

## **Advancing Human Resource Practices In Hospitality: A Bibliometric Analysis Of Hris Adoption And Implications For Hr Professionals**

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**Abstract:** This bibliometric study investigates the evolution and scholarly trends surrounding the adoption of Human Resource Information Systems (HRIS) and their implications for human resource (HR) professionals within the hospitality sector. Employing a quantitative descriptive approach, the study assesses the global distribution and thematic focus of HRIS-related publications indexed in the Scopus database. The analysis reveals that 11 of the 40 reviewed articles affirm that the development and implementation of HRIS significantly enhance managerial efficiency by streamlining HR operations, optimising workforce utilisation, and reducing the demand for extensive HR investment. Furthermore, HRIS is recognised for fostering greater employee participation and contributing to organisational development. Recent literature offers valuable perspectives on the strategic integration of HRIS in the hospitality industry, particularly in addressing operational complexities such as shift scheduling, the management of seasonal labour, compliance with hospitality regulations, and the delivery of service excellence through targeted training. These insights are crucial in a sector characterised by high labour mobility, customer-centric performance standards, and operational unpredictability. This study contributes a comprehensive synthesis of the current knowledge landscape, identifying key research gaps and emerging directions. The findings reinforce the notion that HRIS is not only a tool for administrative efficiency but also a critical enabler of workforce engagement and performance optimisation in hotels and hospitality enterprises. The paper concludes with a call for future bibliometric and empirical research to bridge conceptual and practical dimensions of HRIS, especially concerning its integration with advanced technologies such as artificial intelligence (AI), blockchain, and 5G. These innovations are poised to reshape the contours of HR practice and digital transformation within the global hospitality industry.

**Keyword:** Bibliometric, Hotel, Human Resource Practices, HRIS

**Abstrak:** Penelitian bibliometrik ini bertujuan untuk menganalisis tren dan perkembangan literatur ilmiah terkait penggunaan Human Resource Information Systems (HRIS) dan implikasinya terhadap peran dan praktik praktisi Sumber Daya Manusia (SDM). Analisis deskriptif kuantitatif mengukur perkembangan publikasi artikel ilmiah di berbagai negara dengan tema *human resource information system*, Sumber data yang digunakan untuk analisis data berasal dari database Scopus. 11 dari total 40 artikel mengkonfirmasi bahwa pengembangan dan penerapan sistem informasi sumber daya manusia membuat manajer perusahaan lebih mudah dan efisien dalam proses pengelolaan perusahaan selain juga memperlancar operasi perusahaan dengan adanya pengurangan investasi sumber daya manusia dan juga memberi karyawan lebih banyak kontribusi dan partisipasi dalam pembangunan perusahaan. Penelitian yang dipublikasi memberikan wawasan yang berharga tentang tren terkini, tantangan yang dihadapi, dan solusi inovatif dalam bidang *information management system*. Secara khusus, praktik HRIS ditawarkan dengan detail pada SDM Hotel yang memfasilitasi kinerja khas dalam operasional hotel, seperti penjadwalan shift yang kompleks, pengelolaan staf musiman, pelatihan layanan pelanggan, dan kepatuhan terhadap standar industri perhotelan. Hasil penelitian diharapkan dapat memberikan gambaran komprehensif mengenai evolusi topik ini dan mengidentifikasi area penelitian yang belum banyak dieksplorasi, sehingga memberikan wawasan bagi akademisi dan praktisi SDM. Singkatnya, temuan ini menggarisbawahi bahwa HRIS adalah alat yang sangat berharga bagi praktisi SDM, tidak hanya untuk efisiensi operasional, tetapi juga sebagai instrumen kunci dalam membangun tenaga kerja yang lebih terlibat dan berkinerja tinggi. Dengan demikian, investasi dan pengelolaan HRIS yang strategis merupakan prioritas bagi fungsi SDM modern. Rekomendasi berkembangnya Studi Bibliometrik tentang HRIS hendaknya berfokus pada upaya menganalisis jembatan konseptual dan empiris antara manajemen informasi dan berbagai fungsi spesifik HRIS, juga adanya usaha untuk mengeksplorasi potensi integrasi dan dampak teknologi-teknologi baru (AI, blockchain, 5G) dalam domain HRIS.

**Kata kunci :** Bibliometrik, Hotel, Penerapan Sumber Daya Manusia, HRIS

## INTRODUCTION

Contemporary transformations in human diversity, particularly in the workplace, are increasingly pronounced. Demographic shifts have contributed to more heterogeneous workforces in terms of race, ethnicity, gender, age, sexual orientation, and socio-economic background. These changes demand that organisations become more adaptive and inclusive. Globalisation has further intensified the necessity for companies to interact with diverse cultural values and perspectives, making inclusive work environments essential for success in the global marketplace (Basuki, 2023).

In parallel, technological advancement has revolutionised how we work, while intergenerational differences—each generation bearing distinct workplace expectations and values—have reshaped organisational dynamics. The ever-evolving industrial revolution requires organisations to invest in developing human capital capable of navigating competitive and fast-changing environments.

The pursuit of effectiveness and efficiency in human resource management (HRM) has thus become a critical determinant of corporate sustainability and success. Effective HRM ensures the right individuals with the right competencies are placed in the right roles at the right time. Efficiency, on the other hand, relates to achieving these objectives with minimal time, cost, and effort (Dr. Edy Soetrisno, 2017).

In this context, the adoption of Human Resource Information Systems (HRIS) has emerged as a key organisational innovation, significantly improving both the effectiveness and efficiency of HR operations. From automating administrative tasks such as recruitment, payroll processing, and employee self-service, to streamlining access to data and reporting, HRIS provides a centralised platform that empowers both HR departments and employees. The system enhances operational transparency, data accuracy, and speed of reporting—ranging from attendance records to performance metrics and labour cost analyses.

The tourism industry is a service-oriented industry, and the presence of talented human resources is very effective in its development. Hence, talent management is vital for this industry, as it can help increase performance and increase reliability and competitiveness (Maria, 2023). The hotel industry, operating under 24/7 service demands, has increasingly adopted HRIS to meet its distinct workforce management challenges. Hotels are required to address diverse and round-the-clock service needs, including late-night check-ins, early breakfast services, and emergency housekeeping requests. These unique conditions demand high levels of workforce coordination and shift flexibility, aligning well with the capabilities offered by HRIS. Furthermore, HRIS supports employee training and motivation, contributing to business performance and creating competitive advantages through better service delivery (Rand H. Al-Dmour, 2020).

This bibliometric study explores how HRIS research has evolved in response to these demands, particularly within the hotel sector. It aims to map the landscape of HRIS-related research, identify prevailing trends, and offer practical implications for hotel HR professionals. A bibliometric technique was employed in conjunction with desk research and descriptive analysis as the main method for reviewing rural tourism businesses' literature. The goal of the bibliometric analysis is to track the evolution of scientific article publishing and research contributions in a specific research area (Priatmoko & Kabil, 2023). By examining current literature and its applications, this study helps practitioners make informed decisions on HRIS investments and optimise implementation strategies through lessons learned from global best practices.

## LITERATURE REVIEW

### Human Resources in the Hotel Industry

Theoretical developments in HRM increasingly position human resources as strategic partners in driving excellence, sustainability, and technological

responsiveness. A successful organization needs employees who care about the organization, respect its spirit and rules and regulations, go beyond their normal job duties, and, above all, are expected to perform beyond expectations (Sulistiono, 2024). HR's role now extends beyond administrative functions to shaping organisational culture, developing capabilities, integrating technologies (e.g., HR analytics and HRIS), and enhancing employee experience (Abdullah, 2020).

According to Gomathy (2023) in Syarweny (2024), the core functions of HRM encompass: (1) recruitment and selection, (2) training and development, (3) performance management, (4) compensation and benefits, (5) employee relations, (6) diversity and inclusion, (7) HRIS, and (8) legal compliance. In this evolving context, HRIS is viewed as a central enabler of HR effectiveness and efficiency. Hospitality HR practices differ significantly from those in other sectors. These include global career development, cultural adaptation, 24/7 work environments, shift work, safety management, relationship building, workload balancing, and conflict resolution. Given the labour-intensive nature of the hospitality sector, effective HRM is vital to ensuring competitive success (Mohan, 2016).

### **Human Resource Information Systems (HRIS)**

Information and communication technology has become a necessity for humans in planning, implementing, and evaluating their activities (Hendi Prasetyo, 2022). One example of technological advancement in the field of information is the development of information systems in companies, particularly in human resource management. Human Resource Information Systems (HRIS) refer to software applications that assist human resource departments in managing tasks ranging from recruitment to reporting. According to Ambo (Sitti Nurbaya Ambo, 2015). HRIS functions as a decision-support system by enabling real-time data collection and workforce analysis, presenting visual dashboards, and delivering insights for

strategic planning. (Syarweny, 2024) highlights three essential roles of HRIS in contemporary organisations. First, it facilitates data-driven decision-making by providing integrated, real-time analytics to identify workforce trends and support strategic judgement. Second, it enhances training and development processes by identifying skill gaps, customising training curricula, monitoring learning progress, and evaluating outcomes. Third, HRIS supports career and turnover management by forecasting attrition risks and identifying opportunities for career advancement, thereby improving talent retention strategies.

### **Bibliometric analysis**

Bibliometric analysis, meanwhile, is a methodological approach that employs quantitative and qualitative techniques to evaluate research productivity, trends, and the structure of academic literature (Hakim, 2020). This analysis typically falls into two categories: descriptive bibliometrics, which focuses on the attributes and characteristics of publications, and relational or behavioural bibliometrics, which examines the connections and relationships among different pieces of literature (Yupi Royani, 2019). In this study, Biblioshiny—a user-friendly platform within the Bibliometrix R-package—is utilised to systematically visualise and interpret publication data, enabling the formulation and exploration of bibliometric research questions. R is a command-line programming language with open-source statistical packages and an ecosystem (Kabil & Priatmoko, 2021).

### **METHODOLOGY**

This research applies a Systematic Literature Review (SLR) methodology to synthesise scholarly evidence transparently and reproducibly. The approach aims to capture the full spectrum of relevant, peer-reviewed HRIS literature while assessing its quality (Lame, 2019); (Deniswara, 2023).

Following PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, this study ensures

a transparent, replicable, and comprehensive review process (Handayani, 2017); (Fauza, 2023).

Data were extracted from the Scopus database (Tricco, 2016) using the keywords: *decision making, hotel, human resource management, information management, tourism*. The search was restricted to articles published between 2021 and 2024 and carried out on 18 February 2025. Inclusion criteria required that sources be Scopus-indexed

journal articles, conference papers, editorials, scientific notes, or reviews, all of which had passed the final publication stage (Sanfilippo, 2020).

The initial search yielded 109 documents, which were refined to 40 journal articles for final analysis. These were processed and visualised using Biblioshiny (v4.3.2) within RStudio, enabling an in-depth bibliometric mapping of the research network.

## RESULTS AND DISCUSSION

### Bibliometric Analysis

The results of both descriptive and relational bibliometric analyses are presented as follows:

Table 1. Data Completeness Overview. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Meta Data	Description	Missing Counts	Missing%	Status
AB	Abstract	0	0	Excellent
CI	Affiliation	0	0	Excellent
AU	Author	0	0	Excellent
DI	DOI	0	0	Excellent
DT	Document Type	0	0	Excellent
SO	Journal	0	0	Excellent
LA	Language	0	0	Excellent
PY	Publication Year	0	0	Excellent
TI	Title	0	0	Excellent
TC	Total Citation	0	0	Excellent
ID	Keyword Plus	2	1,83	Good
RP	Corresponding Authour	4	3,67	Good
DE	Keywords	46	42,2	Poor
CR	Cited References	109	100	Completely Missing
WC	Science Categories	109	100	Completely Missing

As shown in Table 1, the bibliometric dataset is generally complete for key fields such as Abstract (AB), Author Affiliation (CI), Author (AU), DOI (DI), Document Type (DT), Source (SO), Language (LA), Publication Year (PY), Title (TI), and Total Citations (TC). These variables show no data gaps. However, for Keywords Plus (ID), although 1.83% of entries are incomplete, the overall data quality

remains acceptable. The Corresponding Author (RP) field shows a 3.67% incompleteness rate, which is still within an acceptable range. The most significant data gap is found in the Descriptors (DE) or author-provided keywords, where 40.2% of entries are incomplete—highlighting a notable limitation in keyword precision.

Table 2. Dataset Characteristics. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

<b>Description</b>	<b>Results</b>
<b>MAIN INFORMATION ABOUT DATA</b>	
Timespan	2021:2024
Sources (Journals, Books, etc)	4
Documents	40
Annual Growth Rate %	-56.32
Document Average Age	3.17
Average citations per doc	7.15
References	0
<b>DOCUMENT CONTENTS</b>	
Keywords Plus (ID)	536
Author's Keywords (DE)	43
<b>AUTHORS</b>	
Authors	105
Authors of single-authored docs	12
<b>AUTHORS COLLABORATION</b>	
Single-authored docs	12
Co-Authors per Doc	2.62
International co-authorships %	25
<b>DOCUMENT TYPES</b>	
Article	40

Table 2 describes the characteristics of the dataset, which comprises relatively recent publications, with an average publication age of 3.17 years, covering the period from 2021 to 2024 and sourced from four distinct journals. A notable decline in annual publication output is observed (-56.32%), warranting further investigation into possible causes such as shifting research priorities or reduced funding. The average number of citations per document is relatively low at 7.15, which may reflect either the niche nature of the topic or its emerging status within the field.

Additionally, the volume of Keywords Plus significantly exceeds that of author-provided keywords, suggesting a richer and possibly more refined indexation by the database. The data also reveals a high level of author collaboration, with an average of 2.62 authors per article, and 25% of the papers involving international collaboration—indicating a healthy degree of scholarly interaction across borders. Importantly, all records in the dataset are classified as journal articles, ensuring a consistent level of academic rigour across the analysed literature.

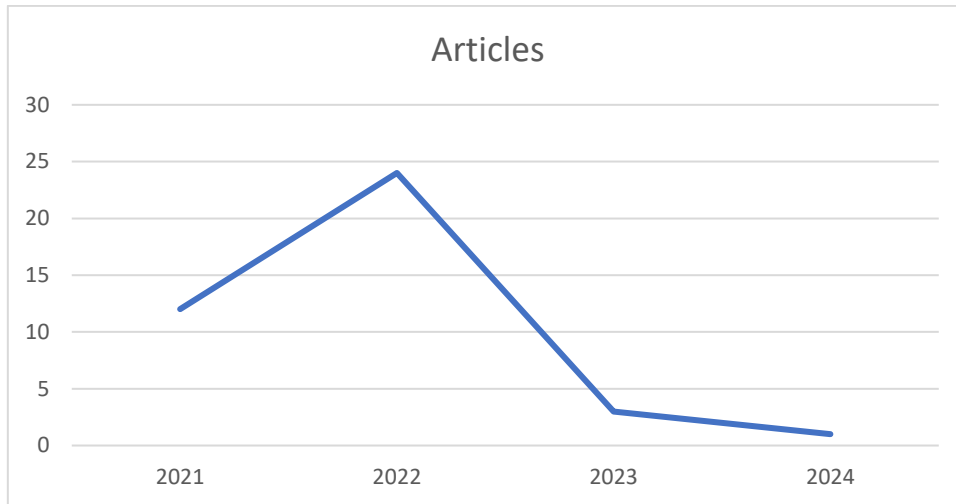


Figure 1. Annual Scientific Production. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Figure 1 illustrates the annual distribution of scientific publications (articles) from 2021 to 2024, showing a varied trend: in 2021, 12 articles were published, while 2022 saw a significant increase to 24 articles, reflecting either heightened research activity or a broader indexing scope. However, this was followed by a sharp decline in 2023, with only 3 articles published, and the downward trend continued into 2024, with just 1 article recorded.

This pattern reflects an inconsistent trend in publication volume over time. Following a notable increase from 2021 to 2022, the number of publications drastically decreased in subsequent years.

From a temporal relevance perspective, the publication surge in 2022 may be attributed to critical post-pandemic factors. In particular, the acceleration of digital transformation following the COVID-19 crisis likely played a central role. As organisations across sectors increasingly embraced digital solutions, there was a heightened need for resilient and adaptive Information Management Systems (IMS) for remote operations, decision-making, and communication.

This period also marked a rising focus on data analytics and intelligence. Titles such as "Application of Data Mining in Performance Management of Public Hospitals" and "Analysis of Enterprise Human Resources Demand Forecast Model Based on SOM Neural Network" reflect this trend.

Furthermore, 2022 appears to represent a phase of technological evolution within the IMS domain, potentially influenced by advancements in cloud computing, artificial intelligence (AI), Internet of Things (IoT), cybersecurity, and blockchain. Relevant studies, such as "Mobile Edge Computing Application in Enterprise Human Resource Management Platform Based on Task Scheduling Algorithm" and "IoT Applications in the Innovation System of Enterprise Human Resource Performance Management Based on the Integration of Big Data," demonstrate how emerging technologies were being explored for integration into information systems.

The spike in publications in 2022 suggests both a response to pressing organisational challenges and a surge in academic interest in novel approaches for designing and implementing effective IMS frameworks.

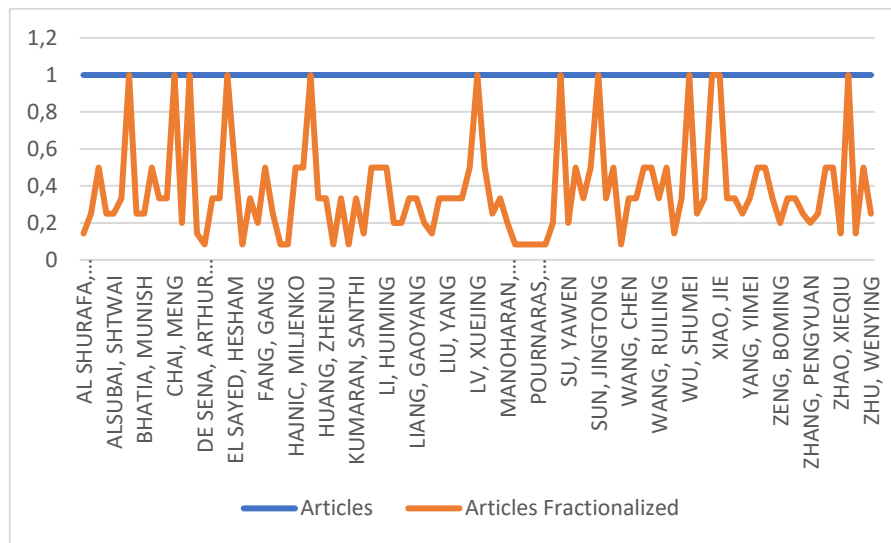


Figure 2. Average Citations per Year. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Despite the volume of publications in 2022, articles from 2021 and 2023 received higher average citations per article and per year (MeanTCperArt and MeanTCperYear), suggesting stronger scholarly impact. Publications from 2023, although few, showed

the highest annual citation rate—indicating early influence and high relevance. Meanwhile, 2024 articles had not yet received citations, which is understandable given their recent release.

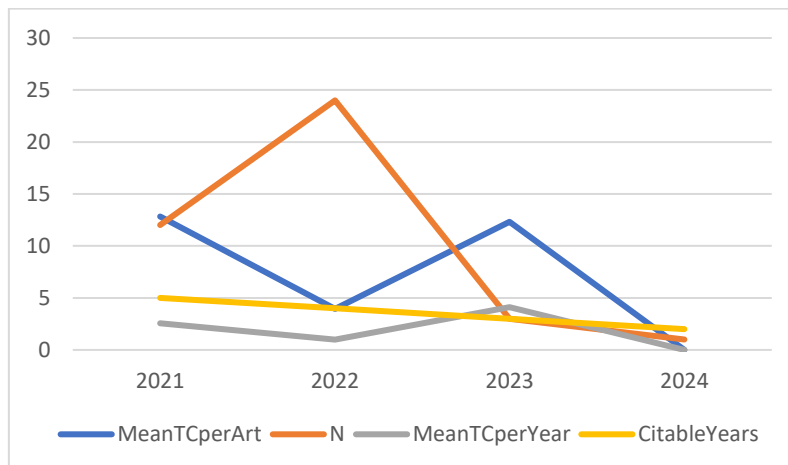


Figure 3. Most Relevant Sources. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.



In terms of source relevance, Computational Intelligence and Neuroscience emerged as the most prolific journal in the dataset, followed by Mobile Information Systems. Other notable sources include

Wireless Communications and Mobile Computing and IEEE Access, which, while featuring fewer publications, are still influential within the field.

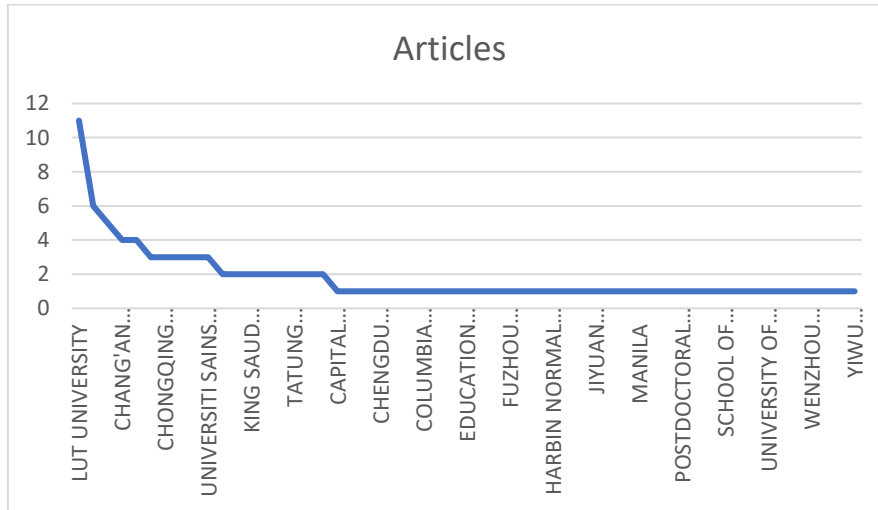


Figure 4. Most Relevant Authors. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Analysis of author contributions (Figure 4) reveals that most authors in the dataset contributed only a single publication. This suggests a dispersed authorship landscape with

many individual contributors rather than a concentration of prolific researchers dominating the field.

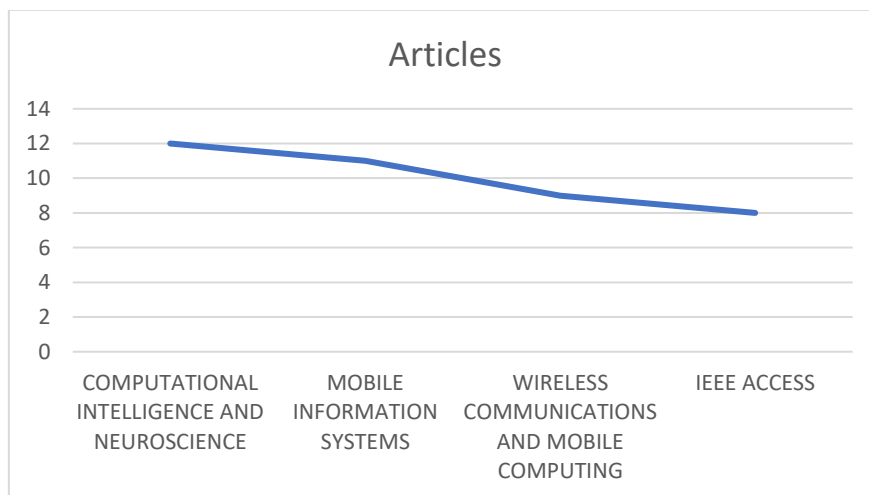


Figure 5. Most Relevant Affiliations. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Figure 5 highlights LUT University and Beihua University as the most prominent institutions in terms of publication output related to this topic. While most institutions had limited contributions, a few were notably productive. The data also demonstrates the

international relevance of the research theme, as represented by diverse institutional affiliations across countries. This indicates the potential for cross-institutional collaboration and disciplinary convergence.

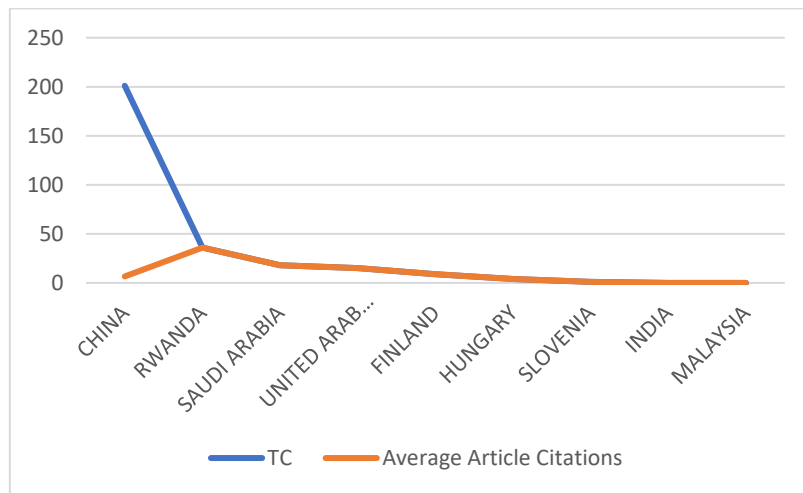


Figure 6. Most Cited Countries. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

China stands out as the most cited country overall, indicating both high publication volume and impact. Countries like Rwanda, Saudi Arabia, and United Arab Emirates show high impact per article, suggesting that although they contribute fewer papers, their work is of substantial scholarly

significance. On the other hand, nations such as Finland and Hungary show moderate influence, while Slovenia has minimal citation impact. India and Malaysia, though represented in the dataset, exhibit low visibility or impact in terms of citations.

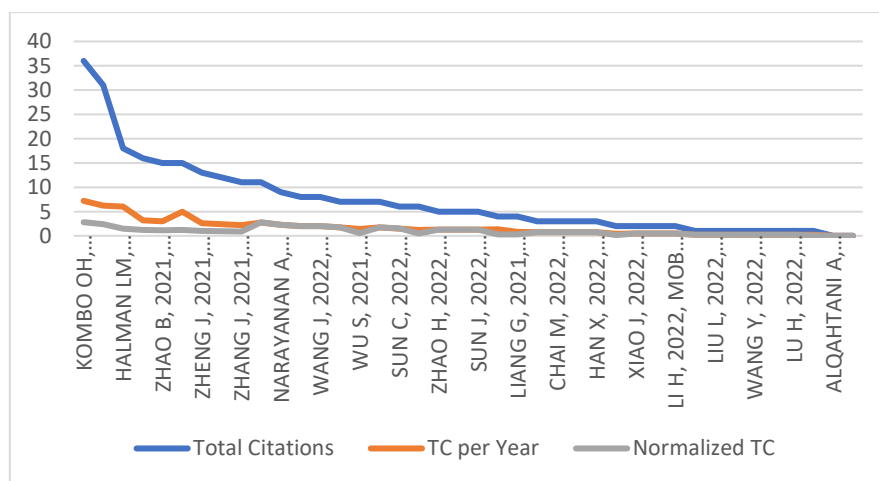


Figure 7. Globally Most Cited Documents. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

The most globally cited documents include KOMBO OH, 2021, IEEE ACCESS and SU Y, 2021, MOB INF SYS. These papers serve as foundational references within the dataset, as reflected by their high citation counts. Both IEEE Access and Mobile Information Systems appear as key publication venues. While older publications naturally

accumulate more citations, some recent studies also show rapid citation growth, highlighting emerging influence. Metrics such as Total Citations per Year and Normalised Total Citations offer further insights into the speed and scale of scholarly impact, although some documents still register relatively low citation numbers despite being included in the dataset.

Table 3. Trend Topics. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

<b>Term</b>	<b>Frequency</b>	<b>Year (Q1)</b>	<b>Year (Median)</b>	<b>Year (Q3)</b>
Information management	36	2021	2022	2022
Human resource management	29	2021	2022	2022
Decision making	12	2022	2022	2022

Through Biblioshiny, the topic trends are presented in detail in Table 3, allowing researchers to identify patterns and trends in the data through statistical functions and visualisations (Wisnawa, 2024). At this stage, the data provides initial insights into the research dynamics in the relevant field. Based on the reviewed documents, the following interpretations can be made: IEEE Access, a multidisciplinary journal covering various areas of electrical and computer engineering, appears multiple times in the most-cited documents list, suggesting a significant research trend in fields relevant to the journal's scope. Similarly, Mobile Information Systems (MOB INF SYS) also features numerous highly cited documents, indicating a strong research trend in the evolving field of information systems, including its technological aspects, applications, and

implications. The inclusion of Wireless Communications and Mobile Computing highlights significant interest and development in wireless communication and mobile computing topics. Furthermore, Computational Intelligence and Neuroscience shows a research trend linking computational intelligence with neuroscience. Additionally, when considering the potential topic trends based on the publication years (assuming topics remain relatively stable in the short term), it can be concluded that the dominance of publications in 2021 and 2022 suggests that the topics addressed in these publications were of major interest and widely researched during that period. The emergence of highly cited publications in 2023, such as those from IEEE Access, indicates that these topics remain relevant and continue to develop.

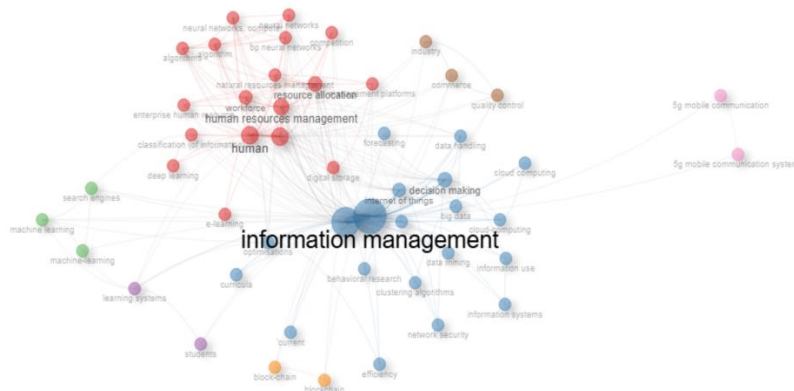


Figure 8. Keyword Co-occurrence Network. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Figure 8 displays the keyword co-occurrence network, visualising the connections between keywords. The colour or numbering of clusters (as shown in the "Cluster" column) indicates groups of keywords that frequently appear together. Cluster 1 (Red): Focuses on "human" and "human resources management," highlighting the relationship between human resource management, technology, algorithms, and potential applications across various contexts, including natural and digital resources. Cluster 2 (Blue): Centres on "information management" and "human resource management," indicating an emphasis on how information is managed, analysed, and used for decision-making, training, and improving efficiency, often leveraging technologies such as IoT, big data, and cloud computing. Cluster 3 (Green): Contains "machine learning" and "machine-learning," pointing to the application of artificial intelligence in information retrieval and machine learning contexts. Cluster 4 (Purple): Comprises "learning systems" and "students," suggesting a focus on learning systems and their relationship with learners. Cluster 5 (Orange): Includes "block-chain" and "blockchain," reflecting a focus on blockchain technology. Cluster 6 (Brown): Contains

"industry," "quality control," and "commerce," indicating an emphasis on management applications in the context of industry, quality control, and commerce. Cluster 7 (Pink): Includes "5G mobile communication" and "5G mobile communication systems," highlighting the focus on fifth-generation mobile communication technologies.

Thus, it can be concluded that "information management" emerges as a central theme and key connector in the analysed research, underlining its foundational role in various other research areas within the dataset. "Human resource management" is also a crucial topic closely tied to information management, with connections to human resources, technology, and algorithms. The emergence of different clusters indicates multiple, yet interconnected, research foci, such as the application of AI/machine learning ("machine learning," "deep learning"), blockchain technology, learning systems, and 5G communication technologies. Keywords with high betweenness centrality act as bridges between distinct topics, indicating the potential for interdisciplinary research. Keywords with high closeness and PageRank scores represent core topics that have a significant influence across the overall research network.

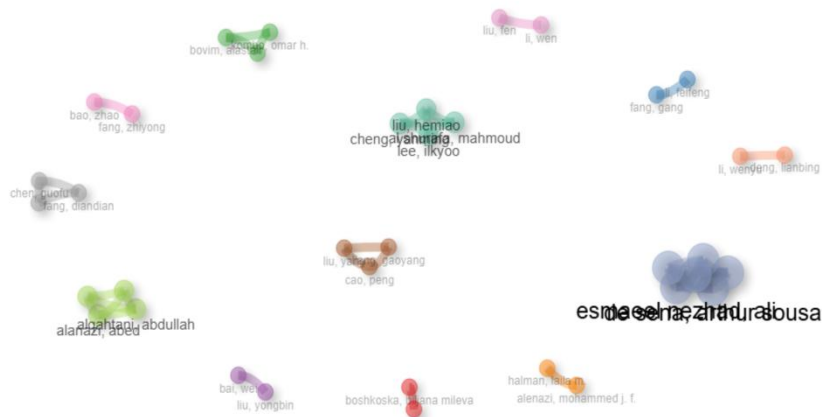


Figure 9. Collaboration. Source: researcher, derived from R Programming Language (bibliometrix package), 2025.

Figure 9 presents an analysis of author collaboration networks, revealing a structure fragmented into multiple groups or communities, as indicated by the "Cluster" column. Thirteen clusters were identified, highlighting the existence of fragmentation in author collaboration. Intra-group Connectivity: The varying closeness values among authors indicate differences in their connectedness to other members within their collaboration groups. Authors with a closeness value of 1 are highly connected to other members, while lower values (e.g., 0.2, 0.333) reflect authors on the periphery of the group, with fewer direct collaborations. Author Influence: The uniform PageRank value indicates that all authors have relatively equal influence within the detected collaboration network. However, the zero betweenness value may affect the interpretation of PageRank. It is evident that this collaborative research shows the presence of multiple disciplines working together to

address evolving complex issues ( (Yohanes sulistyadi, 2024).

### HRIS STUDY AND ITS IMPLICATIONS FOR HR PRACTITIONERS IN GENERAL

The analysis confirms that the implementation of systems can have transformative impacts on HR practitioners in companies, as explored by Sun J. in the article "Machine Learning-Driven Enterprise Human Resource Management Optimization and Its Application." The key impacts are:

1. Enhanced Recruitment Efficiency and Accuracy, Reducing Information Load: HR practitioners no longer need to manually sift through large volumes of applicant data. The system automatically presents the most relevant candidates that match job criteria. Additionally, Improved Candidate Matching: With deep learning-based recommendations, the system can identify more complex and personalized matches between candidates and positions, even with minimal data (cold start), leading to higher quality hires and shorter recruitment times.
2. Stronger Data-Driven Decision-Making: HR practitioners will receive more

curated and relevant information on talent and labour market trends, helping them make more informed decisions regarding talent acquisition strategies, employee development, and succession planning. The system's real-time recommendation capabilities also enable quicker responses to changing talent needs.

3. **Improved User Experience (UX) for HR and Employees/Candidates:** HR practitioners can focus on strategic aspects of their role rather than time-consuming administrative tasks, as the system handles data search and filtering. Furthermore, **Personalisation for Employees/Candidates:** The system implicitly suggests job openings or career development opportunities tailored to employee/candidate profiles and preferences, enhancing satisfaction and engagement.
4. **Addressing New Data Challenges:** The system's ability to manage the cold start problem ensures that useful recommendations are made even for new candidates or job openings without much initial data, preventing missed opportunities.

Overall, the application of recommendation systems within the HRIS ecosystem will enable HR practitioners to shift from reactive and time-consuming information management to a more proactive, intelligent, and personalized approach to talent management, ultimately contributing to operational efficiency and competitive advantage.

Liu L., Sun B., Xu Q.'s article "Mobile Edge Computing Application in Enterprise Human Resource Management Platform Based on Task Scheduling Algorithm" directly links HR's critical role in company development and how HR informatics, through information management systems, can optimize efficiency. The implications for HR practitioners include:

1. **Faster System Access and Responsiveness, with Reduced Latency:** HR practitioners will experience

significantly faster access to employee data, analytical reports, approval processing, and data entry with minimal delays due to data processing being done closer to the source or user. This is crucial for agile HR operations and real-time decision-making. Superior Mobility Support allows HR practitioners and employees to access HRIS functions from anywhere and at any time through mobile devices with optimal performance, enabling flexible work and dynamic HR management.

2. **Enhanced HR Process Efficiency and Optimization:** By reducing the processing load on central networks and data centres, the HRIS system becomes more stable and efficient overall. This indirectly supports increased efficiency in HR processes such as recruitment, payroll, performance management, and HR administration. Additionally, **Comprehensive Optimization:** The use of network communication technology to build management information systems explicitly mentions that it "can significantly optimize and improve the efficiency of human resource management," indicating that this technology not only improves speed but also enables streamlined and automated workflows in HR.
3. **Driving Continuous HR Data Analysis, Focusing on Data Importance:** Despite the introduction of advanced technologies, the research emphasizes that HR informatics still requires "monitoring and comprehensive, ongoing analysis of internal data, information, and trends." This underscores that HR practitioners must remain focused on interpreting data and insights from HRIS to identify trends, evaluate programs, and make evidence-based strategic decisions. Technology provides the data, but human analysis gives it meaning. Furthermore, **Enhancing HR's Strategic Capacity** allows HR practitioners to focus more on strategic roles like workforce planning,

talent development, change management, and senior management consultation on HR issues that affect business growth.

## **HRIS STUDY AND ITS IMPLICATIONS FOR HOTEL HR PRACTITIONERS**

HRIS adoption strengthens HR practices and organizational performance in the hospitality sector, particularly for More Efficient Workforce Management in a 24/7 Operational Environment: HRIS simplifies complex staff scheduling across various hotel departments (front office, housekeeping, food & beverage, etc.) that operate around the clock. The system helps optimize resource allocation, prevent staff shortages or surpluses, and ensure compliance with working hour regulations. The 2020 study by Rand H. Al-Dmour, University of Jordan, "The Influence of HRIS Usage on Employee Performance and Mediating Effects of Employee Engagement in Five-Star Hotels in Jordan," found that HRIS usage positively impacts both employee performance and engagement, with engagement acting as a partial mediator. Key conclusions include:

1. **HRIS as a Strategic Driver of Employee Performance and Engagement:** The findings confirm that HRIS is not just an administrative tool for managing data but a strategic investment that can directly improve employee productivity and effectiveness. Moreover, HRIS enhances employee engagement, indicating that well-designed systems can help employees feel more connected, empowered, and motivated, which is essential for sustained performance.
2. **Focus on Designing and Utilizing HRIS to Build Engagement:** Since employee engagement mediates HRIS' effect on performance, HR practitioners need to focus not only on technical functionality but also on how HRIS can: **Ease Information Access:** Employees can easily access important information (e.g., salary, leave, benefits, policies). **Enhance Autonomy:** Self-service features allow employees to manage

personal data and certain HR processes independently.

**Improve Communication:** HRIS can serve as an effective communication channel between management, HR, and employees. **Support Development:** Training or performance management modules within HRIS can facilitate employee development. HR practitioners should promote HRIS as a tool that empowers employees rather than just a system for use.

3. **Practical Implications for HRIS Implementation and Management:** **Effective Training** ensures employees understand how to use HRIS optimally and perceive its benefits in their daily work. The **HRIS User Experience (UX)** should be intuitive and easy to use to encourage high adoption and engagement. Moreover, HR practitioners need to actively communicate how HRIS can make employees' work easier, more transparent, and more connected, ultimately enhancing their performance. **Integration with Broader HR Strategies:** HRIS should be seen as an integral part of the talent management and company culture strategies to maximize its impact on performance and engagement.

A 2024 study by Valentyna Postova, Iryna Mazurkevych, Maryna Riabenka, Alla Lukianets, and Iryna Krupitsa, "Development of Information Systems and Technologies in the Field of Hotels and Tourism," concluded that information systems in the hospitality industry prove to be economically viable and effective when they can generate revenue, provide a competitive advantage, increase market share, reduce costs, and improve efficiency across departments and the hotel as a whole. The implementation of these systems can transform the methodological, informational, and technological components of management processes to a higher and more efficient level, significantly improving service quality. While some regions (e.g., Ukraine) may lag in adoption, the potential for implementing modern management systems

tailored to local conditions is promising for enhancing competitiveness. Overall, the adoption of new technologies holds great potential for improving human effort outcomes, including overcoming institutional challenges and optimizing operational tasks such as guest accommodation and reservation management.

## CONCLUSION

Eleven out of forty articles confirm that the development and implementation of Human Resource Information Systems (HRIS) have made it easier and more efficient for company managers to manage the organisation. Additionally, it has streamlined operations by reducing investment in human resources, while also enabling employees to have greater contribution and participation in the company's development. The gap in the literature regarding research trends on the topic of HRIS highlights the urgent need for studies that adopt a bibliometric analysis approach, such as in-depth investigations into the positive impact of HRIS usage on company growth (S., 2022). Research by Kombo O.H., Kumaran S., Bovim A., Su Y., Chen G., Li M., Shi T., and Fang D., as well as related research documents from IEEE ACCESS and Mobile Information Systems, have the highest citation counts, despite discussing different topics. This is because each article identifies and attempts to solve significant practical problems within its context, applies cutting-edge technologies, and presents solutions that have the potential to bring considerable benefits to their respective fields, all while employing a structured approach and methodology in their research.

The year 2022 marks a particularly active and relevant period for research in this field, driven by the acceleration of digital transformation, an increased focus on data and analytics, the evolution of information technology, heightened awareness of information management challenges, and a growing academic interest in innovations within information systems. These studies provide valuable insights into current trends, challenges, and innovative solutions within the

field of information management systems. The research reveals that HRIS usage has a significant positive influence on both employee performance and employee engagement. Moreover, it uncovers that employee engagement serves as a partial mediator in the relationship between HRIS usage and employee performance, indicating that HRIS not only directly enhances employee performance, but also indirectly improves it by increasing the level of employee engagement. In summary, these findings underscore that HRIS is an invaluable tool for HR practitioners, not only for operational efficiency but also as a key instrument in fostering a more engaged and high-performing workforce. Consequently, the strategic investment and management of HRIS is a priority for modern HR functions. Looking ahead, bibliometric studies on HRIS should focus on efforts to analyse the conceptual and empirical bridges between information management and various specific HRIS functions. Additionally, it is crucial to explore the potential integration and impact of emerging technologies, such as AI, blockchain, and 5G, within the HRIS domain. Furthermore, it is essential to delve into human interaction with HRIS and how human factors principles can be applied to design and implement more effective systems. The ultimate goal is to measure the significant impact of HRIS usage in human resource management practices.

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