The Internet of Things in Logistics

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Abstract

Abstract: Typical logistics processes became significantly more complex and dynamic during the last decades. Among other things, this is driven by internationalization of supply chains and global competition, shorter product life-cycles, mass customization, and stricter quality requirements. However, the advent of new technologies may alleviate these challenges; here, RFID technology is particularly promising. This article describes a novel use for RFID in logistics: By storing additional information like routing or necessary processing steps directly on the tag, an Internet of Things is possible. We describe the vision and a possible implementation for the Internet of Things in Logistics, evaluate effects of this approach to the efficiency of a material handling system, and describe additional services, which become possible by using RFID in logistics.