

## Tracing Motivation in Modern Workplaces: A Two-Decade Bibliometric Insight and Research Mapping

Herlina Lusiana<sup>1</sup>, Firdaus<sup>2</sup>, Mursanto<sup>3</sup>, Lamsah<sup>4</sup>, Teguh Wicaksono<sup>5</sup>

<sup>1,2,3,4,5</sup>Management Program, Islamic University of Kalimantan MAB Banjarmasin,  
Indonesia

Corresponding email : [lusiana.muyoto@gmail.com](mailto:lusiana.muyoto@gmail.com)

### Abstract

*Motivation in modern workplaces has evolved significantly over the past two decades, shaped by technological disruption, changing work paradigms, and shifting employee expectations. This study aims to systematically trace the conceptual, thematic, and collaborative development of workplace motivation research through a comprehensive bibliometric analysis. Drawing on 300 peer-reviewed journal articles published between 2001 and 2021, data were sourced from Scopus and Google Scholar using the search phrase “understanding motivation in modern workplaces.” The analysis employed VOSviewer software to generate network, overlay, density, and co-authorship visualizations, while data selection followed the PRISMA framework to ensure relevance and transparency.*

*Findings reveal a major shift from traditional constructs such as performance and job satisfaction to emerging themes including psychological well-being, digital leadership, remote work, and meaningful work. The evolution indicates a transition from incentive-based to experience-centered motivation theories, reflecting broader sociotechnical changes. However, the study also uncovers thematic blind spots—such as sustainability-related motivation and employee values—and highlights the fragmented nature of global research collaboration. These insights underscore the need for integrative, cross-disciplinary, and future-oriented frameworks in understanding motivation.*

*This study contributes to the literature by offering a aiming to enhance engagement and well-being in increasingly digital and hybrid work environments.*



**Keywords:** Motivation, Modern Workplaces, Bibliometric Mapping, Employee Well-being, Digital Work Environment

## INTRODUCTION

The dynamics of motivation in modern workplaces have experienced a profound transformation in the past two decades, fueled by rapid technological advancements, shifting organizational paradigms, evolving employee values, and global disruptions such as the COVID-19 pandemic. As work becomes increasingly digital, flexible, and autonomous, understanding what drives employees to perform, engage, and remain committed has become a strategic imperative for organizations worldwide. Motivation, once predominantly studied through classical theories such as Maslow's Hierarchy of Needs or Herzberg's Two-Factor Theory, has now expanded into a multifaceted domain that intersects with topics such as remote work, psychological safety, job crafting, meaningful work, and digital well-being. In this shifting context, organizations are forced not only to revisit long-standing assumptions about motivation but also to realign their human resource practices to address emerging motivational challenges in the hybrid and post-digital workplace.

Despite the growing complexity and strategic relevance of workplace motivation, the academic literature on this subject is becoming increasingly fragmented, with studies dispersed across multiple disciplines including psychology, management, organizational behavior, and human resource development. Scholars have employed diverse methodological and theoretical approaches, resulting in a broad but often disconnected body of knowledge. This proliferation of studies, while indicative of strong scholarly interest, creates challenges for synthesizing insights, identifying coherent thematic trends, and detecting conceptual blind spots. Consequently, practitioners and scholars alike struggle to answer a fundamental question: how has motivation been conceptualized, operationalized, and evolved in modern workplace research over the last two decades? Previous literature reviews on motivation have tended to adopt either narrative or systematic review methodologies, which, while valuable, often lack the analytical rigor and visual mapping capacities required to trace intellectual structures and research trends at scale. For example, earlier reviews often focused on specific theoretical frameworks such as Self-Determination Theory (SDT), Goal-Setting Theory, or Job Characteristics Theory, or examined motivation in isolated contexts such as public sector work or academic institutions. While these studies provide depth, they often fall short in offering a panoramic view of the research landscape. In contrast, bibliometric analysis—through tools such as

480

IJEBIR, Volume 04 Issue 06, 2025



Copyright at authors some right reserved this work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

co-citation analysis, co-authorship networks, and thematic evolution mapping—offers a robust method to identify influential publications, research clusters, knowledge gaps, and emerging frontiers in a large corpus of literature.

To date, relatively few bibliometric studies have regularly mapped the development of motivation research within modern workplace contexts. Those that exist typically focus on general organizational behavior or leadership domains, where motivation is treated as a peripheral variable rather than a central construct. This presents a significant research gap. There is a pressing need for a comprehensive, data-driven synthesis of the scholarly discourse that captures how the understanding of motivation has evolved over time, particularly in response to the structural, technological, and cultural shifts defining the contemporary work environment. Addressing this gap is not only important for advancing theory, but also for informing evidence-based HR practices that align with current and future workforce expectations.

The novelty of this study lies in its scope and methodological approach. By employing a bibliometric analysis of peer-reviewed publications from 2000 to 2024, this research offers a longitudinal, macro-level mapping of motivation research in modern workplace settings. Unlike previous reviews that rely on selective literature or qualitative synthesis, this study utilizes bibliometric indicators—such as publication trends, co-citation networks, and keyword co-occurrence maps—to trace how key concepts, influential authors, and thematic clusters have emerged, interacted, and shifted over time. Additionally, this study highlights under-researched areas and potential directions for future inquiry, making it a valuable resource for both scholars seeking theoretical advancement and practitioners aiming for actionable insights.

This article aims to answer the following research question: How has the concept of motivation in modern workplace contexts evolved in the scholarly literature over the past two decades, and what are the major intellectual, thematic, and methodological trends revealed through bibliometric analysis? By addressing this question, the study not only contributes to the consolidation of fragmented knowledge but also illuminates the trajectory of motivation research in alignment with the evolving world of work. It further underscores the importance of adaptive, interdisciplinary approaches in understanding one of the most enduring yet dynamic constructs in organizational science—human motivation.



## **LITERATURE REVIEW**

### **Theoretical Foundations of Motivation in Workplaces**

Work motivation has long been a central topic in the study of organizational behavior and human resource management. Early theories of motivation, such as Maslow's Hierarchy of Needs (1943), introduced the idea that individuals are driven by a hierarchy of needs ranging from physiological to self-actualization. Although this theory provided a strong conceptual foundation, criticisms have been raised regarding its universality and measurability in the context of modern organizations. Herzberg's (1959) Two-Factor Theory distinguished between motivator factors (such as achievement and recognition) and hygiene factors (such as pay and working conditions), providing a more practical approach to job design. On the other hand, process theories such as Expectancy Theory (Vroom, 1964) and Goal-Setting Theory (Locke & Latham, 1990) emphasize the role of perceptions and goals in influencing individual motivation. These theories position employees as rational agents who make decisions based on their expectations and the incentives they face.

In the last two decades, Self-Determination Theory (SDT) developed by Deci and Ryan (2000) has become one of the most prominent approaches to understanding work motivation. SDT emphasizes the importance of intrinsic motivation based on the satisfaction of three basic psychological needs: autonomy, competence, and relatedness. Research by Gagné & Deci (2005) suggests that when organizations create a work environment that supports autonomy, employees tend to demonstrate higher engagement and performance. However, criticisms of SDT include challenges in its application to more collectivistic cultural contexts, where the value of autonomy may not be a high priority. Contemporary studies have also begun to integrate SDT with concepts such as employee engagement, job crafting, and meaningful work, enriching our understanding of motivation in changing organizational contexts.

Although these theories provide a strong conceptual framework, most are still rooted in individualistic paradigms and assumptions of job stability that may no longer be relevant in the digital and post-pandemic era. The main challenge in developing motivational theories today is how to adapt classical principles to increasingly uncertain, flexible, and digitalized work dynamics. Therefore, cross-disciplinary integration and contextual reinterpretation of theories are increasingly important in updating the theoretical basis of modern work motivation.



**Motivation in the Modern Workplace: Shifts, Challenges, and Emerging Constructs**

The development of the work environment in the last two decades has fundamentally changed the way organizations understand and manage employee motivation. Digital transformation, the increasing prevalence of remote work, and the shift in values of millennials and Gen Z towards work-life balance have expanded the scope of relevant variables in motivation studies. Motivation is no longer seen solely as a response to incentives or job structures, but rather as the result of a complex interaction between organizational context, personal identity, and work meaning. A study by Grant (2008) showed that perceptions of the social contribution of work can be a stronger predictor of intrinsic motivation than monetary incentives. This marks a shift from an instrumental approach to a transformative approach to understanding motivation.

This shift also gave birth to various new relevant constructs, such as job crafting (Wrzesniewski & Dutton, 2001), psychological empowerment (Spreitzer, 1995), and meaningful work (Rosso et al., 2010). These constructs emphasize that employees are not only objects influenced by organizational systems, but also active agents who shape their work experiences autonomously and reflectively. In the modern work context, employees are required to continuously adjust to dynamic roles, often without fixed structures, which creates new needs for self-motivation. This is reinforced by the study of Kooij et al. (2013) which found that work motivation is dynamic across the lifespan and is influenced by changes in values, life goals, and working conditions.

However, the modernization of the workplace also brings significant challenges to the sustainability of motivation. Increased digital workloads, social isolation in remote work settings, and career uncertainty in the gig economy have been linked to burnout and long-term decline in motivation (Kniffin et al., 2021). While organizations seek to adopt flexibility as a means of supporting employee well-being, studies show that without strong structural support and organizational culture, flexibility can actually exacerbate role ambiguity and job control (Choudhury et al., 2021). Therefore, understanding work motivation in the modern era requires a more complex, cross-level, and contextual approach.

Critically, many contemporary motivation studies remain trapped in sectoral silo approaches—for example, focusing only on a single industry or cultural context—thus making generalization and theory development across contexts difficult. This is where a bibliometric approach is essential to synthesize and map how these motivation concepts develop and interact in the global literature longitudinally. This study fills this need by constructing a broader, more integrated conceptual and evolutionary map of motivation research.



## **Mapping Research Trends and Gaps in Motivation Studies: Insights from Bibliometric Evidence**

In the last two decades, the volume of publications on work motivation has increased exponentially, indicating that this issue remains relevant in academic discourse across disciplines. However, this increase is not always accompanied by theoretical consistency and methodological coherence. A review by Latham & Pinder (2005) shows that the motivation literature is often fragmented between psychological, managerial, and sociological orientations, each with different terminology, approaches, and empirical focus. This fragmentation creates an epistemological gap that hinders the consolidation of knowledge and the development of comprehensive theories. In this context, a bibliometric approach becomes important to identify the structure of knowledge, scientific networks, and main thematic trends in motivation research.

Previous relevant bibliometric studies, such as those conducted by Podsakoff et al. (2008) in the field of organizational behavior, have shown that this method is able to uncover the interrelationships between theories, methodologies, and scientific influences hidden in the literature. However, bibliometric studies that explicitly map motivation in the context of modern work are still very limited. Most studies only mention motivation as a mediating or predictive variable in research on leadership, job satisfaction, or organizational performance, without raising it as the main conceptual focus. In fact, existing bibliometric studies tend to be too broad (e.g. on human resource management in general), or too narrow (e.g. only on SDT theory), so that they fail to present a complete knowledge landscape.

Furthermore, there are also geographical and cultural gaps in the motivation literature. The majority of research is dominated by studies from developed countries with formal and stable work contexts, while informal, flexible or post-colonial contexts are under-explored. This creates an epistemological bias in the global representation of how motivation is understood and constructed. This is where an inclusive and longitudinal bibliometric approach is important, which not only maps dominant actors and themes but also identifies areas that are under-represented in the literature. This study takes on this role by presenting thematic mapping, citation networks and conceptual evolutions that can help bridge the gap between theory and practice, and between local and global contexts in motivation studies.

Thus, in-depth bibliometric analysis serves not only as a tool for literature navigation, but also as a means of critical reflection on the direction of scientific development. This study will reveal how the concept of motivation has moved from

484



traditional theories to more flexible, contextual, and multidisciplinary constructs—a shift that reflects the complexity of work in the 21st century.

## **METHOD**

### **Research Approach**

This study employs a quantitative-descriptive bibliometric approach to systematically map and analyze the evolution of studies related to motivation in current places of work. Bibliometric analysis is widely recognized as an effective method for uncovering research patterns, intellectual structures, and knowledge development trends across scientific disciplines. As proposed by Donthu et al. (2021), bibliometric methods enable researchers to quantitatively assess publication growth, co-citation networks, and thematic clusters, providing an evidence-based view of the scholarly landscape. In line with the aim of this study—to trace the conceptual and empirical trajectory of workplace motivation studies over the past two decades—a bibliometric design is both relevant and strategic. This method allows the integration of a large volume of published data while maintaining analytical rigor and interpretive depth. Furthermore, the visualization outputs generated from this approach help identify critical topics, influential authors, and collaborative patterns across regions and institutions, making it particularly appropriate for reviewing a rapidly evolving research domain such as workplace motivation in the digital era.

### **Data Sources and Type**

The data used in this study consists of 300 peer-reviewed journal articles published from 2001 to 2021. These articles were retrieved from two reputable academic databases: Scopus and Google Scholar. Scopus is selected due to its comprehensive indexing of high-impact journals across social sciences, business, and psychology, ensuring that the retrieved data represents high-quality scholarship. Meanwhile, Google Scholar is included to capture gray literature and potentially underrepresented yet relevant research outputs, especially those from emerging economies or interdisciplinary outlets. The scope of this study focuses exclusively on publications that examine aspects of motivation in the context of modern workplaces, including topics such as employee engagement, digital work environments, remote work, and job crafting. Only English-language journal articles were included to ensure consistency in analysis and comparability of content. The use of two databases allows for a broader capture of the academic conversation while ensuring coverage of core and peripheral contributions in the field.

485



### Data Collection Process

The data collection process was conducted in early 2025 through a systematic keyword-based search. The primary keyword phrase used was “understanding motivation in modern workplaces,” which was entered in the advanced search functions of both Scopus and Google Scholar. In Scopus, Boolean operators and filtering tools were used to narrow the results to articles published between 2001 and 2021, written in English, and limited to the subject areas of business, management, social sciences, and psychology. Google Scholar searches were manually reviewed and filtered to remove duplicates, non-peer-reviewed sources, and publications outside the specified time range. The initial search resulted in a total of 612 documents. These results were exported and compiled into a reference management system for further screening and evaluation. Each entry was cataloged based on title, abstract, author, year of publication, journal source, and keywords.

### Data Selection Process

To ensure methodological transparency and replicability, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram was adopted as the framework for the data selection process. The initial database screening of 612 records underwent a multi-stage filtering. First, duplicates across Scopus and Google Scholar were identified and removed, resulting in 478 unique entries. Second, a title and abstract screening was conducted to assess relevance to workplace motivation. Third, a full-text review was applied to assess alignment with the conceptual scope of the study—excluding those that focused solely on student motivation, clinical settings, or purely theoretical perspectives without organizational context. This process resulted in a final sample of 300 high-quality, thematically relevant articles for bibliometric analysis. The PRISMA model ensures that the inclusion process is transparent, replicable, and systematically driven by predefined criteria, as illustrated by Page et al. (2021).

### Data Interpretation and Analysis Process

The selected articles were analyzed the usage of VOSviewer (version 1.6.19), a specialized software for building and visualizing bibliometric networks. VOSviewer was chosen due to its ability to generate clear and interpretable visualizations of co-authorship, co-quotation, and keyword co-prevalence networks—key dimensions for mapping intellectual structures and thematic development. Four types of visual outputs were generated to support the interpretation: network visualization (to identify clusters of related

486

IJEBIR, Volume 04 Issue 06, 2025



Copyright at authors some right reserved this work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

research), overlay visualization (to map temporal evolution of themes), density visualization (to highlight research hotspots), and co-author collaboration mapping (to examine author affiliations and international partnerships). The keyword co-occurrence map provided insights into dominant and rising subject matters, whilst the co-quotation evaluation found out foundational theoretical frameworks that have shaped the sphere. those visualizations have been significantly interpreted to discover studies developments, expertise gaps, and regions for future inquiry. Following the recommendation of van Eck and Waltman (2014), the threshold settings for keyword frequency and co-authorship connections were optimized to ensure analytical clarity and thematic relevance.

Through this bibliometric approach, supported by systematic review principles and advanced visualization techniques, the study offers a rigorous and comprehensive mapping of how workplace motivation has been conceptualized and evolved in the instructional literature during the last two decades.

## RESULTS AND DISCUSSION

### 1. Cluster Analysis

Desk 1 Cluster analysis outcomes

**Table 1. Cluster Analysis**

| Cluster 1                       | Cluster 2                 | Cluster 3            | Cluster 4               |
|---------------------------------|---------------------------|----------------------|-------------------------|
| Belonging                       | aesthetics                | covid-19             | acceptability           |
| Burnout                         | creativity                | empathy              | aviation                |
| corporate social responsibility | digital leadership        | employability skills | awareness               |
| gender equality                 | education                 | Gender               | feasibility             |
| mental health                   | entrepreneurship          | hospitality industry | mhealth                 |
| Stress                          | human resource management | new work             | security                |
| systematic literature review    | human-AI collaboration    | Nurse                | sustainable development |
| turnover intention              | motivation                | remote work          | technology              |
| virtual reality                 | pedagogy                  | Resilience           | Uganda                  |
| well being                      | sharing economy           | teacher beliefs      | usability               |
| work engagement                 | trust                     | Telework             | warehouse               |
| Workplace                       |                           |                      |                         |



|                             |                           |                              |                            |
|-----------------------------|---------------------------|------------------------------|----------------------------|
| Cluster 5                   | Cluster 6                 | Cluster 7                    | Cluster 8                  |
| AI                          | coping                    | city logistics               | blended learning           |
| bayesian networks           | employee well-being       | industry 4.0                 | Care                       |
| digital mental health       | job insecurity            | last mile delivery           | digitalization             |
| machine learning            | self-determination theory | psychological well-being     | higher education           |
| meaningful work             | software engineering      | road safety                  | human factors              |
| perceived overqualification | student engagement        | soft skills                  | language ideology          |
| Perception                  | systematic review         | structural equation modeling | microlearning              |
| Recruitment                 | technology acceptance     | Survey                       | talent management          |
| sustainability              | technostress              |                              |                            |
| Cluster 9                   | Cluster 10                | Cluster 11                   | Cluster 12                 |
| Aged                        | andragogy                 | construction industry        | employee productivity      |
| job satisfaction            | artificial intelligence   | employee engagement          | inclusive leadership       |
| Norway                      | generative ai             | environmentalsustainability  | knowledge sharing          |
| older adults                | self-directed learning    | learning                     | organizational behavior    |
| social isolation            | sustainable development   | pro-environmental behavior   | organizational performance |
| subjective wellbeing        | sustainable technology    | safety training              |                            |
| technology acceptance       |                           |                              |                            |
| work from home              |                           |                              |                            |
| Cluster 13                  | Cluster 14                | Cluster 15                   |                            |
| digital competencies        | human-centricity          | bibliometric analysis        |                            |
| digital technology          | industry 5.0              | emotional intelligence       |                            |
| nursing education           | Innovation                | hospital                     |                            |
| qualitative research        | risk management           | transfer                     |                            |
| Satisfaction                | Vocational education      |                              |                            |



table 1 provides the results of cluster evaluation of 300 selected scientific articles analyzed bibliometrically using VOSviewer software. This analysis resulted in 15 thematic clusters that represent the intellectual structure and conceptual developments in work motivation research over the past two decades. Each cluster reflects a concentration of topics or keywords that frequently appear together in the literature, indicating semantic proximity and thematic relatedness between publications.

Clusters 1 to 4 show the dominance of psychological well-being issues such as belonging, burnout, well-being, mental health, stress, and resilience, indicating a shift in focus from instrumental motivation to experiential motivation and employee well-being. This reflects that classical motivation theories such as Two-Factor Theory (Herzberg) or Expectancy Theory (Vroom) have evolved towards a more humanistic direction, in line with contemporary approaches such as Self-Determination Theory (Deci & Ryan), which emphasizes the basic psychological needs of individuals. This finding also shows that the understanding of motivation is no longer limited to external incentive factors, but includes emotional dynamics integrated with flexible work contexts, such as telework and remote work that appear in cluster 4.

The emergence of the terms human-AI collaboration, digital leadership, virtual reality, and technology acceptance in clusters 2, 5, and 13 reflects the influence of digital disruption on work processes and motivational experiences. This strengthens the argument that work motivation in the Industry 4.0 era and even towards Industry 5.0 cannot be separated from the individual's adaptive ability to digitalization. This is where research based at the process needs-resources version and technostress becomes increasingly relevant, especially in understanding how technology becomes a motivator and stressor. This context has not been widely explained in previous systematic literature, so these results strengthen the novelty of this bibliometric study: mapping the correlation between digitalization and motivation as part of a new theoretical landscape.

In the next clusters (6 to 10), the dominance of keywords such as employee well-being, psychological well-being, job insecurity, job satisfaction, employee productivity, to inclusive leadership was found. This indicates that contemporary work motivation research also has a lot to do with mediating and moderating variables such as leadership, job stability, and employee engagement. This is consistent with a contemporary study by Deci & Ryan (2017) which states that contextual support from organizations and managers is very important in maintaining intrinsic motivation, especially in an ambiguous and changing work environment.



Interestingly, clusters 11 and 12 show the demographic and social dimensions of work motivation, such as aged, older adults, social isolation, sustainable development, and organizational behavior. These topics underline the importance of inclusiveness and adaptive job design to differences in age, cultural background, and environmental values. The link between subjective wellbeing and organizational performance suggests that modern motivation studies are increasingly moving towards a balance between economic performance and employee psychological sustainability.

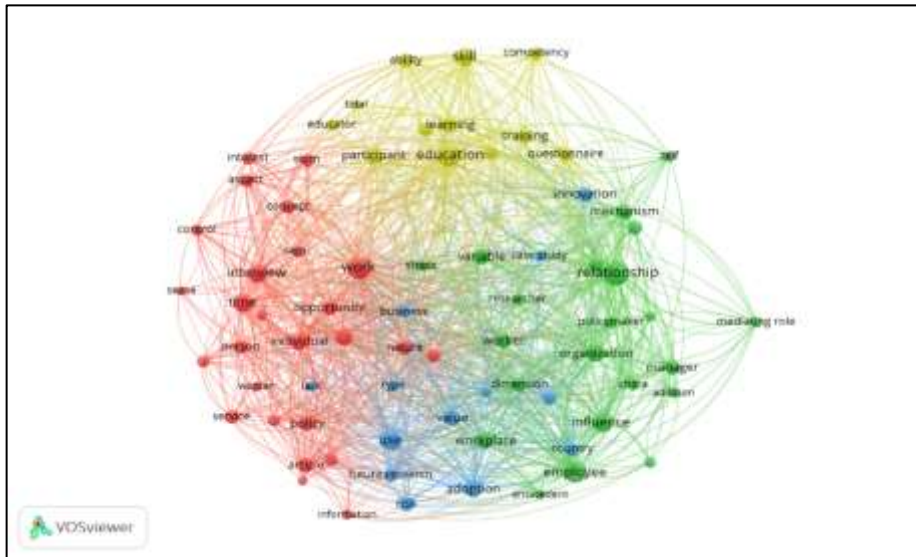
Clusters 13 to 15 show a focus on methodological developments and research innovations. The emergence of the terms bibliometric analysis, qualitative research, emotional intelligence, and digital competencies marks a growing scientific awareness of the importance of integrating analytical methods and cognitive-emotional variables in the study of motivation. Terms such as risk management, industry 5.0, nursing education, and human-centricity show the potential for expanding the application of motivation to specific sectors that have not been widely highlighted in classic reviews.

Overall, Table 1 reveals three important things. First, there has been a major shift from incentive-based motivation theories to a paradigm that places well-being, meaningful work, and sustainability at the center. Second, the impact of digital transformation is significant and creates new variables that must be accommodated in motivation theories. Third, the motivation literature has grown multidimensionally, involving domains of mental health, leadership, technology, and social inclusion, which have not been widely mapped in previous studies.

Thus, the results of this cluster evaluation now not simplest improve the importance of the principal topic within the studies title (Tracing Motivation in Modern Workplaces), but also directly address the research problems that have been raised, namely the fragmentation of the literature and the absence of long-term conceptual mapping. This study successfully bridges the research gap by revealing the complexity and integration across themes that shape the current work motivation research landscape. The uniqueness of this approach—using visual and quantitative analysis of keyword networks—expands the boundaries of conventional narrative methodology and gives a systematic map that may be used as a basis for the development of evidence-based human resource control theory and exercise.



## 2. Network Visualization



**Figure 1. Network Visualization**

Source: Data processed, 2025

Figure 1 shows the effects of network visualization that illustrates the connection among keywords in three hundred decided on clinical articles on motivation in the cutting-edge workplace. This visualization was generated using VOSviewer software with a co-occurrence mapping approach, which maps key phrases primarily based on the frequency in their co-incidence in the same report. each node represents a keyword, even as the traces connecting the nodes imply the extent of semantic relationship among the phrases. the size of the node indicates the frequency of its prevalence, and the shade of the cluster indicates comparable thematic connections.

From the results of this visualization, it can be clearly seen the formation of several main clusters that indicate the theoretical and thematic orientation of the work motivation literature in the last two decades. One of the dominant clusters consists of keywords such as motivation, job satisfaction, employee engagement, performance, and organizational behavior, which shows that the concept of motivation is consistently associated with classical variables in organizational theory. This confirms that until now, many researchers still refer to conventional theoretical frameworks such as Herzberg's Two-Factor Theory and Goal-Setting Theory in exploring the determinants and consequences of work motivation. However, the visualization also shows the emergence of other large nodes

associated with contemporary concepts such as well-being, remote work, meaningful work, technostress, job crafting, and digital leadership, which indicates a diversification of the focus of motivation studies towards the digital context and employee well-being.

One of the significant findings in this network is the central position of the word well-being, which is closely connected to the nodes burnout, psychological safety, stress, resilience, and employee engagement. This relationship reflects a new paradigm in motivation theory, namely the transition from an output-based motivation approach to an experience-centered motivation approach. Such studies generally adopt the Self-Determination Theory (SDT) framework which explains that the fulfillment of basic needs such as autonomy and relatedness has a significant contribution in increasing intrinsic motivation, especially in unstable work conditions that require high adaptation.

In addition, there is a network structure that shows increasing attention to the issue of digitalization of work, as seen from nodes such as telework, remote work, digital leadership, AI-human collaboration, and technology acceptance. The close relationship between these nodes and the words motivation and employee performance indicates that motivational challenges in the modern work environment are not only psychological, but also greatly influenced by technological transformation. This suggests that motivation research has shifted from the physical workspace to the digital workspace, which requires an expansion of the dimensions of motivation to include digital readiness and emotional intelligence in interacting with technology-based work systems.

In terms of research gaps, this network visualization shows that several important concepts that should have strong relationships are still scattered or less visually connected. For example, meaningful work and psychological empowerment do not appear in a central position even though recent literature suggests that both are important predictors of intrinsic motivation in hybrid and knowledge work contexts. This indicates that the current literature has not fully integrated contemporary motivation concepts into an established research architecture, a conceptual gap that could be the basis for further exploration.

Furthermore, this network visualization also shows a pattern of conceptual collaboration that is still regional in nature. For example, keywords such as employability, blended learning, and soft skills are more connected to nodes from the education and job training sector, indicating that motivation research in the vocational and educational contexts is still running independently and has not been fully integrated with the corporate or industrial context. In other words, this visualization reveals the existence of an

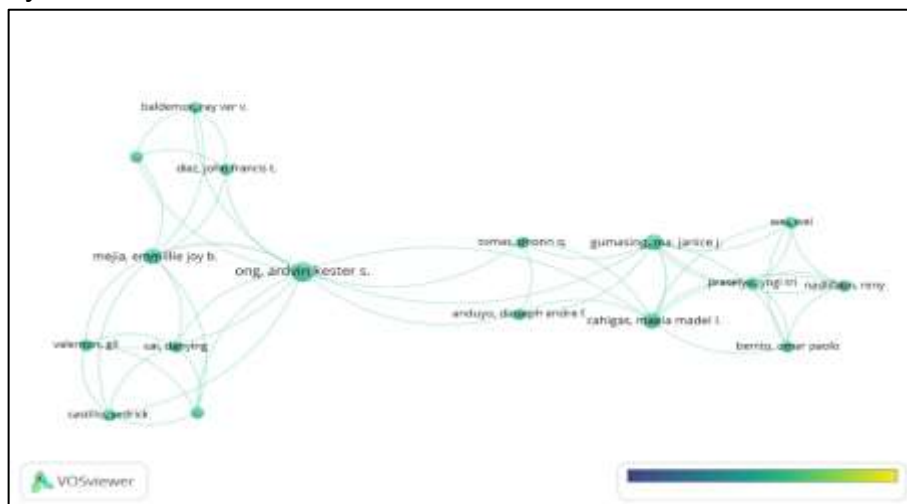


epistemological silo between the education and business domains, which is an important challenge for the generalization of research findings on work motivation.

From a novelty perspective, Figure 1 serves as a visual platform that not only describes a conceptual map but also shows how motivation theory evolves in social and technological contexts. This visual approach goes beyond narrative boundaries and provides a systematic reading of the relationships between variables, opening up space for more contextual reconstruction of HR theory and policy design. In relation to the research problem raised—the fragmentation of the literature and the lack of thematic synthesis—Figure 1 provides empirical confirmation that motivation literature has indeed developed unevenly, with certain themes being very dominant, while others remain on the fringes of the discourse.

Methodologically, the use of VOSviewer in producing this network visualization provides an advantage in capturing large-scale data connectivity patterns, which is difficult to do with manual qualitative approaches. Thus, Figure 1 does not only present visual data, but also becomes a reflection of how motivational knowledge is formed, developed, and spread in the global scientific community. These results contribute directly to the purpose of the article, namely to map the understanding of motivation in the context of the modern workplace comprehensively and longitudinally, while also answering the practical need for a theoretical synthesis that can be applied to the era of digital, flexible, and post-pandemic work.

### 3. Overlay Visualization



**Figure 2. Overlay Visualization**

Source: Data processed, 2025

figure 2 gives an overlay visualization of the consequences of a bibliometric analysis of 300 clinical articles on motivation within the contemporary place of business. This visualization maps the emergence of keywords in a time dimension, with color gradients indicating the period in which a particular word or theme appeared in the literature. Darker colors (blue–purple) indicate keywords that appeared more in the early period (2001–2010), while lighter colors (yellow–green) represent the emergence of keywords in the more recent period (2016–2021). By using this temporal feature, the overlay visualization provides an overview of the thematic evolution in motivation research, while highlighting contemporary trends and future directions for scientific development.

In general, this visualization shows a shift in focus from traditional approaches to psychological well-being and digital transformation-based approaches. In the early period, keywords such as job satisfaction, performance, organizational behavior, and employee motivation dominated the literature, indicating that motivation research at that time was still rooted in the classical approach that emphasized the linear relationship between motivation and organizational performance. This was consistent with the dominant theoretical frameworks at that time, such as Goal-Setting Theory (Locke & Latham, 1990), Expectancy Theory (Vroom, 1964), and Two-Factor Theory (Herzberg, 1959). This approach tended to be mechanistic, assuming that employee motivation could be improved through proper job design and appropriate incentive systems.

However, the yellow color that dominates keywords such as employee well-being, burnout, psychological safety, meaningful work, and resilience shows that since 2016, motivation research has shifted towards psychosocial issues and emotional well-being. This shift is very relevant to the global context, especially since the COVID-19 pandemic has accelerated disruption to conventional work systems and created new psychological pressures for employees. A contemporary study by Kniffin et al. (2021) highlighted that the pressures of remote work, social isolation, and economic uncertainty have made well-being an integral component of work motivation. Therefore, more recent literature discusses not only how to motivate employees to work more productively but also how to create a psychologically sustainable work environment.

The emergence of keywords such as remote work, hybrid workplace, telecommuting, and digital leadership in bright colors shows that the digitalization of the workplace is also an important catalyst in the redefinition of the concept of motivation. Research in recent years has begun to examine how the use of technology, work flexibility, and changes in organizational structures impact intrinsic and extrinsic motivation. Self-Determination Theory remains an important reference in these studies, but with an

494



extension to the digital and remote context. This indicates that classical theories remain relevant, but must be adapted to new contexts, which is one of the novelties of this bibliometric result.

One important aspect of Figure 2 is the visualization of the “delay” or late integration of several important themes into the mainstream literature. For example, meaningful work and job crafting, although conceptually introduced more than a decade ago, have only emerged as dominant keywords since 2018. This suggests that the adoption of the concepts of meaning-based motivation and employee agency did not occur simultaneously with the development of their theories, but rather was triggered by practical needs arising in the contemporary work context. This finding reinforces the previously identified research gap, namely the need for a more systematic integration between new theory and modern organizational practice.

This overlay visualization also reveals the lack of exploration of several issues that are starting to be globally relevant, such as sustainability, green motivation, or ESG-oriented motivation, which do not appear significantly in this visualization. In fact, the integration between employee motivation and organizational sustainability values is becoming increasingly important, especially for the younger generation of workers who have different value orientations towards the world of work. The absence of these themes indicates that although the literature has shifted towards well-being and digitalization, the scope of motivation studies has not fully followed the development of broader social values and norms.

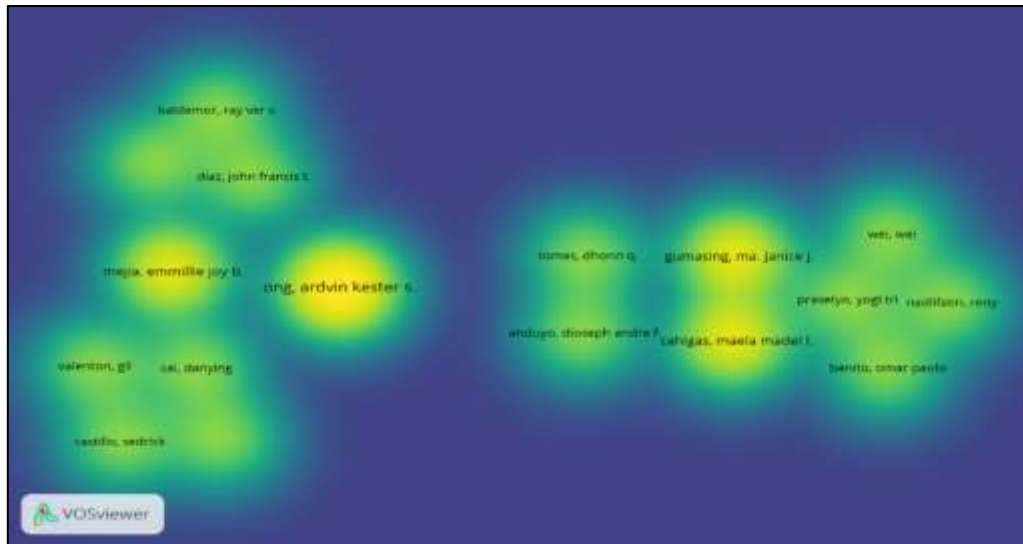
From a methodological perspective, overlay visualization offers the advantage of identifying the temporal direction of scientific development that static bibliometric analysis cannot provide. By placing time as a visual variable, researchers can clearly see the thematic transition phases, which are crucial for understanding the life cycle of a scientific concept. In the context of this article, this visualization supports the main objective of the study, which is to trace or explore the understanding of motivation in the modern workplace, not only spatially (based on themes), but also temporally (based on time trends).

Thus, Figure 2 makes a significant contribution to answering the research question of how motivation has been studied and developed in the last two decades. This visualization also reinforces the importance of the bibliometric approach as a method of knowledge synthesis, allowing researchers to identify dominant themes, emerging areas, and potential new explorations in the work motivation literature. This provides a strong



basis for further research agendas that are more adaptive to the changing contemporary work context.

#### 4. Density Visualization



**Figure 3. Density Visualization**

Source: Data processed, 2025

Figure 3 indicates the density visualization effects from a bibliometric evaluation of 300 clinical articles on motivation in the cutting-edge place of business. This visualization shows the density of keywords based on frequency and strength of connectivity in the literature network. The bright yellow areas indicate points with high frequency and strong connectivity, while the green to blue areas indicate lower density. Different from network and overlay visualization, density visualization focuses on identifying scientific centers of gravity or themes that are dominant poles in academic discourse.

An initial interpretation of this figure shows that there are three main density zones, each of which can be understood as the thematic center of motivation research in the last two decades. The first zone, the densest and brightest, is centered on keywords such as motivation, job satisfaction, performance, employee engagement, and organizational behavior. This reinforces previous findings that the main pillars of work motivation research are still heavily influenced by classical theories and cognitive-behavioral approaches, which emphasize the correlation between motivation and work output. In other words,

despite the paradigm shift, the outcome-based theoretical foundation remains dominant in the discourse space.

The second zone, which has a medium density but appears in yellow-green, consists of keywords such as well-being, burnout, stress, mental health, and psychological safety. This zone reflects the broadening understanding of motivation as part of psychological and emotional well-being. This density not only reflects the increasingly complex and demanding reality of work, but also shows that mental health issues are now integrated into the mainstream discussion of work motivation. A study by Van den Broeck et al. (2016) reinforces the importance of balancing job demands and job resources in maintaining intrinsic motivation and avoiding burnout. This zone shows that well-being is no longer a secondary issue, but an integral part of the modern motivational structure.

The third zone that attracts attention is in the new density area, which includes keywords such as remote work, digital leadership, human-AI collaboration, hybrid workplace, and technology acceptance. Although its intensity is not as bright as the first zone, its presence indicates the emergence of a new center of gravity in motivation research: the relationship between digital transformation and employee motivation dynamics. This reflects the main novelty of contemporary research, namely the integration between motivation theory and the context of work digitalization. This phenomenon is very relevant to the post-pandemic reality, where flexibility, digital autonomy, and technological skills are key elements in the work experience. In the context of Self-Determination Theory, this demands a new understanding of how autonomy and competence are mediated by digital technologies.

Although the three zones indicate the main focus in the literature, density visualization also critically reveals empty areas or “cold zones” in the literature network. For example, concepts such as sustainability, employee values, organizational citizenship behavior, and green motivation do not appear to have high density. This indicates that the relationship between work motivation and sustainability issues, social values, and employees’ informal contributions is still rarely explored in the literature. In fact, in studies of millennials and Gen Z, social and environmental values have been shown to have a significant influence on intrinsic motivation and work engagement (Wiedmer, 2015). The absence of these regions within the dense sector suggests a conceptual research gap that may be utilized for future studies improvement.

The main strength of density visualization lies in its ability to quantitatively and visually map the concentration of academic focus, while also directing researchers' attention to less explored areas. This image also indirectly shows how the distribution of

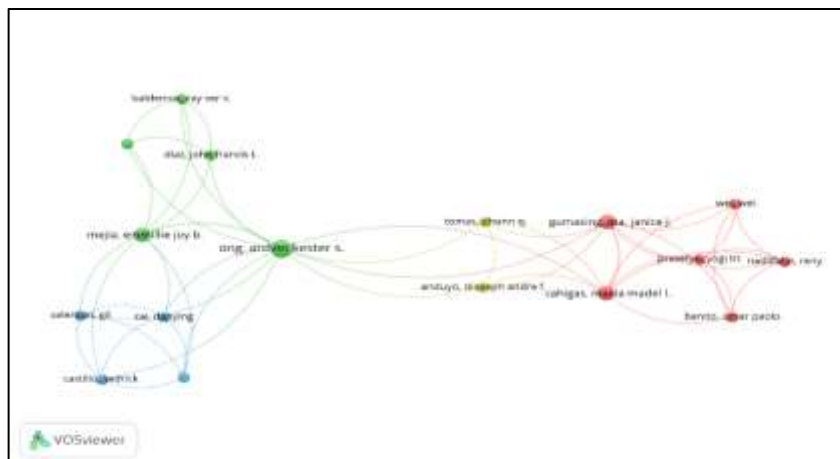


knowledge is not always even; there are themes that receive excessive attention and there are also themes that are left behind. In this context, the results of this visualization are in line with the research goal, namely tracing and mapping longitudinally and spatially the development of understanding of work motivation in the modern era.

Theoretically, this picture reinforces the need for an updated motivational framework that is not only based on the relationship between individual and organizational variables, but also integrates social, cultural, technological, and psychological well-being contexts. The consequence of this mapping is the need to develop more adaptive cross-disciplinary theories, including the integration of motivational theories with positive psychology, organizational neuroscience, and digital behavior studies approaches. In the larger framework of human resource management, this demands a shift from productivity-based policies to human sustainability-based policies.

Thus, Figure 3 not only serves as a visual exploration tool, but also as an empirical representation of the dynamics of scientific discourse on work motivation. It shows that this knowledge landscape is dynamic, layered, and still leaves a wide conceptual space to be explored. The findings from this density visualization provide a strong basis for a more progressive and transformative research agenda in the future, while also answering the main challenge of the research problem proposed in this article: how to summarize and redirect the discourse on work motivation in a framework that is more relevant to the complexity of the modern working world.

## 5. Co-author Collaboration Network



**Figure 4. Co-author Collaboration Network**

Source: Data processed, 2025

Figure 4 indicates the co-creator collaboration visualization, a network map of collaborations between authors who contributed to medical guides on motivation inside the current administrative center over the last two many years. This visualization presents a graphical representation of instructional collaboration styles based totally on creator association, frequency of collaboration, and degree of connectivity between people or studies corporations. every node in the visualization represents a unmarried creator, whilst the strains connecting the nodes imply collaborative relationships in the courses. The size of the node indicates the productivity of the individual in the analyzed corpus, while the colors indicate different collaborative groups or clusters.

In general, Figure 4 shows a fragmented network structure, characterized by many discrete clusters or small isolated collaborative groups. This shows that motivation research in the modern workplace still tends to be regional and decentralized. There are not many nodes that function as cross-cluster bridging authors, indicating low connectivity across institutions, countries, or disciplines. This also confirms the research problem proposed in this study: the existence of fragmentation in the motivation literature, both thematically and collaboratively. The absence of a dominant actor connecting various clusters indicates weak epistemological integration in the development of contemporary motivation theory.

This finding is interesting because theoretically, work motivation is a universal and cross-disciplinary topic. However, this visualization shows that researchers still work within certain geographical or institutional boundaries, with collaborations occurring more at the national or regional level. For example, it can be seen that clusters with dominant nodes from East Asia (especially China and South Korea) are more active in collaborating internally, while clusters from Western Europe and North America have a looser structure but are less interconnected. This creates the potential for epistemic silos, where theoretical and methodological approaches develop in parallel without much knowledge exchange or conceptual integration.

Some authors appear as key nodes in the network, indicated by larger node sizes and high connectivity. However, most other authors are in a peripheral position. This means that scientific contributions on this topic are still highly dependent on a few central actors, who have access to global research resources and academic networks. In the context of theory building, this creates the potential for certain epistemological dominance, for example, approaches based on Self-Determination Theory (SDT) from Western studies that are more widely cited and used, compared to approaches based on collectivistic or



contextual values from Global South countries that are less represented in this collaboration map.

The phenomenon of limited collaboration also has an impact on the slow diffusion of new concepts. For example, topics such as green motivation, employee meaning-making, or technology-mediated motivation develop in very specific clusters, without any visible integration with other larger clusters. This shows that thematic innovations have not been fully communicated or developed together on a global scale. This is certainly an important note for the agenda of developing motivation theories that are more contextual and responsive to global challenges, such as changes in the work climate, digitalization, and mental health.

From a methodological perspective, this co-author collaboration visualization strengthens the bibliometric approach as a means to evaluate not only the content of studies, but also the social structures that shape knowledge production. According to Katz and Martin (1997), scientific collaboration not only enriches the quality of publications but also accelerates the exchange of ideas, methodologies, and approaches across disciplines. Therefore, this finding suggests a need to encourage more cross-institutional and cross-national collaboration in motivation research, especially to bridge theoretical approaches that have so far developed in separate academic ecosystems.

The absence of transdisciplinary networks in this visualization also shows that motivation research has not sufficiently integrated perspectives from increasingly relevant fields such as neuroscience, data analytics, behavioral economics, and sustainability science. In fact, the development of the complex modern work world requires an integrative approach that goes beyond traditional disciplinary boundaries. Therefore, Figure 4 indirectly reveals an important research gap: the absence of cross-knowledge collaboration as a foundation for the development of adaptive and transformative work motivation theory.

In the context of the objectives of this study, this collaboration visualization provides confirmation that work motivation studies have not yet fully developed as a global, interconnected knowledge ecosystem. This article, through this analysis, not only maps contemporary themes in motivation, but also highlights the collaborative structures that underlie the formation of such discourse. Thus, Figure 4 not only serves as a reflection of academic networks, but also as a strategic basis for developing a more inclusive, global, and multidisciplinary collaborative research policy in responding to the challenges of motivation in the world of work today and in the future.



## CONCLUSION AND SUGGESTIONS

The outcomes of this study display that motivation inside the contemporary place of work has gone through full-size conceptual and thematic evolution during the last two decades. through a bibliometric method to three hundred medical articles, it was found that motivation is no longer solely studied from classical perspectives such as external incentives or productivity, but is increasingly directed at issues of psychological well-being, the meaning of work, and adaptation to digitalization. The visual map from VOSviewer explicitly illustrates the diversification of themes, the emergence of new centers of density, and the existence of collaborative fragmentation between researchers across regions and disciplines. This analysis directly addresses research problems related to literature fragmentation and the absence of longitudinal mapping in contemporary work motivation studies, while strengthening the novelty of this study which integrates thematic and temporal dimensions.

However, it was also found that several important themes such as green motivation, employee values, and organizational sustainability are still on the fringes of the discourse, indicating a gap in research relevant to the development of new generation work values. Based on these findings, it is recommended that future research further integrate contextual variables relevant to post-pandemic work dynamics and the digital economy. In addition, increasing cross-country and cross-disciplinary collaboration is essential to building an inclusive and transformative motivation theory. This study can be used as a foundation in developing human resource management policies that are oriented towards welfare and sustainability, as well as an academic reference in designing motivation research based on bibliometric data in the future.

## Limitations

This look at has numerous methodological and conceptual barriers that want to be considered in deciphering the effects. First, although the records come from foremost databases, namely Scopus and Google pupil, best English-language articles are analyzed, so it's far in all likelihood that critical contributions in other languages are not noted. Second, although bibliometrics are effective in mapping the structure and evolution of the literature, this approach does not dig deeply into the content and therefore does not capture the interpretive complexity of each article. This makes the analysis macro in nature and relies more on the representation of frequency and relatedness of keywords.

Third, the limitation of the publication year range limited to 2021 may affect the reading of post-pandemic trends more comprehensively, considering that the greatest

501



disruption in the world of work occurred in the period 2020–2023. In addition, bibliometric software such as VOSviewer has limitations in setting visualization thresholds that are technical in nature but can affect the final results of the scientific network representation. Therefore, although the results of this study are robust, a mixed methods approach or analytical triangulation is still needed in further studies to be able to explore more deeply, not only about what is studied but also why and how motivation is understood in various social and organizational contexts.

### ***Implications***

This study provides significant theoretical, methodological, and practical contributions. Theoretically, the findings reinforce the need to develop a more contextual, flexible, and multidimensional model of work motivation. The integration of classical theories such as Self-Determination Theory with contemporary themes such as meaningful work, technostress, and digital leadership opens up opportunities for formulating new theories that are more relevant to the realities of modern work. Methodologically, this study emphasizes the effectiveness of bibliometrics in compiling big data literature synthesis as an alternative to systematic narratives that are limited and subjective.

The most prominent practical implication is the need for organizations to shift their motivation management approach from control and incentive structures to work designs that are empowering, inclusive, and adaptive to the needs of the digital workforce. Future HR policies need to consider the balance between digitalization and well-being, and build a work environment that supports emotional engagement and intrinsic employee growth. In addition, the results of this analysis can also be utilized by higher education institutions and research institutions to design cross-country and cross-disciplinary research agendas, especially to fill the gaps in collaboration and issue representation in the global literature that are currently still uneven.

### **REFERENCES**

- A., Saragih, R., & Winarno, A. (2024). The influence of digital culture and transformational leadership style on employee performance: the mediating role of work motivation. *International Journal for Multidisciplinary Research*, 6(5). <https://doi.org/10.36948/ijfmr.2024.v06i05.29546>
- Alasiri, N. and AlKubaisy, Z. (2022). Exploring the role of leadership, work environment, it alignment and company performance on the digital transformation: a study on the private sector companies in western region, saudi arabia. *International Journal of*

502



- Professional Business Review, 7(2), e0500.  
<https://doi.org/10.26668/businessreview/2022.v7i2.500>
- Astafieva, K., Bondarchuk, O., Astafiev, O., & Nikulnikova, H. (2023). Digitalization of the workplace as a means of hr-branding. Herald of Khmelnytskyi National University, 314(1), 103-109. <https://doi.org/10.31891/2307-5740-2023-314-1-15>
- Ayun, T. (2025). Digital leadership and job satisfaction: the role of intrinsic motivation as mediating variable. Journal of Management and Administration Provision, 5(2), 183-192. <https://doi.org/10.55885/jmap.v5i2.587>
- Bakker, A. (2015). A job demands–resources approach to public service motivation. Public Administration Review, 75(5), 723-732. <https://doi.org/10.1111/puar.12388>
- Batubara, K., Syam, B., & Wahyuni, S. (2020). Job demands–resources model affects the performance of associate nurses in hospital. Jurnal Keperawatan Indonesia, 23(2), 111-118. <https://doi.org/10.7454/jki.v23i2.1132>
- Bangura, S. and Lourens, M. (2024). Constraints and enablement of workplace digitalisation: an integrative review. International Journal of Business & Management Studies, 05(05), 107-113. <https://doi.org/10.56734/ijbms.v5n5a11>
- Barba, P., Kennedy, G., & Ainley, M. (2016). The role of students' motivation and participation in predicting performance in a mooc. Journal of Computer Assisted Learning, 32(3), 218-231. <https://doi.org/10.1111/jcal.12130>
- Bessonova, Y. (2022). User motivation and psychological vulnerabilities in remote working. Институт Психологии Российской Академии Наук Организационная Психология И Психология Труда, 7(4), 195-226. [https://doi.org/10.38098/ipran.opwp\\_2022\\_25\\_4\\_009](https://doi.org/10.38098/ipran.opwp_2022_25_4_009)
- Christiana, C. and Rofiqoh, I. (2025). Systematic literature review: the impact of leadership style, work motivation, and job satisfaction on employee performance in the digital era. American Journal of Economic and Management Business (Ajemb), 4(4), 302-316. <https://doi.org/10.58631/ajemb.v4i4.197>
- Cooman, R., Styne, D., Broeck, A., Sels, L., & Witte, H. (2013). How job characteristics relate to need satisfaction and autonomous motivation: implications for work effort. Journal of Applied Social Psychology, 43(6), 1342-1352. <https://doi.org/10.1111/jasp.12143>
- Deci, E. and Ryan, R. (2008). Self-determination theory: a macrotheory of human motivation, development, and health.. Canadian Psychology/Psychologie Canadienne, 49(3), 182-185. <https://doi.org/10.1037/a0012801>



- Deci, E., Koestner, R., & Ryan, R. (2001). Extrinsic rewards and intrinsic motivation in education: reconsidered once again. *Review of Educational Research*, 71(1), 1-27. <https://doi.org/10.3102/00346543071001001>
- Deng, D., Xu, G., & Qin, C. (2023). Influence of employees' perception of digital transformation meaning on work engagement and well-being. *Social Behavior and Personality an International Journal*, 51(9), 1-13. <https://doi.org/10.2224/sbp.12623>.
- Dimova, G. and Nikolova, A. (2024). Methods of motivating employees to comply with safety measures. *GRDIER*, (1), 55-66. <https://doi.org/10.58861/tae.grdier.2024.06>
- 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.
- Effendy, M. and Arquisola, M. (2022). Do transformational leadership traits influence indonesian employees' digital maturity?. *International Journal of Research in Business and Social Science* (2147-4478), 11(8), 128-140. <https://doi.org/10.20525/ijrbs.v11i8.216>.
- Fang, W., Dai, S., & Tang, L. (2020). The impact of international research collaboration network evolution on chinese business school research quality. *Complexity*, 2020, 1-20. <https://doi.org/10.1155/2020/7528387>
- Fulmer, S. and Frijters, J. (2009). A review of self-report and alternative approaches in the measurement of student motivation. *Educational Psychology Review*, 21(3), 219-246. <https://doi.org/10.1007/s10648-009-9107-x>
- Glass, A. (2007). Understanding generational differences for competitive success. *Industrial and Commercial Training*, 39(2), 98-103. <https://doi.org/10.1108/00197850710732424>
- Haines, V., Godley, J., & Hawe, P. (2010). Understanding interdisciplinary collaborations as social networks. *American Journal of Community Psychology*, 47(1-2), 1-11. <https://doi.org/10.1007/s10464-010-9374-1>
- Hall, K., Feng, A., Moser, R., Stokols, D., & Taylor, B. (2008). Moving the science of team science forward. *American Journal of Preventive Medicine*, 35(2), S243-S249. <https://doi.org/10.1016/j.amepre.2008.05.007>
- Hall, K., Stokols, D., Stipelman, B., Vogel, A., Feng, A., Masimore, B., ... & Berrigan, D. (2012). Assessing the value of team science. *American Journal of Preventive Medicine*, 42(2), 157-163. <https://doi.org/10.1016/j.amepre.2011.10.011>
- Hanandeh, A., Altaher, A., Halim, M., Rezk, W., Mahfoudh, N., Hammouri, Q., ... & Darawsheh, S. (2023). The effects of digital transformation, digital leadership, and



- entrepreneurial motivation on business decision making and business process performance: evidence from greater amman municipality. *International Journal of Data and Network Science*, 7(2), 575-582. <https://doi.org/10.5267/j.ijdns.2023.3.014>
- Hannula, M. (2006). Motivation in mathematics: goals reflected in emotions. *Educational Studies in Mathematics*, 63(2), 165-178. <https://doi.org/10.1007/s10649-005-9019-8>
- Henrich, J., Heine, S., & Norenzayan, A. (2010). Beyond weird: towards a broad-based behavioral science. *Behavioral and Brain Sciences*, 33(2-3), 111-135. <https://doi.org/10.1017/s0140525x10000725>
- Herman, H., Kaniawati, I., Setiawan, A., & Rusdiana, D. (2024). Bibliometric computational mapping analysis of publications on science process skill using vosviewer. *Kne Social Sciences*. <https://doi.org/10.18502/kss.v9i13.16058>
- Hoang, A. (2025). Evaluating bibliometrics reviews: a practical guide for peer review and critical reading.. [https://doi.org/10.31219/osf.io/wdkp9\\_v1](https://doi.org/10.31219/osf.io/wdkp9_v1)
- Hughes, M., Peeler, J., Hogenesch, J., & Trojanowski, J. (2014). The growth and impact of alzheimer disease centers as measured by social network analysis. *Jama Neurology*, 71(4), 412. <https://doi.org/10.1001/jamaneurol.2013.6225>
- Inoue, A., Kawakami, N., Tsutsumi, A., Shimazu, A., Miyaki, K., Takahashi, M., ... & Totsuzaki, T. (2014). Association of job demands with work engagement of japanese employees: comparison of challenges with hindrances (j-hope). *Plos One*, 9(3), e91583. <https://doi.org/10.1371/journal.pone.0091583>
- İRİ, R. and Ünal, E. (2024). Bibliometric analysis bibliometric analysis of research (1980-2023). *Ahi Evran Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 10(2), 386-403. <https://doi.org/10.31592/aeusbed.1446738>
- Jabagi, N., Croteau, A., Audebrand, L., & Marsan, J. (2019). Gig-workers' motivation: thinking beyond carrots and sticks. *Journal of Managerial Psychology*, 34(4), 192-213. <https://doi.org/10.1108/jmp-06-2018-0255>
- Jan, R., Usman, M., Abrar, M., Ullah, N., Asshad, M., & Ali, S. (2021). Scaling agile adoption motivators from management perspective: an analytical hierarchy process approach. *Scientific Programming*, 2021, 1-16. <https://doi.org/10.1155/2021/4522273>
- Kapitanski, A. (2022). The influence of the coach leadership style and motivational climate on the perception of support for autonomous behavior., 386-390. <https://doi.org/10.37393/icass2022/67>



- Jesus, F., Ibarra, L., Jesus, C., Santiago, S., & Nocum, C. (2024). Readiness of government employees on workplace digital transformation and its correlation to employees' productivity using herzberg two-factor theory. *International Journal of Applied Economics Finance and Accounting*, 20(2), 139-152. <https://doi.org/10.33094/ijaefa.v20i2.1948>
- Kamaludin, K. and Prasetyadi, A. (2023). Two decades of bibliometric research in indonesia. *The Light Journal of Librarianship and Information Science*, 3(1), 32-43. <https://doi.org/10.20414/light.v3i1.7034>
- Kensbock, J. and Stöckmann, C. (2020). "big brother is watching you": surveillance via technology undermines employees' learning and voice behavior during digital transformation. *Journal of Business Economics*, 91(4), 565-594. <https://doi.org/10.1007/s11573-020-01012-x>
- Khan, K., Nasir, A., & Saleem, S. (2021). Bibliometric analysis of post covid-19 management strategies and policies in hospitality and tourism. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.769760>
- Kim, S., Choi, W., Lee, A., Yi, J., & Boss, E. (2018). Reaching across the aisle: cross-disciplinary collaboration in otolaryngology research. *The Laryngoscope*, 129(8), 1800-1805. <https://doi.org/10.1002/lary.27619>
- Knapp, B., Bardenet, R., Bernabéu, M., Bordas, R., Bruna, M., Calderhead, B., ... & Deane, C. (2015). Ten simple rules for a successful cross-disciplinary collaboration. *Plos Computational Biology*, 11(4), e1004214. <https://doi.org/10.1371/journal.pcbi.1004214>
- Koutsikouri, D., Lindgren, R., & Henfridsson, O. (2017). Building digital infrastructures: towards an evolutionary theory of contextual triggers.. <https://doi.org/10.24251/hicss.2017.575>
- Krath, J., Morschheuser, B., & Korflesch, H. (2022). Designing gamification for sustainable employee behavior: insights on employee motivations, design features and gamification elements.. <https://doi.org/10.24251/hicss.2022.198>
- Kurdi, M. and Kurdi, M. (2021). Analisis bibliometrik dalam penelitian bidang pendidikan: teori dan implementasi. *Journal on Education*, 3(4), 518-537. <https://doi.org/10.31004/joe.v3i4.2858>
- Lang, J., Zettler, I., Ewen, C., & Hülshager, U. (2012). Implicit motives, explicit traits, and task and contextual performance at work.. *Journal of Applied Psychology*, 97(6), 1201-1217. <https://doi.org/10.1037/a0029556>



- Law, K., Chan, A., & Ozer, M. (2017). Towards an integrated framework of intrinsic motivators, extrinsic motivators and knowledge sharing. *Journal of Knowledge Management*, 21(6), 1486-1502. <https://doi.org/10.1108/jkm-03-2016-0119>
- Le, Q., Tang, J., & Natt, N. (2023). The social contract model in the digital era: revisiting rousseau and locke. *ISSLP*, 2(3), 15-26. <https://doi.org/10.61838/kman.isslp.2.3.3>
- Lekan, H. and Starčič, A. (2023). Coaching in the leadership for development-oriented work in educational organization in a crisis situation. *Education & Self Development*, 18(3), 50-68. <https://doi.org/10.26907/esd.18.3.04>
- M. and Lind, M. (2018). Digital natives, work values, and computer self efficacy. *International Journal of Strategic Information Technology and Applications*, 9(1), 1-22. <https://doi.org/10.4018/ijsita.2018010101>
- Matorevhu, A. (2024). Bibliometrics: application opportunities and limitations.. <https://doi.org/10.5772/intechopen.1005292>
- Merigó, J. and Yang, J. (2016). Accounting research: a bibliometric analysis. *Australian Accounting Review*, 27(1), 71-100. <https://doi.org/10.1111/auar.12109>
- Mikhaylova, A., Golovko, O., & Nizhneva, N. (2021). Educational motivation development by means of digital information and communication technologies. *SHS Web of Conferences*, 110, 03008. <https://doi.org/10.1051/shsconf/202111003008>
- Mohamad, F. and Abiddin, N. (2024). Enhancing employee well-being and productivity in evolving work environments. *Academic Journal of Interdisciplinary Studies*, 13(3), 289. <https://doi.org/10.36941/ajis-2024-0081>
- Nordgreen, T., Rabbi, F., Tørresen, J., Skar, Y., Guribye, F., Inal, Y., ... & Lamo, Y. (2021). Challenges and possible solutions in cross-disciplinary and cross-sectorial research teams within the domain of e-mental health. *Journal of Enabling Technologies*, 15(4), 241-251. <https://doi.org/10.1108/jet-03-2021-0013>
- Ntoumanis, N. (2005). A prospective study of participation in optional school physical education using a self-determination theory framework.. *Journal of Educational Psychology*, 97(3), 444-453. <https://doi.org/10.1037/0022-0663.97.3.444>
- Olaniran, A., Madaj, B., Bar-Zeev, S., Banke-Thomas, A., & Broek, N. (2021). Factors influencing motivation and job satisfaction of community health workers in africa and asia—a multi-country study. *The International Journal of Health Planning and Management*, 37(1), 112-132. <https://doi.org/10.1002/hpm.3319>



- Oshio, T., Inoue, A., & Tsutsumi, A. (2018). Associations among job demands and resources, work engagement, and psychological distress: fixed-effects model analysis in japan. *Journal of Occupational Health*, 60(3), 254-262. <https://doi.org/10.1539/joh.2017-0293-oa>
- Öztürk, O., Kocaman, R., & Kanbach, D. (2024). How to design bibliometric research: an overview and a framework proposal. *Review of Managerial Science*, 18(11), 3333-3361. <https://doi.org/10.1007/s11846-024-00738-0>
- Page, MJ, McKenzie, JE, Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., ... & Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71.
- Pegoraro, D., Oliveira, R., Saragozo, R., Silva, J., & Lopes, L. (2024). Assédio moral no trabalho/workplace bullying: uma revisão de literatura. *Iosr Journal of Business and Management*, 26(10), 59-67. <https://doi.org/10.9790/487x-2610075967>
- Pennington, D. (2008). Cross-disciplinary collaboration and learning. *Ecology and Society*, 13(2). <https://doi.org/10.5751/es-02520-130208>
- Perry, J., Hondgehem, A., & Wise, L. (2010). Revisiting the motivational bases of public service: twenty years of research and an agenda for the future. *Public Administration Review*, 70(5), 681-690. <https://doi.org/10.1111/j.1540-6210.2010.02196.x>
- Pratama, R. and Wahyuni, S. (2021). Turning eco-investments into sustainable competitive advantages: an exploratory case study of eco-oriented startup. *Proceeding of the International Conference on Family Business and Entrepreneurship*, 2(1). <https://doi.org/10.33021/icfbe.v2i1.3538>
- Pratiwi, H., Wahyuningsih, S., & Udin, U. (2023). Mapping the work-life balance research landscape: a bibliometric analysis. *Multidisciplinary Reviews*, 6(2), 2023014. <https://doi.org/10.31893/multirev.2023014>
- Prokhorova, M., Лебедева, Т., Shkunova, A., Bulganina, S., & Lazutina, A. (2020). Motivation of university teachers developing and implementing open online courses.. <https://doi.org/10.2991/assehr.k.200723.057>
- Ramamoorthy, V. and Adikaram, A. (2024). Pushed or pulled? becoming gig workers in sri lanka. *Kelaniya Journal of Management*, 13(1), 85-100. <https://doi.org/10.4038/kjm.v13i1.7799>



- Rockmann, K. and Ballinger, G. (2017). Intrinsic motivation and organizational identification among on-demand workers.. Journal of Applied Psychology, 102(9), 1305-1316. <https://doi.org/10.1037/apl0000224>
- Ryan, R. and Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being.. American Psychologist, 55(1), 68-78. <https://doi.org/10.1037/0003-066x.55.1.68>
- Sanyal, S. and G., S. (2024). The digital transformation of work., 1-22. <https://doi.org/10.4018/979-8-3693-5380-6.ch001>
- Saputrabey, M., Sepriyanti, Y., Riyanto, R., Moeins, A., & Zen, Y. (2025). Enhancing digital motivation work and its effect on digital target-based employee performance at regional revenue agency of dki jakarta province. Edelweiss Applied Science and Technology, 9(1), 968-980. <https://doi.org/10.55214/25768484.v9i1.4296>
- Scholze, A. and Hecker, A. (2023). Digital job demands and resources: digitization in the context of the job demands-resources model. International Journal of Environmental Research and Public Health, 20(16), 6581. <https://doi.org/10.3390/ijerph20166581>
- Siddiqua, M. (2023). Exploring motivation in organizational behavior: a review. South Asian Journal of Social Studies and Economics, 20(3), 169-179. <https://doi.org/10.9734/sajsse/2023/v20i3721>
- Singh, V. (2023). Third eye: unraveling the past, present, and future of the transgender workforce. Business and Society Review, 128(3), 549-567. <https://doi.org/10.1111/basr.12326>
- Sivunen, A. and Laitinen, K. (2019). Digital communication environments in the workplace., 41-53. <https://doi.org/10.4324/9780429196881-4>  
Stockham,
- Soman, S. (2022). Work motivators: comparing gen-xers and millennials in the it sector. NHRD Network Journal, 15(2), 257-268. <https://doi.org/10.1177/26314541221074174>
- Spreitzer, G., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: two images of the new world of work. Annual Review of Organizational Psychology and Organizational Behavior, 4(1), 473-499. <https://doi.org/10.1146/annurev-orgpsych-032516-113332>
- Sunaryo, W., Yusnita, N., Herfina, H., Wulandari, D., & Suhendra, S. (2023). The effects of digital transformational leadership, work environment and motivation on reinforcing job satisfaction: evidence from vocational schools. International Journal of Data



- and Network Science, 7(2), 883-890. <https://doi.org/10.5267/j.ijdns.2022.12.023> (2023). Unearthing hidden research opportunities through bibliometric analysis: a review. Asian Journal of Research in Education and Social Sciences. <https://doi.org/10.55057/ajress.2023.5.1.23>
- Thomas, A. (2024). Digitally transforming the organization through knowledge management: a socio-technical system (sts) perspective. European Journal of Innovation Management, 27(9), 437-460. <https://doi.org/10.1108/ejim-02-2024-0114>
- Thompson, C. and Gregory, J. (2012). Managing millennials: a framework for improving attraction, motivation, and retention.. The Psychologist-Manager Journal, 15(4), 237-246. <https://doi.org/10.1080/10887156.2012.730444>
- Trenerry, B., Chng, S., Wang, Y., Suhaila, Z., Lim, S., Lu, H., ... & Oh, P. (2021). Preparing workplaces for digital transformation: an integrative review and framework of multi-level factors. Frontiers in Psychology, 12. <https://doi.org/10.3389/fpsyg.2021.620766>
- Trinidad, M., Ruiz, M., & Calderón, A. (2021). A bibliometric analysis of gamification research. IEEE Access, 9, 46505-46544. <https://doi.org/10.1109/access.2021.3063986>
- Urbano, C. and Ardanuy, J. (2020). Cross-disciplinary collaboration versus coexistence in his serials: analysis of authorship affiliations in four european countries. Scientometrics, 124(1), 575-602. <https://doi.org/10.1007/s11192-020-03471-z>
- van Eck, N.J., & Waltman, L. (2014). Visualizing bibliometric networks. In Measuring scholarly impact (pp. 285–320). Springer
- Vergara, D., Velasco, M., Chivite, C., & Fernández-Arias, P. (2020). The challenge of increasing the effectiveness of learning by using active methodologies. Sustainability, 12(20), 8702. <https://doi.org/10.3390/su12208702>
- Waworuntu, E., Kainde, S., & Mandagi, D. (2022). Work-life balance, job satisfaction and performance among millennial and gen z employees: a systematic review. Society, 10(2), 384-398. <https://doi.org/10.33019/society.v10i2.464>
- White, G., Sjin, N., West, J., & Boppana, R. (2023). Success of digital identity infrastructure: a grounded model of eid evolution success.. <https://doi.org/10.24251/hicss.2023.240>
- Ziomek, A. (2023). Motivation to work remotely in the face of organizational and cost conditions. Ekonomia I Prawo, 22(2), 399-418. <https://doi.org/10.12775/eip.2023.023>



Дуракова, И. and Endovitsky, D. (2023). Older workers and the supply and demand for digital technology jobs.. [https://doi.org/10.51408/csit2023\\_62](https://doi.org/10.51408/csit2023_62)  
Пронин, В. and Krivopuskov, V. (2023). Psychological needs and motivation of remote workers: sociological viewpoint. Digital Sociology, 5(4), 15-22.  
<https://doi.org/10.26425/2658-347x-2022-5-4-15-22>

