


Transformation Analysis of Human Resources Development in Dr. Pallemmai Tandi Regional Public Hospital, Palopo City

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Article Info	ABSTRACT
Keywords: Digital transformation, Human resources, Digital era	In today's digital era, hospitals face great challenges in adapting their service systems and internal management to advances in information technology. One of the crucial aspects affected is the development of human resources (HR), which must be able to adapt to digital changes quickly and effectively. This study aims to determine the effect of digital transformation on HR development at RSUD dr. Pallemmai Tandi Palopo City. The research method used is quantitative method with simple linear regression approach. The number of respondents in this study were 51 people selected through total sampling technique. The results showed that digital transformation has a positive and significant effect on HR development, with a regression coefficient value of 0.765 and a significance value of <0.001. The R square value of 0.589 shows that digital transformation explains 58.9% of the variation in HR development. Thus, the higher the level of digital transformation, the higher the HR development in the hospital environment.
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INTRODUCTION

The rapid development of information and communication technology has driven digital transformation in various sectors, including the health care sector. Digital transformation is an important strategy to improve the quality of health services, operational efficiency, and expand the reach of services to the community. Innovations such as electronic medical record systems, telemedicine services, and cloud-based patient data integration are tangible forms of digitalization that are changing the face of health services globally (Lakhotia et al. 2024)

In the context of human resource management (HRM), digital transformation has changed the way organizations manage, develop, and monitor employee performance. Technology enables the use of HR management software that simplifies the process of recruiting, training, and developing employees more effectively. Through the use of data analytics, organizations can now identify new skill needs, assess employee performance in real-time, and plan more targeted development programs (Innayah et al. 2024) . The use of technology also allows for more effective employee management.

Digital transformation has become the main driver of change in various sectors, including human resource management. Companies and educational institutions are required

to adapt quickly to technological developments in order to improve efficiency, productivity and competitiveness. However, this transformation process is not without challenges, especially in terms of developing human resources who must have skills and competencies that are in line with the demands of the digital era. Many employees do not have adequate digital skills, so the skills gap is one of the main challenges in HR development. RSUD dr. Pallemmai Tandi Palopo, as a provincial referral hospital in South Sulawesi, has a unique HR and technology structure-there are sociogeographic challenges, IT infrastructure, and digital competency development needs that are specific to the local context. However, academic studies that address HR transformation contextually in the hospital have not been found, so this research is here to answer that need. This research aims to identify the level of readiness of HR digital competencies and IT infrastructure at RSUD dr. Pallemmai Tandi Palopo and analyze the obstacles and opportunities faced in the implementation of HR digitalization in regional hospitals. Thus, this research not only fills the void of empirical studies, but also aims to make a practical contribution to the implementation of HR digitalization in regional hospitals (Hariri, Wahyuni, and Rochmat 2025)

Digital Transformation

Digital transformation is the process of integrating digital technology into all aspects of an organization's services and operations, including hospitals. In the context of hospitals, digital transformation includes not only the adoption of hospital information systems (HIS), but also changes in organizational culture, work models, and especially the development of human resources to be able to adopt and utilize technology optimally.

Digital transformation in the healthcare sector includes digitizing patient data, service automation, implementing artificial intelligence (AI), telemedicine, big data analytics, and the Internet of Medical Things (IoMT). This transformation requires technological readiness and the ability of human resources to adapt. (Fadilah and Anshori 2025)

Digital transformation is a process triggered by changes in digital technology and has a significant impact on organizations, including structures, processes, and added value for customers. Digital transformation has a significant impact on work systems and decision-making in hospitals. The application of digital technology drives operational efficiency, accelerates service processes, and improves the accuracy and security of patient information. However, the success of digital transformation is not only determined by the availability of technology, but also by the readiness of human resources. Trained and adaptive human resources are key in dealing with changes in systems and ways of working based on digital technology. Therefore, training programs, strengthening digital competencies, and change management are strategic steps that must be prioritized. (Anggraini, Oktadinna, and Martini 2025)

In relation to the results of this study, it can be concluded that the success of organizational transformation, including hospital digitalization, makes a real contribution to human resource development. Employees involved in the transformation process tend to experience increased capacity in terms of technological skills, cross-unit collaboration, and understanding of information systems. This proves that organizational transformation does not only impact technical systems, but also becomes a strategic tool in shaping human

resources that are competent, innovative, and ready to face the future challenges of the health sector. This finding is in line with Davenport and Harris' view that the integration of technology and HR is the main foundation in creating a digital-based competitive advantage. (Ihwanudin et al. 2025)

Human Resources (HR)

Human resources (HR) are the most important asset in an organization, which includes all individuals who contribute to the achievement of company or institution goals. HR does not only refer to workers or employees, but also includes their skills, knowledge, abilities, and potential. Human resource management is a strategic process for managing people in an organization, which involves recruiting, training, developing, and providing incentives.

In the era of digital transformation and rapid organizational change, HR development has become more complex and demands an adaptive approach. Employees are required to have not only technical skills, but also soft skills such as leadership, effective communication, and critical thinking. Therefore, organizations need to develop a sustainable training and development system to prepare HR to face future challenges. According to (Hermon Pattinasarany et al. 2025) HR development strategies based on digital learning and competency approaches have been proven to significantly increase organizational productivity and competitiveness.

Strengthening an inclusive and collaborative organizational culture is also an important factor in managing HR effectively. A work culture that supports innovation, openness, and learning will form an environment conducive to individual and team growth. Research by (S. Rahmawati, Margiyanti Utami, and Annisa 2023) states that organizations that actively involve their employees in the transformation and decision-making process tend to have HR who are more loyal, productive, and committed to the company's vision. Therefore, HR management is not just an administrative aspect, but a strategic pillar in the success of organizations, including hospitals as public service institutions based on professional human resources. (F. Rahmawati 2024)

METHOD

According to Sugiyono population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and draw conclusions. The population in this study were all employees of Dr. Pallemmai Tandi Hospital who were involved in the digital transformation process and HR development, with a total of 51 people. (Charismana, Retnawati, and Dhewantoro 2022)

A sample is a number of subjects that are part of a population that has the same characteristics (Sari and Siregar 2022) If the population is less than 100 people, then all members of the population can be sampled. Therefore, this study uses total sampling, where the entire population of 51 people is used as research respondents.

This study obtained data, the authors used primary data, which according to Sugiyono (Sulistiyowati 2017) is data obtained directly from respondents who are the target of research. This data is collected from the results of the answers to the questionnaires given to

respondents who are permanent employees in the environment of Dr. Palembang Tandil Hospital.

The data collection technique used in this research is a questionnaire (questionnaire), which consists of several statements arranged based on the indicators of each variable. The questionnaire was distributed directly in the form of paper printouts (offline). The measurement scale used in this study is the Likert scale, which provides five answer options, namely: strongly disagree, disagree, moderately agree, agree, and strongly agree.

The data analysis techniques used include instrument testing (validity and reliability tests), simple linear regression analysis, and hypothesis testing (t test). Descriptive analysis was used to describe the characteristics of data obtained from respondents, such as frequency, percentage, average, and standard deviation. Meanwhile, simple linear regression analysis is used to determine the direct effect of one independent variable on one dependent variable.

Simple linear regression is a statistical technique used to analyze the relationship between one independent variable (X) and one dependent variable (Y). In this study, variable X is digital transformation, and variable Y is human resource development. This technique is used to determine whether organizational transformation has a significant influence on HR development at RSUD dr. Palembang Tandil. The simple linear regression equation used in this study is as follows:

$$Y = a + bX + e$$

Description:

Y = HR Development

a = Constant (fixed value when X = 0)

b = Regression coefficient (the amount of influence of variable X on Y)

X = Digital transformation

e = Error (error rate)

Through this quantitative approach and simple regression analysis, it is hoped that the research will be able to provide objective and measurable information about the effect of organizational transformation on human resource development. The results of this study can also be used as a basis for consideration in making strategic hospital management policies, especially in improving the quality and competence of human resources that are adaptive to organizational change.

RESULTS AND DISCUSSION

Validity Test

The validity test is a process to measure the extent to which an instrument (for example a questionnaire) actually measures what should be measured, and not other constructs. In other words, validity shows the accuracy and accuracy of the measuring instrument in carrying out its function according to Sugiharto and Sitinjak (Rahmayanti et al. 2024), validity relates to a variable measuring what should be measured. Validity in research states the degree of accuracy of the research measuring instrument on the actual content being measured. The

validity test is a test used to show the extent to which the measuring instrument used in a measurement measures what is measured.

The validity test was conducted to determine whether the data collected after the study was valid or not using a questionnaire as a measuring tool. Items can be declared valid if $R_{count} > R_{table}$ where the significance level used is 5% or 0.05.

Table 1. Validity Test

Variable	Item	R count	R table	Description
Digital Transformation (X)	x1.1	0.871	0.301	Valid
	x1.2	0.805	0.301	Valid
	x1.3	0.537	0.301	Valid
	x1.4	0.568	0.301	Valid
	x1.5	0.724	0.301	Valid
	x1.6	0.804	0.301	Valid
	x1.7	0.509	0.301	Valid
	x1.8	0.417	0.301	Valid
HR Development (Y)	y1	0.781	0.301	Valid
	y2	0.713	0.301	Valid
	y3	0.864	0.301	Valid
	y4	0.537	0.301	Valid
	y5	0.528	0.301	Valid
	y6	0.797	0.301	Valid
	y7	0.495	0.301	Valid

Source: Data processed by SPSS 26 (2025)

Based on the data in table 1, it can be concluded that all question items in this research instrument are declared valid because they have a value of $R_{count} > R_{table}$. The items on the digital transformation variable show very strong validity. Meanwhile, all items in the HR development variable show high validity. Thus, the research instrument can generally be declared valid, because the majority of items meet the specified validity criteria.

Reliability Test

According to Edy, reliability is defined as the extent to which test scores are consistent, reliable and repeatable. There are several factors that can cause low reliability of test results, first, systemic, related to the level of difficulty of the test that is too high, so that most subjects in answering rely on guessing or guessing. (Pramuaji and Loekmono 2018).

The reliability test was carried out to determine whether the research variable data through the questionnaire was reliable or not. A variable is said to be reliable when the *Cronbach's Alpha* value is > 0.60 .

Table 2. Reliability test results

Variable	Cronbach's Alpha	Description
Digital transformation (X)	0.741	Reliable
HR Development (Y)	0.766	Reliable

Source: Data processed by SPSS 26 (2025)

The technique used is testing with Cronbach's Alpha, where a variable is said to be reliable if the Alpha value is more than 0.60. The test results show that the digital transformation variable (X) obtained an Alpha value of 0.741 and the HR development variable (Y) of 0.766. This value indicates that the instrument used has good internal consistency.

Simple Linear Regression Analysis

Simple linear regression analysis is a statistical method used to model and analyze the linear relationship between two quantitative variables: one independent variable (X) and one dependent variable (Y). This method is divided into simple linear regression and multiple linear regression, each of which has different applications depending on the complexity of the data. Simple linear regression is suitable for situations where there is only one factor affecting the outcome, while multiple linear regression is used when multiple factors are considered to play a role. It provides more flexibility and accuracy in data analysis (Nurhaswinda et al. 2025)

Simple linear regression analysis Simple linear regression analysis is used to measure the extent of the influence of digital transformation (X) on HR development (Y).

Table 3. Coefficients ^a

Model	B	Std. Error	Beta	t	Sig.
(Constant)	36.375	1.362	-	26.699	<0.001
Organizational transformation (X)	0.765	0.069	0.384	2.600	<0.001

Source: Data processed by SPSS 26 (2025)

Based on the results of data processing in Table 3, it can be seen that the simple linear regression equation is as follows:

$$Y = 36.375 + 0.765X + e$$

From this equation it can be explained that:

1. The constant value of 36.375 is positive, which means that if there is no digital transformation (X = 0), then human resource development (Y) remains at a value of 36.375. In other words, there is a basic contribution to HR development even though it is not influenced by digital transformation.
2. The regression coefficient value of 0.765 is positive, which indicates that every one unit increase in the digital transformation variable will increase human resource development by 0.765 units. This indicates a positive direct effect of digital transformation on HR development.

Thus, it can be concluded that the independent variable digital transformation (X) has a positive and significant influence on the dependent variable human resource development (Y). The positive coefficient value indicates that the higher the level of digital transformation carried out, the higher the HR development achieved. This is reinforced by a significance value of <0.001 which is much smaller than the 0.05 limit, as well as an R Square value of 0.589, which means that 58.9% of the variation in HR development can be explained by digital transformation. The remaining 41.1% is influenced by other variables outside this model.

Hypothesis Test

T-test

The t test is conducted to see the effect of the independent variable on the dependent variable partially. The test is done by comparing T count with T table or by looking at the significance column in each T count. The T table value for a significance level of 5% (0.05) and degrees of freedom (df) = $n - k = 51 - 2 = 49$, then the T table value is 2.008.

Table 4. Coefficients ^a

Model	B	Std. Error	Beta	t	Sig.
(Constant)	36.375	1.362	-	26.699	<0.001
Organizational transformation (X)	0.765	0.069	0.384	2.600	<0.001

Source: Data processed by SPSS 26 (2025)

Based on the table above, the following results are obtained: The results in this study show that the digital transformation variable has a t value of 2.600 which is greater than the t table of 2.008. In addition, the significance value obtained is <0.001, which means it is smaller than the 0.05 significance level. This shows that digital transformation has a positive and significant effect on human resource development. In other words, the better the digital transformation process in the organization, the higher the increase in human resource development that occurs.

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that digital transformation has a positive and significant effect on human resource development at RSUD dr. Pallemmai Tandil Palopo City. The regression analysis results show that 58.9% of the variation in HR development can be explained by digital transformation. This shows that the process of change in systems, structures, and work culture makes an important contribution to improving the quality and competence of employees. Thus, the more effective the implementation of transformation, the greater the potential for HR improvement. Therefore, organizations need to continue to encourage innovation and renewal to support sustainable human resource development. Constructive Recommendations for Future Research; Exploration of the Role of Intermediate Variables Further investigate the effectiveness of digital training, management support, and employee attitudes as mediators or moderators between digital transformation and HR development outcomes, as found in other studies. Multiperspective Methods: Quantitative + Qualitative. Add in-depth interviews or case studies to understand work culture, resistance, and individual success stories in the digital adaptation process. This is in line with the finding that a human-centered approach increases employee engagement. Digital Maturity Assessment: Digital Maturity Index (DMI). Use tools such as the healthcare sector-specific Digital Maturity Index to assess the institution's digital maturity, identify weak areas/data integration and formulate continuous improvement recommendations.

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