

## **The Current State of Internet of Things (IoT) Adoption in Retail: Evidence From Romania Based on The Technology Acceptance Model (TAM)\***

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### **Abstract**

The Internet of Things (IoT) will be a defining technology trend of the next decade, having a practical impact in retail. IoT aims to provide people and businesses with intelligent, innovative technologies, in which all the physical objects are interconnected. The implementation of IoT technologies in retail is an incremental process that provides an incentive for digital transformation. The research indicated the popularity of IoT technologies with application in retail, technologies such as self-checkout, digital signage, parcel lockers, RFID tags or smart shelves. Also, the research includes an exploratory study regarding the adoption of IoT technologies among Romanian entrepreneurs in the retail industry. The study was based on the original Technology Acceptance Model (TAM), analyzing the following factors: Perceived Usefulness, Perceived Ease of Use, Attitude Towards Using and Behavioral Intention to use. The conceptual research model introduces another three factors that could influence the adoption of IoT technologies in the retail industry, namely: Perceived Risk, Perceived Complexity and Subjective Norm.

**Keywords:** IoT adoption, TAM, IoT in retail