

Driving Forces Shaping the Future of Urban Logistics: Insights from a Foresight Exercise in Singapore

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Abstract

Urban logistics is an extremely important and yet disturbing activity for cities. On the one hand, it plays a key role in the development of cities by distributing goods to retail, commercial establishments, and homes. On the other hand, its operations negatively impact the environment, economy, and society in general. In addition, urban logistics is a complex and evolving system shaped by various uncertainties and driving forces. Its development cannot be projected by simply extrapolating past and current trends. Foresight exercises help planners and stakeholders identify key drivers of change, including trends, challenges, and technologies, that might effectively shape the future. This paper presents insights from an ongoing foresight study on the future of urban logistics in Singapore. Preliminary findings in our environmental scanning indicate that e-commerce, decarbonisation, regulatory measures, parcel lockers, and cycle logistics are the dominant future drivers of change in the urban logistics landscape in Singapore. Regarding technology, autonomous vehicles, delivery robots, green vehicles, drones, and tracking technology are seen as potential game-changers for Singapore's future urban logistics.

Keywords

Urban Logistics, Drivers of Change, Future, Foresight, Urban Freight.

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