

HRIS for Sustainable Workforce Management: A Literature-Based Perspective

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ABSTRACT

The study explores the impact of Human Resource Information Systems (HRIS) on organizational learning, productivity, and sustainability in a dynamic human resource management landscape. It employs a combination of Systematic Literature Review (SLR) and bibliometric analysis to analyze peer-reviewed articles from 2001 to 2021, using Scopus as the primary database. By applying inclusion and exclusion criteria, the study highlights HRIS's evolutionary trends, knowledge structure, and literature gaps, particularly in the financial sector. Using VOSviewer for co-citation analysis and bibliographic coupling, the research identifies significant publications, productive authors, and key themes. The study further illustrates the benefits of HRIS implementation in financial sectors, offering insights into research advancements and future possibilities for sustainable sectors. Conducted under the PRISMA 2020 guidelines, the research ensures systematic, transparent, and reproducible methods. This paper provides scholars and practitioners with analytical frameworks to explore HRIS applications across different sectors.

Keywords: Human Resource Information System (HRIS), Systematic Literature Review (SLR), Bibliometric Analysis, VOSviewer, Scopus, Co-citation Analysis, PRISMA.

INTRODUCTION

Human Resource Information System (HRIS) has fostered effective organisational learning, noticeable productivity, and, above all, sustainability in a period of demanding and changing human resource management approaches for organisational growth and development of information technology. As organizations continue to face challenges such as globalization, remote work, and dynamic workforce expectations, there is a growing need to explore how HRIS can address these demands and facilitate the transition to more innovative HR practices.

The current study combines bibliometric analysis with a systematic literature review (SLR). The systematic review is used methodically to collect available material and then evaluate it against established criteria (Tranfield et al., 2003). The current study examines peer-reviewed articles from the year 2001 to 2021 from Scopus database. Specific keywords are used to find articles with the different search string resulting in articles which were undertaken for further study after inclusion and exclusion criteria. This review-based work aims to provide qualitative insight into HRIS's overall evolutionary trend, knowledge structure, and literature gaps and suggests some future research possibilities with special reference to the financial sector by using open-source software. The study offers a clear insight into the benefits of implementing HRIS in the financial sectors and also a comprehensive picture of the advancement of publications and research diversification within the domain. Furthermore, it gives scholars and practitioners an analytical idea to implement HRIS in different sustainable sectors.

The current study is a combination of Systematic Literature Review (SLR) and Bibliometric Analysis. SLR is used in the study because the procedure it involves is systematic, reproducible, transparent, and iterative. Electronic databases are becoming more widely available, making it simpler for academics to conduct systematic research in a timely way. Therefore, SLR is conducted strictly following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) statement, i.e., PRISMA checklist and flow diagram. The PRISMA declaration also guarantees the research's accuracy and completeness (Moher et. al., 2009). In the present study, for new systematic reviews, the PRISMA 2020 flow diagram is utilised, which solely includes database and registry searches. To begin with a database search, it is important to establish the scope of the study and to choose the suitable keywords that are to be utilised during the search.

Objectives

1. Examine the evolution of Human Resource Information Systems (HRIS) from 2001 to 2021.
2. Identify key research trends, influential publications, and significant contributors in the HRIS domain.

3. Utilize systematic literature review (SLR) and bibliometric analysis to provide insights into HRIS research advancements.
4. Analyze the focus of HRIS research on the financial sector, particularly its implementation in banking and insurance industries.

METHODOLOGY

Data Collection

The study employs a Systematic Literature Review (SLR) following PRISMA 2020 guidelines. Articles were sourced from the Scopus database between 2001 and 2021. Boolean operators and search strings were used to refine the search results.

Selection Criteria

Inclusion of peer-reviewed journal articles, conference papers, book chapters, and reviews. Exclusion of articles not in English and those unrelated to HRIS. Data refined based on subject area, document type, and accessibility.

Bibliometric Analysis

Conducted using VOSviewer for co-citation analysis, bibliographic coupling, and co-occurrence keyword analysis. Publication trends, country-wise distribution, author collaboration, citation networks were analysed.

Documents Search Process

In order to start exploring about the topic Human Resource Information System (HRIS), data required for the study was acquired from the Scopus database only and a thorough investigation was searched in the Title, Abstract, and Keywords which were merged to find the most pertinent study in the field. At first, documents were collected using search string and Boolean operators into the Scopus database. All the documents collected were without refining open access, year of publication, author name, subject area, document type, source title, publication stage, keyword, affiliation, funding sponsor, country/territory, source type and lastly language.

PRISMA Statement

It is important to establish the scope of the study and to choose suitable keywords before beginning a database search. The search strings were used to conduct a literature search in the Scopus database in order to conduct the broadest study of the literature feasible and to include as many research papers relevant to the issue in the search as possible. The below Table and figure shows the flow of information i.e., records included for further study and records excluded from the study. The articles found during the search were assessed, and the PRISMA statement guidelines for paper selection were followed.

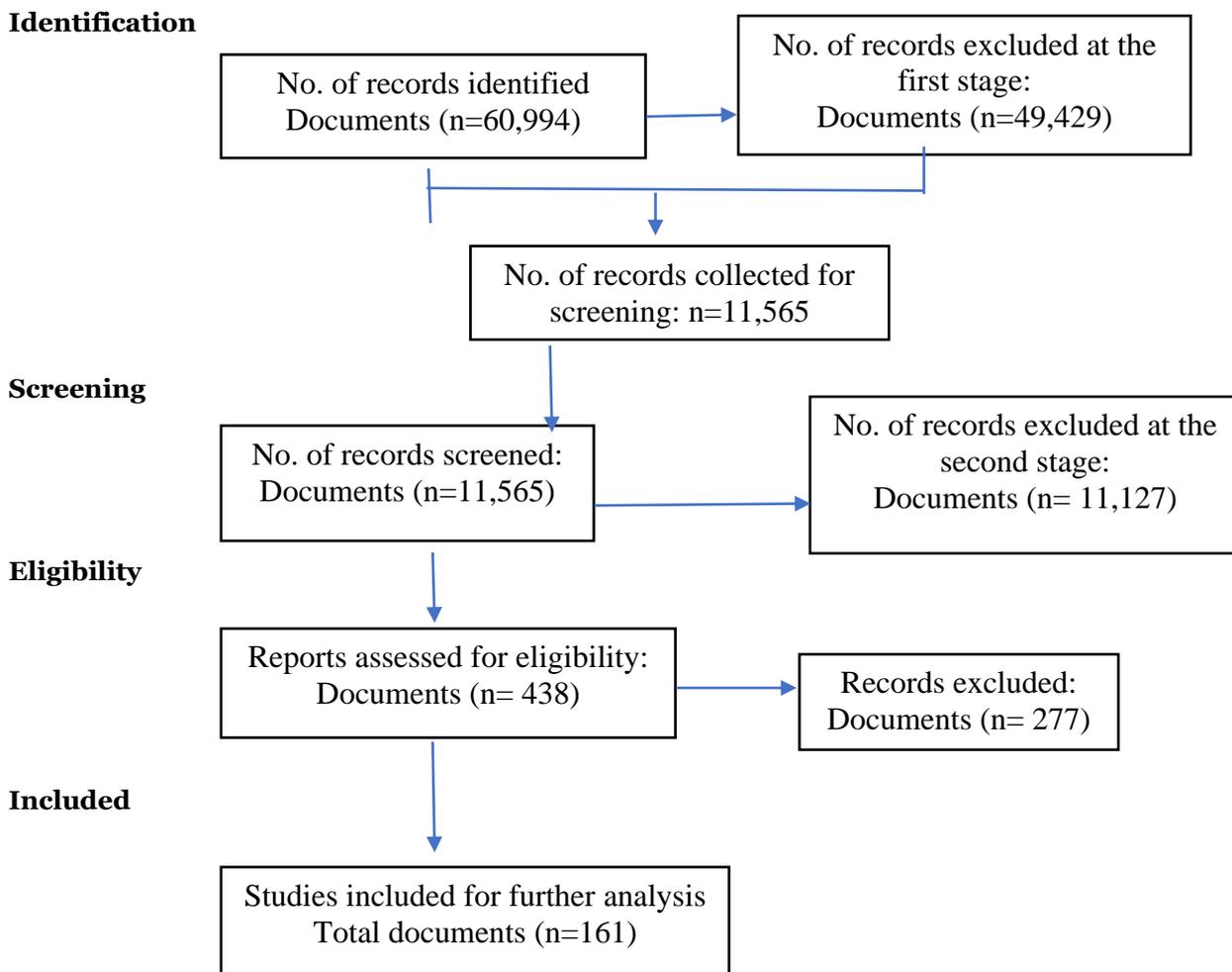
Table 1: Data retrieval process

Year	Database	Search string	Language	Document type
2001-2021	Scopus	(i) "human resource information system" AND "business organisations" (ii) "human resource information system" AND "hospitality industry" (iii) "human resource information system" AND "IT industry" (iv) "management information system" AND "human resource information system" (v) "human resource management system" AND "Banking" (vi) "human resource information system" AND "application" (vii) "ict" AND "personnel management" (viii) human AND resource AND information AND system (ix) "human resource management system" AND "IT industry" (x) hrms (xi) "human resources information system" AND "Banking", Hris, hris OR hrms OR "human resource information system"	English	Article Conference Paper Review article Book chapter

	OR "human resource management system", "human resource information system" AND "insurance companies"		
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(Source: Adapted from the study)

Figure 1: Flow of Information (Inclusion and exclusion criteria)



Source: PRISMA STATEMENT (Flow diagram)

Selection criteria

The selection criteria are divided into four stages in order to strictly follow the PRISMA statement which gives a clear view of documents under identification, screening, eligibility and inclusion. Exclusions were made under each stage according to the limitation criteria.

Stage 1: Identification

In table 2 data retrieval process. The year limitation, database, search string, language and document type were first established. There is total 11 search strings and are search in the Scopus database from year 2001 to 2021. The document types for the study are articles, conference papers, review articles and book chapters only. The documents available other than in English language were not included for the study. Keeping in mind about all the data retrieval limitations 60,994 documents were recorded in the identification process. The total number of 47,429 documents were excluded from the subject areas – Medicine (12,274), Biochemistry, Genetics and Molecular Biology (8,244), Chemistry (7,112), Environmental Science (4,370), Agricultural and Biological Sciences (3,505), Pharmacology, Toxicology and Pharmaceutics (2,204), Mathematics (1,454), Materials Science (1,329), Nursing (1,279), Chemical Engineering (1,102), Health Professions (991), Earth and Planetary Sciences (978), Physics and Astronomy (710),

Neuroscience (542), Energy (469), Immunology and Microbiology (440), Veterinary (258), Dentistry (162) and Undefined (6).

Stage 2: Screening

After excluding 47,429 documents from various subject area. Total 11,565 documents were recorded for screening. The included subject areas are- Business, Management and Accounting (7,879), Computer science (1,121), Engineering (756), Social Sciences (534), Decision Science (412), Multidisciplinary (356), Arts and Humanities (289), Economics, Econometrics and Finance (134), Psychology (84).

During the screening process, documents were first screened on the basis of scope of the present study. The total number of 6,785 documents was found to be out of the scope and 2,809 documents were within the scope of the study. Later, the finalised documents are screened again for its availability as full text wherein, it was found that 1,414 documents were not available as full text and 119 documents were identical. During this period, duplicate articles were eliminated from the databases to obtain a list of distinct articles. The major reason behind difficulty getting access to the full text content is because of publisher's restrictions. Therefore, after screening the documents finally 11,127 documents were excluded from the further study and 438 documents were assessed for eligibility.

Stage 3: Eligibility

In the third stage 438 documents were recorded to check eligibility. There are 277 articles that are still in press were excluded. Documents that have been approved for publication but have not yet been sorted into a volume or issue are referred to as articles in press. Journal pre-proofs, uncorrected proofs, corrected proofs, and withdrawn articles in press are all considered to be articles in press stage. Therefore, such articles were excluded from the study and a total of 161 documents were finalised for further analysis.

Stage 4: Documents included

In the final stage a total of 161 documents are included for further study. The documents are accessible as full text to download and to read online.

Descriptive analysis

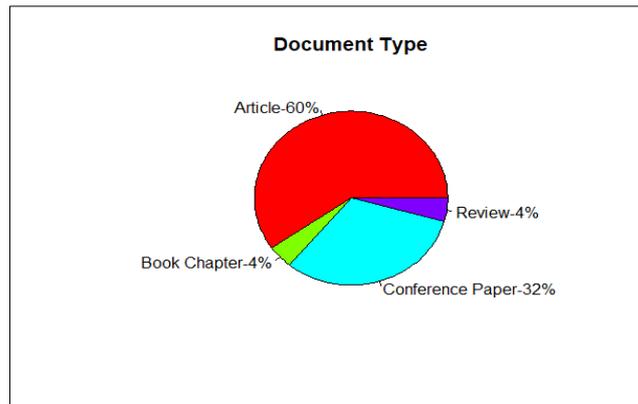
Descriptive analysis helps to identify patterns, trends, and relationships within the data, and is useful for gaining insights into the data and making informed decisions.

Document type

The below pie chart shows a clear picture of the percentage distribution of document types into four categories i.e., Article, Book Chapter, Conference Paper and Review Article.

Document Type	Count of Document Type
Article	96
Book Chapter	7
Conference Paper	51
Review	7
Grand Total	161

Graph 1 and Table 2: Document Type Distributions



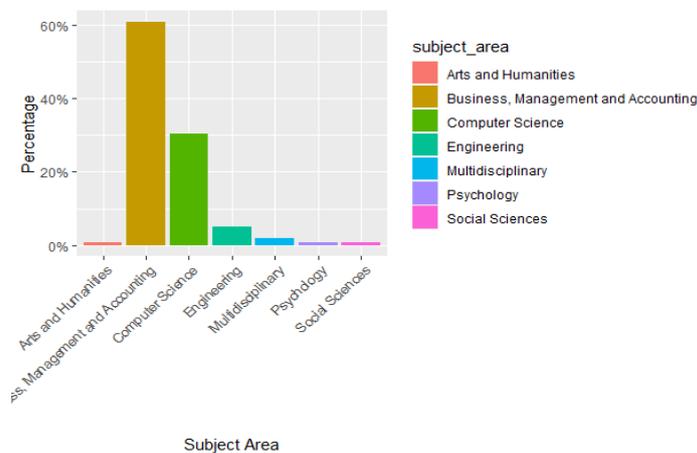
(Source: Scopus database)

The Graph 1 and Table 3 above shows that the highest percentage of document type is article, i.e. 60% with a total of 96 articles. It is followed by the conference article with 32 % and 51 documents. Book chapter and Review share the same percentage of document type with 4% and 7 number of documents each. Therefore, for the present study total 161 documents has been taken for bibliometric analysis.

Subject area

The next distribution is the subject area in which 7 branches of study were covered under subject area. Initially nine subject areas were selected for the study. Later during the inclusion and exclusion criteria only seven subjects covered the selection process. Those subjects are- (i) Business, Management and Accounting (ii) Computer science (iii) Engineering (iv) Social Sciences (v) Decision Science (vi) Multidisciplinary (vii) Arts and Humanities (viii) Economics, Econometrics and Finance (ix) Psychology. Below is the figure showing subjects with its number of documents.

Graph 2: Distributions of documents on the basis of subject area



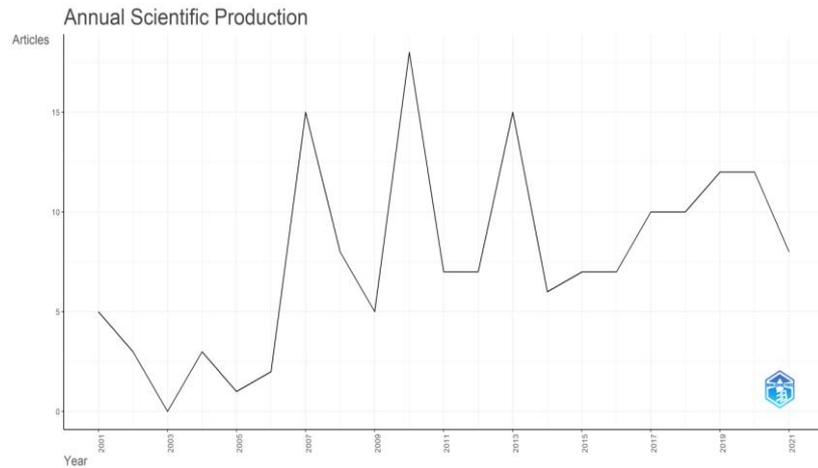
(Source: Scopus database)

In the graph 2 above the highest percentage covering subject area is Business, Management and Accounting with 60% and 98 documents. Next, the subject area Computer Science scores the second highest percentage of 30% with 49 documents. The third subject area engineering score 5% with 8 documents. The fourth subject area multidisciplinary score 2% and 3 documents. The last three subject areas i.e., arts and humanities, psychology and social sciences score same percentage of 1% with 1 document each.

Publication per year

The publication of documents was counted for per year. The year limitation for the present study is from 2001 to 2021. Within this annual limit, other areas such as document type, language, and appropriate database were also considered. Below is the graph 2.3 showing publication of documents per year.

Graph 3: Publications of documents per year



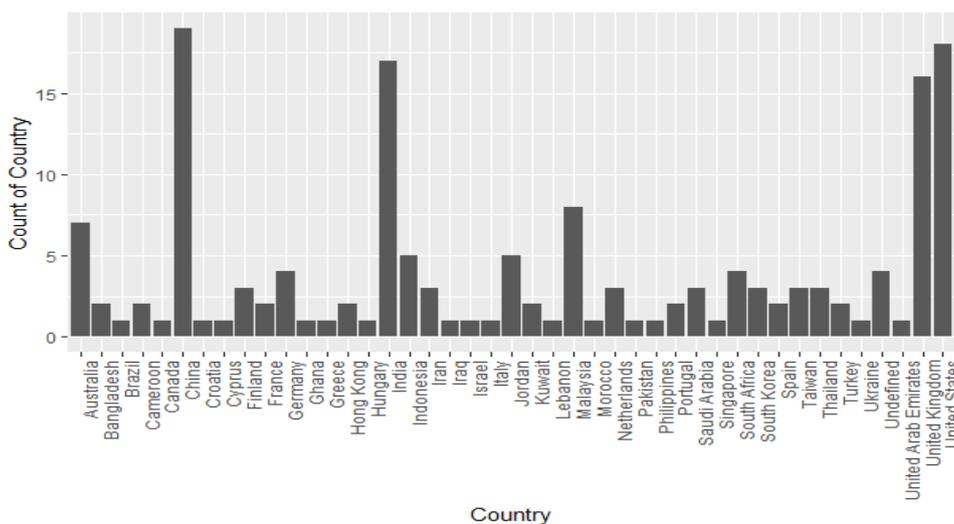
(Source: Scopus database)

Graph 3 displays the quantity of publications published each year. It is observed that in year 2001 - 5 documents, 2002 - 3 documents, 2004 - 3 documents, 2005 - 1 document, 2006 – 2documents, 2007 - 15 documents, 2008 - 8 documents, 2009 - 5 documents, 2010 - 18 documents, 2011 - 7 documents, 2012 - 7 documents, 2013 - 15 documents, 2014 - 6 documents, 2015 - 7 documents, 2016 - 7 documents, 2017 - 10 documents, 2018 - 10 documents, 2019 - 12 documents, 2020 - 12 documents and lastly 2021 - 8 documents were published. Here, it can be observed that initially during year 2001 to 2006 numbers of articles publish were very less i.e., minimum 1 document and maximum 5 documents. But since 2007 number of publications has been increased.

Country wise publication

The number of article publication from each country is counted to know which country is the highest in terms of publication. There are 43 countries in the list. Below is the Graph 2.4 showing Country wise publication of documents.

Graph 4: List of countries and publications



(Source: Scopus database)

The countries with the highest number of articles are China (19), United States (18), India (17) and United Kingdom (16). The other countries publish articles less than 10 are – Malaysia (8), Australia (7), Indonesia (5), Jordan (5), Germany (4), South Africa (4), United Arab Emirates (4), Undefined (4), Finland (3), Iran (3), Netherlands (3), Saudi Arabia (3), South Korea (3), Taiwan (3), Thailand (3), Bangladesh (2), Cameroon (2), France (2), Hong Kong (2), Kuwait (2), Portugal (2), Spain (2), Turkey (2), Brazil (1), Canada (1), Croatia (1), Cyprus (1), Ghana (1), Greece (1),

Hungary (1), Iraq (1), Israel (1), Italy (1), Lebanon (1), Morocco (1), Pakistan (1), Philippines (1), Singapore (1), Ukraine (1).

Descriptive figures of the documents retrieved

The documents retrieved from Scopus database was imported to biblioshiny to get more accurate and descriptive figures. Below is the information about all the 161 documents collected from Scopus.

Table 3: Descriptive figures

Description	Results
MAIN INFORMATION ABOUT DATA	
Time span	2001:2021
Sources (Journals, Books, etc)	120
Documents	161
Annual Growth Rate %	2.38
Document Average Age	10.1
Average citations per doc	14.02
References	6273
DOCUMENT CONTENTS	
Keywords Plus (ID)	558
Author's Keywords (DE)	432
AUTHORS	
Authors	338
Authors of single-authored docs	33
AUTHORS COLLABORATION	
Single-authored docs	34
Co-Authors per Doc	2.41
International co-authorships %	16.77
DOCUMENT TYPES	
Article	96
book chapter	7
conference paper	51
Review	7

(Source: Scopus database)

The above Table 3 provides key information about the dataset of the topic “Human Resource Information system” (HRIS). The data covers the time span of 2001-2021 and includes 161 documents from various sources such as journals, books, and conferences. The average annual growth rate is 2.38%, with an average document age of 10.1 years. The average number of citations per document is 14.02, and there are 6,273 references in the dataset. The dataset also includes 558 keywords and 432 author keywords. The documents were written by 338 authors, with 33 authors contributing single-authored documents. The average number of co-authors per document is 2.41, with 16.77% of co-authorships being international. In terms of document types, there are 96 articles, 7 book chapters, 51 conference papers, and 7 reviews. This information provides insight into the nature and scope of the dataset and could inform further research in the field.

Bibliometric analysis

The goal of bibliometric analysis here in the study is to provide insights into the productivity and collaboration patterns of researchers, documents, keywords and countries.

Table 4: Types and Unit of Analysis

Sl. No.	Types of analysis	Unit of analysis
1.	Co-authorship	Authors
2.	Co-occurrence	All keywords Index keywords
3.	Citation	Documents Authors

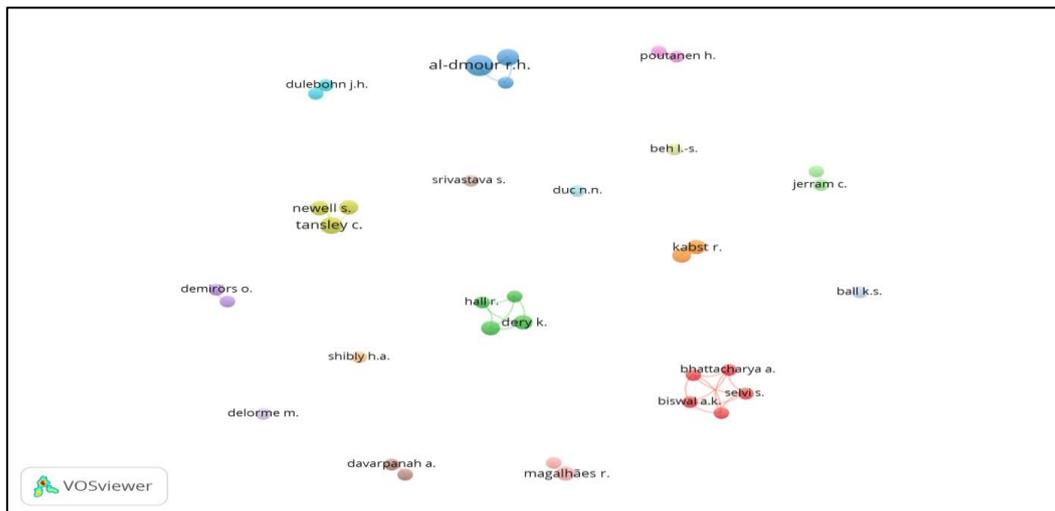
4.	Bibliographic coupling	Documents Authors Countries
5.	Co-citation	Cited authors

(Source: VOSviewer)

In the above table 4 different types of analysis in the field of bibliometrics is shown. The first type of analysis is co-authorship, which focuses on identifying collaborations between authors. In this type of analysis, the unit of analysis is the authors themselves. The second type of analysis is co-occurrence, which involves identifying the frequency of occurrence of all keywords or index keywords in a set of documents. The unit of analysis for co-occurrence is the set of all keywords or index keywords. The third type of analysis is citation analysis, which identifies the frequency of citations of individual documents or authors. The unit of analysis for citation analysis can be either the documents themselves or the authors who have been cited. The fourth type of analysis is bibliographic coupling, which identifies the frequency of co-citations between documents, authors, or countries. The unit of analysis for bibliographic coupling can be documents, authors, or countries. Finally, co-citation analysis focuses on identifying the frequency of citations of specific authors in a set of documents, with the unit of analysis being the cited authors. These different types of analysis are all important in understanding the structure and impact of academic research in a given field.

1. *Co-authorship:* The given data represents the number of articles published by different authors. The data provides a snapshot of the publishing trends in academic research. This report aims to analyse the data and identify the most prolific authors.

Figure 2: Co-authorship analysis



The above figure 2 is showing the total number of articles divided by the number of co-authors in each article. The author with the highest number of articles is AL-DMOUR RH with six articles, followed by 10 authors with four articles each. Additionally, 20 authors have published two articles each, while 71 authors have published only one article. The data also provides insight into how much contribution each author has made in each article. The average fractionalized number of articles for all authors is approximately 0.76, which indicates that the typical article has a little more than one co-author.

It is also interesting to note that some authors have a relatively high fractionalized number of articles. For instance, BALL KS has a fractionalized number of 2.0, which implies that the two articles in which they have contributed have no other co-authors. On the other hand, authors such as CHENG C-C have a fractionalized number of only 0.14, which indicates that the articles in which they have contributed have many co-authors.

The data can be used to draw insights about the publishing trends in the field of academic research. For instance, the authors who have published the most articles can be considered the most prolific authors in the field. Furthermore, the authors with a higher fractionalized number of articles can be considered the primary contributors to the articles in which they have participated.

2. **Co-occurrence:** While analysing the keywords there are 3 types of unit of analysis i.e., all keywords, author keywords and index keywords. All keywords can be seen as a broader term, including all the keywords present in the article. In this, keywords are extracted from all the articles, including the author keywords and the index keywords.

Figure 3: Co-occurrence of all keywords

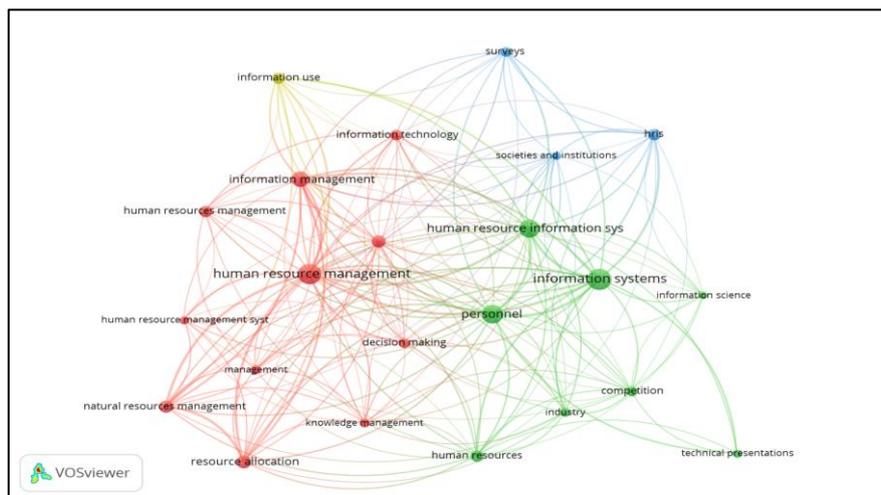


(Source: Scopus database)

Figure 3 shows the frequency of occurrence of various terms related to information systems and human resource management. The term "information systems" has the highest frequency of occurrence at 36 times, followed closely by "human resource management" at 33 times and "personnel" at 29 times. "Human resource information systems" is fourth on the list with a frequency of 25 times. Other terms such as "information management", "resource allocation", and "natural resources management" also appear on the list, though with lower frequencies of occurrence. It is interesting to note that terms such as "competitive advantage", "innovation", and "knowledge management" also appear, indicating the importance of these concepts in the field of information systems and human resource management. Thus, the figure highlights the key topics and themes that are frequently discussed in this field of study, and could serve as a useful starting point for further research and analysis.

- **Co-occurrence Index keywords:** Indexed keywords are chosen by Scopus and are standardized to vocabularies derived from thesauri that Elsevier owns or licenses. Unlike Author keywords, Indexed keywords take into account synonyms, various spellings, and plurals. The keywords analysed include competition, decision making, HRIS, human resource information systems, human resource management, human resource management systems, human resources, human resources management, industry, information management, information science, information systems, information technology, information use, knowledge management, management, management information systems, natural resources management, personnel, resource allocation, societies and institutions, surveys, and technical presentations.

Figure 4: Co-occurrence of Index keywords

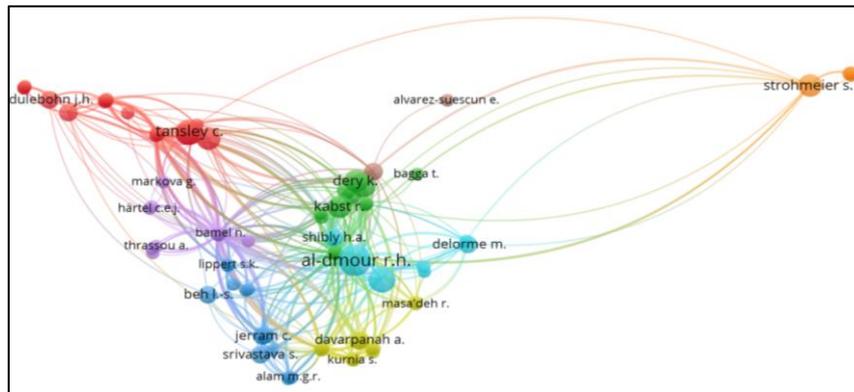


The figure 4 shows that human resource management has the highest number of occurrences and link strength, followed by human resource information systems and information systems. This indicates that these three keywords are the most important and frequently discussed in the given context. Additionally, personnel and natural resources

management also have a high number of occurrences and link strength, which suggests that they are important topics as well. On the other hand, technical presentations and societies and institutions have a relatively low number of occurrences and link strength, indicating that they are less important and less frequently discussed in the given context.

3. *Citation:* author citation analysis is a powerful tool for exploring the citation patterns of authors and identifying important research trends and collaborations. The resulting map shows clusters of authors who frequently cite each other, as well as clusters of authors whose publications are frequently cited together.

Figure 5: Analysis of author’s citation

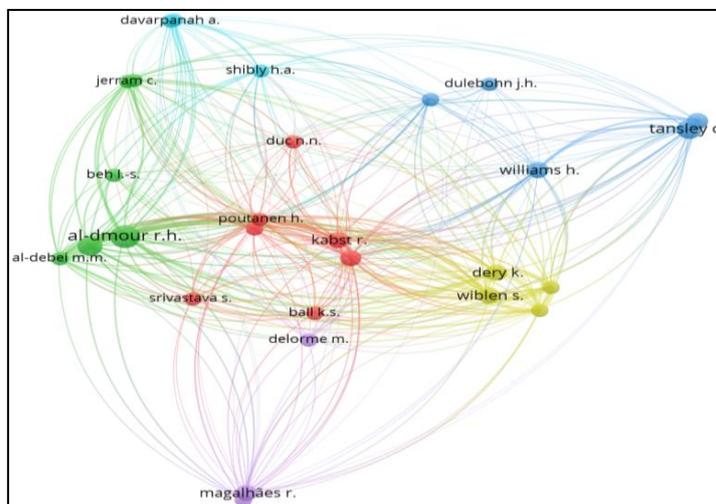


The above figure 5 shows bibliometric information about authors. The authors vary in the number of documents, citations, and total link strength. The author with the most documents is Al-dmour r.h. with 6 documents and Love S. with 4 documents in cluster 6 (Blue). Al-dmour r.h. has the highest total link strength of 77 followed by Ball k.s. with 271 citations and 54 total link strength, indicating that the publications are well connected to other publications in the field. Three authors namely Cornelius n.e., Hussain z., and Wallace j. in cluster 2 (Green) have 1 document each with 127 citations and total link strength of 47 indicating that the publications are well connected to other publications in the field.

Some authors have high citation counts but low total link strength, indicating that their publications are not well connected to other publications in the field. Examples of such authors include Beh L.S. with 2 documents, 87 citation and total link strength of 12. Dery K. with 3 documents 73 citations but only 17 total link strength and Tansley C. with 4 documents 112 times citation but only 19 total link strength.

4. *Bibliographic coupling:* Bibliographic coupling is a method used in bibliometrics to identify the degree of similarity between the research interests of different authors based on the similarity of their citations. Below figure shows a bibliographic coupling analysis of the authors and their publications based on the number of citations and total link strength.

Figure 6: Bibliographic coupling of authors

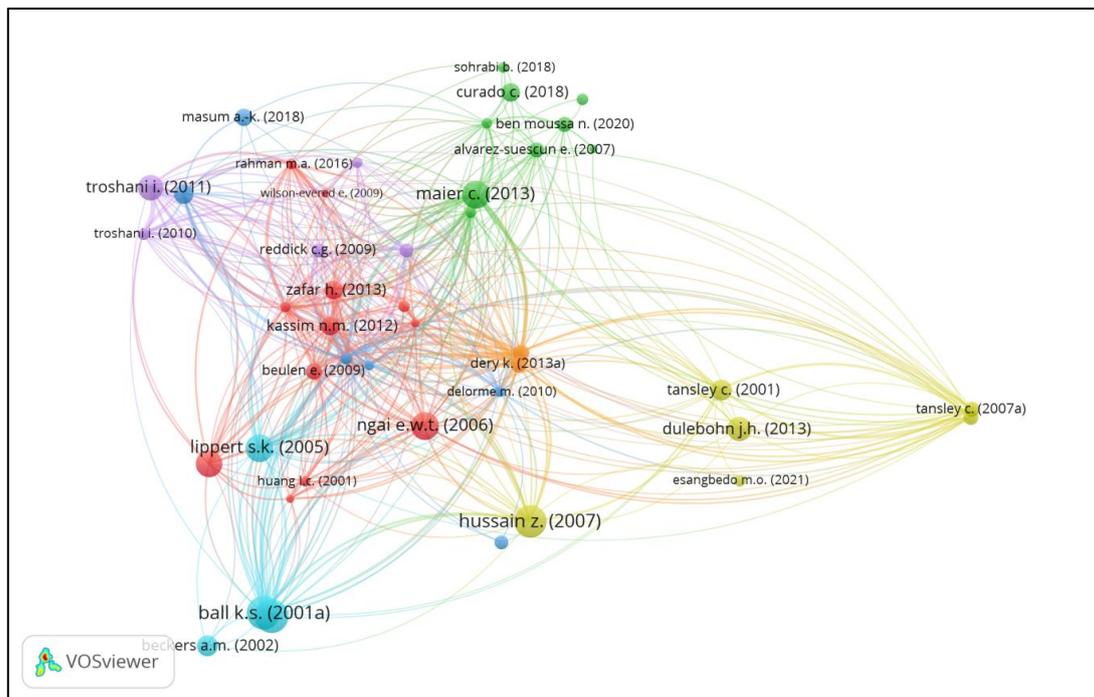


Among the authors analysed, Love S. had the highest link strength (1998) which indicates that his works have been cited heavily and the number of documents he has produced is relatively low (4). Love S. is followed by Ball K.S. with a link strength of 236, which is quite low compared to Love S. Ball K.S. has published two documents and has been cited 271 times. In terms of the number of documents, Johnson R.D. and Al-debei M.M. have both published two documents. However, Johnson R.D. has been cited 79 times while Al-debei M.M. has been cited 9 times. Therefore, Johnson R.D. has higher link strength than Al-debei M.M. Link strength is an important measure of the impact of an author's work. It is determined by the number of citations an author's work has received and the number of documents an author has produced. Love S., Ball K.S., and Hall R. have the highest link strength among all the authors analysed.

Citations are an important measure of an author's impact on their field. Jerram C. and Tansley C. have the highest number of citations with 98, followed by Troshani I. with 98 citations as well. Johnson R.D. and Love S. have been cited 79 and 12 times respectively. However, the link strength of Johnson R.D. is higher due to the lower number of documents he has produced.

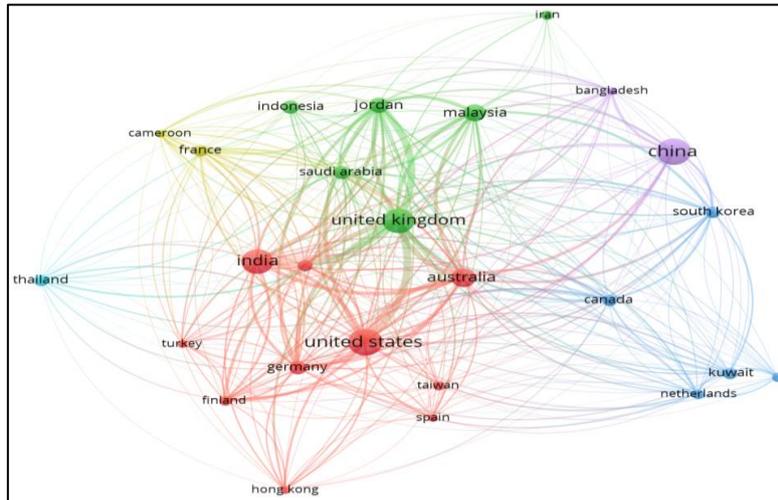
Thus, the authors analysed have varying levels of link strength and citation counts. Love S., Ball K.S., and Hall R. have the highest link strength, while Jerram C. and Tansley C. have the highest number of citations. Link strength is an important measure of the impact of an author's work, and it takes into account both the number of documents produced and the number of citations received.

Figure 7: Bibliographic coupling of documents



The figure 7 (Bibliographic coupling of documents) reveal that there is a significant overlap in research interests among the authors. The analysis also shows that some authors have a higher level of collaboration and citation, indicating that they are influential in their respective fields. The analysis identified some emerging research areas that suggest potential future research directions. The analysis also identified some emerging research areas, such as the use of information technology in healthcare (Dery K. 2013a, Dery K. 2013b, Troshani I. 2010), e-commerce (Tansley C. 2007a, Tansley C. 2007b), and innovation in management (Maier C. 2013, Troshani I. 2011).

Figure 8: Bibliographic coupling of countries

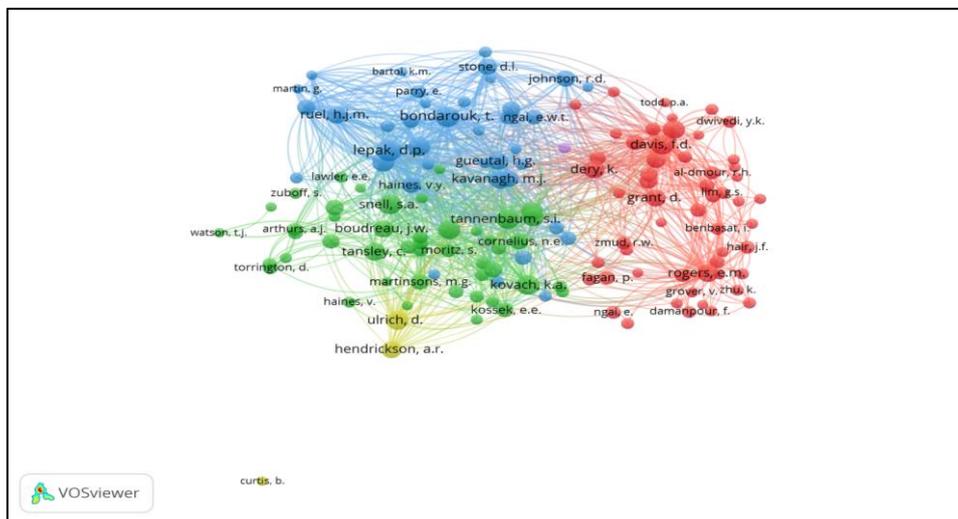


In the above figure 8, the United States has the highest number of documents and citations, with 20 documents and 529 citations. The United Kingdom has the second-highest number of citations, with 541, and also has the highest total link strength, with 3356. Australia has the third-highest number of citations, with 270, and also has high total link strength of 2320.

Several countries have a small number of documents and citations, such as Kuwait, Bangladesh, and Iran. However, Jordan has a relatively small number of documents but a high number of citations and total link strength, suggesting a high level of research impact in that country.

5. *Co-citation:* Co-citation analysis is a bibliometric technique used to identify the degree of relatedness between two or more authors based on their citation in a set of articles or research papers.

Figure 9: Co-citation of cited authors



In the above figure 9 (co-citation of cited authors), a group of 70 authors who had been cited frequently were selected and then calculated the number of times each author had been cited and the total link strength between authors based on their co-citation in the articles. The result shows that the most cited author in the dataset was Bondarouk, T.V., with a total of 26 co-citations and total link strength of 1580. This was followed by Lepak, D.P. with 50 co-citations and total link strength of 1679. Kavanagh, M.J. was the third most cited author with 41 co-citations and total link strength of 1427. Other highly cited authors include Petit, A. (39 co-citations and a total link strength of 1460), Hughes, A.A. (15 co-citations and a total link strength of 700), and Galanaki, E. (19 co-citations and a total link strength of 958). Among the authors with the highest total link strength were Mayfield, J. and Mayfield, M., with total link strength of 710, and Ngai, E.W.T. and Panayotopoulou, L., with total link strength of 1035 and 1047, respectively.

The result revealed that certain authors are more frequently cited and have a stronger relationship with other authors in the field.

FINDINGS

The study successfully examined the evolution of Human Resource Information Systems (HRIS) from 2001 to 2021, fulfilling the first objective. The analysis of publication trends revealed that HRIS research has seen significant growth, particularly from 2007 onwards, indicating increasing academic and industry interest.

The second objective, identifying key research trends, influential publications, and significant contributors, was achieved through bibliometric analysis. Co-authorship analysis highlighted that Al-Dmour R.H., Love S., and Ball K.S. are among the most prolific authors, contributing extensively to HRIS literature. The United States, United Kingdom, China, and India emerged as the leading contributors to HRIS research. Keyword analysis revealed that “human resource management,” “information systems,” and “innovation” were dominant themes, indicating a strong link between HRIS and organizational efficiency, competitive advantage, and knowledge management.

The third objective, utilizing systematic literature review (SLR) and bibliometric analysis to provide insights into HRIS research advancements, was fulfilled using PRISMA 2020 guidelines. A total of 161 documents were selected after applying strict inclusion and exclusion criteria. Citation analysis identified highly referenced studies, such as those by Bondarouk T.V. and Lepak D.P., reinforcing their influence on HRIS development. The co-citation network demonstrated that HRIS research is interdisciplinary, often overlapping with management information systems, decision sciences, and computer science.

The fourth objective, analyzing the focus of HRIS research on the financial sector, was also achieved. The study found that HRIS adoption is highest in the financial sector, particularly banking and insurance, due to the need for effective data management, compliance, and efficiency improvements. The bibliometric analysis highlighted that a significant number of studies focused on banking institutions, where HRIS has been instrumental in streamlining HR functions, payroll processing, and workforce analytics. Despite this emphasis, there remains a gap in HRIS research related to smaller financial institutions and emerging fintech sectors, suggesting future research opportunities in these areas.

Furthermore, bibliographic coupling analysis identified emerging research areas, including the impact of HRIS on employee engagement, decision-making, and organizational innovation. The study also emphasized literature gaps, particularly in HRIS adoption in small and medium-sized enterprises (SMEs) and non-financial sectors, suggesting directions for future research.

LIMITATIONS

The literature review’s shortcomings are mostly reflective of the inadequacies in the reports evaluated. The information used in this study was confined to articles, conference paper, book chapter and review articles published in Scopus database only. The research is based on an existing HRIS scenario, which may not be able to keep up with rapid technological advancements. There is a probability that the researcher has missed some studies that were beyond accessibility. Another limitation is that the records are limited to the publication year 2001 to 2021, articles published before 2001 were accessible online but the online analytical processing (OLAP) was electronically poor. Relevant studies may have been ignored since most of the research on the topic of HRIS was found to be distributed across several disciplines while scanning the related studies. The study area is confined to the service sector only which does not highlight the implication of other areas.

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