



Human Resource Management as a Catalyst for Firm Innovation: A Bibliometric Review

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ABSTRACT

Growing competition due to global-wide firm operations has compelled organisations to constantly force themselves to modernise and re-shape their organisational structures, systems, and techniques to reap a competitive advantage. Researchers claim that innovation is of a salient competitive strategy as it enables firms to increase their growth and competitive position, thereby achieving a sustained competitive advantage. Notwithstanding, how to foster innovation within firms remains paradoxical and past findings are obscure. Intriguingly, the literature shows that human resources and its effective management is a significant enabler of organisational capabilities, a "proxy variable" for competitive advantage. It is axiomatic that innovation is being recognised as an organisational capability. Notably, the research on the link between human resource management and innovation is plethora in developed country context. However, little is known about the evolution of this new field of research. Therefore, the present study aims to analyse and synthesis the documents published in the Scopus database on human resource management and innovation. Bibliometric analysis was performed to discover the present trend and the evolution of the research field, identify the principal authors, articles, and topics, and propose future research direction. The articles published between 2000 and 2021 were analysed quantitatively. Based on the analysis fourteen compelling research clusters were identified: "innovation", "human", "knowledge management", "resource allocation", "Technical presentation", senior entrepreneurship", "HRM practice", "evaluation", "learning", "e-government", "computer-generated holography", "continuous innovation", " evolution", " role", is the critical research domain in the knowledge field of HRM and innovation.

Keywords: Competitive advantage, Human resource management practices, Innovation, Organisational capabilities

INTRODUCTION

In today's contemporary business environment, the universal truth is that enterprises must "adapt or perish" to seize success (Shipton et al., 2006). In a highly competitive business world, the concept of innovation has gained notable popularity among researchers and practitioners as a salient driver of economic progress and organisational growth. Zhou (2006) posit that innovation has become a necessary condition for achieving sustained competitive advantage and is one of the primary issues in management and strategic management literature. Increasingly, the past findings indicate that organisations make a significant portion of their revenue from innovation-oriented activities (Shipton et al., 2006; Foss & Laursen, 2012). Thereby, organisational practitioners seek to improve their capacity to inspire and coordinate innovation inside their organisation to assure long-term survival (Adla et al., 2019). Innovation increases the firm's ability to adapt to environmental changes and helps identify new changes critical to the firm's existence (Foss & Laursen, 2012).

Additionally, it may foster competitive advantage by enabling the business to develop and promote new or improved goods and services, addressing client requirements. Within enterprises, innovation-related activities create a strong culture of lifelong learning, growth, and personal achievement (Diaz-Fernandez et al., 2015; Bos-Nehles & Veenendaal, 2019). Regardless, stimulating innovation within organisations has been a primary concern of both corporate leaders and policymakers (Adla et al., 2019). The literature claims that organisations equipped with creative human resources can bring novel ideas into reality (Schaffer & Paul-Chowdhury, 2002; Shipton et al., 2006; Foss & Laursen, 2012). Firms'

strategic approach to human resource management is critical in eliciting considerable positive work-related attitudes among workers, which results in significant firm innovation (Lepak & Snell, 2002). Unsurprisingly, firms in developed and emerging nations are more concerned with human resources to ensure their survival and expansion. The resource-based view of the firm is increasingly being used to describe the purpose of valuable and limited resources and competencies that are recognised as sources of competitive advantage (Diaz-Fernandez & Bornay-Barrachina, 2015). Businesses may reap a competitive edge by acquiring and using rare, scarce, and unique resources (Guest et al., 2003). Human resources, in particular, fall under this category. Additionally, scholars asserted that human resource management and practices contribute to developing organisational capabilities, a "proxy variable" for nurturing organisational success (Diaz-Fernandez & Bornay-Barrachina, 2015). Remarkably, organisational innovation is recognised as a salient organisational capability (Moyeen & Huq, 2001).

Firms are constantly required to be mindful of the human resources capabilities in facilitating firm innovation (Ling & Nasuridin, 2010). Further, it has been stressed that the firm should formulate human resource practices that are flexible and innovative to embrace a volatile and turbulent business environment (Wei & Lau, 2005). It is axiomatic that HRM practices are a critical and significant source of innovation for the company, and they have a substantial influence on the firm's ability to achieve its objectives (Waheed et al., 2019). When organisations engage in HRM practices, workers are more willing to demonstrate good work attitudes, significantly increasing innovation.

Effective human resource management encourages individuals to experiment with new ideas, deepen their knowledge of one another, and modify business processes, all of which contribute considerably to firm innovation (Shipton et al., 2006).

Presently, HRM theory for innovation is not well formulated. It is crucial to comprehend how and why human capital fosters innovation in firms and what HRM practices can be adapted to simulate the anticipated level of innovative performance (Foss & Laursen, 2012). Laursen & Foss (2014) posit that the

intimacy between HRM practices and innovation has been portrayed as a black box, while much requires exploration. Paradoxically, in developing countries like Sri Lanka, exploration of the link between HRM and innovation is infancy. As a result, it calls for more research in this domain. The present study explores the growing trends, the thematic evolution of the research field, most influential research articles, influential researchers, influential keywords, dominating countries to provide a comprehensive understanding of the field.

REVIEW OF LITERATURE

Individuals and their management are often responsible for innovation (Kang & Snell, 2009). Without people, innovation will not occur. Typically, innovation is defined as the introduction or modification of goods, processes, or the reorganisation of the firm's dominating structure (Tushman et al., 2002). It is well recognised that human resource management is a critical factor in organisational innovation. Innovation is vital in a turbulent economic environment (Sáenz et al., 2009); moreover, innovation enables organisations to seize opportunities to expand quicker than their rivals. Effective human resource management encourages workers to experiment with fresh ideas, improve their intimate knowledge of one another, and implement changes in business operations, all of which contribute considerably to firm innovation (Shipton et al., 2006).

Additionally, they asserted that innovation is a two-stage process: the first stage involves 'exploration,' or the generation of creative ideas, and requires individuals to take risks, explore, and be adaptable; the second stage requires individuals to work in an environment that recognises 'exploitation,' and inspires them to pursue specific policies that increase efficiency.

Such human resource management should enable employees to be stirred and prepared to provide ground-breaking ideas (Akhavan & Mahdi Hosseini, 2016). The literature demonstrates that human resource management is the determinant element in a firm's creative behaviour. Additionally, experts have argued that a broader understanding of individual traits might boost creativity and innovation. Gloet & Terziowski (2004) argue that if innovation is seen as a byproduct of knowledge management, firms must develop sophisticated human resource strategies that support that process.

Diaz-Fernandez & Bornay-Barrachina (2015) claimed that HRM practices as a superior driver in inspiring individuals to project conducive attitudes and behaviours are needed to facilitate and execute the firm's competitive strategy. Innovative firms frequently seek to supervise their human resources efficiently to produce and provide new products and services to market. Chen & Huang (2009) highlighted that when the firm focus on innovative activities such as launching a new product, new process and new administrative practices, they constantly require creative and innovative employees who are adaptable, taking a risk, tolerant of uncertainty and

ambiguity. Firms are increasingly experimenting with new HRM systems to confront strategic aims. It is crucial to comprehend how and why human capital fosters innovation and what HRM practices can be adopted within the firm to stimulate the anticipated level of innovative performance (Foss & Laursen, 2012). Employees, founders, or top executives might explicitly act as drivers to superior, innovative performance (Felin & Hesterly, 2007; Dalota & Perju, 2010),

and foremost, innovative performance could be the outcome of the capabilities cultivated through human interactions within the firms (Lepak & Snell, 2002). The fundamental assumption is that every one of the practices needs to pursue innovation (Hailey, 2001). When firms create new products, services and revamp management processes, they need well-motivated and competent employees to bring creative ideas, formulate innovative tactics, and garner new opportunities

METHODOLOGY

Traditional narrative-based literature assessments are inadequate to provide a holistic understanding (Aparicio et al., 2021). As a result, scientific mapping, which use bibliographic methods to visualise the overview and evolution of a specific area, is gaining increasing interest. The bibliometric analysis was performed to achieve the research aim in this study. A search was conducted for all published studies between 2000- 2021 in the Scopus database. Scopus is one of the salient and widely recognised databases. The search terms and their combinations using the following keywords “human resource management practices”, “HRM”, “HR practices”, “human resource management”, “innovation”, “organisational innovation” was used to obtain the desired results for bibliometric investigation. Further, the authors adopted the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) approach (Moher et al., 2009)

to review and select documents for the literature search. This approach has also been used in bibliometric studies. A total of 437 articles (including duplicates) were obtained from the Scopus search. Later 89 duplicate articles were removed, titles and abstracts of the remaining 348 articles were screened to measure their relevance according to the inclusion criteria. (a) articles only in the English language; (b) appropriate search terms; (c) innovation and HRM is the primary focus; (c) literature review and empirical studies. This screening process led to the eligibility of 252 articles. Additionally, proceedings, book chapters, books and articles published in other disciplines such as Engineering, Economics, Econometrics and Finance, Social Sciences were eliminated. Ultimately, 157 articles were acknowledged for bibliometric investigation. These details are presented in the PRISMA framework (see figure 1).

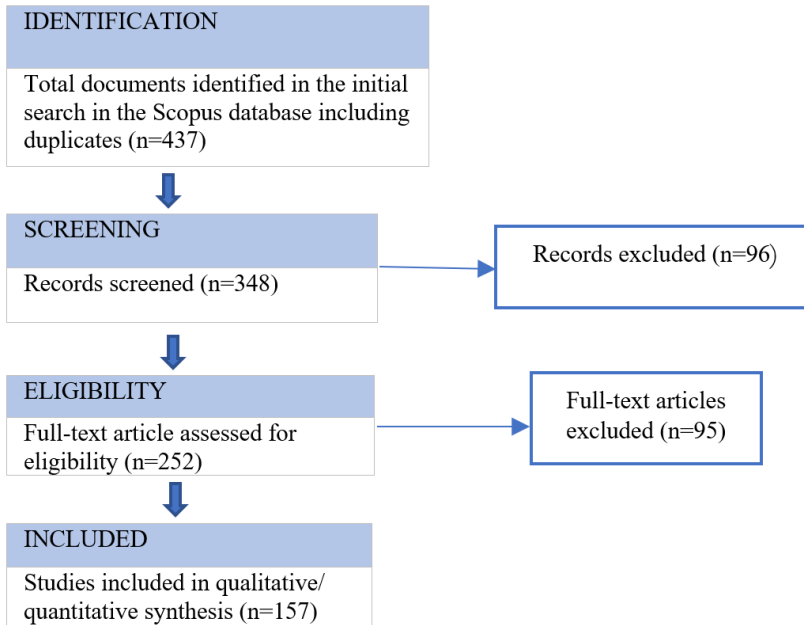


Figure 1 PRISMA framework

Bibliometric analysis

Bibliographic analysis is a widely used and robust technique for examining and interpreting a vast range of scientific data. It aids researchers to unveil the evolutionary intricacies of a particular topic while also offering light on its burgeoning regions (Van Raan, 2012). Bibliometrics is a set of tools that researchers may use to analyse published data and is a field of research that applies mathematical and statistical techniques to study publishing patterns in the distribution of information. Such techniques include impact indicators,

citation and co-citation analysis, and bibliometric mapping. The primary benefit of bibliometrics is that it consists of evaluative and relational methodologies, previously thought to be mutually exclusive. Similarly, within bibliometrics, various quantitative relational approaches effectively use citation data to facilitate "evaluative counting and ranking of research productivity". Researchers in multiple disciplines have extensively employed it to expose buried essential aspects in a specific research domain

RESULTS

Table 1 contains the preliminary information about the data for which bibliometric analysis was carried out. The search was performed between 2000-2021. A total of 157 research articles were published in 68 journals by 375 authors

from 36 different nations. The average publication per year is 8.76, and the average citations per document are 25.55. Further, the average citation per year per document is 2.602. 530 keywords plus and

470 author's keywords were found regarding the keywords.

Table 1 The main information about the data

MAIN INFORMATION ABOUT DATA	
Timespan	2000:2021
Sources	68
Documents	157
Average years from publication	8.76
Average citations per documents	25.55
Average citations per year per doc	2.602
References	1288
DOCUMENT TYPES	
Article	157
DOCUMENT CONTENTS	
Keywords Plus (ID)	530
Author's Keywords (DE)	470
AUTHORS	
Authors	375
Author Appearances	397
Authors of single-authored documents	26
Authors of multi-authored documents	349
AUTHORS COLLABORATION	
Countries	36
Single-authored documents	31
Documents per Author	0.419
Authors per Document	2.39
Co-Authors per Documents	2.53
Collaboration Index	2.77

Thematic map

The themes used in a research domain continue to evolve. A thematic area is a set of themes that have evolved across different subperiods. Discovering the thematic growth is vital for researchers to understand the patterns and the themes that have been evolved in a specific research domain to date. The thematic

map shows what research themes have been studied in the past and what are the recent themes used recently. This help researchers to identify the most interesting and influential themes used previously; as a result, researchers can focus on the current topics.

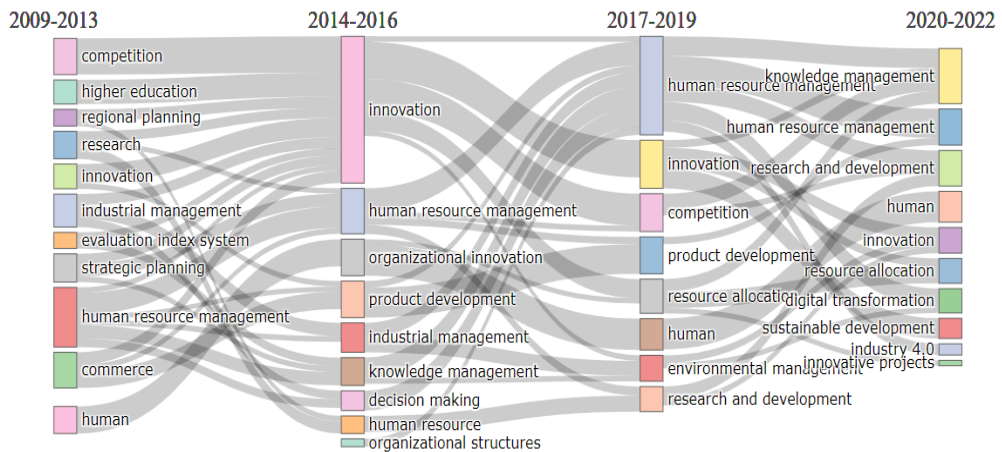


Figure 2 Thematic evolution

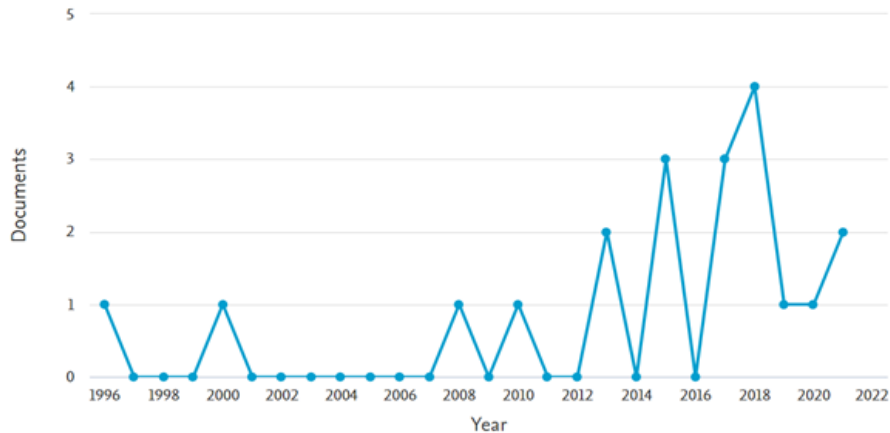
Figure 2 shows the themes' evolution (HRM and innovation) and inter-relationships from 2009 to 2022. Accordingly, from 2009 to 2013, the HRM and innovation research focused on several domains such as human resource management, innovation, strategic planning, competition, industrial management, commerce, and human. In the subsequent period 2014-2016, new themes were emerged, such as innovation, organisational innovation, product development, knowledge management

and organisational structures. These themes had a link with previous themes. In the following period (2017-2019), different sub-themes, such as environmental management and research and development, were appeared. Several compelling themes were identified in the present research (2020-2022), such as innovative projects, Industry4.0, and digital transformation.

Years

The total number of research articles, increasing trend and worldwide distribution in HRM and innovation in developing and developed countries was found using Scopus data. Explicitly, the interest in HRM and innovation research is nascent from year to year. Fig. 3 displays the total number of publications per year published in the period between 1996-2022. it can be noted that, in 26 years, there has been a notable

development in the number of publications on this subject. Notably, a breakthrough point can be seen in 2015, and 2018 outstands as the year with the higher number of articles published



Co-occurrence of author keyword

The bibliometric analysis result shows the co-occurrence of the topics and keywords used in the human resource management and innovation research (see Figures 4 and 5). The most important keywords are *viz.*,

knowledge acquisition, agile manufacturing system, computer architecture, risk management, recycling, multi-disciplinary teams, innovative solutions, training and development,

responsibility, capacity building, HRM strategy, innovation strategy, collectivism-oriented HRM, innovation mechanisms, sustainable development, organisational change, process innovation, product innovation, societies and institutions, service innovation, sources of innovation, strategic human resources, informal R&D.

Figure 5 Co-occurrence of all keywords

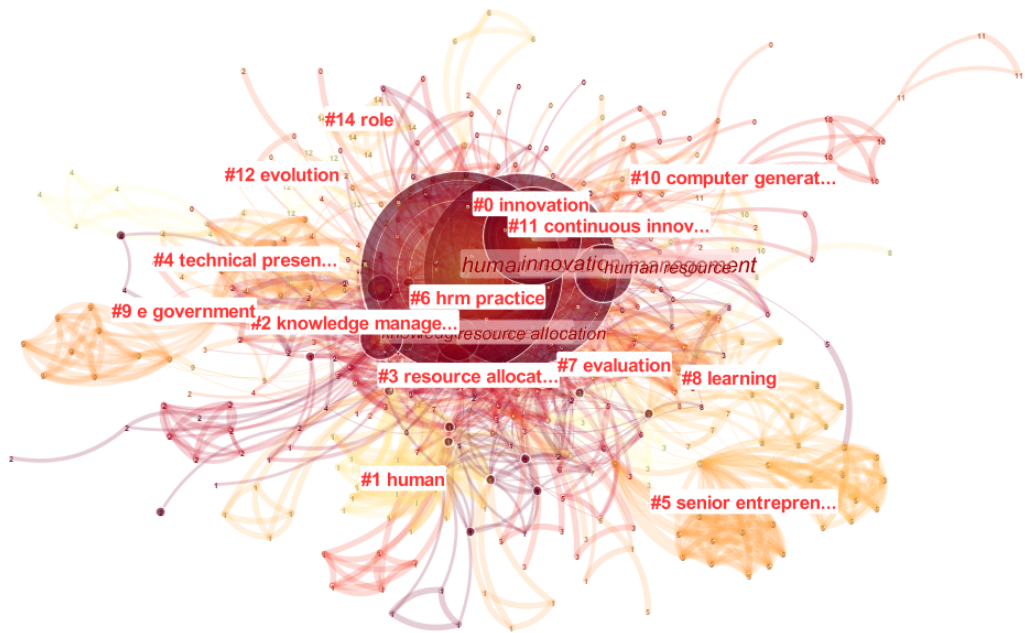


Figure 6 Clusters in HRM and Innovation research

CiteSpace software was used to develop the timeline map. CiteSpace is a freely accessible application that enables interactive and exploratory investigation of the development of a scientific subject, ranging from a single specialisation to numerous interconnected scientific frontiers. The timeline map (see figure 7) depicts the temporal spans of clusters and their connections. As seen in Figures 6 and 7, fourteen clusters developed. The nodes in each line reflect the keywords included inside each cluster, while the connections show the relationships between the various keywords. Additionally, linkages

between clusters demonstrate that all fourteen clusters are inextricably linked. These extracted main clusters denoted by a '#' represent the discipline's research horizons of the emergence of the domain. "innovation", "Human", "Knowledge management", "Resource allocation", "Technical presentation", "Senior entrepreneurship", "HRM practice", "Evaluation", "Learning", "E-government", "Computer-generated holography", "continuous innovation", "Evolution", "Role" are the significant research clusters in the HRM and innovation research domain.

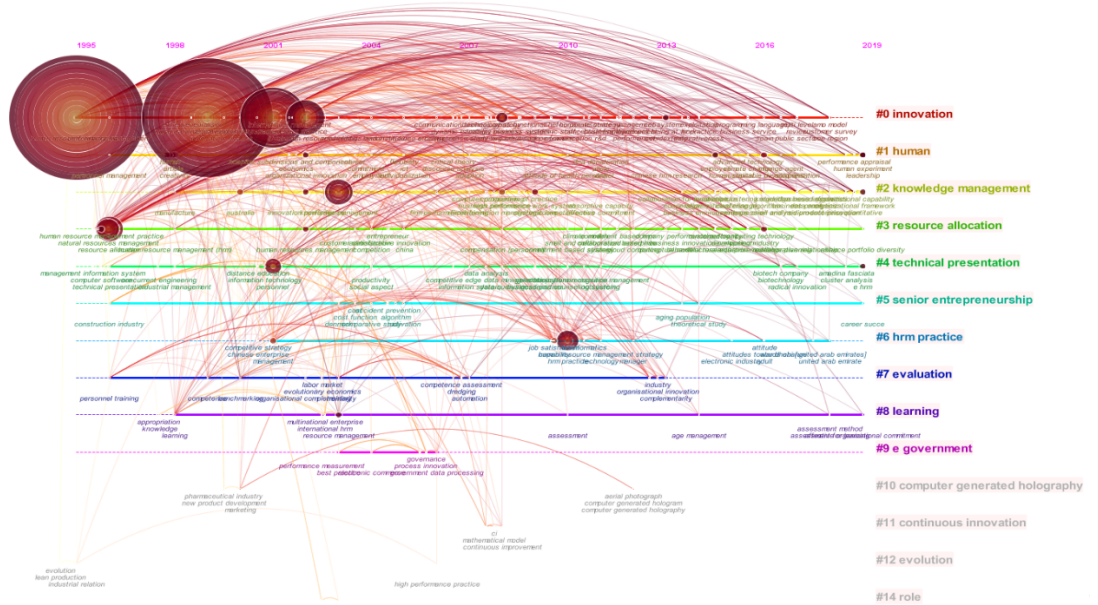


Figure 7 Timeline view of clusters

Influential journals

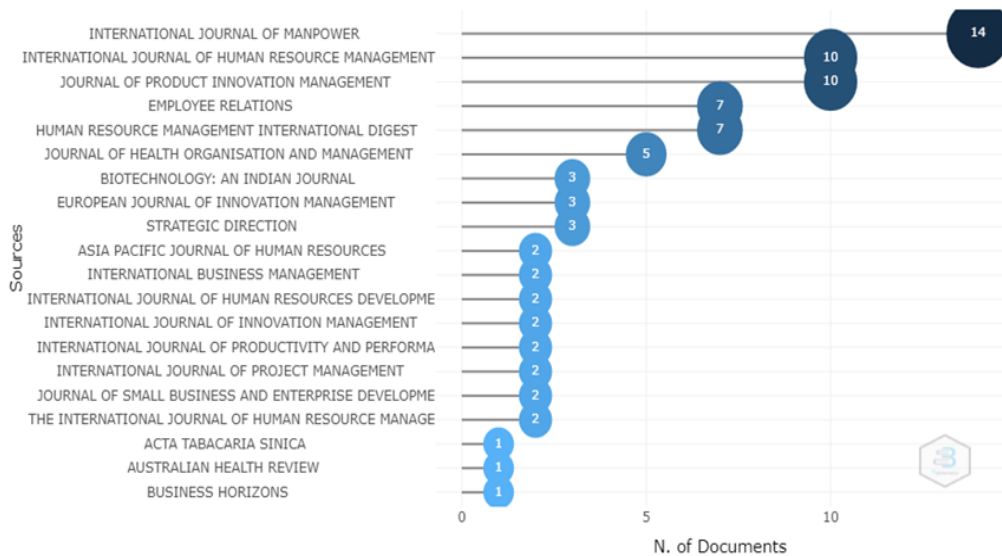


Figure 8 The top journals with number of publications

As shown in figure 8, the top 20 journals with the largest number of publications are as follows: International Journal of manpower (14 articles), International

journal of human resource management(10 articles), Journal of product innovation management (10 articles), employee relations (7 articles),

human resource management
international digest (7 articles).

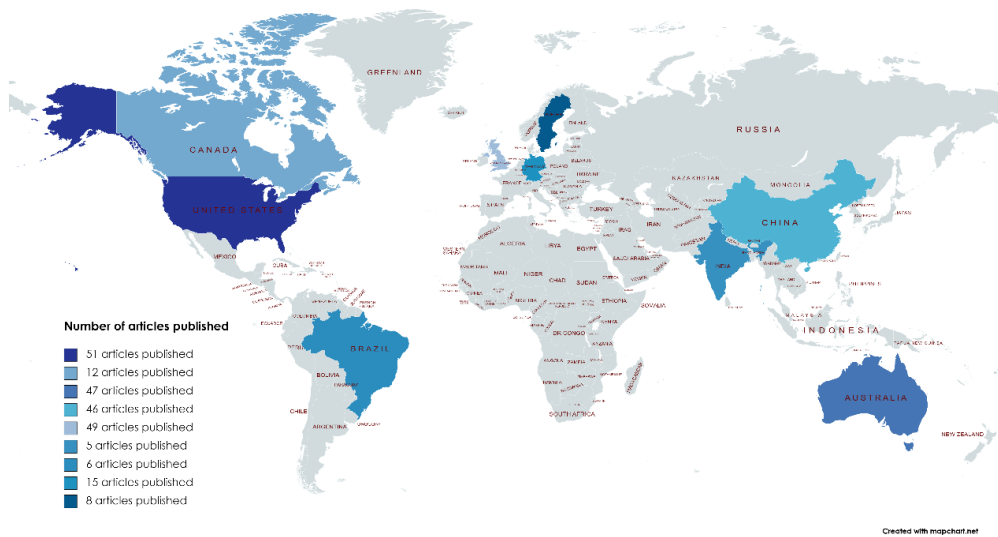


Figure 9 Number of articles published by country.

Countries

Figure 9 shows the world map of the countries around the world where the HRM and innovation related research articles were published. Importantly, researchers from 36 countries notably contributed to the HRM and innovation research with at least one article. Based on the data, the most prolific ten countries were identified with the highest publication in the domain of HRM and innovation. USA (51 articles), UK (49 articles), Australia (47 articles), China (46 articles), Spain (30 articles), Netherlands (23 articles), Germany (15), Canada (12), Italy (12 articles), Ireland (10 articles), which are far ahead of other countries. Further, five countries have published 5 articles. Secondly, about the countries that have received the highest number of citations in the entire Scopus, China stands out in first place (TC = 418) with average article citations (20.90), followed

by Spain in second place (TC = 402) with the average article citations (40.20), and thirdly by the USA (TC = 383) with average article citations (19.15). Australia is the fourth place (319) with the average article citations (45.57).

Figure 10 illustrates the total number of research articles published by researchers of different nations and the collaboration rate of the nation's authors with other nations' authors. It is important to note that the research articles are produced between authors of the same countries in almost all cases. Thus, the collaboration rate between nations is comparatively low. According to the country with the highest number of publications with authors from other countries, the USA (5; Freq: 0.1652), China (3; Freq: 0.1130), Spain (1; Freq: 0.0870), UK (1; Freq: 0.0870). It can be noted that countries such as Australia, Canada, Brazil, Sweden, Ireland, Nigeria fall under the single country publication.

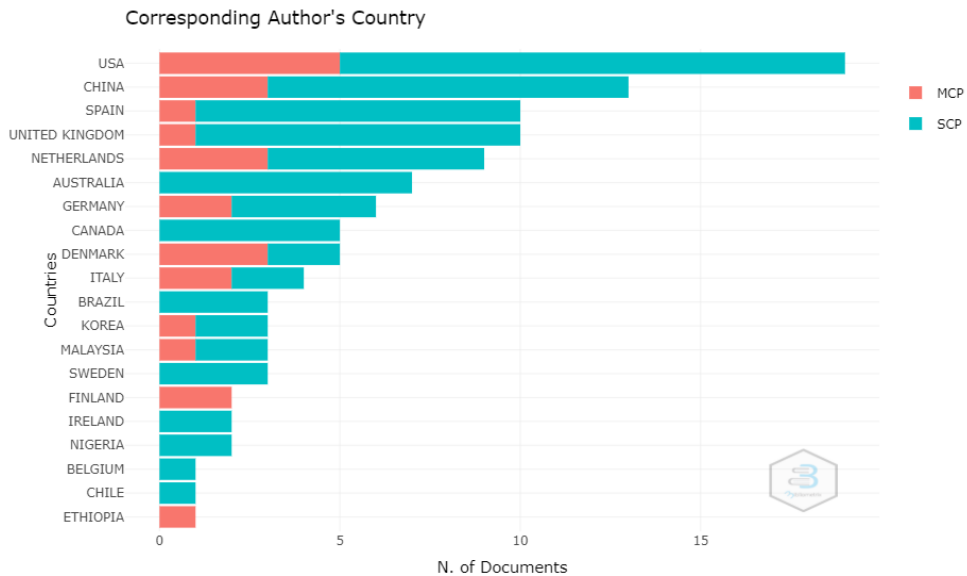


Figure 10 Index of collaboration between countries.

Note: MCP-Multiple country publications; SCP-Single country publications.

Table 2 Synopsis of influential research articles

Author	Title	Purpose	Findings
TC Ling, AM Nasurdin	HRM Practices and firm Innovation: An Empirical Study in Malaysia	Examine the relationship between human resource management (HRM) practices and organisational innovation.	Training alone was found to have a positive and significant effect on the three forms of organisational innovation. Performance appraisal positively and significantly affects administrative innovation.
Daniel Jime'nez-Jime'nez and Raquel Sanz-Valle	Innovation and HRM fit: an empirical study	Analyse the relationship between innovation and human resource management (HRM)	firms following an innovation strategy will be characterised by the use of performance appraisal systems, incentive-based compensation, internal career opportunities and high employee participation.
Daniel Jime'nez-Jime'nez* and Raquel Sanz-Valle	Could HRM support organisational innovation?	Examine the link between HRM and innovation and analyse the effect of both of them on performance.	Found a positive relationship between HRM and innovation. As predicted, the adoption of a set of certain HRM practices encourages innovation.
Shoko Haneda, Keiko Ito	Organizational & HRM and	Focus on the link between organisational	Implementing different types of HRM practices at the same

	innovation: Which management practices are linked to product or process innovation?	and human resource management practices	time significantly raises the probability of product innovation.
Petra De Saá-Pérez & Nieves Lidia Díaz-Díaz	HRM and innovation in the Canary Islands: an ultra-peripheral region	Aim to analyse the relationship between the human resource (HR) policy and innovation in an ultra-peripheral region.	High commitment HRM has a positive influence on organisational innovation in processes.
Helen Shipton, Doris Fay, Michael West, Malcolm Patterson and Kamal Birdi	Managing People to Promote Innovation	Focus upon organisational innovation and investigate the role of HRM in developing the individual skills and collective attributes required to innovate successfully.	Firms exhibiting ‘a sophisticated’ approach to HRM tend to be significantly more innovative – in terms of products and production technology.
H Shipton, MA West, J Dawson, K Birdi	HRM as a predictor of innovation	Argue that HR practices also have the potential to promote organisational innovation	Training, induction, teamwork, appraisal and exploratory learning focus are all predictors of innovation. Furthermore, training, appraisal and induction, combined with an exploratory learning focus, explain variation between product and technological innovation companies.
Anna. C. Bos-Nehles & Andre A.R. Veenendaal	Perceptions of HR practices and innovative work behaviour: the moderating effect of an innovative climate	Explore the effect that perceived HR practices have on the innovative work behaviour (IWB)	Compensation systems, information sharing, and supportive supervision affect IWB. Rewarding innovative behaviour results in less engagement in IWB.
Chung-Jen Chen , Jing-Wen Huang	Strategic HR practices and innovation performance-The the mediating role of knowledge management capacity	From the knowledge-based view, examining the role of knowledge management capacity in the relationship between strategic human resource practices and innovation performance.	Found that strategic HR practices relate positively to knowledge management capacity, which in turn relate positively to innovation performance
Jianwu Jiang, Shuo Wang & Shuming Zhao	Does HRM facilitate employee creativity and organisational innovation? A study of Chinese	Examine how HRM practices relate to employee creativity and organisational innovation.	Hiring and selection, reward, job design, and teamwork positively affect employee creativity. The relationships between the four HRM practices and firm innovation

firms

were mediated by employee
creativity.

Co-citation analysis

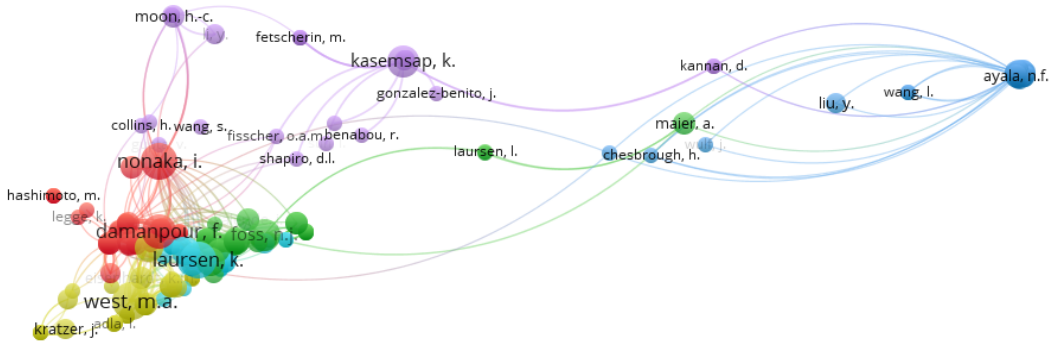


Figure 11 Co-citation map by authors

According to McCain (1990) Co-citation analysis (McCain, 1990) constructs metrics of similarity between documents, authors, or journals using co-citation counts. The frequency with which two units are quoted together is known as co-citation (Small, 1973). The basic premise of co-citation analysis is that the more two articles are cited together, the more probable their content is connected. This

is a strict grouping strategy used regularly by subject-matter experts who cite articles they find essential and fascinating. As shown in figure 11, the most influential authors were identified. Laursen, Damanpour, Jiménez-Jimenez, Nonaka, Foss, West, Adla, Kratzer Kasemsap, Moon, Gonzalez-Benito, and Maier are the most influential authors in the HRM and innovation research.

Word clusters

Using bibliometric analysis, leading seven clusters of keywords were found (see figure 12) the cluster 1 includes employee creativity, employee engagement, employee motivation, employee participation, employee performance, employee satisfaction, employee attitude, empowerment, enthusiasm, explicit knowledge, idea generation, innovative behaviour. Cluster 2 organisational culture, organisational structure, organisational innovation, organisational behaviour, organisational capability,

organisational change, organisational climate, organisational design, organisational development, organisational learning, organisational knowledge, organisational support, organisational context, organisational performance. Cluster 3 shows innovation capability, innovation culture, innovation outcome, innovation performance, innovation strategy, innovation theory, innovative capacity, innovative practice, innovative development, innovation potential.

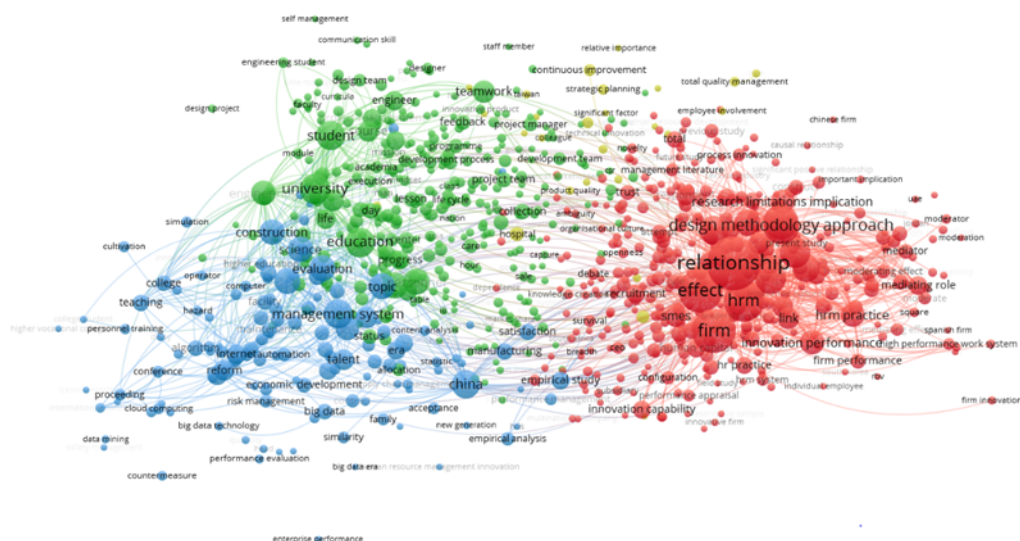


Figure 12 The clusters of HRM and innovation publication

Cluster 4 shows corporate governance, project-based learning, soft skills, professional skills, multi-disciplinary teams, big data, informatisation, resource allocation, R&D, radical innovation, RBV, product innovation, process innovation, readiness, machine learning. Cluster 5 exhibits knowledge economy, knowledge creation, knowledge sharing, knowledge acquisition, leadership style, strategic planning, talent management, team effectiveness, innovation system. Cluster 6 shows human capital, human

resource management, performance evaluation, work engagement, environmental performance, training and development, high-performance work system, abortive capacity, time management, technical skill. Cluster 7 shows product design, product development, production system, product process, process improvement, project management, artificial intelligence, data mining, enterprise resource planning, enterprise management.

Cluster analysis and Multiple Correspondence analysis

Multiple Correspondence Analysis (MCA) was used to analyse the keywords included in the dataset. Figure 13 depicts the conceptual structure of the keywords linked with the resilience articles considered in this research. It compresses large amounts of data, including various variables, into a low-dimensional space to create an intelligible two-dimensional

graph that employs plane distance to indicate the similarity of the keywords. The proximity of keywords to the centre shows that they have gotten considerable attention in recent years (Xie et al., 2020). The findings are evaluated in terms of the points' relative locations and their distribution along the dimensions; the more similar the distribution of words, the

more closely they are represented on the map (Aria & Cuccurullo, 2017). Cluster 1 (red) includes papers about human resource management, innovation,

information management, product development, sustainable development, industrial engineering. Cluster 2 (blue) organisational innovation and human.

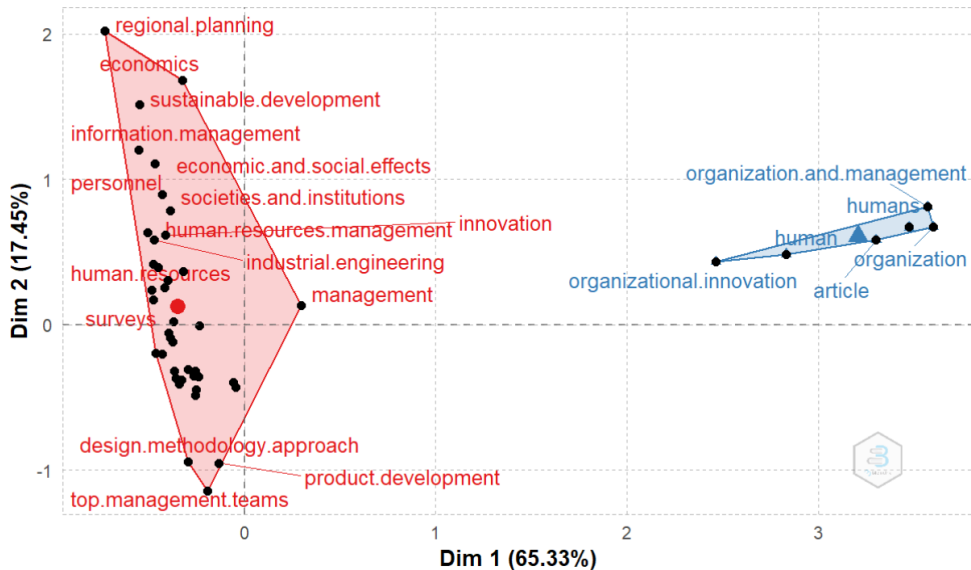


Figure 13 Conceptual structure map

Word Dynamics

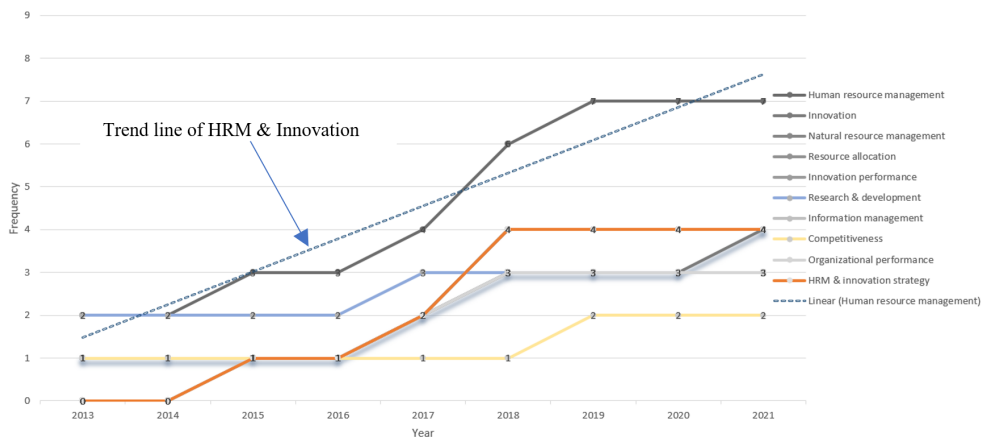


Figure 14 The change of the top 10 keywords by frequency

The top 10 most frequent HRM and innovation domain keywords are obtained and visualized in Fig. 14. It is axiomatic that the terms 'HRM & innovation' is the most prominent, with a substantially

greater frequency than the other eight keywords in the domain. It grows slowly throughout the first two time slices, then takes off with a rapid growth rate beginning with the third slice.

CONCLUSION

Within the broad domain of innovation literature, there is scarce attention on what makes innovation. The literature claims that HRM is a salient factor in leveraging organizational innovation. Notwithstanding, HRM has been scarcely treated in innovation literature from a firm perspective. Further, because of the number of published works and the subject's changes through time, a literature study on any topic is likely to be complicated. The systematic review, combined with bibliometric analysis, tries to identify the primary contributions, critical topics, current dynamics, and suggestions for future study on the subject. This paper aims to supplement past bibliometric studies on HRM and

innovation research by offering a new panoramic view of this domain. In contrast to prior bibliometric research in this area, this study undertakes a holistic analysis of the HRM and innovation domain using a newly developed bibliometric technique. The overview, critical points of themes, thematic growth, and research focuses of this area are graphically and intuitively portrayed via a collection of scientific maps from both static and dynamic views. This new attempt can consolidate and extend bibliometric results prior to HRM and innovation literature studies.

REFERENCES

- Adla, L., Gallego-Roquelaure, V., & Calamel, L., 2019. Human resource management and innovation in SMEs. *Personnel Review*.
<https://doi.org/10.1108/PR-09-2018-0328> In Press.
- Aparicio, G., Iturralde, T., & Maseda, A. (2021). A holistic bibliometric overview of the student engagement research field. *Journal of Further and Higher Education*, 45(4), 540-557.
- Akhavan, P., & Mahdi Hosseini, S. (2016). Social capital, knowledge sharing, and innovation capability: an empirical study of R&D teams in Iran. *Technology Analysis & Strategic Management*, 28(1), 96-113.
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of informetrics*, 11(4), 959-975.
- Bos-Nehles, A. C., & Veenendaal, A. A. (2019). Perceptions of HR practices and innovative work behavior: the moderating effect of an innovative climate. *The International Journal of Human*

- Resource Management*, 30(18), 2661-2683.
- Chen, C. J., & Huang, J. W. (2009). Strategic human resource practices and innovation performance—The mediating role of knowledge management capacity. *Journal of business research*, 62(1), 104-114.
- Dalota, M. D., & Perju, A. (2010). Human resources management and the company's innovation. *Romanian Economic and Business Review*, 5(4), 122.
- De Saa-Perez, P., & Díaz-Díaz, N. L. (2010). HRM and innovation in the Canary Islands: an ultra-peripheral region of the European Union. *The International Journal of Human Resource Management*, 21(10), 1649-1666.
- Díaz-Fernández, M., Bornay-Barrachina, M., & López-Cabrales, A., 2015. Evidence-based HRM: A global forum for empirical scholarship. In *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 3(1), pp.64-80.
- Farr, J. L., & Ford, C. M. 1990. Individual innovation. In M. A. West & J. L. Farr (Eds.), *Innovation and creativity at work*: 63-80. Chichester, England: Wiley.
- Felin, T., & Hesterly, W. S. (2007). The knowledge-based view, nested heterogeneity, and new value creation: Philosophical considerations on the locus of knowledge. *Academy of management review*, 32(1), 195-218.
- Foss, N. J., & Laursen, K., 2012. HRM practices and innovation. In M. Dodgson, D. Gann, & N. Phillips (Eds.), *Handbook of innovation management*. Oxford: Oxford University Press. <https://doi.org/10.2139/ssrn.2149464>.
- Gloet, M., & Terziovski, M., 2004. Exploring the relationship between knowledge management practices and innovation performance. *Journal of manufacturing technology management*, 15(5), pp.402-9.
- Guest, D. E., Michie, J., Conway, N., & Sheehan, M. (2003). Human resource management and corporate performance in the UK. *British journal of industrial relations*, 41(2), 291-314.
- Hailey, V. H. (2001). Breaking the mould? Innovation as a strategy for corporate renewal. *International Journal of Human Resource Management*, 12(7), 1126-1140.
- Haneda, S., & Ito, K. (2018). Organisational and HRM and innovation: Which management practices are linked to product and/or process innovation?. *Research Policy*, 47(1), 194-208.
- Jiang, J., Wang, S., & Zhao, S. (2012). Does HRM facilitate employee creativity and organisational innovation? A study of Chinese firms. *The International Journal of Human Resource Management*, 23(19), 4025-4047.
- Jiménez-Jiménez, D., Valle, R. S., & Hernández-Espallardo, M. (2008). Fostering innovation. *European Journal of innovation management*, 11(3), 389-412.
- Kang, S. C., & Snell, S. A. (2009). Intellectual capital architectures and ambidextrous learning: a framework for human resource management. *Journal of management studies*, 46(1), 65-92.
- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital,

- employment, and human resource configurations. *Journal of management*, 28(4), 517-543.
- Ling, T. C., & Nasurdin, A. M. (2010). HRM practices and organisational innovation: An empirical study in Malaysia. *Journal of Applied Business Research (JABR)*, 26(4).
- McCain, K. W. (1990). Mapping authors in intellectual space: A technical overview. *Journal of the American society for information science*, 41(6), 433-443.
- Moyeen, A. F. M. A., & Huq, A. (2001). Human resource management practices in business enterprises in Bangladesh. *Journal of Business Studies*, 22(2), 263-270.
- Sáenz, J., Aramburu, N., & Rivera, O. (2009). Knowledge sharing and innovation performance: A comparison between high-tech and low-tech companies. *Journal of intellectual capital*, 10, 22-36.
- Schaffer, R. H., & Paul-Chowdhury, C. M. (2002). Implementation: there's more to innovation than great ideas. *Ivey Business Journal*, 67(2), 1-6.
- Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing people to promote innovation. *Creativity and innovation management*, 14(2), 118-128.
- Shipton, H., West, M. A., Dawson, J., Birdi, K., & Patterson, M. (2006). HRM as a predictor of innovation. *HRM journal*, 16(1), 3-27.
- Tan, C. L., & Nasurdin, A. M. (2011). HRM practices and organisational innovation: assessing the mediating role of knowledge management effectiveness. *Electronic journal of knowledge management*, 9(2), 155.
- van Raan, A. F. (2012). Properties of journal impact in relation to bibliometric research group performance indicators. *Scientometrics*, 92(2), 457-469.
- Waheed, A., Miao, X., Waheed, S., Ahmad, N., & Majeed, A. (2019). How new HRM practices, organisational innovation, and innovative climate affect the innovation performance in the IT industry: A moderated-mediation analysis. *Sustainability*, 11(3), 621.
- Wei, L. Q., & Lau, C. M. (2005). Market orientation, HRM importance and competency: Determinants of strategic HRM in Chinese firms. *The International Journal of Human Resource Management*, 16(10), 1901-1918.
- Xie, H., Zhang, Y., Wu, Z., & Lv, T. (2020). A Bibliometric Analysis on Land Degradation: Current Status, Development, and Future Directions. *Land*, 9(1), 28. <https://doi.org/10.3390/land9010028>.
- Zhou, K. Z. (2006). Innovation, imitation, and new product performance: The case of China. *Industrial Marketing Management*, 35(3), 394-402.