

# **DIGITALIZATION IN THE FOOD INDUSTRY – APPLICATION OF BLOCKCHAIN TECHNOLOGY AS A SUSTAINABLE BUSINESS MODEL**

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Background: Blockchain technology is rapidly becoming a common word and promises to solve many problems related to the lack of trust. Despite its popularity and the great interest it has received from public and private parties, the technology is still far from being well understood and is surrounded by a great deal of exaggeration and hype. This paper intends to present the application areas of the blockchain technology in the food industry and to analyse the potential benefits and barriers of the implementation in the food industry through the latest existing literature review. Methods: a literature review was conducted using academic documents written in English language and published in peer-reviewed scientific journals. The relevant papers were analysed and were searched systematically in ScienceDirect, SpringerLink and Emerald databases. A complementary search in Google Scholar was also executed. Results: 11 papers fit the criteria, allowing for qualitative analysis only. The papers were categorized into three groups: food safety (1), food traceability (2) and food supply chain management (3). Conclusions: Food safety is a relatively new approach in the food industry. New technologies need to be used together with the blockchain technology in order to increase acceptance with consumers and to provide an efficient and robust mechanism for enhancing food traceability and a transparent and reliable way to evaluate quality, safety and sustainability. Blockchain technology offers a promising approach to foster a future food-system, which is safer, traceable, more sustainable and reliable.