



## MANAGEMENT AND COMMERCIAL ACTIVITIES AT RAILWAY STATIONS: INTERNATIONAL EXPERIENCE AND LESSONS FOR UZBEKISTAN

**Iskandarov Kudrat Shuxratovich**

Tashkent State Transport University, PhD Researcher

ORCID: 0000-0001-9737-0195

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**Abstract.** The article analyzes three models for the development of railway stations based on international experience: “Transport + Retail,” “Eki-naka/Mini-hub,” and “Rail + Property” (TOD). The first model directs passenger flow towards commercial activities, the second transforms waiting time into services, while the third integrates stations into urban planning centers. Their value creation mechanisms, advantages, and limitations are examined, along with the opportunities for their application in Uzbekistan. The research results contribute to improving the efficiency of station management and ensuring financial sustainability.

**Keywords:** railway stations, transport management, “Transport + Retail,” “Eki-naka,” “Mini-hub,” “Rail + Property” (TOD), additional services, international experience.

### Introduction

In recent years, railway stations have been evolving not only as logistics hubs but also as centers of commercial and social activity within the global transport system. International practice demonstrates that by effectively managing station infrastructure and integrating commercial services, it is possible not only to create additional revenue streams beyond transportation but also to significantly enhance passenger experience and service quality. Such an approach, in turn, opens up new opportunities for the development of public-private partnership mechanisms, the involvement of local entrepreneurs, and the support of urban planning strategies.

The analysis of international transport network development experiences makes it possible to identify three conceptual models. The first is the “Transport + Retail” approach, which is closely integrated with transport infrastructure. The second includes the “Eki-naka” model, focused on the commercialization of passenger flows and waiting time within the station, and the modular “Mini-hub” model designed for small and medium-sized stations. The third is the “Rail + Property” or Transit-Oriented Development (TOD) model, which integrates railway nodes with real estate development and urban planning processes.





In the following analysis, the value creation mechanisms of these models, their advantages and limitations, as well as the priority conditions for their application in Uzbekistan, will be examined on a scientific basis.

### **“Transport + Retail” model**

The “Transport + Retail” approach in railway stations is aimed at generating non-transport revenues through the development of retail trade, food and beverage outlets, advertising, and service offices. The value chain operates on the basis of continuous passenger flows, which are transformed into retail turnover, rental income, and advertising revenues. From an operational standpoint, it is crucial to ensure that retail zones do not obstruct passenger flows, while safety and wayfinding integration remain key priorities. In asset management, a balanced tenant mix is formed by combining major brands with local operators, while advertising inventories and event calendars make it possible to generate revenues even during off-peak periods. Digital analytics — including passenger flow data, dwell time, and heat maps — are increasingly employed to dynamically manage leasing policies [1].

This model is widely applied in Europe and the United States. For example, in the United Kingdom, Waterloo and King’s Cross stations generated £800 million in revenue in 2023 through Network Rail Property [2]; in Germany, the 5,400 stations managed by Deutsche Bahn Station & Service AG achieved €429 million in commercial revenues [3]; in the United States, Washington Union Station receives 37 million annual visitors and generates \$20–25 million in revenues from more than 100 shops and restaurants [4]. Similarly, in Russia, major stations recorded 40 billion rubles in commercial revenues in 2022 [5], while in Turkey, Ankara YHT Gar functions as a mega-terminal with integrated shopping centers and service blocks, modeled on airport-style infrastructure [6].

The advantages of this model include the provision of additional cash flow in the short and medium term, the improvement of service quality, enhanced passenger experience, and more efficient use of station assets. At the same time, it is most effective in high-traffic stations, while smaller stations yield limited results. Moreover, inadequate zoning, or violations of sanitary and safety requirements, can trigger social discontent [7].

### **“Eki-naka” and “Mini-hub” Model**

The integrated “Eki-naka” and “Mini-hub” approach focuses on converting passengers’ waiting time inside stations into efficient services. Within the “Eki-naka” format, fast-service cafés, pharmacies, and service corners are placed inside ticket gates and waiting areas, allowing passengers’ “idle time” to be filled





with impulse purchases or convenient services. The “Mini-hub,” in turn, consists of modular units that are cost-effective and quick to implement for small and medium-sized stations, with the advantage of being easily replicated across the network.

The management model is based on categorizing stations into mega, medium, and small types, with corresponding standards defined for each (visual identity, sanitation, operating hours, access logistics, and auditing). Public-private partnership processes are simplified, with priority given to engaging local entrepreneurs. The advantages of this model include delivering quick results with low capital expenditure, expanding service coverage, enabling standardization and monitoring, and supporting local employment. Its limitations, however, are that revenues are not as high as in large hubs; maintaining service quality requires regular audits and training; there is a risk of competition with external vendors; and strict compliance with hygiene and safety requirements is essential [8].

This model is most advanced in Japan and France. JR East has established more than 4,000 retail and service points across 1,657 stations, deriving 12.4% of its total revenues from this activity in 2023 [1]. In France, SNCF Gares & Connexions manages 180,000 m<sup>2</sup> of retail space across 3,000 stations, introducing standardized 2–3 modular blocks (café, pharmacy, service corner) in smaller stations [9]. Likewise, in Germany, Russia, and Turkey, the “Mini-hub” approach has been applied in small and medium-sized stations to generate additional revenue streams within a short time frame [3,6,10].

In the context of Uzbekistan, this model is particularly relevant for regional and district centers. A standardized catalog of modules (e.g., cafés of 25–40 m<sup>2</sup>, pharmacies of 20–30 m<sup>2</sup>, service corners of 15–25 m<sup>2</sup>) should be developed, supported by template contracts and operational guidelines. Once implemented through pilot projects, the subsequent expansion across the network can reshape public perceptions of railway stations in a positive direction while creating additional opportunities for the local economy.

### **“Rail + Property” (TOD) modeli**

The “Rail + Property” or TOD (Transit-Oriented Development) approach transforms railway stations into central elements of the urban system by integrating residential, office, retail, hotel, and recreational zones within a mixed-use framework. The value mechanism of this model is based on land policy and legal design, focusing on attracting capital investments through development rights and generating long-term rental streams. TOD clusters





consolidate the “live-work-shop-recreate” cycle in one location, stabilize pedestrian flows, expand the use of public transport, and finance infrastructure through land-value-capture instruments [11].

The advantages of this model include large-scale and stable revenue generation, urban regeneration, transport integration, improvements in social infrastructure, and a reduction of the carbon footprint. Its limitations, however, involve high capital expenditures, long project cycles, complex legal regulations, the need for stakeholder coordination, sensitivity to interest rates and real estate cycles, as well as risks of gentrification and the necessity of social protection measures [12].

The model is widely applied in East Asia and other regions. In Hong Kong, MTR Corporation has developed more than 100,000 residential units and 13–16 shopping centers across 33 large TOD projects, achieving a 99% occupancy rate [13,14]. In China, mega-stations such as Beijing South, Shanghai Hongqiao, and Guangzhou South were designed in an airport style, surrounded by integrated retail, office, and residential complexes [15]. In the United States, TOD elements have been implemented in Denver Union Station and the California High-Speed Rail project, while in Turkey, Ankara and Istanbul stations have adopted similar practices [16,17].

In the context of Uzbekistan, this approach is particularly relevant for Tashkent, Samarkand, and Bukhara. For successful implementation, phased construction based on master plans is essential, along with the integration of public and private capital, clearly defined land-legal mechanisms (leasehold, superficies), PPP tenders divided into lots, professional property management systems, and the incorporation of social protection and inclusivity measures from the outset.

Overall, the three models complement each other. In major hubs, the “Transport + Retail” model can enhance short-term cash flow, while the “Rail + Property (TOD)” model ensures long-term financial stability and urban planning synergies. Across the wider network, the “Eki-naka” and “Mini-hub” approaches serve as rapid and cost-effective solutions, helping small and medium-sized stations achieve economic sustainability.

Based on the above models and the international practices of the countries applying them, a comparative table has been developed for deeper analysis.



**Table 1.**

**Comparative Analysis of International Practices in Station Management and Commercial Activities**

				Lessons / Pilot Options for Uzbekistan
	Eki-naka – in-station retail and services	Shops, restaurants, Suica digital services, loyalty programs	Strong integration of transport and retail; passenger experience at the center	Mini-shops, vending machines, and service blocks as pilots for small stations
	“One model – multiple stations”	180,000 m <sup>2</sup> retail, advertising, modular leasing	Standardized retail management approach, applied even in small stations	Standard mini-hub blocks suitable for regional stations
		Station-overbuild residential and shopping complexes	“Station + Mall” symbiosis; property revenues exceed transport income	Mega TOD (transport + housing + retail) projects for Tashkent / Samarkand
		Category 1 = mega-hubs; Categories 5–6 = mini-hubs	Rational allocation of financial resources; service levels differentiated by station type	Modular service blocks for medium and small stations
	“Union Station”		Highly successful in large hubs; limited commercial potential in small stations	Union Station-type intermodal mega-hub concept for Tashkent
	Airport-style mega-station + TOD	300–400k m <sup>2</sup> retail, residential, business complexes	Large urban stations reshape city centers	Rebuilding Tashkent and Samarkand as airport-style mega-hubs
	“Station experience” +	Shopping centers, restaurants, cultural events	Stations operate as touristic landmarks	Integrating transport + retail + tourism in Samarkand and Bukhara stations
			Mega-hubs in large cities; modular blocks in smaller stations	Modular service blocks in regional and district stations
	Airport-style YHT (high-speed rail)		Ankara YHT Garı as a mega-terminal; mini-	Mega-terminal concept for





	stations		hub in smaller stations	Tashkent / Samarkand; mini-hub for smaller stations
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The analysis of the international experiences summarized in the table indicates that there is no universal model for the effective management of railway stations and the development of commercial activities. Rather, each country applies its own specific approach, determined by its economic, legal, and social conditions. For Uzbekistan, these cases provide important practical lessons that can guide the design of context-appropriate strategies.

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