

Analysis of NFC and Biometrics in the Retail Industry

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Abstract : The increasing emphasis on mobility has driven the application of innovative communication technologies across various industries. In the retail sector, Near Field Communication (NFC) has emerged as a significant and transformative technology, particularly in the payment and retail supermarket sectors. NFC enables new payment methods, such as electronic wallets, and enhances information management in supermarkets, contributing to the growth of the trade. This report presents a comprehensive analysis of NFC technology, focusing on five key aspects. Firstly, it provides an overview of NFC, including its application methods and development history. Additionally, it incorporates Arthur's work on combinatorial evolution to elucidate the emergence and impact of NFC technology, while acknowledging the limitations of the model in analyzing NFC. The report then summarizes the positive influence of NFC on the retail industry along with its associated constraints. Furthermore, it explores the adoption of NFC from both organizational and individual perspectives, employing the Best Predictors of organizational IT adoption and UTAUT2 models, respectively. Finally, the report discusses the potential future replacement of NFC with biometrics technology, highlighting its advantages over NFC and leveraging Arthur's model to investigate its future development prospects.

Keywords : innovation, NFC, industry, biometrics

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