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Article Reviews

### **Connecting The Dots in The Digital Labor Marketplace: A Bibliometric Review of Global Gig Dynamics**

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#### Abstract

In the multi-faceted tapestry of modern employment, the burgeoning global gig economy represents a seismic shift, encapsulating technological advancements that have reshaped contemporary work structures. This unprecedented rise has triggered a paradigm shift in labor structures, provoking intense debates on the fundamental redefinition of traditional employment models in the global economic sphere. This study addressed the imperative need to comprehend and contextualize these dynamics, driven by technology and characterized by short-term, digitally facilitated work engagements. Among the transformative sway of the gig economy, this study endeavors a comprehensive bibliometric review, shedding light on trends shaping the dynamics. Employing the Dimensions Digital Science database, our methodology involved a meticulous search strategy, resulting in a collection of relevant scholarly publications. We conducted rigorous data cleaning and validation and applied bibliometric analysis using Biblioshiny (Bibliometrics) in RStudio. The findings reveal a marked surge in gig economy publications, emancipating the growing scholarly interest. Thematic analysis emphasized emerging trends such as digital platform work, regulatory efficiencies, and socioeconomics as focal areas. This study provides a holistic overview of the scholarly output on gig economy literature, offering a comprehensive understanding of its evolution and complexities. This serves as a foundational resource for all stakeholders, guiding further studies and facilitating evidenced decisionmaking in the ever-evolving landscape. By synthesizing current knowledge on digital labor marketplace dynamics and pinpointing emerging trends in the creative gig economy, this review informs future research agendas and fosters a deeper understanding.

**Keywords** Digital Platforms; Gig Economy; Labor Market; Marketplace; Regulations; Technology

#### **INTRODUCTION**

The gig economy, characterized by short-term flexible work arrangements facilitated through digital platforms, has emerged as a transformative force in the global labor landscape. Technological advances have enabled this new form of economy on a large scale, in which there is a free-market system allowing organizations (i.e., job providers) to hire independent contractors (i.e., job seekers) (Batmunkh et al., 2022). This rapid growth of gig work, spanning various sectors such as transportation, freelancing, and online platforms, has ignited scholarly interest and prompted extensive research across multiple disciplines (Healy et al., 2017; Kaine & Josserand, 2019). This paper provides a broad overview of the gig economy's significance through a comprehensive bibliometric review that aims to connect the dots in global gig dynamics.

The gig economy represents a departure from traditional employment models, offering workers and businesses newfound flexibility but also presenting unprecedented challenges (Manyika et al., 2016). In the basic model big workers enter into formal agreements with ondemand companies to provide services to their clients through an internet-based technological platform that allows them to search for providers (Donovan et al., 2016). Some notable platforms are Uber, Airbnb, Upwork, TaskRabbit, and Instacart.



As this dynamic form of work continues to reshape employment structures, policymakers, businesses, and scholars must understand its complexities, implications, and evolution (Manyika et al., 2016). To date, an extensive sparse body of literature has emerged exploring diverse aspects of the gig economy, ranging from its impact on labor markets and the economy to regulatory frameworks, technological advancements, and the socioeconomic welfare of workers.

Moreover, although the wayward aspects of the gig sphere and incumbent economy have been studied across the niche over the years, there is limited availability of synthesized snapshot studies of the gig-based economy (Batmunkh et al., 2022), let alone systematized bibliometric analysis and thematic aspects exploring and connecting the stakeholder's emerging concerns.

During this proliferation of research, our bibliometric analysis seeks to provide a systematic and global collective perspective on the state of knowledge, explore the incumbent themes, and ignite a meaningful discussion regarding the gig economy sphere. By employing rigorous bibliometric methods, we aim to identify key research trends, influential works, and collaborative networks, thereby shedding light on the interconnected dynamics that characterize this evolving field. Bibliometric analysis is a well-known method for analyzing a large number of scientific articles. It is used for trends, collaboration patterns, research constituents, and the network structure of the domain (Aria & Cuccurullo, 2017; Donthu et al., 2021). It illustrates network analysis, collaboration, countries, authors, and keywords. RStudio is free and open-source software for the analysis of datasets using the bibliometrics package biblioshiny in the simplest form.

The overarching goal of this bibliometric review is to offer a nuanced understanding of how the gig economy has been studied globally. By connecting the dots across publications through the systematic review study, we aim to contribute valuable insights that inform future research directions, guide policymakers, and assist practitioners in navigating the challenges and opportunities presented by the gig economy. As we surge into this intricate pattern and trends in global gig dynamics, this study will serve as a foundational resource for scholars and stakeholders grappling with the complexities of contemporary work arrangements in a systematic way and offers a bird's-eye view of the digital labor marketplace dynamics.

### LITERATURE REVIEW

The gig economy, characterized by non-traditional, short-term employment arrangements facilitated through digital platforms, has garnered substantial scholarly attention across various disciplines (Vallas & Schor, 2020). It is a multifaceted phenomenon at the intersection of technology, labor markets, and economic structures.

The evolution of the gig economy is traced through seminal works such as Sundararajan (2017) and Woodcock and Graham (2020) influential studies, which explored the rise of alternative work arrangements. The term "gig economy" encompasses a diverse array of non-standard work, including freelance, on-demand, and platform-based work (Berg, et al., 2018). Scholars investigating the gig economy have approached the topic from various angles, contributing to a rich tapestry of knowledge. Their findings underscored the significant increase in gig and independent contracting, sparking subsequent research exploring the drivers and consequences of this transformation.

Collaborative consumption and the rise of digital labor marketplaces have also been subjects of scholarly exploration. Sundararajan (2017) provided a comprehensive overview of the "sharing economy," emphasizing the role of online platforms in facilitating peer-to-peer transactions. The implications of these platforms for traditional industries and the broader economy have been examined by Zervas et al. (2017) in their analysis of the impact of Airbnb on the hotel industry and in their assessment of emergent technological advancement related to small

and medium enterprises (SMEs), particularly for logistics and supply chains and the associated optimization of contractual outsourcings (Bashokoh et al., 2023; Chaudhary & Niroula, 2023; Musa et al., 2023; Sujatini et al. 2023).

The gig economy is a global phenomenon, and research reflects this wayward international dimension. Socioeconomic implications of gig work have been a central focus of scholarly inquiry. Notable contributions, such as the work by Kost et al. (2019), shed light on the challenges faced by gig workers, including issues related to job insecurity, lack of employment benefits, and the impact of the gig economy on income stability. Gandini (2018) highlights the gig economy's role in altering traditional labor markets, emphasizing the shift toward non-traditional employment. Concurrently, scholars such as Stefano (2016) have explored the legal and regulatory dimensions of the gig economy, addressing the implications of this new form of work for traditional labor laws. Research has also focused on the wellbeing of gig workers. Wood et al. (2019) investigated the job satisfaction and quality of gig workers, providing insights into their subjective experiences.

Technological advancements, particularly the role of digital platforms, have been a prominent theme in the literature. Wood et al. (2018) examined the automation potential of jobs in the context of the gig economy, highlighting the transformative impact of technology on labor markets. He also discusses the role of technology in shaping gig work, examining the impact of platform design on worker behavior and outcomes. This intersection between technology and gig work continues to evolve, prompting ongoing investigations into the role of AI and algorithmic management (Rosenblat & Stark, 2016).

Understanding the dynamics of labor markets in the gig economy is crucial. Stewart and Stanford (2017) examined how gig work influences overall labor force participation, while Kost et al. (2019) investigated the challenges and opportunities associated with gig work in different career sectors. The regulatory landscape of the gig economy has garnered significant attention. Scholars such as Stefano (2016) explore the legal challenges posed by gig work, considering issues related to worker classification and the implications for social protection. Such regulatory aspects are integral to shaping the future of gig work (Berg et al., 2018). This interdisciplinary nature of gig economy research is evident in the diversity of perspectives. Milosevic et al. (2021) examined the trends, challenges, and opportunities of gig work and exemplified the interdisciplinary approach taken by scholars.

While these seminal works have advanced our understanding of the gig economy, the expansive and evolving nature of this field necessitates a systematic review analysis. As the literature on the gig economy continues to expand, we embark on a bibliometric review of the literature. This represents a fraction of the rich tapestry of research exploring the complexities of gig work. By conducting a bibliometric analysis, we aim to synthesize and map these scholarly contributions, identifying overarching trends, key contributors, and areas ripe for further exploration. The interconnectedness of research themes and the global nature of gig economy studies underscore the importance of our endeavor to connect the dots in global gig dynamics.

#### **RESEARCH METHOD**

It outlines the systematic approach employed in conducting the bibliometric analysis on the gig economy, aimed at providing a comprehensive understanding of global research trends by emphasizing data collection, inclusion criteria, and analytical techniques (Donthu et al., 2021). The objective is to provide transparency and reproducibility in the selection, retrieval, and analysis of scholarly publications.

1. Data Sources

We conducted a comprehensive and systematic search across one of the available open-

source major academic databases, Dimensions Digital Science, to identify relevant publications on the gig economy. This platform was chosen for itsopen accessibility and relatively extensive coverage, ensuring a comprehensive representation of scholarly output.

### 2. Search Strategy

The search strategy involved a combination of keywords pertinent to the gig economy. The queries were meticulously crafted to capture the diverse aspects that it accommodates. Search terms included keywords such as "gig economy," "platform work," "digital labor," and variations thereof, and Boolean operators were used to refine the search scope, ensuring a comprehensive retrieval of relevant literature. Iterative testing of the search string was conducted to optimize precision and recall, ensuring that the final search strategy was both sensitive and specific.

## 3. Inclusion and Exclusion Criteria

Articles included in the analysis were captured without the limitation of time frame to include the overall trends and development in the gig economy. The inclusion criteria encompassed peer-reviewed open-access articles addressing various facets of the gig economy, including but not limited to labor markets, technological innovations, regulatory challenges, and socioeconomic impacts, using the embedded research classifications of Dimensions with specificity of Field of Research (Australian and New Zealand Standard Research Classification-ANZSRC) and aligned Sustainable Development Goals. Non-English publications were also excluded to maintain consistency in analysis and ensure a coherent and manageable dataset.

# 4. Data Cleaning and Validation

The retrieved dataset then underwent rigorous data cleaning procedures to eliminate duplicates, inaccuracies, and irrelevant entries. This process involved cross-referencing titles, abstracts, authors, and publication details. The final dataset reflects a carefully curated selection of relevant and unique scholarly publications.

# 5. Dataset Statistics

Descriptive statistics, such as the total number of publications, trend across years, top 10 papers, most contributing nation, author, and representation from different journals, were compiled to provide an overview of the dataset's characteristics.

# 6. Bibliometric Indicators

The key variables included in the dataset encompassed bibliographic details such as title, authors, publication year, journal, abstract, citation counts, and other bibliometric indicators. To quantify the impact and visibility of publications, we employed bibliometric indicators such as citation counts and h-index (Donthu et al., 2021). Citation analysis was conducted using citation databases available on selected platforms to assess the influence of individual articles, authors, and journals within the gig economy literature (Podsakoff et al., 2005).

# 7. Co-authorship and Collaboration Analysis:

Collaboration patterns between researchers and institutions were investigated through coauthorship analysis (Acedo et al., 2006). This involved mapping co-authorship networks to identify key contributors and collaborative hubs within the gig economy research community. Visualization of these networks provides insights into collaborative dynamics within the gig economy research community.

## 8. Global Geographics

To ensure a global perspective, we considered the geographical distribution of authors, institutions, and the focus of the research. This involved analyzing the affiliations of authors and the settings of the studies to identify regional variations in research output and thematic emphasis.

# 9. Thematic Analysis

A thematic analysis was conducted to categorize publications based on their primary research focus (Zupic & Čater, 2015). Keywords and key phrases were extracted from titles, abstracts, and subject headings to identify prevalent themes within the publications and were subsequently analyzed to reveal the word cloud and unique clusters and trends shaping the discourse on the gig economy.

# 10. Visualization Tools

The bibliometric mapping tool Biblioshiny (a RStudio bibliometrics package) was employed to create visual representations of citation networks, co-authorship and collaboration patterns, and associated thematic clusters. These tools facilitate the creation of descriptive and collaboration networks, thematic maps, and visual representations of trend patterns (Aria & Cuccurullo, 2017), providing a comprehensive overview of the global landscape of gig economy research and enhancing the interpretation of complex bibliometric relationships. By adhering to these systematic procedures, the bibliometric analysis ensures the reliability and validity of the findings, offering a robust synthesis of the existing body of knowledge on the gig economy.

# **Data Collection**

This section provides a detailed account of the systematic data collection process employed in the bibliometric study of the gig economy, outlining the database used, search strategy, and quality assurance criteria.

# 1. Database

The initial step involved the choice of database(s) and is a critical step in ensuring the comprehensiveness of the bibliometric study. Dimensions Digital Science (https://www.dimensions.ai) was selected because of its open-source availability and relatively strong coverage of academic literature across diverse disciplines. This database platform is recognized for its open access and is very popular among scholars of developing economies and by its multidisciplinary nature, encompassing journals, conference proceedings, and other scholarly publications.

# 2. Search Strategy

A systematic and expansive search strategy was developed to capture a broad spectrum of literature on the gig economy. Employing a combination of controlled vocabulary and keywords, we used terms such as "gig" and "economy" and variations thereof. Boolean operators (AND, OR) were employed strategically to refine searches and enhance relevance. The comprehensive nature of the search aimed to minimize the risk of overlooking relevant publications. The search string used was: ("gig" OR "sharing" OR "freelance") AND "economy"

## 3. Inclusion and Exclusion

To focus the study on specificity of trends, publications were confined by 'title and abstract' search and only 18928 publications were included. The title and abstract section of the paper must have accompanied the aforementioned search string to be accommodating to the study. Open access (limits the publications to 9247) and peer-reviewed articles (limits the publications to 6531) addressing various aspects of the gig economy, such as labor markets, technology, and socio-economic impacts, were considered.

The research classification system available in Dimensions was also utilized, which is the automated emulation of standard classification systems used around the world, based on machine learning guided by topic experts. Herewith, it was used to extract the analysis pertinent data in context to economics; work environment, innovation and industry, and management and services with categories:

a. By Field of Research (ANZSRC 2020)- It is a component of the 2020 Australian and New Zealand Standard Research Classification (ANZSRC) system. There are three related ANZSRC classifications: Fields of Research (FoR), Type of Activity (ToA), and Socioeconomic Objective (SEO). Only FoR is made available in Dimensions. The FoR covers all areas of academic research at a high level; therefore, it works well for non-granular investigations by broad subject areas. Therefore, FoR is good for comparative analyses across all academic disciplines at a fairly high level. Hereby, the study focuses on the following two fields of research, thereby limiting the dataset to 2871 publications:

35- Commerce, Management, Tourism, and Services38-Economics

b. Sustainable Development Goals: The United Nations Sustainable Development Goals (SDGs) are targets for global development adopted by the United Nations in September 2015 and set to be achieved by 2030. Comprised of 17 interconnected goals, they are a universal call to action- a blueprint to achieve a more sustainable future for all. It has been implemented herewith as a classification scheme covering areas of research associated with one or more SDGs and is an indicator for all fitting documents in Dimensions, thereby addressing research areas aligned to the goals. The study employs the following SDGs, thereby limiting the dataset to 483 publications:

8-Decent Work and Economic Growth9- Industry, Innovation, and Infrastructure

4. Data Retrieval

The search yielded a substantial number of potential articles. Subsequently, the analysis ready dataset of 483 articles was extracted and exported from Dimensions Digital Science on 26th December 2023. Non-relevant records were excluded through a two-step screening process to maintain consistency in analysis and interpretation. In the first step, screenings of the records for duplication (3 records) and other than English for language (45 records) were conducted. In the second step, titles and abstracts of extracted records were reviewed and flagged for subsequent scrutiny for eligibility and relevance based on inclusion criteria.

Finally, data retrieval holistically involved extracting relevant information, including title, author names, publication year, journal, abstract, keywords, and subsequent relevant

bibliometric variables. This dataset (limited to 435 records) formed the foundation for subsequent bibliometric analysis.

#### 5. Quality Assurance

To ensure the accuracy and reliability of the dataset, data cleaning procedures were implemented systematically. Verification checks on duplicate records, other than English publications, completeness of most relevant details, etc. were performed iteratively to rectify discrepancies or errors, enhancing the overall quality of the collected data.

Ambiguous entries (3 records) and those lacking essential author information (7 records) were identified. Subsequently, the dataset was also screened through the title and abstract against relevancy with the context of the study, which helped identify the 239 irrelevant records. Finally, a dataset of 186 relevant analysis ready publications was determined. The goal was to create a clean and validated dataset that accurately represented the scholarly output of the gig economy. Figure 1 below summarizes the major information of the retrieved data.



Figure 1. Main Information Summary of the Dataset from biblioshiny (RStudio package)

#### 6. Ethical Considerations

Adherence to ethical guidelines was paramount in data collection. All data were obtained from publicly available and legitimate open sources, and ethical considerations were observed throughout the process.

By meticulously following these data collection protocols, we ensured the creation of a robust and reliable dataset for subsequent bibliometric analysis. The systematic approach ensures the reliability and validity of the dataset, laying the groundwork for insightful findings and uncovering patterns, trends, and relationships within the gig economy literature.

#### FINDINGS AND DISCUSSION

This section analyzes and presents a detailed exploration of the bibliometric analysis results, unveiling descriptive datasets, patterns, key contributors, and emerging trends (Zupic & Čater, 2015) within the global literature on the gig economy.

#### 1. Publication Trends

The analysis revealed a notable increase in scholarly output on the gig economy over the period. Figure 2 illustrates the distribution of scientific publications across years, indicating a

steady growth with slight trend declines in 2019 and 2021 with notable upward trajectory and a peak in publications in recent years in research activity. Figure 3, 4, and 5 depict the relevant authors, countries, and terminologies of the study. This trend aligns with the dynamic nature of the gig economy with growing interest and recognition and its increasing impact on various aspects of work and society.

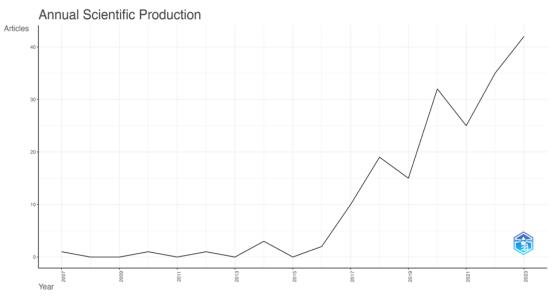


Figure 2. Annual Scientific Production Over Time from Library (RStudio package)

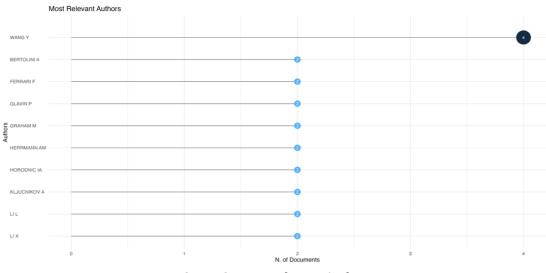


Figure 3. Most Relevant Authors

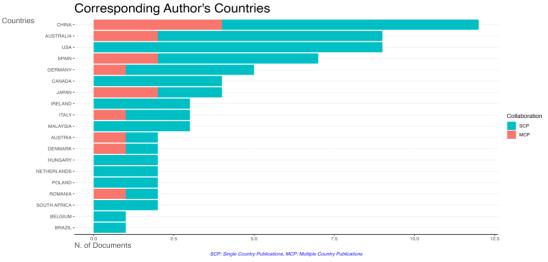
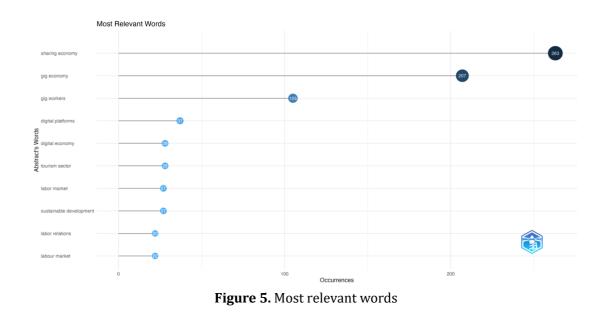


Figure 4. Corresponding Authors' Countries



#### 2. Distribution across disciplines

The interdisciplinary nature of gig economy research is evident in its distribution across academic disciplines. Figure 6 illustrates Bradford's Law with the proportion of publications and distribution of scientific literature to analyze the scattering of articles in scientific journals associated with economics, sociology, management, and technology-related fields. The gig economy's multifaceted nature has spurred contributions from diverse domains, reflecting the complex and evolving dynamics of gig work.

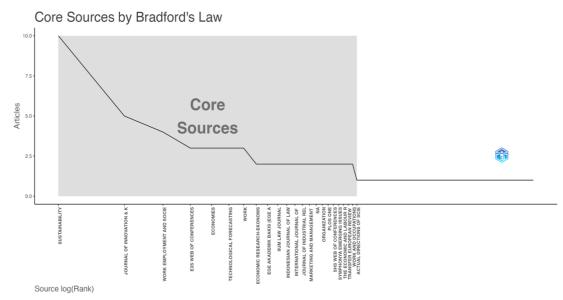


Figure 6. Core Sources from Bradford's Law

3. Citation Analysis

Citation counts were employed to assess the impact and influence of publications within the gig economy literature. Table 1 showcases the 10 most cited papers, highlighting influential works that have significantly contributed to the scholarly discourse. The top-cited articles and authors were identified using the Digital Object Identifier (DOI), shedding light on the seminal works that have shaped the discourse.

Paper Details	DOI	<b>Total Citations</b>	
Puga (2010), Journal of Regional Science	10.1111/j.146797	563	
r ugu (2010), journal of Regional beforee	87.2009.00657.x		
Gandini (2018), Human Relations	10.1177/0018726	420	
danami (2010), manan kelacions	718790002	120	
Tassinari and Maccarrone (2019), Work	10.1177/0950017	329	
<b>Employment and Society</b>	019862954		
Muñoz and Cohen (2017), Technological	10.1016/j.techfore	273	
Forecasting and Social Change	.2017.03.035		
Kässi and Lehdonvirta (2018), Technological	10.1016/j.techfore	267	
Forecasting and Social Change	.2018.07.056		
Healy et al. (2017). Labour & Industry: A	10 1000 /1020176		
Journal of the Social and Economic Relations	10.1080/1030176 3.2017.1377048	149	
of Work.	5.2017.1577040		
Jabagi et al. (2019), Journal of Managerial	10.1108/jmp-06-	141	
Psychology	2018-0255		
Todolí-Signes (2017), Transfer European	10.1177/1024258	136	
Review of Labour and Research.	917701381		
Potiece Harris (2019) Organization	10.1177/1350508	128	
Peticca-Harris (2018), Organization	418757332		
Kaine and Josserand (2019), Journal of	10.1177/0022185	112	
Industrial Relations	619865480	112	

### 4. Collaboration Patterns:

Co-authorship networks were mapped to visualize collaboration patterns between researchers and institutions. Figure 7, 8, 9, and 10 illustrate key nodes and clusters within the affiliations, network of countries, study co-occurrence areas, and Lotka's law to understand the distribution of productivity among researchers within specific disciplines showcasing collaborative activity. The analysis identifies prolific authors, institutions, countries, and thematic rationales contributing to the global gig economy. This analysis reveals the interconnected nature of the gig research community, emphasizing collaborative efforts in advancing knowledge within the field.

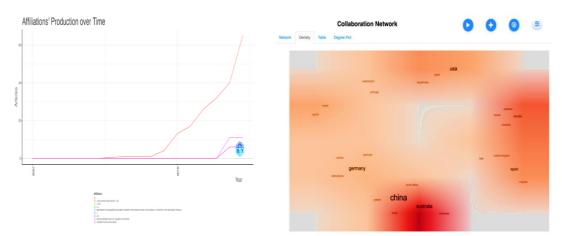


Figure 7. Production over time of affiliations

Figure 8. Collaboration Network of Countries



Figure 9. Co-occurrence Network

Figure 10. Lotka's Law for Author Productivity

5. Thematic Analysis

A thematic analysis of keywords and co-occurring terms within publications revealed pertinent trends and research clusters. Figure 11, 12, and 13 present thematic and tree maps,

illustrating the interconnected important themes shaping the gig economy literature. Notable clusters include "digital platform work," "sustainability challenges," and "socioeconomic impact" emphasizing the wayward nature of gig work research.

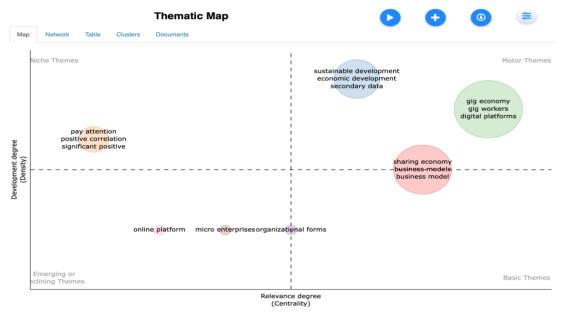


Figure 11. Thematic Map

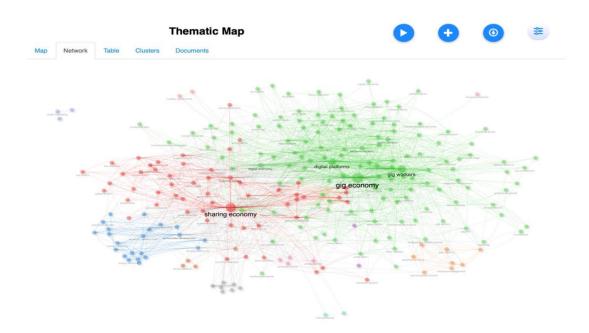
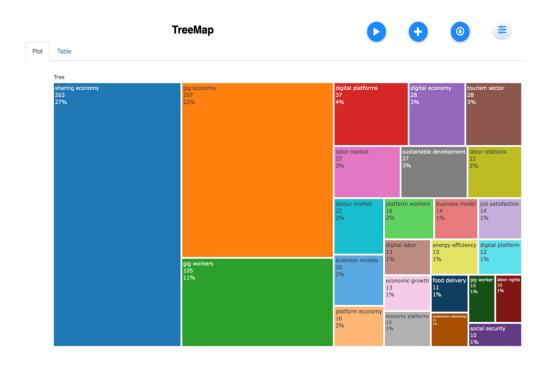


Figure 12. Theme Network Map



#### Figure 13. Tree Map

#### 6. Global Perspectives:

Analysis of the geographical distribution of publications highlights regional variations in gig economy research. Figure 14 provides a world map depicting the concentration of scholarly production, with darker shades indicating higher research activity. The findings highlight a global perspective, with substantial contributions from China, Australia, and the United States. Figure 15 and Table 2 explain the variations in the countries' production of scientific papers and the country-wise impact of the output with varied results. This analysis contributes to understanding the global dissemination of knowledge on the gig economy.

**Country Scientific Production** 

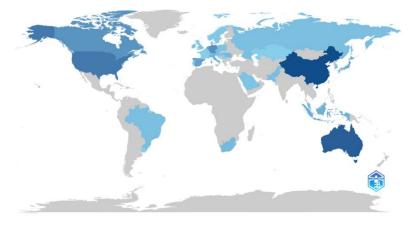


Figure 14. World Map of Scientific Production

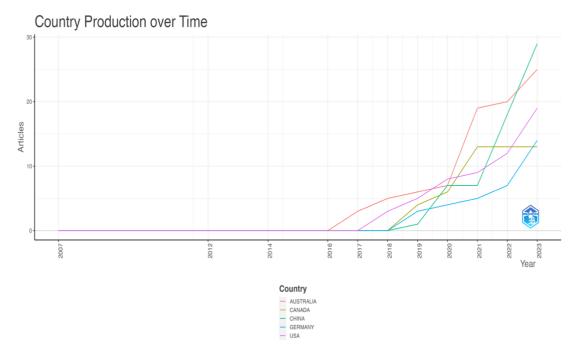


Figure 15. Scientific Production of Countries Over Time

The country- specific citation details the impacts as follows:

Country	<b>Total Citations</b>	Average Citations
Spain	471	67.30
Ireland	339	113.00
Australia	307	34.10
Canada	205	51.20
China	185	15.40
France	128	128.00
Italy	121	40.30
Romania	98	49.00
USA	93	10.30
Brunei	77	77.00

Table 2. Country-specific impact in terms of citations

7. Journals and Impact Factor Analysis

Journals publishing gig economy research were identified, and their impact factors were analyzed. Notable sources, as depicted in Figure 16, 17 depict the influential platforms and associated outputs over time in disseminating gig economy literature, and Figures 18, 19 exhibit the impacts of the sources and authors on gig dynamism.

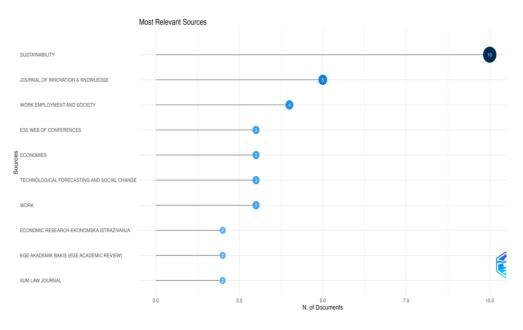


Figure 16. Relevant Sources

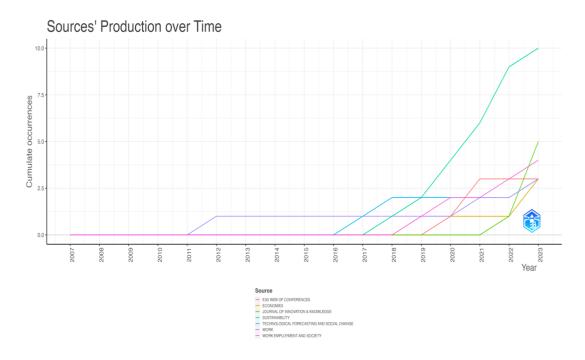


Figure 17. Production of Sources Over Time

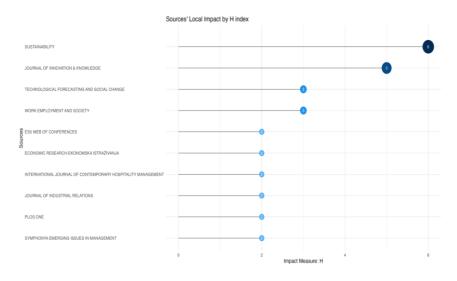


Figure 18. Sources H-index

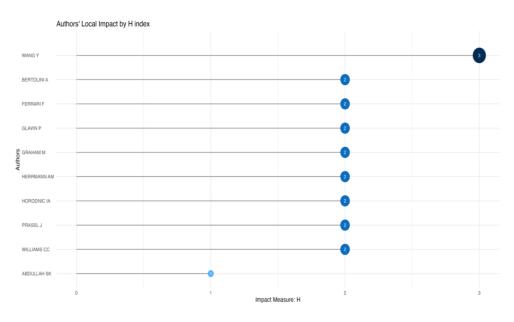


Figure 19. Author's H-index

#### 8. Emerging Topics

Through a detailed examination of keywords in the abstracts of publications, emerging topics within the gig economy literature were identified and presented in Figure 20 and 21. Notable themes include "platform or sharing works," "digital transparency," "sustainability," "labor markets," and "impact of the gig economy on traditional labor markets." These emerging topics indicate the evolving nature of research in response to technological advancements and shifts in the gig economy landscape.

		Trend Topics		+ 💿 🛎
Plot	Table			
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	platform economy	-		•
	job satisfaction	-		•
	energy efficiency	-		•
	food delivery-			•
	gig economy-			•
	gig workers			•
	digital platforms	-		•
	labor market			•
	platform workers	-		•
1	sharing economy		•	
	tourism sector-		•	
	digital economy	-	•	
susta	ainable development	-	•	
	labor relations		•	
	labour market			
	business models			
	business model			
	economy platforms			

Figure 20. Trend Topics

	WordCloud	0	•	0	***
Plot	Table				



Figure 21. Word Cloud

In conclusion, the detailed bibliometric analysis of the gig economy presented here offers a comprehensive understanding of the global literature on the gig economy from publication trends, influential works, collaboration networks, and thematic clusters. From citation analysis to collaboration patterns and emerging themes, this study offers a view of the scholarly discourse surrounding gig work. The visualizations presented here offer a snapshot perspective of the study, emphasizing the interconnectedness of knowledge within the gig economy research community. Overall, the findings contribute to the ongoing dialog on digital innovations, regulations, and sustainability impacts on the gig economy, offering a foundation for further exploration and a roadmap for stakeholders navigating this dynamic field.

#### Discussions

The analysis has established key patterns, trends, and relationships within this dynamic gig field. The observed increase in gig economy publications reflects the growing recognition of this phenomenon in academic discourse and its profound impact on labor markets. The upward trajectory suggests a maturing research landscape, and the surge in publications in recent years signifies the relevance and timeliness of the gig economy as a research domain. The analysis of journals publishing gig economy research and their impact factors provides insights into the dissemination of work in this field. Journals such as Sustainability and the Journal of Innovation & Knowledge serve as influential platforms for gig economy research, indicating the existence of dedicated outlets that contribute to the visibility and recognition of scholarly work. The identification of highly cited articles and influential authors provides insights into the intellectual foundation of gig economy research. The seminal works of the most relevant authors depicted in Figure 3 have played pivotal roles in shaping the discourse. The high citation counts underline the enduring impact of these contributions.

The visualization of the collaboration network highlights the slightly lesser interconnectedness of researchers and institutions, emphasizing the enhanced importance of collaborative efforts in advancing knowledge and signifying the exchange of diverse perspectives. The global perspective of gig economy research is evident in the geographical distribution of publications, where contributions from Australia, China, and North America signify the worldwide relevance of gig work. Thematic analysis revealed several key clusters, offering a nuanced understanding of the diverse research themes. The prominence of themes such as "digital platform work" "sustainability challenges" and "socio-economic impact" underscores the multifaceted nature of gig work and the interdisciplinary approaches adopted by researchers. Finally, these identified patterns and themes provide a foundation for future studies to build upon, fostering continued exploration of the gig economy's impact on work, society, and the global economy.

### Implications

The findings of the bibliometric analysis on the gig economy have several implications for researchers, policymakers, practitioners, and stakeholders involved in shaping the future of work. These implications provide valuable insights into the current state of gig economy research and offer guidance for future endeavors.

1. Research Landscape Awareness:

This bibliometric analysis serves as a comprehensive overview of the existing gig economy literature, offering researchers a panoramic view of the field's evolution, key contributors, and emerging trends to assess current priorities and pertinent themes. This awareness is crucial for scholars seeking to situate their work to ensure that future studies align with the evolving dynamics and emerging challenges within the gig economy.

2. Identifying Influential Works:

The identification of top-cited articles and influential authors provides a foundation for understanding intellectual history and thus benchmarks for researchers aiming to understand the seminal contributions shaping the discourse on the gig economy. This knowledge enables scholars to draw inspirations, build upon established foundations, and contribute meaningfully to the ongoing scholarly dialog.

3. Thematic Guidance for Future Research:

Thematic analysis identifies emerging trends within the gig economy literature, detailing areas of increasing interest. Researchers and policymakers can leverage this to explore understudied areas, address existing gaps, contribute to the ongoing discourse, and stay ahead of the curve by focusing on themes that reflect the current and anticipated challenges in the gig

economy.

4. Collaboration Opportunities:

The co-authorship network visualization reveals collaborative hubs that foster opportunities for interdisciplinary collaborations. The global distribution of gig research emphasizes diverse perspectives that account for regional variations. Researchers can work toward fostering a more inclusive representation, ensuring that the literature captures the diversity of experiences across different regions. It encourages researchers to joint efforts and leverage these networks for the holistic promotion of knowledge exchange.

5. Strategic Journal Selection:

Understanding the landscape of journals publishing gig economy research, along with their impact factors, assists researchers in strategically selecting appropriate platforms for publication. Researchers can leverage this information to target suitable journals that contribute to the dissemination and recognition of their work.

6. Policy formulation and regulatory considerations:

This analysis sheds light on the academic knowledge that informs policies and practices related to the gig economy. Policymakers can use these insights to inform regulatory frameworks and policies. Recognizing global trends and regional variations in the literature can aid in the development of adaptable and effective policies that address the challenges and opportunities presented by the gig economy.

7. Industry adaptation and innovation:

Businesses and practitioners can leverage the findings to adapt to the changing nature of work. Insights into technological trends, regulatory challenges, and socioeconomic impacts can guide businesses in developing innovative strategies that align with the evolving landscape of gig employment.

8. Educational and Training Initiatives

Academic institutions and training providers can use the findings to tailor educational programs to address the skills and knowledge required in the gig economy. Recognizing thematic clusters and emerging trends can inform the development of curricula that align with the evolving needs of gig workers.

Finally, the implications derived from this bibliometric analysis extend beyond academia, offering actionable insights for various stakeholders involved in understanding, shaping, and navigating the gig economy landscape.

### CONCLUSIONS

The comprehensive bibliometric analysis undertaken to explore the gig economy literature has provided valuable insights into the evolution, trends, and collaborative dynamics within this dynamic field. This conclusion synthesizes the key findings and discusses their broader CTA implications.

1. Synthesis of the Key Findings:

- The analysis revealed substantial growth in gig economy publications over the past decade, reflecting the increasing scholarly interest in this transformative phenomenon.
- Seminal works and influential authors have played crucial roles in shaping the intellectual discourse surrounding gig work, laying the foundation for further exploration.
- Co-authorship networks demonstrated the collaborative nature of gig economy, emphasizing the need for diverse perspectives in showcasing interconnected hubs.
- Thematic analysis unveiled emerging trends, highlighting prevalent themes such

as digital platform work, regulatory efficiencies, and socioeconomic impacts.

- The global distribution of publications emphasized the international relevance of gig economy research, although regional disparities were evident.
- Journal analysis provided insights into influential platforms for disseminating gig economy research, contributing to the field's visibility and impact.

2. Broader Implications:

- Researchers can assess the identified influential works, collaboration networks, and thematic trends to inform their studies and contribute to the ongoing discourse on the gig economy by engaging with thought leaders.
- Policymakers can leverage insights into emerging trends to inform evidence-based decision-making and address the regulatory, economic, and social challenges associated with gig work.
- Practitioners in the gig economy can use the study's findings to stay informed about the latest research developments, fostering a deeper understanding of their operations and workforce management.

3. Call to Action:

- In conclusion, this bibliometric analysis provides a comprehensive and contemporary snapshot of the gig economy literature.
- Connecting the dots across publications, collaborations, and emerging themes, this analysis serves as a foundational resource to the call for ongoing engagement, collaboration, and research to inform evidence-based decision-making and address the complexities inherent in the gig work world.

In essence, this bibliometric analysis provides a foundation for further inquiry, encouraging a continued exploration of the gig economy's impact on labor markets, societal structures, and the future of work. The insights gleaned from this study contribute to a growing body of knowledge that shapes our understanding of one of the most transformative forces in contemporary employment.

### LIMITATION & FURTHER RESEARCH

Finally, it is crucial to acknowledge the limitations inherent in the bibliometric approach (Aria & Cuccurullo, 2017; Donthu et al., 2021). While this study provides a quantitative overview of the gig economy literature, it may not capture the entirety of relevant research. Language restrictions, availability of the free open-source access database, and exclusion of non-peer-reviewed works may introduce biases. Additionally, the reliance on citation counts as a measure of impact has its limitations, as it may not fully capture the broader societal or policy impact of certain works.

In addition, this bibliometric analysis has identified potential research gaps within the gig economy literature and is crucial for steering the trajectory of future studies. Areas with limited coverage, such as digital platform-based technological advancements and regulatory efficiency, present opportunities to delve deeper into specificity for further exploration. In-depth qualitative analyses of the most important stakeholders could complement quantitative insights (Chaudhary & Niroula, 2023) and offer a richer understanding of the lived experiences. Longitudinal analyses could provide insights into evolving patterns, whereas comparative studies across different sectors or countries could enhance our understanding of contextual variations in gig work dynamics, fostering a more comprehensive understanding of gig complexities.

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