

Digital Payment Dynamics in Gig Economy Integration

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Keywords: Digital Payment Systems, Gig Economy, Implementation, Integration, Technological Infrastructure.

Abstract: The gig economy, characterized by short-term employment and a reliance on independent workers, has witnessed significant growth in recent years, making the integration of digital payment systems a vital aspect of its functioning. This review paper critically examines the multifaceted factors that influence the adoption and integration of digital payment systems within the gig economy. Drawing upon a comprehensive analysis of 30 selected research papers out of 88, this review explores the key drivers and implications related to the implementation of digital payment systems. The synthesis of these findings provides a holistic understanding of the complexities surrounding the adoption of digital payment systems in the gig economy and offers insights into their future development and implications.

1 INTRODUCTION

In the modern era of technological advancements and digitalisation, the nature of work and the demand for workers have profoundly transformed. On one hand, the introduction of artificial intelligence, algorithms, robots, and machine learning has certainly improved the efficiency and ease of many tasks for human workers. However, it has also led to the displacement of certain jobs as machines increasingly take over, reducing traditional job opportunities within the economy adapt to these changes, companies have been reevaluating their workforce models. The demand for full-time workers has, in many cases, shifted towards independent workers or gig workers. This shift represents the emergence of a "gig economy," where a significant portion of work is performed by gig workers or freelancers (Altenried, 2021). These individuals work as independent, short-term contractors and are compensated based on each specific task or project they undertake. The Gig economy, often described as a free market system, revolves around the execution of temporary contracts with independent workers for short-term engagements. However, what sets this economic model apart is its profound reliance on digital technologies for both work arrangements and payments. Platforms like Uber, which provide ride-sharing services, epitomize this digital shift. In such ecosystems, drivers not only receive work but also payment through digital channels (Behl et al., 2022).

Consequently, the integration of digital payment systems assumes a pivotal role, while also raising significant concerns. The endeavour to streamline these payment mechanisms encompasses a multifaceted challenge, addressing technological, security, human resource, and economic considerations.

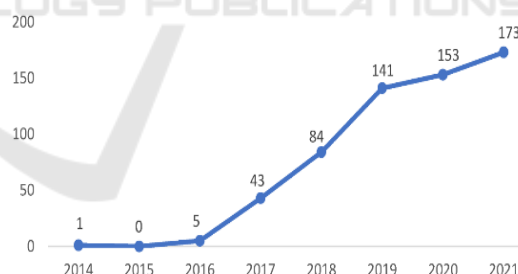


Figure 1: The rise of the Gig Economy in India (Source: MDPI, 2022).

India's gig economy boasts a staggering 15 million workers, involved in various sectors, according to a report by the Boston Consulting Group. The 2019 report by the India Staffing Federation positions India as the fifth-largest country globally in flexi-staffing, indicating substantial growth. However, a significant urban-rural digital divide is apparent, making the gig economy predominantly urban-centric. With regulations still in the drafting stage, there's a pressing need for authorities to establish robust digital payment systems to bridge the divide and foster

economic growth. Major food delivery platforms like Zomato and Swiggy rely on gig workers for food deliveries, utilizing digital payments for transactions. Fostering financial inclusion requires simplified processes for gig workers to access banking services and dedicated apps for managing insurance, social security, and taxes. Robust digital integration on the customer side is vital for transparency, security, and

accessibility. To overcome geographical disparities, integrating digital payment systems with apps supporting offline digital payments will enhance inclusivity in the gig economy.

2 LITERATURE REVIEW

Table 1: Digital Payment Revolution: Transforming the Gig Economy.

Author	Findings
Harvard Business Review (2021)	Integrating digital payments in the gig economy can free up resources for other business aspects.
Altenried (2021)	Digital payment integration should occur at all levels of the gig economy.
World Bank (2022)	Digital payments streamline processes, ensuring timely compensation for gig workers and reducing administrative burdens.
Álvarez Cuesta (2018)	Digital payments enhance financial security for gig workers and reduce administrative burdens for employers.
Behl et al. (2022)	Evolving digital payment systems require substantial investments in technology to keep pace with security advancements and transaction volumes.
Vyas (2020)	Regulators must adapt to emerging technologies and business models as digital payments become more integrated into daily life.

3 OBJECTIVE

- To Identify Key Factors Influencing the Adoption of Digital Payment Systems in the Gig Economy.
- To Assess the Impacts and Implications of Digital Payment System Integration in the Gig Economy.

4 RESEARCH METHODOLOGY

For this review paper, a comprehensive research methodology was employed, involving the initial selection of 88 relevant papers. A careful screening process based on key keywords led to the inclusion of 50 papers. Subsequently, 30 of these papers were meticulously examined to analyze the multifaceted factors influencing the implementation and integration of digital payment systems in the gig economy. The review laid a robust foundation for understanding the interconnections among these factors and their profound implications for the gig economy and its stakeholders.

5 RESULT AND ANALYSIS

According to Behl et al. (2022), the gig -economy has been a fruit of disruptive innovation where the digital revolution has created access to on-demand services like Food delivery and transport logistics like Uber, and OLA. However, the product of disruptive innovations, like start-up culture, has been highly questioned for its unstructured network and sustainability (Basadur,2016). The integration & implementation of a digital payment system creates the scope for discussion on its effect on the various aspects of the gig economy (Álvarez Cuesta, 2018). Hence the coming sections will discuss the issues in the Gig economy from various perspectives and its prospective resolution with the integration and implementation of a digital payment system.

5.1 Factors Influencing the Adoption of Digital Payment Systems in the Gig Economy

Kim, L. (2018) in the article, “Capability Building in Catching-up at Hyundai Motor & Gig Economy” has argued that the initialization is the foundation of the gig economy. Hence the adoption of digital payment should be at various levels for a holistic inclusivity

and sustainability of the gig culture. Hence following factors have been considered for discussion on digital payment integration in the Gig economy based on the review of journal papers (Cherry et al.,2020).

5.1.1 Technological Infrastructure

The backbone for seamless digital fund exchange, its challenges include ensuring universal access and sustainability, addressing digital divide issues, and considering environmental concerns. Future expansions like 5G, IoT, and edge computing present opportunities and data security challenges.

5.1.2 Regulatory Framework

Clear regulations fostering trust and security while encouraging innovation are vital. Striking a balance between safety and innovation is key, as overly complex regulations may hinder growth. International cooperation in regulating cross-border payments might become more crucial.

5.1.3 Trust and Security

Paramount in digital payment adoption, trust is established through robust security measures such as encryption, two-factor authentication, and fraud detection systems. Users need to feel confident that their financial data is secure.

5.1.4 User Experience

A positive user experience through intuitive design, functionality, and excellent customer support encourages adoption. Conversely, poor user experiences, like confusing interfaces or glitches, can deter users from embracing digital payments.

5.1.5 Financial Considerations

Affordability, transparency in transaction costs, and accessibility are critical factors influencing adoption. Users seek cost-effective alternatives to traditional payment methods. Achieving reasonable transaction costs while ensuring sustainable revenue streams for service providers is a challenge.

In summary, the integration of digital payments into the gig economy requires robust technological infrastructure, balanced regulatory frameworks, emphasis on trust and security, a positive user experience, and addressing financial considerations for affordability and transparency in transaction costs. These factors together contribute to the holistic

inclusivity and sustainability of digital payment adoption in the gig culture.

5.2 Impacts and Implications of Digital Payment System Integration in the Gig Economy

5.2.1 Economic Sustainability

Koutsimpogiorgos et al. (2020) emphasize economic sustainability at micro and macro levels concerning gig workers' reliance on digital payments for income stability. For individuals, it provides predictable cash flows, while on a broader scale, it increases financial inclusion and stimulates economic growth.

5.2.2 Social Inclusivity

Langley (2021) highlight digital payments' role in fostering social inclusivity by breaking traditional barriers for individuals from diverse backgrounds, including the underbanked and unbanked. It contributes to gender inclusivity and transcends geographical boundaries, enabling opportunities for remote or rural dwellers.

5.2.3 Innovative Sustainability

Friedman (2021) stress how innovative features like real-time tracking and digital wallets empower gig workers. These tools address challenges such as income volatility, offering better financial management and control, ensuring sustainability in the gig economy.

6 DISCUSSION

The Gig economy, reliant on technological infrastructure for digital transactions, underscores its vital role in shaping the landscape of digital payment systems. Accessibility and reliability are crucial for seamless transactions, essential for the thriving existence of gig work ecosystems (Doucette,2019) . Regulatory frameworks strike a balance between innovation and user safeguarding, significantly impacting the adoption of digital payments. Trust and security are pivotal; any breach disrupts the entire gig economy ecosystem.

Innovative sustainability features in digital payments address income volatility for gig workers, providing real-time tracking, budgeting aid, and tailored financial services, ensuring economic stability (Cherry,2016). Market dynamics,

intertwined with these factors, foster competition, driving innovation and service enhancement. Yet, this competition can lead to complexities and fragmentation, necessitating a vigilant and adaptable approach for the evolving gig economy's continued relevance.

7 CONCLUSION

In conclusion, the implementation and integration of digital payment systems in the gig economy are subject to a multitude of interconnected factors. These factors, including technological infrastructure, regulatory frameworks, trust and security, user experience, financial considerations, economic sustainability, social inclusivity, innovative features, and market dynamics, collectively shape the digital financial landscape within the gig economy. Hence, Continuous evaluation and adaptation are vital in this dynamic landscape. The ever-evolving gig economy necessitates a vigilant and flexible approach to ensure the digital financial landscape's relevance and effectiveness. Understanding the interconnected nature of these factors is essential in crafting strategies that leverage these elements to foster a more resilient and inclusive gig economy, ensuring its continued success in an ever-changing world of work.

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