The Rise of the Gig Economy: Global Trends and Policy Implications—A Mixed Methods Study

Natalia Mikhaylovna Esmurzayeva

ABSTRACT

Over the last decade, the gig economy has shifted from marginal to mainstream, propelled by platformization, demand for flexibility, and crisis shocks (COVID-19 and the war in Ukraine). These forces reconfigured work and exposed gaps in social protection, prompting governments to seek updated regulatory responses. Despite the growing political and economic relevance of the gig economy, its sectoral composition, regional characteristics, and regulatory responses remain insufficiently explored, particularly in transition economies. A lack of coherent legal frameworks and inconsistent labor protections for gig workers pose significant challenges to inclusive and sustainable labor market development. This article investigates the structural evolution of the gig economy through a multimethod approach that includes content analysis of industry and statistical reports, comparative legal analysis of regulatory models in the US, the EU, India, China, and Ukraine, and an in-depth case study of Ukraine's gig sector under wartime conditions. Designed as a structured integrative review rather than a primary data investigation, the study introduces two conceptual models: a policy roadmap linking global principles with concrete steps for Ukraine and a causal framework of crisis-driven gig expansion. Together, these models synthesize existing evidence into tools that facilitate cross-country comparison and inform policy design.

Keywords: City hybrid gig contracts, Comparative legal analysis of gig work, Digital platforms, Diia, Flexible employment, Gig economy, Labour rights, Platform-mediated labour relations, Regulatory policy, Social protection gaps for freelancers, Wartime gig economy in ukraine

Independent Researcher, Dnipropetrovsk Region, Ukraine

Correspondence to: Natalia Mikhaylovna Esmurzayeva, esmur89@gmail.com

Additional material is published online only. To view please visit the journal online.

Cite this as: Esmurzayeva NM. The Rise of the Gig Economy: Global Trends and Policy Implications–A Mixed Methods Study. Premier Journal of Economics 2025;3:100006

DOI: https://doi.org/10.70389/PJEC.100006

Peer Review

Received: 6 August 2025

Last revised: 4 September 2025

Accepted: 6 September 2025

Version accepted: 5

Published: 25 September 2025

Ethical approval: N/a

Consent: N/a

Funding: No industry funding

Conflicts of interest: N/a

Author contribution: Natalia Mikhaylovna Esmurzayeva – Conceptualization, Writing – original draft, review and editing

Guarantor: Natalia Mikhaylovna Esmurzayeva

Provenance and peer-review: Unsolicited and externally peer-reviewed

Data availability statement: N/a

Highlights

- The gig economy grew rapidly between 2018 and 2025 due to platform expansion and economic shocks.
- Key segments include transport, freelancing, healthcare, and education-based gig work.
- Ukraine experienced a wartime surge in freelance activity.
- Legal models vary globally, with the EU pursuing formalization and Ukraine experimenting with hybrid contracts.
- The study provides policy recommendations for ensuring social protections in flexible work systems.

Introduction

This study explores the main drivers of gig economy growth at both global and national levels. It analyzes regional and sectoral trends and evaluates the political and legal consequences of gig employment. The research focuses on comparing regulatory models in the US, the EU, India, China, and Ukraine.

The following questions guide the investigation:

1. What growth patterns have been observed in different regions between 2018 and 2025, and how do they compare?
2. How is the gig economy structured across major sectors, and what transformations have occurred?
3. What are the features of legal and regulatory frameworks in the selected countries, especially regarding social protections and political conditions?

By answering these questions, the study offers a comparative framework for understanding national responses to platform-mediated work and provides evidence-based recommendations for adapting labor policy to the demands of a rapidly changing economy.

Materials and Methods

This review-based study combined three methods: (1) content analysis to systematize data on freelancing, digital labor, and legal frameworks; (2) comparative legal analysis to assess regulatory models in the US, the EU, India, China, and Ukraine; and (3) statistical benchmarking to evaluate market dynamics and regional distributions. The methodological parameters and search queries are detailed in Tables 1 and 2, and the source selection process is visualized in Figure 1.

All sources were rated on four criteria—provenance, data transparency, timeliness, and relevance—each scored 0–2 (max 8). Peer-reviewed and official data with ≥6 points were used in the core analysis, while lower-scoring commercial or press materials were placed in supplementary files. To reduce bias, scoring was checked twice, with a 20% sample independently reassessed and discrepancies resolved by consensus.

All included sources were assessed using a structured set of criteria. Priority was given to peer-reviewed research and official statistics. Complementary data sources (e.g., platform-generated reports, market studies) were used selectively, clearly labeled, and interpreted with caution. Evaluation focused on source credibility, transparency of data and methods, publication timeliness, and relevance to the research questions. Gray and commercial sources were included only if triangulated with official or academic evidence.

All quantitative evidence is traceable to official or peer-reviewed sources cited directly in the text; no separate dataset is provided.

Ethical considerations. This study relies exclusively on secondary sources (official statistics, peer-reviewed publications, and publicly available

Table 1 | Methodological parameters of the study

Element	Description
Search strategy	
Databases	Scopus, Web of Science, Google Scholar, reference systems of international organizations (ILO, Eurostat, OECD, World Bank, BLS, State Statistics Service of Ukraine, etc.)
Keywords	*Gig economy, digital platforms, platform work, freelance, nonstandard employment, labor rights, regulatory policy*
Time range	2018–2025, with selective inclusion of earlier sources for historical context
Inclusion criteria	(1) Peer-reviewed sources; (2) Regional representativeness (US, EU, India, China, Ukraine); (3) Availability of quantitative or conceptual data on the gig economy
Exclusion criteria	(1) Nonacademic publications without references to primary data; (2) Sources unrelated to the gig economy, freelancing, or digital platforms; (3) Duplicate or outdated data that contradict more recent publications
Methods of analysis	
Content analysis	Systematization of quantitative and qualitative data; classification into blocks: market dynamics, sectoral structure, legal status, social protection; identification of key trends
Comparative analysis of legislation	Assessment of legal models in the US, the EU, India, China, and Ukraine based on the following criteria: (1) legal status of gig workers; (2) access to social protection; (3) key legislative initiatives (EU Platform Work Directive, California AB5 Act, etc.)

Source: Compiled by the author.

Table 2 | Full search strings used in the study

Database/Portal	Boolean Search String	Language(s) Used	Date Range
Scopus	"gig economy" OR "platform work" OR "digital labor" AND ("regulation" OR "policy" OR "social protection") AND (Ukraine OR "United States" OR "European Union" OR "India" OR "China")	English	2018–2025
Web of Science	("freelance work" OR "nonstandard employment") AND ("regulation" OR "legal framework" OR "flexible employment") AND ("crisis" OR "war" OR "COVID")	English	2018–2025
Google Scholar	"gig economy" OR "digital platforms" AND ("labor rights" OR "self-employment") AND ("Ukraine" OR "transition economies")	English (translated into Ukrainian/ Chinese where needed)	2018–2025
Eurostat/EU portals	"platform work" AND ("social insurance" OR "directive" OR "worker rights")	English, French	2018–2025
World Bank/ILO/OECD	"gig economy" OR "digital labor" AND ("developing countries" OR "statistics" OR "policy")	English	2018–2025
US Government Sites (BLS, DOL)	"independent contractor" AND ("Fair Labor Standards Act" OR "employee classification")	English	2018–2025
Government of India (e-Shram)	"gig economy" AND ("social protection" OR "platform worker")	English (with regional adaptation)	2018–2025
Government of China	Translation of "gig economy" and "platform economy" into "新就业形态" and "平台经济" for local site search	English (translated into Simplified Chinese)	2019–2025
Ukrainian Portals (ДПС, ДССУ, DOU, LigaZakon)	"самозайняті" OR "фрилансери" AND ("платформи" OR "гіг-економіка")	English (translated into Ukrainian)	2020–2025

Source: Compiled by the author.

reports); no primary or personally identifiable data were collected.

Note on Definitional Inconsistencies

Several statistics presented in this study reflect varying institutional definitions. Where headcounts were not directly comparable (e.g., "any platform registration" vs. "≥1 hour in reference week"), we reported estimates in parallel and refrained from synthesizing them into single point values. Comparative statements rely on like-for-like measures; where this was not feasible, we present ranges and explicitly qualify interpretations.

Results and Discussion Section

Drivers and Global Dynamics of Gig Economy Growth

More people are moving away from long-term jobs toward flexible gigs as independent contractors, a shift often praised as entrepreneurial but largely driven by firms seeking to cut costs and transfer risks onto workers.[1] Following the 2008–2009 global financial crisis, the gig economy began to form a "shadow" segment of the labor market outside traditional employment relationships. In the US, the share of workers in alternative arrangements rose from 10.7% in 2005 to 15.8% in 2015, although only about 0.5% provided services via online intermediaries such as Uber or TaskRabbit, showing that platformization was still at an early stage before the rapid expansion of the 2010s.[2]

Several global drivers have since underpinned expansion: digital platforms simplifying job matching, employers' demand for flexibility, and cost optimization. COVID-19 acted as a catalyst, boosting delivery and remote tasks and entrenching flexibility as a valued attribute.[3,4] According to the World Bank, the gig economy now accounts for up to 12% of the global labor market.[5] Within the EU, the most reliable estimates are provided by Eurostat. According to its experimental survey, 3.0% of the 15–64 population reported at least one hour of platform work during the reference week. This narrower but standardized definition allows for consistent cross-country comparison and avoids discrepancies that arise from parallel headcount projections.[6] This contrast illustrates how

DOI: https://doi.org/10.70389/PJEC.100006 | Premier Journal of Economics 2025;3:100006

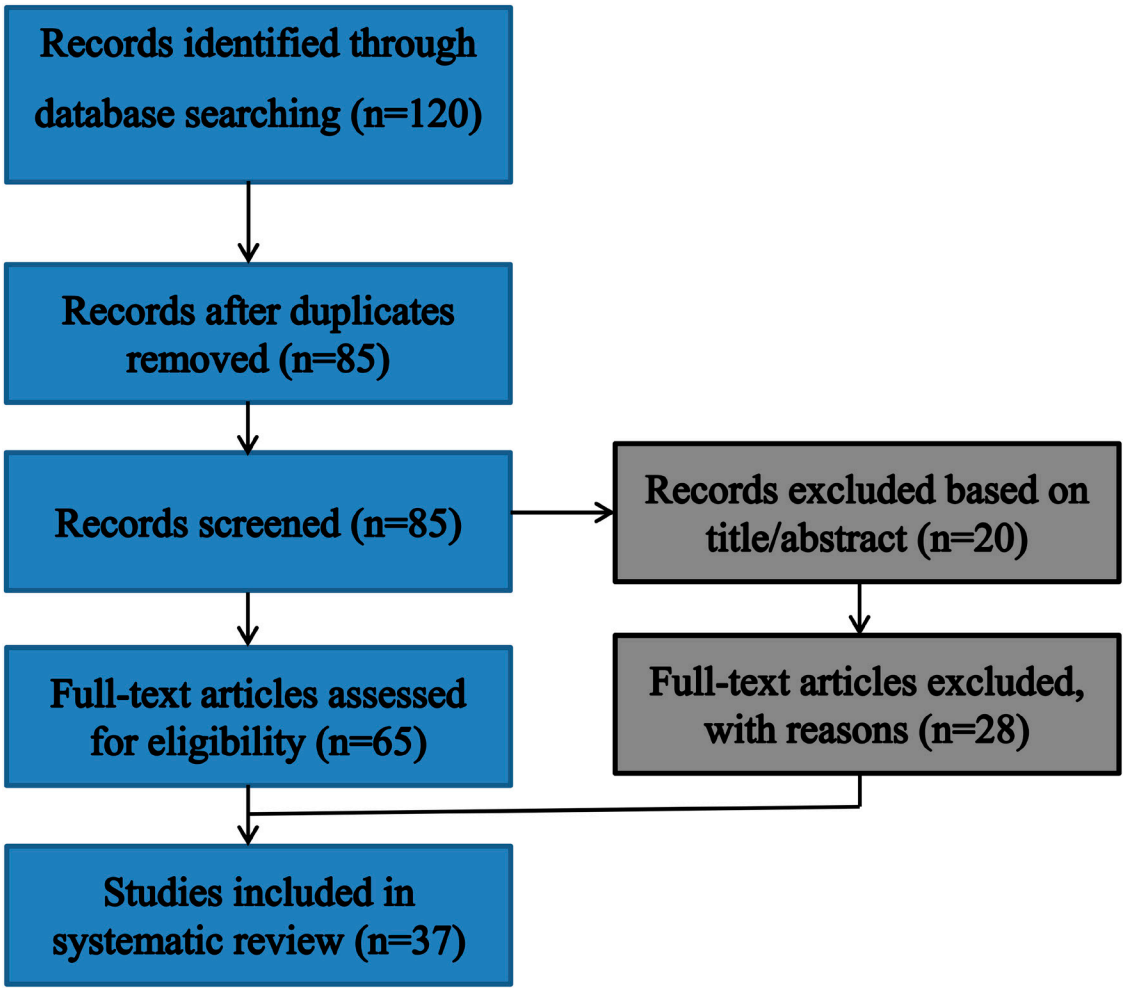

Fig 1 | PRISMA flow diagram of the search, screening, and inclusion process. Arrows indicate the sequence of study selection stages
Source: Author's own development

definitional scope strongly affects estimates of platform work.

From a labor-process perspective, algorithmic allocation and customer rating systems enable platforms to maintain a large "reserve army" of potential workers while commodifying labor supply without guaranteeing stable demand. This extends traditional managerial control into the digital domain while formally preserving contractor status. Viewed through the lens of global value-chain theory, rapid growth in developing and transition economies reflects a transnational redistribution of digital labor: workers in India, Africa, and Ukraine increasingly supply services to clients in North America and Western Europe, creating a planetary labor market. While this expands income opportunities and fosters digital inclusion, it also intensifies global competition and exerts downward pressure on wages, reinforcing structural inequalities between the Global North and South.[7–9]

Segments and Global Dynamics of Platform Work

Location-based services (e.g., transport, delivery, rentals, cleaning, repairs, childcare) and remote services (e.g., online teaching, programming, customer support, translation, design, telehealth). Some platforms also enable income via content creation (e.g., videos, texts). These categories span from low-skilled manual labor to high-skilled digital freelancing in Information Technology (IT), education, design, and healthcare. Initially, location-based work dominated, but remote services—especially in tech and education—have grown rapidly. This shift reflects a major transformation in the gig economy.[6]

The spread of the gig economy varies by region. In North America and Europe, platforms mostly provide supplementary income, while in developing countries, they often serve as the main source of earnings. Still, only ≈1.7% of the overall labor force relies on platform work full-time, whereas among platform workers, over 52% earned less than one-quarter of their monthly income from platform work.[6,10]

Meanwhile, the Global South is expanding fast: about 40% of platform usage/traffic now comes from developing countries, and request-side activity has surged (e.g., Africa: +130% in online job requests vs +14% in North America). These are platform usage indicators, not worker headcounts.[5] Growth is driven by

young, skilled remote workers in South Asia, Africa, and Eastern Europe.[9]

These trends fuel a "planetary labor market," where clients in high-income countries hire global talent across borders.[11] But growing competition pushes workers in low-income regions to accept lower pay, worsening inequality and labor standards.[8] Governments in India, Pakistan, and Indonesia view platform work as a driver of job creation, though protections remain weak.

Political and Legal Implications

The rapid growth of the gig economy has pushed governments to address worker rights, as gig workers—typically classified as independent contractors—lack basic protections like minimum wage and paid leave.[12] While this reduces platform costs, it also leads to the commodification of labor. Some scholars consider gig workers part of the "precariat"—a social class characterized by unstable incomes and insecure working conditions.[13] In response, policymakers and labor unions have proposed three major approaches: (1) strengthening enforcement of existing labor laws; (2) expanding the legal definition of "employee" to include more platform workers; and (3) introducing an intermediate status of "dependent contractor" with partial rights and protections.[4,12]

On October 23, 2024, the European Parliament and the Council formally adopted the Platform Work Directive (EU 2024/2831), with the Council finalizing the agreement on October 14, 2024.[14] The directive entered into force on December 1, 2024. It introduces the presumption of an employment relationship, meaning a platform is considered the employer unless it can prove otherwise.[3] The goal is to eliminate false self-employment and extend basic rights to gig workers—including minimum wage, paid holidays, and social insurance. The directive also addresses algorithmic transparency and data protection.[15] Eurostat data on gaps in social insurance for platform workers (e.g., 62.4% for unemployment, 56.3% for sickness)[6] directly confirm and provide quantitative justification for the EU's steps toward the Platform Work Directive and the "presumption of employment relationship" mentioned in the article. This demonstrates a clear causal link between identified social protection deficits and legislative responses.

Gig workers are increasingly subject to algorithmic management systems that restrict autonomy and intensify control over task allocation and remuneration.[11,16] Despite these challenges, self-organization is growing, with strikes and grassroots unions emerging across different regions. This signals a shift from fragmented, individualized work toward new forms of collective action within the gig economy. Tables 3 and 4 present a comparative analysis of regulatory models for gig workers in the US, the EU, India, China, and Ukraine.

Countries approach the balance between gig flexibility and protection differently: the US shows regulatory fragmentation, the EU moves toward formalization, while India and China expand protections without altering worker status—offering useful benchmarks for transition economies like Ukraine.

Ukraine as a Unique Case of Gig Economy Development Driven by Crisis

The Ukrainian experience with the gig economy stands out due to its acceleration under conditions of national crisis—the full-scale war. For many Ukrainians, freelancing became a true "lifeline"," as it was one of the few available income sources for hundreds of thousands of people. Therefore, Ukraine deserves a separate analysis as a unique case of rapid gig sector expansion under extreme crisis conditions.

Ukraine's Gig Economy Before and During the War

Ukrainian freelancers mainly worked in IT and creative fields, with programmers, designers, and copywriters most in demand. According to ILO estimates, as early as 2018, up to 500,000 Ukrainians (about 3% of the

Table 3 | Legal status and policies

Legal Status of Platform Workers	Key Policies/Legislation
US	
Mostly independent contractors, traditionally not considered "employees."[17,18]	AB5 (2020): "ABC test" for all contractors, including gig workers. Prop 22 (2020): Classifies platform drivers as independent contractors.[19]
EU	
Presumption of employee status if the platform effectively controls the work.[20]	Platform Work Directive (2024)—introduces the presumption of an employment relationship and obliges the platform to prove otherwise.[20]
India	
Separate employment category: "gig/platform worker" is not considered a standard employee.[21]	Code on Social Security (2020): first recognition of gig workers, with insurance/pension schemes, but no change in employment status.[21]
China	
Informally, platforms treat such workers as independent; the government refers to them as "workers in new forms of employment."[22]	Ministry of Human Resources and Social Security Guidelines (November 2023)—"Guidelines on Rest and Remuneration" for platform service workers.[22]
Ukraine	
No separate legal status for "gig workers"—they are usually registered as sole proprietors (SP) or engaged under civil contracts. Within the special regime Diia.City (for the IT sector), a "gig contract" was introduced.[23]	Law on Stimulating the Digital Economy (Diia.City, 2021)—legalizes "gig contracts" for IT professionals. No direct regulation exists in other sectors.[23]

Source: Compiled by the author based on official legislative and policy documents (2019–2024).

DOI: https://doi.org/10.70389/PJEC.100006 | Premier Journal of Economics 2025;3:100006

Table 4 | Protection and workers' rights

Social Protection	Collective Bargaining Rights	Algorithmic Accountability	Enforcement Mechanisms
US			
Very limited: temporary benefits (e.g., COVID-related assistance through the CARES Act), usually no mandatory health insurance or pensions provided by the platform.[24]	No federal right to collective bargaining—independent contractors are excluded from the scope of the National Labor Relations Act.[24]	No specific laws; transparency only in nonbinding policies (e.g., 2022 AI Bill of Rights), not covering gig workers.[25]	No dedicated agency for gig work—general labor laws apply (DOL oversight, lawsuits over misclassification). Violations are sanctioned under state or federal law.[25]
EU			
Full package of worker rights: minimum wage, insurance, paid leave, etc., under national laws (improved access to sick leave, pensions, unemployment).[3]	The directive promotes collective bargaining and mandates negotiations on working conditions with workers' representatives.[14]	Algorithms must be transparent, with human oversight required for dismissals and task allocation.[26]	National authorities ensure compliance: platforms are obliged to report (declare platform work) to authorities,[3] and fines are imposed for evading employment status.
India			
Limited protection: e-Shram registration grants access to some programs; pilot pension/health schemes exist. Aggregators must contribute 2% of turnover, but rarely do.[21]	Collective bargaining rights are effectively absent—gig workers are not covered by trade union laws.[27]	No regulation of algorithmic management in the current Indian legislation.	Welfare boards and registration schemes exist.[21]
China			
Partial protection: gig workers may voluntarily contribute to basic pension and health insurance, but platforms are not obliged to provide coverage (subsidies for employers are planned).[22]	No formal bargaining rights; only guideline-based consultations on rest schedules and pay.[22]	Government guidelines require platforms to include algorithms that notify workers to rest after maximum working hours, and to disclose rules for task allocation and remuneration.[22]	Advisory ministry documents; compliance by local labor authorities. Violations (e.g., unpaid minimum rates) sanctioned under general labor laws.
Ukraine			
Diia.City: mandatory state insurance, employers pay 22% USC (Unified Social Contribution). Outside: no package, workers self-contribute.[23]	Excluded from labor law; no bargaining rights. Draft platform work law pending.	No algorithm regulation; Diia.City sets minimum conditions without transparency rules.	Enforced via tax/social insurance oversight (Diia.City firms report/pay USC); violations sanctioned under Tax and Labor Codes.

Source: Compiled by the author based on official legislative and policy documents (2019–2024).

labor force) were registered on online platforms such as Upwork, Fiverr, and Freelancer, placing Ukraine seventh globally in terms of online labor volume.[28] This figure reflects registrations rather than a verified count of active workers.

According to the State Statistics Service of Ukraine, the number of active SPs grew from 1.39 million in 2022 to 1.63 million in 2024—a net increase of over 240,000. SP status is a tax/registration category and does not map one-to-one to platform worker headcounts.[29] This upward trend, observed despite wartime conditions, reflects not only entrepreneurial resilience but also a broader structural shift toward flexible employment formats, including platform-based work.

International platforms such as Upwork facilitated this transformation by restricting access for Russian users while opening new opportunities for Ukrainian freelancers. During the war, new gig formats emerged, including online volunteering via platforms like SpivDiia.[30] Instead of halting Ukraine's gig sector, the war expanded it into areas like logistics and volunteering, reinforcing flexible work as a tool for economic resilience.

Policy Vacuum and Digital Experiments. Challenges and Prospects

Ukraine's gig economy is expanding rapidly despite lacking a clear legal status for gig workers. Available data from the wartime period likely reflect cumulative registrations (e.g., tax status or platform sign-ups) rather than the actual number of active freelancers. This distinction is essential, as many individuals may register without maintaining sustained platform activity. Most operate as SP or under civil contracts, which lowers taxes but limits social protection. Additionally, in July 2022, Ukraine passed a law introducing the concept of nonfixed working hours—the local equivalent of a zero-hour contract.[31] Under this arrangement, a freelance worker is officially employed "as needed," may have multiple employers, and is still entitled to basic social protections (e.g., payment for a minimum of 32 working hours per month, sick leave, vacation benefits).

Most freelancers remain outside social protection; income/contribution tracking is weak, and collective representation scarce. Beyond the IT-only Diia.City carve-out, Ukraine lacks a general legal status for platform workers. Figure 2 provides a policy translation model, mapping global principles (such as harmonized metrics, algorithmic accountability, and portable social protection) onto phased Ukrainian steps and expected outcomes, such as improved protections and data transparency.

The first stage should focus on legal recognition of gig worker status, basic guarantees, and integration into the tax system, followed by the development of social insurance mechanisms and digital infrastructure.

Figure 2 provides a policy translation model, mapping global principles (such as harmonized metrics, algorithmic accountability, and portable social protection) onto phased Ukrainian steps and expected outcomes, such as improved protections and data transparency.

Figure 3 presents a causal explanatory model of crisis-driven gig expansion, showing how labor

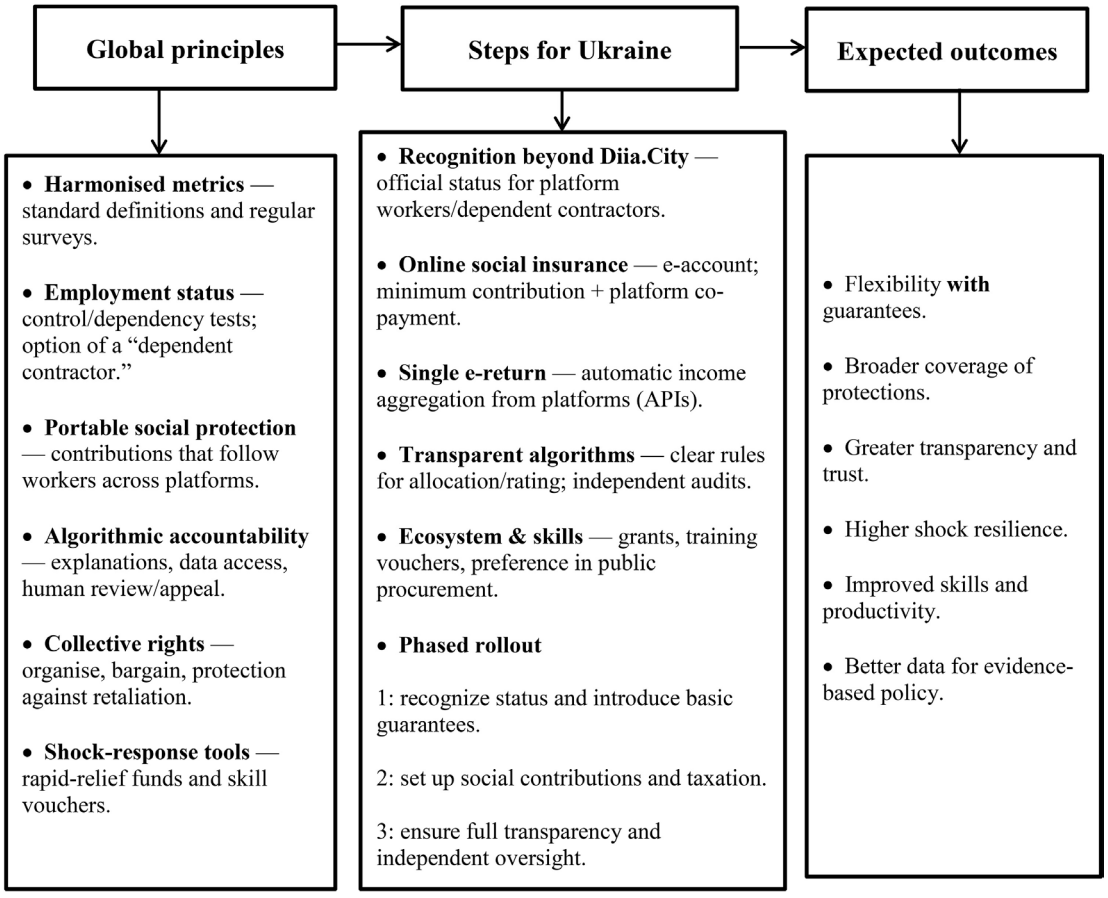

Fig 2 | Policy roadmap for platform work: global principles → steps for Ukraine → expected outcomes
Source: Author's own development

market shocks lead to digital uptake and survival strategies, which in turn trigger policy innovations with longer-term economic effects. Together, the two figures offer both a broad conceptual explanation and a country-specific application.

It should be noted that recent ILO data confirm that developing and transition economies play a significant and growing role as major suppliers of digital labor in the online sector.[28] This trend directly reinforces the dynamics illustrated above: in the absence of stable local opportunities and under conditions of repeated labor market shocks, workers from these economies increasingly rely on platform work as a survival and resilience strategy.

The conceptual model aligns with recent interdisciplinary research on how crises accelerate transformations in digital labor. First, from the perspective of global production network theory, crises act as midlevel catalysts that reconfigure economic linkages and labor practices. Narayan (2025) demonstrates how pandemic or geopolitical shocks restructure global digital services through networked innovation and accelerated platform uptake in emerging economies.[32] Second, empirical findings from Mozambique show that digital labor platforms can buffer economic shocks: a 2025 study observed increased task allocation per worker during COVID-19, especially for women, indicating that platforms helped absorb demand and stabilize earnings in disrupted job markets.[33] OECD evidence: platform workers favor protection and investment policies (skills, income support, algorithmic oversight) for resilience.[34]

Beyond policy shifts, theories of algorithmic management and labor commodification clarify structures. Duggan et al. show governance via metrics, rankings, and automated oversight.[35] Meanwhile, Scholz conceptualizes platform labor as the commodification of human effort—fragmented, monetized, and outsourced through digital infrastructures.[36] These lenses help explain how crisis-driven gig expansion is not merely reactive but institutional, rooted in new forms of control and valuation. Recent comparative evidence also highlights how the COVID-19 pandemic accelerated state and EU-level regulatory responses, marking a turning point in the formalization of platform work.[37]

For researchers, Figure 3 serves not only as a conceptual explanation but also as a framework that can be empirically tested. Each stage of the model corresponds to measurable indicators: crisis triggers (e.g., unemployment, migration flows), digital uptake (platform registrations, SP dynamics), survival strategies (share of income from gig work), policy innovations (new legal instruments such as gig contracts or zero-hour arrangements), and consequences (coverage by social insurance, income stability, recovery speed).

DOI: https://doi.org/10.70389/PJEC.100006 | Premier Journal of Economics 2025;3:100006

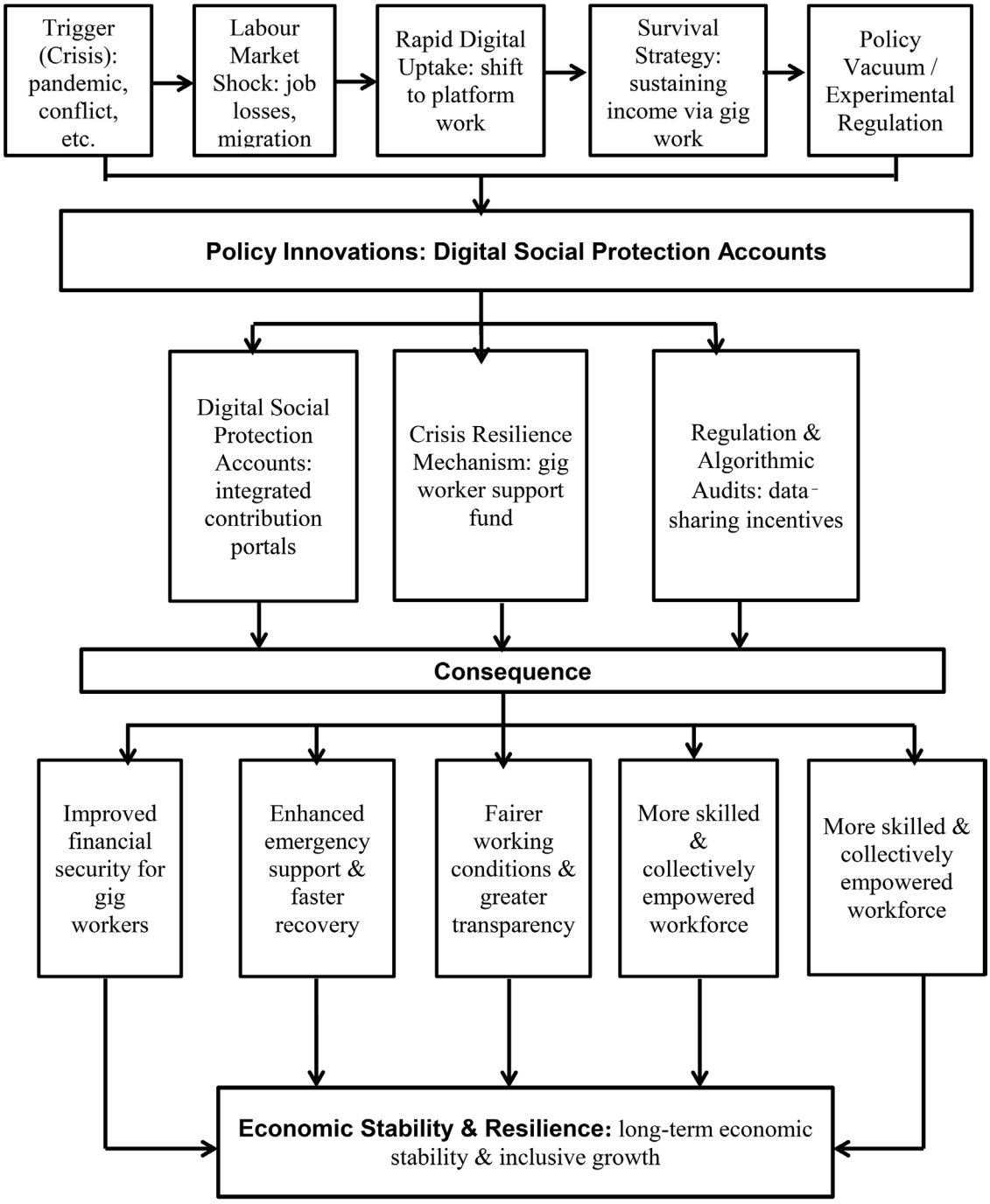

Fig 3 | Crisis-driven gig expansion model with future perspectives and economic stability
Source: Author's own development

By tracing these indicators through official statistics, surveys, and platform data, scholars can examine whether the proposed sequence—Crisis → Digital Uptake → Policy Innovation → Resilience—holds across different countries and crises. This makes the model a practical tool for comparative labor research and for evaluating the effectiveness of policy responses.

Conclusions

This study demonstrates that the gig economy cannot be analyzed solely as a labor market trend but as a multilayered institutional phenomenon shaped by crisis, digitalization, and legal experimentation. Its contribution lies in three dimensions of novelty:

1. Methodological synthesis—by triangulating official statistics, consultancy forecasts, and platform data, the paper highlights systematic discrepancies in measurement and shows how definitional ambiguity distorts both global estimates and policy design.
2. International comparison reveals four models: fragmented, formalized, incremental, and wartime hybrid.

3. Ukrainian wartime case—beyond describing survival strategies, Ukraine illustrates how an extreme crisis can accelerate digital labor adoption and produce legal experiments (gig contracts, nonfixed hours) under martial law, offering insights into how fragile states may institutionalize platform work during disruption.

Overall, the findings show the gig economy as a stress-test for labor governance in crises, with Ukraine illustrating wartime digital adaptation. Future work should harmonize measurement standards and test whether hybrid regimes can balance flexibility with protection in recovery. For policymakers, this underscores the need for hybrid frameworks extending protection without eroding flexibility.

Limitations of the Study

Reliable statistics on the gig economy remain scarce worldwide, with estimates differing depending on definitions, survey methods, and the extent of informal or cross-border work. These data gaps complicate not only academic comparisons but also evidence-based policymaking, as governments lack a consistent basis for regulation and social protection design. Strengthening official monitoring and developing harmonized definitions would improve both research and policy capacity.

References

1 Friedman GC. Workers without employers: shadow corporations and the rise of the gig economy. Rev Keynesian Econ. 2014;2(2):171–88. https://doi.org/10.4337/roke.2014.02.03
2 Katz LF, Krueger AB. The rise and nature of alternative work arrangements in the United States, 1995–2015. ILR Rev. 2019;72(2):382–416. https://doi.org/10.1177/0019793918820008
3 Council of the European Union. EU rules on platform work – explainer. Brussels: Council of the European Union; 2024. Available from: https://www.consilium.europa.eu/en/policies/platform-work-eu/
4 Belsie L. The evolving role of gig work during the COVID-19 pandemic. Cambridge (MA): National Bureau of Economic Research; 2023 (NBER Digest). Available from: https://www.nber.org/digest/20238/evolving-role-gig-work-during-covid-19-pandemic
5 World Bank. Demand for online gig work rapidly rising in developing countries. Washington, DC: World Bank; 2023. Available from: https://www.worldbank.org/en/news/press-release/2023/09/07/demand-for-online-gig-work-rapidly-rising-in-developing-countries
6 Eurostat. Experimental statistics on digital platform employment. Eurostat News; 2024. Available from: https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240718-1
7 Bureau of Labor Statistics. Contingent and alternative employment arrangements – July 2023. Washington, DC: U.S. Department of Labor; 2024. Available from: https://www.bls.gov/news.release/conemp.nr0.htm
8 Zeid R, Alrayess D, Ajwad MI, Soytas MA, Rivera N. The gig economy and the future of work: global trends and policy directions for non-standard forms of employment. Washington, DC: World Bank; 2023. (Social Protection & Jobs; SPJ Policy & Technical Note No. 52). Available from: https://documents1.worldbank.org/curated/en/099060524074041161/pdf/P1796471e104d70c8193971d1ead6456d2e.pdf
9 Kässi O, Lehdonvirta V. Online labour index: measuring the online gig economy for policy and research. Technol Forecast Soc Change. 2018;137:241–8. https://doi.org/10.1016/j.techfore.2018.07.056
10 Eurostat. Employment statistics – digital platform workers. Luxembourg: Eurostat; 2023. Available from: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Employment_statistics_-_digital_platform_workers
11 Howcroft D, Bergvall-Kareborn B. A typology of crowdwork platforms. Work Employ Soc. 2019;33(3):21–38. https://doi.org/10.1177/0950017018760136
12 Graham M, Anwar MA. The global gig economy: towards a planetary labour market? First Monday. 2019;24(4). https://doi.org/10.5210/fm.v24i4.9913
13 Herrmann AM, Zaal PM, Chappin MMH, Schemmann B, Lühmann A. "We don't need no (higher) education": how the gig economy challenges the education–income paradigm. Technol Forecast Soc Change. 2023;186(Part A):122136. https://doi.org/10.1016/j.techfore.2022.122136
14 European Parliament and Council of the European Union. Directive (EU) 2024/2831 of 23 October 2024 on improving working conditions in platform work. Off J Eur Union. 2024;L 2831. Available from: https://eur-lex.europa.eu/eli/dir/2024/2831/oj
15 Hosley R. EU Platform Worker Directive: what it means for employers. Remofirst; 2025. Available from: https://www.remofirst.com/post/eu-platform-worker-directive
16 Wood AJ, Graham M, Lehdonvirta V, Hjorth I. Good gig, bad gig: autonomy and algorithmic control in the global gig economy. Work Employ Soc. 2019;33(1):56–75. Available from: https://www.jstor.org/stable/26969991
17 U.S. Department of Labor, Wage and Hour Division. Employee or independent contractor classification under the Fair Labor Standards Act: final rule. Fed Regist. 2024;89(6):1638–745. Available from: https://www.federalregister.gov/documents/2024/01/10/2024-00067/employee-or-independent-contractor-classification-under-the-fair-labor-standards-act
18 California Legislature. Assembly Bill No. 5, Chapter 296: Worker status – employees and independent contractors. Sacramento (CA): State of California; 2019. Available from: https://www.labor.ca.gov/ab5-statute/
19 California Secretary of State. Proposition 22: exempts app-based transportation and delivery companies from providing employee benefits to certain drivers. Initiative statute. Official Voter Information Guide. 2020. Available from: https://vigarchive.sos.ca.gov/2020/general/quick-reference-guide/22.htm
20 European Parliament. Parliament adopts Platform Work Directive. Press release; 2024. Available from: https://www.europarl.europa.eu/news/en/press-room/20240419IPR20584/parliament-adopts-platform-work-directive
21 Government of India. The Code on Social Security, 2020. Bill No. 121 of 2020. New Delhi: Ministry of Labour and Employment; 2020. Available from: https://labour.gov.in/sites/default/files/ss_code_as_introduced_in_lok_sabha.pdf
22 Ministry of Human Resources and Social Security of the People's Republic of China. Notice on issuing the Guidelines on protecting the rights and interests of workers in new forms of employment. Beijing: Government of China; 2023. Available from: https://www.gov.cn/zhengce/zhengceku/202402/content_6933822.htm
23 State Tax Service of Ukraine. Main provisions of the Law of Ukraine as of 14.12.2021 No. 1946-IX "On amendments to the Tax Code of Ukraine to stimulate development of digital economy in Ukraine." Kyiv: State Tax Service of Ukraine; 2021. Available from: https://tax.gov.ua/en/mass-media/news/546168.html
24 U.S. Department of Labor. U.S. Department of Labor announces new guidance to states on unemployment insurance programs. News Release; 2020. Available from: https://www.dol.gov/newsroom/releases/eta/eta20201230-1
25 The White House, Office of Science and Technology Policy. Blueprint for an AI Bill of Rights: making automated systems work for the American people. Washington, DC: The White House; 2022. Available from: https://bidenwhitehouse.archives.gov/ostp/ai-bill-of-rights/
26 European Parliament. European Parliament. Brussels: European Parliament; 2025. Available from: https://www.europarl.europa.eu/portal/en
27 Ministry of Labour and Employment (India). About e-Shram portal. New Delhi: Ministry of Labour and Employment; 2021. Available from: https://eshram.gov.in/e-shram-portal

28 International Labour Organization; Oxford Internet Institute. The role of digital labour platforms in transforming the world of work. Online Labour Observatory; 2021. Available from: http://onlinelabourobservatory.org/paper/ilo-weso-report-2021/
29 Derzhavna sluzhba statystyky Ukrainy. Ekonomichna statystyka: Ekonomichna diialnist. Reiestr respondentiv statystychnykh sposterezhen. Kyiv: State Statistics Service of Ukraine; 2025. Available from: https://www.ukrstat.gov.ua/operativ/operativ2013/kap/kap_22.htm. [in Ukrainian]
30 Ministerstvo rozvytku hromad ta terytorii Ukrainy. SpivDiia: v Ukraini zapustyly ofitsiinu platformu humanitarnoi dopomohy [CoAction: official humanitarian aid platform launched in Ukraine]. Kyiv: Uriadovyi Portal; 2022. Available from: https://www.kmu.gov.ua/news/spivdiya-v-ukrayini-zapustili-oficijnu-platformu-gumanitarnoyi-dopomogi [in Ukrainian]
31 Belovolchenko A.V Ukraini ukhvalyly zakon pro frilans: shcho vin zminiue. DOU.ua; 2022. Available from: https://dou.ua/lenta/news/freelance-law. [in Ukrainian]
32 Narayan D. A conjunctural approach to global production networks: the case of India's software services industry. J Econ Geogr. 2025:lbaf012; (advance online publication). https://doi.org/10.1093/jeg/lbaf012
33 Jones S, Manhique I. Digital labour platforms as shock absorbers: evidence from the COVID-19 pandemic in Mozambique. J Afr Econ. 2025;34(1):116–41. https://doi.org/10.1093/jae/ejae002
34 Chueri J, Busemeyer MR. Different status, same demands? The social policy preferences of platform workers in OECD countries. Compet Change. 2025; (ahead of print). https://doi.org/10.1177/10245294251318440
35 Duggan J, Sherman U, Carbery R, McDonnell A. Algorithmic management and app-work in the gig economy: a research agenda for employment relations and HRM. Hum Resour Manag J. 2020;30(1):114–32. https://doi.org/10.1111/1748-8583.12258
36 Scholz T. Uberworked and underpaid: how workers are disrupting the digital economy. Cambridge: Polity Press; 2017. p. 242. http://doi.org/10.1111/wusa.12308
37 De Stefano V. The rise of the "justintime workforce": on-demand work, crowdwork, and labour protection in the gig economy. Comp Lab Law Policy J. 2016;37(3):471–504. https://doi.org/10.2139/ssrn.2682602