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Mapping Human Resource Management (HRM) Research in the Public Sector within the Context of Digital Transformation: A Bibliometric Analysis 2015–2025

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ABSTRACT

*Digital transformation is driving changes in human resource management within the public sector, encompassing governance, work processes, and the capacity development of civil servants. This study aims to map publication trends, identify key contributors, and analyze the thematic structure and evolution of research on public sector human resource management (HRM) in the context of digital transformation. A quantitative approach using bibliometric methods was applied to 47 Scopus-indexed journal articles published between 2015 and 2025. Data were analyzed using R version 4.6.1 and the Bibliometrix package, covering publication productivity, source journals, national contributions, citations, keyword frequency, co-occurrence networks, thematic mapping, and emerging trends. The results indicate an upward trend in publication productivity, peaking in 2025. The *SA Journal of Human Resource Management* and *Sustainability* emerged as the most productive publication sources. In terms of citation counts, China ranks highest, followed by South Africa and Bahrain. The most frequently occurring keywords are "human resource management" and "public sector." Thematic mapping reveals that HRM and productivity are prominent themes, while digital transformation, e-HRM, and artificial intelligence represent areas with significant potential for further development. These findings suggest that research on public sector HRM is increasingly intertwined with digital transformation; however, the integration of these two fields warrants further exploration specifically regarding the application of technology in managing civil servants and enhancing the performance of public organizations.*

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Introduction

Digital transformation has become a strategic priority in public administration reform across various countries. Technological developments, including artificial intelligence (AI), big data, cloud computing, and the Internet of Things (IoT), have driven significant changes in business processes, organizational culture, decision-making, and interactions between governments and citizens. Digital transformation involves not only the adoption of technology to improve administrative efficiency and public service delivery but also the integration of technology, data, institutional structures, and human resources. Zendra (2026), describes digital transformation as a comprehensive change in government governance. Similarly, Erinaldi et al.,

(2026), emphasize that its success depends not merely on technological adoption but also on bureaucratic capacity, data interoperability, and organizational readiness.

Within this process, human resources play a crucial role, as State Civil Apparatus (Aparatur Sipil Negara, ASN) personnel are key actors in the formulation, implementation, and evaluation of public policies. Digital transformation requires civil servants to develop the ability to utilize technology, manage information, analyze data, and collaborate across organizational boundaries. Putri et al., (2025), argue that bureaucratic reform must be accompanied by the transformation of human resource management to develop a competent, professional, ethical, and service-oriented civil service. Harisnor (2026), further emphasizes the importance of technical competencies, professionalism, and integrity among public officials in responding to advances in digital technology.

These developments have encouraged a shift in public sector human resource management (HRM), from administratively oriented personnel management toward a more strategic, integrated, and technology-driven approach. Government HRM now extends beyond routine personnel administration to include talent management, digital competency development, performance management, succession planning, and data-driven decision-making. Putri et al., (2025), explain that the transformation of HRM within Indonesia's civil service encompasses changes in recruitment, competency development, performance management, promotion systems, organizational culture, and the digitalization of personnel governance.

The application of digital technology has increasingly extended across various HRM functions in the public sector. Digital recruitment systems facilitate more efficient and transparent selection processes, while e-learning platforms expand access to competency development opportunities. Electronic performance appraisal systems support more systematic and measurable performance monitoring, whereas personnel information systems and talent management platforms facilitate competency mapping, talent identification, and career planning for civil servants. Nam (2025), identifies the contributions of digital transformation to recruitment efficiency, competency development, performance evaluation, and internal communication. In Indonesia, the implementation of SIASN, MyASN, e-Kinerja, the National Civil Service Agency's (BKN) Talent Management System, and other digital applications illustrates the ongoing digitalization of civil service management. These developments indicate a gradual transition beyond conventional personnel administration toward talent management and information-based decision-making (Putri et al., 2025).

Despite these opportunities, the implementation of digital HRM in the public sector continues to face several challenges. One of the most significant concerns is the gap in digital competencies and literacy among public employees, alongside limitations in technological infrastructure. Nam (2025), Putri et al., (2025), and Erinaldi et al., (2026), highlight how inadequate human resource capacity and unequal access to digital infrastructure can hinder successful digital transformation. Fauzi et al., (2026), also identify regional disparities in digital literacy and differences in organizational readiness as major challenges in developing civil servants' competencies.

Another challenge concerns organizational readiness and bureaucratic work culture. Technological change can reshape the distribution of responsibilities, coordination mechanisms,

and supervisory practices, potentially creating uncertainty and resistance among employees. Nam (2025), identifies conservative bureaucratic cultures, hierarchical organizational structures, and limited institutional support for innovation as factors that constrain technology adoption. Similarly, Putri et al., (2025), highlight resistance to organizational change and weak interagency coordination as persistent barriers to the implementation of digital HRM.

Furthermore, digital HRM requires effective data governance and information security mechanisms. Integrating personnel management systems necessitates standardized data structures and consistent information-sharing procedures to prevent data fragmentation and duplication. Zendra (2026) emphasizes the importance of interoperability and data integration in digital government. Meanwhile, Harisnor (2026) identifies several risks associated with digital technology, including personal data breaches, unauthorized access to information, and potential algorithmic discrimination. These concerns indicate that HRM digitalization must incorporate data protection, transparency, objectivity, and accountability into organizational decision-making processes.

Previous studies have examined digital transformation in the public sector from various perspectives (Erinaldi et al., 2026; Nam, 2025; Putri et al., 2025; Zendra, 2026). Their differing research emphases demonstrate that the relationship between digital transformation and public sector HRM has been explored through multiple analytical approaches. Nevertheless, the development and interconnections of research themes within this field have yet to be systematically mapped. Addressing this gap, the present study aims to map the development of the literature on public sector human resource management in relation to digital transformation and digital HRM, particularly within the contexts of government, public administration, and Indonesia's State Civil Apparatus (ASN). Using bibliometric analysis of Scopus-indexed journal articles, the study examines publication trends, author contributions, journal publication patterns, the development of research across countries, major research themes, and emerging topics. The findings are expected to provide an overview of the intellectual development of this research field, identify existing knowledge gaps, and highlight opportunities for future research on public sector HRM in the era of digital transformation.

Method

This study employs a quantitative approach using bibliometric analysis to map the development of research on Public Sector Human Resource Management (HRM) in the context of digital transformation and Digital HRM. This method enables researchers to identify research development patterns, major contributors, intellectual structures, and thematic trends within a particular field. (Aria & Cuccurullo, 2017; Donthu et al., 2021). Bibliometric analysis was selected because of its ability to systematically examine large volumes of scientific publications and provide an overview of how a research field has evolved over time (Wardhana et al., 2023).

The research data were obtained from scientific publications indexed in the Scopus database. Scopus was selected due to its extensive coverage of international scholarly publications and the availability of bibliographic metadata required to analyze research productivity, citations, collaboration patterns, and relationships among research concepts.

Table 1. Search Strategy and Document Selection in the Scopus Database

Stage	Search Conditions	Number Of Document
Search query	TITLE-ABS-KEY (public sector human resource management) AND (digital transformation OR digital HRM) AND (government OR public administration OR civil service)	179
Search query after refining	TITLE-ABS-KEY (public sector human resource management) AND (digital transformation OR digital HRM) AND (government OR public administration OR civil service) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (LANGUAGE , "English")) AND (LIMIT-TO (SRCTYPE , "j")) AND (LIMIT-TO (PUBSTAGE , "final")) AND (LIMIT-TO (OA , "all")) AND PUBYEAR > 2014 AND PUBYEAR < 2026	47

Note: Data were retrieved on October 1, 2026.

The initial search yielded 179 documents. The dataset was subsequently refined by applying several inclusion criteria: publications classified as journal articles, written in English, published in journal sources, designated as final-stage publications, available through open access, and published between 2015 and 2025. After applying these criteria, 47 articles were retained for bibliometric analysis. The selected bibliographic records were exported from Scopus and processed using R version 4.6.1 with the Bibliometrix package. This software was employed to conduct descriptive analysis and bibliometric mapping of the selected publications.

The analysis consisted of two main approaches. First, performance analysis was conducted to examine research productivity and scholarly contributions through indicators such as annual publication trends, the most productive authors, leading publication sources, contributing countries and institutions, and citation patterns. Second, science mapping was employed to identify the intellectual structure and relationships within the research field by examining collaboration networks, keyword associations, and the development and clustering of research themes (Donthu et al., 2021).

To provide a more comprehensive interpretation of thematic developments, the analysis incorporated thematic map and trend topics visualizations. The thematic map was used to identify the position and characteristics of research themes based on their density and centrality. These dimensions facilitate the classification of themes into four categories: motor themes, basic themes, niche themes, and emerging or declining themes. Meanwhile, trend topics analysis was conducted to illustrate shifts in research attention by examining the occurrence of keywords over specific periods. Together, these analyses provide insights into the thematic structure, evolving research interests, and potential future directions of Public Sector HRM research in the context of digital transformation (Aria & Cuccurullo, 2017; Wardhana et al., 2023).

Result & Discussion

Based on the bibliometric analysis conducted using Bibliometrix, research on public sector human resource management in the context of digital transformation comprises 47 scientific

articles published across 35 publication sources between 2018 and 2025. These findings indicate that scholarly publications specifically examining the relationship between public sector HRM and digital transformation began to emerge in the academic literature in 2018. An annual publication growth rate of 51.12% suggests increasing scholarly interest in this topic throughout the observation period. Meanwhile, the average document age of 2.47 years indicates that the publications included in the dataset are relatively recent. The average citation count of 15.28 citations per article further suggests that these publications have attracted attention within the academic literature.

Table 2. Main Information about the Bibliometric Dataset

Desription	Result
Timespan	2018-2025
Sources	35
Documents	47
Annual Growth Rate	51.12%
Document Average Age	2.47
Average citations per doc	15.28
Authors	166
Co-Authors per Doc	3.6
Single-authored docs	5
International co-authorships	34.04%

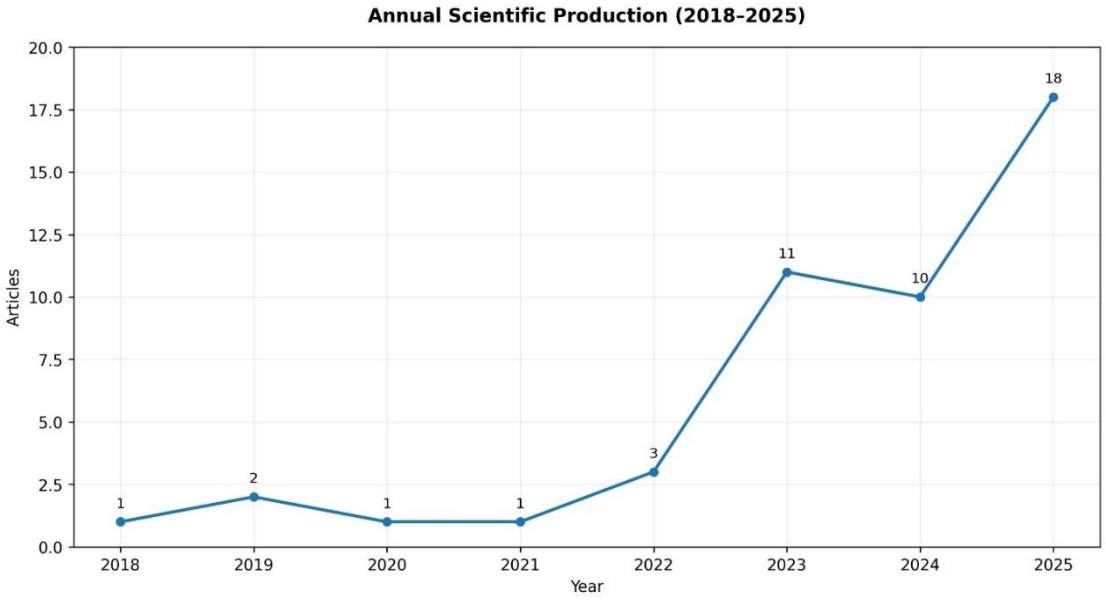
In terms of content, the dataset contains 213 author-provided keywords (Author's Keywords) and 131 additional keywords (Keywords Plus). This diversity of keywords indicates that research on public sector human resource management and digital transformation encompasses a wide range of concepts and research interests. These findings provide a basis for identifying emerging research themes, relationships among concepts, and the evolving direction of research through keyword network analysis, thematic mapping, and trend topic analysis.

A total of 166 authors contributed to the 47 articles. Of these, five articles were single-authored, while the average number of authors per article was 3.6. These findings suggest that research in this field is characterized by greater collaboration among researchers than individual authorship. Furthermore, the international collaboration rate of 34.04% indicates the involvement of researchers from different countries in advancing scholarly knowledge in this area.

The Annual Scientific Production analysis reveals an overall increase in publications on public sector human resource management in the context of digital transformation between 2018 and 2025, although the growth was not consistent from year to year. During the initial period, publication output remained relatively low, with one article published in 2018, increasing to two articles in 2019, before declining to one article in 2020 and remaining at the same level in 2021. In 2022, the number of publications began to increase, reaching three articles. A more substantial increase occurred in 2023, when publication output reached 11 articles. Although the number

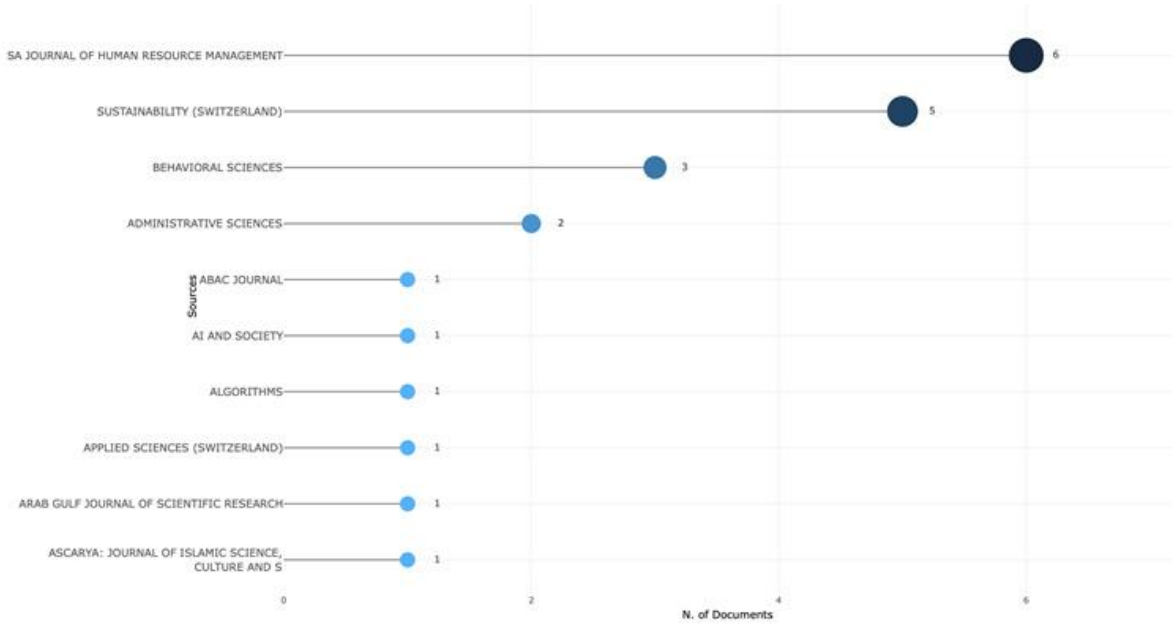
declined slightly to 10 articles in 2024, it rose sharply to 18 articles in 2025, representing the highest annual publication output during the period under review.

Figure 1. Annual Scientific Production



This pattern demonstrates that scholarly attention to public sector human resource management and digital transformation has increased considerably, particularly since 2023. Of the 47 articles analyzed, 39 articles, or approximately 83%, were published between 2023 and 2025. This finding indicates that research on this topic has gained increasing academic attention in recent years. Based on the Most Relevant Sources analysis, publications on public sector HRM in the context of digital transformation are distributed across various academic journals, with differing levels of contribution. The SA Journal of Human Resource Management emerged as the leading publication source, contributing six articles, followed by Sustainability (Switzerland) with five articles. Meanwhile, Behavioral Sciences contributed three articles, and Administrative Sciences published two articles. The remaining six journals, namely ABAC Journal, AI and Society, Algorithms, Applied Sciences (Switzerland), Arab Gulf Journal of Scientific Research, and Ascarya: Journal of Islamic Science, Culture and Social Studies, each contributed one article.

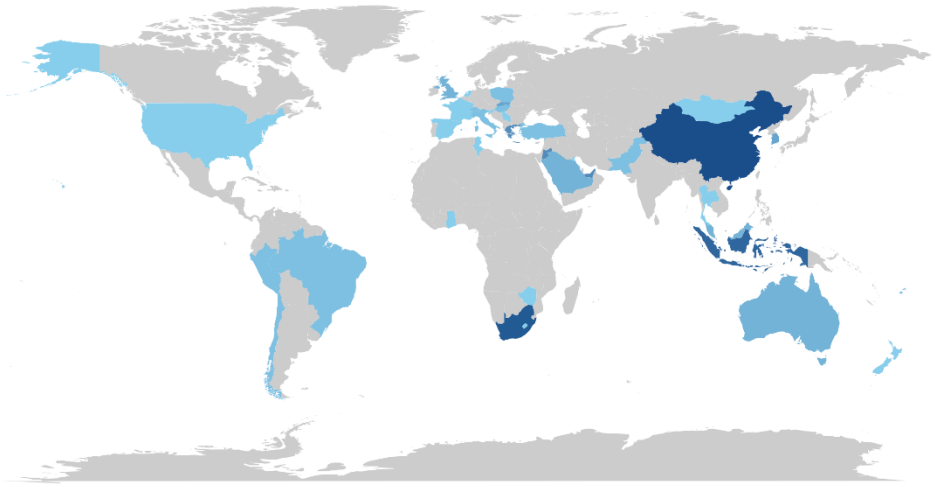
Graphics 2. Most Relevan Sources



The prominence of the SA Journal of Human Resource Management indicates that the studies included in this dataset are closely associated with the field of human resource management (HRM). Meanwhile, the contribution of Sustainability (Switzerland) demonstrates that public sector HRM research also intersects with sustainability perspectives. The presence of Behavioral Sciences and Administrative Sciences further suggests that this topic is examined through the perspectives of organizational behavior and public administration. In addition, publications in AI and Society and Algorithms indicate connections between this research field, developments in artificial intelligence, and the application of technology within organizations.

The Countries' Scientific Production analysis illustrates the geographical distribution of publications on public sector HRM in the context of digital transformation during 2018–2025. Overall, the publications involve researchers from various countries across Asia, Europe, the Americas, Africa, and Oceania. This distribution suggests that digital transformation in public sector human resource management has attracted scholarly attention across national boundaries and is not confined to a particular geographical region.

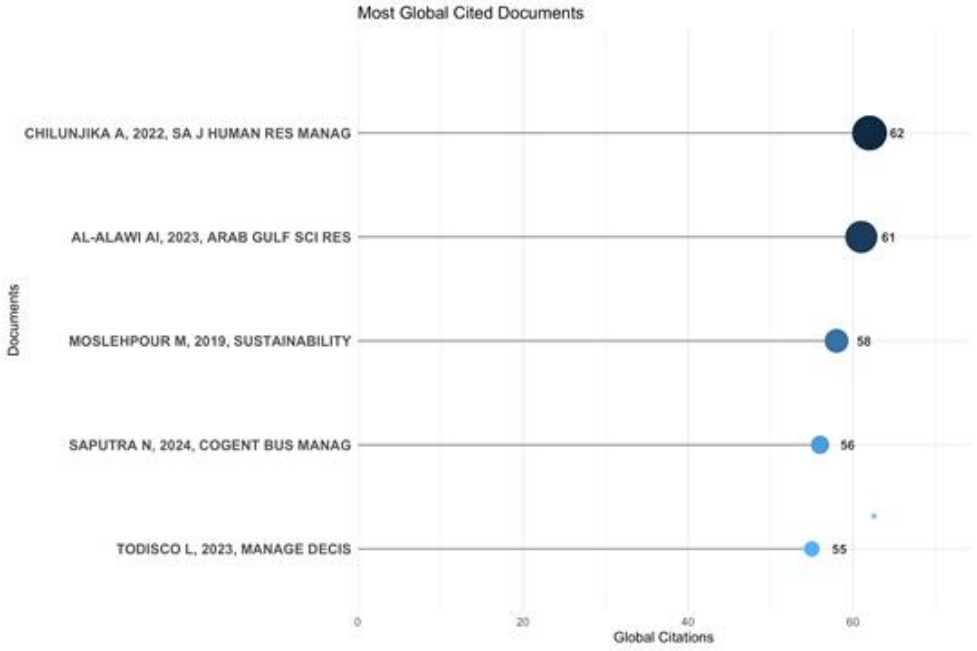
Figure 3. Countries' Scientific Production



Based on the color gradients displayed on the map, China appears to be one of the most productive countries in terms of scientific publications, as indicated by the darkest shade of blue. Several other countries also demonstrate notable publication contributions, including South Africa, Indonesia, the United States, Brazil, Australia, and several countries across Europe and Asia. This geographical distribution suggests that research in this field has developed across countries with diverse public administration systems, institutional capacities, and levels of digital transformation. The involvement of countries from different regions further highlights the international relevance of digital transformation in public sector HRM. However, the geographical distribution alone does not reveal whether these countries share similar research priorities or pursue different research interests shaped by their respective public administration contexts and human resource management challenges.

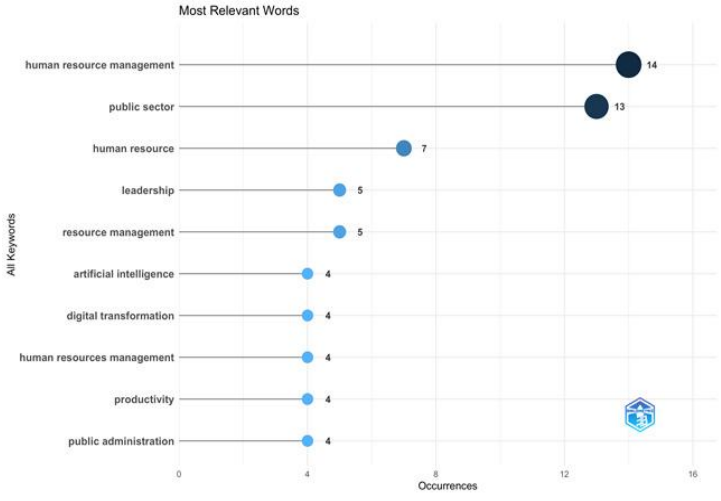
The Most Cited Countries analysis identifies the countries with the highest citation contributions in publications on public sector human resource management in the context of digital transformation during 2018–2025. According to the visualization, China ranks first with 105 citations, followed by South Africa with 83 citations and Bahrain with 61 citations. Indonesia ranks fourth with 59 citations, followed by Italy with 55 citations and New Zealand with 43 citations. The remaining countries among the top ten are Slovenia (38 citations), Pakistan (36 citations), Cyprus (25 citations), and Greece (24 citations).

Figure 4. Most Cited Countries



Based on the Most Frequent Words visualization, the most frequently occurring keyword is human resource management, with 14 occurrences, followed by public sector, with 13 occurrences. Furthermore, human resource appears 7 times, while leadership and resource management each appear 5 times. These findings indicate that the studies included in the dataset are predominantly focused on human resource management within the public sector, with leadership and resource management emerging as supporting research themes.

Graphic 5. Most Frequent Words

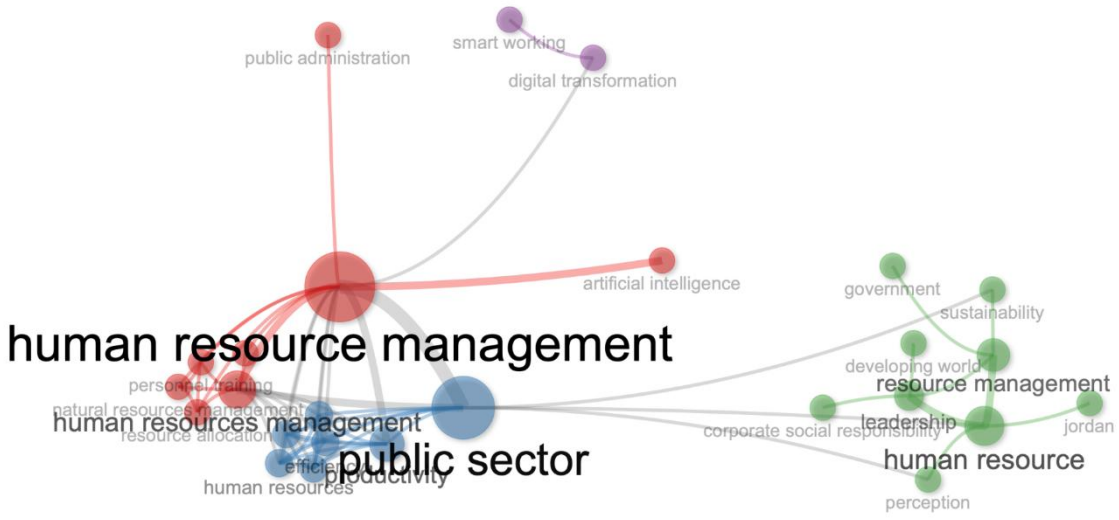


The keywords artificial intelligence and digital transformation each appeared 4 times. This indicates that artificial intelligence and digital transformation have become part of the research discourse on human resource management (HRM) in the public sector, although their frequencies remain lower than those of the dominant themes. Other keywords, such as productivity, public administration, and human resources management, also highlight the relationship between these studies and efforts to improve productivity and public administration practices.

Based on the Co-occurrence Network visualization, four main clusters were identified, illustrating the interrelationships among research themes. (1) The red cluster centers on HRM-related keywords and is connected to public administration, artificial intelligence, and personnel training. (2) The blue cluster centers on public sector and is associated with HRM, productivity, efficiency, and resource allocation. These two clusters indicate that the research landscape is predominantly characterized by HRM-related issues, particularly within public sector organizations and in relation to improving productivity and efficiency. Meanwhile, (3) the green cluster encompasses human resource, resource management, and leadership, which are associated with government, sustainability, and developing world. This cluster highlights the interconnections among HRM, leadership, and governmental contexts. Furthermore, (4) the purple cluster consists of digital transformation and smart working, indicating a relationship between digital transformation and evolving work practices.

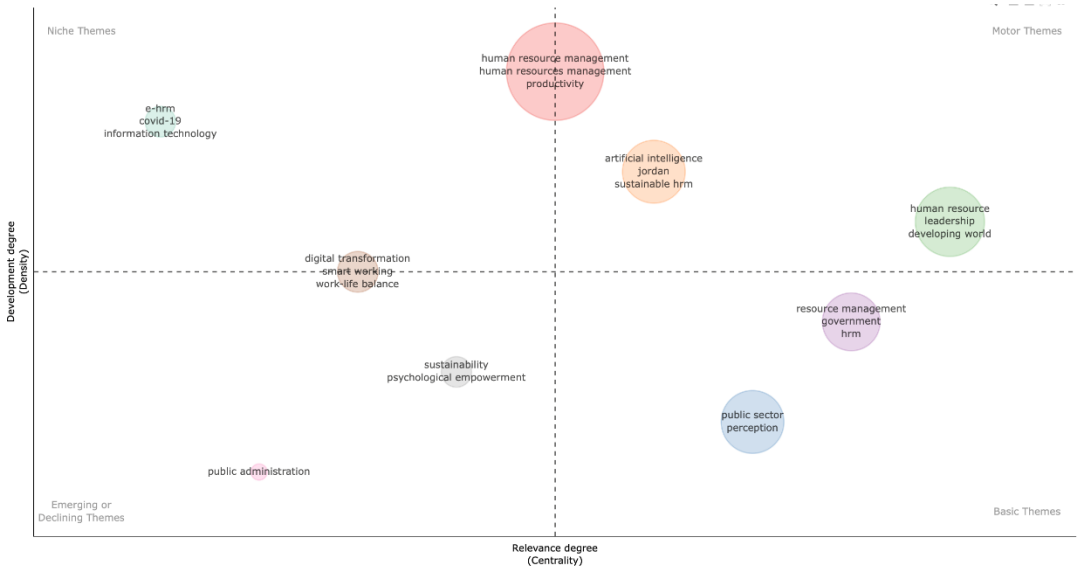
Overall, the network reveals that existing research remains dominated by HRM and public sector themes, while digital transformation constitutes a relatively distinct and more specific thematic cluster. This pattern suggests opportunities for future research to explore the integration of digital transformation into public sector HRM practices more comprehensively.

Figure 2. Co-occurrence Network



Based on the Thematic Map, the development of research themes related to HRM in the public sector can be categorized into four quadrants. In the Motor Themes quadrant (upper right), the themes human resource, leadership, and developing world demonstrate strong interconnections and a relatively high level of thematic development. Additionally, artificial intelligence, Jordan, and sustainable HRM are also positioned within this quadrant. These findings indicate that leadership, human resource management, artificial intelligence, and sustainability represent important and evolving themes in the literature.

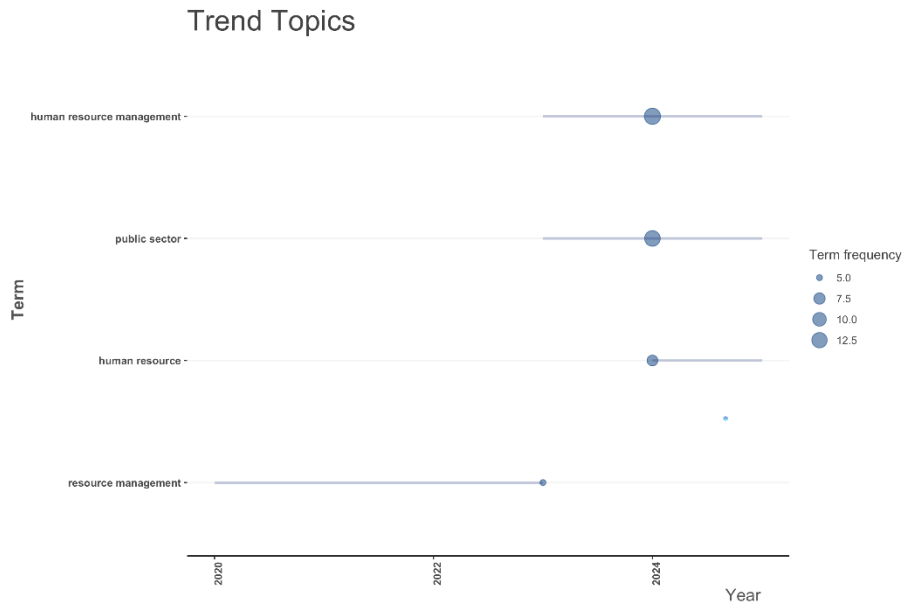
Figure 3. Thematic Map



In the "Basic Themes" quadrant (bottom right), there are themes such as resource management, government, human resource management (HRM), the public sector, and perception. These themes exhibit a relatively strong connection to the research field as a whole, yet their level of development remains relatively low. Meanwhile, the "Niche Themes" quadrant (top left) contains themes like e-HRM, COVID-19, and information technology; these themes show a relatively high level of development but have limited connections to the core research themes. The "Emerging or Declining Themes" quadrant (bottom left) includes digital transformation, smart working, work-life balance, sustainability, and psychological empowerment. This positioning indicates that these themes have relatively low connectivity and a low level of development within the structure of the analyzed literature.

Based on the "Trend Topics" visualization, four key terms have emerged in the evolution of the research: human resource management, public sector, human resource, and resource management. The first three terms appear within a more recent timeframe and are positioned close to one another. This suggests that, in recent years, research attention has increasingly focused on human resource management within the context of the public sector.

Figure 4. Trend Topics



Meanwhile, the term "resource management" has a longer span of usage and tends to appear in an earlier period compared to the other three terms. This shift indicates a change in the focus of study from a general discussion on resource management toward a more specific issue: human resource management and its application within the public sector.

Development of Public Sector Human Resource Management Research in the Context of Digital Transformation

The results of the bibliometric analysis indicate that research on public sector human resource management (HRM) in the context of digital transformation is a relatively emerging field that has experienced considerable growth. Of the 47 articles analyzed, 39 articles, or approximately 83%, were published between 2023 and 2025. The substantial increase in publications since 2023 reflects growing academic interest in changes in human resource management within the public sector alongside advances in digital technology. Nevertheless, this increase has not followed a linear trend, as evidenced by a decline in the number of articles in 2024 before rising again in 2025. This pattern suggests that the field is still developing and has not yet established a stable research tradition.

This development can be associated with changes in working environments and organizational demands within government institutions following the COVID-19 pandemic. The pandemic encouraged public organizations to accelerate the adoption of technology, including in employee management and work arrangements. Al-Alawi et al., (2023), identified several factors influencing the adoption of digital transformation in HRM, including information technology infrastructure, technical support, digital skills, organizational culture, employee resistance,

funding, and leadership support. Meanwhile, Todisco et al., (2023), found that the implementation of smart working provides flexibility and enhances the ability of public organizations to respond to crises, while also raising concerns regarding the right to disconnect and work-life balance. These findings demonstrate that HRM digitalization is not merely a matter of technology adoption but also involves organizational readiness and employees' experiences in adapting to changing work arrangements.

This trend is also reflected in the relatively recent characteristics of the publications, with an average document age of 2.47 years and an annual publication growth rate of 51.12%. However, the growth rate and the dominance of publications in the most recent period should be interpreted as indications of increasing academic attention. These findings reinforce the research urgency outlined in the introduction, particularly the need for systematic mapping to understand the development, interconnections, and research directions of HRM transformation within government organizations.

Publication Structure, Country Contributions, and Academic Influence

The distribution of publications across 35 journals indicates that research on public sector HRM and digital transformation has developed across multiple disciplines, reflecting increasingly diverse perspectives in examining this topic. Geographically, the publications originate from various regions, including Asia, Europe, Africa, the Americas, and Oceania. Based on citation counts, China ranks first with 105 citations, followed by South Africa (83), Bahrain (61), and Indonesia (59). Indonesia's fourth-place position indicates that publications originating from the country have received academic attention within the analyzed dataset. Nevertheless, citation counts do not directly reflect the number of publications or the quality of research produced by a country; rather, they indicate the level of academic attention received by its publications.

The diversity of countries and publication sources also demonstrates that digital transformation in public sector HRM occurs within different institutional and administrative contexts. Chilunjika et al., (2022), discussed the opportunities and challenges associated with the use of artificial intelligence in public sector HRM in South Africa. Al-Alawi et al., (2023), examined the factors influencing the adoption of digital transformation in HRM in Bahrain, while Todisco et al., (2023), investigated the experiences of public sector employees in Italy regarding the implementation of smart working. These contextual differences suggest that digital transformation in HRM cannot be separated from institutional capacity, workforce characteristics, organizational culture, and the administrative conditions of each country.

Regarding academic influence, the article by. Chilunjika et al., (2022), received the highest number of global citations, with 62 citations, followed by Al-Alawi et al., (2023), with 61 citations and Moslehpour et al., (2019), with 58 citations. Chilunjika et al., (2022), highlighted the potential of artificial intelligence to automate routine tasks, strengthen the strategic focus of HR functions, and reduce bias in recruitment and selection processes. However, certain occupations may remain vulnerable to technological displacement. Meanwhile, Al-Alawi et al., (2023),

emphasized the importance of technological and organizational factors in implementing digital transformation within HR functions. The high citation counts of these two articles indicate that artificial intelligence and technology adoption have become important components of the academic discourse on HRM transformation.

Interestingly, not all highly cited articles directly focus on the digitalization of HR functions. Moslehpour et al., (2019) examined the relationships among leadership, organizational climate, work styles, and employee satisfaction in Mongolia's government sector. Similarly, Waheed et al., (2018), investigated the relationships among performance appraisal quality, psychological empowerment, and employees' innovative behavior in public sector higher education institutions in Pakistan.

Conceptual Structure and Interconnections Among Research Themes

The results of the most frequent words and co-occurrence network analyses indicate that the keywords human resource management and public sector are the most dominant terms, appearing 14 and 13 times, respectively. The keyword human resource appears seven times, while leadership and resource management each appear five times. The dominance of these terms suggests that the conceptual structure of the research remains centered on human resource management within public sector organizations. In contrast, the keywords artificial intelligence and digital transformation each appear only four times. This finding indicates that although digital transformation serves as an important context in the literature search, technology-related discussions have not yet dominated the overall keyword structure.

The co-occurrence network reveals four interconnected thematic clusters. The first cluster centers on human resource management and is associated with public administration, artificial intelligence, and personnel training. This cluster illustrates the connections among HRM functions, public administration, technology utilization, and employee competency development. The second cluster centers on the public sector and is associated with human resources management, productivity, efficiency, and resource allocation. This cluster indicates that research also addresses the relationship between employee management and public organizational performance, particularly productivity and resource utilization efficiency. The third cluster comprises human resource, resource management, and leadership, alongside themes such as government, sustainability, and the developing world. This cluster demonstrates that leadership and HRM are integral to discussions of governance and organizational sustainability (Melo & Demo, 2024). The fourth cluster includes digital transformation and smart working. Its relatively separate position from the main clusters suggests that digital transformation and changing work arrangements have not yet been fully integrated into the core discourse on public sector HRM.

Thematic Positioning and the Evolution of Research Focus

The thematic map analysis indicates that public sector HRM and digital transformation themes have not yet been fully integrated. Within the Motor Themes quadrant, human resource, leadership, and developing world exhibit relatively high levels of centrality and density, reflecting well-developed themes that are strongly connected to the broader research field. The themes artificial intelligence, Jordan, and sustainable HRM are also positioned within this quadrant, indicating increasing academic attention to technology and sustainability in human resource management. Meanwhile, the Basic Themes quadrant includes resource management, government, HRM, public sector, and perception, which serve as conceptual foundations within the literature. The themes e-HRM, COVID-19, and information technology are located in the Niche Themes quadrant, suggesting that these topics have been developed in specific research areas but remain relatively weakly connected to the broader field.

The themes digital transformation, smart working, and work-life balance are positioned within the Emerging or Declining Themes quadrant. This positioning indicates relatively low levels of centrality and density within the dataset but does not necessarily imply that these themes are losing relevance. Instead, the findings may suggest that the connections between digital transformation and public sector HRM practices still require further conceptual and empirical development. This interpretation is consistent with Amoako et al., (2023), who demonstrated that e-HRM implementation in public organizations in developing countries is influenced by perceived ease of use, perceived usefulness, self-efficacy, compatibility, and facilitating conditions. Almaaitah et al., (2024), also found that e-HRM influences employee performance both directly and indirectly through employee engagement.

The trend topics visualization indicates that human resource management, public sector, and human resource have become prominent terms in more recent periods. In contrast, resource management exhibits a longer period of occurrence and tends to appear in earlier publications. This pattern suggests a shift in academic attention from general discussions of resource management toward more specific investigations of HRM within public sector organizations.

Theoretical Implications and Future Research Agenda

Overall, the bibliometric findings indicate that research on public sector HRM in the context of digital transformation encompasses several major themes, including the digitalization of HR functions, artificial intelligence, changing work arrangements, leadership, productivity, and employee capacity development. Nevertheless, the relationships among these themes have not yet formed a fully integrated research framework. In this context, digital transformation involves not only technology implementation but also employee readiness, organizational change, and governance. Chilunjika et al., (2022), demonstrated that artificial intelligence can support HR functions while simultaneously presenting challenges related to job transformation and the need for new competencies. Similarly, Bian et al., (2025), identified the importance of AI

governance and ethics, data infrastructure, employee training, privacy protection, and algorithmic bias mitigation in the digital transformation of government HRM.

Beyond technology, leadership and organizational culture also play important roles in the success of digital transformation. Zolak Poljašević et al., (2025), demonstrated that HRM reforms in public administration continue to face institutional barriers, politicization, and resistance to change. Meanwhile, Kim et al., (2024), highlighted the importance of HRM practices that support employee resilience in responding to disruptions in the work environment. These findings emphasize that digital transformation requires leadership capable of managing change, building trust, and aligning HR policies with the needs of both employees and organizations.

Therefore, future research should examine the relationships between digital technologies and strategic HR functions, the roles of leadership and organizational culture in the implementation of e-HRM and AI, and ethical considerations related to data protection, transparency, and algorithmic accountability. Comparative studies across countries and public organizations are also needed to understand how differences in institutional capacity, infrastructure, and workforce characteristics influence the implementation of digital transformation.

Thus, the main contribution of this study lies in mapping the development and knowledge structure of public sector HRM research within the context of digital transformation. The findings demonstrate that academic attention to this topic has increased considerably, although the connections between digital technologies and HRM practices still require further development. This situation creates opportunities for future research to establish a more integrative framework that positions technology, human resource capacity, leadership, and organizational governance as interconnected elements in the digital transformation of public sector HRM.

Conclusion

This research indicates that the study of public sector human resource management (HRM) within the context of digital transformation has evolved, particularly in recent years. A bibliometric analysis of 47 journal articles published between 2015 and 2025 reveals an upward trend in publication productivity notably since 2023 with the highest number of publications recorded in 2025. These articles are distributed across various journals, with the SA Journal of Human Resource Management and Sustainability serving as the most frequent sources within the dataset. In terms of national contribution, China ranks highest by citation count, followed by South Africa, Bahrain, Indonesia, and Italy. Meanwhile, keyword analysis identifies "human resource management" and "public sector" as the most dominant themes. These findings confirm that HRM remains a primary focus in public sector research, while also highlighting its connection to issues such as productivity, leadership, artificial intelligence, and digital transformation.

Network mapping and thematic analysis show that research remains centered on HRM and the public sector, while topics such as digital transformation, e-HRM, artificial intelligence, and flexible work arrangements are gaining traction in the literature. However, the interconnections between these themes suggest that the integration of digital transformation and public sector HRM still offers significant potential for further development. Consequently, future research should place greater emphasis on how digital technologies are implemented within government HRM functions, as well as how such implementation influences the capacity of civil servants, leadership, productivity, and the overall performance quality of public organizations.

Reference

Al-Alawi, A. I., Messaadia, M., Mehrotra, A., Sanosi, S. K., Elias, H., & Althawadi, A. H. (2023). Digital transformation adoption in human resources management during COVID-19. *Arab Gulf Journal of Scientific Research*, *41*(4), 446–461. https://doi.org/10.1108/AGJSR-05-2022-0069

Almaaitah, M. F., Al-Rwaidan, R. M., Al-Adamat, A. M., Enaizan, O., & Alserhan, A. F. (2024). The impact of e-human resource management on employee performance: The mediating role of employee engagement in Jordanian service and public administration commission. *Journal of Infrastructure, Policy and Development*, *8*(9), 6763. https://doi.org/10.24294/jipd.v8i9.6763

Amoako, R., Jiang, Y., Adu-Yeboah, S. S., Frempong, M. F., & Tetteh, S. (2023). Factors influencing electronic human resource management implementation in public organisations in an emerging economy: An empirical study. *South African Journal of Business Management*, *54*(1). https://doi.org/10.4102/sajbm.v54i1.2937

Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, *11*(4), 959–975. https://doi.org/10.1016/j.joi.2017.08.007

Bian, L., Xiao, Y., & Robert, J. (2025). Evolving corporate social responsibility practices and their impact on social conflict. *The Extractive Industries and Society*, *21*, 101580. https://doi.org/10.1016/j.exis.2024.101580

Chilunjika, A., Intauno, K., & Chilunjika, S. R. (2022). Artificial intelligence and public sector human resource management in South Africa: Opportunities, challenges and prospects. *SA Journal of Human Resource Management*, *20*. https://doi.org/10.4102/sajhrm.v20i0.1972

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070

Erinaldi, Ramadhani, A., Murni, Sari, M. R., & Muti'ah, U. (2026). Transformasi Digital dalam Administrasi Publik: Studi Komparatif di Indonesia dan Korea Selatan. In *Studi Administrasi Publik dan ilmu Komunikasi* (Vol. 3).

Fauzi, A. R., Fajari, A., Nugroho, T., Fatma, H., Sitio, S., Pramesswari, D., & Lestari, N. S. (2026). Implementasi Future Skills ASN menuju Indonesia Emas 2045 di Lingkunga Pemerintah Provinsi Jawa Timur. In *Jurnal Kebijakan Publik* (Vol. 3, Number 2). https://ejurnal.stiaamuntai.ac.id/index.php/PPJ/article/view/1902/1480

Harisnor Harisnor. (2026). Kode Etik dan Profesionalisme Aparatur Sipil Negara dalam Era Digitalisasi Penguatan Integritas, Akuntabilitas dan Tata Kelola Pemerintahan. *Majelis: Jurnal Hukum Indonesia*, *3*(3), 130–152. https://doi.org/10.62383/majelis.v3i3.1869

Kim, P., Cho, W., & Yang, I. (2024). Workplace Disruption in the Public Sector and HRM Practices to Enhance Employee Resilience. *Review of Public Personnel Administration*, *44*(1), 86–115. https://doi.org/10.1177/0734371X221095399

Melo, T. A. de, & Demo, G. (2024). Home Sweet Home? The Mediating Role of Human Resource Management Practices in the Relationship between Leadership and Quality of Life in Teleworking in the Public Sector. *Sustainability (Switzerland)*, *16*(12), 5006. https://doi.org/10.3390/su16125006

Moslehpour, M., Altantsetseg, P., Mou, W., & Wong, W. K. (2019). Organizational climate and work style: The missing links for sustainability of leadership and satisfied employees. *Sustainability (Switzerland)*, *11*(1), 125. https://doi.org/10.3390/su11010125

Nam, N. H. (2025). The impact of digital transformation on human resource management: Survey evidence in Vietnam. In *Ministry of Science and Technology, Vietnam* (Vol. 67, Number 2). https://doi.org/10.31276/vmostjossh.2024.0028

Putri, A. A., Azzahira, F. G., Hafidz, M., Qodri, A., Ramadhan, F. F., Latifah, A. A., Azzahra, R., & Rinto, P. (2025). Transformasi Manajemen Sumber Daya Manusia ASN melalui Implementasi Reformasi Birokrasi di Indonesia. In *Indonesia Economic Jurnal* (Vol. 1, Number 2).

Todisco, L., Tomo, A., Canonico, P., & Mangia, G. (2023). The bright and dark side of smart working in the public sector: employees' experiences before and during COVID-19. *Management Decision*, *61*(13), 85–102. https://doi.org/10.1108/MD-02-2022-0164

Waheed, A., Abbas, Q., & Malik, O. F. (2018). 'Perceptions of performance appraisal quality' and employee innovative behavior: Do psychological empowerment and 'perceptions of HRM system strength' matter? *Behavioral Sciences*, *8*(12), 114. https://doi.org/10.3390/bs8120114

Wardhana, Wijaya Pramodha, A., Sugihartati, R., Adriani Salim, T., Rafdi Ramadhan, A., & Ilmu Pengetahuan Budaya, F. (2023). Analisis Bibliometrik terhadap Perkembangan Topik Penelitian Standardisasi Kualitas Perpustakaan di Indonesia pada Database Scopus Tahun 2018-2023 Menggunakan VOSviewer dan CitNetExplorer. *Media Pustakawan*, *30*(3), 20–32. https://doi.org/https://doi.org/10.37014/medpus.v30i3.4973

Zendra, N. (2026). Transformasi Pelayanan Publik melalui Sistem Pemerintahan Berbasis Elektronik: Menuju Tata Kelola Pemerintahan Digital yang Terintegrasi. In *RUANG ILMU: Jurnal Ilmu Sosial dan ...*. https://jurnal.suriaacademicpress.com/index.php/RUANGILMUJISH/article/view/242%0Ahttps://jurnal.suriaacademicpress.com/index.php/RUANGILMUJISH/article/download/242/115

Zolak Poljašević, B., Gričnik, A. M., & Šarotar Žižek, S. (2025). Human Resource Management in Public Administration: The Ongoing Tension Between Reform Requirements and Resistance to Change. *Administrative Sciences*, *15*(3), 94. https://doi.org/10.3390/admsci15030094