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Smart Urban Food Re-Distribution using Web Application

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Abstract: The rapid rate of urbanization presents significant obstacles to the effective, flexible, and longterm distribution of food in urban settings. This abstract presents Smart Urban Food Distribution (SUFD), a novel approach created to tackle these issues through the incorporation of cutting-edge technologies. The goal of SUFD's multi-domain architecture is to transform urban food distribution networks. To enhance the entire food distribution process, SUFD makes use of cutting-edge technology like AI-driven predictive modeling and real-time data analytics. By means of accurate demand forecasting, inventory control, and route optimization, SUFD lowers food waste, improves the resilience of the supply chain, and lessens its environmental impact.Modern last-mile delivery methods like drones, micro-fulfillment centers, and driverless cars are also included in SUFD. These technologies enable delivery choices that are faster, more economical, and less harmful to the environment, particularly in heavily populated urban areas. The success of SUFD depends critically on stakeholder collaboration. In line with the general objectives of resilience and sustainability, SUFD encourages an integrated approach to urban food delivery through partnering and putting in place interoperable systems.

Keywords: Food distribution networks, real-time data analytics, resilience of the supply chain, micro-fulfillment centers

