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## IMPACT OF HRIS STRATEGY ON HRIS EFFECTIVENESS

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**Abstract** 

**Purpose** – Recent development in disruptive technologies has enabled HR to rely more on Human Resource Information System (HRIS) to help with talent acquisition and development. At the same time post covid hybrid and work-from-home work culture, providing seamless HR experience to employees is proving to be a challenge. To bridge this gap, this study aims to propose to evaluate the effect of having a clear HRIS strategy on overall HRIS effectiveness as well as benefits to the organization. Moreover, this paper uses various aspects of HRIS strategy and its overall impact to explain the effect on overall HRIS effectiveness.

**Design/methodology/approach** – The research was conducted using a survey of 99 participants and descriptive analysis and, regression was used to analyse the data.

**Findings** – The findings of the study suggest that HRIS strategy has a significant positive impact on HRIS effectiveness. These findings have practical implications for HR professionals and organizations, highlighting the importance of developing and implementing effective HRIS strategies.

**Research limitations/implications** – This paper contributes to the understanding of the impact HRIS Strategy has on the effectiveness of HRIS and which are the contributing factors.

Originality/value – The findings extend the discussions regarding the impact a clearly defined HRIS strategy has on overall HRIS effectiveness and how the findings can be used by the organization to focus on making their HRIS more effective.

Keywords HRIS, HRIS strategy, HRIS effectiveness, HR, IS, IS effectiveness.



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#### Introduction

The need for a Human Resource Information System (HRIS) strategy in an organization has become increasingly important in today's fast-paced and competitive business environment. The traditional manual approach to managing HR processes is no longer sufficient to keep up with the demands of an evolving workforce. HRIS is a software solution that helps

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organizations manage their human resource processes and data more efficiently, accurately, and cost-effectively.

Human Resource Information Systems (HRIS) is an important tool for HR professionals to manage employee data and support decision-making. Still, Human Resource Information System (HRIS) effectiveness has always been a point of debate in many organizations with HR and users having a different point of view. Over the years, organizations have been investing in HRIS to improve their HR processes and practices. HRIS can automate administrative tasks such as payroll, recruitment, and training, enabling HR professionals to focus on more strategic tasks such as talent management, performance management, and employee engagement. Moreover, HRIS can provide real-time data and analytics, enabling organizations to make datadriven decisions. However, the effectiveness of HRIS depends on how well it is aligned with the organization's HRM goals and objectives.

HRIS strategy refers to the process of aligning HRIS with the organization's Human Resource Management (HRM) goals and objectives to maximize its impact. However, the successful implementation and utilization of HRIS require a well-developed HRIS strategy. HRIS strategy refers to the overall plan and approach for using HRIS to achieve organizational goals and objectives (Ruël et al., 2004). A well-developed HRIS strategy can help organizations to achieve higher levels of HRIS effectiveness. This study aims to investigate the impact of HRIS strategy on HRIS effectiveness.

The need for an HRIS strategy is even more critical in large organizations, where managing HR processes manually can be overwhelming and prone to errors. With an HRIS in place, organizations can automate routine HR tasks, freeing up HR personnel to focus on more strategic initiatives such as talent management and employee development.

The COVID-19 pandemic has brought about unprecedented changes in the workplace, with organizations across the world transitioning to hybrid work arrangements, remote work, and work-from-home models. The adoption of these work models has highlighted the need for organizations to have effective human resource information systems (HRIS) strategies in place. This aspect is now forcing the organization to step back and relook at its HRIS, especially the HRIS strategy aspect.

A study by Kavanagh and Johnson (2015) found that HRIS strategy has a significant impact on HRM outcomes such as employee engagement and retention. The study suggested that HRIS strategy should be aligned with the organization's HRM goals and objectives and should be integrated with other HRM practices to achieve its intended outcomes. Moreover, the HRIS strategy should be flexible to adapt to changing HRM needs.

The new work order has forced organizations to rethink their HRM strategies, with many turning to HRIS to facilitate remote work and maintain business continuity. HRIS can automate administrative tasks, such as payroll, recruitment, and training, enabling HR professionals to focus on more strategic tasks such as talent management, performance management, and employee engagement. Moreover, HRIS can provide real-time data and analytics, enabling organizations to make data-driven decisions even in a remote work environment.

However, the effectiveness of HRIS in the new work setting depends on how well it is aligned with the organization's HRM goals and objectives. The HRIS strategy should take into account the unique challenges and opportunities of a hybrid or remote work setting. For example, the HRIS strategy should ensure that employees have access to HRIS systems and information from remote locations securely. Additionally, the HRIS strategy should provide remote employees with the necessary tools and resources to effectively manage their work, such as self-service HRIS portals, chatbots, and online learning platforms.

Several studies have highlighted the importance of HRIS strategy in facilitating hybrid or remote work. For example, a study by Loo (2021) found that an effective HRIS strategy is crucial in supporting remote work and maintaining employee engagement. The study suggested that organizations should adopt a holistic HRIS strategy that incorporates various HRM practices, such as performance management and talent management, to enhance the effectiveness of HRIS.

Another study by Laumer et al. (2020) found that the HRIS strategy plays a significant role in facilitating the adoption of hybrid work arrangements. The study suggested that the HRIS strategy should be flexible and adaptive to accommodate changing work arrangements and employee needs. The HRIS strategy should also provide employees with the necessary tools and resources to communicate and collaborate effectively, such as video conferencing software, instant messaging platforms, and project management tools.

Another study by Parry and Tyson (2011) found that the HRIS strategy has a positive impact on HRM effectiveness. The study suggested that the effective use of HRIS requires a strategic approach, and HRIS strategy should be aligned with the organization's HRM goals and objectives. Moreover, the HRIS strategy should be integrated with other HRM practices such

as performance management and talent management.

Thus, considering how important is HRIS strategy on HRIS or HRM effectiveness and how a clearly defined strategy can lead to many advantages for the organization, this study decided to focus on answering the following research question.

How does the implementation of an HRIS strategy affect the efficiency and effectiveness of HRIS processes? One of the proven yardsticks to check the effectiveness of any strategy is how it is working on the ground, is it efficient and effective. The same is true even for HRIS Strategy and to validate this following objective and hypothesis were identified.

To assess the current state of HRIS strategy implementation in organizations and identify best practices.

H<sub>1</sub>: Organizations that have a clearly defined HRIS strategy in place will be more likely to achieve HRIS success.

H<sub>2</sub>: Organizations that have an HRIS strategy aligned with their business strategy will have a more effective and efficient HRIS.

To evaluate the impact of HRIS strategy implementation on HR process efficiency and effectiveness.

H<sub>3</sub>: HRIS strategy implementation will lead to increased efficiency, employee engagement, accuracy, and achievement of the organization's HR goals.

#### Method

For initiating and deploying this study, we used a form-based survey. This study uses quantitative research. The sample of 99 Indian HR professionals represents a convenience sample, as respondents were selected from a list of contacts from LinkedIn. The instrument used in this study contains scales extracted and adapted from other studies. The HRIS strategy is aligned with our organization's overall business strategy. This question can be linked to the concept of strategic alignment, which is a commonly used measure in strategic management research. The HRIS strategy provides clear guidance for the use and management of the HRIS. This question can be linked to the concept of organizational process guidance, which is a measure used to assess the effectiveness of organizational processes. The HRIS strategy guides how to measure the effectiveness of the HRIS. This question can be linked to the concept of performance measurement, which is a commonly used measure in performance management research. The HRIS strategy has helped to identify and address gaps in HRIS functionality or performance. This question can be linked to the concept of process improvement, which is a measure used to assess the effectiveness of organizational processes. The HRIS strategy has improved the efficiency of HR tasks in our organization. This question can be linked to the concept of process efficiency, which is a commonly used measure in process improvement research. The HRIS strategy has improved the accuracy and completeness of HR data. This question can be linked to the concept of data quality, which is a commonly used measure in information systems research. The HRIS strategy has increased employee engagement and satisfaction with HR processes. This question can be linked to the concept of employee satisfaction, which is a commonly used measure in human resource management research. The HRIS strategy has contributed to the achievement of our organization's HR goals. This question can be linked to the concept of goal attainment, which is a commonly used measure in organizational performance research. A few of the earlier studies that have used similar measures include, Henderson, R., & Venkatraman, N. (1993). Strategic alignment: Leveraging information technology for transforming organizations. IBM systems journal, 32(1), 4-16. Melão, N., & Garrido-Moreno, A. (2016). Organizational process guidance: An integrated research review. Business Process Management Journal, 22(2), 268-290. Neely, A. D., Gregory, M. J., & Platts, K. W. (1995). Performance measurement system design: A literature review and research agenda. International journal of operations & production management, 15(4), 80-116.

All items were measured on a five-point Likert-type scale (ranging from 1 to 5). No demographic variables were added to this study. The questionnaire was made available via google forms. After collection, the quality of data was processed and analyzed using Real Statistics add-in in Excel and SPSS software. The normality was validated through the D'Agostino-Pearson test and reliability was checked using Cronbach's Alpha test. Finally, the construct validation was done using Pearson's correlation. Hypothesis testing was done using ANOVA, and Regression analysis.

#### **Results**

H<sub>1</sub>: Organizations that have a clearly defined HRIS strategy in place will be more likely to achieve HRIS effectiveness.

This hypothesis was tested to examine if a clearly defined HRIS strategy has a positive impact on HRIS effectiveness. Our organization has a clear HRIS strategy in place was defined as the independent variable overall, I believe that having an HRIS strategy has had a positive impact on the effectiveness of our HRIS as the dependent variable. A linear regression analysis test was run and the regression coefficient for the predictor variable "Our organization has a clear HRIS strategy in place" is 0.94, which indicates that for each unit increase in having a clear HRIS strategy, there is a corresponding increase of 0.94 units in the effectiveness of the HRIS. The R-squared value of 0.78 suggests that about 78% of the variance in the effectiveness of the HRIS can be explained by the presence of a clear HRIS strategy. This means that having a clear HRIS strategy is an important determinant of the effectiveness of the HRIS. The ANOVA results show that the regression model is significant, indicating that the predictor variable is a significant factor in explaining the variation in the effectiveness of the HRIS. The F-value of 335.79 and the p-value of 2.89E-33 provide strong evidence in support of the significance of the relationship. Therefore, it can be concluded that having a clear HRIS strategy is a key factor in enhancing the effectiveness of the HRIS. These findings can be used to inform HR managers and decision-makers about the importance of formulating and implementing a clear HRIS strategy to optimize the effectiveness of HRIS in their organizations. This finding supports H1, as shown in Figure 1.

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.880835							
R Square	0.775871							
Adjusted R Square	0.77356							
Standard Error	0.574799							
Observations	99							
ANOVA								
	df	SS	MS	F	gnificance	F		
Regression	1	110.9417	110.9417	335.7857	2.89E-33			
Residual	97	32.04824	0.330394					
Total	98	142.9899						
	Coefficients	andard Err	t Stat	P-value	Lower 95%	Upper 95%	ower 95.09	lpper 95.0%
Intercept	0.113845	0.167246	0.680703	0.497681	-0.21809	0.445781	-0.21809	0.445781
Our organization has a clear HRIS strategy in place.	0.939701	0.051281	18.32446	2.89E-33	0.837922	1.04148	0.837922	1.04148

Figure 1

H<sub>2</sub>: Organizations that have an HRIS strategy aligned with their business strategy will have a more effective and efficient HRIS.

This hypothesis was tested to examine if the HRIS strategy being aligned with the business strategy makes the HRIS more effective and efficient. Overall, I believe that having an HRIS strategy has had a positive impact on the effectiveness of our HRIS was the dependent variable, and The HRIS strategy is aligned with our organization's overall business strategy was the independent variable. A linear regression analysis test was run and the coefficient for the predictor variable "The HRIS strategy is aligned with our organization's overall business strategy" is 0.909, which means that a one-unit increase in the predictor variable is associated with a 0.909 unit increase in the dependent variable. This coefficient is statistically significant at p<0.001, indicating that the relationship is unlikely to be due to chance.

The R-squared value of 0.676 indicates that the predictor variable explains about 67% of the variance in the dependent variable.

The ANOVA results show that the regression model is significant, indicating that the predictor variable is a significant factor in explaining the variation in the effectiveness of the HRIS. The F-value of 201.91 and the p-value of 1.93E provide strong evidence in support of the significance of the relationship. Overall, the results of the analysis suggest that organizations should ensure that they have a clear HRIS strategy in place that aligns with their overall business strategy to improve the effectiveness of their HRIS. These findings can have practical implications for organizations looking to improve the efficiency and effectiveness of their HRIS and can be used as a basis for further research in this area.

This finding supports H1, as shown in Figure 2

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.821885							
R Square	0.675496							
Adjusted R Square	0.67215							
Standard Error	0.691635							
Observations	99							
ANOVA								
	df	SS	MS	F	gnificance	F		
Regression	1	96.58907	96.58907	201.9175	1.93E-25			
Residual	97	46.40083	0.478359					
Total	98	142.9899						
	Coefficient	andard Fr	4 0404	Dualus	Louis OF0/	I Innor OE	ower OF O	Unner OF OW
	Coefficients							Upper 95.0%
Intercept			0.443888					0.522692479
The HRIS strategy is aligned with our organization's overall business strategy.	0.909657	0.064016	14.20977	1.93E-25	0.782603	1.036712	0.782603	1.036712035

Figure 2

H<sub>3</sub>: HRIS strategy implementation leads to increased efficiency, employee engagement, accuracy, and achievement of the organization's HR goals.

The regression model (figure 3) shows that the four independent variables (HRIS strategy improving efficiency, accuracy, engagement, and contribution to HR goals) have a statistically significant impact on the dependent variable, overall (the belief that HRIS strategy has a positive impact on HRIS effectiveness). The adjusted R-squared value of 0.82 indicates that

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the model explains 82% of the variability in the dependent variable. Specifically, the coefficient for "improving accuracy and completeness of HR data" is 0.45, indicating a positive relationship between this variable and the effectiveness of the HRIS. The coefficient for "contributing to the achievement of our organization's HR goals" is 0.52, indicating a stronger positive relationship. The coefficient for "increasing employee engagement and satisfaction with HR processes" is 0.20, indicating a weaker but still positive relationship. However, the coefficient for "improving the efficiency of HR tasks" is negative (-0.14), indicating a negative relationship with the effectiveness of the HRIS. This suggests that there may be other factors influencing HRIS effectiveness beyond just efficiency. Overall, these findings suggest that having an HRIS strategy aligned with the organization's goals and focused on improving the accuracy and completeness of HR data, as well as increasing employee engagement and satisfaction, can have a positive impact on the effectiveness of the HRIS. However, more research is needed to better understand the relationship between HRIS efficiency and effectiveness.

This finding partly supports H1, as shown in Figure 3, the exception being the independent variable The HRIS strategy has improved the efficiency of HR tasks in our organization.

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.909425							
R Square	0.827053							
Adjusted R Square	0.819694							
Standard Error	0.512914							
Observations	99							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	df 4	SS 118.2602879	MS 29.56507196	-	Significance F 6.06071E-35			
Regression Residual	df 4 94			-				
	4	118.2602879	29.56507196	-				
Residual	4 94	118.2602879 24.72961114	29.56507196	-				
Residual	94 98	118.2602879 24.72961114	29.56507196	-		Upper 95%	Lower 95.0%	Upper 95.0%
Residual	94 98	118.2602879 24.72961114 142.989899	29.56507196 0.26308097	112.3801239 P-value	6.06071E-35			Upper 95.0% 0.10962723
Residual Total	4 94 98 Coefficients	118.2602879 24.72961114 142.989899 Standard Error	29.56507196 0.26308097 t Stat	112.3801239 P-value	6.06071E-35 Lower 95%	Upper 95% 0.10962723		0.10962723
Residual Total Intercept	4 94 98 Coefficients -0.21768	118.2602879 24.72961114 142.989899 Standard Error 0.164846205	29.56507196 0.26308097 t Stat -1.320496126	P-value 0.189875565 0.259181217	6.06071E-35 Lower 95% -0.544984781	Upper 95% 0.10962723 0.106039113	-0.544984781	0.10962723 0.106039113
Residual Total  Intercept The HRIS strategy has improved the efficiency of HR tasks in our organization.	4 94 98 Coefficients -0.21768 -0.14156	118.2602879 24.72961114 142.989899 Standard Error 0.164846205 0.124703253	29.56507196 0.26308097 t Stat -1.320496126 -1.13519187	P-value 0.189875565 0.259181217 1.29058E-05	6.06071E-35 Lower 95% -0.544984781 -0.38916335	Upper 95% 0.10962723 0.106039113	-0.544984781 -0.38916335 0.2546316	0.10962723 0.106039113

Figure 3

#### Discussion

The results confirm the hypotheses of this study, with only one exception. It also illustrates the relationship between HRIS Strategy and HRIS effectiveness. Following the findings of Bondar Ouk, T., & Ruël, H. (2009). Electronic human resource management: Challenges in the digital era. The International Journal of Human Resource Management, 20(3), 505-514., this study also offers insights into how HRIS strategy plays an important role in achieving HRIS effectiveness.

In conclusion, the findings of this study highlight the importance of having a clearly defined HRIS strategy in place that aligns with the organization's business strategy and goals. HR managers and decision-makers should consider formulating and implementing an HRIS strategy that is tailored to their organization's needs to optimize the effectiveness of their HRIS. The study also suggests that future research should explore other factors that may influence HRIS effectiveness beyond just efficiency.

Similarly, this study also highlights how a strategic HRIS approach can be leveraged to achieve higher HRIS efficiency (Cooke, F. L., Shen, J., & McBride, A. (2018). Strategic orientation, human resource management practices, and organizational performance: A configurational approach. Journal of Business Research, 89, 152-165)

In test H<sub>1</sub>, it was noted that a well-defined HRIS strategy is a crucial aspect of improving the efficacy of an organization's HRIS. These results can serve as guidance for HR managers and decision-makers, highlighting the significance of devising and executing a distinct HRIS strategy to maximize the effectiveness of their HRIS in their respective organizations.

In test H<sub>2</sub>, it was noted that having a well-defined HRIS strategy that is consistent with the overall business strategy is essential for enhancing the effectiveness of HRIS in organizations. These results have significant practical implications for organizations that aim to improve their HRIS efficiency and effectiveness. Additionally, they can serve as a basis for future research in this domain.

In the test H<sub>3</sub>, it was noted that the study indicates that an HRIS strategy that is in line with the organization's objectives and emphasizes the improvement of HR data accuracy and completeness, as well as employee engagement and satisfaction, can result in a favorable impact on the HRIS's effectiveness. Nonetheless, further investigation is necessary to gain a more profound understanding of the link between HRIS efficiency and effectiveness.

All three hypotheses represent the results of a study that investigated the impact of having a well-defined HRIS strategy on the effectiveness of HRIS in organizations. The study findings indicate that a clear and consistent HRIS strategy that aligns with the organization's overall business strategy is crucial for improving the efficacy of HRIS. This information can be useful for HR managers and decision-makers in devising and executing a distinct HRIS strategy to optimize the effectiveness of HRIS in their respective organizations.

# Final remarks, limitations, and suggestions for future studies

Although HRIS strategy and its impact on HRIS effectiveness have been widely explored in the literature (Michael K. Bedell and Jayfus T. Doswell, 2008, R. Haines III and R. Petit, 1997, Mohammad Hosein Rezaei Dolatabadi and Hassan Darvish, 2017) the role of HRIS strategy, efficiency, effectiveness, accuracy and completeness, achievement of HR goals, etc, were not fully examined. This study examined all these aspects and tried to give a comprehensive overview.

Furthermore, the study suggests that an HRIS strategy that focuses on improving the accuracy and completeness of HR data and increasing employee engagement and satisfaction can lead to a positive impact on the effectiveness of HRIS. However, the study also acknowledges that more research is needed to gain a deeper understanding of the relationship between HRIS efficiency and effectiveness.

Overall, the study highlights the significance of having a well-defined HRIS strategy in organizations and provides practical implications for improving HRIS efficiency and effectiveness. The study findings can also serve as a basis for future research in this area.

Along with useful suggestions and contributions made by this study, it is important to note that it is not without limitations. Notable, although the sample size is 99, it is not feasible to obtain completely generalizable results about the population under study. Demographic information was not included in this study which can be included in future studies. Future studies should conduct comparative studies between the different sizes of organizations to get more meaningful insight.

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