



EXPLORING HRIS ADOPTION AND PERFORMANCE OUTCOMES IN HYDERABAD-BASED IT ENTERPRISES: A CASE STUDY APPROACH

Meghana Panthangi¹, Y Suryanarayana Murthy²

¹Student, Department of Management Studies, Vardhaman College of Engineering(A), Shamshabad, Telangana

²Assistant Professor, Department of Management Studies, Vardhaman College of Engineering (A), Shamshabad, Telangana

Article DOI: <https://doi.org/10.36713/epra15346>

DOI No: 10.36713/epra15346

ABSTRACT

This study aims to examine the IT companies in Hyderabad, India, and their adoption of HR information systems, as well as the impact of this adoption on performance results. The research aims to identify the factors influencing HRIS adoption, assess the challenges faced during implementation, and examine the overall impact of HRIS on organizational performance through the use of a case study methodology. In order to guide academic research and practical strategies for the implementation of HRIS, this study aims to analyze the special environment of Hyderabad's information technology sector. By doing so, it hopes to provide insightful information. Furthermore, it offers a thorough analysis of how HRIS impacts the dynamics and success of businesses.

KEYWORDS: HRIS adoption, IT enterprises, organizational performance, determinants, implementation challenges.

INTRODUCTION

Employing an HRIS has grown in importance as a management tool in recent years, especially for the ever-changing IT industry in Hyderabad. Human resource information systems (HRIS) make it easier to incorporate technology into HR operations, which improves efficiency by standardizing procedures. Companies that want to succeed in today's complicated business climate must grasp the complex ramifications of HRIS adoption and how it affects performance outcomes.

Countless cutting-edge tech companies call Hyderabad, sometimes called the "Silicon Valley of India," home. The city is a major center for information technology (IT) businesses. Implementing an HRIS becomes a strategic necessity for these companies, as they are always looking for ways to improve their HRM procedures. But, given the particular setting of Hyderabad's IT sector, it is necessary to investigate the difficulties, advantages, and results of HRIS implementation.

The purpose of this research is to use a thorough case study technique to investigate the complexities of HRIS implementation in IT businesses situated in Hyderabad. The study aims to provide useful insights that might benefit practitioners in both academia and industry by analyzing real-world events, problems, and success stories. The results of this study should help IT companies better understand the complexities of HRIS installation in Hyderabad and provide useful information for improving HRM practices and overall business results.

STATEMENT OF THE PROBLEM

The adoption and performance of Human Resource Information Systems (HRIS) in Hyderabad-based IT companies are complex. Due to the paucity of thorough research on HRIS adoption in this regional context, an in-depth analysis is needed to identify crucial variables affecting effective implementation and organizational performance. This study examines Hyderabad's dynamic IT sector's HRIS adoption problems and prospects to close this gap.



OBJECTIVES OF THE STUDY

1. Investigate the determinants influencing the adoption of HRIS in IT enterprises located in Hyderabad, India.
2. Assess the challenges faced by IT organizations in Hyderabad during the implementation and utilization phases of HRIS.
3. Examine the impact of HRIS adoption on organizational performance within the IT sector in Hyderabad, providing insights into its overall effectiveness.

RESEARCH GAP

Despite the growing significance of HRIS adoption in the IT enterprises of Hyderabad, there exists a notable research gap in understanding the specific contextual factors, challenges, and performance outcomes within this regional context. Existing literature lacks comprehensive studies that delve into the nuanced dynamics of HRIS implementation in Hyderabad-based IT firms, hindering the development of tailored strategies for successful adoption and optimization of HRIS functionalities. This research aims to fill this critical research gap by providing a detailed exploration of the complexities surrounding HRIS adoption in the unique setting of Hyderabad's IT industry.

LITERATURE REVIEW

Anton Barisic, Marija Tomić, and Mirjana Bach (2022): This study aims to determine companies' HRIS utilization characteristics. The company's size (measured in personnel), market size, market growth, and industry were examined. The logistic regression model was created to determine how much the above characteristics affect the company's HRIS decision. Results show that size, market size, and market growth affect HRIS utilization, but industry type does not.

Rajesh Kadian and Subhash Kundu (2012) This study examines how Indian organizations use Human Resource Information Systems (HRIS) for HRM. While "employee record" and "payroll" were the most common HRIS applications, "technical and strategic HRM" and "corporate communication" were also used. The study suggests that HRIS plays a vital role in Indian HRM, including both fundamental and advanced functions, with sector-specific differences and similarities between Indian and global organizations.

Emmanuel Udekwe, Chux Gervase Iwu, et al. (2021): The study examines how Human Resource Information Systems (HRIS) might improve health care delivery in South Africa and how adoption challenges affect HRIS adoption. The study examines South African health sector HRIS adoption using a descriptive literature review. HRIS adoption in the health sector needs development, according to the report. The South African reluctance to completely adopt HRIS has caused employee unhappiness, talent drains, and administrative inefficiencies. The report stresses the need to invest in HRIS in the South African health sector, including financing, infrastructure, and skilled labor.

Varinia Azkarin, Rangga Gelar, et al. (2023): A REST API for employee recommendation management in a Human Resource Information System (HRIS) is the topic of this study. Web application development is efficient with Express JS and Node.js, which were used to build the API. The research shows that an HRIS REST API for employee referral management was successful. This study found Express JS and Node.js effective for establishing an HRIS REST API for employee referral management. The API's successful testing shows its functionality and reliability in managing employee referrals, candidate progress tracking, and talent acquisition optimization, suggesting HRIS development benefits.

Theodosia J. Magege, Dr. Charles Cleophace Ngirwa (2023): Human Resource Information Systems' impact on Azania Bank Limited's performance was examined. The study used descriptive research and SPSS for descriptive and inferential analysis of structured questionnaires. Pre-established regression models were used for correlation and regression analysis. Results showed that HRIS has greatly increased employee and management access to human resource data across the institution. Organizational performance is positively correlated with HRIS relevance; hence, the study indicated that HRIS is vital.

This study examines how the technology-organization-Environment (TOE) model affects informed decision-making, employing HRIS as a mediator. A comprehensive literature evaluation, main construct identification, hypotheses formation, and research framework construction comprise the study's methodology. Employee viewpoints were collected using structured surveys and descriptive statistical analysis in SPSS. In order to improve



job quality, the study investigates the connection between TOE model factors (technology, organization, and environment) and informed decision-making in higher education through the use of HRIS.

Mohamed Alkashami (2023): Human Resource Information Systems (HRIS) are increasingly important to enterprises, as this study shows. This study highlights the growing importance of HRIS to enterprises, its essential features, market size growth, and practical applications. The problems and constraints of HRIS implementation are also acknowledged. The report shows the importance and market growth of HRIS in organizational management. It recognizes the practical benefits of HRIS and the challenges of 21st-century deployment.

Yeshana Gunawardane, Jenusan Sathiyakumar, et al. (2022): Sri Lankan MSMEs and the Human Resource Information System (HRIS) are the focus of this study. Primary data from an earlier study and secondary data were acquired. We collected quantitative data in the Western Province using convenience sampling. Challenges to HRIS deployment were assessed using simple and multiple regression analyses. The research suggests that cost, technical expertise, management support, and staff training affect MSMEs' HRIS deployment. These findings suggest HRIS technology could acquire traction in the MSME sector and emphasize the need for HRIS service providers to promote their systems to this group. This study concludes that the Sri Lankan MSME sector needs HRIS technology.

Izzat Alhalalmeh (2018): This study examines how HRIS benefits and drawbacks affect Al-Balqa Applied University staff performance. The study used a self-administered questionnaire with 200 randomly selected respondents. The data was collected descriptively and analyzed using SPSS. The research shows that HRIS installation improves university performance. Conversely, HRIS implementation hurdles hurt university staff performance. This study concludes that improving HRIS benefits and addressing implementation difficulties can improve staff performance at Al-Balqa Applied University.

This study focuses on the installation of Human Resource Information Systems (HRIS) as a key step in improving resource management for organizational efficiency. The study uses descriptive and qualitative methods. The study found that HRIS can improve HRM in planning, recruitment, selection, development, performance evaluation, and pay. HRIS helps optimize HRM functions, enabling firms to compete better. This study concludes that HRIS can transform HRM efficiency and effectiveness. HRIS may boost an organization's competitiveness by streamlining essential HR operations, preparing it for a competitive market.

S Dr. Christi Anandan, Princeton (2023): This study examines how Human Resource Information Systems (HRIS) help manage human resources and personnel data. The researcher used descriptive research. The study found that service industry employees are unaware of and underuse HRIS due to its development. Employers should educate and train workers on HRIS use. This research shows that HRIS is becoming more important in the service business and that employees need more HRIS education. Addressing these difficulties allows firms to maximize HRIS's HR management benefits.

Johan Hendri Prasetyo, Joko Ariawan (2023): This study examines how HRIS improves employee performance through competence and work discipline. A quantitative causality methodology and snowball sampling are used in the investigation. It was found that HR information systems can directly and indirectly boost employee performance at PT XL Axiata, with competence and work discipline mediating. In conclusion, HRIS improves employee performance directly and indirectly by improving competence and work discipline. The results show that HRIS can improve human resource management and performance at PT XL Axiata.

Faridi Mohamed, Dani Safaâ (2020): This paper introduces corporate debt's significance in governance structures to expand corporate governance theory. The research introduces the "over-governance model," highlighting financial leverage as a key aspect of governance bundles and agency costs. It illuminates company agency cost dynamics. Finally, this study presents a theoretical foundation for corporate governance research. It emphasizes the importance of debt levels in governance system design and helps boards, corporate management, and regulators optimize governance structures and reduce agency costs.

METHODOLOGY

1. **Sample Frame:** Hyderabad-based IT companies developing, implementing, and using HRIS are studied. The sample frame is created by listing such organizations in industry directories, business associations, and government databases. A diverse IT industry presence across sizes and expertise levels is the goal.

2. **Sample Size:** A representative sample of Hyderabad IT companies is chosen using saturation. Purposive sampling ensures SMEs and major organizations participate. Since theoretical saturation means no new insights are emerging, the sample size is finalized to ensure data depth and richness.
3. **Sampling Technique:** Purposive and stratified sampling are used to balance organizational sizes and subsectors in Hyderabad's IT industry. This method helps identify HRIS adoption and performance patterns across IT sectors.
4. **Statistical Tools:** Mean, median, and standard deviation are used to describe the sampled IT companies' demographic and organizational profiles. Regression analysis is used to examine the links between independent variables (such as HRIS adoption factors) and dependent variables (organizational performance outcomes). Data analysis using statistical tools ensures rigor and reliability in the interpretation of findings.

HYPOTHESIS

1. There is a significant relationship between determinants influencing HRIS adoption and the adoption of HRIS in IT enterprises in Hyderabad, India.
2. There is a significant relationship between challenges faced during the implementation and utilization phases of HRIS in IT organizations in Hyderabad.
3. There is a significant impact of HRIS adoption on organizational performance within the IT sector in Hyderabad.

CONCEPTUAL MODEL

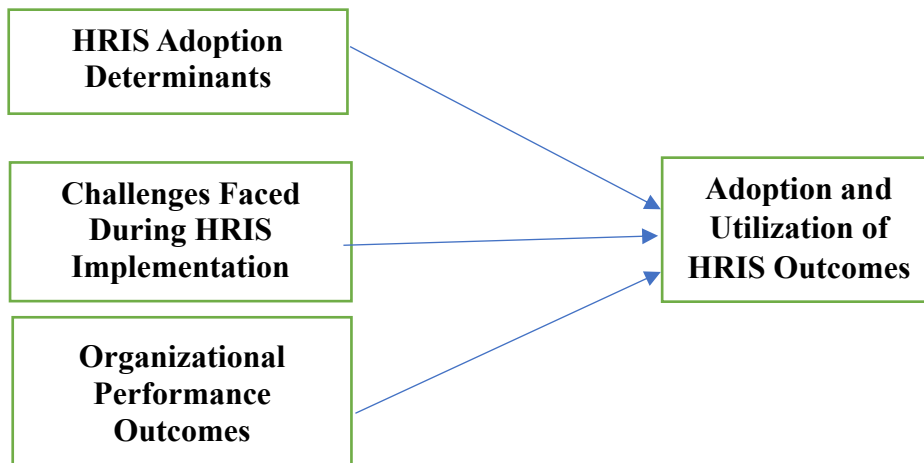


Fig-1: Conceptual Model

RESULTS AND DISCUSSIONS

Reliability Statistics	
Cronbach's Alpha	N of Items
.941	12

Regression

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.896 ^a	0.789	.567	0.0259
a. Predictors: (Constant), HRIS4, HRIS2				

The provided model summary, featuring an R value of 0.896, demonstrates a strong positive correlation between the independent variables and the dependent variable, indicating good predictive power. The R Square value of 0.789 suggests that approximately 78.9% of the variance in the dependent variable is explained by the model. However, the adjusted R Square value is significantly lower at 0.567, which implies that when the model's



complexity is taken into account, its explanatory power decreases notably. This discrepancy might indicate that some of the predictors (HRIS4 and HRIS2) are not significantly contributing to the model, or there could be overfitting. The standard error of the estimate at 0.0259 is relatively low, indicating that the model's predictions are, on average, close to the observed values. This summary suggests a model with strong initial indicators of fit but also points to potential issues with predictor efficiency or model overfitting.

Hypothesis Testing

Hypothesis	P-Value	Result
H ₁ : HRIS Adoption Determinants → Adoption and Utilization of HRIS Outcomes	0.00	Significant
H ₂ : Challenges Faced During HRIS Implementation → Adoption and Utilization of HRIS Outcomes	0.00	Significant
H ₃ : Organizational Performance Outcomes → Adoption and Utilization of HRIS Outcomes	0.00	Significant

- The hypothesis states that HRIS Adoption Determinants significantly impact the adoption and utilization of HRIS outcomes. This suggests that various factors influence HRIS acceptance and use in an organization.
- Challenges during HRIS implementation significantly impact adoption and utilization of HRIS outcomes. This means that HRIS acceptance and use must overcome these hurdles.
- The hypothesis (H3) states that the adoption and use of outcomes significantly impact organizational performance outcomes. This means that how an organization adopts and uses technology affects its performance.

LIMITATIONS

Although the study provides valuable insights, it is limited in its applicability to other industries and contexts because it only covers IT businesses in Hyderabad. Participants may give subjective or socially desired replies due to their dependence on self-reported data from surveys, which adds to the possibility of response bias. This study can only offer a snapshot in time rather than a longitudinal picture due to its cross-sectional approach, which limits its capacity to show causal links between HRIS adoption and organizational performance. If unrelated factors, such as changes in the economy or issues specific to the business, have an impact on the results, it might be even more challenging to understand them. The results may not be applicable to the present or future because technology is always evolving; thus, HRIS deployment tactics must be continuously adjusted and monitored to stay up with technology.

CONCLUSIONS

To sum up, this study set out to investigate the factors that influence the adoption of Human Resource Information Systems (HRIS) and how it affects the performance of IT businesses in Hyderabad. Extensive research into the factors that influence HRIS acceptance, difficulties encountered during installation, and the perceived results of performance evaluations has yielded fruitful findings. By illuminating the complex interplay of these factors in the specific setting of Hyderabad's IT industry, this study adds to the current body of knowledge. By utilizing these insights, organizations may enhance their HRIS strategy, effectively tackle obstacles, and maximize performance. Results from this study will help IT companies in Hyderabad make better decisions and develop more successful strategies for using HRIS systems, which will improve HR management in an era where technology is always changing the game.

SCOPE FOR FUTURE STUDY

Future research can advance our comprehension of HRIS adoption and performance outcomes in Hyderabad's IT enterprises. First, a comparative analysis across regions can unveil variations in HRIS strategies, guiding the identification of region-specific factors. Second, longitudinal studies are essential to track HRIS impact on organizational performance over time, offering nuanced insights into evolving challenges. Third, adopting a mixed-methods approach with qualitative insights can provide a richer understanding of contextual influences on HRIS adoption. Fourth, an external environmental analysis should explore legislative, economic, and technological factors shaping HRIS strategies. Finally, extending research beyond IT to include various industries in Hyderabad can uncover sector-specific challenges and successes, contributing to a more comprehensive understanding of HRIS dynamics.



REFERENCES

1. Anton Florijan Barisic, Mirjana Pejic Bach (2022), "Adoption of Human Resource Information Systems: Impact of Industry, Size and Market", *Conference Paper · May 2022* DOI: 10.23919/MIPRO55190.2022.9803480,
2. Kundu, Subhash & Kadian, Rajesh. (2012). Applications of HRIS in Human Resource Management in India: A Study. *European Journal of Business and Management*. Volume 4, ISSN 2222-1905, No.21, 2012, 34-41,
3. Alebiosu, J.O., Salau, O.P., Atolagbe, T.M., & Dada, A.E. (2022). Bolstering the role of human resource information system on employees' behavioural outcomes of selected manufacturing firms in Nigeria. *Heliyon*, volume 9, issue 4, e12785.
4. Emmanuel Udekwe, Chux Gervase Iwu, Andre Charles de La Harpe, Justin Olawande Daramola (2021), "Descriptive literature review of human resource information systems (HRIS) adoption issues in the health sector, South Africa", *IJRBS VOL 10 NO 5* ISSN: 2147-4478, DOI: 10.20525/ijrbs.v10i5.1284
5. Varinia Azkarin, Rangga Gelar Guntara, Oding Herdiana (2023), "Development of a REST API for Human Resource Information System for Employee Referral Management Domain Using the Express JS Framework and Node.js", *JSRET (Journal of Scientific, Research, Education, and Technology)*, Vol. 2 No. 3 2023.
6. Theodosia J. Magege, Dr. Charles Cleoplace Ngirwa (2023), "EFFECTIVENESS OF HUMAN RESOURCES INFORMATION SYSTEM (HRIS) ON ORGANISATIONAL PERFORMANCE IN THE BANKING SECTOR", Vol. 6, No. 01; 2023 ISSN: 2581-4664.
7. Nayra Samy, Rasha Abd El Aziz, Marwa Tarek, Miran Ismail (2022), "HRIS Mediating Role the Relationship between TOE and Decision Making", *Technology and Investment*, 2023, 14, 1-21, ISSN Online: 2150-4067 ISSN Print: 2150-4059, DOI: 10.4236/ti.2023.141001
8. Sabrina Jahan (2014), "Human Resources Information System (HRIS): A Theoretical Perspective", *Journal of Human Resource and Sustainability Studies*, Volume 2, 33-39. doi: 10.4236/jhrss.2014.22004
9. Mohamed Alkashami (2023), "Human Resource Information Systems (HRIS) in the 21st Century: A Critical Appraisal", *Baltic Journal of Law & Politics*, VOLUME 16, NUMBER 1 (2023) ISSN 2029-0454, 375-388 DOI: 10.2478/bjlp-2023-0000026
10. Yeshana Gunawardane, Jenusan Sathiyakumar, Kanishkar Sivalingam, Bavananthan Rasathurai, Wasantha Rajapakshe, and Chathurini Kumarapperuma (2022), "Impact of the Challenges in Implementing Human Resource Information Systems in Sri Lankan MSMEs", *SLIIT Business Review*, 2022 Vol.02, Issue No. 02, pp. 59-88
11. Mohammad Izzat Alhalalmeh (2018), "Impact of Benefits and Barriers of Implementing Human Resources Information System on Staff Performance at Al-Balqa Applied University", *International Journal of Business and Management*; Vol. 13, No. 10; 2018 ISSN 1833-3850 E-ISSN 1833-8119.
12. Eddy Hermawan Hasudungan Panjaitan (2023), "Implementing Human Resource Information System (HRIS) for Efficient Human Resource Management", *International Journal of Science and Society*, Volume 5, Issue 2, 2023.
13. S Princeton, Dr. C.R. Christi Anandan (2023), "Perception of employees of HRIS in the Service sector: An Empirical Study", *International Journal of Multidisciplinary Research and Growth Evaluation*, Volume: 04, Issue: 02, ISSN (online): 2582-7138
14. Johan Hendri Prasetyo, Joko Ariawan (2023), "The role of HR information system in boosting the performance of employee", *Enrichment: Journal of Management*, Volume 13, Issue 1 (2023), ISSN 2087-6327 (Print) | 2721-7787, DOI: 10.35335/enrichment.v13i1.1220
15. Harini Methuku, Hatim Ramadan(2013), "A Study on Developing the Role of Human Resource Information Systems for Good Leadership", *American Journal of Industrial and Business Management*, 2013, Volume 3, 497-506, DOI: 10.4236/ajibm.2013.35057
16. Dani Safaâ, Faridi Mohamed (2020), "The factors of acceptance and use of HRIS", *Technium Social Sciences Journal* Vol. 9, 397-404, July 2020 ISSN: 2668-7798, DOI: 10.47577/tssj.v9i1.1093
17. Amer Abuhantash (2023), "The Impact of Human Resource Information Systems on Organizational Performance: A Systematic Literature Review", *European Journal of Business and Management Research*, Volume 8, ISSN: 2507-1076 DOI: 10.24018/ejbmr.2023.8.3.1992
18. Emmanuel Udekwe, Chux Gervase Iwu, Olawande Daramola, Andre Charles de la Harpe (2022), "The Risk Implications of Ineffective Use of Human Resource Information Systems in the South African Public Health Sector", *Conference Paper in SSRN Electronic Journal · November 2022* DOI: 10.2139/ssrn.4331744, ISSN 1556-5068
19. Lieli Suharti, Priyanto Ratna Sulisty (2018), "The implementation of human resources information system and it's benefit for organizations", *Article in Diponegoro International Journal of Business · March 2018* Vol.1, No.1, 2018, pp. 1-7, p-ISSN: 2580-4987; e-ISSN: 2580-4995, DOI: 10.14710/dijb.1.1.2018.
20. Ahmad Suffian Mohd Zahari, Mohd Amir Harun, Siti Fatimah Mardiah Hamzah and Suzila Mat Salleh (2018), "The influence of Human Resource Management Information System (HRMIS) Application towards Employees Efficiency and Satisfaction", *Journal of Physics: Conference Series*, doi :10.1088/1742-6596/1019/1/012077.