



Analysis Influence HRIS System Against HR Efficiency in the Hybrid Working Era

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ABSTRACT

Digital transformation is driving organization optimize management source Power man through implementation of Human Resource Information System (HRIS), especially in the era of hybrid working which demands flexibility and efficiency work. Research This aim analyze the influence of HRIS on efficiency source Power Humans in the hybrid working era. Research use approach quantitative with method survey of 150 selected respondents use purposive sampling technique. Data collection was carried out through questionnaire five-point Likert scale, whereas data analysis using Structural Equation Modeling Partial Least Squares (SEM-PLS) with help SmartPLS 4. Research results show that all over indicator fulfil criteria Validity and reliability. Structural model testing show that HRIS has an impact positive and significant to efficiency source Power man with The path coefficient value is 0.684, the t-statistic is 15.273, and the p-value is 0.000. The R² value of 0.468 indicates that HRIS is capable explains 46.8% of the variation efficiency source Power human. Findings This prove that HRIS implementation is capable increase efficiency human resource management through digitalization of administrative processes, acceleration access information, improvement coordination work, and taking decision data- based research This give implications practical for organization in optimize HRIS implementation for increase efficiency source Power humans in the hybrid working era

INTRODUCTION

Development digital technology has bring very significant changes in various aspect management organizations, including in management source Power human resources (HR). Digital transformation does not only change method organization running business processes, but also changing pattern management power work to be more effective, efficient and responsive to change environment business. Organization moment This sued For capable utilise technology information as part from the human resource management strategy to increase Power compete and maintain productivity (Zulkarnaini & Haholongan, 2025). Digitalization in HR function enables various previous activities done manually switch become a more process fast, accurate, and integrated, so that capable support taking more decisions right. Change the the more real since the development of a more flexible work model flexible, which requires organization For adapt system human resource management with needs of the digital era.

One of the most prominent changes is increasing implementation of hybrid working, namely system work that combines activity working in the office with Work from other locations, such as House or place Work alternatively, in flexible. Working model This develop as form adaptation organization to change environment increasingly modern work dynamic. Hybrid working provides freedom for employee in arrange location Work without reduce not quite enough answer to achievement of organizational targets (Nanjar et al., 2024). In addition increase flexibility, work model this also provides chance to employee For optimize balance between life personal and work, so that expected capable increase satisfaction work and productivity. According to Choudhury et al., (2021) , the implementation of hybrid working is one of the form innovation in management power capable work increase flexibility organization at a time give room for employee For Work in a way more adaptive in accordance with need individual and organization. Although Thus, success implementation system hybrid work does not only determined by the flexibility provided to employees, but also depends on the ability organization in manage administrative processes, communication, coordination, and monitoring human resource performance in general effective. Without support system good management, flexibility Work precisely potential cause constraint in coordination inter-employee, lateness delivery information, as well as difficulty in do evaluation performance.

In condition work that is not Again fully done in a way face face, organization need digital system that is capable support the entire HR management process integrated. Management of employee data spread across various location Work need system information that is capable provide data in a accurate, fast, and easy accessible to all interested parties (Muhammad Reffy Adrian, 2025). Therefore that, utilization technology information become needs that are not can separated from practice modern HR management. One of the current technology This Lots applied by various organization is the Human Resource Information System (HRIS). HRIS is system designed information For help organization in manage all over related activities with source Power man

through an integrated digital platform (Mawarti Mawarti, 2026). Through HRIS, companies can do employee data management, record keeping attendance, management payroll, administration leave, assessment performance, management training and development competence, up to provision various information personnel in real-time in One interconnected systems connected. Integration of various function the make the HR administration process more efficient simple, more fast, and have level greater accuracy tall compared to with manual system. In addition Therefore, the use of HRIS is also capable reduce work administrative nature repetitive so that HR staff can more focus on activities that are strategic, such as development competence employees and planning need power work. With Thus, the use of HRIS is expected capable increase work process efficiency at a time speed up the retrieval process decision based on accurate and up-to-date data.

Efficiency source Power man is one of the indicator important to use For measure success organization in face change pattern work in the digital age. Efficiency No only interpreted as ability organization in produces high output, but is also related with ability utilise source power, time, cost, energy and technology optimally for reach objective organization. Organizations that have level good HR efficiency will capable finish work with more fast, minimize error administration, improve quality internal services, as well as optimize productivity employees. In environment hybrid work, achievements efficiency become the more important Because organization must capable ensure that the entire work process still walk in a way effective although employee Work from different locations. According to Robbins, SP, & Judge, (2021) , productivity and efficiency employee influenced by various factors, including quality system applied work organization, support technology used in implementation work, as well as environment capable work support implementation task optimally. Therefore that, the existence of HRIS is one of the factors that play a role important in guard efficiency work, because system the enable administration, communication, monitoring and evaluation processes performance done in a way integrated without limited by location Work employee.

Besides support HR administration processes, HRIS implementation also has role important in strengthen management knowledge (knowledge management) within organization. Knowledge management is a series of strategies and processes used For obtain, collect, store, organize, develop, and distribute knowledge possessed organization so that can utilized optimally in support achievement objective organization. Stored knowledge with Good will become asset important for company Because can increase quality taking decision, speed up settlement work, reduce occurrence repetition errors, as well as increase effectiveness work in various organizational units. According to Pakiding, (2020) , the application of knowledge management is capable of give various benefit for organizations, including increase business process efficiency, speed up innovation, improving effectiveness of work processes, as well as save cost and time operational. With existence system management good knowledge, organization can ensure that information important No only owned by

individuals certain, but can utilized by all member organization in accordance with need his job.

Knowledge management consists of on two form main, namely tacit knowledge and explicit knowledge. Tacit knowledge is knowledge gained individual through experience, skills, and learning during operate work so that its nature is very personal and relative difficult For documented and transferred to other people. In contrast, explicit knowledge is knowledge that has been documented in form procedure work, guidelines operational, database, reports, and system information so that more easy stored, studied, and disseminated to all over member organization (Pakiding, 2020) . In In its implementation, HRIS functions as a capable medium integrate second type knowledge the to in One system centralized information. Through HRIS, various information about policy company, procedures work, competency data employees, results evaluation performance, up to documentation training can stored and accessed in a way more easily by the parties who need it. This integration No only increase availability information, but also supports the learning process organization, accelerating knowledge transfer between employees, as well as help organization create a more efficient work process efficient and sustainable. With Thus, the existence of HRIS does not only functioning as tool HR administration, but also become means strategic in optimize management knowledge in the end contribute to improvement efficiency source Power man in a way overall.

Various company large companies in Indonesia, such as PT Unilever Indonesia, PT United Tractors, and PT Telkom Indonesia, have show success in implementing knowledge management as part of an organization's digital transformation strategy. Implementation of knowledge management in companies the No only aim For documenting knowledge possessed organization, but also for ensure that knowledge the can accessed, shared, and utilized by all employee in a way effective. Management integrated knowledge with digital system capable speed up the distribution process information, improve coordination inter-unit work, and reduce dependence to knowledge that only owned by individuals certain. With Thus, the organization capable create a more efficient work process efficient, improve productivity employees, as well as strengthen Power competition company in face change environment growing business dynamic. Success implementation of knowledge management show that management information based technology own a very important role in support effectiveness management source Power man at a time increase efficiency operational organization (Haryanto, 2015) .

Findings the in line with research conducted by Pakiding, (2020) at PT Asuransi Sinar Mas which shows that knowledge management strategy provides influence positive to efficiency Work employees. Through implementation of the strategy, the company capable speed up access to required information in implementation work, improve accuracy taking decisions, and create a more efficient work process systematic and structured. In addition that, availability documented information with good also makes it easier employee in get necessary knowledge without must rely on informal communication or experience individual certain conditions the in a way No direct capable reduce

time search information, minimize error in implementation work, as well as increase effectiveness coordination between parts. Therefore that, success implementation of knowledge management shows that management integrated information through digital technology can be one of factor supporters improvement efficiency Work employee (Pakiding, 2020) .

In context management source Power modern humans, the effectiveness of the Human Resource Information System (HRIS) is not only determined by his ability in managing administrative data personnel, but also by their abilities in supports the process of storage, management and distribution knowledge within organization. HRIS allows various information regarding employee data, policies company, procedures work, results evaluation performance, to development programs competence stored in One integrated system so that can accessible in a way quickly by the party in need. Availability accurate and easy information accessible the No only speed up settlement jobs, but also improve quality coordination, communication, and taking decision in environment increasing work digitalized. With Thus, HRIS implementation is one of the instrument strategic capable support creation efficiency source Power humans, especially in organizations that implement system hybrid work.

Digital transformation in management organizations are also increasingly strengthened by developments various technology supporting technologies, such as the Internet of Things (IoT) and data analytics. The development of second technology the allows organization collect, process, and utilize real -time data to support operational and decision-making processes more decisions fast as well as more accurate (Gupta, D., & Kulkarni, 2023) . Integrated data utilization give organization ability For monitor various activity business in a way more effective, identifying problem since early, and develop strategies based on information of a nature actual. Besides that, integration digital technology with system management organizations are also capable increase productivity, optimizing utilization source power, as well as produce more decisions appropriate through utilization comprehensive data analysis (Lampinen, M., & Mäntyneva, 2022) . Although research the more Lots focus on improving efficiency operational organization in a way general, concept utilization digital technology own strong relevance with HRIS implementation. In In practice, HRIS utilizes the same principle, namely integrate data, present information in a way fast, and supportive taking decision data -based so that capable increase effectiveness and efficiency management source Power humans, especially in organizations that implement pattern hybrid work.

On the other hand, the implementation digital technology in system hybrid work also brings various challenges that need to be overcome become attention organization. Increasing dependence tall to technology information cause employee must interact with various digital applications and systems in operate activity everyday. If condition the No supported by an easy system used, adequate infrastructure, and ability good user, then use technology precisely potential causes technostress, digital fatigue, as well improvement burden work that can influence effectiveness implementation work (Spagnoli et al., 2020) . Condition the show that success digital transformation is not only determined by

availability technology, but also by readiness organization in manage changes that occur. Therefore that, HRIS implementation must be supported by infrastructure adequate technology, competence adequate users, guaranteed data security, and integration a good system so that all HRIS functions can utilized optimally. With support mentioned, HRIS does not only play a role as system administration personnel, but also as means strategic capable increase efficiency source Power man through more work processes fast, accurate, integrated, and adaptive to need organizations in the hybrid working era.

Based on description Therefore, the implementation of the Human Resource Information System (HRIS) is an important strategy. in support digital transformation of management source Power humans in the era of hybrid working. The use of HRIS is expected capable increase efficiency Work through simplification of administrative processes, convenience access information, improvement coordination between employees, as well as taking more decisions fast and data -driven. Therefore that, research This aim For analyze the influence of the Human Resource Information System (HRIS) on efficiency source Power Humans in the hybrid working era. Research results expected can give contribution to development study management source Power man digital-based at the same time become reference for organization in optimize HRIS implementation as effort increase efficiency Work employees in the environment increasing work flexible and digitalized.

LITERATURE RIVIEW

Human Resource Information System (HRIS)

Human Resource Information System (HRIS) is system information based designed technology For support management all over activity source Power man in a way integrated. HRIS combines function human resource management with technology information so that various administrative processes personnel can done in a way more fast, accurate, and efficient. System This allows organization managing employee data digitally start from the recruitment process, employee data recording, absence, payroll, assessment performance, training, to development career in one platform that is mutually connected.

According to Michael J. Kavanagh and Richard D. Johnson, (2020) , HRIS is combination between source Power humans, technology information and procedures organization used For collect, store, process, and distribute information Human resources for use support the decision-making process decision. With the existence of HRIS, the organization capable get accurate and real-time information so that human resource management becomes more effective.

Opinion the reinforced by Dessler, (2020) who explains that HRIS is system computerization used For manage all employee data so that capable increase efficiency administration as well as support the planning process source Power man in a way strategic. Therefore that, HRIS implementation is not only functioning as tool administration, but also as means supporters taking decision data-driven decision making.

Objectives of Human Resource Information System (HRIS)

The purpose of HRIS implementation is For increase quality management source Power man through utilization technology information. In general HRIS objectives include:

1. Increase efficiency HR administration;
2. Provide human resources information fast and accurate;
3. Support taking decision data -driven;
4. Increase quality service hr function;
5. Reduce error administration;
6. Support digital transformation of organizations.

According to Michael J. Kavanagh and Richard D. Johnson, (2020) , objectives The main purpose of HRIS is provide quality information so that management capable take more decisions effective about management source Power man.

Functions of Human Resource Information System (HRIS)

In In practice, HRIS has various function important in organizations, including:

- a. Employee data administration;
- b. Management absence;
- c. Payroll;
- d. Recruitment and selection;
- e. Evaluation performance;
- f. Training and development;
- g. Management compensation;
- h. HR reporting;
- i. HR data analysis.

Functions the allows organization reduce work administrative which is manual in nature so that HR staff can more focus on activities strategic.

Human Resource Information System (HRIS) Indicators

In study This, HRIS is measured through a number of indicator following.

- a. Quality system (System Quality)
- b. Quality information (Information Quality)
- c. Convenience Ease of Use
- d. Speed access information
- e. Data integration
- f. Data security

Indicator the Lots used in study about implementation system HR information.

Efficiency Source Power Man

A. Understanding HR Efficiency

Efficiency source Power man is ability organization in utilise power Work optimally for produce maximum output with use source minimum power possible. Efficiency No only related with productivity work, but also concerns ability organization in save time, costs, energy, and work processes without reduce quality results work.

According to Robbins, SP, & Judge, (2021) , efficiency Work influenced by quality system work, utilization technology, motivation, and environment supportive work implementation task in a way effective. An organization that is capable of manage factors the will own level greater productivity tall compared to organizations that are still using less work processes integrated.

In the digital era, HR efficiency is one of the indicator important in measure success digital transformation of organizations. Utilization technology information, especially HRIS, allows company reduce work administrative, speed up channel information, improve data accuracy, as well as speed up the retrieval process decision so that efficiency Work can Keep going improved.

B. Factors that Influence HR Efficiency

A number of influencing factors HR efficiency includes:

1. Competence employee;
2. Technology information;
3. System Work;
4. Leadership;
5. Communication organization;
6. Culture organization;
7. Training;
8. Motivation Work.

In study this, the factors that become attention main is use of HRIS as technology supporters human resource management.

C. Indicator HR Efficiency

Human resource efficiency can measured through indicator following.

1. Efficiency time Work.
2. Productivity Work.
3. Accuracy settlement work.
4. Subtraction error administration.
5. Efficiency cost operational.
6. Speed taking decision.

Hybrid Working

1. Understanding Hybrid Working

Hybrid working is system work that combines work from office (work from office) and work from other locations such as home (work from home) flexible. Working model This give freedom to employee in determine location Work in accordance with need jobs and policies organization.

According to Choudhury et al., (2021) , hybrid working provides more flexibility tall compared to system Work conventional so that capable increase satisfaction work, productivity, and balance life Work employee if supported by adequate digital technology.

2. Characteristics of Hybrid Working

1. Characteristics of hybrid working include:
2. Flexibility location Work;
3. Flexibility time Work;
4. Use digital technology;
5. Virtual collaboration;
6. Online communication;

7. Evaluation based results Work.

3. The Relationship Between Hybrid Working and HRIS

The implementation of hybrid working requires organization own system information that is capable manage HR activities without limited by location work. In condition In this case, HRIS functions as center data management, communication, performance monitoring, and digital HR administration so that the entire HR management process remains walk effective although employee Work from various location. Therefore Therefore, HRIS implementation is one of the factor supporters success implementation of hybrid working.

The Relationship Between Human Resource Information System (HRIS) and HR Efficiency

Human Resource Information System (HRIS) is one of the form implementation technology information that plays a role important in increase effectiveness and efficiency management source Power humans in the organization. Along development digital transformation, HRIS does not Again viewed only as system administration personnel, but has develop become instrument strategic that supports the planning, organizing, controlling, and taking decision in human resource management. According to Michael J. Kavanagh and Richard D. Johnson, (2020) , HRIS integrates functions management source Power man with technology information so that all data and information personnel can managed in a way systematic, accurate, and easy accessible to all stakeholders. The integration allows organization reduce manual work processes at once increase quality service HR function.

Efficiency source Power man is ability organization in utilise power work, time, costs, and resources Power other optimally for produce maximum performance. Organizations that have level high HR efficiency capable finish various activity Work with more fast, more accurate, and use source more power A little compared to with organizations that are still apply system management conventional. Robbins, SP, & Judge, (2021) explain that productivity and efficiency Work influenced by various factors, such as quality system work, support technology, competence employees, as well as environment supportive work achievement objective organization. Therefore that, utilization technology information, especially HRIS, is one of the factors that are capable increase efficiency management source Power man.

HRIS implementation provides various benefit for organization in operate functions human resource management system This capable automate various activity administration, such as employee data management, record keeping attendance, payroll, recruitment, assessment performance, management training, up to compilation HR reports in automatic. Automation the capable reduce work administrative nature repetitive tasks, minimizing error recording (human error), as well as speed up settlement work so that source Power man can more focused on activities that are strategic. Besides In addition, HRIS also provides information in real-time, so that leadership organization can obtain the required data in a way fast For support the decision-making process more decisions accurate and data -based (Dessler, 2020) .

In the era of hybrid working, HRIS implementation becomes the more important. Because organization must be capable of managing activity source Power man without being limited by location work. System hybrid work demands organization own system information that is capable of connecting employees who work from office and from other locations simultaneously. HRIS allows various administrative processes personnel done online, such as recording attendance, submission leave, delivery information company, evaluation performance, up to communication between employee with HR department. According to Choudhury et al., (2021), success system hybrid work is greatly influenced by capabilities organization in utilizing digital technology for coordination, communication, and productivity employees. Therefore that, the existence of HRIS is one of the factors capable supporters ensure the entire HR management process remains walk in a way effective although employee Work from different locations.

Besides increase efficiency administration, HRIS also contributes to improvement quality management information and knowledge in organization. System This allows all data regarding competence employee, history training, results evaluation performance, as well as policy organization stored in one integrated database. Availability accurate and easy information accessible will speed up the coordination process, reduce duplication work, as well as increase quality taking decision. Pakiding, (2020) explain that implementation of knowledge management supported by the system information capable increase efficiency Work through acceleration access information, management more knowledge systematic, as well as improvement effectiveness of business processes. With Thus, HRIS does not only functioning as tool HR administration, but also as a supporting medium management knowledge organization in a way sustainable.

Various study the previous also shows that HRIS implementation has connection positive with improvement efficiency source Power man. The use of HRIS is capable speed up business processes, improve data accuracy, reducing cost administration, as well as repair quality service HR function through utilization integrated digital technology (Michael J. Kavanagh and Richard D. Johnson, 2020). However Thus, the effectiveness HRIS implementation is not only determined by sophistication the technology used, but is also influenced by readiness organization, competence users, support management, data security, and ability organization in integrate system the to in business processes in a way comprehensive. If factors the can fulfilled, then HRIS implementation will give significant contribution to improvement efficiency management source Power man.

Based on description said, can understood that there is close relationship between implementation of Human Resource Information System (HRIS) with efficiency source Power humans. The more Good quality HRIS implementation in something organization, increasingly big opportunity organization For increase efficiency administration, speed up settlement work, improve accuracy information, as well as support taking more decisions effective. In In the context of hybrid working, the existence of HRIS becomes the more important Because

capable support coordination, communication, and human resource management integrated without limited by location work. Therefore that, in a way theoretical can assumed that the Human Resource Information System (HRIS) has an influence positive to efficiency source Power man.

METHODOLOGY

Study This use approach quantitative with method survey For analyze the influence of the Human Resource Information System (HRIS) on efficiency source Power humans in the era of hybrid working. Approach quantitative chosen Because capable test connection intervariable in a way objective based on the numerical data obtained through distribution questionnaire to respondents. According to Creswell, JW, & Creswell, (2023) , research quantitative aim test theory through measurement variables and analysis statistics so that connection intervariable can explained in a way empirical.

The research design used is study explanatory research because aim explain influence variables independent to variables dependent. Research done with cross-sectional approach, namely Data collection was carried out on one time certain without observation repetitive to respondents.

Population in study This is all over employees in the organization or companies that have implementing Human Resource Information System (HRIS) and apply system hybrid working. Data collection techniques sample using purposive sampling, namely technique determination sample based on criteria certain customized with objective research. Criteria respondents includes: (1) employees still using HRIS in activity his work, (2) has work at least one years, and (3) work with hybrid working system.

Amount samples used in study This as many as 150 respondents. The number the has fulfil recommendation Hair, JF, et., al (2022) who stated that analysis using Partial Least Squares Structural Equation Modeling (PLS-SEM) can done with amount adequate sample in accordance complexity of the research model. With a simple research model and a large number of indicator as much as six indicators, number sample as many as 150 respondents assessed has fulfil condition For produce stable parameter estimates and have level accuracy good analysis.

Data used in study This consists of on primary data and secondary data. Primary data is obtained through distribution questionnaire to respondents use five- point Likert scale, namely 1 = very much disagree agree, 2 = no agree, 3 = neutral, 4 = agree, and 5 = strongly agree. While that is secondary data obtained from various source like books, articles scientific, journal national and international, as well as other relevant documents with topic study.

Variables independent in study This is the Human Resource Information System (HRIS), whereas variables dependent is efficiency source Power human. Second variables measured use six indicator research that is compiled based on study theory and research previous. All indicator measured use five- point Likert scale For know perception respondents to HRIS implementation and level efficiency source Power humans in organizations that implement system hybrid work.

Before done data analysis, instruments study tested using validity tests and reliability tests. Validity tests aim For know ability every indicator in measure constructs being studied. Indicators declared valid if own outer loading value ≥ 0.70 and Average Variance Extracted (AVE) value ≥ 0.50 . Next, the reliability test done use Cronbach's Alpha and Composite Reliability values, with criteria value ≥ 0.70 indicates that instrument study own level good consistency.

Data analysis was performed using Structural Equation Modeling - Partial Least Squares (SEM-PLS) with help device soft SmartPLS 4. Stages analysis covering outer model evaluation, which consists of on validity test convergent, validity discriminant, and reliability construct. Next done evaluation of the inner model through testing R^2 value, Effect Size (f^2), Predictive Relevance (Q^2), and testing hypothesis use bootstrapping technique. Hypothesis study stated accepted if t-statistic value > 1.96 and p-value < 0.05 , which indicates that the Human Resource Information System (HRIS) has an influence in a way significant to efficiency source Power humans in the hybrid working era.

RESULT

Analysis Statistics Descriptive

Analysis descriptive done For know description general perception respondents to Human Resource Information System (HRIS) implementation and efficiency Source Power Humans in the hybrid working era. Analysis results show average value (mean) of each indicator is above 3.70 so that indicates that respondents give biased assessment positive to second variables study.

Table 1. Statistics Descriptive Variables Study

Indicator	Mean	Standard Deviation	Category
X1	3.81	0.77	Tall
X2	3.84	0.81	Tall
X3	3.80	0.73	Tall
X4	3.82	0.77	Tall
X5	3.85	0.71	Tall
X6	3.79	0.71	Tall
Y1	3.88	0.76	Tall
Y2	3.85	0.78	Tall
Y3	3.87	0.74	Tall
Y4	3.84	0.72	Tall
Y5	3.87	0.73	Tall
Y6	3.89	0.71	Tall

Based on Table 1, all indicators in the Human Resource Information System (HRIS) variable have average value between 3.79–3.85. The highest average value found in the X5 indicator (Mean = 3.85), whereas mark lowest found in the X6 indicator (Mean = 3.79). Findings the show that respondents evaluate HRIS implementation in organizations has walk with good, especially in support the administration and provision processes information in a way fast. On the variable Efficiency Source Power Humans, all indicator get average value between 3.84–3.89. The highest average value found in the Y6 indicator (Mean =

3.89), whereas mark lowest is on the Y4 indicator (Mean = 3.84). This is show that respondents feel existence improvement efficiency Work after organization implementing HRIS in the system hybrid work.

Besides that, the whole mark standard deviation is below 1.00 so that show that answer respondents relatively homogeneous and not there is difference overly exaggerated perception big among respondents.

Analysis results descriptive show that HRIS implementation obtained an overall average as big as around 3.82, which includes in category high. This indicates that respondents evaluate HRIS system has capable support management source Power man through provision fast information, convenience data access, integration of administrative processes, and improvement efficiency implementation task.

HRIS implementation is also assessed help organization in speed up the administrative process staffing, reducing error data recording, and improving effectiveness communication between HR department with employees in the environment hybrid work.

Analysis results descriptive show that HRIS implementation obtained an overall average as big as around 3.82, which includes in category high. This indicates that respondents evaluate HRIS system has capable support management source Power man through provision fast information, convenience data access, integration of administrative processes, and improvement efficiency implementation task.

HRIS implementation is also assessed help organization in speed up the administrative process staffing, reducing error data recording, and improving effectiveness communication between HR department with employees in the environment hybrid work.

Evaluation of Measurement Model (Outer Model)

The purpose of outer model evaluation is For know to what extent each indicator capable reflect construct being measured. According to Hair et al. (2022), a indicator stated fulfil validity convergent if own outer loading value ≥ 0.70 . The more tall outer loading value, the more big contribution indicator in explain latent variables.

Table 2. Outer Loading Values

Variables	Indicator	Outer Loading	Information
Human Resource Information System (HRIS)	X1	0.772	Valid
	X2	0.808	Valid
	X3	0.784	Valid
	X4	0.750	Valid
	X5	0.755	Valid
	X6	0.806	Valid
HR Efficiency	Y1	0.788	Valid
	Y2	0.823	Valid
	Y3	0.785	Valid
	Y4	0.779	Valid
	Y5	0.785	Valid

	Y6	0.761	Valid
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Based on Table 2, all indicators in the Human Resource Information System (HRIS) variable have outer loading values between 0.750 and 0.808. The highest value found in the X2 indicator (0.808), whereas mark lowest found in the X4 indicator (0.750). Because all mark be on top minimum limit of 0.70, then all over HRIS indicators are stated fulfil validity convergent and feasible used For measure HRIS construct.

the variable Efficiency Source Power Humans, all indicators also show outer loading value is in the range of 0.761–0.823. The Y2 indicator has mark highest of 0.823, while Y6 indicator has mark lowest of 0.761. All indicator fulfil criteria validity convergent Because own value above 0.70.

With so, no there is necessary indicators eliminated. All indicator capable represent each construct individually adequate and able to be continued to stage testing reliability construct and Average Variance Extracted (AVE).

Reliability and Validity Test Convergent

After all indicator declared valid based on outer loading value, stage next is evaluate reliability and validity convergent construct. Testing done use three parameters, namely Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE). According to Hair et al. (2022), a construct stated reliable if own Cronbach's Alpha and Composite Reliability values are higher big from 0.70, whereas validity convergent fulfilled if AVE value is higher big from 0.50.

Table 3. Results of Reliability and Validity Tests Convergent

Variables		Cronbach's Alpha	Composite Reliability	AVE	Information
Human Resource Information System (HRIS)		0.865	0.899	0.598	Reliable and Valid
Efficiency Source Power Man		0.876	0.906	0.617	Reliable and Valid

Based on Table 3, Human Resource Information System (HRIS) variables obtained Cronbach's Alpha value is 0.865, while variables Efficiency Source Power Man get value 0.876. Second mark the be on top minimum limit of 0.70, so that show that all over indicators for each variable own level good internal consistency. With Thus, the instrument study stated reliable and capable produce consistent measurement.

1. Interpretation of Composite Reliability

Test results show that The Composite Reliability value for the HRIS variable is 0.899, while for the variable Human resource efficiency is 0.906. Second mark the has fulfil criteria required by Hair et al. (2022), namely more big from 0.70. This is show that every construct own excellent reliability in explain indicators the compiler.

Composite Reliability values approaching 1 indicate that all over indicator capable represent latent variables in consistent so that the measurement model own level high reliability.

2. *Average Variance Extracted (AVE) Interpretation*

The Average Variance Extracted (AVE) value for the Human Resource Information System (HRIS) variable is 0.598, while variables Human resource efficiency gains value 0.617. Second mark the more big from minimum limit of 0.50, so that fulfil condition validity convergent.

This matter show that each construct capable explain more from 50% variance the indicators, whereas the rest influenced by other outside factors construct research. With Thus, all indicator own good ability in measure the variable it represents.

Validity Test Discriminant Validity

Validity discriminant aim For ensure that every construct in study truly different with construct others. Testing validity discriminant done use two approach, namely Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT). According to Hair et al. (2022), a construct stated fulfil validity discriminant if root square Average Variance Extracted (AVE) value is higher big compared to correlation between construct. Besides that, the HTML value must be is below 0.90, or more conservative below 0.85, for show that each construct own adequate difference.

1. *Fornell-Larcker Criterion*

The diagonal values in Table 4 are root square from AVE value of each construct, whereas off - diagonal values indicate correlation between construct.

Table 4. Fornell-Larcker Criterion Test Results

Variables	HRIS	HR Efficiency
Human Resource Information System (HRIS)	0.773	0.684
HR Efficiency	0.684	0.785

Based on Table 4, values root The squared AVE on the Human Resource Information System (HRIS) variable is 0.773, while on the variable Human resource efficiency is 0.785. Second mark the more big compared to mark correlation between construct of 0.684.

Findings the show that each variable own more capabilities Good in explain the indicators Alone compared to explain construct other. With thus, based on criteria Fornell-Larcker, all construct has fulfil validity discriminant.

2. *Heterotrait-Monotrait Ratio (HTMT)*

Besides use Fornell-Larcker, validity discriminants are also evaluated via HTMT. Approach This considered more sensitive in detect difference between construct compared to method traditional.

Table 5. Values of HTMT

Variables	HRIS	HR Efficiency
Human Resource Information System (HRIS)	–	0.742
HR Efficiency	0.742	–

Test results show that HTMT value between Human Resource Information System (HRIS) and HR Efficiency variables of 0.742. This value be under limit maximum 0.90 as recommended by Saputra & Budhijana, (2024) . Therefore that, second construct stated own validity good discriminant.

The HTMT value that is far below limit maximum show that HRIS variables and HR Efficiency are two different constructs in a way conceptual although own positive relationship in the research model. This is indicates that every variables measure different and different concepts happen overlapping overlap measurement (overlap) between construct.

Structural Model Evaluation (Inner Model)

The evaluation of the structural model (inner model) aims For know research model capabilities in explain connection between latent variables. Evaluation done through testing R Square value (R^2), Effect Size (f^2), Predictive Relevance (Q^2), as well as testing hypothesis use Bootstrapping method. According to Hair, JF, et., al (2022) , values the used For evaluate strength of the model as well as significance connection intervariable.

Analysis results show that R Square (R^2) value for variables Efficiency Source Power Man of 0.468, while The Adjusted R Square value is 0.465. This value show that implementation of Human Resource Information System (HRIS) is capable explains 46.8% of the variation efficiency source Power humans in the era of hybrid working. Meanwhile that, amounting to 53.2% variation HR efficiency is influenced by other factors outside the research model, such as culture organization, leadership, motivation work, competence employees, as well as environment work. Based on Hair et al.'s (2022) criteria, the R^2 value including in category moderate, so that can concluded that HRIS has sufficient ability Good in explain change HR efficiency.

Next, the results Effect Size (f^2) testing shows mark of 0.880. This value be on top limit of 0.35, so that including in category influence large effect. This is show that Human Resource Information System (HRIS) variables provide strong contribution to improvement efficiency source Power human beings. In other words, the existence of HRIS has role important in support effectiveness implementation work, speed up administrative processes, improve accuracy employee data management, as well as expedite coordination work in the environment hybrid work.

The results of the Predictive Relevance (Q^2) test obtained mark of 0.281. This value more big from zero ($Q^2 > 0$), so that show that the research model own ability good prediction to endogenous variables. With Thus, the model that was built capable predict connection between HRIS implementation and efficiency source Power man in a way adequate.

Testing hypothesis done use bootstrapping method. Analysis results show that connection between Human Resource Information System (HRIS) and Efficiency Source Power Man own coefficient path coefficient of 0.684. The value of the path coefficient the show direction a positive relationship, which means the more Good HRIS implementation, then the more tall level efficiency source Power humans in organizations that implement system hybrid work.

Besides that, the result testing produce the t-statistic value is 15.273, which is more big from mark critical 1.96, and p-value of 0.000, which is more small from level significance of 0.05. The results show that the influence of the Human Resource Information System (HRIS) on efficiency source Power man influential positive and significant. With Thus, the hypothesis research that states that the Human Resource Information System (HRIS) has an influence positive to efficiency source Power humans in the hybrid working era can accepted.

In a way overall, results structural model evaluation show that the research model own sufficient ability Good in explain connection between variables. HRIS implementation is proven give significant contribution to improvement efficiency source Power human, good through improvement speed of administrative process, convenience access information, effectiveness communication, as well as optimization employee data management. Findings This show that utilization of HRIS is one of the factor important in support success human resource management in organizations that implement system hybrid work.

DISCUSSION

Research result show that the Human Resource Information System (HRIS) has an influence positive and significant to efficiency source Power humans in the era of hybrid working. This proven through results SEM-PLS analysis shows the path coefficient value is 0.684, the t-statistic is 15.273, and the p-value is 0.000. In addition that, the R Square value of 0.468 shows that HRIS implementation is capable explains 46.8% of the variation efficiency source Power humans, whereas the rest influenced by other factors outside the research model. The Effect Size (f^2) value of 0.880 indicates that HRIS provides great influence to human resource efficiency, whereas Q^2 value of 0.281 indicates that the model has ability good prediction.

Findings the show that HRIS implementation is capable increase efficiency management source Power man through digitalization of administrative processes, provision information in real-time, as well as integration various activity human resource management in One system. In the era of hybrid working, organizations face challenge in manage employees who work from location different so that needed system information that is capable speed up coordination, communication, and decision making decisions. HRIS

implementation enables the administrative process personnel, attendance, payroll, assessment performance, up to employee data management done in a way more fast, accurate, and efficient. Conditions the impact on increasing productivity organization as well as optimization use time and resources Power. Research result This in line with study Falestina Lase and Forman Halawa, (2025) who found that Human Resource Information System (HRIS) implementation provides impact positive to efficiency human resource management in the digital era. Research the explain that digitalization of HR management processes through HRIS is capable speed up service administration, improve data accuracy, reducing manual work, as well as support taking decision based more information accurate. Similarity results the show that HRIS utilization is not only increase effectiveness personnel data management, but also becomes one of the factor important in increase efficiency organization in a way overall.

Findings study this also supports study Sinambela & Depari, (2025) who explains that digital transformation in management source Power man own role strategic in increase performance employees in the work era hybrid. According to study mentioned, utilization digital technology makes it possible organization build system more work flexible, improve collaboration between employees, speed up communication, as well as make things easier supervision to implementation work. Research results This strengthen findings the with show that HRIS is one of the technology that is capable support success implementation of hybrid working through improvement efficiency human resource management.

Study this is also consistent with results study Giovany & Almigo, (2026) about HRIS implementation as system supporters HR management at PT X. Research the show that HRIS is capable increase effectiveness of administrative processes personnel, speed up access information, reduce duplication work, as well as assist the HR division in do data management more systematic. The results show that success HRIS implementation is not only determined by sophistication technology used, but also by capabilities organization in integrate system the to in business processes daily.

Besides that, the result study This in line with study Supardi & Santoso, (2025) about HRIS implementation at PT Bio Farma West Java. Research the conclude that the use of HRIS is capable of increase efficiency HR administration through automation of work processes, reduction use manual documents, speed up service processes personnel, as well as improvement accuracy information. Findings the support results study this is what shows that HRIS implementation provides contribution real to improvement efficiency source Power humans, especially in organizations that implement system hybrid work.

From the side theory, results study This support view Robbins, SP, & Judge, (2021) stated that that effectiveness organization influenced by quality system work, utilization technology, as well as ability organization in manage source Power man in a way effective. HRIS implementation as part from digital transformation enables organization build system more work structured, accelerated flow information, as well as support taking decision data -based.

With Thus, the use of HRIS is one form innovation capable management increase efficiency organizations in the digital era.

Although Thus, the R Square value of 46.8% indicates that HRIS implementation is not the only one influencing factors efficiency source Power man. There is still 53.2% variation HR efficiency is influenced by factors others, such as employee digital competency, culture organization, style leadership, motivation work, quality training, readiness technology, as well as policy organization in apply system hybrid work. Therefore Therefore, HRIS implementation is necessary supported by the increase capacity source Power human, strengthening infrastructure technology information, as well as policy capable organization push utilization technology optimally.

In a way overall, research This prove that the Human Resource Information System (HRIS) is one of the factor important in increase efficiency source Power humans in the era of hybrid working. Digitalization HR management through HRIS is capable increase speed service administration, repair data accuracy, making it easier coordination between employees, as well as support taking more decisions fast and precise. Findings This strengthen results research previously at a time give proof empirical that investment organization in the HRIS system is an effective strategy For increase efficiency management source Power man in the middle development pattern increasing work flexible and based technology.

CONCLUSIONS AND RECOMMENDATIONS

Study This aim For analyze the influence of the Human Resource Information System (HRIS) on efficiency source Power humans in the era of hybrid working. Based on results analysis using Structural Equation Modeling – Partial Least Squares (SEM-PLS), obtained results that HRIS has an impact positive and significant to efficiency source Power human beings. This is show that the more Good HRIS implementation in organization, then the more tall level efficiency source Power human resources produced. The implementation of HRIS is proven capable support digitalization of administrative processes, improving accuracy data management, speed up access information, making things easier coordination work, and support taking decision in a way more effective on the environment work that applies hybrid working system.

The results of the model evaluation show that HRIS has sufficient ability Good in explain variation efficiency source Power humans, as well as fulfil all over criteria validity, reliability, and feasibility of the model. Findings This strengthen results study previously stated that HRIS implementation is an important strategy in support digital transformation of management source Power human beings. Therefore that, organization need optimize utilization of HRIS through development integrated system, improvement employee digital competency, as well as provision infrastructure adequate technology so that the benefits of HRIS can be realized felt in a way maximum in increase efficiency work in the hybrid working era.

Although Thus, research This Still own limitations Because only test influence One variables independent, namely the Human Resource Information System (HRIS), towards efficiency source Power human beings. Therefore that, research furthermore recommended For develop research models with add variables others, such as digital competence, digital leadership, culture organization, employee engagement, satisfaction work, as well as readiness technology organization, so that can give greater understanding comprehensive about factors that influence efficiency source Power humans in the hybrid working era.

FURTHER STUDY

This study has limitations; therefore, further research on the topic of "Analyzing the Influence of HRIS Systems on HR Efficiency in the Hybrid Work Era" is needed to refine the current study and broaden the scope of research in this area.

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