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Conference Abstract (for Presentation)

HUMAN-CENTRICITY IN THE FOOD SUPPLY CHAIN

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The new concept of Industry 5.0 evolves the idea of Industry 4.0 by including sustainability, human-centricity and resilience (Breque et al., 2021). One possible field of application of Industry 5.0 is supply chain management, due to its predominant involvement of technology, innovation, and sustainability aspects. Nonetheless, the human-centricity component has been often neglected so far, despite the remarkable impact of supply chains on several stakeholders, such as workers, local communities, consumers, and societies – this calls for further analyses to be conducted in the direction of “people-centric” supply chains (Pagell and Wilhelm, 2025).

In this context, we highlight how the food industry is one of the most affected–yet underexplored–areas of application of human-centricity. Traditionally, the food industry has largely focused on achieving higher productivity and efficiency, also by implementing Industry 4.0 technologies (Anastasiadis et al., 2021). The adoption of Industry 5.0 in the food supply chain may be able to enhance sustainability and resilience, as well as robust human–technology coworking and cooperation – aspects such as food safety and worker health, information transparency, worker welfare and human rights are, indeed, among the most critical issues food supply chains must cope with (Anastasiadis et al., 2021).

Despite such general interest, current literature is very limited and fragmented on this topic. Therefore, we develop and outline a detailed review and analysis of the literature and provide a conceptual framework that can be used as a starting point in directing further research on this topic. In addition, the work is complemented by a case study analysis in the food industry, in order to validate the preliminary results of our framework and collect insights from an industry perspective.

References

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