NFC Aided Sortation System for E-Commerce Warehouses

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Abstract

Backed by the rise in smartphone penetration and the ever-increasing demand for online shopping, logistics companies of these e-commerce companies face a challenge of carrying out delivery operations to areas all across the country with a problem of adding new delivery hubs on a weekly basis to cater to the needs of the growing customer base. Realizing the importance of sort quality of the shipments, sortation facilities are moving towards semi-automated aids to cater to all the delivery hubs without compromising on the right destination and shipment delivery time. 'Put to light' systems, a possible solution, fails to ensure 100% quality as it involves button press, a mode of failure and operational misuse, as an acknowledgement. Also, the high expenses for installation and the amount of IT and infrastructure required for the adaptation of this technology definitely nurtures the need for an alternate solution. We propose the use of NFC (Near Field Communication) technology to address these issues while achieving the expected throughput. With NFC* technology, operator should acknowledge the drop of shipment into the right destination by bringing his scanner device close to the bag, which is tagged with a NFC chip. The scanner device will be equipped with the configuration of sort logic for shipments and confirms the shipment's sort. The process design associated with this technology eliminates the scope for operational errors. NFC sortation system, being a wireless and robust alternative, is an economical and viable option to ensure 100% sort quality.

Keywords
Supply chain network, sortation strategy, NFC Technology, Put to Light

*NFC- Near Field Communication

Biography

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