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Worker well-being in the digital economy: Lens through bibliometrics analysis

Author:
Darlington T. Chigori[1]

Affiliation:
[1]Department of Business Management, Faculty of Management and Commerce, University of Fort Hare, East London, South Africa

Corresponding author:
Darlington Chigori,
dchigori@ufh.ac.za

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Orientation: The study employed bibliometrics analysis to investigate key research themes and trends on digital economy and worker well-being.

Research purpose: The study aims to provide a comprehensive understanding of worker well-being and digital economy to identify prominent and emerging research themes in this domain.

Motivation for the study: Given the rapid digital transformation of workplaces, there is a need to assess literature trends on workers' well-being and the digital economy.

Research approach/design and method: The study employed a quantitative bibliometrics analysis to map literature on worker well-being and the digital economy. Data from Scopus were collected and screened through Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA). A total of 1473 documents were considered meeting the study's criteria. The scientific literature production, country scientific production, conceptual structure (co-occurrence network, thematic map and thematic evolution) and keyword analysis were used to analyse the data.

Main findings: The analysis revealed the following key themes, including *task performance, emotional labour, employee voice, career adaptability, job satisfaction, employee well-being, work engagement, proactive personality and psychology of work*.

Practical/managerial implications: The findings underscore the need for organisations to implement employee well-being initiatives and support mechanisms to address the challenges posed by digital work environments.

Contribution/value-add: This study contributes to the existing literature by providing a detailed map of the research landscape. The study shows the need to address well-being challenges because of poverty, vulnerability and changing psychology of work. The study also shows importance of adaptability, work engagement and support systems for employees.

Keywords: worker well-being; digital economy; employee engagement; job satisfaction; employee voice; job insecurity.

Introduction and background

The digital economy plays a crucial role in the changing world of work through digital work platforms. These platforms significantly impact employee well-being and the ability to participate in the digital revolution (Umair et al., 2023). The digital divide, exacerbated by digital disruption, introduces environmental turbulence because of digital innovation (World Bank, 2019). Regardless of the field of work, technology has permeated all processes and functions within the workplace. Consequently, employees experience disruption, changing workspace, increased stress and job insecurity, impacting their overall well-being and productivity (Cheng et al., 2012; Lord, 2020). In emerging economies, a noticeable trend is that worker exploitation continues to degrade the average citizens' livelihoods (Matlala, 2021). The exploitation is noticeable within the broader context of the digital economy, where technological innovations have reshaped traditional labour markets. While the digital economy expedites the gig economy (*labour market prevalent of short-term work contracts or freelance work*) (Kavese et al., 2022), gig workers are often vulnerable to exploitation by employers who take advantage of their non-traditional work status (Graham & Anwar, 2019; Lu et al., 2022; Palhad et al., 2023). The arrangement diminishes the chances of reducing inequalities in emerging economies such as South Africa.

Will income equality and worker well-being ever be a possibility? Given the ever-evolving digital age landscape (Chigori et al., 2024), the digital economy requires amendment towards digital work equity, the intricacies of the gig economy and worker well-being. The changing digital workplace, characterised by the rise of the gig economy turbulence (Lord, 2020), presents additional challenges and opportunities for employees and employers in emerging economies. Tapia et al. (2024) discuss the implications of the gig economy on job security, income stability and traditional employment structures, particularly in Africa. Balancing the benefits of gig work with safeguarding workers' well-being is essential for promoting inclusive growth and sustainability, as highlighted by Leighton and McKeown (2020).

With the rise of digital platforms and artificial intelligence (AI), traditional jobs are being replaced by automation, and new job roles are emerging (Palhad et al., 2023). This shift creates opportunities and challenges for workers. In many instances within the gig economy, AI algorithms are employed to determine pay rates, often with minimal human oversight (Lord, 2020). While this leads to efficient and data-driven decision-making in recruitment and compensation, concerns about transparency and fairness have been raised as algorithms disregard individual circumstances (Chen, 2023). The gig economy has revolutionised work, enabling individuals to work independently in customised workspaces that differ significantly from traditional management concepts. However, the reliance on AI in determining compensation underscores the need for careful consideration of the potential impacts on workers' livelihoods.

Changing digital workplaces, such as the gig economy, present further challenges for emerging economies, shaping the landscape of work and digital entrepreneurship (Graham & Anwar, 2019; Kraus et al., 2018; Richter et al., 2017; Shibata, 2019). While the flexibility and low entry barriers of gig work can empower individuals to participate in the digital economy (Behl et al., 2022), it also exposes them to precarious employment conditions and limited access to social protections (Graham et al., 2017). The gig economy, characterised by flexible work arrangements, can lead to challenges such as information asymmetry, unfair incentives and precarious working conditions, negatively affecting worker health and safety (Palhad et al., 2023).

In Africa, where informal economies dominate, the gig economy's expansion intersects with existing socio-economic realities relating to decent work, raising concerns about job security, income stability and the erosion of traditional employment structures (Tapia et al., 2024). Balancing the potential benefits of gig work with the need to safeguard gig workers' well-being and promote inclusive growth poses a significant challenge for policymakers and businesses in emerging economies (Leighton & McKeown, 2020). Addressing these pressing issues requires concerted efforts to bridge the digital divide, foster innovative e-leadership and ensure the inclusive growth of the digital economy in Africa and other emerging regions (Tapia et al., 2024). Therefore, the study uses bibliometrics to map the digital economy and gig worker well-being trends.

Theoretical development and conceptualisation

The digital economy presents a mismatch between employees' abilities or skills and experience in a dynamic work environment, thereby threatening their well-being (Umair et al., 2023). The digital economy and platform work are not static but dynamic (Wood et al., 2019). In this economy, employees and businesses are no longer restricted by the geographical location of the workers or business. Li et al. (2022a) cited that digital economy through digital platform work opens new work channels for immigrant workers.

Within the backdrop, the advent of the digital economy represents a transformative shift in how work is organised and conducted globally. This transformation is driven by technological advancements that have facilitated the rise of digital platforms, enabling new forms of employment such as gig work. Theoretical frameworks around the digital economy often emphasise its dynamic nature, characterised by constant innovation and disruption (Umair et al., 2023). This dynamism introduces a mismatch between employees' skills and the rapidly evolving demands of digital work environments. Consequently, employees frequently experience heightened stress, job insecurity and challenges to their overall well-being.

The digital economy is not confined by geographical boundaries, allowing businesses and employees to connect and collaborate across vast distances (Li et al., 2022a). This global reach fosters a more inclusive labour market where individuals can participate regardless of physical location. However, this inclusivity comes with its own set of challenges. The flexibility and independence offered by gig work are double-edged swords, providing opportunities for some while exposing others to precarious working conditions and income instability (Malinga, 2024).

Digital economy and gig work in South Africa

South Africa's integration into the digital economy has been marked by rapid growth and significant opportunities. Digital platforms and mobile applications have revolutionised how work is sourced and executed, particularly in e-hailing, e-commerce, entertainment and online delivery (Achieng & Malatji, 2022). The digital economy has proliferated recently, with 3.9 million gig workers (Van Belle et al., 2023; Van Doorn et al., 2022). Digital platforms provide an accessible entry point into the labour market for many (Matlala, 2021), such as ride-sharing, home cleaning and freelance work, with no traditional full-time jobs with benefits.

However, gig work in South Africa operates within a context of high unemployment and pervasive income inequality (Heinonen, 2023; Malinga, 2024). The flexibility and low barriers to entry that characterise gig work make it an attractive option for many individuals struggling to find

traditional employment. Nevertheless, lacking job security and benefits in digital platform work can exacerbate socio-economic disparities. Gig workers often face exploitation (Collins, 2024), as their non-traditional employment status leaves them vulnerable to unfair labour practices (Tapia et al., 2024).

Digital platform employees are not entitled to critical social benefits in South Africa, such as holiday pay, sick leave, unemployment insurance or the right to file a lawsuit if dismissed unfairly (Matlala, 2021). The fact that the South African labour market is marked by multiple aspects of inequality, such as spatial, racial and gendered disparities, is another factor that adds to the injustice faced by platform workers (Van Belle et al., 2023). These disparities and the platform economy interact in specific ways. For instance, digital labour platforms worsen already-existing inequalities and patterns of poverty and exclusion based on gender, race and other factors, even though they have the potential to give those in need decent work opportunities. This scenario exacerbates the challenges of employee well-being as low-quality labour conditions and insecurity characterise these opportunities.

Theoretical perspectives on labour market segmentation help to explain the dual nature of digital economy work in South Africa. On the one hand, gig work can provide immediate income and flexibility, contributing to economic inclusion (Llena-Nozal et al., 2019; Malinga, 2024). On the other hand, it often fails to provide long-term security and stability, reinforcing cycles of poverty and inequality. Addressing these issues requires a nuanced understanding of the local economic context and targeted interventions that protect gig workers' rights while promoting sustainable economic growth. Various researchers highlight how digital platforms and gig economy workers have constant well-being issues (Graham et al., 2017; Keith et al., 2020).

Digital economy, decent work and employee well-being

The digital economy's impact on employee well-being is profound and multifaceted (Arendt, 2015). Digital work platforms demand high flexibility and availability, often blurring the boundaries between work and personal life (Matlala, 2021). This constant connectivity can increase stress and burnout as workers struggle to balance their professional and personal responsibilities. The gig economy exacerbates these issues because of the lack of traditional employment benefits such as health insurance, paid leave and retirement plans (Leighton & McKeown, 2020).

Algorithmic management, a common feature of digital platforms, further complicates the well-being of gig workers. Algorithms determine work assignments, performance evaluations and pay rates, often with little transparency or accountability (Jarrahi et al., 2021). This creates a sense of surveillance and loss of control among workers, contributing to job dissatisfaction and psychological stress (Graham et al., 2017). Moreover, the competitive nature of gig work can lead to unhealthy work practices, as workers push themselves to meet unrealistic targets set by algorithms.

Developing policies that provide social protections and support for gig workers are essential to mitigate these negative impacts (Palhad et al., 2023). This includes ensuring access to healthcare, establishing fair wage standards and creating mechanisms for dispute resolution. In addition, fostering a supportive work environment that prioritises mental health and well-being is crucial (Chinyamurindi et al., 2023; Ruzungunde et al., 2023). Employers and platform operators must recognise their responsibility to promote decent work, healthy work–life balance and provide resources for stress management and mental health support (Chinyamurindi et al., 2023).

Decent work, as defined by the International Labour Organization (ILO), is quality work that is acceptable in remuneration, equal and fair treatment, and safe working conditions (Mokofe, 2022). Achieving decent work in the digital economy involves addressing the unique challenges digital platforms pose. Traditional labour regulations a lack applicability to gig workers. They leave gig workers without the protections and benefits employees enjoy in conventional employment settings (Richter et al., 2017). Empirical studies underscore the precarious nature of gig work and how it affects employee well-being. Various studies highlight the effects of gig work against efforts to achieve decent work.

For instance, Shibata (2019) emphasises the role of algorithms in creating asymmetries of power between workers and platform operators. Similarly, Behl et al. (2022) discuss the exploitation of gig workers because of their non-traditional employment status, calling for more robust regulatory frameworks to protect their rights. In the context of South Africa, the literature points to the dual nature of gig work. While it offers immediate income opportunities, it often fails to provide long-term economic security. Matlala (2021) highlights the exploitation of gig workers in South Africa, emphasising the need for targeted interventions to address these issues. Tapia et al. (2024) discuss the broader implications of the gig economy on job security and income stability, particularly in emerging economies.

Methods

The study maps the literature on worker well-being and the digital economy. The study used the bibliometrics analysis to quantitatively assess literature trends on well-being of workers in the rapidly evolving digital economy. Zimmermann (2000) highlights the emergence of digital economy in the early 2000s. Considering the above, data were collected from the Scopus database for the period 1999–2023. The scientific secondary data from Scopus provide high-quality academic research articles, books and conference articles (Baas et al., 2020; Chigori et al., 2024). Thus, the Scopus database offers a range of tools for analysing the impact of scientific publications, such as the h-index,

frequency charts and statistical analysis tools. To ensure a comprehensive query search, the author used various keywords, including (all ['digital economy' and 'well-being'] or all ['digital economy' and 'well-being'] or all ['decent work' and 'well-being'] or all ['gig economy' and 'well-being'] or all ['decent work' and 'well-being'] or all ['gig economy' and 'well-being'] and pubyear > 1999 and pubyear < 2024) to search peer-reviewed articles. The disciplines most aligned to the study were chosen to be business, management and accounting. This decision was based on the understanding that human resources management (HRM) exists within these areas. Data analysis was conducted using VOSviewer version 1.6.20 and RStudio version 2024.04.2-764.

Validation and data screening

The initial screening of records used for the study was based on keywords related to the digital economy and workers' well-being (see Figure 1). Choosing keywords was necessary to ensure that the appropriate records were retrieved. Validation and screening were conducted through PRISMA. Initially, 10 616 records were identified. After applying initial screening criteria, which excluded conference article, reviews, books, non-English articles and articles in-press, 9143 records were excluded. The exclusion of the mentioned documents was informed by their lack of appropriate bibliometrics information and incomplete records (Chigori et al., 2024). The inclusion criteria focused on articles related to the digital economy, employee well-being, gig work, decent work, digital labour and the gig economy, with searches conducted across all fields or within specific topics. The selected articles were published between 1999 and 2023 and were required to be in English.

Ethical considerations

Ethical clearance to conduct this study was obtained from the University of Fort Hare, Inter-Faculty Human Research Ethics Committee, ref no. CHI001-23. While the data were collected in a well-recognised database, various exclusion and inclusion criteria were used to screen the required data. Only the fully published journal articles were included. A secondary data usage ethical clearance was sought to ensure that data meet ethical requirements.

Results of the study

The study used different techniques for analysis such as literature production, co-occurrence analysis, author keyword analysis, thematic evolution and theme mapping. Although early research on the digital economy and well-being was recorded in early 1999 (see Figure 2), little attention was paid to it until 2010. From 2012 onwards, publications on the topics queried continue to increase gradually. Figure 2 shows an augmented growth in publications in the digital economy and employee well-being research in the previous two decades. The year 2023 exhibited the highest number of publications (n = 460) (see Figure 2) in this field. By July 2024, 318 final and 195 in-press publications showed an upward trend in the research on the digital economy, employee well-being and further areas for exploration. All articles for the year of 2024 were not included. The decision that stemmed from that the year is incomplete; hence, including any material in the year 2024 would be a bias. The average annual growth rate of publications is 29.1%. The publications on the digital economy and worker well-being are found in different fields, including Business, Management and Accounting. Previous studies on the digital economy and employee well-being focused on physical, subjective, psychological and social well-being (Li et al., 2022b); work exhaustion and technostress (Wang et al., 2022) and work value orientations (Shevchuk et al., 2018). These highlighted the inequality in income and lack of workforce benefits, uberification, the future of work, sustainable work practices and platform employment evolution.

Literature growth on workers' well-being and digital economy

The development of scientific literature on the digital economy and workers' well-being, as illustrated (see Figure 2) by the number of articles published from 1999 to 2023 demonstrates a significant and accelerating interest in this field. From 1999 to 2009, the initial years show modest growth with a gradual publication increase. This period likely reflects the early stages of digital economy research, where foundational studies were conducted to explore the nascent relationship between digital technologies and labour markets. The literature during this time was more exploratory, setting the stage for more detailed investigations and identifying critical areas of interest, such as the impact of digitalisation on employment patterns and worker well-being.

From 2010 onwards, there was a noticeable and sharp increase in the volume of publications, particularly from 2015 to 2023, where the number of articles escalated dramatically from (n = 19) in 2015 to (n = 460) in 2023 (see Figure 2). This exponential growth underscores the escalating relevance and urgency of understanding the

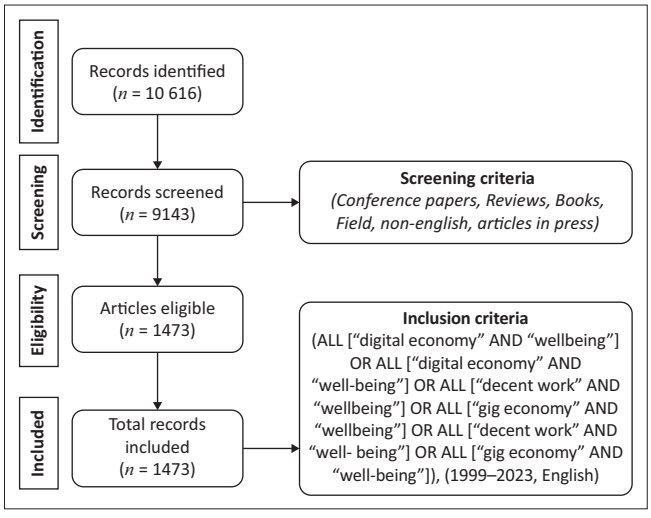

FIGURE 1: Preferred reporting items for systematic reviews and meta-analyses flowchart.

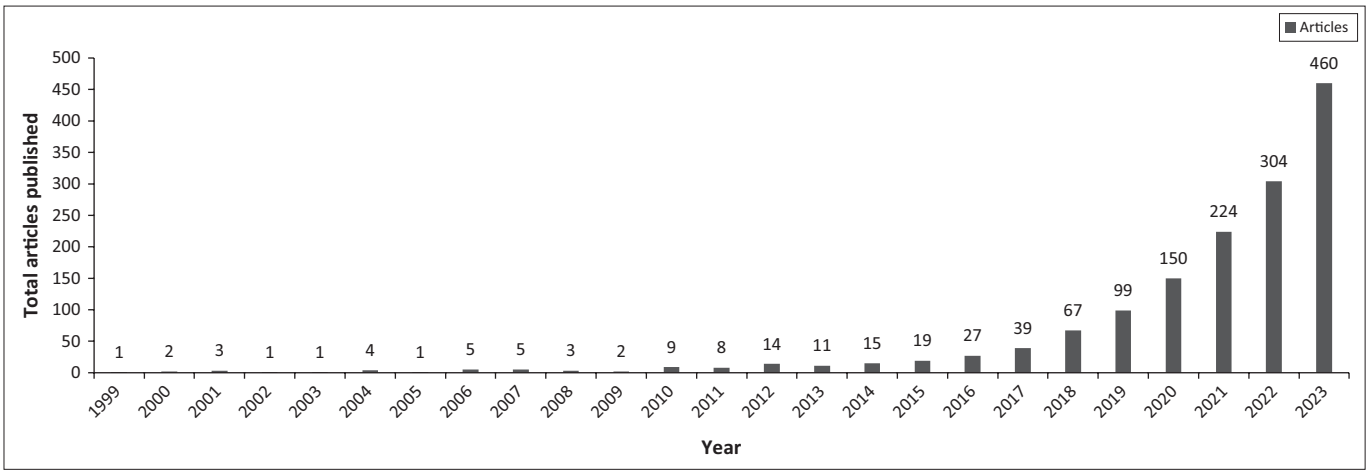

FIGURE 2: Annual article scientific production.

digital economy's implications on worker well-being, driven by rapid technological advancements and transformative shifts in labour practices. The spike in publications during this period can be attributed to the proliferation of digital platforms, the rise of the gig economy and the significant changes brought about by the coronavirus disease 2019 (COVID-19) pandemic, which intensified the focus on remote work, job security and digital inclusion. This surge indicates a heightened academic and policy interest in addressing the multifaceted challenges and opportunities posed by the digital transformation of economies and labour markets, emphasising the need for comprehensive and interdisciplinary approaches to navigate these changes effectively (Paul, 2018).

Country literature production analysis

Figure 3 illustrates the global distribution of scientific production across various countries. The United States is the leading contributor of publications (n = 561), underscoring its dominant role in global scientific research. This prolific output is likely fuelled by substantial investments in research and development, a robust infrastructure of research institutions and a favourable environment for scientific inquiry. Countries such as China (244), India (n = 171) and Australia (n = 281) also demonstrate notable scientific productivity, indicating their growing emphasis on research and development. These nations have increasingly recognised the importance of scientific research in driving innovation and economic growth, thus investing heavily in their respective scientific communities.

European countries such as the United Kingdom (n = 117), Germany (n = 63) and France (n = 47) maintain a strong presence in scientific production, reflecting their longstanding traditions of academic excellence and research. Meanwhile, countries in Africa and South America exhibit comparatively lower scientific output, with South Africa (n = 106) being a notable exception within Africa. The disparities in scientific production across different regions highlight the varying access levels to resources, funding and infrastructure critical for scientific research (Chigori et al., 2024). To foster a more globally balanced scientific community, efforts to bridge these gaps could involve international collaborations, increased funding and research infrastructure development in underrepresented regions.

Literature mapping and keyword analysis

The bibliometric network visualisation in Figure 4 reveals a complex web of interconnected themes within the digital economy and worker well-being. Prominent clusters, distinguished by different colours, indicate various focal areas within the research. One significant cluster, coloured yellow, revolves around economic growth and analysis. This cluster includes terms such as *economic growth*, *economic analysis*, *panel data* and *competition*, which are central to understanding the broader economic implications of digital advancements. The research here primarily focuses on how technological innovation and competitive markets drive economic growth, leveraging empirical data to draw macroeconomic insights (Llena-Nozal et al., 2019).

Figure 4 illustrates another central theme, represented in green, centres on sustainable development and labour markets. Key terms in this cluster include *sustainable development*, *globalisation*, *labour market*, *labour policy* and *employment*. This cluster highlights the critical intersection of digital technologies and labour dynamics, emphasising the importance of policy frameworks that ensure sustainable and equitable human resources (HR) processes in the digital economy. The themes also address issues such as labour migration, income distribution and protecting vulnerable populations within the digital economy (Van Doorn et al., 2022). For instance, various authors highlight the precarious nature of the digital economy on migrant workers' well-being (Arnoldi et al., 2021; Behl et al., 2022; Nilsen & Kongsvik, 2023). The interlinkage of these terms suggests a holistic approach to understanding the socio-economic impact of digitalisation on labour markets.

The red cluster, focusing on the future of work and employment conditions, includes terms such as *future of*

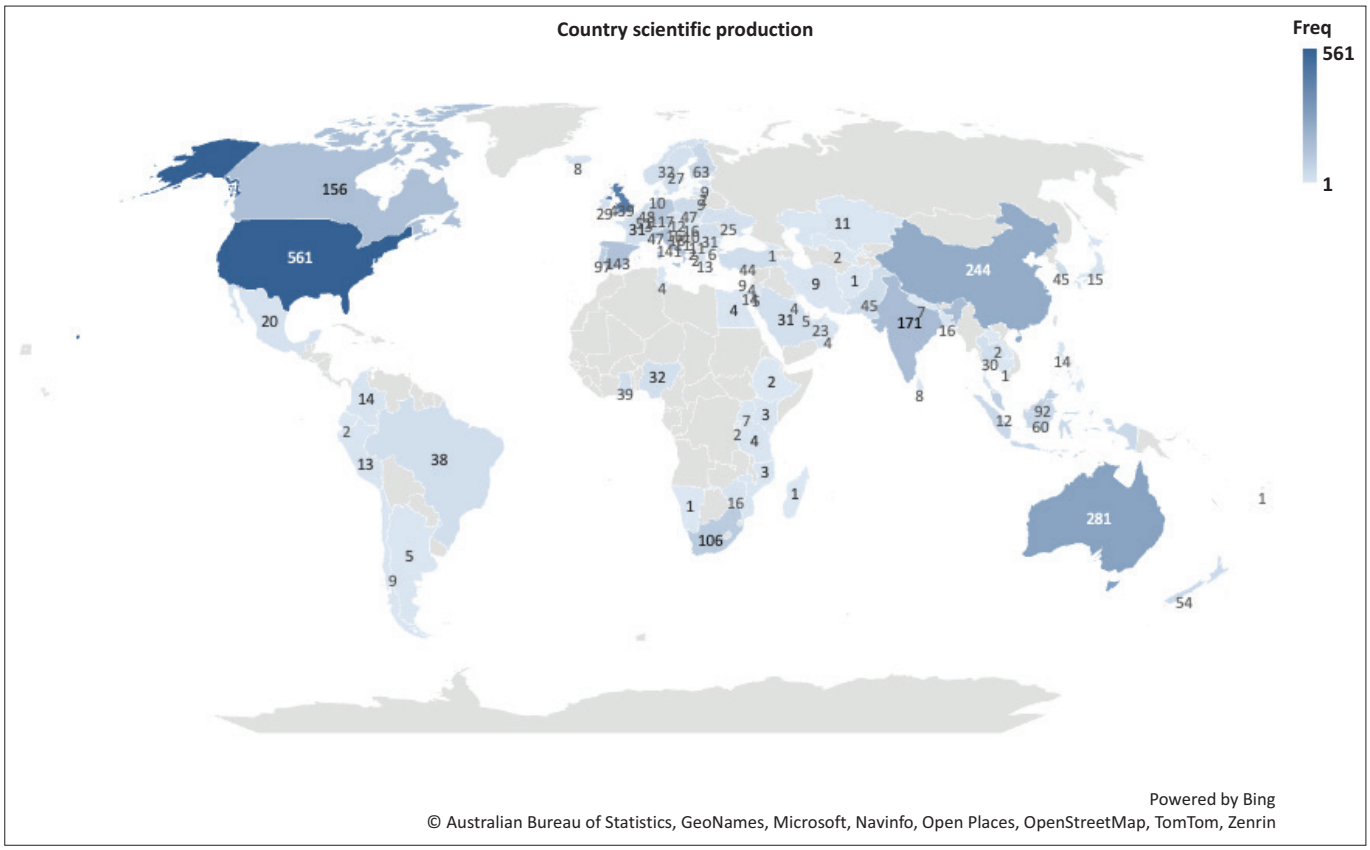

FIGURE 3: Country scientific production map.

work, *decent work*, *AI*, *working conditions*, *job security* and *remote work*. The theme explores the transformative effects of digital technologies (i.e. AI) on employment patterns, emphasising the rise of gig economy and remote work. Researchers within this cluster examine how these shifts influence job security and working conditions (Umair et al., 2023; Wang et al., 2022), advocating for policies that balance the flexibility offered by digital work arrangements with the need for stable and secure employment (Li et al., 2022b). The detailed examination of these terms underscores the dual nature of digital transformation, offering new opportunities while posing significant challenges to worker well-being.

The pink cluster, highlighting the impact of COVID-19, includes terms such as *COVID-19*, *pandemic*, *emotional labour*, *self-efficacy*, *work–family conflict*, *employment* and *income*. This theme captures the profound impact of the pandemic on the digital economy, family challenges and worker well-being. The research here is critical for understanding the immediate and long-term effects of COVID-19 on employment and income levels, illustrating how the pandemic has accelerated digital transformation and reshaped labour markets. Studies in this cluster provide insights into developing resilient strategies to mitigate future crises' impact on the digital economy and workforce (Cheng et al., 2012; Leighton & McKeown, 2020). The integration of these terms reflects the pandemic's significant role as a catalyst for change in the digital work landscape.

The brown cluster delves into the human and social dimensions of the digital economy, focusing on terms such as *quality of life*, *career adaptability*, *psychology of working*, *health*, *emotional labour*, *life satisfaction* and *well-being*. This cluster highlights the significant impact of digital work environments on various facets of worker well-being, including physical and mental health. It emphasises the role of emotional labour in digital settings, where workers often need to manage their emotions and stress levels to meet job demands (Umair et al., 2023; Wang et al., 2022). In addition, the cluster underscores the importance of career adaptability, reflecting how workers must continuously adjust to technological changes and new working conditions. Ultimately, this thematic focus advocates for comprehensive well-being initiatives to enhance life satisfaction and support employees in navigating the complexities of the digital economy (Li et al., 2022b; Umair et al., 2023).

Thematic map analysis

The thematic map analysis (see Figure 5) illustrates various themes related to the digital economy and worker well-being, categorised by their development degree (density) and relevance (centrality). The upper right quadrant, labelled motor themes, shows highly central and well-developed topics within the discipline, such as the gig economy, platform work, sharing economy and work. These themes are critical to understanding the contemporary digital labour landscape, where the gig economy and platform-based employment models have become increasingly prevalent

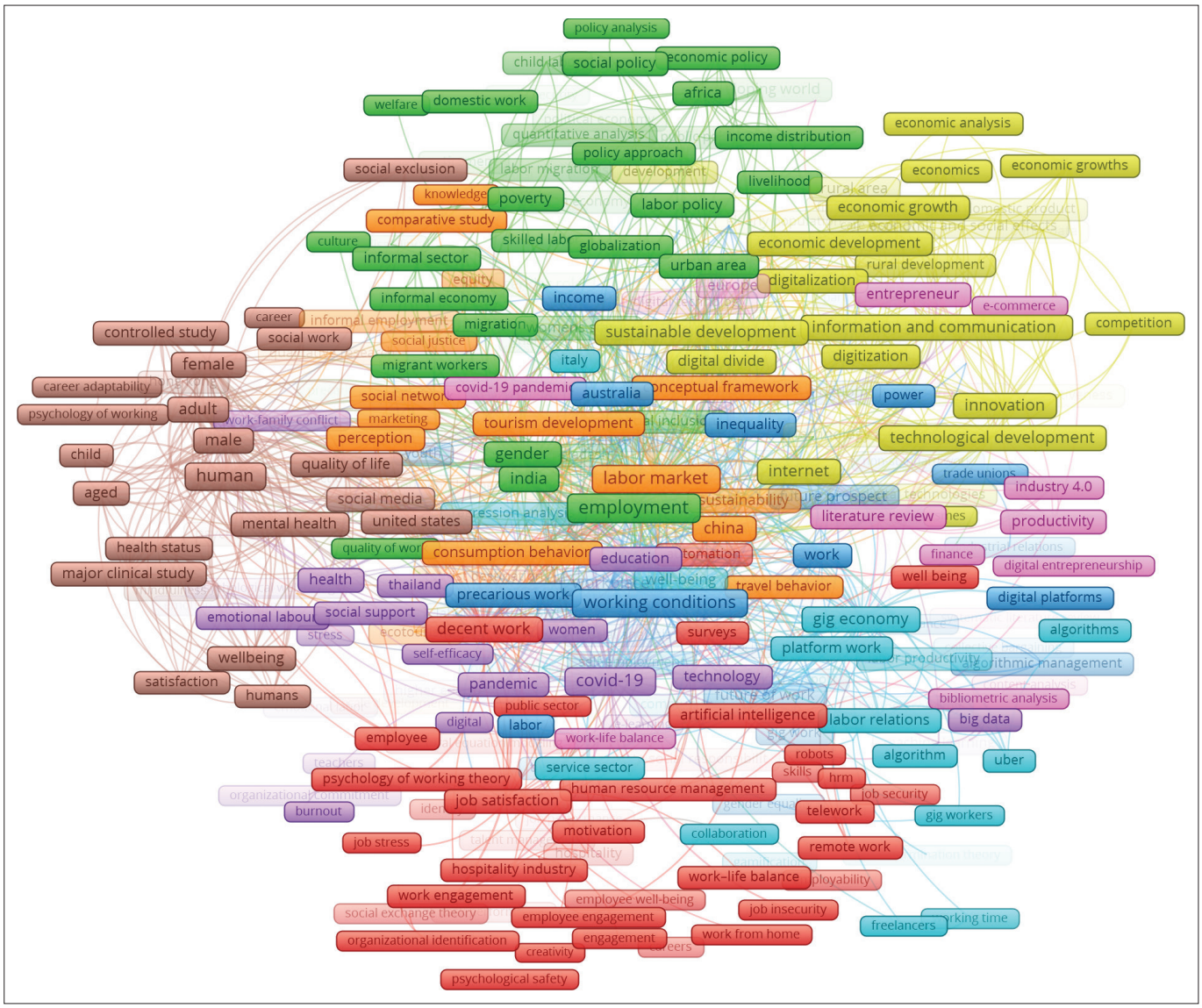

FIGURE 4: Keyword analysis map.

(Behl et al., 2022; Graham & Anwar, 2019; Rahman et al., 2023). The appearance of terms such as gender and China in the right upper quadrant further suggests a focus on demographic and regional studies within these frameworks, highlighting the significant influence of these factors on labour dynamics.

'The lower right quadrant represents basic themes, including *employment*, *health*, *pandemic*, *telework* and *job insecurity*. These themes are fundamental to the discourse on the digital economy and worker well-being, reflecting core concerns heightened by the COVID-19 pandemic (Malinga, 2024; Matlala, 2021). The emphasis on teleworks and job insecurity underscores the widespread shift to remote work and the accompanying challenges workers face in maintaining job stability and health during and after the pandemic. The centrality of these themes indicates their foundational role in ongoing research and policy discussions (Li et al., 2022b).

The left side of the map reveals less central but still significant themes. In the upper left quadrant, niche themes such as *social media*, *vulnerability* and *informal economy* are present. While not as central, these themes represent specialised areas of study that contribute nuanced insights into the broader digital economy narrative. The focus on the informal economy and social media suggests an interest in how digital platforms impact less formalised labour markets and social dynamics. In the lower left quadrant, 'Emerging or declining' themes such as *well-being*, *inequality* and *poverty* indicate areas that are either gaining traction or losing relevance in current research. These themes highlight ongoing concerns about the socio-economic disparities exacerbated by digital transformations and the need for policies that address these inequalities (Lombardi, 2023).

Thematic evolution analysis

The thematic evolution map shown in Figure 6 visually represents the progression and clustering of research themes related to the digital economy and worker well-being from 1999 to 2023. This map is divided into distinct periods, highlighting key emerging and evolving themes. This

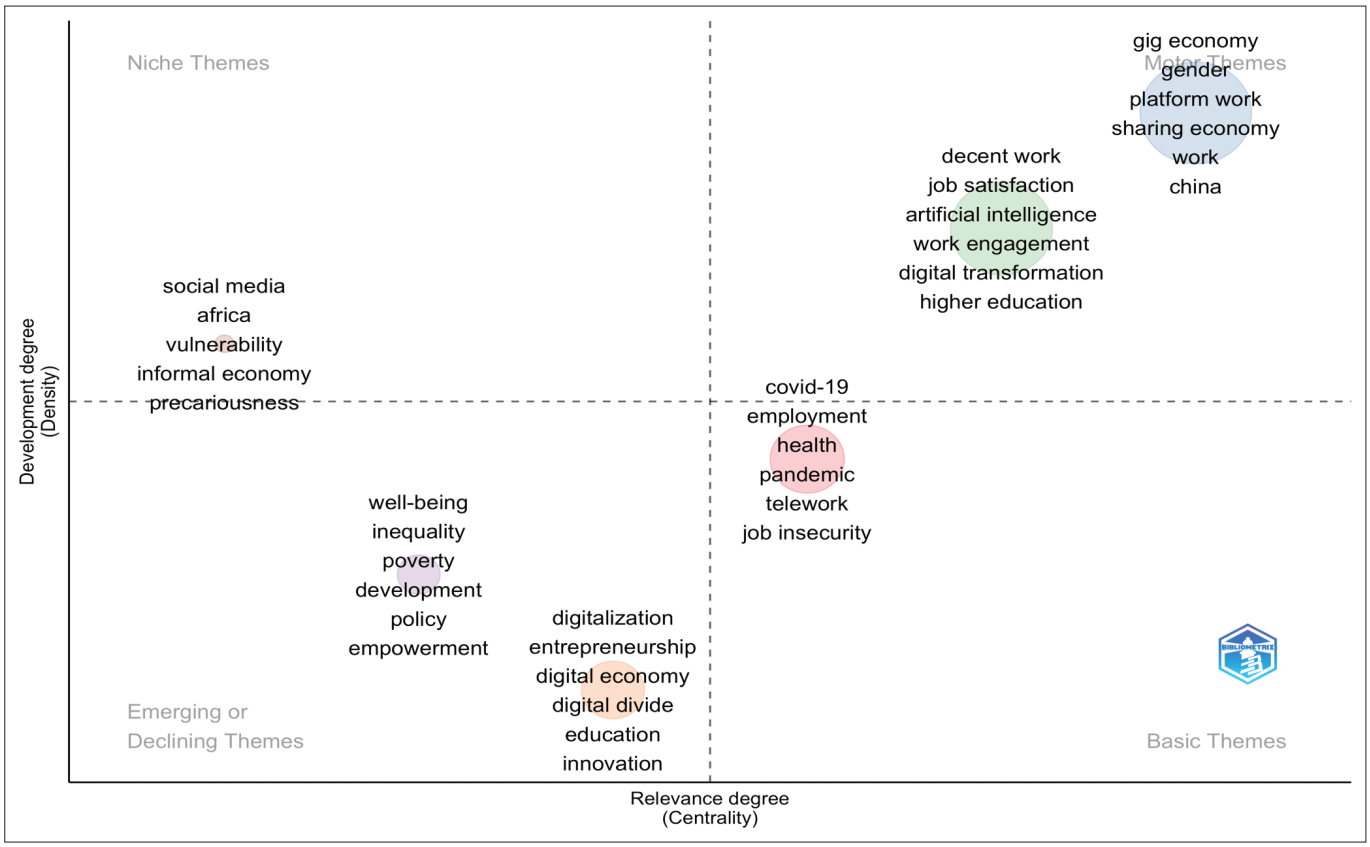

FIGURE 5: Thematic map and conceptualisation.

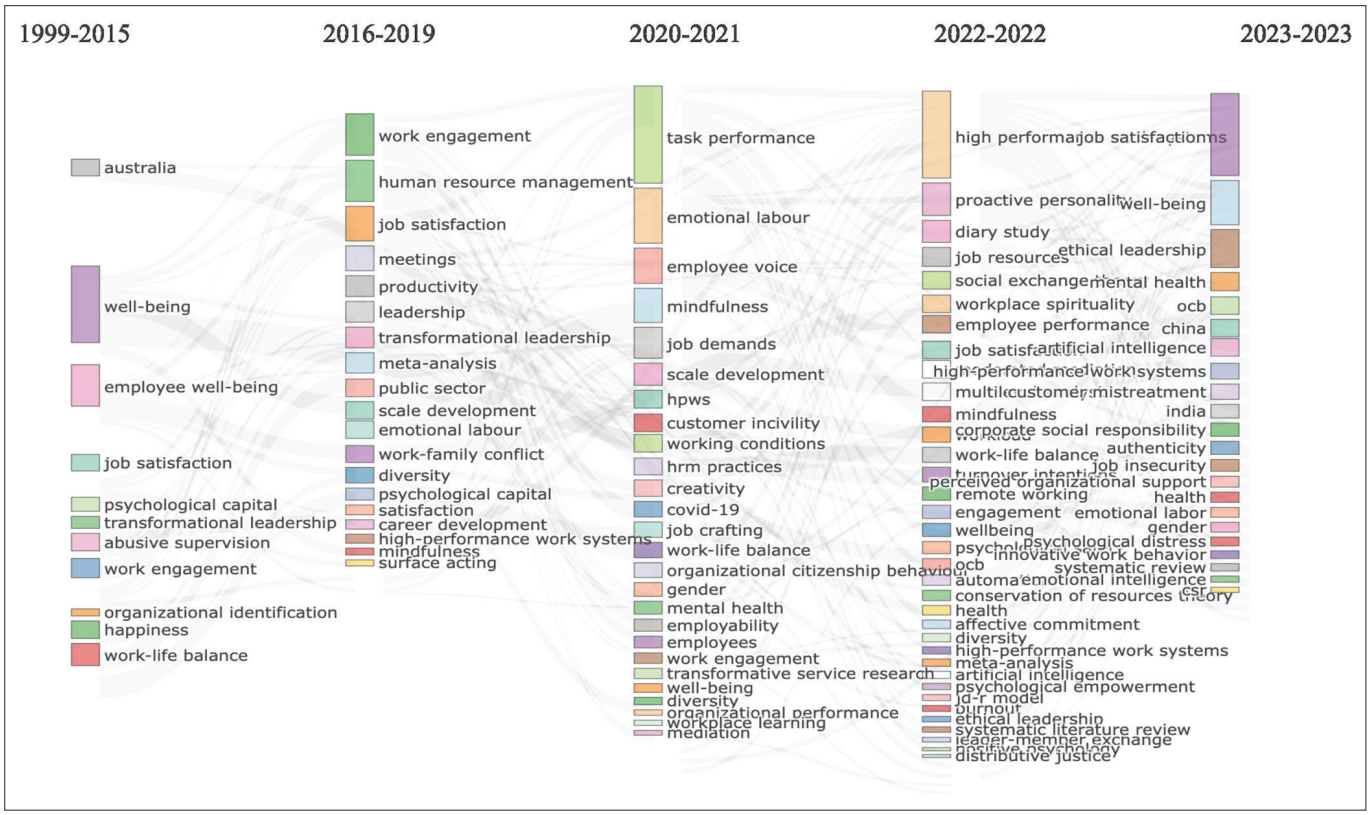

FIGURE 6: Thematic evolution of literature on well-being and digital economy.

analysis critically examines the thematic evolution and clusters, linking these trends with HRM evolution.

From 1999 to 2015 (see Figure 6), the primary themes revolve around well-being, job satisfaction and psychological capital. These foundational themes highlight early research on understanding the fundamental determinants of worker satisfaction and well-being within traditional work environments. Notably, themes such as *well-being*, *employee well-being* and *job satisfaction* are prominent, emphasising understanding how these factors influence productivity and organisational outcomes (Umair et al., 2023). This period corresponds to the early stages of HRM, where the focus was primarily on administrative functions and ensuring essential employee satisfaction to enhance productivity (Cheng et al., 2012; Wang et al., 2022).

The period from 2016 to 2019 shows a shift towards more specific aspects of work engagement and transformational leadership. Themes such as *work engagement, human resource management* and *transformational leadership* indicate a growing interest in how leadership styles and engagement strategies impact employee well-being and performance (Hooi & Chan, 2023). This evolution mirrors the transformation within HRM, moving from a purely administrative role to a more strategic function that incorporates leadership development and employee engagement as critical components of organisational success (Li et al., 2022b).

From 2020 to 2021, the thematic focus shifts towards task performance, emotional labour and employee voice. This period captures the impact of the COVID-19 pandemic, which significantly altered work dynamics and highlighted the importance of understanding *emotional labour* and *employee voice* in remote and hybrid work settings (Umair et al., 2023; Wang et al., 2022). Themes such as *task performance, emotional labour* and *employee voice* underscore the challenges and adaptations required in HRM practices to support employees during unprecedented times, emphasising the need for resilience and adaptability in HR strategies (Lu et al., 2022).

In the most recent period, from 2022 to 2023, the themes have become more diverse and complex, including *high performance, job satisfaction, proactive personality* and *well-being*. The emergence of themes such as *high performance, proactive personality* and *well-being* indicate a continued emphasis on optimising employee performance while ensuring their holistic well-being (Van Belle et al., 2023; Wang et al., 2022). This period reflects the advanced stage of HRM, with a balanced focus on driving high performance and maintaining employee well-being through innovative and proactive HR practices. These HR practices include promoting workplace spirituality, addressing job insecurity and leveraging AI to enhance HRM processes (Matlala, 2021).

The thematic evolution illustrates a comprehensive progression from foundational concepts of employee well-being and job satisfaction to more complex and integrated themes that address contemporary challenges and opportunities in the workplace (Arendt, 2015). This evolution aligns with the transformation of HRM from an administrative function to a strategic partner, emphasising leadership, engagement, resilience and proactive strategies to foster a productive and healthy workforce in the digital age.

Practical managerial implications and recommendations

The various analyses of the digital economy and worker well-being reveal significant insights that have profound implications for the future of HR. The emergence of themes such as the gig economy, platform work and telework highlights a fundamental shift in employment patterns, necessitating new HR strategies (Cheng et al., 2012; Collins, 2024; Leighton & McKeown, 2020). The flexibility offered by these work models provides opportunities for increased worker autonomy and efficiency. However, it also introduces challenges related to job security, worker rights and the need for continuous skill development (Kergroach, 2021). Human resources professionals must develop policies that balance the benefits of flexible work arrangements with robust protections for workers, ensuring that the workforce remains motivated and secure (Olawale et al., 2024).

The impact of COVID-19 on employment has further underscored the necessity for adaptive HR practices (Leighton & McKeown, 2020). The pandemic has accelerated the adoption of remote work, bringing health, job insecurity and worker well-being issues to the forefront (Heinonen, 2023). Human resources departments must prioritise mental health support and create resilient and decent work environments that can withstand future crises (Chinyamurindi et al., 2023; Ruzungunde et al., 2023). This includes implementing comprehensive health programmes, fostering a culture of open communication and ensuring that remote work policies are equitable and inclusive. The centrality of these themes in the thematic analysis suggests that HR must continuously evolve to address the changing work landscape (Achieng & Malatji, 2022; Lord, 2020).

Human resources must advocate for inclusive and equitable practices to address the socio-economic disparities revealed in the analyses. The themes of inequality, poverty and well-being highlight the need for HR to promote diversity and inclusion within organisations proactively. This involves fair hiring practices and ensuring all employees have opportunities for advancement and professional development (Van Belle et al., 2023). In addition, HR should leverage digital tools and data analytics to monitor and address disparities, making informed decisions that foster an inclusive workplace (Achieng & Malatji, 2022; Bianchini & Michalkova, 2019). Prioritising these areas can assist HR to build a more equitable and sustainable future for all workers.

Limitations

The bibliometric analysis methodology offers significant benefits to this study by providing a clear visualisation of thematic clusters and their interconnections, facilitating an understanding of the research landscape. It enables the identification of dominant and emerging themes, aiding in comprehending the broader context of digital economy and worker well-being research. However, this methodology has limitations, such as its reliance on keyword co-occurrence, which may miss nuanced and less frequent yet important connections. The analysis depends on the quality and comprehensiveness of the databases, potentially overlooking significant studies in less accessible journals. Furthermore, bibliometric analysis treats all publications equally, not accounting for the varying quality and impact of individual studies (Zupic & Čater, 2014).

Conclusion

The literature emphasises the importance of inclusive growth and sustainability in the digital economy. Leighton and McKeown (2020) argue that balancing the benefits of digital platform work with the need to safeguard workers' well-being is essential for promoting inclusive growth. Efforts such as expanding internet access, developing digital skills training programmes and supporting entrepreneurship can bridge the digital divide, foster e-leadership and ensure inclusive growth in the digital economy in Africa and other emerging regions. This can ensure employee well-being is achieved and foster decent work in the digital economy, which requires a nuanced understanding of these dynamics and targeted interventions that balance flexibility with security. Collaborative efforts such as establishing minimum wage standards, implementing health and safety regulations and creating dispute resolution mechanisms can help create a regulatory framework that ensures fair and equitable working conditions for all workers in the digital economy.

It is crucial to implement measures such as anti-discrimination policies, access to legal support and awareness campaigns to protect migrant workers from exploitation in the digital and gig work sectors (Collins, 2024). The HRM and state labour institutions should collaborate to establish a framework that includes mental health support services, training on work–life balance and mechanisms for reporting workplace concerns to safeguard employees' well-being. This framework should include regulations on working hours, fair wages and safety standards, as well as mechanisms for addressing grievances and ensuring compliance. These steps can assist digital and gig workers to be better protected and empowered in the digital and gig economies. The promotion of decent work conditions and ensuring their rights are upheld, thereby ensuring employee well-being. This comprehensive framework will not only benefit migrant workers but also contribute to a more ethical and sustainable digital and gig economy. Human resources management needs to prioritise the mental health and well-being of employees to foster a more productive and motivated workforce. The investment in employee well-being, protection, and empowerment is not only ethical but also financially beneficial in the long run.

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Data availability

The data that support the findings of this study, is available from the corresponding author, D.T.C, upon reasonable request.

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