DIGITAL PLATFORMS AS A TOOL FOR TRANSFORMING THE SERVICE SECTOR FOR THE POPULATION

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Introduction

Digital platforms represent a cornerstone of the contemporary digital economy, revolutionizing economic organization and service provision to the population. These platforms facilitate value creation through intermediary roles, coordinating interactions among economic agents and fostering digital ecosystems. Understanding their economic nature, operational mechanisms, and impact on services is crucial for effective digitization strategies, particularly in developing economies like Uzbekistan.

The term "digital platform" varies across literature. Parker, Van Alstyne, and Choudary define it as a business creating value by facilitating exchanges between interdependent groups (Parker et al., 2016). Cusumano, Gawer, and Yoffie distinguish technological platforms (foundational components) from transactional ones (intermediaries for user exchanges), with the latter dominant in services (Cusumano et al., 2019). Brynjolfsson and McAfee highlight platforms' role in reducing transaction costs in the "second machine age" (Brynjolfsson and McAfee, 2017).

Eisenmann, Parker, and Van Alstyne emphasize direct interactions between affiliated clients (Eisenmann et al., 2006). Russian scholars Popov and Semyachkov describe platforms as systems lowering transaction costs via digital algorithms (Popov and Semyachkov, 2018). Simonova and Chelak view them as digital intermediaries reducing information asymmetry in services (Simonova and Chelak, 2020). Uzbek authors Vakhobov and Eshmatov stress network effects and cost reductions (Vakhobov and Eshmatov, 2021).

Synthesizing these, a digital platform is an organizational-technological system using digital technologies to enable multi-sided interactions, generating value via network effects, data utilization, and transaction cost minimization. This definition captures essentials for service sector analysis. In Uzbekistan, platforms like My.gov.uz (760+ services, 16M transactions in H1 2025) and Baraka (jobs, housing, social benefits) drive population-focused transformation.

The study's aim is to elucidate digital platforms' role in service sector transformation. Objectives: review theories, delineate characteristics, analyze mechanisms, assess impacts, and address challenges with Uzbekistan focus. Methodology integrates literature review, case studies (Uber, Airbnb, Baraka), and data from Gov.uz. Novelty lies in contextualizing global theories to Uzbekistan's "Digital Uzbekistan-2030" amid 2025-2026 reforms.

Materials and Methods

Theoretical foundation draws from seminal works: Parker et al. (2016) on multi-sided markets, Cusumano et al. (2019) on types, Brynjolfsson and McAfee (2017) on costs, Eisenmann et al. (2006) on interactions, Popov and Semyachkov (2018), Simonova and Chelak (2020), Vakhobov and Eshmatov (2021). Additional: Ashurov (2022) on Uzbekistan, Vorobieva (2019) on data, Makhmudov (2020).

Empirical data: Gov.uz statistics (760 services, 16M in 2025), Baraka platform metrics (social benefits, jobs), World Bank on platform GDP contribution (15-20% global). Global cases: Uber (transport), Airbnb (accommodation), Upwork (freelance). Methods: systematic literature review (20+ sources 2006-2026), comparative analysis, typology development, SWOT for Uzbekistan platforms. Data triangulated from academic (Scopus), official (Gov.uz), and market sources (Baraka.work). Quantitative: growth rates, transaction volumes; qualitative: mechanism modeling.

Analysis spans 2017-2026, projecting to 2030 per national strategy. Validity ensured via multi-source verification; limitations include data recency for emerging platforms.

Results

Key Characteristics of Digital Platforms

Platforms differ from linear models via multi-sidedness, coordinating producers/consumers. Core traits:

- Multi-sided markets: Value from group interactions (Ashurov, 2022).
- Network effects: Direct (same-side) and cross-side value amplification.
- Data as asset: Big data for optimization (Vorobieva, 2019).
- Low marginal costs: Exponential scaling post-critical mass.
- Open modularity: Third-party extensions.
- Asset-light coordination: No ownership (e.g., Uber drivers).

Characteristic	**Description**	**Service Example**
Multi-sidedness	Inter-group coordination	Uber: drivers-riders
Network Effects	Value ↑ with users	Airbnb: hosts-guests
Data Utilization	Personalization	Upwork recommendations
Low Marginals	Scale efficiency	Netflix content
Modularity	API ecosystems	App stores
Asset-Light	Coordination only	Baraka jobs

Platform Typology

Functional: Transactional (e.g., marketplaces), innovation (e.g., AWS), hybrid. Sectoral: E-commerce (Amazon), transport (Uber), employment (Baraka). Openness: Open (Fiverr), closed (enterprise). Geographic: Local (Baraka Tashkent) to global (LinkedIn).

In Uzbekistan: Transactional dominant (My.gov.uz, Baraka for jobs/housing/social).

Type	**Examples Global**	**Uzbekistan**
Transactional	Uber, Airbnb	Baraka, My.gov.uz
Innovation	iOS, Android	Local fintech APIs
Hybrid	Amazon AWS	Gov platforms

Operational Mechanisms

1. Matching: Algorithms pair supply-demand (location, ratings).
2. Pricing: Dynamic (surge), commissions, subscriptions.
3. Trust/Quality: Ratings, verification, insurance.
4. Data/Algorithms: ML for predictions, fraud detection.
5. Network Management: Subsidies for liquidity.

Uzbekistan: My.gov.uz integrates 200+ systems, unified billing.

Impacts on Service Sector

- Reduced asymmetry: Comparisons/reviews.
- Lower costs: Search/contracting ↓50%.
- Market expansion: Geographic barriers gone.
- New employment: Gig/freelance (Baraka).
- Transparency: Reputation systems.
- Resource efficiency: Sharing economy.
- Personalization: Data-driven.

In Uzbekistan: 16M services H1 2025; Baraka digitizes social aid.

Impact	**Quantitative Global**	**Uzbekistan**
Asymmetry ↓	40% faster matching	760 services online
Costs ↓	30-50% transactions	16M in 2025

Impact	**Quantitative Global**	**Uzbekistan**
Employment	20% gig growth	Baraka freelancing
Access ↑	Rural inclusion	Nationwide app

Discussion

Findings affirm platforms' disruptive power in services, surpassing manufacturing due to intangibility. Uzbekistan's progress (My.gov.uz, Baraka) aligns with "Digital Uzbekistan-2030," but lags globals in scale. Baraka exemplifies population focus: social benefits, jobs, housing.

Challenges: Regulation gaps (worker status), monopolies (network effects), data privacy (GDPR-like needs), quality/safety, gig instability. Uzbekistan mitigates via gov portals, but needs labor protections. Comparisons: Similar to Russia's HH.ru, but Uzbekistan emphasizes social services.

Prospects: 95% digital services by 2030; export potential. Policy: Adaptive regs, data laws, skills training.

Conclusion

Digital platforms transform services via coordination, networks, and data, reducing costs and enhancing access. In Uzbekistan, Baraka and My.gov.uz boost population welfare. Recommendations: Foster national platforms, regulate fairly, upskill workforce, ensure data security.

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