transformation, such as school profiles, work programs, school policies, learning tools, documentation of activities, use of digital platforms, and other relevant supporting archives. The combination of these three techniques is used so that the data obtained is more complete, in-depth, and can corroborate each other.

Data analysis in this study was carried out through the stages of data condensation, data reduction, data presentation, and verification. Data condensation is used to sharpen, focus, simplify, and organize data from interviews, observations, and documentation to match the research focus on the role of human resources in the digital transformation of education. Data reduction is done by sorting out relevant information, grouping data by theme, and excluding data that is not directly related to the research problem. Furthermore, the data is presented in the form of descriptive narratives and categorization of findings to facilitate the identification of patterns and meanings. The validity of the data is maintained through source triangulation, triangulation techniques, and member checks. Information from school principals, teachers, education staff, observations, and documents are carefully compared so that the findings have credibility, consistency, and can be scientifically accounted for.

RESULTS AND DISCUSSION

Results

Readiness and Competence of Educational Human Resources in Digital Transformation

The readiness and competence of educational human resources in this study is defined operationally as the ability of teachers, education staff, and school managers to understand, use, and integrate digital technology into the learning process and educational services. This readiness is not only seen from the ability to use digital devices, but also from the ability to choose appropriate media, manage technology-based learning, adjust teaching methods, and build an adaptive attitude to change. In schools, the readiness of educational human resources can be seen through the use of digital media in learning, the use of school administration applications, and teachers' efforts to adjust to the needs of students in the digital era. However, this readiness is not completely evenly distributed because there are still differences in ability between educators in mastering technology. This condition shows that digital transformation is highly dependent on the human capacity to carry it out.

The results of interviews with school principals show that human resource readiness is the main factor in the success of digital transformation in schools. The principal said, "Schools have started to encourage the use of technology in learning and administration, but its success depends heavily on the readiness of teachers and education staff. There are teachers who adapt quickly, but there are also those who still need assistance." This statement shows that digital transformation is not enough only supported by technological facilities, but also requires mental readiness, technical skills, and commitment of educational human resources. The researcher's interpretation of the data shows that school principals view HR as the center of digital change. Technology is only a tool, while the success of its use is largely determined by the ability of teachers and education staff to manage change. Thus, the readiness of human resources is an

important indicator in assessing the sustainability of digital transformation in the school environment.

Interviews and observations show that digital transformation in schools has begun to run through the use of presentation media, learning videos, online applications, search for learning resources, digital communication, and certain administrative management. However, its use is not even because some teachers still use technology in a limited way, for example only to display materials or send assignments. This condition shows that the main obstacle does not lie in the availability of technology, but in the differences in digital literacy, self-confidence, pedagogical creativity, experience in using technology, access to training, and institutional support. Teachers who have better digital competence tend to be able to create interactive and meaningful learning, while teachers who are not ready still need assistance. Thus, digital transformation must be understood as a process of strengthening human resource capacity so that technology truly supports improving the quality of education.

The data pattern shows that digital transformation runs more optimally when educational human resources have three main elements, namely digital literacy, pedagogical awareness, and adaptability. Digital literacy allows teachers and education staff to use educational devices and applications effectively. Pedagogical awareness helps teachers choose technology that suits learning goals, rather than just using technology as a formality. Adaptability makes educational human resources more open to change and innovation. On the other hand, when the three elements are not evenly distributed, the implementation of technology becomes inconsistent and tends to depend on the individual abilities of each teacher. This pattern emphasizes that the core of education's digital transformation does not only lie in the sophistication of devices, but also in the readiness of human resources to transform technology into innovative, effective, and sustainable school learning and management practices.

Table 1. Readiness and Competence of Educational Human Resources in Digital Transformation

Informant Position	Interview Excerpts	Indicator
Principal	"Schools have started to encourage the use of technology in learning and administration, but its success depends heavily on the readiness of teachers and education staff. There are teachers who adapt quickly, but there are also those who still need assistance."	Human resource readiness; institutional support; teacher adaptation; digital assistance needs.
Teacher	"We have used digital media in learning, such as presentations, learning videos, and several online applications. However, not all teachers feel confident using technology, especially if they have to make learning more interactive."	Teachers' digital literacy; self-confidence; pedagogical creativity; Limitations of technological competence.

Table 1 shows that the readiness and competence of educational human resources are the main factors that affect the success of digital transformation in schools. The principal emphasized the importance of the readiness of teachers and education personnel as the main requirement so that digitalization does not stop at the provision of facilities. This shows that schools already have institutional awareness to encourage digital transformation, but still face challenges in the form of differences in adaptability between human resources. Meanwhile, the teacher emphasized that technology has been used in learning, but its use is not fully optimal because there are still obstacles to

confidence and the ability to create interactive learning. Thus, this table shows that digital transformation requires not only school policies, but also technical and pedagogical readiness of education implementers.

Digital Transformation and Technology Integration Implementation Practices

These findings are operationally defined as the school's efforts to implement digital technologies, including Learning Management Systems (LMS), e-learning, interactive media, and AI, to support personalized learning, administration, and student learning experiences. The main focus is how education human resources (teachers, education staff, and school managers) utilize the technology to create interactive, flexible, and contextual learning. This definition emphasizes that digital transformation is not only about the availability of technology, but also about the ability of humans to integrate technology into pedagogical practices, design learning experiences that suit the needs of students, and encourage educational innovation in a sustainable manner.

Interviews with the principal show that: "We have provided an LMS and several digital learning applications, but the success of their use depends heavily on the abilities of teachers and staff. Teachers who are used to using technology are able to develop interactive learning, while other teachers still use digital media on a limited basis." The researcher's interpretation of this data shows that the capacity of human resources determines how effectively the technology is applied. Technology itself does not automatically improve the quality of learning; Pedagogical innovation arises when teachers understand how to integrate LMS, interactive media, or AI into teaching strategies, tailor content to students' needs, and build interactivity in the classroom.

The results of the second interview with the teacher stated: "We use digital media, learning videos, and online platforms to personalize learning. However, not all materials can be developed due to our limited experience with technology, and some students need additional guidance." The researcher interprets that educational innovation depends on the competence of teachers in transforming technology into pedagogical practices. Teachers who are able to adapt content and methods according to students' needs are able to create a more effective learning experience, while less experienced teachers are limited to using technology as a means of presentation or delivery of materials.

Observations in the field show that the use of LMS, interactive media, and AI has been applied in several subjects. Teachers use online quizzes, discussion forums, and AI data analysis features to assess students' progress. However, this utilization is not evenly distributed, with some classes still using traditional approaches. The researchers interpret that this variation suggests that the digital transformation of schools is still heterogeneous, depending on individual readiness and institutional support. This observation also reveals that successful technology integration tends to emerge when there is collaboration between teachers, mentoring, and a culture of sharing digital practices.

Restatement of the research data shows that although technology is available, the success of digital transformation depends on the capacity of human resources. Teachers and education staff who have high digital literacy, pedagogical creativity, and adaptability are able to create interactive and contextual learning. In contrast, HR unpreparedness leads to limited use of technology to basic functions, such as displaying materials or sending tasks. Thus, the digital transformation of education cannot be judged

only by the availability of devices, but also by the ability of human resources to transform technology into innovative learning practices.

The data pattern shows the relationship between HR readiness and the effectiveness of digital transformation. High readiness results in maximum technology integration, pedagogical innovation, and more personalized learning. Low readiness results in minimal and limited use of technology on administrative aspects or presentation of materials. This pattern emphasizes that the digital transformation of education is human-centered, with human resources as a determining factor for the quality, innovation, and sustainability of technology implementation.

Table 2. Digital Transformation and Technology Integration Implementation Practices

Informant Position	Interview Excerpts	Indicator
Principal	"We have provided LMS and several digital learning applications, but the success of their use depends largely on the abilities of teachers and staff. Teachers who are used to using technology are able to develop interactive learning, while other teachers still use digital media on a limited basis."	Human resource readiness; capacity to use the LMS; pedagogical innovation; variations of technological adaptation.
Teacher	"We use digital media, learning videos, and online platforms to personalize learning. However, not all materials can be developed due to our limited experience with technology, and some students need additional guidance."	Teachers' digital literacy; pedagogical adaptation; experience in using technology; Personalization of learning.

Table 2 explains that the success of the implementation of digital technology is highly dependent on the readiness and competence of educational human resources. The principal emphasized the importance of teacher and staff capacity, while the teacher highlighted experience and adaptability in integrating technology into learning. Data patterns show that digital transformation is not going uniformly, as classes with ready human resources are able to produce pedagogical innovations, while classes with low readiness are still limited to basic use. These findings confirm that the core of digital transformation of education lies in human capacity, not just the availability of technology, so effective technology integration must be tailored to the needs of students and supported by continuous innovation.

HR-Based Education Innovation and Sustainability Strategy

These findings are operationally defined as the school's efforts to build the capacity of educational human resources in a sustainable manner to support digital transformation. Its focus includes professional training, strengthening institutional support, developing a culture of innovation, and adapting technology-based curriculum. This sustainability strategy emphasizes that humans, not technology alone, are the main drivers of educational innovation. This definition emphasizes the role of human resources as a core actor that determines the effectiveness of digital transformation, adaptability to change, and the sustainability of innovation in schools.

Table 3. Innovation and Sustainability Strategy for Educational HR

Interview Excerpts	Indicator	They report
"We regularly hold digital training for teachers and education staff, as well as build a culture of sharing innovative practices between teachers."	Professional training, culture of innovation, collaboration between teachers	Principal
"Schools provide technical support and mentoring for teachers so they can better manage digital learning."	Institutional support, mentoring, digital implementation effectiveness	Vice Principal
"We are trying to adapt the curriculum and learning methods so that technology is not only used as a tool, but as part of a learning innovation strategy."	Curriculum adaptation, technology integration, pedagogical innovation	Teacher

Table 3 shows that the success of sustainable digital transformation depends on a combination of professional training, institutional support, a culture of innovation, and curriculum adaptation. The principal emphasized the importance of training and collaboration between teachers as the foundation of a culture of innovation. The vice principal highlighted institutional support and mentoring as factors that enable teachers to implement technology effectively. Teachers emphasized the integration of technology in learning strategies, not just the use of digital tools, so that innovation becomes meaningful. Critical analysis of the data shows that there is a synergy between these elements. Professional training without institutional support is likely to be suboptimal because teachers need mentoring and the means to practice new skills. In contrast, institutional support without a culture of innovation or curriculum adaptation is also not enough to drive sustainable transformation. This pattern confirms that the sustainability of digital transformation in schools requires a systemic approach that involves multiple levels of human resources simultaneously.

The results of observations in the field strengthen this interpretation. Researchers found that teachers who participated in active digital training used LMS, interactive media, and AI for learning personalization. The school also provides a forum for practice sharing, mentoring, and technical support for teachers. Observations show that technology integration becomes more effective when there is collaboration, a culture of innovation, and ongoing support from school management. The researchers' interpretation emphasizes that pedagogical innovation and the sustainability of digital transformation arise from the dynamic interaction between individual competencies and institutional support. The data restatement shows that the sustainability strategy of the digital transformation of education in schools includes four core elements: professional training, institutional support, a culture of innovation, and curriculum adaptation. These four elements reinforce each other and form the foundation for innovative, effective, and sustainable digital learning management. Thus, humans as the main actors remain the main determinants of the success of digital transformation.

Pattern descriptions from the data show that schools that are able to build internal support systems for HR tend to show high performance in learning innovation and the sustainability of digital transformation. The strong linkages between training, mentoring, a culture of sharing practices, and curriculum adaptation create an adaptive and innovative learning environment. This pattern confirms that the success of digital transformation depends not only on technology, but also on the ability of human

resources to manage, adapt, and optimize technology as an integral part of educational innovation strategies.

Discussion

The results of the study show that the readiness and competence of educational human resources are determining factors for the success of digital transformation in schools (Chen, He, et al., 2025; Njiku, 2024). Teachers, education staff, and school managers who have high digital literacy, pedagogical skills, and good adaptation are able to integrate technologies such as LMS, e-learning, interactive media, and AI into the learning process effectively (M. Wang & Ye, 2026). These findings are in line with the literature that emphasizes the importance of teacher competence in digital learning, but differs in the context of implementation in Indonesia that emphasizes the interaction between individual readiness and institutional support, thus suggesting that digital transformation is human-centered and not solely dependent on technological devices (Jingwen et al., 2026; Kondekar et al., 2025; Nguyen et al., 2026). Thus, this study emphasizes that human resource capacity is not just a supporting factor, but the core of innovation and sustainability of educational transformation.

Technology implementation practices in the field show that although digital infrastructure is available, its level of use and effectiveness is highly dependent on the readiness of human resources (Zhang et al., 2024). Teachers who are experienced and familiar with technology are able to create interactive learning and personalization of materials, while teachers who are less accustomed only use technology in a basic way (Larionova et al., 2024). These findings are consistent with previous research that stated that teacher readiness affects the quality of digital learning, but this study adds empirical context regarding the variation in competencies between teachers in pesantren-based secondary schools, which has not been widely discussed in the international literature (Wohlfart & Wagner, 2025). This shows that the success of educational digitalization is not only the availability of technology, but also the integration of human capacity into pedagogical practices.

The sustainability strategy of digital transformation requires professional training, institutional support, a culture of innovation, and curriculum adaptation (Petrovic & Jaksic, 2026). Principals and education staff emphasize the importance of mentoring, practice sharing forums, and the development of innovative cultures to ensure technology is used effectively (Hassan & Laval, 2024). These findings add to the empirical evidence in the literature that states that the sustainability of educational innovation depends on a supportive human resource ecosystem, not just the individual abilities of teachers (Musyarofah et al., 2025). The practical implications of these findings are the need for educational institutions to design sustainable human resource development programs, tailor learning strategies to teachers' abilities, and create a collaborative culture to encourage effective technology adoption.

The theoretical contribution of this research lies in strengthening the human-centered perspective in the digital transformation of education. The findings of the study confirm that the success of digitalization is not only determined by the availability of technology, but also by human resource capacity, institutional culture, curriculum adaptation, training, and mentoring. The novelty of this research can be seen in the identification of four pillars of digital transformation success in pesantren-based high schools, namely training, mentoring, innovation culture, and adaptive curriculum. Thus,

this research expands the study of digital education and provides practical guidance for schools to build innovative, sustainable, and human-centered digital transformation.

CONCLUSION

Based on the results and discussion of the article, it can be concluded that education is undergoing an increasingly complex paradigm shift in the midst of digital transformation and global crises, where its role is no longer limited to increasing access and academic achievement, but also to strengthening human capacity that is adaptive, resilient, and competitive. In this context, educational human resources, especially teachers and education personnel, are key factors that not only carry out the learning function, but also play a role as transformation agents who are required to have digital competence, innovation, and the ability to adapt to change. Digital transformation itself has evolved from just the use of technology to a data-based, artificial intelligence, and personalization learning ecosystem, which at the same time strengthens challenges in the form of structural and pedagogical digital competency inequality. On the other hand, global crises such as the pandemic have shown the importance of an education system that is not only responsive, but also resilient and risk-mitigated. Therefore, educational human resource planning is required to transform to be more adaptive, strategic, and sustainable through data-based approaches, technology integration, and long-term orientation. Thus, the overall discussion emphasized that the success of education in the future is highly determined by the ability to design a proactive, innovative, and sustainable HR planning strategy that is able to respond to the challenges of digital disruption and global uncertainty in a systematic manner.

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