



Unveiling the Impact of the Gig Economy on Sustainable Development

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Abstract: This paper examines the opportunities and challenges of the gig economy within the framework of the Sustainable Development Goals (SDGs), focusing on some environmental, economic, and social dimensions. It emphasizes the need for fair working conditions, income stability, and ethical considerations to foster an inclusive and sustainable gig economy benefiting workers and society. The gig economy offers environmental benefits through optimized resource utilization, and economic sustainability by generating income opportunities and supporting work-life balance. However, challenges in labor rights, social protection, and income stability persist. The study utilizes both global secondary data and primary data from a survey of 200 gig workers (freelancers) in Slovenia. Through analyzing gig economy data within the context of sustainable development, this study contributes to the ongoing discourse on sustainable practices and inclusivity in the gig economy, urging policymakers and stakeholders to implement measures that promote fairness and sustainability, benefiting both workers and society as a whole.

1. INTRODUCTION

Emerging from technological advancements and shifts in work preferences, the gig economy has transformed conventional employment systems. Through digital platforms, gig workers—often freelancers—offer specialized services to a diverse clientele (Roy & Shrivastava, 2020; Woodcock & Graham, 2019).

One notable benefit of the gig economy is the flexibility it offers to workers in determining their schedules and work locations (Anwar & Graham, 2021). This adaptability appeals to various groups, such as students, part-time workers, and those seeking supplemental income, allowing them to achieve a better work-life balance (Kelliher et al., 2019). Employers, too, find value in this model, gaining swift access to a skilled and diverse workforce, thereby efficiently meeting fluctuating business demands (Burke & Cowling, 2015).

This paper aims to analyze the gig economy within the context of the Sustainable Development Goals (SDGs). We pose the central research question:

How does the gig economy influence sustainable development, specifically addressing its economic, environmental, and social ramifications within the framework of the SDGs?

Understanding the diverse facets of the gig economy—including resource optimization, income generation, and work-life balance—is crucial for evaluating its impact on both contemporary labor markets and future work trends. Such insights also indicate how the gig economy

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contributes to the SDGs, which serve as a roadmap to address global challenges and strive for a more sustainable future by 2030 (Taylor, 2022; United Nations, 2015).

Figure 1 below visually illustrates the interconnectedness of the 17 SDGs, as favored by academic audiences (Folke et al., 2016).

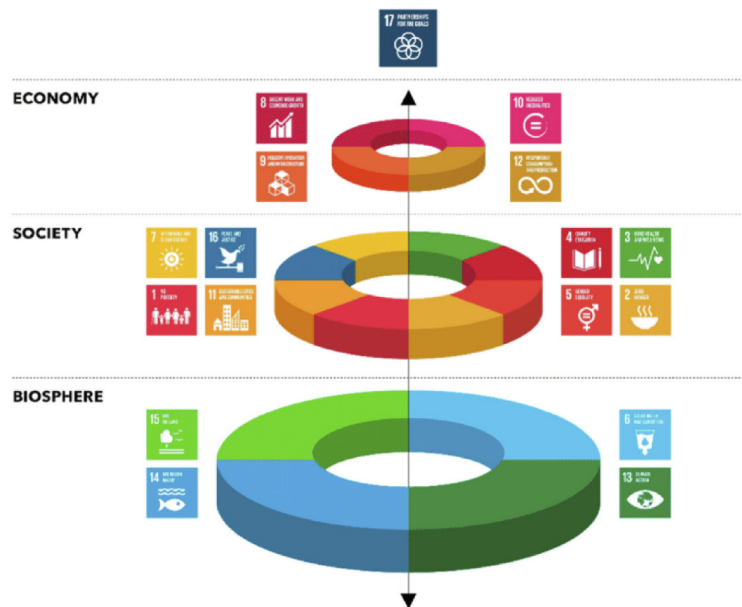


Figure 1. Grouping of the SDGs

Source: Folke et al., 2016

This study particularly delves into:

- **Economic Implications:** The impact of the gig economy on SDGs like Goal 1 (No Poverty) by generating supplemental income, Goal 8 (Decent Work and Economic Growth) by offering flexible employment, and Goal 9 (Industry, Innovation, and Infrastructure) by leveraging digital platforms.
- **Environmental Aspects:** The alignment with Goal 12 (Responsible Consumption and Production) by optimizing resource usage, thereby potentially reducing waste.
- **Societal Perspective:** The contribution to Goal 3 (Good Health and Well-being) through work-life balance, Goal 5 (Gender Equality) by offering equitable opportunities, and Goal 10 (Reduced Inequality) by making employment accessible to various demographics.

Our methodology includes analysis of both secondary literature and primary data from a 2020 survey among Slovenian freelancers. The paper is systematically structured into economic, environmental, and social implications sections, followed by suggestions for future research and conclusions.

2. ECONOMIC AND ENVIRONMENTAL IMPLICATIONS

2.1. Economic Impact and Inclusive Growth

The gig economy has significantly contributed to job creation and income generation by offering individuals various earning opportunities (Farrell et al., 2018). Its adaptable nature aligns jobs with personal skills, schedules, and aspirations. Simultaneously, companies benefit from

access to specialized skills among gig workers, leading to reduced operational costs (ILO, 2020). This operational model transcends geographical constraints, broadening customer bases for individuals, enhancing earnings, and reducing poverty. As such, it advances goals like poverty eradication, decent work, economic growth, and advancements in industry, innovation, and infrastructure.

2.2. Inclusivity and Sustainable Economic Growth

The gig economy's potential to address inclusivity and poverty reduction aligns with Sustainable Development Goals 1 and 8. It offers supplementary income opportunities, particularly aiding those with lower incomes and contributing to poverty alleviation and financial stability. For instance, in 2020, around 36% of the U.S. workforce engaged in gig work, contributing 5.7% to the total GDP (Fennell, 2021). The Freelance Forward survey by Upwork (2022) revealed U.S. freelancers added \$1.35 trillion to the economy, a result of the shift from traditional employment. The growth of gig work could absorb labor, reduce unemployment, and increase overall workforce participation, indirectly reducing poverty rates. Key motivations for gig work include *earning extra income* (83%) and *time flexibility* (73%). A 2020 study of 200 Slovenian freelancers echoed these findings, emphasizing the possibility of choosing their project and realizing their ideas (Huđek & Širec, 2023, p. 71). The gig economy empowers individuals to be microentrepreneurs, using their skills for business ventures and potentially breaking the cycle of poverty. In regions with limited job opportunities, the gig economy provides global participation, ultimately improving living conditions. As it expands, diverse skills are required, driving continuous learning, improved employability, and poverty reduction.

2.3. Accessibility and Empowerment for Individuals with Disabilities

The gig economy's appeal to individuals with disabilities aligns with Sustainable Development Goal 8, promoting inclusive and sustainable economic growth. It addresses discriminatory triggers prevalent in physical employment, such as biases related to disability, accent, attire, and age (De Stefano, 2015; Graham et al., 2017; Huđek, 2022). Additionally, it mitigates accessibility challenges linked to transportation and disability-related obstacles (Zyskowski et al., 2015). Gig work empowers disabled workers, fostering self-reliance, self-esteem, skill development, and practical experience. It also offers an opportunity for individuals facing communication challenges due to disabilities to work without the customary social expectations of traditional workplaces, making it a viable alternative (Harpur & Blanck, 2020). Thus, it contributes to promoting decent work and comprehensive economic growth.

2.4. Entrepreneurship, Innovation, and Infrastructure

The gig economy's influence on entrepreneurship aligns with SDG 9, enabling individuals to initiate businesses, bolster economic growth, and drive innovation. Self-employment demands flexibility, creativity, and problem-solving skills. Independent workers are accountable for generating income and excelling in their chosen field, necessitating innovative ideas, approaches, and solutions (Romero & Martínez-Román, 2012). Gig workers, leveraging digital tools and online platforms, expand and utilize digital infrastructure (Schwellnus et al., 2019), enhancing technology access and connectivity. Moreover, the gig economy fosters global collaboration (Jackson, 2022) among individuals worldwide, enabling project collaboration and expertise exchange. This cross-border knowledge sharing is pivotal for fostering innovation and advancing industry practices.

2.5. Responsible Consumption and Production

Furthermore, the gig economy's potential to promote SDG 12 lies in efficient resource utilization, sustainable work arrangements, innovation, and local economy contribution. Online labor platforms, remote work, and telecommuting could reduce carbon dioxide emissions (Kuzior et al., 2022). Gig work often involves remote and digital-based services, leading to reduced physical resource consumption compared to traditional employment. The gig economy's adaptability empowers individuals to customize work schedules and locations, potentially curbing commuting and carbon emissions and thus supporting sustainable consumption patterns. Gig workers offering localized, on-demand services reduce the need for long-distance transportation, aligning to minimize the environmental impact of production and distribution. Additionally, gig economy platforms can collect and analyze consumption data, enabling informed decisions for more sustainable production and consumption strategies.

2.6. Addressing Challenges

Despite its potential to advance Sustainable Development Goals 1, 8, and 12, the gig economy must tackle challenges. Thriving as a gig economy entrepreneur faces obstacles. Notably, the employment status of gig workers poses a challenge (PwC, 2021). Gig economy workers operate on temporary and contractual terms, lacking various employment rights (such as additional financial benefits and pension contributions) (Berg et al., 2018) and social security. Consequently, gig workers must manage these aspects themselves, including tax payments and self-insurance (Aloisi, 2016). Unpredictable incomes and a lack of conventional support systems can hinder long-term sustainability. Intense competition among diverse gig workers necessitates innovative strategies to differentiate oneself and secure consistent opportunities (Roy & Shrivastava, 2020). Continuous skill enhancement poses a challenge, as gig workers must adapt to rapid industry changes, encountering obstacles such as limited access to formal training, and hindering skill acquisition. Addressing these challenges will be critical to maximizing the potential benefits of the gig economy while mitigating its drawbacks.

3. SOCIAL IMPLICATIONS

The gig economy significantly impacts the social sphere, aligning with SDG 3 (Good Health and Well-being), SDG 5 (Gender Equality), and SDG 10 (Reduced Inequalities). This influence is particularly beneficial for vulnerable groups such as people with disabilities, women, the elderly, and young individuals (OECD & European Union, 2019).

An examination of the Slovenian context reveals diverse profiles of gig workers, with higher male (59%) than female (41%) involvement. The 35-44 age group comprises the largest share (30%) of gig workers in Slovenia, with a notable 42.2% having completed a second level of tertiary education (Huđek & Širec, 2023, p. 65). This data underscores the varied participation in gig work across demographics and educational backgrounds.

Additionally, Upwork's (2019) *Freelancing in America* study establishes a correlation between age and gig work engagement, with younger individuals being more active participants. Similarly, the RSA's extensive survey on Britain's gig economy highlights the allure of gig work among young people (aged 16-30), with a quarter expressing future interest. In light of this expansive growth potential, the RSA envisions platforms as catalysts for equitable and rewarding work in the current labor landscape (Balaram et al., 2017).

3.1. Gender Equality and Flexibility

The gig economy's flexible work arrangements are particularly advantageous for women seeking to balance work and caregiving responsibilities. This flexibility empowers women to participate in the workforce on their terms, enhancing work-life equilibrium. Churchill and Craig (2019) find that the gender divide present in the broader economy is mirrored in the gig economy. Men predominate in platforms for traditionally male tasks like transportation, while women dominate those focusing on traditionally female tasks like caregiving. This suggests the gig economy is a potential alternative for women in creative industries. A survey of 504 participants reveals that both genders are motivated by income enhancement when joining the gig economy, even while holding traditional jobs. Flexibility emerges as a critical incentive for both, yet women cite compatibility with their schedules as a more significant factor, indicating their greater constraint by non-work commitments like family responsibilities. More men than women report effective income generation through gig work.

3.2. Work-Life Balance and Well-being

The gig economy offers new avenues for improved work-life balance. Allowing individuals to set their work hours and locations, facilitates equilibrium. This flexibility can lead to lower stress levels and improved mental well-being, in line with SDG 3's promotion of mental health. Slovenian case results show gig workers to be satisfied with the financial aspect of their subjective well-being, as indicated by income satisfaction. However, satisfaction with non-financial aspects, such as job and career satisfaction and life satisfaction, is even higher. This supports prior findings that gig workers are content with the non-financial dimensions of their work and overall well-being. Notably, life satisfaction receives the highest mean score on a 7-point Likert scale, followed closely by job and career satisfaction.

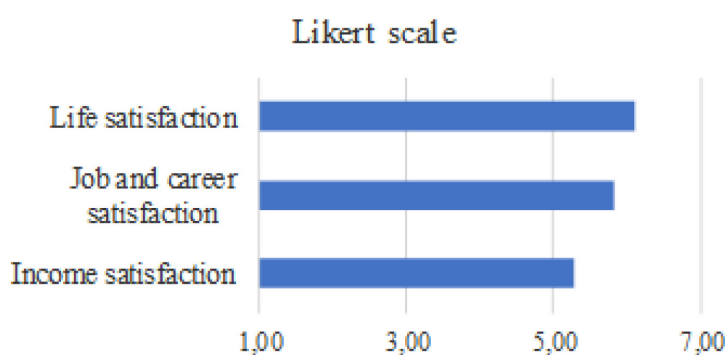


Figure 2. Subjective well-being dimensions of the Slovenia respondents

Source: Own processing

3.3. Social Challenges and Ethical Concerns

Despite these positive aspects, the gig economy presents various social challenges, including ethical concerns, psychosocial risks, and regulatory complexities. Tan et al. (2021) categorizes ethical challenges into three areas: the new work organization, the new nature of work, and the new worker status. Algorithmic systems and price discrimination raise control and exclusion concerns for gig workers. Bérastégui (2021) highlights psychosocial risks due to the organization and management of gig work, while De Ruyter et al. (2018) note regulatory challenges in identifying employers, tax collection, and social protection.

3.4. Job Insecurity and Worker Classification

The gig economy raises apprehensions about job insecurity, worker classification, and international outsourcing. While flexibility is portrayed positively, worker preferences and well-being are sometimes overlooked. The pandemic exacerbated gig labor oversupply in certain sectors, potentially deepening inequality due to a lack of protections. Government intervention to enhance labor safeguards is necessary. While traditional employees enjoy comprehensive rights including healthcare, leave, overtime, and education, modern platform work often lacks such protections, leading to heterogeneous employment. Policymakers need to strike a balance between flexibility, innovation incentives, and worker security. Tailored policies are crucial to address the unique challenges posed by new forms of work.

Stam (2020) emphasizes that fostering innovative entrepreneurship is essential for future prosperity. Governments can support gig workers with financial planning and tax compliance, encouraging legitimate gig work and proper tax contributions. Local governments can collaborate with gig workers and employers to formulate policies benefiting both parties, fostering positive outcomes and potential revenue streams.

4. FUTURE RESEARCH DIRECTIONS

Based on the presented content, we propose several promising directions for future research that can enhance our understanding of the gig economy's implications and potential within the context of sustainable development.

Firstly, an innovative avenue involves the development of novel metrics and assessment frameworks. These tools could facilitate a holistic assessment of the gig economy's role in promoting inclusive and sustainable economic development. Secondly, a comparative exploration spanning diverse countries is essential. Analyzing how regulatory frameworks, cultural dynamics, and economic landscapes influence the gig economy's impact on sustainable development can yield valuable insights and guide the creation of effective policies. Thirdly, a longitudinal investigation is recommended to delve into the lasting economic, social, and environmental effects of gig work over extended timeframes. This comprehensive analysis would significantly contribute to our understanding of its viability as a sustainable livelihood option.

5. CONCLUSION

This study delves into the gig economy's role in furthering Sustainable Development Goals (SDGs) and its potential impact. While it has the potential to alleviate employment barriers and inequalities, challenges like precarious work conditions and social security gaps exist. Addressing these necessitates robust legal frameworks. Fostering an environment that supports fairness can enable the gig economy to contribute positively to sustainable development and equity.

Economically, the gig economy can generate income, create jobs, and alleviate poverty, especially for marginalized groups. Its flexibility empowers microentrepreneurship, breaking the poverty cycle and aligning with SDGs 8 and 9.

Additionally, it promotes responsible consumption (Goal 12) through efficient resource use, emission reduction, and localized services, supporting sustainable consumption patterns and reducing production's impact.

Socially, the gig economy enhances well-being (Goal 3) by enabling work-life balance and challenging gender norms (Goal 5) with equitable opportunities.

While addressing inequalities (Goal 10) with flexible work options, including for those with disabilities, regulatory frameworks must balance gig workers' rights.

In conclusion, the gig economy's transformative impact on labor markets can drive SDG progress. Leveraging its positives, addressing challenges, and fostering responsible growth can align the gig economy with sustainable development. Continued research and cooperation are pivotal for realizing this alignment with the SDG vision.

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