

The Impact of the Digital Economy on Informal Employment of Platform Economy Workers in Chinese Cities

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Abstract: In the context of the digital age, the digital economy is becoming a new driving force for global economic development. In China, in particular, it has had a significant impact on informal employment, especially platform economy workers. This study explores how the digital economy reshapes informal employment patterns and positively contributes to the urban labor market through a literature review and empirical analysis. The findings reveal that the digital economy not only creates new job opportunities and increases labor market flexibility but also fosters innovation and entrepreneurial activities. The paper further analyzes the "Digital Economy+" model, which integrates the digital and platform economies, demonstrating how this model provides diverse employment opportunities and enhances economic participation for urban informal workers. Additionally, the paper proposes strategies to help informal workers leverage digital technology to improve job quality and stability. The results aim to provide policymakers, educators, and informal workers with strategies and insights to navigate the digital economy era, while also acknowledging research limitations, such as the digital divide between urban and rural areas and the adaptability challenges faced by low-education groups. This study offers valuable perspectives for understanding the phenomenon of informal employment in the digital economy.

Keywords: Digital Economy, Informal Employment, Platform Economy, Job Quality, Common Prosperity.

1. Introduction

In the information age, the digital economy, characterized by its unique platformization, personalization, and flexibility, has become a key force driving the transformation of the global economy. As an active participant in the digital economy, China's urban informal employment sector is undergoing unprecedented changes. This paper aims to deeply explore the impact of the digital economy on urban informal employment in China, particularly focusing on platform economy workers. It analyzes how the digital economy reshapes employment models, creates job opportunities, increases labor market flexibility, and promotes innovation and entrepreneurship.

Through a comprehensive literature review and analytical discussion, this study reveals the positive contributions of the digital economy to the urban labor market and examines how the "Digital Economy + Platform Economy" model offers diverse employment opportunities and enhances economic participation for informal workers. The findings provide policymakers and educators with strategies and insights for navigating the digital economy era and offer specific strategies for informal

workers to leverage digital technology to improve job quality and stability. Although the study acknowledges limitations in addressing the digital divide between urban and rural areas and the adaptability issues faced by low-education groups, it still provides valuable perspectives for understanding the phenomenon of informal employment within the context of the digital economy.

2. Employment Transformation under the Platform Economy: The Driving Force and Social Impact of the Digital Economy

(1) Definition and Key Characteristics of the Platform Economy

According to the 2019 definition by the State Council, the platform economy fundamentally refers to "the use of internet technology to promote transformation and innovation in production and distribution systems, creating a more efficient service integration platform" that effectively matches supply and demand, facilitates rapid production response, and maximizes synergies [1].

Compared with traditional business models, the platform economy emphasizes intermediary services that connect various users and service providers, creating value by facilitating transactions between multiple parties rather than directly providing goods or services. It can be viewed as an upgrade and transformation of the traditional market model. The platform economy encompasses fundamental characteristics such as economies of scale, economies of scope, network externalities, multi-sided markets, and big data analysis.

(2) Reshaping Informal Employment through the Platform Economy: Analysis of the Current Situation and Trends

Under the current macroeconomic conditions, young people are increasingly choosing the highly flexible and autonomous work models offered by the platform economy. This trend may stem from a shift in preference away from traditional manufacturing jobs and a desire for personal growth and work-life balance. Additionally, the platform economy provides a basic income safety net for young workers, helping to alleviate the employment pressure caused by technological advancements and industrial restructuring. Informal economies have existed since ancient times, and they are a natural outcome of the unbalanced and insufficient development of modern society. The platform economy, however, builds on advanced technologies such as artificial intelligence, machine learning, blockchain, and cloud computing to create a vast virtual online space that can absorb a significant portion of the surplus labor from the informal economy. The informal economy, in this sense, serves as a source of labor and growth for the platform economy.

Considering the difference between traditional and new definitions, in terms of efficiency, the disappearance of traditional jobs is a typical outcome of technological progress leading to the replacement of "low-efficiency employment with high-efficiency employment." With the support of digital technology, gig jobs created by the platform economy are generally more efficient than the traditional jobs they replace. However, does this mark a historical turning point in the definition of informal employment? According to the China Online Audiovisual Development Research Report (2024), as of December 2023, there were 1.55 billion short video accounts online, with 15.08 million people taking up live streaming as their primary occupation, meaning that on average, 1 in every 100 people is a professional live streamer. Among them, 71.2% of users have purchased goods after watching short videos or live streams, and 40.3% of users recognize short videos or live streaming as their main consumption channel. With proper regulation and guidance, this trend could significantly develop the digital potential of users [2]. Through the platform economy, data, information, and traffic have acquired unprecedented monetization capabilities. In the traditional sense, informal employment may not equate to what it might mean in the future; in this context, flexible employment might become a synonym for informal employment and could evolve into the norm of the future.

Another significant phenomenon is the widening income gap, particularly reflected in the decline in the share of labor income. This issue is complex, but one major factor is the substitution of labor-

intensive processes with capital-intensive ones, such as the widespread use of robotics. The widening gap in income between urban and rural areas, as well as between regions, is an inevitable outcome of industrial agglomeration and urban economic development. Correspondingly, the gig work forms derived from the platform economy provide entrepreneurs with a basic income safety net, mitigating the societal impact of the widening income gap.

3. The Integration of "Digital Economy + Platform Economy": Reshaping the Informal Employment Ecosystem

(1) The Comprehensive Impact of the Digital and Platform Economies on the Labor Market

1. Integration of the Platform and Digital Economies and Their Impact on Employment

Research has shown that the development of the digital economy promotes productivity levels, enhances workers' job satisfaction, and subsequently optimizes job quality [3]. In terms of job creation, the digital economy increases the likelihood of individuals engaging in informal employment, and this effect is primarily evident among informally employed groups. The impact of employment choices varies significantly based on indicators such as educational attainment and self-reliance [4]. To fully benefit from the development of the "Digital Technology + Platform Economy," informal workers must shift their mindset and keep pace with the times.

From an economic perspective, under the backdrop of big data and artificial intelligence, the platform economy is overcoming information and cognitive constraints, moving toward information completeness [5]. AI assists users in decision-making, greatly expanding the scope of rational decision-making, making individuals' choices freer and more proactive. This enhances market influence, ushering in the "era of algorithm supremacy." As a result, the platform economy can comprehensively enhance economic efficiency and overall societal welfare, creating a digital dividend.

2. Expansion of Employment Capability Circles and Transformation of Employment Forms

The platform economy optimizes resource allocation and lowers employment barriers, providing a wide range of flexible and diverse employment opportunities, including part-time, temporary, and emerging professions. By leveraging big data and algorithms, it achieves precise matching of skills and jobs, expanding the scope of employment across different regions and industries while promoting the development of new employment forms. The platform economy also enhances the adaptability of the labor market, increases employment efficiency, and supports micro and small enterprises and entrepreneurship, generating more job opportunities. Additionally, through online training and education, it helps workers improve their skills, promoting sustainable development in the labor market.

The digital economy not only promotes overall economic growth but also creates new business models such as ride-hailing, food delivery, and live-streaming e-commerce [6]. These newly created jobs typically have low skill requirements and easy entry barriers [7]. Moreover, advancements in digital technology come with a preference for specific skills, offering a higher labor premium and forming positive incentives. This encourages low-skilled workers to engage in learning and training, leading to higher employment levels and greater economic returns [8].

From the perspective of the diversity of employment forms and the transformation of employment methods, new employment types have emerged alongside the development of mobile internet, big data, and artificial intelligence. These forms organize labor elements through digital platforms, directly connecting workers and consumers, breaking the constraints of time, space, and job content, and creating a more flexible and less dependent employment state [9]. The spatial limitations of employment have been significantly reduced, and work flexibility has greatly increased, leading to a trend of gig and flexible employment.

(2) Response Measures: How Platform Economy Workers Can Better Utilize Digital Technology

In the digital economy era, for informal workers in the platform economy to fully leverage digital technology and platform resources, they must first improve their digital skills and market sensitivity through online courses and professional training. For example, learning SEO (Search Engine Optimization) and data analysis skills can help them increase online visibility and attract more potential clients.

To enhance work efficiency, informal workers can use various digital tools, such as project management software and automation tools, to streamline workflows. Additionally, by learning how to collect and analyze business data, they can make more accurate and informed decisions based on data, demonstrating a higher level of professionalism and increasing recognition and trust from employers.

To reduce dependency on a single platform, informal workers should establish their business presence on multiple platforms to diversify their sources of income. By actively managing online reviews and feedback, they can improve service quality and build customer trust. Furthermore, maintaining an innovative mindset, staying adaptable, and participating in online communities and forums can help them stay updated with the latest industry information and share experiences with peers, fostering collective growth.

Finally, effective time management is crucial for balancing work and personal life. In today's trend of "intensification," there is an increasing pursuit of a sense of autonomy and freedom regarding one's time, especially among younger groups. Informal workers can use digital tools to plan their time, ensuring that while pursuing professional development, they also enjoy a fulfilling personal life. Through these specific and cohesive measures, informal workers can better seize the opportunities brought by the digital economy, enhancing their personal value and improving their economic status.

4. The Bright Future of the "Digital + Platform" Economy within the Framework of Chinese Modernization

(1) The Social Significance of the "Digital Economy + Platform Economy"

The digital economy not only leads the trend of the times but is also crucial for realizing China's strategy of common prosperity. On a societal level, the development of the digital economy is not merely an issue of industrial growth; it serves the function of supporting shared development and promoting common prosperity, with digital technology at its core [10]. Moreover, to a certain extent, the mode of economic development determines the mode of employment. In the foreseeable future, particularly in the current severe economic crisis, informal employment will be the primary channel for increasing employment. Furthermore, when guided appropriately, digital technology can help bridge the digital divide between urban and rural areas, addressing digital poverty and enhancing the digital access, sense of achievement, and happiness of workers [11].

(2) The Superiority of China's Institutional Framework in Regulating the Platform Economy

This section discusses how China uses policies and regulations to guide and regulate the development of the platform economy while protecting the rights of informal workers. This includes the adaptability of labor laws, data security regulations, and anti-monopoly regulations. Special emphasis is placed on preventing monopolistic behavior by platforms, such as implicit monopolies that hinder healthy competition, like the "either-or" practices. These measures are designed to regulate the healthy development of digital platforms, promote fair competition, expand the freedom of choice for informal workers, and protect their interests.

Chinese modernization aims to benefit the people and requires that the continuous improvement of people's well-being be given more prominence, while also ensuring the government's normative role in the socialist market economy. For example, in the development process of the platform economy, it naturally exhibits network effects and the Matthew effect, tending towards monopolies and competitive exclusion, which may harm consumer rights, encourage overconsumption, and lead

to negative externalities such as "big data price discrimination" and "too big to fail" issues. The socialist market economy system provides effective regulation and oversight to mitigate these effects.

(3) The Digital Economy under the Goal of Common Prosperity

The 14th Five-Year Plan for Digital Economy Development explicitly states that the digital economy can provide a solid material foundation and diverse development opportunities for achieving common prosperity by enhancing productivity, promoting industrial upgrades, balancing regional development, stimulating innovation, optimizing resource allocation, improving public services, creating employment opportunities, advancing inclusive finance, strengthening social governance, and fostering international cooperation. It helps narrow regional disparities, raises income levels across different social strata, improves public well-being, and ensures fair distribution of economic benefits, contributing to social harmony and stability, and playing a vital role in the comprehensive construction of a modern socialist state [12].

At a higher level, the support provided by the digital economy to informal workers also demonstrates the advanced and inclusive nature of new productivity. Unlike historical cases where advanced means of production were predominantly controlled by a minority upper class, digital technology, when combined with appropriate employment knowledge and skills, enables disadvantaged populations to mitigate the negative impact of low educational attainment, transcend class barriers across time and space, and generate wealth that they could not otherwise create. Therefore, the "Digital Economy + Platform Economy" significantly highlights the core of shared prosperity within technological development and aligns organically with national strategies. Specifically, in the post-pandemic era, the digital economy continues to grow rapidly, serving as a key driver of national economic development. Its unique advantages stimulate new consumption demands, while new industries and models based on digital technology inject strong momentum into domestic economic circulation. This is of great significance for building the "dual circulation" development pattern and enhancing China's comprehensive competitiveness [13].

5. Conclusion

This paper explores the profound impact of the digital economy on urban informal employment in China, particularly focusing on platform economy workers. Driven by the digital wave, platform economy workers are experiencing an unprecedented transformation in employment models. The digital economy not only provides new channels and opportunities for informal workers but also enhances economic participation by increasing labor market flexibility and promoting innovation and entrepreneurial activities. The emergence of the "Digital Economy + Platform Economy" model offers diverse employment opportunities for urban informal workers, driving inclusive economic growth.

The Chinese government, through effective policies and regulations, has regulated the development of the platform economy, protecting the rights of informal workers while promoting fair competition. Although challenges such as the urban-rural digital divide and labor protection issues remain, concerted efforts across society, including enhanced training and improved employment stability, can foster the sustainable development of the informal employment sector.

Ultimately, this paper emphasizes the critical role of the digital economy in achieving the goal of common prosperity, advocating for the full utilization of digital technology to provide greater support for informal workers and build an inclusive and sustainable socio-economic system. Looking ahead, the digital economy is expected to bring greater prosperity and opportunities to all social strata, contributing to the comprehensive construction of a modern socialist state.

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