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Analysis of Human Capital Readiness and Digital Culture on Employee Performance in Facing Industry 4.0 : Case Study of Perum DAMRI

Nabila Eka Febriani, Hary Febriansyah
nabila_eka@sbm-itb.ac.id[1]* hary@sbm-itb.ac.id

Institut Teknologi Bandung
Jl. Ganesha [2,3]

Abstrak

Perum DAMRI, a state-owned transportation company, faces significant challenges in transitioning to Industry 4.0, with only 4.7% of employees classified as digitally skilled. This condition indicates that Perum DAMRI needs to significantly improve human capital readiness to compete in the digital era. This study aims to evaluate the human capital readiness and digital culture, towards employee performance at Perum DAMRI Head Office in facing Industry 4.0 challenges.. A survey was conducted to assess human capital readiness and the influence of digital culture on performance. The findings indicate that human capital readiness, particularly in the knowledge and hard skills dimensions, is categorized as *"Not Ready,"* highlighting substantial gaps and the need for comprehensive training and development programs. Additionally, digital culture positively influences employee performance, emphasizing the importance of fostering values such as innovation, collaboration, agility, and a digital-first mindset. The study concludes that both human capital readiness and digital culture significantly affect employee performance, underscoring their critical roles in supporting DAMRI's transition to Industry 4.0.

Keywords: Human capital readiness, digital culture, employee performance

Introduction

Music has consistently played a crucial role in the lives of people, it can shift one's Perum DAMRI, a state-owned company in the transportation sector established in 1946, operates around 45 branches across Indonesia. According to FORDIGI data (2023), only 4,7% of DAMRI's 4,239 employees are classified as digital talent. This is still a long way from the target set by the Ministry of SOEs, where future benchmarking targets at least 20% of employees to be digitally literate. To achieve this target, employees need to prepare themselves to transition from manual processes to a comprehensive digital platform driven by technological advancements. It is crucial for employees and companies to prepare themselves for Industry 4.0 by mastering various fields related to digital technology.

In this context, the author conducted interviews with the Training and Employee Development Staff of Perum DAMRI. The employee stated that the company has

not fully experienced the impact of Industry 4.0 and has not maximized digital technology to enhance employee performance. The limited number of digital talents is considered as a result of the non-optimized implementation of digital culture in the company. The daily operations of DAMRI employees show that the lack of technology utilization results in prolonged completion times for tasks. By utilizing existing technology, employees are required to get used to using digital-based work tools to make it easier for employees to carry out their work. Within organizations, adaptation is carried out by changing manual processes to comprehensive digital platforms. In facing the era of digitalization, maximum readiness is required from Perum DAMRI employees to be able to utilize digital media which is very necessary in carrying out their work. It is crucial to improve digital culture in order to realize the change of an organization's culture, as it is regarded as one of the most significant components that will impact employee performance (Ghafoori et al., 2024). Employee performance is assessed not only on their ability to perform their job, but also the capacity for mastering the amount of work, quality of work and also time management to complete their work as it is scheduled to achieve company goals (Na-Nan et al., 2018).

1. RESEARCH METHOD

Data Collection Method

This research This research uses two types of data, namely primary data and secondary data. Primary data was developed by using mixed method approaches to understand the effect of human capital readiness and digital culture on employee performance at Perum DAMRI, the author uses a mixed method approach that combines qualitative and quantitative methods.

According to Schoonenboom and Johnson, mixed methods research is a type of research in which researchers combine elements from qualitative and quantitative approaches to achieve breadth and depth of understanding in researching and analyzing a phenomenon (Hadju & Aulia, 2022). The author distributed questionnaires to respondents and conducted an in-depth interview.

The questionnaire is a series of questions used to obtain information from respondents for research purposes, with several alternative answers available (Arikunto, in Nugroho, 2018). In this context, Perum DAMRI employees are asked to rate statements using a Likert scale from 1 (one) to 5 (five), with details: 5 strongly agree, 4 agree, 3 slightly disagree, 2 disagree, and 1 strongly disagree. Besides questionnaires, the author also conducted a Interview with the Organization and Employee Development Department as supporting data in this study. Meanwhile, secondary data is used to strengthen the research base through sources such as journals, literature, articles, and the internet.

Data Analysis Method

The purpose of this research is to see if there is an influence of human resource readiness and digital culture on employee performance. Therefore, researchers chose to combine quantitative and qualitative approaches. Mixed-method research aims to answer research with complex problems (Maghfuroh, 2021), which allow combining qualitative and quantitative data to provide a more comprehensive explanation of the research problem. The author is using the application program of SPSS (Statistical Package for Social Science) 23 for data processing in this study . The questionnaire will be assessed by using validity,

reliability, normality test and regression analysis. Besides those analysis, the author also uses gap and HDI analysis for the Human Capital Readiness variable

2. LITERATURE REVIEW

2.1 Transportation Industry in The Industry 4.

The Fourth Industrial Revolution, known as "Industry 4.0," is the latest phase in industrial transformation, characterized by the digitalization of processes and automation in production models. This era integrates modern information technology with various production process (Hamdi et al 2022). Industry 4.0 is revolutionizing the global supply chain through the integration of advanced technologies such as artificial intelligence, Internet of Things, blockchain, data analytics, robotics, and more. In the transportation sector, which plays a vital role in the mobility of goods and people across global regions, collaboration with Industry 4.0 can revolutionize through route optimization, energy efficiency, and increased safety and reliability. Logistics and transportation digitalization begins with digital transformation, which is a change in business processes that aims to increase value faster, better, and more efficiently. To optimize the benefits of this digitalization, active participation from various groups and stakeholders is needed. This participation is not only limited to the use of certain platforms but must also be integrated into an ecosystem that creates added value for all parties involved (Tohir et al., 2024) Along with the development of transportation technology today, transportation has become a bridge of development from a region to the wider world. The development of the transportation system today has become a special concern from various perspectives. The development of transportation technology is utilized by some people to facilitate and accelerate movement in meeting all their life needs (El Hamdi & Abouabdellah, 2022)The success of a company's digital transformation is highly dependent on the assistance of the transformation process with management improvements that run in parallel. This is closely related to the readiness of its human capital and the implementation of proactive management in operations and strong support from top management (Kryukov et al., 2022).

2.2 Human Capital In the Industry 4.0

The new paradigm of Industry 4.0 has spread rapidly across the globe. This revolutionary concept presents the next era of the Industrial Revolution as a flexible platform, where technology and the internet become the overarching means of conducting business and manufacturing activities, including organisation structures and human roles activities (Flores, et al., 2020). In the context of organization, human capital includes the education, experience, knowledge, and skills of employees that create value and support company success (Agolla, 2018 in Khan et al., 2022) . Hence, in this era the company must attract the right talent to compete because the working environment in the new industry will be very different, where the interaction between humans and technology is very crucial (Singh, et al., 2021). These opportunities will require highly skilled, innovative, and dynamic workers, with an emphasis on employees who have strong IT competencies and a deep understanding of practical skills, engineering, and programming (Ahmad, et al., 2018). Employees need to have the initiative to adapt to the new revolution through lifelong learning to improve their performance and technological knowledge, both in terms of quality and

quantity. Employees with specific specializations will become less important than those with versatile skills and adaptability (Kergroach in Ahmad et al, 2018). As quoted from Hendarman (2019), according to McKinsey in the era of industrial revolution 4.0 there will be general skills in addition to digital technical skills. which are increasingly needed, such as:

a. The need for specialization
b. Skills to manage stakeholders.
c. Capability to develop human resources.
d. Ability related to problem solving.

2.3 **Human Capital Readiness**

Human capital readiness refers to the extent to which an organization's workforce is prepared to effectively meet and adapt to evolving demands and challenges especially in the context of Industry 4.0. Human capital readiness is considered an intangible asset by evaluating employees whether they have the skills, aptitude and expertise to implement new approaches and positively impact the organization's learning process (Hendarman et al, 2020). Human capital plays a role in increasing productivity, labor demand, and economic growth (Bergheim, 2005). The higher the human capital readiness, the greater the contribution of intangible assets in creating cash flow, which can be obtained through increased sales and expense efficiency (Kaplan & Norton, 2004). Human capital readiness is a key factor in internal operations that affects business success. All employees should participate in re-training and up-skilling in order to encourage collaboration and accelerate the flow of competency-related information, the development of an integrated and mutually accessible data-based competency management platform is recommended (Kusmin et al, 2017). Human capital is considered the key to organizational success in industry 4.0. Readiness in terms of human capital can be measured with a competency approach including knowledge, skills (soft skills and hard skills) and attitudes (Hendarman et al, 2019). By using these variables, the gap or index between the expected and current conditions of an organization for each competency construct can be calculated. Researcher used the theory developed by Hendarman et al (2019) to explain 3 variables of Human Capital Readiness:

1. Knowledge

   Knowledge is factual or procedural information that an individual possesses and can apply to the job (Raut, 2024). Knowledge includes a performance-oriented intellectual capital through action with knowledge classification in the form of tacit or explicit knowledge, and specialized or general knowledge.

(Sveiby in Hendarman et al 2021). Knowledge can include an understanding of the work processes, technologies, and systems used in the organization.

2. Skills

   Skills are a person's ability or expertise in carrying out a task, which is obtained through practice, both practically and from work experience. According to Muchtamim (2021), skill is the ability to apply knowledge in achieving certain goals. Mastery of skills usually starts with training, but the main factor in truly mastering them is through consistent practice and experience in the field.

3. Attitude

   Attitude basically reflects the way a person takes action, which directly affects his actions. In the context of work, attitude becomes an important supporting element for the knowledge and skills possessed by employees to produce optimal performance in carrying out their tasks (Muchtamim, 2021). According to Haji et al., (2021) the right attitude is the greatest asset in a person because it has a big influence on the performance of the organization and company

2.4 Digital Culture

Digital culture is a manifestation of norms, values, and ways of working that develop with the increasing computerization and digitalization of society (Permana et al., 2021). Digital is a collection of shared assumptions and a comprehensive understanding of organizational practices in the digital environment (Duerr in Velyako & Musa, 2023). In other words, this culture becomes an integral part of organizations in the era of advanced technology (Müller et al., 2019a). With that being said, digital culture is a collection of norms, values, and ways of working that have evolved as a result of digitalization, becoming an integral part of organizations in the era of advanced technology to drive innovation and technological adaptation. Buvat et al., (2017) defines digital culture as a set of 7 (seven) indicators, such as:

1. Innovation:
2. Data-Driven Decision Making
3. Collaboration.
4. Open Culture
5. Digital-First Mindset
6. Agility and Flexibility
7. Customer-Centricity

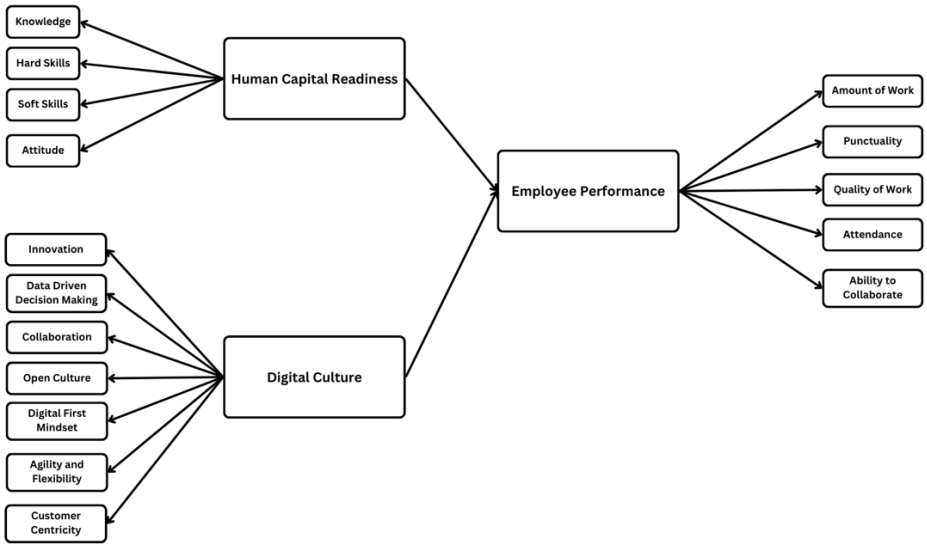
2.5 Employee Performance

One of the indicators of a company's development is the performance of its employees. Performance refers to the work results or achievements obtained by individuals. This performance is measured based on job requirement (Arif et al., 2019). Employee performance is the achievement and accomplishments produced in the workplace, which reflect the implementation of plans to achieve specific goals. Measuring employee performance accurately is very important, because employee performance consists of various dimensions that can be evaluated. In this study, the author will use the performance dimensions that have been developed by Bangun (2012) in (Arif et al., 2019) :

1. Number of Jobs
   Refers to the employee's ability to complete assigned tasks in the amount that is in accordance with the company's predetermined targets. This includes the ability to work on more than one job efficiently and achieve work results that meet management expectations.
2. Quality of Work
   Refers to the level of accuracy and satisfaction with the work results produced by employees. This includes the ability to produce work that meets company standards and meets management expectations.
3. Punctuality
   Refers to the employee's ability to complete work according to the specified deadline. In addition, this dimension also involves the ability to complete work faster than the time given.
4. Attendance
   Refers to the level of employee presence at work consistently, demonstrating commitment to job responsibilities. This dimension is measured by employee absences that are never empty in each work period.
5. Ability to Collaborate
   Refers to the employee's ability to interact and work together effectively with coworkers. This dimension includes a positive attitude in supporting collaboration and team synergy to achieve common goals.

3. Conceptual Framework

The conceptual framework for this research is a guideline to analyze the correlation between Human Capital Readiness dimension including knowledge, hard skill, soft skill and attitude (Hendarman et al, 2021), and Digital Culture dimensions including innovation, data driven decision making, open culture, collaboration, flexibility and agility and customer centricity (Buvat et al, 2017) towards the 5 dimensions of Employee Performance which are amount of work, punctuality, quality of work, attendance and ability to collaborate (Bangun, 2012). The conceptual framework can be seen below:



Based on the Figure III.1, it can be explaining the details of each hypothesis are described below:

H01: Human capital readiness **has no relationship** on employee performance.

H1 : Human capital readiness **has significant and positive relationship** on employee performance.

H02 : Digital culture **has no relationship** on employee performance.

H2 : Digital culture **has significant and positive relationship** on employee performance.

H03: Human capital readiness and digital culture **has no relationship** on employee performance.

H3: Human capital readiness and digital culture **has relationship** on employee performance.

4. ANALYSIS

4.1 Human Capital Readiness and HDI Analysis

After the results of the questionnaire are received, then the data is processed to assess the human capital readiness of Perum DAMRI Head Office. Human Capital Readiness is determined by subtracting the expected value from the current condition value. Based on the results of data processing from 103 respondents at Perum DAMRI Head Office, the following are the results:

Table 2. 1Human Capital Readiness Gap

Indicator	Dimension	Current	Expected	GAP
Knowledge	Knowledge 1	2.61	4.34	1.73
	Knowledge 2	2.67	4.72	2.05
	Knowledge 3	2.52	4.65	2.13
	Knowledge 4	2.82	4.67	1.85
	Knowledge 5	2.43	4.77	2.34
	Knowledge 6	2.93	4.68	1.75
	Knowledge 7	2.95	4.65	1.70
	Knowledge 8	2.96	4.69	1.73
	Knowledge 9	2.94	4.64	1.70
	Knowledge 10	2.69	4.74	2.05
	Knowledge 11	2.94	4.70	1.76
	Knowledge 12	2.73	4.62	1.89
	Knowledge 13	2.79	4.68	1.89
	Knowledge 14	2.78	4.72	1.94

Total		2.77	4.66	1.89
Hard Skill	Hard Skill 1	2.75	4.70	1.95
	Hard Skill 2	2.94	4.67	1.73
	Hard Skill 3	2.95	4.67	1.72
	Hard Skill 4	2.83	4.73	1.90
	Hard Skill 5	2.74	4.73	1.99
	Hard Skill 6	3.02	4.62	1.60
	Hard Skill 7	2.86	4.79	1.93
	Hard Skill 8	2.88	4.59	1.71
Total		2.87	4.69	1.82
Soft Skill	Soft Skill 1	3.01	4.65	1.64
	Soft Skill 2	2.83	4.63	1.80
	Soft Skill 3	2.94	4.63	1.69
	Soft Skill 4	3.00	4.70	1.70
	Soft Skill 5	3.05	4.72	1.67
	Soft Skill 6	3.04	4.69	1.65
	Soft Skill 7	3.05	4.75	1.70
	Soft Skill 8	3.02	4.58	1.56
	Soft Skill 9	2.89	4.67	1.78
	Soft Skill 10	2.90	4.68	1.78
Total		2.97	4.67	1.70

Attitude	Attitude 1	2.98	4.47	1.49
	Attitude 2	3.03	4.42	1.39
	Attitude 3	2.99	4.49	1.50
	Attitude 4	3.12	4.44	1.32
	Attitude 5	2.91	4.47	1.56
Total		3.01	4.45	1.45

3.

Based on the results of the gap analysis on the Human Capital Readiness variable consisting of 37 items, significant differences were found in several dimensions. In the knowledge dimension, there is a gap score of 1.89, with the highest indicators in K5, K3, and K2. This relates to knowledge related to cybersecurity, industrial automation, and technology in Industry 4.0. Furthermore, in the hard skills dimension, the gap score found was 1.82, with the highest indicators in H5, H1, and H7 relating to technical and specific skills related to the implementation of job duties, inter-company relationships facilitated by data integration systems and easy access to information, and technical capabilities in managing knowledge and data through the use of team or company-owned data storage applications.

Meanwhile, the soft skills dimension shows a score gap of 1.70, with the highest gap in sub-variables S2, S9, and S10. This relates to employee stress management in adapting to new technology, employee opportunities for training, and employee ability to innovate. Finally, in the attitude dimension, a gap score of 1.45 was found, with sub-variables A5, A3, and A1 having the highest gap. This shows that there are still challenges in employee acceptance of the use of technology in daily activities, the use of technology for communication and exchanging data or information through software, and employee habits in conducting routine checks of the technology used. Each indicator will be evaluated based on the HDI theory by Hendarman et al. (2021).

$$\text{HDI} = \frac{X - Minimum\ Value}{Maximum\ Value - Minimum\ Value}$$

Where:

X = The gap (substraction from expected vaue with current value)

Minimum value = Lowest gap

Maximum value = Highest gap

After analyzing the gaps in each item, the next step is to identify the indicator level gap in the following table:

2.2 HDI Analysis of Human Capital Readiness

Variable	Current Value	Expected Value	GAP	HDI	Summary
Knowledge	2.77	4.66	1.89	1	Not Ready
Hard Skill	2.87	4.69	1.82	1	Not Ready
Soft Skill	2.97	4.67	0.17	0.56	Ready
Attitude	3.01	4.45	1.45	0	Optimal

3

Based on the HDI analysis, it was found that the knowledge variable has an HDI of 1 and is categorized as "not ready". This shows that Perum DAMRI management does not have an adequate understanding of organizational management knowledge relevant to Industry 4.0, such as an understanding of cybersecurity, augmented reality, SAP, cloud computing, and other technologies. In addition to the knowledge variable, the hard skill variable also has an HDI of 1 and is categorized as "not ready". This means that Perum DAMRI does not have relevant hard skills components to be applied in Industry 4.0. These components include the ability to analyze data and facts to support logical decision-making, the ability to manage and store data using applications or data storage systems, the ability to understand and utilize data integration systems for inter-company relationships, the ability to focus and solve problems based on factual data quickly and efficiently, and initiative and leadership in using technology and processes in the industry 4.0 era.

Meanwhile, soft skills are in the ready category with HDI score 0.56, which means Perum DAMRI has been able to apply the soft skills components needed in Industry 4.0 to support employee performance. This is reflected in employees' ability to adapt to technology, willingness to continue learning and developing themselves related to new technology, and a sense of responsibility in facing and implementing technological changes even though they are new. According to Hendarman & Cantner (2018), soft skills have a significant and positive relationship with individual innovativeness. However, further research is needed to understand whether soft skills relevant to Industry 4.0 also have a similar relationship with individual innovativeness. In the context of digital transformation in the industry 4.0 era, changes not only occur in technological aspects, but also in humans as human capital. Soft skills play an important role in an individual's ability to adapt to new technology, which is one of the company's main assets in facing digital technology disruption. Employees with high soft skills, accompanied by good emotional intelligence, are more likely to change their mindset and encourage individual innovation in the industrial environment. These skills are important capital needed by companies to sustain in the industry 4.0 era. However, the analysis shows that the biggest gap in the soft skills dimension is in the training and innovation components. This finding is consistent with the results of the interview, where management revealed that training has not been conducted evenly in all divisions. Opportunities to get training are also still limited because training is carried out based on direction from the board of directors without using factual data related to the skills gap needed by the company. The attitude dimension is in the optimal category with HDI score 0, which shows that the organization has been effective in managing employee attitudes. This is reflected in how employees actively accept, trust, and consistently use technology, as well as show concern and proactivity towards technology maintenance. This success indicates that Perum DAMRI has been able to build a work culture that supports the implementation of technology and digital transformation in a sustainable manner. This research shows dimensions that can validate the common statement about one of the main barriers to digital transformation, which is the lack of digital talents.

4.2 Digital Culture Analysis

After the results of the questionnaire are received, then the data is processed to assess the digital culture of Perum DAMRI Head Office. Digital culture includes elements such as innovation, collaboration, an open culture, agility, a data-driven mindset, and a focus on customer centrality. The following digital culture analysis

table provides information on the mean score, standard deviation, and average value for each of these aspects:

Table 2.2 Digital Culture Analysis

No	Dimension	Mean	Std. Deviation	Score	Score Percentage
1	Innovation	2.78	0.64	0.56	56%
2	Data Driven Decision Making	2.89	0.73	0.58	58%
3	Collaboration	2.85	0.73	0.57	57%
4	Open Culture	2.93	0.69	0.59	59%
5	Digital First Mindset	2.85	0.76	0.57	57%
6	Agility and Flexibility	2.84	0.65	0.57	57%
7	Customer Centricity	2.80	0.64	0.56	56%
Total		2.85	0.69	0.57	57%

According to Buvat (2017), dimensions such as Innovation, Data-Driven Decision Making, Collaboration, Open Culture, Digital First Mindset, Agility and Flexibility, and Customer Centricity are important indicators in evaluating an organization's readiness for digital transformation and innovation. Each of these dimensions contributes to creating an organization that is competitive and adaptive to change. Based on the table above, the average score for each digital culture dimension shows a a moderate ranking on the digital culture scale. Each dimension scored between 0.56 and 0.59 with an average score 0.57 and an mean score of 2.85. Based on these results, Perum DAMRI has a low level of digital culture. Employees gave the highest rating to the "open culture" dimension of digital culture, while "innovation" received the lowest score. Moderate scores on the dimensions in the table may reflect the lack of a well-defined digital

strategy in the organization, which hinders progress towards digital maturity. Kane et al., (2015)found that only 15% of companies in the early stages of digital maturity have a clear and coherent digital strategy. In addition, the score may indicate the need for a more proactive leadership role in driving digital transformation and ensuring that digital strategies are implemented effectively across the organization. This is in line with the recent research that conducted by Demirel, (2024) that found that the success of digital transformation is not only determined by technology, but also depends on the development and implementation of a digital mindset among employees. Digital transformation requires strategic thinking, creative approaches, and the establishment of a digital mindset across stakeholders. Managers and business leaders have a key role in selecting and implementing digital tools. Their involvement is critical to designing new roles and routines, while effectively reforming organizational culture and goals. In the early stages, leaders analyze the most relevant local activities to align with broader organizational goals (Müller et al., 2019b)

4.3 Regression Model Analysis

Regression testing is carried out by first determining the extent to which the dependent variable is influenced by the independent variables in this study. Furthermore, the effect of the independent variables simultaneously on the dependent variable was tested using the Anova Test. Finally, the analysis was conducted to see the partial relationship between each independent variable and the dependent variable. In this study, the independent variables include Human Capital Readiness and Digital Culture, while the dependent variable is Employee Performance.

Table 2.3 Regression Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917[a]	.841	.838	2.58270

Based on the table, the R Square value is 0.841 or 84.1%. This means that the Human Capital Readiness and Digital Culture variables together affect Employee Performance by 84.1%. While the rest, 15.9%, is influenced by other factors not included in this study. These factors can be aspects such as motivation, work environment, management, or other things that are not analyzed in this model.

4.4 T Test Analysis

Table 2.4 T-Test of Human Capital Readiness and Digital Culture

Model		Unstandardized Coefficient		Standardized Coefficient	t	Sig
		B	Std. Error	Beta		
1	(constant)	-3.185	1.567		-2.033	.045
	X1	.228	0.13	.855	17.803	.000
	X2	.036	0.17	.105	2.177	.032

The decision to reject or accept the hypothesis with the amount of data is 103 and with a significance level of 5%. Based on the comparison of the t-count and t-table values, the basis for decision making is:

- If t-count < t-table , then H0 is accepted, and Ha is rejected (there is no influence).
- If t-count >t-table , then H0 is rejected, and Ha is accepted (there is an influence).

Then the results of the sig test from Table 2.4 are as follows:

a. There is a significant influence between the Human Capital Readiness (X1) variable on Employee Performance (Y), due to the t-count value (17.803) > t-table (1.9840) and a significance value of 0.000 <0.05. So that there is an influence between variable X1 on Y, or in other words H0 is rejected and Ha is accepted. It means that human capital readiness (such as knowledge, skills and attitudes) has a direct influence on employee performance. The more prepared employees are in this regard, the better work results they achieve.
b. There is a significant influence between the Digital Culture (X2) variable on Employee Performance (Y) because the t-count> t-table value (2.177> 1.9840) and a significance value of 0.00 <0.05. So that there is an influence between the X2 variable on Y, or in other words H0 is rejected and Ha is accepted. It means that digital culture in the company, such as innovation, data-driven decision making, collaboration, open culture, digital first mindset, agility and flexibility as

well as customer centricity is also proven to affect employee performance. If digital culture is well implemented, employee performance tends to improve.

5. Conclusion

The results of this study indicate that all hypotheses proposed are accepted. The first hypothesis (H1) states that human resource readiness has a significant and positive effect on employee performance. The second hypothesis (H2) states that digital culture has a significant and positive relationship with employee performance. Meanwhile, the third hypothesis (H3) states that human resource readiness and digital culture have a significant and positive relationship with employee performance.

This study aims to evaluate the human capital readiness and digital culture, towards employee performance at Perum DAMRI Head Office in facing Industry 4.0 challenges. The survey results reveal that human resource readiness in the knowledge dimension is in the "Not Ready" category, with a gap value of 1.98 and an HDI of 1. This finding emphasizes the need to increase employee capacity in the knowledge dimension to support the successful implementation of technological change in the company. In addition, the hard skills dimension is also still classified as "Not Ready", with a gap value of 1.82 and an HDI of 1. The limitations in this dimension indicate the importance of more intensive training and development of technical skills to increase employee readiness to support technology-based operations.

On the other hand, this study also proved that digital culture has a significant influence on employee performance. Digital culture values such as innovation, data-driven decision-making, digital-first mindset, open work culture, collaboration, flexibility, agility, and customer focus need to be improved and integrated in employee performance appraisal mechanisms. Effective implementation of digital culture can strengthen organizational capabilities in facing increasingly dynamic changes in the Industry 4.0 era.

6. Recommendation

Based on the results of the discussion and conclusions related to the analysis of human resource readiness and digital culture on employee performance at Perum DAMRI Head Office, the authors provide the following recommendations:

a. This research has limitations in scope, where the focus of the research was only on Perum DAMRI Head Office and on the phenomena that occurred during the research period. Therefore, it is recommended for

future researchers to expand the scope of research, both in terms of location and subject, such as covering Perum DAMRI branch units in various regions. In addition, future research can also consider additional relevant variables, such as work motivation, organizational environment, or management policies that can have an influence on employee performance.

b. To increase employees' human capital readiness, Perum DAMRI needs to assess employees' competency mapping, to see the gap between the skills and knowledge possessed by employees and what the company needs. Perum DAMRI can also develop training programs that focus on strengthening knowledge and hard skills related to Industry 4.0 technology by optimizing the use of the FORDIGI platform.
c. To create a digital culture, organizations will need to have the right blend of top-down and bottom-up approaches that engage, empower, and inspire employees to build the culture change together by coding a digital DNA.

The results of this study are expected to be a reference and learning for future researchers to develop more in-depth studies in similar topics, to make a more comprehensive contribution to improving employee performance in an organizational context.

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