

Navigating the Gig Economy Research Landscape: A Bibliometric Analysis

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Abstract

The gig economy has emerged as a dynamic and transformative component of the contemporary labour market, challenging traditional employer–employee relationships and reshaping the structure and nature of work. Enabled by rapid technological advancement and changing employment patterns, it encompasses diverse forms of short-term contracts, freelance assignments, independent work, and labour transactions mediated through digital platforms. The growing significance of the gig economy has been accompanied by a substantial rise in scholarly research and academic publications. In this context, the present study systematically examines the existing scientific literature on the gig economy to trace the evolution and development of the research domain. It aims to identify the leading authors, countries, journals, and institutional affiliations contributing to the field, while also examining patterns of collaboration and influential scholarly publications. Relevant publications were retrieved from the Scopus database using a structured keyword-based search strategy. Following the application of appropriate selection criteria, **710 publications** were included in the bibliometric analysis. The findings reveal a marked expansion of scholarly interest in the gig economy, particularly during the recent years, demonstrating its growing academic relevance across multiple disciplines. By mapping publication trends, influential contributors, research structures, and emerging developments, the study provides a comprehensive overview of the existing research landscape and identifies potential directions for future research in the evolving field of the gig economy.

Keywords: Gig Economy; Bibliometric; VOSviewer; Scopus

1. Introduction

As the global transition towards advanced digital connectivity, including 5G technology, accelerates, the adoption of the gig economy continues to expand worldwide. These developments are influencing the way individuals, businesses, and governments organize work and make decisions. An increasing number of full-time employees are using gig work as an additional source of income, while others are considering transitioning from conventional employment to full-time freelance or contract-based work (Roy & Shrivastava, 2020). The COVID-19 pandemic further accelerated the growth of digital labour platforms, resulting in a substantial increase in the number of tasks and employment opportunities created, offered, and completed through online platforms (Umar et al., 2021). Technological advancements have enabled a wide range of products and services—including news, banking, healthcare, education, and trading—to be delivered through digital or hybrid models (Osburg, 2017). The rapid advancement of information and communication technologies (ICT), coupled with the widespread availability of the internet, has contributed significantly to the emergence and expansion of innovative economic models such as the access economy, platform economy,

sharing economy, and gig economy (Scuotto et al., 2021). Although the expression "gig economy" has gained widespread recognition only during the last decade, the concept of temporary and task-based work has much older roots. Digital platforms, including Airbnb, Uber, Lyft, TaskRabbit, and Upwork, have been instrumental in promoting platform-based employment and contributing to the emergence of the gig economy as a significant feature of the modern labour market. Nevertheless, some scholars trace the origins of gig work to the use of the term "gig" by jazz musicians to describe individual performances as early as 1915 (Friedman, 2014). Over the last decade, considerable academic attention has been devoted to employment structures, temporary work arrangements, and the changing nature of labour in the platform economy (Graham et al., 2017; Hardy & McCrystal, 2022; Healy et al., 2017; Wood et al., 2019). Platform-mediated work can broadly be categorized into four major forms: highly skilled professionals and independent contractors; cloud-based consultants and freelancers; gig workers involved in services such as food delivery, domestic maintenance, and caregiving; and digitally facilitated tasks that require comparatively minimal skills or prior experience (Vallas & Schor, 2020). Gig work therefore represents one important segment of the broader platform-work ecosystem. At the same time, the boundaries of gig work remain subject to scholarly debate. Some researchers argue that gig employment can encompass a wide range of occupations, extending from lawyers and information technology or business consultants to service providers such as dog walkers. From this perspective, gig employment is distinguished less by the specific occupation or technological setting and more by the contractual arrangements and interpersonal relationships that characterize the employment relationship (Friedman, 2014; Graham et al., 2017). The rapid global expansion of the gig economy has consequently attracted increasing interest from researchers across multiple academic disciplines. Evidence from the Scopus database, based on the search strategy described in the methodology section, indicates a notable increase in scholarly publications on the gig economy since 2016, suggesting that academic interest in this field is likely to continue expanding. The growing body of literature has addressed a diverse range of issues, including labour and employment law (Kwan, 2022; D'Elia & Gabriele, 2022), the future of employment and changing work arrangements (Jabbari et al., 2022; Lata et al., 2022), and the consequences of the COVID-19 pandemic for gig workers and digital labour platforms (Cao et al., 2022; Griep, 2022; Regan & Christie, 2023). The continued expansion of the gig economy highlights the need for researchers, policymakers, and other stakeholders to develop appropriate strategies and regulatory frameworks that can harness the potential benefits of this emerging employment model while addressing issues such as income inequality, job security, worker protection, and entrepreneurial opportunities. When effectively supported and regulated, the gig economy may contribute to entrepreneurship, employment generation, and broader economic participation. Evidence also suggests that many gig workers perceive their work positively. According to a study reported by Zippia study reported that **84% of gig workers held a positive perception of their work, while 97% indicated that they were happier than full-time employees.** The software and information technology sector has also emerged as an important area of gig employment, reflecting the increasing integration of digital technologies with flexible work arrangements. Kolmar (2022) observed that the gig economy has expanded at a considerably

faster rate than the traditional labour market. Similarly, Heeks (2017) estimated that approximately **70 million gig workers** were registered on digital labour platforms worldwide, with the global gig workforce continuing to expand. Despite the growing body of scholarly research on the gig economy, there remains a need for a systematic examination of its development, intellectual structure, and emerging research directions. Accordingly, the present study employs a **bibliometric approach** to analyse the existing scholarly literature on the gig economy in a structured and comprehensive manner. The study seeks to examine publication trends and identify the principal contributors to knowledge development in this field, including influential authors, countries, research areas, journals, and institutional affiliations. Furthermore, the study analyses the relationships among frequently occurring author keywords to identify dominant themes, interconnected research areas, thematic clusters, and emerging topics within gig economy research. The article is organized into several sections, including the **introduction, literature review, research methodology, results and analysis, discussion, and conclusion**. The bibliometric analysis examines publication patterns over time, leading publication sources, institutional contributions, disciplinary distribution, and the structural characteristics of the research domain. Through systematic mapping of the existing scholarly literature, the study aims to provide a comprehensive understanding of the evolution, current state, and intellectual development of gig economy research, while also highlighting potential avenues for future academic investigation.

2. Literature Review

Chaudhary (2021) examined the increasing participation of women in the gig economy and highlighted the growing employment opportunities available to female workers through gig-based work arrangements. The study is particularly relevant in the Indian context, where female labour force participation has remained comparatively low. The findings highlight a pronounced gender disparity in labour force participation and indicate that the gig economy may offer women greater access to flexible work arrangements. However, persistent challenges associated with gender inequality continue to constrain the full realization of these opportunities. Pal (2021) examined the growing significance of the gig economy and assessed its key benefits and challenges from both international and Indian perspectives. The study discussed the changing nature of employment resulting from gig-based work and reviewed recent initiatives introduced by the Government of India in this area. Although gig employment can provide greater flexibility and alternative income-generating opportunities, the study also identified concerns related to employment security, social protection, regulatory frameworks, and the rights and welfare of gig workers. Mukherjee and Sujatha (2020) focused on independent workers in the gig economy and investigated the process through which individuals develop professional identities in preference to traditional organizational identities. Their study particularly examined the role of learning agility in shaping professional identity among gig workers. The research suggests that the changing employment environment requires workers to continuously develop their skills and adapt to new professional circumstances, making learning agility an important factor in sustaining professional identity and employability within the gig economy. Rukhsar (2019) investigated employees' awareness and perceptions regarding the gig economy, while also identifying the challenges associated with

this emerging form of employment and possible measures to address them. The study indicated that gig-based work can provide workers with greater opportunities to develop professional networks both within and outside conventional organizational boundaries. It also highlighted the flexibility of the gig economy in allowing individuals to utilize their skills without being restricted by traditional organizational structures. The National Sample Survey Organisation (NSSO) provides important evidence regarding the changing employment structure in India. One of the notable characteristics of India's employment scenario over the past two decades has been the relatively slow growth of employment despite substantial expansion in overall economic output. According to the employment estimates based on usual status, including principal and subsidiary activities, employment growth was comparatively stronger during periods of slower economic expansion. In contrast, employment growth declined considerably during the period between 2004 and 2005, with rural employment experiencing an absolute decline, while urban employment increased at a compound annual growth rate of approximately 2.5%. These developments demonstrate the structural challenges associated with employment generation in India and provide an important background for understanding the emergence of alternative forms of work, including gig employment (Employment Policy Department, Employment Working Paper No. 206, 2016. According to the **Cambridge Dictionary (2020)**, the gig economy refers to a work arrangement in which individuals perform temporary jobs or undertake individual assignments and receive separate payments for each task, rather than being employed through a traditional employer–employee relationship. This definition highlights the fragmented and task-oriented nature of gig employment. The emerging literature has also compared this form of employment with a contemporary manifestation of Taylorism, wherein labour is increasingly divided into highly specialized and short-duration tasks or micro-activities. Such micro-fragmentation has become increasingly feasible because of digital technologies and online labour platforms. The NITI Aayog report, “India's Booming Gig and Platform Economy (2022)”, provides one of the most comprehensive assessments of the gig and platform economy in India. The report developed a systematic methodology for estimating the current size of the gig workforce and assessing its potential for generating employment in the future. It also examined international approaches to social security for gig and platform workers and evaluated both the opportunities and challenges associated with this emerging economic model. The report emphasized the importance of recognizing the growing contribution of gig workers, creating additional employment opportunities, and developing appropriate policy measures to support sustainable growth in the sector. The regulatory framework governing gig workers in India has also evolved in response to the changing nature of employment. The Code on Wages, 2019 extended the principle of minimum wages and floor wages across organized and unorganized sectors, including workers operating under emerging forms of employment. Similarly, the Code on Social Security, 2020 formally recognized gig workers and platform workers as distinct categories within the broader labour framework. The Code provides a framework for extending social-security measures such as maternity benefits, life and disability coverage, old-age protection, provident fund-related benefits, and employment injury protection to eligible workers. However, the formal recognition of these workers does not automatically ensure access to all such benefits, and questions relating to

implementation, eligibility, financing, and effective coverage remain important areas of concern. The **Code on Social Security, 2020** brought together various existing social-security laws under a single legislative framework, thereby creating a more streamlined and coherent system of social-security regulation. A significant feature of the Code was the formal recognition and definition of **gig workers and platform workers**, categories that had previously lacked explicit and comprehensive legal recognition. By acknowledging these categories within the social-security framework, the legislation represents an important step towards addressing the changing nature of employment. However, the effectiveness of these provisions ultimately depends upon their implementation and the extent to which social-security mechanisms can be made accessible to workers engaged in temporary and platform-mediated employment. Ernst & Young (EY), in its report “Future of Jobs in India: A 2022” Perspective, examined the future of employment across five major sectors: textiles and clothing, IT/ITES, retail, financial services, and automobiles. The report examined the impact of three key forces—**demographic transformation, globalization, and the increasing adoption of Industry 4.0 and other advanced technologies**—on the future of employment in India. Based on secondary research and insights gathered from industry experts, business leaders, and academics, it provided a forward-looking assessment of emerging employment trends. The findings suggested that India's future labour market would largely be shaped by the country's ability to adapt to demographic shifts, greater global integration, and the rapid deployment of advanced technologies across businesses. These changes are particularly relevant to the gig economy, as technological advancement is not only generating new forms of employment but also altering the skills and competencies expected from both workers and employers. Similarly, **Kathuria, Kedia, Varma, Bagchi, and Khullar (2017)**, in their study “Future of Work in a Digital Era: The Potential and Challenges for Online Freelancing and Microwork in India,” investigated the growth and development of online freelancing and microwork within India's evolving labour market. The study identified web-based platforms as important mechanisms for connecting workers with businesses and enabling individuals to undertake independent and temporary work. Online freelancing and microwork were found to offer considerable opportunities within India's largely unregulated labour environment, ranging from relatively simple tasks to complex business activities. The study also highlighted the role of digital platforms in improving worker participation and productivity and noted that some platforms were introducing training and capacity-building initiatives to help freelancers adapt to technological changes. At the same time, the researchers identified challenges associated with payments, bidding mechanisms, and platform navigation. Continuous improvements in platform algorithms were therefore viewed as important for facilitating more effective interactions between clients and freelancers. Tyagi (2017), in the study “GIG Economy and Its Impact on India”, examined the growing phenomenon of independent work within the Indian labour market and assessed its implications for workers and organizations. The study also considered regulatory constraints affecting independent contractors and explored the broader impact of gig employment on India's employment structure. According to the study, the expansion of the gig economy presents several challenges, including regulatory and legal uncertainty, organizational cultures that may not be adequately prepared to accommodate part-

time or contingent workers, and limited managerial understanding of gig-based employment. The study recommended reforms in employee-policy evaluation and performance assessment, greater integration of skill-based gig workers with conventional employment structures, and appropriate changes to labour regulations to accommodate emerging forms of work. The McKinsey Global Institute (2016), in its report “Independent Work: Choice, Necessity and the Gig Economy”, estimated that as many as 162 million people, representing approximately the report estimated that approximately **20–30% of the working-age population in the United States and EU-15 countries** was engaged in some form of independent work. These estimates were derived from existing datasets along with a comprehensive workforce survey conducted across six countries. The report characterized independent work through three key features: **a high level of autonomy, remuneration based on specific tasks, assignments, or sales, and relatively short-term working relationships between workers and clients**. The study highlighted several potential economic benefits of independent work, including increased labour force participation, reduced unemployment, greater consumer demand, and improved productivity. Businesses and consumers may also benefit from increased service availability and more efficient matching between demand and skills. For workers, autonomy and flexibility were identified as major attractions. Nevertheless, the report also identified several challenges, particularly regarding access to benefits, income security, credit, training, and professional qualifications. While some of these issues may require policy interventions, others could potentially be addressed through innovative business models and new intermediaries within the independent-work ecosystem.

Overall, the existing literature demonstrates that the gig economy is becoming an increasingly important component of the contemporary labour market, both globally and in India. Previous studies have examined the phenomenon from multiple perspectives, including women's participation, worker identity, employee perceptions, technological transformation, online freelancing, employment generation, labour regulation, social security, and future workforce requirements. Reports by NITI Aayog, McKinsey Global Institute, EY, and other institutions further demonstrate the growing economic significance of gig and platform-based employment. At the same time, the literature reveals persistent challenges related to income stability, social security, regulatory uncertainty, gender disparities, skill development, and worker protection. These developments establish the need for a systematic examination of the existing body of research. A bibliometric analysis can therefore provide valuable insights into the evolution of gig economy scholarship, identify influential researchers and institutions, map major research themes and collaborations, and highlight emerging areas for future investigation.

3. Research Methodology

A systematic review of the existing literature on the gig economy was undertaken alongside a bibliometric analysis to investigate the evolution, scope, and structural characteristics of research within this emerging domain. The **Scopus database** was used to retrieve relevant publications, with the search covering studies available up to **September 2023**. Given the relatively developing nature of gig economy scholarship, a targeted search strategy was employed using the term **“gig economy”** within the title, abstract, and keyword fields of the

database. Scopus was chosen as the principal bibliographic source due to its extensive coverage and recognition as one of the leading global databases of peer-reviewed scholarly literature.

The database provides extensive coverage across multiple disciplines and includes various forms of scholarly publications, such as journal articles, books, book chapters, and conference proceedings. Its broad multidisciplinary coverage makes it particularly suitable for conducting bibliometric studies and analysing the evolution of research within an emerging field such as the gig economy.

For the present study, the search term “gig economy” the search term “**gig economy**” was applied to the title, abstract, and keyword fields in the Scopus database, resulting in an initial retrieval of **1,295 documents**. To enhance the relevance, consistency, and scholarly quality of the dataset, predefined exclusion criteria were subsequently applied. Publications in languages other than English, studies falling outside the selected subject areas, book chapters, narrative literature reviews, books, book reviews, conference papers, and letters to the editor were excluded from the final dataset. Following the application of these criteria, the final sample was reduced to 710 relevant documents.

The complete records and cited references of all 710 selected publications were subsequently exported from Scopus and compiled in Microsoft Excel for further processing. The dataset was finalized as of September 2023. Bibliometric analysis was then performed on the 710 selected publications using VOSviewer software, which is widely used for visualizing and analysing bibliographic networks. The software facilitated the examination of relationships among publications, authors, keywords, countries, institutions, and other relevant bibliographic elements. The overall search, screening, exclusion, and selection procedure followed in the study is presented in Figure 1.

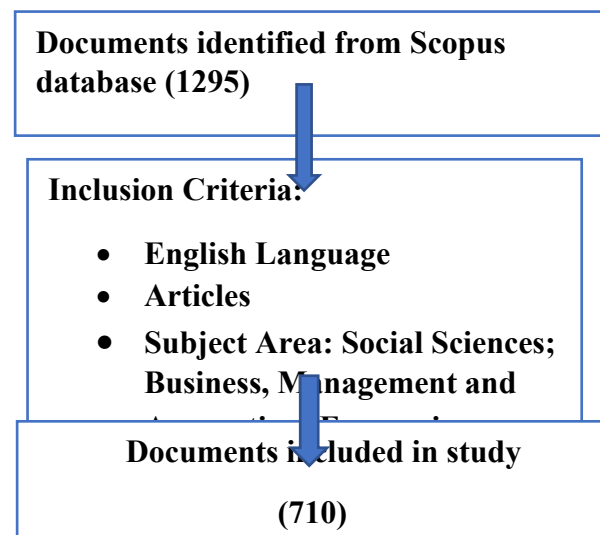


Figure 1. Article Selection Process

4. Results and Analysis

The analysis of the selected publications offers a detailed overview of the existing research landscape and identifies key trends, patterns, and developments in gig economy scholarship. Bibliometric analysis can generally be approached through two complementary techniques: **Performance Analysis** and **Science Mapping**. While performance analysis assesses the

productivity and scholarly contributions of different participants within a research domain, science mapping examines the interrelationships, conceptual structures, and underlying patterns among various elements of the research field.

4.1 Performance Analysis

Performance analysis assesses the scholarly contributions made by researchers, countries, journals, institutions, and other participants to a specific research domain. In the context of bibliometric research, this approach is primarily descriptive and provides an overview of the productivity and influence of the selected literature. In the present study, performance analysis considers several indicators, including publication trends by year, contributing countries, prominent journals, and citation patterns of the selected publications.

4.1.1 Subject Analysis

The gig economy has attracted scholarly attention across a wide range of academic disciplines, reflecting its multidisciplinary nature and its growing relevance to contemporary employment, technology, economics, and society. The literature identified in the present study spans **19 subject areas**, although research activity is particularly concentrated in a smaller number of major disciplines. As illustrated in **Figure 2**, Social Sciences account for the largest share of publications, representing **36.30%** of the total research output. This is followed by **Business, Management and Accounting (25.30%)**, **Economics, Econometrics and Finance (11.50%)**, **Computer Science (6.70%)**, **Arts and Humanities (5.70%)**, **Decision Sciences (4.40%)**, **Psychology (2.60%)**, **Environmental Science (2.50%)**, **Engineering (1.80%)**, and **Medicine (1.30%)**. Publications classified under other subject areas collectively account for the remaining **1.80%**.

The distribution demonstrates that research on the gig economy is predominantly rooted in the social sciences and management-related disciplines, while technological, psychological, environmental, engineering, and medical perspectives are also gradually emerging. **Table 1** presents the leading subject areas contributing to gig economy research. In terms of the number of publications, **Social Sciences** make the largest contribution with **475 publications**, followed by **Business, Management and Accounting with 333 publications**, and **Economics, Econometrics and Finance with 150 publications**. This disciplinary distribution highlights the inherently interdisciplinary character of gig economy research and indicates that the phenomenon is being examined not only as an alternative employment model but also from economic, managerial, technological, social, and behavioural perspectives.

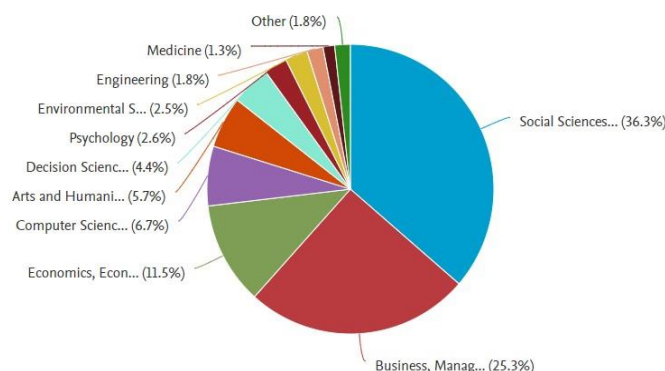


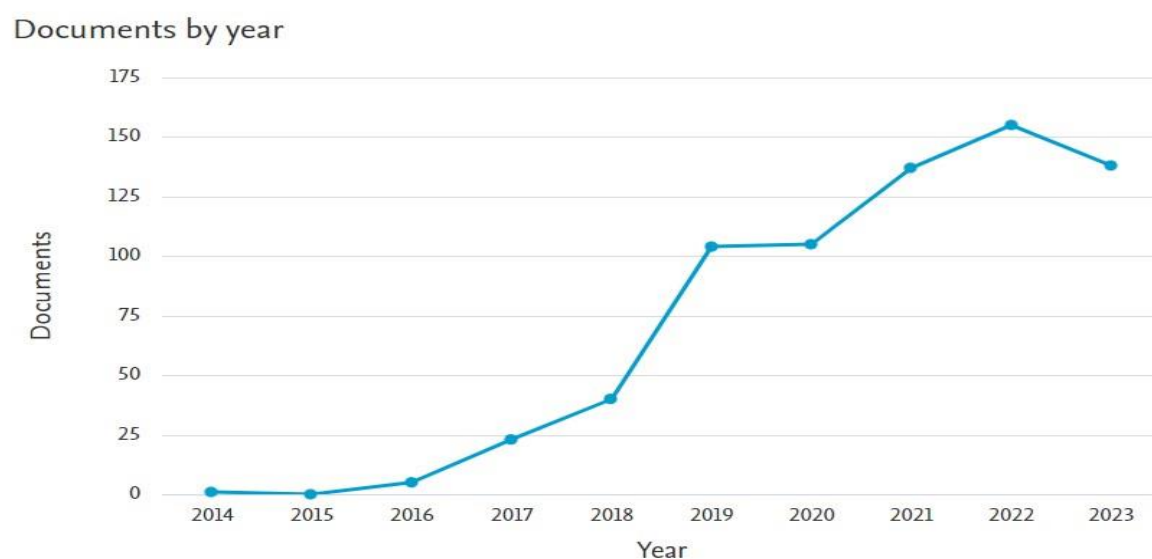
Figure 2: Documents by Subject Area

Table 1. Top Subjects

Subject Area	Publication
Social Sciences	475
Business, Management & Accounting	331
Economics, Econometrics & Finance	150
Computer Science	87
Arts & Humanities	75
Decision Sciences	58
Psychology	34
Environmental Science	33
Engineering	24
Medicine	17
Earth and Planetary Sciences	8
Energy	7
Neuroscience	2
Agricultural and Biological Sciences	1
Biochemistry, Genetics and Molecular Biology	1
Health Professions	1
Mathematics	1
Multidisciplinary	1
Nursing	1

4.1.2 Evolution of Publication

Figure 3: Number of publications per year



4.1.2 Publication Trend by Year

Figure 3 illustrates a clear and consistent upward trend in scholarly publications related to the gig economy over the period under consideration. The bibliometric analysis demonstrates a gradual increase in academic interest in the subject, with the volume of research output expanding considerably over time. Based on the global literature indexed in the Scopus database, publications on the gig economy were identified from **2014 to 2023**, resulting in a total of **710 documents** included in the final dataset. The annual publication pattern indicates that research interest in the gig economy has strengthened progressively, particularly during the later years of the study period. The increasing number of publications reflects the growing academic and practical significance of gig-based employment, digital labour platforms, and changing employment relationships. By **2019, the number of publications had reached 104**, indicating a substantial increase in scholarly attention to the subject. Overall, the findings presented in Figure 3 demonstrate that the gig economy has evolved from a relatively emerging research area into a rapidly expanding field of academic inquiry.

4.1.3 Geographical Distribution of Publications

Table 2 highlights the **top 15 countries** contributing to scholarly research on the gig economy. The **United States** emerges as the leading contributor with **197 publications**, followed by the **United Kingdom** with **137 publications** and **Australia** with **71 publications**. Figure 4 presents the geographical distribution of countries that have contributed **15 or more publications**, thereby illustrating the major national contributors and the global spread of academic research on the gig economy.

Table 2. Top 15 Countries Contributing to Gig Economy

Country/Territory	Documents
United States	197
United Kingdom	137
Australia	71
Canada	44
Germany	43
India	36
Netherlands	28
China	24
Spain	23
Hong Kong	22
Italy	22
France	18
Norway	17
South Africa	17
Poland	15

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

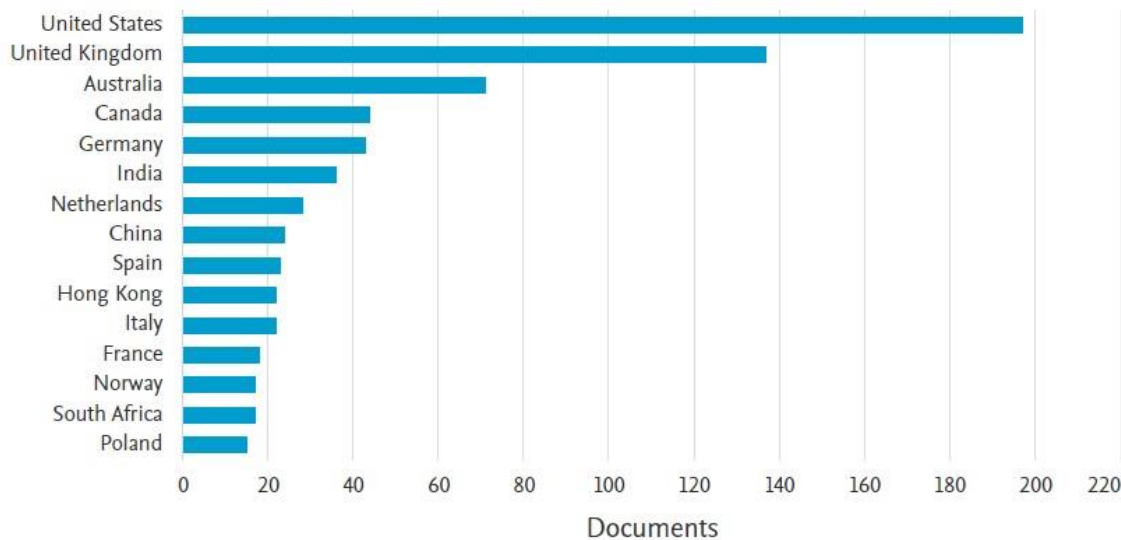


Figure 4. Geographical Analysis.

4.1.4 Authorship Analysis

Table 3. Authorship Analysis.

Author Name	Publication
Graham, M.	12
Lehdonvirta, V.	10
Wood, A.J.	7
Anwar, M.A.	6
Bissell, D.	5
Curran, N.M.	5
Frenken, K.	5
Jarrahi, M.H.	5
Newlands, G.	5
Barratt, T.	4
Chan, N.K.	4
Fieseler, C.	4
Goods, C.	4
Heeks, R.	4
Howson, K.	4

The study also examines the **most prolific authors** contributing to research on the gig economy. Figure 5 presents the authors who have published a minimum of **four publications** in this field. Among them, **Graham, M.** ranks first with **12 publications**, making the author the most productive contributor to gig economy research. The publication output of the leading authors, along with their corresponding number of publications, is presented in **Table 3**.

Documents by author

Compare the document counts for up to 15 authors.

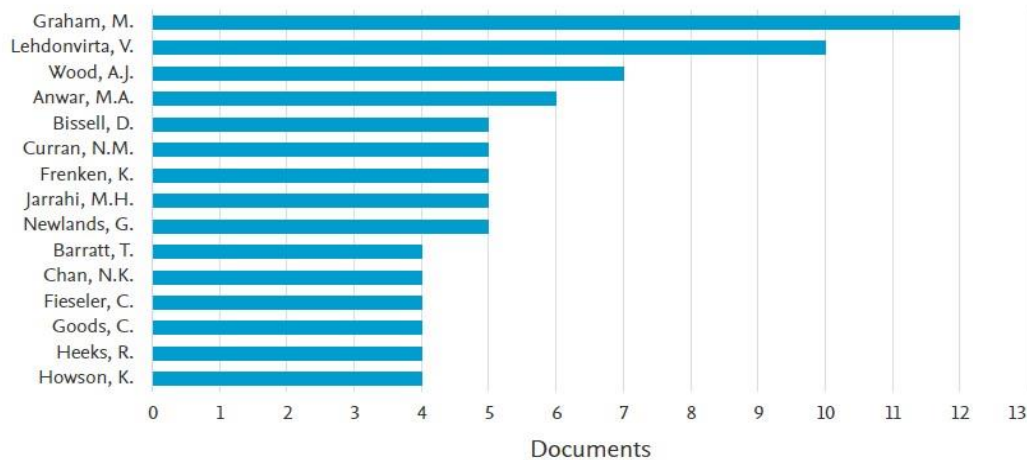


Figure 5. Analysis of Authors.

4.1.5 Affiliation Analysis

Table 4 presents the **top 10 institutional affiliations** contributing to scholarly research on the gig economy. The **University of Oxford** occupies the leading position in terms of publication output, followed by **The University of Sydney**. The distribution of institutional contributions demonstrates that research on the gig economy is geographically and institutionally diverse, with scholarly work emerging from universities and research institutions across different parts of the world rather than being concentrated within a single region. This widespread institutional participation reflects the growing global academic interest in the gig economy. Figure 6 further illustrates the institutions that have contributed **at least eight publications** to the field.

Table 4. Top 10 Institutions Contributing Publications on Gig Economy

	University	Documents
1	University of Oxford	31
2	Oxford Social Sciences Division	20
3	The University of Sydney	16
4	University of Melbourne	15
5	University of Toronto	13
6	Handelshøyskolen BI	12
7	The University of Manchester	10
8	University of Bristol	10
9	The Hong Kong Polytechnic University	8
10	The University of North Carolina at Chapel Hill	8

Documents by affiliation ⓘ

Compare the document counts for up to 15 affiliations.

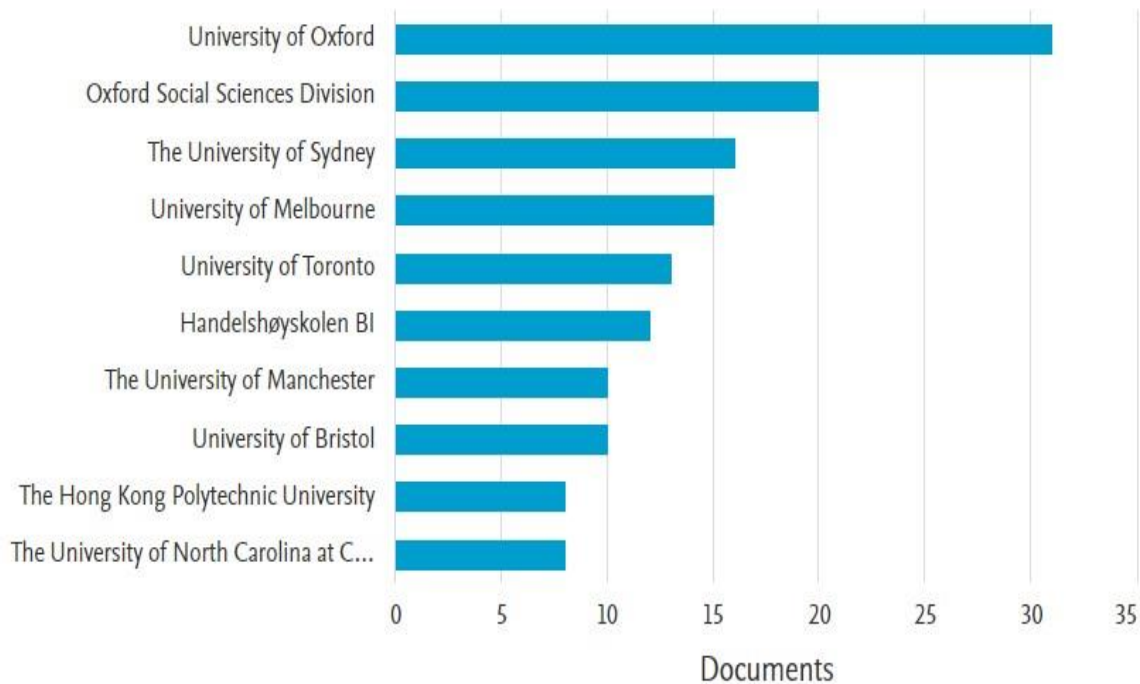


Figure 6. Affiliation Analysis.

4.1.6 Source Analysis

Table 5. Most Contributing Journal.

Source	TP	TC	CPP	
Work Employment and Society		20	1656	82.8
Proceedings of The ACM On Human Computer Interaction		20	319	15.95
New Technology Work and Employment		18	758	42.11
Journal of Industrial Relations		13	432	33.23
New Media and Society		13	300	23.08
Environment and Planning A		12	272	22.67
Capital and Class		8	355	44.375
Critical Sociology		8	321	40.125
International Journal of Human Resource Management		8	404	50.5
International Journal of Comparative Labour Law and Industrial Relations		7	272	38.86

Notes: TP = Total publications, TC = Total citation, CPP = Citation per publication.

4.1.6 Journal Analysis

Table 5 provides an overview of the **principal journals** that have contributed to the scholarly literature on the gig economy. Of the **160 journals** identified in the dataset, the analysis

considers the **10 most productive journals**, with a minimum threshold of **three publications** used for inclusion. The findings show that Proceedings of the ACM on Human-Computer Interaction, Work, Employment and Society, and New Technology, Work and Employment are among the leading outlets, with **20, 20, and 18 publications**, respectively. Notably, Work, Employment and Society has the greatest overall impact, as it records the **highest publication and citation counts** among the journals examined. These findings highlight the important role played by leading academic journals in facilitating and disseminating research on the gig economy.

4.2 Science Mapping

Science mapping focuses on examining the relationships and interactions among the different components of a research field. Unlike performance analysis, which primarily evaluates research productivity and impact, science mapping explores the conceptual, intellectual, and structural connections that exist among various elements of the scholarly literature. In the present study, science mapping includes keyword analysis and other network-based techniques used to identify the underlying structure of gig economy research.

4.2.1 Keyword Analysis

Keyword analysis provides valuable insights into the major themes and research areas receiving scholarly attention within a particular field. It is based on the assumption that keywords selected by authors appropriately represent the central content and focus of their research publications. By examining the frequency and co-occurrence of keywords, it is possible to identify prominent research themes as well as relationships among different concepts within the gig economy literature. In the present study, keyword co-occurrence analysis was conducted using **VOSviewer**, which provides an effective graphical interface for visualizing bibliometric networks and identifying relationships among keywords (Cobo et al., 2011). For the analysis, only keywords that occurred at least **five times** were considered. From a total of **2,033 keywords** identified in the dataset, **85 keywords** met the specified occurrence threshold. These keywords were subsequently grouped into **eight distinct clusters**, represented by different colours in Figure 7.

The visualization indicates that the **Gig Economy** keyword constitutes the most prominent node within **Cluster 1**, which comprises **80 items**. The size and connectivity of the nodes indicate the relative prominence and relationships of the keywords within the research network. Among the frequently occurring keywords identified in the analysis are **positive deviant, workplace, and incivility**, as presented in Table 6. The keyword network provides an overview of the major conceptual areas and thematic relationships that characterize existing research on the gig economy.

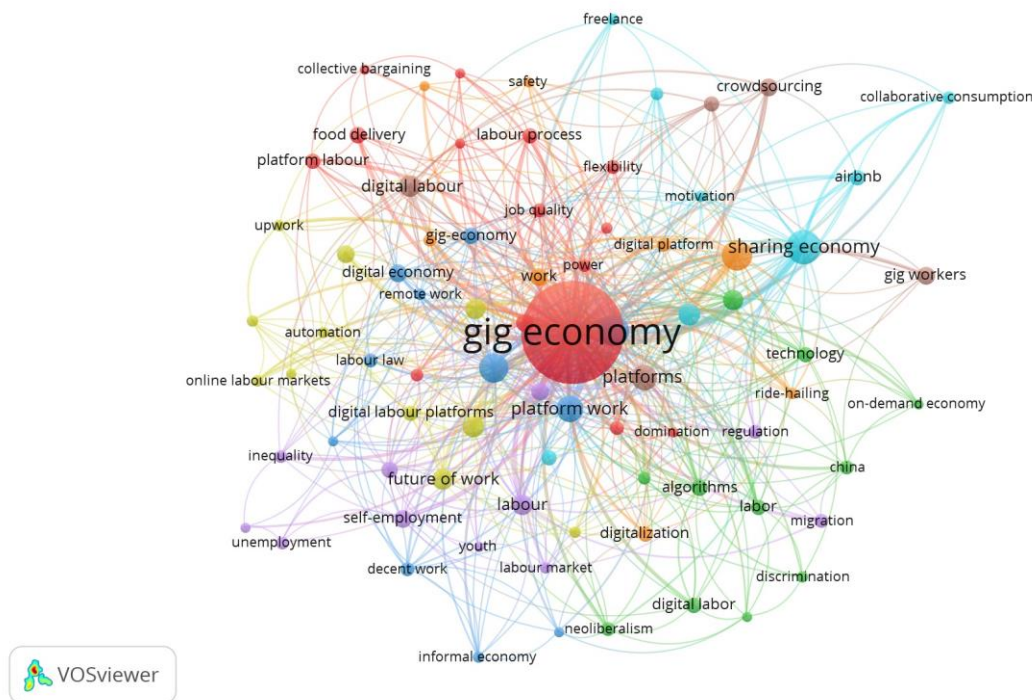


Figure 7. Keyword Analysis.

Table 6. Top Keywords.

Keyword	Occurrences	Total Link Strength
gig economy	414	649
sharing economy	46	103
uber	38	90
platform economy	37	92
gig work	34	84
platform work	28	76
platforms	26	69
digital labour	20	52
digital platforms	19	38
precarious work	19	40

4.2.2 Co-Citation Analysis

Author co-citation analysis was conducted to examine and visualize the **intellectual structure of research on the gig economy**. This technique helps identify influential scholars and reveal the relationships among authors whose works are frequently cited together within the selected body of literature. The analysis was based on the **710 publications** included in the study. To identify authors with a meaningful level of scholarly influence, a minimum threshold of **20 co-citations per author** was established. From the total of **31,952 authors** identified in the dataset, **336 authors** met the specified threshold and were therefore included in the co-citation network. As illustrated in **Figure 8**, authors whose publications are frequently cited together were organized into **five distinct clusters**, with each cluster representing a group of scholars

sharing relatively strong intellectual or thematic connections. In the VOSviewer visualization, authors receiving a greater number of co-citations tend to appear closer to one another, indicating stronger intellectual proximity and association. Among the five identified clusters, **three clusters are considerably larger** than the remaining two, suggesting that they represent the major intellectual groupings within the existing gig economy research literature.

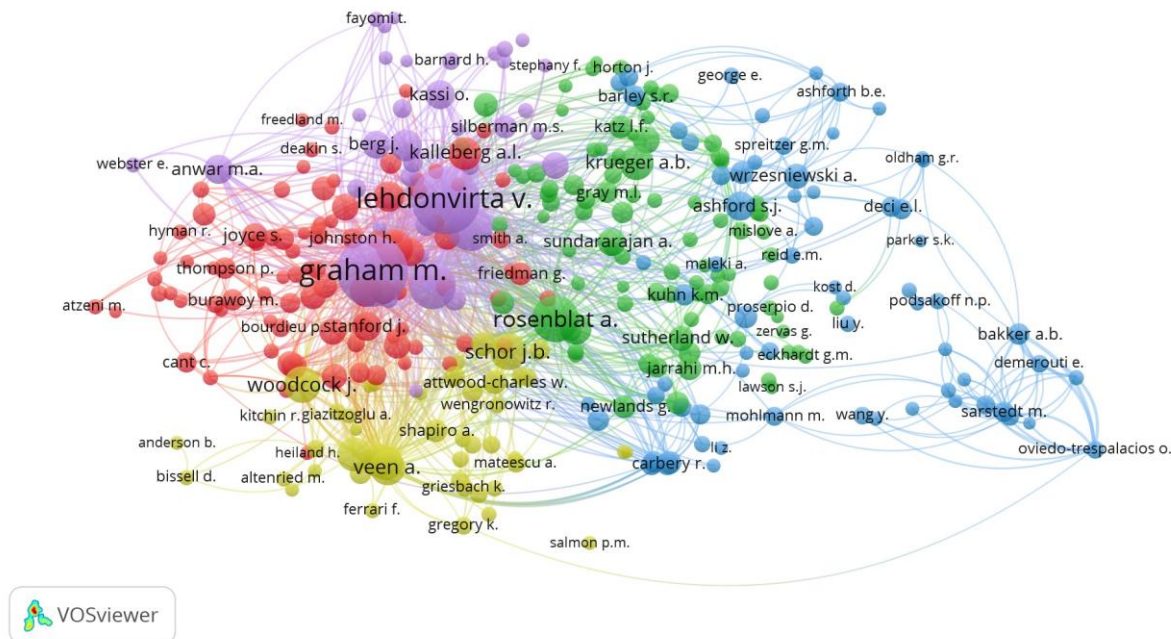


Figure 8. Network Visualization for Co-cited Authors

Conclusion

The present study provides a comprehensive bibliometric assessment of the gig economy research landscape with the aim of developing a deeper understanding of publication patterns, research trends, influential contributions, and the evolution of scholarly interest in this emerging field. Using a combination of bibliometric and descriptive techniques, the study analysed **710 publications indexed in the Scopus database between 2014 and 2023**. The findings demonstrate that scholarly research on the gig economy began to gain momentum from 2014 onwards and has continued to expand over the study period. A notable increase in research output was observed in 2019, when the number of publications reached **104**, compared with **40 publications in 2018**. This notable increase in scholarly output highlights the growing academic attention being devoted to **evolving employment patterns, digital labour platforms, and emerging forms of work** within the gig economy. The geographical distribution of publications further reveals that the **United States** is the leading contributor to gig economy research based on its overall publication output. However, the relatively uneven geographical distribution of research highlights the need for greater scholarly attention to developing and emerging economies. Future research should therefore place greater emphasis on Asian countries, including **Thailand, Malaysia, India, and Indonesia**, where the rapid transformation of economic structures, labour markets, and political environments is likely to

have significant implications for gig-based employment. Expanding research across these contexts would provide a more balanced understanding of the global development and consequences of the gig economy. The citation analysis further revealed that the study by **Wood et al. (2019)** was the most highly cited publication in the dataset, receiving **611 citations**. The thematic analysis indicates that recent scholarship has increasingly concentrated on issues related to **human resource management, employment relationships, and digital labour platforms**. The findings suggest that employment represents one of the central areas of influence of the gig economy, as a substantial proportion of the existing literature examines the changing relationship between employers, workers, and digital platforms. The literature identifies several important transformations associated with gig-based employment. These include the emergence of **new organizational forms**, particularly those involving algorithmic management, digital monitoring, and managerial control; the emergence of **novel forms of work**, often associated with inadequate social and legal protections, along with **new employment classifications** that increasingly distinguish conventional employees from independent contractors, has become a prominent feature of the gig economy (Tan et al., 2021; Marquis et al., 2018; Keith et al., 2019; Behl et al., 2021; Hudak et al., 2021). These developments indicate that the gig economy extends beyond merely creating alternative employment opportunities but is also challenging conventional assumptions about organizational structures, worker rights, and employment relationships. Gig employment presents both opportunities and challenges for workers and organizations. For businesses, digital labour platforms can provide faster and more cost-effective access to talent while enabling organizations to recruit specialized workers from geographically diverse locations. Freelancers and independent workers may similarly benefit from greater flexibility, autonomy, and access to a broader range of employment opportunities. However, gig work is also associated with several disadvantages, including relatively low or unpredictable earnings, income instability, limited employment security, the possibility of sudden termination or deactivation, and inadequate compensation and social protection. Platform workers may therefore require greater institutional and regulatory support to understand contractual terms, protect their interests, and exercise their employment-related rights (Hardy & McCrystal, 2022). Despite its contributions, the study has certain limitations. The first major limitation relates to the use of **Scopus as the sole bibliographic database**. Although Scopus provides extensive coverage of peer-reviewed academic literature, it does not include every relevant publication, and research published in journals that are not indexed in Scopus may consequently have been excluded. The second limitation concerns the search strategy, as the analysis primarily focused on publications containing the term “**gig economy**” within the specified search fields. Consequently, relevant studies that discuss gig-based work using alternative terminology may not have been captured. Future studies could overcome these limitations by adopting a broader search strategy and drawing upon multiple bibliographic databases, including **Web of Science, Dimensions, and Google Scholar**, to ensure more comprehensive coverage of the existing literature. Combining datasets from multiple sources could provide broader coverage of the literature and enable more comprehensive bibliometric mapping. Future studies may also consider related concepts and alternative terminology, such

as platform work, digital labour, online freelancing, independent work, contingent employment, and platform economy. Such an expanded approach could generate a more comprehensive understanding of the evolution, intellectual structure, emerging themes, and future directions of gig economy research. Overall, the findings confirm that the gig economy has developed into a rapidly expanding and multidisciplinary area of academic inquiry. Its implications extend beyond employment to organizational structures, labour relations, technology, social protection, human resource management, and public policy. As digital platforms and flexible work arrangements continue to transform labour markets, sustained academic and policy attention will be essential to ensure that the opportunities created by the gig economy are accompanied by adequate worker protection, social security, and equitable employment practices.

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