



THE ILLUSION OF INCLUSION: ANALYZING HIDDEN UNEMPLOYMENT AND THE DIGITAL GIG ECONOMY IN KENYA (2024–2026)

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ABSTRACT

Kenya's labor market presents a structural paradox: sustained economic growth coexists with a persistent crisis of hidden unemployment, where millions of working-age adults remain economically active yet lack stable, decent employment. Between 2024 and 2026, this phenomenon has become increasingly entangled with the rapid expansion of the digital gig economy, which has emerged as both a coping mechanism for the unemployed and a new frontier of labor precarity. This study analyzes the relationship between hidden unemployment, defined as underemployment, discouraged workers, and those in vulnerable employment, and participation in digital platform work in Kenya. Drawing on a mixed-methods design combining secondary analysis of Kenya National Bureau of Statistics labor force data (2020–2026), a survey of 384 gig workers in Nairobi, Kisumu, and Mombasa, and semi-structured interviews with 30 platform workers, the study tests five hypotheses examining the economic impact, employment transition patterns, vulnerability levels, policy effectiveness, and future orientation of gig work. Preliminary evidence indicates that while the gig economy has absorbed approximately 1.54 million workers and contributes approximately \$1.03 billion (Sh133.37 billion) to GDP, it largely reproduces the precarity of the informal sector rather than providing a pathway to formal employment. Key findings reveal that 53% of ride-hailing drivers rely on platform work as their primary income source, yet hourly earnings fall below minimum wage thresholds, and legal classification as independent contractors excludes workers from statutory labor protections. The study contributes to theoretical debates on labor market dualism and precarity, offers empirical evidence on labor trajectories in digital economies, and provides policy recommendations for extending social protection, strengthening regulatory frameworks, and promoting decent work in Kenya's evolving labor market.

KEYWORDS: Hidden unemployment, gig economy, platform work, labor precarity, informal sector, digital labor, Kenya, decent work

OPERATIONAL DEFINITIONS OF TERMS

Term	Definition
Hidden unemployment	A category of labor underutilization including discouraged workers (those who have stopped actively seeking employment), time-related underemployed workers (those working fewer hours than desired), and those in vulnerable employment (lacking formal contracts or social protection) (ILO, 2023).
Gig economy	A labor market characterized by short-term, flexible work arrangements mediated by digital platforms, where workers are typically classified as independent contractors rather than employees (Woodcock & Graham, 2020).
Platform work	Paid work mediated by a software application (the App) that organizes and facilitates transactions between workers and clients, often organized through algorithmic management systems (Masikane & Webster, 2025).
Digital labor platform	An organization that uses digital technology and automated systems to arrange and facilitate work for a fee, including ride-hailing, delivery, freelancing, and microtask platforms (Srnicsek, 2017).
Precarity	A condition of labor characterized by uncertainty, instability, and lack of security in employment, including income volatility, absence of social protection, and limited worker rights (Kalleberg, 2009; Standing, 2011).



Jua Kali sector	The informal sector in Kenya, literally meaning “hot sun” in Kiswahili, characterized by small-scale, unregulated economic activities and entrepreneurial self-employment (King, 1996).
Decent work	Productive work conducted in conditions of freedom, equity, security, and human dignity, as defined by the International Labour Organization, encompassing fair income, workplace security, social protection, and rights at work (ILO, 1999).

LIST OF ACRONYMS AND ABBREVIATIONS

Acronym	Full Form
AfCFTA	African Continental Free Trade Area
COTU-K	Central Organization of Trade Unions (Kenya)
GDP	Gross Domestic Product
ILO	International Labour Organization
KNBS	Kenya National Bureau of Statistics
KUGWO	Kenya Union of Gig Workers
NSSF	National Social Security Fund
SHIF	Social Health Insurance Fund
TWU-K	Transport and Allied Workers Union (Kenya)

SECTION ONE: INTRODUCTION

1.1 Background of the Study

The relationship between economic growth and employment generation has long been a central concern of development economics. In much of the Global South, however, this relationship has become increasingly decoupled: economies grow, productivity increases, yet the creation of stable, decent employment fails to keep pace with the expanding working-age population. This phenomenon, often described as “jobless growth”, manifests not merely as open unemployment but as a more insidious condition: *hidden unemployment*. Hidden unemployment encompasses discouraged workers who have ceased active job-seeking, underemployed individuals working involuntarily fewer hours than desired, and those trapped in vulnerable employment lacking formal contracts, social protection, or labor rights (ILO, 2023). It is a condition of being economically active yet structurally excluded from the benefits of formal labor market participation, a paradox of inclusion without security.

Simultaneously, the past decade has witnessed the meteoric rise of digital labor platforms such as Uber, Bolt, Upwork, Fiverr, Glovo, and countless others that have fundamentally reshaped how work is organized, accessed, and experienced. These platforms promise flexibility, autonomy, and low-barrier entry into income generation, presenting themselves as democratic alternatives to rigid formal employment. Yet a growing body of evidence suggests that platform work often reproduces, and in some cases amplifies, the very precarity that characterizes hidden unemployment (Woodcock & Graham, 2020; Masikane & Webster, 2025). This tension between promise and reality, the *illusion of inclusion*, forms the central problematic of this study.

This research examines the intersection of these two phenomena in Kenya between 2024 and 2026. Kenya presents a particularly instructive case: it is simultaneously a regional leader in digital innovation (the “Silicon Savannah”) and a country where approximately 90% of new jobs are created in the informal sector (KNBS, 2025). The nation's labor force has grown to approximately 23 million people, yet formal employment opportunities remain scarce, particularly for youth. The digital gig economy has expanded rapidly, now supporting an estimated 1.54 million workers and contributing approximately \$1.03 billion (Sh133.37 billion) to national GDP (Bolt/Ipsos, 2026; The Kenya Times, 2026; Capital FM, 2026). The critical question, however, is whether this expansion represents genuine labor market inclusion or merely a digital refurbishment of longstanding precarity.



1.1.1 Global Context: The Rise of Platform Work

Globally, the emergence of platform work has been accompanied by intense scholarly and policy debate. In much of the Global North, platform work is framed as a disruptive innovation that challenges the post-war settlement of standard employment relationships (SER) – the model of full-time, permanent, socially protected wage labor that dominated industrialized economies from 1945 to 1980. Scholars such as Standing (2011) have argued that platform work epitomizes the rise of the “precariat”: a new class characterized by unstable incomes, fragmented work histories, and exclusion from social protections that were once considered universal entitlements of employment.

However, as Munck (2013, p. 752) astutely notes, “The type of work described by the term ‘precarity’ has always been the norm in the global South.” Fordism and the welfare state were never global norms; they were historically specific arrangements confined largely to Western Europe and North America during a particular period of capitalist development. For most of the world’s workers, precarious, informal, and flexible labor has been the enduring reality, not a recent deviation. This insight is crucial for understanding platform work in Kenya: rather than representing a rupture with established labor market structures, platform work may be better understood as a technologically mediated extension of the informal economy, a digital *jua kali*.

The global response to platform work is evolving rapidly. In June 2025, the International Labour Conference agreed to develop a new ILO Convention and Recommendation on decent work in the platform economy, to be finalized and adopted in 2026 (ITUC, 2025; Privacy International, 2026). The Convention establishes that platform workers are entitled to fundamental labor rights, including fair pay, clear contracts, union rights, worker safety, data privacy, and the right to appeal unfair account deactivations. It further mandates human review of algorithmic decisions affecting workers’ livelihoods (Privacy International, 2026). This represents a significant normative shift: the world is now recognizing gig work as real work that must be protected. However, the translation of these international standards into national law and practice remains highly uneven.

1.1.2 The African Context: Informality as Norm

Across sub-Saharan Africa, informal employment accounts for more than 80% of total employment outside of small-scale agriculture (ILO, 2022). This does not represent a failure of formal labor markets to absorb workers; rather, it reflects a fundamentally different structure of economic organization. In Kenya’s case, the informal sector, colloquially known as the *jua kali* sector, has long been characterized by ease of entry, small-scale operation, skills acquired outside formal schooling, and unregulated but highly competitive markets (King, 1996).

This cultural and economic context has made Kenya exceptionally fertile ground for digital platform work. The parallels between the informal economy and the platform economy are striking: both offer low barriers to entry, flexible working arrangements, individualized risk, and minimal regulatory oversight. However, critical differences also exist. Platform work introduces algorithmic management, automated systems that assign tasks, monitor performance, and discipline workers, which, as Rosenblat and Stark (2016) demonstrate, enables novel forms of control while allowing platforms to maintain the legal fiction that they are merely technology companies, not employers. The question of whether platform work offers an improvement over traditional *jua kali* labor, or merely a technologically sophisticated intensification of its precarity, is empirically unresolved.

Recent research on platform work in Sub-Saharan Africa highlights the heterogeneity of worker experiences. Dinika (2025) developed an empirical typology of platform workers across Rwanda, South Africa, and Zimbabwe, identifying five distinct segments: high-skilled independents, low-skilled dependents, and aspiring entrepreneurial, established entrepreneurial, and discouraged peripherals. This typology reveals nuanced differences in autonomy constraints, income volatility, and peripheral exclusion across worker groups, suggesting that platform work cannot be understood as a monolithic category (Dinika, 2025). Similarly, Tighanimine et al. (2025) mapped the content moderation and data labeling industry across 43 African countries, documenting how workers face insecurity and inadequate psychological support while remaining largely invisible to users in the Global North.

1.1.3 Kenya's Labor Market Paradox

Kenya’s labor market presents what may be termed a *structural paradox*: sustained economic growth alongside limited progress in generating formal, high-quality employment. As shown in Table 1.1, while the labor force has grown steadily, the majority of new jobs remain concentrated in the informal sector.

Table 1.1: Kenya Labor Force Indicators, 2020–2025

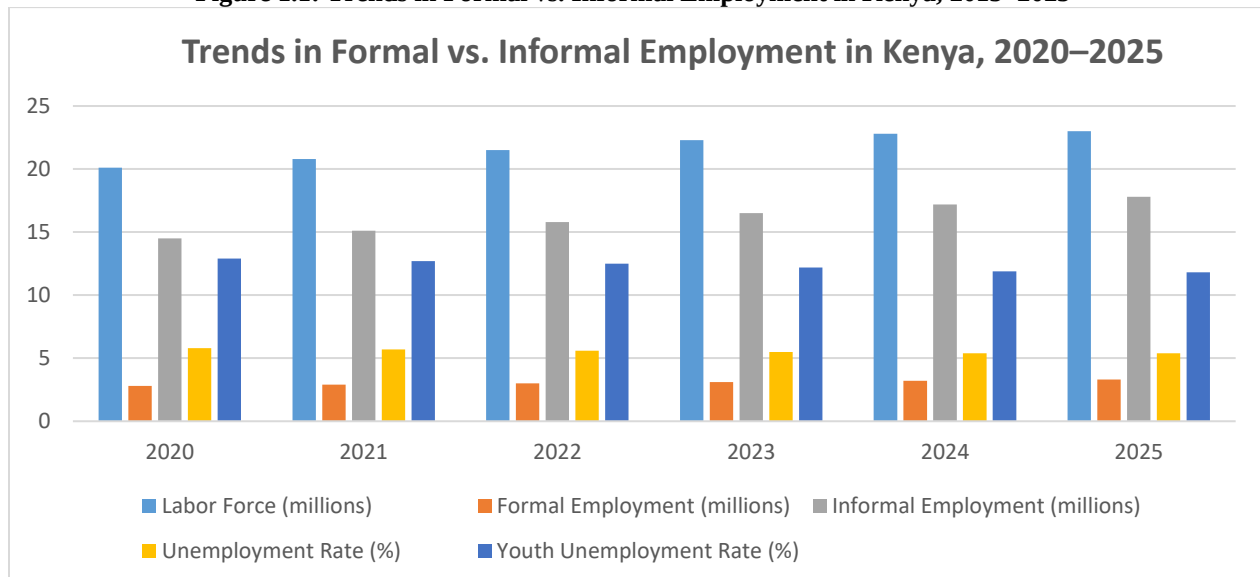
Year	Labor Force (millions)	Formal Employment (millions)	Informal Employment (millions)	Unemployment Rate (%)	Youth Unemployment Rate (%)
2020	20.1	2.8	14.5	5.8	12.9
2021	20.8	2.9	15.1	5.7	12.7
2022	21.5	3.0	15.8	5.6	12.5
2023	22.3	3.1	16.5	5.5	12.2
2024	22.8	3.2	17.2	5.4	11.9
2025	23.0	3.3	17.8	5.4	11.8

Sources: Kenya National Bureau of Statistics (KNBS) Economic Surveys, 2021–2025

Several features of this data merit attention. First, the official unemployment rate (approximately 5.4% in 2025) dramatically understates labor underutilization because it counts only those actively seeking work without success. It excludes discouraged workers who have stopped searching, underemployed workers who would prefer more hours, and those in vulnerable employment who would prefer formal positions but cannot access them. The youth unemployment rate, at nearly 12%, is more than double the national average.

Second, approximately 90% of new jobs created annually are in the informal sector. In 2024, an estimated 782,300 new jobs were created, of which roughly 703,700 were informal (KNBS, 2025). This indicates that formal employment is not merely insufficient but is failing to absorb even a small fraction of labor force entrants. The structural nature of this challenge is underscored by the fact that it persists across economic cycles.

Third, the demographic pressures are intensifying. With approximately 1 million young Kenyans entering the labor market annually, the gap between formal job creation and labor force growth continues to widen. As the Bolt/Ipsos Gig Economy Report (2026) notes, higher youth unemployment compared to the national average is influencing how young Kenyans enter the labor market, with many turning to gig work because it offers a flexible and accessible pathway into income generation.

Figure 1.1: Trends in Formal vs. Informal Employment in Kenya, 2015–2025


Source: Graph based on KNBS data

1.1.4 The Digital Gig Economy in Kenya: Growth and Contradictions

Within this structural context, the digital gig economy has emerged as a significant labor market phenomenon. As of 2025, Kenya's gig economy is valued at over \$1 billion, supports more than 1.54 million workers, and contributes



approximately 0.85% to national GDP (Bolt/Ipsos, 2026; The Kenya Times, 2026). This represents a remarkable growth trajectory: the number of active digital labor platforms increased from 11 in 2015 to over 40 by 2022, driven by rising demand for ride-hailing, delivery, freelancing, and e-commerce services (Bolt/Ipsos, 2026).

Table 1.2: Gig Economy Segments in Kenya, 2025

Segment	Share of Gig Market (%)	Primary Worker Profile	Key Platforms
E-commerce	42	Young adults (18-35), urban	Jumia, Kilimall
Ride-hailing	20	Men (predominantly), ages 25-45	Uber, Bolt, Little Cab
Freelancing	17	Educated youth, tertiary education	Upwork, Fiverr
Micro-tasks	10	Varied, often part-time	Remotasks, Clickworker
Remote work	9	BPO employees, content moderators	CCI Global, Sama
Other	2	-	-

Source: Bolt/Ipsos Gig Economy Report (2026)

The motivational drivers for gig work participation are instructive. According to survey data, approximately 28% of workers cite financial independence and self-sufficiency as their primary motivation; 21% point to the ability to earn on their own terms (flexible hours, no fixed schedule, no direct manager); and 19% enter specifically to build skills and progress professionally (Capital FM, 2026; Bolt/Ipsos, 2026). This suggests that for many, platform work is not merely a last resort but is chosen actively over available alternatives, including, presumably, traditional *jua kali* work or unemployment.

However, selection into gig work does not necessarily imply satisfaction or adequacy. Among Kenyan ride-hailing drivers surveyed, 53% identify ride-hailing as their primary source of income, a significantly higher proportion than in Nigeria (25%) or South Africa (30%) (Bolt/Ipsos, 2026; Daily Nation, 2026). This indicates deeper dependency on platform income in the Kenyan context. Furthermore, gender representation remains highly unbalanced. In ride-hailing, 97% of drivers are male and only 3% female, reflecting broader patterns of gender segregation in the platform economy (The Kenya Times, 2026; Bolt/Ipsos, 2026). According to the World Bank's Global Findex Database (2024), 40% of adults in sub-Saharan Africa held a mobile money account in 2024, up from 27% three years earlier, and mobile money platforms such as M-Pesa and Airtel Money are central to this ecosystem, enabling digital taxi drivers to manage earnings efficiently (Daily Nation, 2026).

Government initiatives have accelerated this trajectory. The Ajira Digital Programme, launched to train young Kenyans for digital work, had trained over 516,500 people by April 2024. The Jitume Digital Hub network reached approximately 28,000 users across 117 centres by mid-2024 (Onditi, 2026). These investments reflect policy recognition that digital work may offer a pathway to employment, particularly for youth excluded from formal labor markets.

Yet contradictions abound. Researchers have documented significant precarity among platform workers across Africa. Masikane and Webster (2025) found that food courier riders in Nairobi, Johannesburg, and Accra face long working days (averaging 12 hours), significant unpaid waiting time between calls (30-60 minutes for 69% of riders), and exposure to crime and health and safety risks. In Nairobi specifically, the authors documented protest actions by e-hailing drivers and delivery services from Bolt, Uber, Little Cab Kenya, and Faras in July 2024, demanding higher pay and opposing higher taxation (Masikane & Webster, 2025).

1.1.5 Theoretical Contrasts and Justification for the Study

The existing literature presents three competing perspectives on the relationship between hidden unemployment and digital gig work.

Perspective One: The Inclusion Thesis. From this view, digital platforms democratize access to work by lowering barriers to entry, enabling flexible scheduling, and connecting workers to global labor markets. Gig work is positioned as a solution to unemployment, particularly youth unemployment, by providing income-generating opportunities where formal employment is scarce. This perspective finds support in government policy (the Ajira Digital Programme) and platform marketing (Bolt/Ipsos, 2026), and is consistent with narratives of digital transformation as a pathway to development.



Perspective Two: The Precarity Thesis. Countering the inclusion thesis, a substantial body of scholarship argues that platform work amplifies rather than alleviates precarity. Workers lack employment contracts, social protection, collective bargaining rights, and job security. Algorithmic management enables surveillance and control while obscuring employer responsibility (Rosenblat & Stark, 2016). Income volatility is endemic; platform workers bear all operational risks (fuel, maintenance, data costs, and accidents) while platforms extract significant commissions. From this perspective, the gig economy represents not inclusion but the intensification of exploitation—a digital enclosure of the labor market.

Perspective Three: The Continuity Thesis. A third perspective, emerging from scholarship on informal economies in the Global South, suggests that platform work may be best understood as a technological extension of longstanding informal work patterns rather than a radical break. In this view, the precarity of platform work is not novel; it mirrors the precarity of *jua kali* labor. What is new is the specific form of management (algorithmic) and the global connectivity that platforms enable (Masikane & Webster, 2025). The question then becomes not whether platform work is precarious, but whether it offers marginal improvements over traditional informal work in terms of income stability, safety, or dignity, and whether it creates new possibilities for collective organization and resistance.

These competing perspectives have not been empirically resolved in the Kenyan context. Moreover, existing research tends to study either hidden unemployment (labor market statistics) or gig work (platform-specific studies) without systematically analyzing the relationship between them. This study addresses this gap by directly examining how hidden unemployment, underemployment, discouragement, vulnerability, drives participation in gig work, and how gig work, in turn, shapes workers' labor market trajectories over time.

1.2 Statement of the Problem

Despite Kenya's sustained economic growth over the past decade, the country faces a deepening crisis of hidden unemployment. Official statistics obscure the true scale of labor underutilization: while the headline unemployment rate hovers around 5.4%, this figure excludes discouraged workers who have stopped actively seeking employment, the underemployed who work fewer hours than they desire or are available for, and those trapped in vulnerable employment without formal contracts or social protection (KNBS, 2025; ILO, 2023). Youth are disproportionately affected, with unemployment rates double the national average (approximately 12% compared to 5.4%), signaling systemic risks to human capital development.

Simultaneously, the digital gig economy has expanded dramatically, absorbing an estimated 1.54 million workers into platform-mediated labor in ride-hailing, delivery, freelancing, e-commerce, and micro-tasks (Bolt/Ipsos, 2026; The Kenya Times, 2026). This expansion has been celebrated by policymakers and platforms alike as evidence of digital transformation creating new pathways to employment. However, emerging evidence suggests a more troubling reality: gig workers in Kenya face significant precarity, with 53% of ride-hailing drivers relying on platform work as their primary income source yet earning below minimum wage thresholds, lacking access to statutory labor protections, enduring algorithmic management without adequate grievance mechanisms, and facing constant risk of arbitrary account deactivation (Masikane & Webster, 2025; Capital FM, 2026; Kashindi, 2025). The legal classification of platform workers as independent contractors rather than employees effectively excludes them from the protective framework of Kenya's labor laws, which were designed for the standard employment relationship and have not been adapted to the realities of digital platform work (Kashindi, 2025).

The central problem this study addresses is the disjuncture between the *rhetoric of inclusion*, which presents gig work as a solution to unemployment and a pathway to formal employment, and the *reality of precarity*, in which gig work may reproduce or intensify the very conditions of hidden unemployment it purports to solve. Put simply: does the digital gig economy genuinely incorporate hidden unemployed workers into decent work, or does it create a new form of hidden unemployment characterized by platform-mediated precarity?

This problem has significant theoretical, empirical, and policy dimensions. Theoretically, it tests competing claims about the relationship between digitalization and labor market inclusion. Empirically, it requires systematic analysis of labor market transitions between hidden unemployment, gig work, formal employment, and other labor market states. From a policy perspective, it is urgently relevant: as Kenya deliberates legal reforms to extend protections to platform workers, as the ILO's forthcoming Convention on platform work establishes international standards (ITUC,

2025; Privacy International, 2026), and as digital skills programs such as Ajira Digital and Jitume Hubs continue to expand (Onditi, 2026), evidence on the actual experiences and outcomes of gig workers is essential for informed policymaking.

The specific knowledge gaps this study addresses are:

1. The extent to which hidden unemployment drives participation in different types of gig work (ride-hailing, freelancing, e-commerce, micro-tasks) has not been systematically quantified.
2. The impact of gig work on workers' economic well-being, including income levels, income stability, and poverty status, relative both to unemployment and to traditional informal sector work remains under-researched.
3. The labor market trajectories of gig workers, whether gig work serves as a stepping stone to formal employment, a trap of prolonged precarity, or a permanent alternative to formal work, have not been tracked longitudinally.
4. The mechanisms through which platforms' legal classification of workers as independent contractors affects workers' access to social protection, collective bargaining, and grievance redress have not been adequately analyzed.
5. The effectiveness of existing policy interventions (Ajira Digital, Jitume Hubs) in improving gig work outcomes has not been rigorously evaluated.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of this study is to analyze the relationship between hidden unemployment and participation in the digital gig economy in Kenya between 2024 and 2026, examining the extent to which gig work provides a pathway to decent work versus reproducing labor precarity.

1.3.2 Specific Objectives

The specific objectives of this study are to:

1. **Determine** the prevalence and distribution of hidden unemployment among gig workers in Kenya, disaggregated by gig work type (ride-hailing, delivery, freelancing, e-commerce, micro-tasks) and demographic characteristics (age, gender, education, location).
2. **Establish** the economic impact of gig work participation on workers' income levels, income stability, and poverty status, comparing gig workers to both unemployed individuals and traditional informal sector workers.
3. **Determine** the patterns of labor market transition among gig workers, including entry into gig work (from unemployment, underemployment, or formal employment), movement between gig platforms, and exit from gig work (to formal employment, back to unemployment, or to other informal work).
4. **Examine** the vulnerability of gig workers to labor rights violations, including denial of minimum wage, exclusion from social security, lack of grievance mechanisms, and arbitrary account deactivation, and analyze the relationship between legal classification (independent contractor vs. employee) and access to protections.
5. **Analyze** the effectiveness of existing policy interventions (Ajira Digital Programme, Jitume Digital Hubs, proposed labor law reforms) in improving gig work outcomes and facilitating transitions to formal employment.

1.4 Hypotheses of the Study

The following null hypotheses are proposed for testing:

H₀₁: There is no significant relationship between hidden unemployment status and participation in digital gig work in Kenya.

H₀₂: There is no significant difference in income levels between gig workers, traditional informal sector workers, and unemployed individuals when controlling for demographic characteristics.

H₀₃: Gig work participation does not significantly increase the probability of transition to formal employment compared to continued informal sector work or unemployment.

H₀₄: The classification of gig workers as independent contractors does not significantly affect their access to social protection, minimum wage compliance, or grievance mechanisms.

H₀₅: Participation in Ajira Digital Programme training does not significantly improve gig workers' income levels or probability of formal employment transition.

1.5 Significance of the Study

This study is significant at theoretical, empirical, methodological, and policy levels.



Theoretical Significance: The study contributes to debates on labor market segmentation, precarity, and the digital transformation of work in developing economy contexts. By testing competing perspectives on platform work (inclusion thesis vs. precarity thesis vs. continuity thesis) against empirical evidence from Kenya, the study advances understanding of how digitalization shapes labor market outcomes in contexts where informal employment has long been the norm rather than the exception. The findings will speak to broader debates about the future of work in the Global South, challenging Northern-centric assumptions that may not travel well.

Empirical Significance: The study generates primary evidence on a population – gig workers in Kenya – that has been under-studied relative to its economic significance. By collecting survey data from 384 gig workers across three cities and conducting in-depth interviews with 30 workers, the study captures heterogeneity across gig work types (ride-hailing, delivery, freelancing, e-commerce, micro-tasks) that existing studies often conflate. The focus on labor market transitions, tracking workers' pathways into, though, and out of gig work, addresses a critical gap in cross-sectional studies that cannot identify causal relationships between gig work participation and outcomes.

Methodological Significance: The study's mixed-methods design, combining secondary analysis of KNBS labor force data, primary survey data, and qualitative interviews, enables triangulation across data sources and provides both breadth (representativeness) and depth (lived experience). The development and validation of survey instruments specifically adapted to the Kenyan gig economy context will provide resources for future research.

Policy Significance: The study provides evidence to inform several ongoing policy processes:

- **Labor law reform:** As Kenya deliberates extending protections to platform workers, evidence on the actual working conditions and legal status of gig workers is essential. The study's findings on the relationship between independent contractor status and access to protections will inform debates about reclassification or creation of a third employment category.
- **Social protection expansion:** With the government extending social health insurance (SHIF) and seeking to expand NSSF coverage, evidence on the economic vulnerability of gig workers will inform policy design.
- **Digital skills training:** The Ajira Digital Programme and Jitume Hubs represent significant public investment in digital skills development. The study's evaluation of whether participation in these programs improves gig work outcomes will inform program refinement and resource allocation.
- **International standards implementation:** The ILO's forthcoming Convention on platform work (expected 2026) establishes international standards that Kenya will need to implement (Privacy International, 2026; ITUC, 2025). The study provides baseline evidence against which progress can be measured.

1.6 Scope of the Study

The study focuses on the period 2024–2026, capturing the most recent data available on labor market dynamics and gig economy expansion in Kenya. This period is significant because it follows the peak of COVID-19 disruption (which accelerated platform adoption), includes the most recent KNBS labor force surveys, and coincides with the ILO's finalization of the platform work Convention.

Geographically, the study focuses on three urban centers: Nairobi (the capital and largest city, with the highest concentration of gig work), Mombasa (the coastal economic hub, with significant ride-hailing and delivery activity), and Kisumu (the western regional hub, representing gig economy dynamics outside the capital). These locations capture variation in gig work density, platform presence, and labor market conditions.

In terms of gig work types, the study includes:

- **Location-based platform work:** Ride-hailing (Uber, Bolt, Little Cab), food delivery (Glovo, Uber Eats), and other on-demand services
- **Online freelancing:** Upwork, Fiverr, and similar platforms connecting workers to global clients
- **Micro-tasks:** Remotasks, Clickworker, and platforms offering small, repetitive tasks (data labeling, transcription, content moderation)
- **E-commerce platforms:** Jumia, Kilimall, and related logistics work

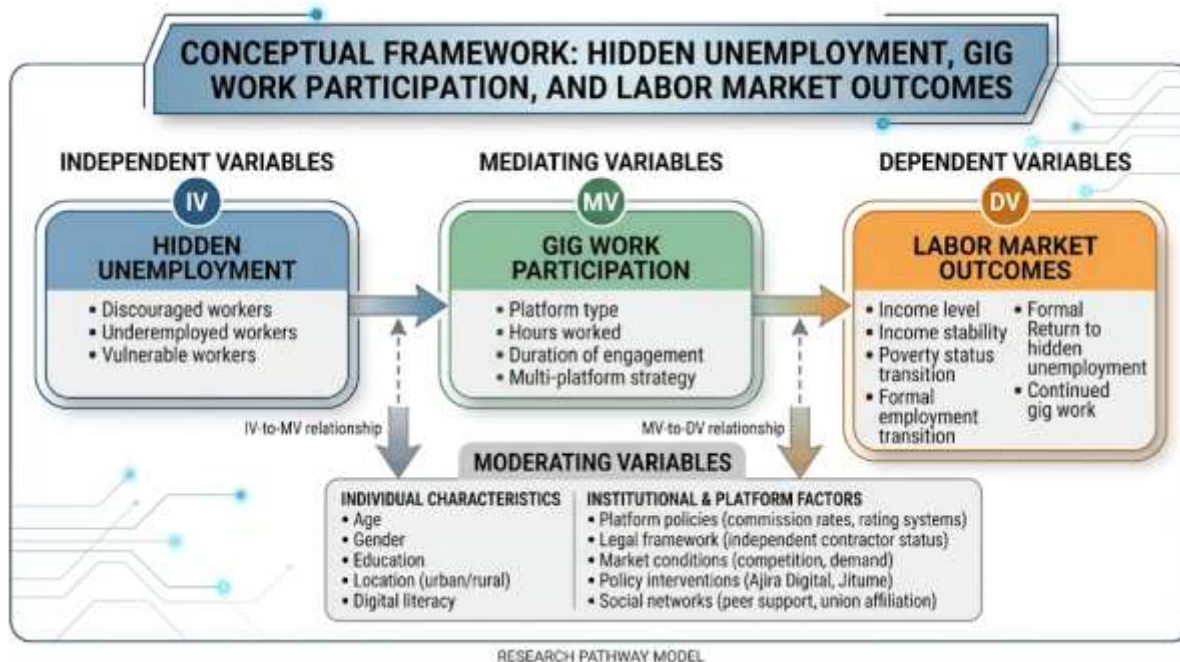
The study explicitly excludes platform-mediated rental of assets (e.g., Airbnb), fully automated work without human labor, and volunteer or unpaid digital labor.

Demographically, the study focuses on working-age adults (18-65 years) who are currently engaged in or have previously engaged in gig work. It does not include those who have never participated in gig work, except as a comparison group (unemployed individuals) for specific analyses.

1.7 Conceptual Framework of the Study

The conceptual framework for this study posits that hidden unemployment, comprising discouraged workers, underemployed workers, and vulnerably employed workers, drives participation in the digital gig economy. However, gig work participation does not uniformly resolve hidden unemployment; rather, outcomes vary depending on gig work type, individual characteristics, platform practices, and policy context. The framework also recognizes feedback loops: gig work experiences shape subsequent labor market behaviors (formal job search, return to traditional informal work, continued gig work, or complete labor force withdrawal).

Figure 1.3: Conceptual Framework: Hidden Unemployment and Gig Economy Participation in Kenya



Source: Conceptual Framework

1.7.1 Independent Variables

The primary independent variable is **hidden unemployment status**, operationalized as a categorical variable with three dimensions: (a) *discouraged workers* – individuals who have stopped actively seeking employment due to belief that no jobs are available; (b) *underemployed workers*– individuals employed but working fewer hours than they desire and are available for, including those working part-time involuntarily; (c) *vulnerably employed workers* – individuals in employment lacking formal contracts, social protection, or labor rights (ILO, 2023).

Secondary independent variables include **individual characteristics** (age, gender, education level, location, digital literacy) and **policy intervention participation** (Ajira Digital training, Jitume Hub access).

1.7.2 Dependent Variables

The study examines two sets of dependent variables.

Primary dependent variables measure labor market outcomes:

- Economic well-being:** Income level (monthly earnings from gig work), income stability (coefficient of variation across months), and poverty status (below/above poverty line, transition in/out of poverty)

- *Employment trajectory*: Transition to formal employment (operationalized as obtaining employment with written contract, social security registration, and minimum wage compliance), return to hidden unemployment, or continued gig work

Secondary dependent variables measure working conditions:

- *Labor rights access*: Minimum wage compliance, social protection coverage (NSSF, SHIF registration), grievance mechanism access
- *Legal classification effects*: Differences in outcomes between workers classified as independent contractors versus those with formal employee status

1.7.3 Description of Variables

Variable	Type	Operational Definition	Measurement
Hidden unemployment status	Independent categorical	Discouraged worker; Underemployed; Vulnerably employed	Self-reported + KNBS criteria
Gig work type	Independent categorical	Ride-hailing; Delivery; Freelancing; Micro-tasks; E-commerce	Self-reported platform
Monthly income	Dependent continuous	Total earnings from gig work in past month (KES)	Self-reported earnings
Income stability	Dependent continuous	Coefficient of variation of monthly earnings over 6 months	Calculated from earnings history
Poverty status	Dependent binary	Below national poverty line vs. above	KES 7,500/month threshold
Formal employment transition	Dependent binary	Obtained formal employment vs. not	Written contract + NSSF registration
Legal classification	Independent binary	Independent contractor vs. employee	Self-reported + contract verification
Social protection access	Dependent binary	Enrolled in NSSF and/or SHIF vs. not	Registration verification
Minimum wage compliance	Dependent binary	Hourly rate $\geq$ KES 135.9 vs. $<$	Calculated from earnings/hours
Ajira Digital participation	Independent binary	Participated in training vs. not	Program records + self-report
Digital literacy	Independent ordinal	Basic; Intermediate; Advanced	Skills assessment

SECTION TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews the theoretical and empirical literature relevant to understanding the relationship between hidden unemployment and digital gig work in Kenya. The review proceeds in three parts. First, it develops the theoretical framework, drawing on labor market segmentation theory, precarious work theory, and platform capitalism theory. Second, it reviews empirical evidence on hidden unemployment in developing economies, the growth of digital gig economies in Africa, working conditions in platform work, worker agency and resistance, and policy responses. Third, it synthesizes the literature to identify gaps this study addresses and operationalizes the conceptual framework.

2.2 Theoretical Framework

The study integrates three complementary theoretical perspectives: labor market segmentation theory, precarious work theory, and platform capitalism theory. Each perspective illuminates different aspects of the relationship between hidden unemployment and gig work, and together they provide a comprehensive analytical framework.

2.2.1 Labor Market Segmentation Theory

Labor market segmentation theory, developed by economists including Doeringer and Piore (1971) and further elaborated by Reich, Gordon, and Edwards (1973), challenges neoclassical assumptions of a single, competitive labor



market. Instead, segmentation theorists argue that labor markets are divided into distinct segments with limited mobility between them.

The primary distinction is between the *primary labor market* (characterized by high wages, job security, promotion ladders, and social protections) and the *secondary labor market* (characterized by low wages, instability, limited advancement, and absence of protections). Workers in the secondary labor market are disproportionately women, racial and ethnic minorities, and youth. Crucially, segmentation is self-reinforcing: secondary labor market experience does not typically lead to primary market entry; instead, it traps workers in secondary employment, with employers interpreting secondary market experience as signaling low productivity or unreliability.

Kenya's labor market exhibits strong segmentation. The formal sector, public administration, large corporations, multinationals, banking, telecommunications, constitutes the primary segment, characterized by written contracts, social security registration, career ladders, and union representation. The informal sector, *jua kali*, small-scale trade, casual labor, constitutes the secondary segment. Segmentation is so pronounced that economists refer to “formal” and “informal” sectors as distinct labor markets with limited crossover.

Applying segmentation theory to the digital gig economy raises several questions. Is platform work a new *tertiary* segment, distinct from both formal and traditional informal work? Or does it represent a digital intensification of secondary labor market characteristics? Can gig work serve as a bridge between secondary and primary segments, providing income and skills that facilitate formal employment, or does it operate as a trap, absorbing labor that might otherwise pressure the formal sector to expand? These questions are central to the study's investigation of labor market transitions.

2.2.2 Precarious Work Theory

Precarious work theory, associated most prominently with Standing (2011) and Kalleberg (2009), focuses on employment that is uncertain, unstable, and insecure. Precarious work is characterized by: (1) uncertainty about continued employment; (2) limited or no access to social protections (health insurance, pensions, unemployment benefits); (3) low wages with high income volatility; (4) limited worker rights and weak enforcement of such rights as exist; (5) unpredictability of work schedules; and (6) lack of collective bargaining representation.

Standing (2011) argues that precarious work has expanded significantly since the 1970s, creating a new class, the *precariat*, distinct from both the proletariat (traditional working class) and the salariat (stable salaried employees). The precariat lacks occupational identity, experiences high labor churn, relies on money wages without non-wage benefits, and depends on short-term or episodic work.

However, as Munck (2013) and Bernstein (2007) argue, precarious work has not “emerged” recently in the Global South; it has long been the norm. For most of the world's workers, stable, protected employment has never been available. The relevant question for Kenya is not whether gig work is precarious but whether its precarity differs meaningfully from traditional informal work, and whether it creates new possibilities for organization and resistance that could transform precarious conditions.

Bernstein's (2007) concept of “classes of labour” is particularly relevant. In Africa, Bernstein argues, rather than clearly demarcated classes of capital and labor, one finds quite flexible “classes of labour”, large groups who simultaneously and ambiguously combine employment and self-employment. Categories like “worker,” “peasant,” “employed,” and “self-employed” are fluid and overlapping. As Masikane and Webster (2025) note, this ambiguous status of the African worker means that precarious workers are experimenting with new hybrid forms of worker organization, including different types of associations, blurring the distinction between traditional unionism and informal workers' associations, co-operatives, micro-businesses, and savings clubs.

2.2.3 Platform Capitalism Theory

Platform capitalism theory, developed by Srnicek (2017) and further elaborated by Woodcock and Graham (2020) and Masikane and Webster (2025), analyzes how digital platforms have become dominant business models in contemporary capitalism. Platforms are digital infrastructures that enable interactions between two or more user



groups (e.g., drivers and riders, freelancers and clients). Platform businesses extract value not primarily from producing goods or services but from orchestrating and monetizing these interactions.

Critical for this study is platform capitalism's approach to labor. Platforms typically classify workers as independent contractors rather than employees, shifting risks (equipment costs, liability, benefits) onto workers while maintaining control through algorithmic management. This classification is legally contested but commercially advantageous: platforms avoid employer obligations (minimum wage, overtime, benefits, payroll taxes, unemployment insurance) while extracting significant commissions per transaction.

Algorithmic management is a distinctive feature of platform work. As Rosenblat and Stark (2016) document, platforms use algorithms to assign tasks, monitor performance, rate workers, and impose discipline. Workers may be deactivated for low ratings or unspecified policy violations with limited appeal rights. Masikane and Webster (2025) describe how food courier riders are old-fashioned piece-rate workers who are only paid when they perform delivery tasks, with an average of 69% waiting 30-60 minutes between calls, resulting in long working days with significant unpaid time. The labour process is such that, rather than clocking in with a traditional timecard, gig workers log into an app, subjecting themselves to the external authority of an algorithm.

The Leeds Index of Platform Labour Protest documented 1,271 instances of platform worker protest globally between January 2017 and July 2020, with protests concentrated over pay, employment status, and health and safety. As Masikane and Webster (2025) document, platform worker protests have shown a strong tendency to be driven from below by worker self-organization, especially in the global South, although trade unions also had an important presence in some parts of the world.

Platform capitalism theory thus illuminates the structural conditions that produce precarity in gig work: the independent contractor classification, algorithmic opacity, and the global architecture of platform ownership that separates workers from decision-makers. It also suggests, however, that platform work may enable new forms of collective actions that were unavailable to traditional informal workers.

2.2.4 Integration of Theories

This study integrates these three theoretical perspectives by recognizing that Kenya's gig economy is simultaneously shaped by:

- **Labor market segmentation** that creates a secondary labor market (traditional informal sector) into which platform work has been inserted as a new digital variant, with limited mobility to the primary formal segment
- **Precarious work characteristics** that are intensified by platform design particularly algorithmic management and independent contractor classification but not fundamentally novel to workers accustomed to informal sector precarity
- **Platform capitalism dynamics** that create distinctive features: global ownership structures, algorithmic opacity, data extraction as part of value creation, and new possibilities for worker organization

Masikane and Webster (2025) argue that through the rise of the gig economy, a new social force is being born. The changing nature of work, the deepening oppression of workers, and the weakness of traditional trade unions are reshaping an extremely precarious workforce in the informal and gig economy. However, through ethnographic studies, evidence shows that workers are self-organizing, which provides them with the ability to develop collective solidarity and engage in strike action.

Figure 2.1: Integrated Theoretical Framework

Theory	Core Focus	Relevance to Gig Work
Labor Market Segmentation (Doeringer & Piore, 1971)	Primary/secondary market divide; limited mobility	Is gig work secondary or tertiary segment? Can it bridge to primary?
Precarious Work (Standing, 2011; Kalleberg, 2009)	Uncertainty, instability, lack of protections	How does gig precarity compare to traditional informal work?
Platform Capitalism (Srnicek, 2017; Woodcock & Graham, 2020)	Platform ownership models; algorithmic management	How do platform design features shape precarity and resistance?



Integrated Framework	Intersection of segmentation, precarity, and platform dynamics	Analysis of hidden unemployment→gig work→labor market trajectories
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Source: Author's construction

2.3 Empirical Literature Review

2.3.1 Hidden Unemployment in Developing Economies

Hidden unemployment has been extensively documented in developing economies, where official unemployment statistics systematically understate labor underutilization. The ILO estimated that prior to COVID-19, approximately 470 million people globally were in forms of hidden unemployment (underemployed or discouraged workers

In sub-Saharan Africa, the phenomenon is particularly acute. In Kenya, KNBS labor force data show that while unemployment rates have remained relatively stable (5-6%), the share of workers in vulnerable employment (own-account workers and contributing family workers) has increased steadily, reaching over 60% of total employment by 2022 (KNBS, 2023). This indicates that many workers who are “employed” by official definitions lack the security and protections associated with decent work.

The informal sector has long dominated Kenya's labor market. Data from the Kenya National Bureau of Statistics shows that of the estimated 782,300 new jobs created in 2024, around 703,700, or 90%, were in the informal sector (Daily Nation, 2026). Within this context, digital platforms such as ride-hailing are emerging as a flexible and accessible pathway for income generation, absorbing labor and reshaping service delivery outside traditional formal employment (Bolt/Ipsos, 2026).

2.3.2 The Growth of Digital Gig Economies in Africa

Research on digital gig economies in Africa has expanded significantly since 2020, though it remains concentrated in a few countries (Kenya, Nigeria, South Africa, Ghana) and platform types (ride-hailing, delivery).

Anwar and Graham (2021) conducted one of the first systematic studies of digital labor in Africa, surveying workers on major freelancing platforms. They found that African freelancers were concentrated in lower-skilled tasks (data entry, transcription, virtual assistance) compared to their Global North counterparts, earned lower hourly rates, and faced barriers including payment processing difficulties and platform verification requirements. However, freelancing provided income that was often superior to local alternatives, particularly for workers in countries with high unemployment.

In the Kenyan context, the Bolt/Ipsos Gig Economy Report (2026) provides the most comprehensive recent data. Key findings include:

- **Scale:** 1.54 million gig workers in Kenya; \$1.03 billion market value; 0.85% GDP contribution
- **Growth trajectory:** From 11 platforms (2015) to 40+ (2022)
- **Worker motivations:** 28% seek financial independence; 21% value schedule flexibility; 19% seek skills/professional growth
- **Earnings distribution:** Among ride-hailing drivers, 20% derive >75% of income from platform work; 44% derive 25-75%; 33% derive <25%
- **Engagement duration:** 50% of drivers active >1 year; 24% active 6-12 months indicating significant retention rather than casual, transient participation
- **Gender imbalance:** 97% of drivers male, 3% female

Government initiatives have expanded access: Ajira Digital trained 516,500+ by April 2024; Jitume Digital Hubs reached 28,000+ users across 117 centres (Onditi, 2026). The Jitume programme was launched in 2023 under the National Digital Master Plan 2022–2032, implemented through Konza Technopolis and sector agencies, designed as a practical response to digital exclusion bringing connectivity, devices, and skills training closer to communities (Onditi, 2026).



2.3.3 Working Conditions and Precarity in Platform Work

A substantial body of research documents precarious working conditions in platform work globally, with growing evidence from Africa.

Income and wages: Dinika (2025) documented that high-skilled independents navigate autonomy and instability on global freelancing platforms while facing discrimination, while low-skilled dependents experience exploitative algorithms dictating terms of participation. Masikane and Webster (2025) found that food courier riders are old-fashioned piece-rate workers, only paid when performing delivery tasks, with 46% reporting average workdays spanning 12 hours. As one Ghanaian courier rider remarked, “I do not have off days. I work all days of the week. I only pause when there is an occasion” (Masikane & Webster, 2025).

Health and safety: Platform workers face significant health and safety risks without employer responsibility. In Nairobi, Masikane and Webster (2025) found that health and safety concerns were paramount for riders, while in Johannesburg, crime was the most frequently cited concern (58% of respondents). The high crime rate has rendered certain areas of cities unsafe, effectively normalizing the risk for riders.

Content moderation and data labor: Tighanimine et al. (2025) mapped the content moderation and data labeling industry across 43 African countries, involving 17 major firms serving predominantly North American and European clients. The authors found that African content moderation workers face insecurity and inadequate psychological support while remaining invisible to users. They apply Honneth's “struggle for recognition” framework to understand data workers' demands for professional acknowledgement.

Worker classification and legal status: The legal classification of gig workers as independent contractors has profound consequences. As Kashindi (2025) notes, national labour laws need to adapt to the new dynamics of the digital economy, including remote work, freelancing, and platform work, and Kenya's existing labor laws fail to account for the realities of gig and remote platform work.

2.3.4 Worker Agency and Resistance

An important corrective to literature focusing solely on precarity is research documenting worker agency and resistance in the platform economy. Even under conditions of intense control, platform workers exercise power.

Individual resistance: Studies document “gaming the algorithm” as a form of individual resistance. Ride-hailing drivers extend rides beyond app-assigned routes, add customers outside the app to avoid commissions, and use multiple phones to compare real-time demand across platforms.

Collective organization: More significantly, platform workers have developed collective forms of organization. Masikane and Webster (2025) document that in Nairobi, e-hailing drivers and delivery services from Bolt, Uber, Little Cab Kenya, and Faras embarked on protest action in July 2024, demanding higher pay and opposing higher taxation. The authors argue that technology allows platform workers an avenue to bargain for their labor rights, contributing to the emergence of self-organized, hybrid forms of union-like associations, and new partnerships with traditional unions and non-governmental organizations.

The Central Organization of Trade Unions (COTU-K) has affiliated with the Kenya Union of Gig Workers (KUGWO), marking significant progress in collective representation for this workforce. As Masikane and Webster (2025) note, traditional unions remain crucial to providing support and access to institutional power for the emerging organizations of precarious workers, as evidenced by the case of the Transport and Allied Workers Union in Kenya (TWU-K).

2.3.5 Policy and Regulatory Responses

Policy responses to platform work are evolving at international, regional, and national levels.

International level: The ILO's adoption of a Convention on Decent Work in the Platform Economy (scheduled for finalization in June 2026) represents the most significant international standard to date (ITUC, 2025; Privacy International, 2026). Key provisions include: digital labor platforms must ensure human review of decisions affecting workers' livelihoods; member states must extend core labor rights (fair pay, clear contracts, union rights, worker safety, data privacy) to platform workers; and protections specifically address migrant and refugee workers.



National level (Kenya): Several policy processes are underway:

- **Labor law reform:** The Ministry of Labour and Social Protection, in collaboration with the Ministry of ICT, is developing a dedicated policy on digital jobs (Kashindi, 2025). Discussions include extending social protection to gig workers, clarifying legal classification, and establishing grievance mechanisms.
- **Digital infrastructure:** The Ajira Digital Programme and Jitume Hubs continue to expand, with a focus on youth and rural areas. As Onditi (2026) notes, the next phase of the Jitume initiative will add advanced creative infrastructure to the hubs, supporting filmmakers, content creators, and digital storytellers alongside coders and developers.
- **Social protection:** The government is exploring models for extending NSSF and SHIF coverage to gig workers.

However, gaps remain. Kashindi (2025) emphasizes that national labour laws indeed need to adapt to the new dynamics of the digital economy, including remote work, freelancing, and platform work, and that Kenya's 2007 labour laws fail to account for the realities of gig and remote platform work.

2.3.6 Summary of Empirical Gaps

The literature reviewed reveals several significant gaps that this study addresses:

Gap	Description	This Study's Contribution
Hidden unemployment-gig work relationship	No study has systematically analyzed how hidden unemployment drives gig work participation	Quantifies relationship between hidden unemployment status and gig work entry
Labor market transitions	Most gig economy studies are cross-sectional; we don't know workers' trajectories	Tracks transitions into, through, and out of gig work
Comparative outcomes	Few studies compare gig workers to traditional informal workers	Compares income, stability, rights access across worker categories
Policy evaluation	No rigorous evaluation of Ajira Digital, Jitume Hubs, or labor law reforms	Evaluates policy intervention effectiveness
Worker heterogeneity	Most studies aggregate gig workers; segment differences unknown	Disaggregates by gig type (ride-hailing, freelancing, micro-tasks, e-commerce)
Temporal coverage	Literature lags current conditions (2024-2026)	Provides contemporary evidence for ongoing policy processes

2.4 Conceptual Framework Operationalization

Based on the theoretical and empirical literature reviewed, the conceptual framework operationalizes the relationships between hidden unemployment and gig work outcomes through the following propositions:

Proposition 1 (Entry): Hidden unemployment—particularly underemployment and vulnerable employment—increases the probability of gig work participation, though the strength of this relationship varies by gig type (strongest for location-based work; weaker for freelancing requiring specific skills).

Proposition 2 (Income): Gig work provides income that may exceed what workers could earn in traditional informal sector activities but falls below minimum wage levels. Income stability is lower for gig workers than formal employees but may be comparable to traditional informal workers.

Proposition 3 (Transitions): Gig work is more likely to result in continued gig work or return to hidden unemployment than transition to formal employment. However, a minority of workers—those with higher education, digital skills, and social capital—may successfully transition to formal employment.



Proposition 4 (Legal classification): Independent contractor classification significantly reduces access to social protection and labor rights compared to formal employment, but workers may be unaware of their legal status or the rights they are missing.

Proposition 5 (Policy effectiveness): Participation in Ajira Digital training is associated with higher gig earnings but not with higher probability of formal employment transition, suggesting skills training improves gig outcomes but does not bridge labor market segmentation.

These propositions guide the empirical analysis detailed in Section Three.

SECTION THREE: METHODOLOGY

3.1 Introduction

This chapter presents the methodological framework for the study. It describes the research design, study area, target population, sampling techniques, data collection instruments, pretesting and validation procedures, model specification, and methods of data analysis and presentation. Ethical considerations are also addressed.

3.2 Research Design

The study employs a mixed-methods convergent parallel design, integrating quantitative and qualitative data collection and analysis. This design is appropriate because the research questions require both breadth (representative estimation of relationships between hidden unemployment and gig work outcomes) and depth (understanding of lived experiences, coping strategies, and meaning-making among gig workers).

The quantitative component uses a cross-sectional survey with retrospective elements (recalling labor market status prior to gig work entry and tracking transitions over the past 12 months). This design enables estimation of associations between hidden unemployment status and gig work outcomes while acknowledging that causal inference is limited without longitudinal data.

The qualitative component uses semi-structured interviews to explore workers' experiences of labor market transitions, platform working conditions, coping strategies, and aspirations. Interviews provide contextual depth that surveys cannot capture, including how workers perceive their legal status, how they navigate algorithmic management, and how they understand their relationship to formal and informal labor markets.

The design is convergent because quantitative and qualitative data are collected contemporaneously (over the same period) and integrated during analysis. Integration occurs through: (1) joint display of quantitative findings and qualitative themes; (2) using qualitative data to explain unexpected quantitative results; (3) triangulating findings across data sources to assess convergence, complementarity, or contradiction.

Secondary data from KNBS labor force surveys (2020-2025), the Bolt/Ipsos Gig Economy Report (2026), and ILO documents supplement primary data collection.

3.3 Study Area

The study is conducted in three urban centers in Kenya: **Nairobi**, **Mombasa**, and **Kisumu**.

Nairobi (coordinates: 1°17'S 36°49'E) is Kenya's capital and largest city, with an estimated population of 4.4 million. It is the epicenter of Kenya's digital economy, hosting the highest concentration of gig workers, platform headquarters (Uber, Bolt, Little Cab), and digital infrastructure. Most gig economy research to date has focused on Nairobi; inclusion enables comparison with existing studies.

Mombasa (coordinates: 4°03'S 39°40'E) is Kenya's second-largest city and primary coastal economic hub, with an estimated population of 1.2 million. Ride-hailing and delivery platforms are active, but gig economy density is lower than Nairobi. Inclusion enables analysis of whether gig economy dynamics differ between primary and secondary urban centers.

Kisumu (coordinates: 0°06'S 34°45'E) is the largest city in western Kenya and the regional hub for Lake Victoria basin, with an estimated population of 700,000. Ajira Digital and Jitume Hubs have established presence in Kisumu, making it suitable for evaluating policy intervention effects.



The three locations provide geographic diversity while remaining comparable in urban characteristics. Rural areas are excluded because gig work remains concentrated in urban centers with reliable internet connectivity and platform market density. According to Onditi (2026), about 65% of Kenyans have access to the internet, yet access remains sharply unequal, with just 11.6% of Kenyans using computers, mostly in urban centres.

3.4 Target Population

The target population comprises all working-age adults (18-65 years) who are currently engaged in or have engaged in digital gig work within the past 12 months in the three study locations.

The population is stratified by:

- **Gig work type:** Ride-hailing drivers; delivery couriers; online freelancers; micro-task workers; e-commerce logistics workers
- **Location:** Nairobi; Mombasa; Kisumu
- **Gender:** Male; female (with oversampling to ensure adequate female representation given evidence of gender disparities in gig work participation, where 97% of ride-hailing drivers are male) (Bolt/Ipsos, 2026)

The total target population size is estimated at approximately 250,000 workers across the three locations, based on extrapolation from the 1.54 million national gig worker estimate and urban population shares.

Table 3.1: Distribution of Target Population by County

County	Estimated Gig Workers	Share of National Total
Nairobi	180,000	72%
Mombasa	45,000	18%
Kisumu	25,000	10%
Total (three counties)	250,000	100%

Source: Author's estimates based on Bolt/Ipsos (2026) and KNBS data

3.5 Sample Size and Sampling Techniques

Sample Size Determination

The quantitative sample size is calculated using Cochran's formula for cross-sectional surveys:

$$n = (Z^2 * p * q) / e^2$$

Where:

- $Z = 1.96$ (95% confidence level)
- $p = 0.5$ (maximum variability, conservative estimate)
- $q = 1 - p = 0.5$
- $e = 0.05$ (margin of error)

$$n = (1.96^2 * 0.5 * 0.5) / 0.05^2 = (3.84 * 0.25) / 0.0025 = 0.96 / 0.0025 = 384$$

The target sample size is 384 gig workers. This is adjusted upward to 420 to account for anticipated non-response (approximately 10%).

For the qualitative component, saturation is the guiding principle—sampling continues until no new themes emerge from interviews. Based on comparable studies (e.g., Masikane & Webster, 2025; Dinika, 2025), 30 semi-structured interviews (10 per study location) are planned.

Sampling Techniques

A **stratified purposive sampling** strategy is employed for the quantitative survey. Given that no comprehensive sampling frame of gig workers exists, probability sampling is impossible. The approach instead combines:

1. **Stratification** by gig type, location, and gender (ensuring representation across strata)
2. **Purposive sampling** within strata using multiple recruitment channels: platform driver lounges (ride-hailing), freelance co-working spaces (freelancers), Ajira Digital program lists (with permission), and snowball sampling
3. **Quota sampling** ensures minimum cell sizes: at least 50 workers per gig type per location where feasible

For qualitative interviews, maximum variation sampling is used to capture diverse experiences: workers with varying gig durations, income levels, legal status, and demographic characteristics.

Table 3.2: Sample Size Distribution

Stratum	Nairobi	Mombasa	Kisumu	Total
Ride-hailing drivers	50	25	15	90
Delivery couriers	40	20	15	75
Freelancers	40	15	15	70
Micro-task workers	30	15	10	55
E-commerce logistics	30	15	10	55
Subtotal (quantitative)	190	90	65	345
<i>Adjustment for non-response</i>	<i>*40*</i>	<i>*20*</i>	<i>*15*</i>	<i>*75*</i>
Total quantitative	230	110	80	420
Qualitative interviews	12	10	8	30

3.6 Data Collection Instruments

3.6.1 Questionnaire

A structured questionnaire (Appendix I) is developed for the quantitative survey. The questionnaire comprises six sections:

Section A: Demographic Information (age, gender, education, household composition, location)

Section B: Labor Market History (employment status prior to gig entry; duration of gig work; history of unemployment, underemployment, or formal employment)

Section C: Gig Work Participation (platforms used; hours worked; months active; multi-platform strategy; reasons for gig entry)

Section D: Economic Outcomes (monthly earnings; earnings variability; household income; poverty status; asset ownership)

Section E: Working Conditions and Rights (legal classification; contract type; NSSF/SHIF registration; minimum wage compliance; experience of account deactivation; grievance mechanism access; union membership)

Section F: Policy Intervention Exposure (Ajira Digital participation; Jitume Hub access; awareness of labor rights; policy preferences)

Most questions use closed-ended formats with Likert scales for attitudes. Selected questions are open-ended to capture unanticipated responses.

The questionnaire is developed in English and translated into Kiswahili, with back-translation to ensure equivalence. Enumerators are fluent in both languages and administer the questionnaire in the respondent's preferred language.

3.6.2 Interview Guide

A semi-structured interview guide (Appendix II) is developed for qualitative interviews. The guide covers:

- **Labor market trajectory:** How did you come to do gig work? What were you doing before? What transitions have you experienced?
- **Daily work experience:** Can you describe a typical workday? What are the best and worst parts of this work? (cf. Masikane & Webster, 2025)
- **Platform relationship:** How would you describe your relationship with the platform? Have you experienced account deactivation or rating problems? How did you handle them?
- **Economic situation:** Does this work provide enough to meet your needs and your family's needs? What do you do when work is scarce?
- **Legal status:** Do you consider yourself an employee or independent contractor? Do you know your legal rights? Have you accessed NSSF/SHIF?
- **Social relations:** Do you interact with other gig workers? Have you participated in any collective action (strikes, union meetings, informal coordination)? (cf. Masikane & Webster, 2025)
- **Future aspirations:** Where do you see yourself in five years? Do you want to continue gig work, find formal employment, start a business?

3.6.3 Secondary Data Sources

Secondary data will be obtained from:

- Kenya National Bureau of Statistics (KNBS) Economic Surveys and Labour Force Reports (2020-2025)
- Bolt/Ipsos Gig Economy Report (2026)



- ILO reports on platform work and decent work (2023-2026)
- Ministry of ICT, Innovation and Youth Affairs program data on Ajira Digital and Jitume Hubs

3.7 Pretesting of Research Instruments

The questionnaire and interview guide will be pretested with 30 gig workers (10 per study location) who will not be included in the final sample. Pretesting aims to:

1. Assess clarity, comprehensibility, and cultural appropriateness of questions
2. Identify ambiguous, confusing, or offensive items
3. Estimate completion time and respondent burden
4. Test skip patterns and question flow
5. Validate response categories and Likert scale anchors

Based on pretest results, instruments will be revised before full administration.

3.8 Reliability Tests

Reliability refers to the consistency and reproducibility of measurements from the assessment tools (Creswell & Creswell, 2018).

Internal consistency reliability will be assessed using Cronbach's alpha coefficient for Likert-scale items measuring latent constructs (e.g., job satisfaction, precarity perception, policy awareness). Acceptable thresholds are $\alpha \geq 0.70$ for established scales and $\alpha \geq 0.60$ for newly developed scales (Nunnally & Bernstein, 1994).

Test-retest reliability will be assessed by administering the questionnaire to a subsample of 30 respondents twice, two weeks apart. The correlation coefficient between the two administrations will be calculated, with $r \geq 0.70$ indicating acceptable stability over time.

For qualitative data, **inter-coder reliability** will be established. Two researchers will independently code 20% of interview transcripts, compare coding, resolve discrepancies through discussion, and calculate Cohen's kappa coefficient (target $\kappa \geq 0.80$).

Table 3.3: Reliability Thresholds

Reliability Type	Method	Acceptable Threshold
Internal consistency	Cronbach's alpha	$\alpha \geq 0.70$
Test-retest	Pearson correlation	$r \geq 0.70$
Inter-coder	Cohen's kappa	$\kappa \geq 0.80$

3.9 Validity Tests

Validity refers to whether the test measures what it claims to measure (Creswell & Creswell, 2018).

Content validity will be established through expert review. The questionnaire and interview guide will be reviewed by a panel of three experts: a labor economist, a gig economy researcher, and a representative from a gig worker organization. The panel will assess whether items adequately cover all dimensions of the constructs under study. The Content Validity Index (CVI) will be calculated, with $CVI \geq 0.80$ indicating acceptable content validity.

Construct validity will be assessed through:

- **Convergent validity:** Correlation between measures of the same construct (e.g., self-reported income and expenditure-based income estimates) should be high ($r \geq 0.70$)
- **Discriminant validity:** Correlation between measures of different constructs (e.g., income and digital literacy) should be lower than convergent correlations

Face validity will be established during pretesting: respondents will be asked whether the questions appear to measure what they claim to measure and whether any items seem irrelevant or off-target.

Criterion-related validity will be assessed by comparing survey responses (e.g., income levels, platform usage) with available administrative data (e.g., platform transaction data where accessible) or with findings from comparable studies (e.g., Bolt/Ipsos, 2026).

For qualitative data, **credibility** (internal validity) will be established through:

- **Triangulation:** Comparing findings across data sources (surveys, interviews, secondary data)
- **Member checking:** Returning interview summaries to participants for verification
- **Peer debriefing:** Discussing preliminary findings with fellow researchers

3.10 Model Specification

To test the hypotheses, the following regression models will be estimated:

Model 1 (Hidden unemployment → Gig work participation):

$$GigParticipation_i = \alpha + \beta_1 HiddenUnemp_i + \beta_2 Age_i + \beta_3 Gender_i + \beta_4 Education_i + \beta_5 Location_i + \varepsilon_i$$

Where *GigParticipation* is a binary indicator of gig work participation (or categorical for gig type), and *HiddenUnemp* captures pre-gig labor market status.

Model 2 (Income determinants):

$$Log(Income)_i = \alpha + \beta_1 GigType_i + \beta_2 Hours_i + \beta_3 HiddenUnemp_i + \beta_4 Education_i + \beta_5 AjiraDigital_i + \varepsilon_i$$

Model 3 (Formal employment transition):

$$Pr(FormalTransition)_i = \logit[\alpha + \beta_1 GigDuration_i + \beta_2 GigType_i + \beta_3 Training_i + \beta_4 Education_i + \beta_5 SocialCapital_i]$$

Model 4 (Legal classification effects):

$$ProtectionAccess_i = \alpha + \beta_1 IndependentContractor_i + \beta_2 GigType_i + \beta_3 UnionMember_i + \beta_4 Education_i + \varepsilon_i$$

Table 3.4: Summary of Variables and Measurement

Variable	Type	Operational Definition	Measurement
Hidden unemployment status	Independent categorical	Discouraged worker; Underemployed; Vulnerably employed	Self-reported + KNBS criteria
Gig work type	Independent categorical	Ride-hailing; Delivery; Freelancing; Micro-tasks; E-commerce	Self-reported platform
Monthly income	Dependent continuous	Total earnings from gig work in past month (KES)	Self-reported earnings
Income stability	Dependent continuous	Coefficient of variation of monthly earnings over 6 months	Calculated from earnings history
Formal employment transition	Dependent binary	Obtained formal employment vs. not	Written contract + NSSF registration
Legal classification	Independent binary	Independent contractor vs. employee	Self-reported + contract verification
Social protection access	Dependent binary	Enrolled in NSSF and/or SHIF vs. not	Registration verification
Ajira Digital participation	Independent binary	Participated in training vs. not	Program records + self-report

3.11 Methods of Data Analysis and Presentation

3.11.1 Quantitative Data Analysis

Quantitative data will be analyzed using Stata/SPSS. The analysis proceeds in three stages:

Descriptive analysis: Frequencies, percentages, means, medians, and standard deviations will be computed for all variables. Results will be presented in tables and figures.

Bivariate analysis: Cross-tabulations and chi-square tests will examine associations between categorical variables. T-tests and ANOVA will compare means across groups.

Multivariate analysis: Regression models (linear, logistic, multinomial) will estimate relationships between hidden unemployment and gig work outcomes while controlling for confounding variables. Assumptions of regression (normality, homoscedasticity, multicollinearity) will be tested.

**Table 3.5: Research Objectives, Data Sources, and Analytical Methods**

Objective	Data Source	Analytical Method
1: Prevalence of hidden unemployment	Survey, KNBS	Descriptive statistics, cross-tabulation
2: Economic impact	Survey	Regression analysis, ANOVA
3: Labor market transitions	Survey (retrospective)	Survival analysis, transition matrices
4: Vulnerability and legal classification	Survey, interviews	Regression, thematic analysis
5: Policy effectiveness	Survey, program data	Difference-in-differences, propensity score matching

3.11.2 Qualitative Data Analysis

Qualitative data from interviews will be analyzed using thematic analysis following Braun and Clarke's (2006) six-phase framework:

1. **Familiarization:** Transcribing interviews, reading and re-reading transcripts
2. **Initial coding:** Generating initial codes for meaningful data segments
3. **Theme search:** Collating codes into potential themes
4. **Theme review:** Checking themes against coded extracts and full dataset
5. **Theme definition:** Refining theme names and definitions
6. **Writing up:** Producing final narrative with illustrative quotations

NVivo software will be used to manage coding and theme development.

3.11.3 Integration of Methods

Quantitative and qualitative findings will be integrated using a joint display matrix that compares results from both methods for each research objective. Convergence (findings agree), complementarity (findings provide different but compatible insights), or dissonance (findings contradict) will be identified and interpreted.

3.12 Ethical Considerations

The study will adhere to ethical principles of research involving human subjects:

1. **Informed consent:** All participants will receive an information sheet (Appendix IV) explaining study purpose, procedures, risks, benefits, and confidentiality. Written or verbal consent will be obtained before data collection.
2. **Voluntary participation:** Participants may withdraw at any time without penalty.
3. **Confidentiality and anonymity:** Identifying information will be removed from datasets. Pseudonyms will be used for interview quotes. Data will be stored on password-protected devices.
4. **Minimizing harm:** Sensitive topics (income, legal status, platform disputes) will be approached carefully. Referral information for psychosocial support will be provided if needed.
5. **Institutional approval:** Ethical clearance will be obtained from Maseno University Ethics Review Committee and relevant national authorities (NACOSTI).
6. **Data security:** All data will be anonymized and stored securely for five years post-study before destruction.

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