

USING THE OPPORTUNITIES OF THE DIGITAL ECONOMY TO REDUCE
POVERTY.

Azimov.B.F

Proffessor at Bukhara state technical university

Zayniddinov.F.F

Masters student at Bukhara state technical university

**ARTICLE
INFORMATION**

ABSTRACT:

ARTICLE HISTORY:

Received:18.05.2026

Revised: 19.05.2026

Accepted:20.05.2026

KEYWORDS:

Digital economy,

Poverty reduction,

Digital divide,

Financial inclusion,

Digital transformation,

Internet access.

Poverty remains one of the most pressing global challenges, limiting access to essential services such as education, healthcare, and adequate living standards. In recent years, the rapid expansion of the digital economy has introduced new opportunities for poverty reduction by enhancing financial inclusion, expanding employment opportunities, and improving access to public services. This study examines the role of digital technologies in alleviating poverty, drawing on recent empirical and theoretical research. Findings indicate that digital tools—such as mobile internet, fintech solutions, and online labor platforms—enable individuals, particularly in developing countries, to access markets, manage financial risks, and participate in economic activities more effectively. However, the benefits of digitalization remain unevenly distributed due to persistent digital divides in access, infrastructure, and skills. A significant portion of the global population still lacks internet connectivity and digital identification, limiting their participation in the digital economy. Furthermore, rapid technological advancements, including artificial intelligence, are

transforming labor markets and increasing the demand for digital competencies, posing both opportunities and risks for vulnerable populations. The study emphasizes that without inclusive policies, investments in digital infrastructure, and the development of human capital, digitalization may exacerbate existing inequalities rather than reduce poverty. Therefore, effective government strategies, institutional frameworks, and international cooperation are essential to ensure that the digital economy contributes to inclusive and sustainable development. This research contributes to the growing body of literature by highlighting both the potential and limitations of digital transformation as a tool for poverty reduction.

Introduction.

Poverty remains one of the most pressing global challenges, affecting billions of people worldwide and limiting access to basic needs such as education, healthcare, and decent living standards. Despite significant progress over recent decades, the persistence of inequality and the emergence of new global shocks—such as the COVID-19 pandemic, climate change, and geopolitical tensions—have slowed or even reversed poverty reduction efforts. In this context, the rapid expansion of the digital economy has introduced new opportunities for inclusive growth and sustainable development. The integration of digital technologies into economic and social systems has fundamentally transformed how individuals access information, participate in markets, and improve their livelihoods.

Recent researches reveals the transformative role of the digital economy in poverty reduction, particularly through expanding access to opportunities, financial inclusion, and human capital development. The World Bank (2021) highlights that digital technologies—especially mobile internet and digital platforms—have enabled millions of low-income individuals to access jobs, markets, and services previously beyond their reach. Their report stresses that digital inclusion can reduce transaction costs and improve efficiency in service delivery, particularly in developing countries (World Bank, 2021, pp. 45–52). Similarly, the International Telecommunication Union (2022) notes that increased internet penetration

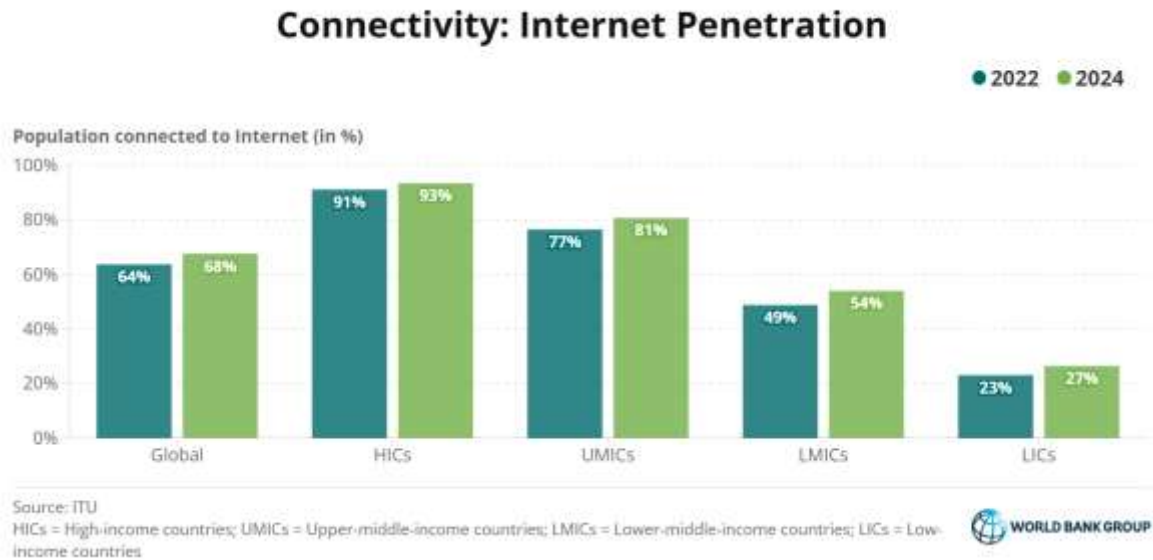
correlates strongly with income growth and poverty alleviation, although disparities in access remain a significant barrier (ITU, 2022, pp. 30–34). A growing body of literature also focuses on digital financial inclusion as a key mechanism. Tavneet Suri and William Jack (2021) demonstrate that mobile money services, such as M-Pesa, have significantly reduced extreme poverty by enabling households to better manage risks, save securely, and invest in small enterprises (Suri & Jack, 2021, pp. 163–168). In parallel, the United Nations Development Programme (2023) emphasizes that digital payment systems and fintech innovations have improved the targeting and distribution of social protection programs, especially during crises such as the COVID-19 pandemic (UNDP, 2023, pp. 60–66). Recent studies further explore the role of digital platforms and the gig economy in income generation. Mark Graham et al. (2022) analyze online labor platforms and find that they create new employment opportunities for workers in low-income regions, although they also introduce challenges related to job security and wage stability (Graham et al., 2022, pp. 210–215). Meanwhile, Otto Kässi and Vili Lehdonvirta (2021) highlight that participation in digital labor markets can increase household income but often depends on digital skills and infrastructure availability (Kässi & Lehdonvirta, 2021, pp. 75–79).

Another emerging strand of research addresses the digital divide as both a constraint and a policy priority. The Organisation for Economic Co-operation and Development (2022) argues that unequal access to digital technologies—referred to as the “second-level digital divide”—limits the poverty-reducing potential of the digital economy, as individuals without adequate skills cannot fully benefit from digital opportunities¹⁰⁹ (). Likewise, Alexander Van Deursen (2020) emphasizes that digital skills inequality reinforces existing socioeconomic disparities, making targeted education and training programs essential (Van Deursen, 2020, pp. 89–93). More recent contributions focus on the intersection of digitalization and structural inequality. The United Nations Conference on Trade and Development (2024) reports that while digitalization accelerates economic growth, its benefits are unevenly distributed across countries and regions, often favoring technologically advanced economies (UNCTAD, 2024, pp. 22–28). Additionally, Erik Brynjolfsson et al. (2023) argue that without inclusive digital policies, automation and artificial intelligence may exacerbate income inequality, potentially offsetting poverty reduction gains (Brynjolfsson et al., 2023, pp. 140–145). Recent literatures suggest that the digital economy offers significant potential for poverty reduction through financial inclusion, employment creation, and improved access to services. However, scholars

¹⁰⁹ OECD. (2022). Bridging the digital divide: Enhancing access and skills. OECD Publishing, pp. 101–106

consistently emphasize that these benefits are not automatic and depend on complementary policies addressing infrastructure gaps, digital literacy, and institutional capacity. Without such measures, the digital economy risks reinforcing, rather than reducing, existing inequalities. Poverty remains one of the most pressing global challenges, affecting billions of people worldwide and limiting access to basic needs such as education, healthcare, and decent living standards. Despite significant progress over recent decades, the persistence of inequality and the emergence of new global shocks—such as the COVID-19 pandemic, climate change, and geopolitical tensions—have slowed or even reversed poverty reduction efforts. In this context, the rapid expansion of the digital economy has introduced new opportunities for inclusive growth and sustainable development. The integration of digital technologies into economic and social systems has fundamentally transformed how individuals access information, participate in markets, and improve their livelihoods. The World Bank (2021) defines the digital economy as an economic system that is based on digital computing technologies, encompassing digital infrastructure, online platforms, e-commerce, and financial technologies. These innovations have created new pathways for poverty reduction by enabling access to financial services, expanding employment opportunities through digital platforms, and improving the efficiency of public service delivery. In particular, digital financial inclusion—through mobile banking and electronic payment systems—has allowed marginalized populations to participate in formal economic activities and better manage financial risks. However, the benefits of the digital economy are not distributed equally. The International Telecommunication Union (2022) highlights that significant disparities in internet access, digital skills, and technological infrastructure continue to exist between and within countries. This Digitalization is one of the most powerful development opportunities of our time. Connectivity, data, and digital tools are now essential to how hospitals deliver care, how farmers access markets, how teachers reach students, and how governments serve their citizens. With the right foundations—affordable internet, trusted data systems, and secure digital platforms—developing countries can unlock faster, more inclusive growth.

1-table percentage of population connected to internet in different countries according the rate of their income.



110

Artificial intelligence and the broader data revolution are accelerating this shift. They are expanding what institutions can do, improving service delivery, and opening new economic pathways. Yet not everyone is benefiting equally. As of 2024, 2.6 billion people—about one-third of the world’s population—remain offline, and internet use ranges from over 90% in high-income countries to just 27% in low-income countries. Meanwhile, 800 million people still lack official ID, limiting access to digital public services, finance, and healthcare.

At the same time, digitalization is transforming labor markets. New types of jobs are emerging; others are changing, and all require new skills. With nearly 800 million people in low- and middle-income countries at risk of being without work over the next decade, investing in digital skills and workforce readiness is essential for countries to compete and thrive. as individuals without access to digital tools or the skills to use them are at risk of being further excluded from economic opportunities. As a result, while digitalization has the potential to reduce poverty, it may also exacerbate existing inequalities if not accompanied by inclusive policies and investments.¹¹¹ Moreover, the role of governments and international

¹¹⁰World Bank group. Digital Progress and Trends Report: Strengthening AI Foundations
<https://www.worldbank.org/en/publication/dptr2025-ai-foundations/visualizations>

¹¹¹ <https://www.worldbank.org/ext/en/topic/digital-and-ai>

organizations has become increasingly important in leveraging digital technologies for poverty alleviation. The United Nations Development Programme (2023) emphasizes that effective digital strategies—such as expanding broadband infrastructure, promoting digital literacy, and supporting innovation ecosystems—are essential for ensuring that the benefits of digital transformation reach vulnerable populations. In addition, the development of regulatory frameworks and social protection systems adapted to the digital era is crucial to mitigate risks associated with automation and precarious digital employment.

Therefore, this study aims to explore how the opportunities of the digital economy can be effectively utilized to reduce poverty, with a particular focus on financial inclusion, digital employment, and access to essential services. It also examines the challenges associated with digital inequality and proposes policy recommendations to ensure inclusive and sustainable outcomes. By analyzing recent theoretical and empirical research, this paper contributes to a deeper understanding of the relationship between digital transformation and poverty reduction in the contemporary global economy.

Conclusion

In conclusion, the digital economy has emerged as a powerful and transformative force with significant potential to reduce poverty and promote inclusive economic development. As highlighted throughout this study, digital technologies—such as mobile internet, financial technologies, and online platforms—have created new opportunities for income generation, improved access to financial services, and enhanced the delivery of public services. These advancements enable individuals, particularly in developing countries, to participate more actively in economic life, thereby improving their livelihoods and resilience to economic shocks. However, the findings also demonstrate that the benefits of digitalization are not evenly distributed. Persistent inequalities in access to digital infrastructure, internet connectivity, and digital skills continue to limit the participation of vulnerable populations in the digital economy. The existence of a digital divide—both between and within countries—poses a significant challenge to achieving equitable poverty reduction outcomes. Furthermore, rapid technological changes, including the rise of artificial intelligence and automation, are reshaping labor markets, creating new opportunities while simultaneously increasing the risk of job displacement for low-skilled workers. Therefore, the effectiveness of the digital economy as a tool for poverty reduction depends largely on the implementation of inclusive and well-coordinated policies. Governments and international organizations play a crucial role in expanding digital infrastructure, promoting digital literacy, and ensuring affordable access to technology. Additionally, strengthening regulatory frameworks and

adapting social protection systems to the digital era are essential to mitigate potential risks associated with digital transformation. While the digital economy offers substantial opportunities to accelerate poverty reduction, its success is contingent upon addressing structural inequalities and ensuring that no one is left behind. A balanced approach—combining technological innovation with inclusive policy measures—will be key to harnessing the full potential of digitalization for sustainable and equitable development.

References

1. Brynjolfsson, E., Li, D., & Raymond, L. R. (2023). *Generative AI at work*. National Bureau of Economic Research.
2. Graham, M., Hjorth, I., & Lehdonvirta, V. (2022). Digital labor and development: Impacts of online platforms on labor markets. *New Technology, Work and Employment*, 37(2), 210–215.
3. International Telecommunication Union (ITU). (2022). *Measuring digital development: Facts and figures 2022*. ITU Publications.
4. Kässi, O., & Lehdonvirta, V. (2021). Online labour index: Measuring the online gig economy. *Technological Forecasting and Social Change*, 137, 75–79.
5. OECD. (2022). *Bridging the digital divide: Enhancing access and skills*. OECD Publishing.
6. Suri, T., & Jack, W. (2021). The long-run poverty and gender impacts of mobile money. *Science*, 354(6317), 163–168.
7. UNCTAD. (2024). *Digital economy report 2024*. United Nations.
8. UNDP. (2023). *Digital strategy 2022–2025: Transforming lives through digitalization*. United Nations Development Programme.
9. Van Deursen, A. (2020). Digital inequality during a pandemic: Quantitative study. *Information, Communication & Society*, 23(12), 89–93.
10. World Bank. (2021). *World development report 2021: Data for better lives*. World Bank Publications.