British Food Journal

Guest editorial: Empowering change: exploring digital transformation in the organizational and employee dynamics of the food sector

Introduction

The main reason for writing this editorial on the special issue "Empowering change: exploring digital transformation in the organizational and employee dynamics of the food sector" is to acknowledge the outstanding contribution of the researchers who have enriched the British Food Journal with their scholarship. Digital transformation (DT), broadly understood as the process through which organizations leverage digital technologies to generate value and reshape their operational and strategic foundations, has emerged as one of the most consequential organizational phenomena of our time (Vial, 2021; Verhoef *et al.*, 2021). While scholarship on DT has advanced considerably across multiple sectors, the food and agri-food industry presents a distinctively complex case. Unlike manufacturing or financial services, food organizations operate at the intersection of biological processes, perishable supply chains, regulatory pressures and deeply entrenched cultural and entrepreneurial traditions, all of which shape, often constrain, the pace and trajectory of digital adoption.

The agri-food sector has traditionally lagged behind other industries in embracing digitalization. This reluctance reflects not merely a lack of technical readiness but also a constellation of organizational, cultural and structural barriers. Entrepreneurs and small-medium enterprises (SMEs), which constitute the backbone of the food economy across Europe and beyond, frequently contend with concerns over the initial investment costs of digital technologies, uncertainties regarding integration with existing workflows and apprehensions about disruptions to established methods of operation. Cultural and educational barriers further compound the slower pace of adoption, particularly at the micro-enterprise level. Accordingly, the shift toward Industry 4.0 and, more recently, toward Industry 5.0 paradigms – which recenter human beings within technology-driven processes – calls for a more nuanced understanding of how food organizations navigate this transformation (Capolupo *et al.*, 2025; Panigrahi *et al.*, 2025).

From an organizational perspective, DT in the food sector involves rethinking traditional business models and operational processes to enhance efficiency, agility and sustainability. Companies face increasing pressure to adopt data-driven decision-making, integrate intelligent systems across production and distribution and reconfigure their value chains in response to evolving market dynamics. The evidence emerging from the most recent literature suggests that dynamic capabilities, including big data analytics capabilities and digital capabilities, play a decisive role in enabling such transitions, particularly when embedded in supportive organizational cultures oriented towards data-driven decision-making (Ciasullo *et al.*, 2025). At the same time, supply chain digitalization through technologies such as blockchain and artificial intelligence (AI) is generating new possibilities for traceability, transparency and sustainability across the entire food value chain (Bekkouche and de-Magistris, 2025).

From an employee perspective, DT reshapes workforce dynamics in profound ways, demanding continuous learning, reskilling and adaptation. Employees may experience ambivalence as automation and digital platforms reconfigure traditional task structures: AI adoption in organizations has been shown to simultaneously activate approach motivation (through enhanced autonomy and competence) and avoidance motivation, manifesting as AI anxiety (Liu *et al.*, 2026). Factors such as affective change management, strong digital

British Food Journal
Vol. 128 No. 8, 2026
pp. 3209-3215

e-ISSN: 1758-4108
p-ISSN: 0007-070X
DOI 10.1108/BFJ-08-2026-551

leadership and attention to the human dimensions of technology adoption are therefore critical to ensuring that DT empowers rather than alienates the food sector workforce (Rosa, 2025). Against this backdrop, this special issue brings together sixteen rigorously reviewed papers that collectively advance our understanding of how DT is reshaping organizational structures, workforce dynamics and operational efficiencies in food organizations across multiple geographies and sub-sectors.

Emerging themes

The papers gathered in this special issue converge around a set of interrelated themes that reflect the current frontiers of research on DT in the food sector. Five broad thematic issues emerge from the contributions: (1) AI-driven innovation and competitive dynamics, (2) supply chain digitalization, traceability and transparency, (3) employee and consumer dynamics in digital environments, (4) social media, corporate disclosure and digital marketing and (5) skills, circular economy and the twin digital-green transition.

The first and most pervasive theme concerns the adoption of AI across food-sector organizations. From production processes to service delivery, AI is emerging as a pivotal driver of innovation, quality assurance and competitive advantage. A rapidly expanding interest is converging towards AI's potential to optimize production tasks, resource utilization and enhance efficiency, with the most substantial gains occurring in organizations that are furthest from the technological frontier (Marolla *et al.*, 2026). Yet adoption remains uneven, and the organizational and contextual factors that mediate the transition from AI intention to AI use remain only partially understood, as do the managerial attitudes that shape the pace of organizational uptake.

The second theme concerns supply chain digitalization, with particular attention to blockchain technology, traceability and food safety. Blockchain has attracted growing scholarly attention as a tool for building immutable, decentralized records of product provenance, enabling near-real-time tracking from farm to fork and reducing food fraud. When combined with IoT sensors and AI-driven analytics, blockchain supports not only traceability but also the broader sustainability ambitions of the agri-food sector. The socio-cultural and systemic barriers that hinder full-scale implementation represent an underexplored dimension of this literature that the present special issue addresses directly.

A third emerging theme relates to employee and consumer behavior in digitally transformed food environments. On the consumer side, understanding the gap between intention and actual behavior in relation to digital food applications constitutes a significant research challenge. On the employee side, AI adoption is associated with the restructuring of hierarchical relationships, shifts in skill composition and changes in how individuals craft their roles (Rosa, 2025). Organizational resilience (here addressed as the capacity to absorb and adapt to disruptions) is increasingly understood as a function of how successfully digital enablers and employee dynamics are integrated. The resource-based view and dynamic capabilities frameworks offer promising theoretical lenses for examining these relationships (Rosa *et al.*, 2026).

The fourth theme pertains to social media, digital marketing and corporate disclosure. Social media platforms have become strategic arenas for food businesses, reshaping how brands communicate with consumers, how influencers (internal and external) shape behaviors and how companies disclose sustainability-related information to stakeholders (Rosa *et al.*, 2024). The legitimacy-seeking dimension of corporate digital communication, particularly in relation to biodiversity and environmental performance, reflects the convergence of DT with the broader sustainability agenda.

Fifth, the twin transition places new demands on the agri-food workforce and business models alike. The profiling of digital and circular skills required by the agri-food labor market, alongside the emergence of Circular Economy 5.0 paradigms centered on human-AI

collaboration, signals the deepening embeddedness of DT in the long-term sustainability challenges facing the food sector (McDermott *et al.*, 2024).

Overview of the published papers

The contributions accepted in this special issue cover a wide thematic and methodological spectrum, and we organize their discussion according to the five emerging themes identified above.

AI-Driven Innovation and Competitive Dynamics. Several papers engage directly with the adoption of AI and its implications for organizational innovation and competitiveness. Martínez-Falcó *et al.* (2025) investigate DT, innovation ambidexterity and competitive advantage in the wine industry, employing PLS-SEM and IPMA analysis. Grounded in the dynamic capabilities view, their study demonstrates that DT positively fosters both explorative and exploitative innovation, with ambidexterity serving as a key mechanism through which competitive advantage is secured. Marolla *et al.* (2026) extend this line of inquiry through a global study on AI adoption in wineries, using a Delphi-refined questionnaire administered to over 500 participants. Their findings reveal that wineries adopt a dual approach to express the highest innovation orientation. Csapody *et al.* (2026) examine the attitudes of restaurant managers towards AI-based front-of-house solutions using Q-methodology, identifying five distinct managerial groups ranging from advocates to sceptics. Their analysis underscores that AI adoption in hospitality remains shaped by a complex interplay of perceived utility, identity threat and contextual readiness. Shah *et al.* (2026a) examine the adoption of immersive technologies in the food industry, applying the AIDUA framework and investigating the role of organizational unlearning as a precondition for successful technology assimilation. Their contribution draws attention to the cognitive and institutional dimensions of adoption processes that are frequently neglected in quantitative adoption studies. Zheng *et al.* (2026) analyze the adoption of AI-powered technologies for food upcycling in green hotels, employing a Technology-Organization-Environment and Natural Resource-Based View perspective. Using PLS-SEM on data from 342 hotel employees in China, they find that digital leadership and government regulations are the primary drivers of adoption, while technology road mapping exerts no significant effect, pointing to the primacy of institutional and leadership factors over technical planning mechanisms.

Supply chain digitalization, traceability and transparency. A cluster of contributions addresses the transformation of food supply chains through digital technologies. Romeo *et al.* (2026) conduct a qualitative study on the cultural and organizational challenges of adopting blockchain in the Italian agri-food supply chain. Drawing on a multi-stakeholder focus group, they surface the persistence of socio-cultural barriers, including low digital literacy, inter-organizational mistrust and regulatory fragmentation, that prevent full-scale implementation even when the technological infrastructure is available. Barros Telles do Carmo *et al.* (2026) present an in-depth case study of Tenute Rubino, an Italian winery, examining how DT is managed at the socioeconomic and organizational culture levels. Their findings reveal that both traceability and rapid information access are the principal drivers of technology adoption, while high installation costs and cultural resistance remain significant barriers. Manetti *et al.* (2026) offer a systematic literature review on the circular economy, AI and human-in-the-loop nexus in the agri-food sector. Guided by a PSE-informed multi-layer conceptual framework and analyzing 128 articles selected from an initial pool of 3,578 records, they argue that AI-enabled strategies facilitate circular economy transitions within Industry 5.0 contexts, and that the role of human agency is decisive in determining whether AI integration leads to genuine sustainability gains or merely incremental efficiency improvements.

Organizational dynamics. A distinct group of papers examines the human and organizational dimensions of DT. Ciasullo *et al.* (2025) investigate how dynamic capabilities shape a data-driven culture and contribute to DT in Italian agri-food SMEs. Using covariance-based SEM on 300 survey responses, they demonstrate that big data

analytics capabilities exhibit a particularly strong effect, underscoring the strategic centrality of analytical competencies in enabling digital readiness. Alharthi and Soomro (2026) examine the role of digital enablers, DT and employee dynamics in driving organizational resilience and performance in the Pakistani food industry. Grounded in the resource-based view, their path analysis on 356 valid cases reveals significant positive effects of digital technology and employees' digital skills on both resilience and performance, thereby affirming the indispensability of human capital development in any DT strategy. Arcidiacono *et al*. (2026) explore digital orientation as a strategic shield against geopolitical shocks, focusing on European agrifood firms' reactions to the 2025 US tariff shock. Using event study methodology and content analysis of annual reports, they find that firms with stronger digital orientation exhibit greater stock market resilience, contributing a timely argument for digital investment as a form of strategic hedging. Smaldone *et al*. (2026) contribute a big-data-driven profiling of employability skills required by the agri-food sector to support its twin digital and circular transition. Leveraging LLMs and transformer-based topic modeling on job advertisements scraped from major European employment platforms, they generate a taxonomy of skills that offers strategic input for workforce development and education policy.

Social media, digital marketing and corporate disclosure. A further cluster of papers explores how digital platforms reconfigure communication, marketing and corporate accountability in the food sector. L'Abate *et al*. (2026) adopt legitimacy theory to examine the extent to which food companies disclose biodiversity-related information on the X social media platform. Based on a content analysis of 126 listed food companies, they find that firm-level financial characteristics significantly shape the volume of biodiversity disclosure, with implications for corporate sustainability reporting standards and investor communication. Maione *et al*. (2026) investigate the effectiveness of internal versus external influencers in food-related social media marketing. Through a 2×1 between-subjects experimental design involving 300 participants exposed to a simulated Instagram post promoting a pizzeria, they show that internal influencers (owners and employees acting as brand ambassadors) generate higher perceived authenticity, consumer trust and behavioral intention compared to external content creators, challenging prevailing assumptions in digital marketing strategy.

Consumer behavior and digital food applications

Two contributions examine consumer behavior in relation to digital food services and delivery applications. Shah *et al*. (2026b) investigate the intention-behavior gap in AI-powered food delivery applications from a smart tourism perspective. Drawing on self-determination theory, cognitive dissonance theory and mere exposure theory, and testing a proposed model on 305 tourists using PLS-SEM, they identify the psychological mechanisms that mediate or moderate the gap between tourists' usage intention and actual usage behavior, contributing actionable insights for app designers and digital tourism operators. Dominici *et al*. (2026) adopt a mixed-methods Kano model analysis to investigate the factors influencing Italian consumers' continued use of food delivery applications. Moving beyond standard quantitative models, their study combines focus group discussions with a Kano-structured questionnaire to uncover the deeper motivations and experiential dimensions that drive sustained engagement. Notably, their findings reveal that fair rider compensation emerges as a significant satisfaction driver, reflecting a growing consumer sensitivity to ethical dimensions of the platform economy.

Conclusions and research agenda

This special issue paves the way for several research directions. First, longitudinal studies are needed to track how digital capabilities accumulate and evolve within food organizations over time, moving beyond the cross-sectional designs that dominate the current literature. Second, the intersection of DT and sustainability - particularly the twin digital-green transition and the

emerging Circular Economy 5.0 paradigm - represents a frontier where conceptual frameworks and empirical evidence remain underdeveloped. Third, the experiences of SMEs in non-European food economies have received insufficient scholarly attention; comparative and cross-cultural studies would greatly enrich our understanding of the institutional conditions that enable or constrain digital adoption. Fourth, the societal implications of AI adoption for food workers call for interdisciplinary research that bridges organizational behavior, labor economics and technology studies. Fifth, as immersive technologies, generative AI and human-in-the-loop systems become more prevalent, questions of governance, transparency and algorithmic accountability in food organizations will demand the attention of both scholars and policymakers.

We trust that the present special issue contributes meaningfully to these ongoing conversations and inspires future generations of scholars to deepen our collective understanding of this transformative field.

Nicola Capolupo
Department for the Promotion of Human Sciences and Quality of Life, San Raffaele Roma University, Rome, Italy

Angelo Rosa
LUM - Libera Università Mediterranea "Giuseppe Degennaro", Casamassima (BA), Italy, and

Elena-Madalina Vatamanescu
National University of Political Studies and Public Administration (SNSPA), Bucharest, Romania

References

Alharthi, S. and Soomro, B.A. (2026), "Enabling a smart change: the role of digital enablers, digital transformation and employee dynamics towards organizational resilience and performance in the food industry", *British Food Journal*, Vol. 128 No. 8, pp. 3394-3421, doi: 10.1108/BFJ-03-2025-0247.

Arcidiacono, D., D'Ercole, F., Frascati, D. and Fraccalvieri, G. (2026), "Digital orientation under global trade tensions: evidence from agrifood sector in Europe", *British Food Journal*, Vol. 128 No. 8, pp. 3422-3442, doi: 10.1108/BFJ-04-2025-0563.

Barros Telles do Carmo, B., Barberini, D., Padovani, G., Pasca, M.G. and Arcese, G. (2026), "Organisational dynamics and digital transformation in the wine industry: Tenute Rubino case study", *British Food Journal*, Vol. 128 No. 8, pp. 3340-3354, doi: 10.1108/BFJ-04-2025-0522.

Bekkouche, S. and de-Magistris, T. (2025), "Digitalization in the European agri-food supply chain: a scoping review of traceability, transparency, and sustainability", *Frontiers in Blockchain*, Vol. 8, 1701872, doi: 10.3389/fbloc.2025.1701872.

Capolupo, N., Maione, G. and Supino, S. (2025), "The anatomy of human resource management (HRM) 5.0. A bibliometric review of practices and workforce skills", *The TQM Journal*, Vol. ahead-of-print No. ahead-of-print, pp. 1-23, doi: 10.1108/TQM-07-2025-0402.

Ciasullo, M.V., Ferrara, M. and Lim, W.M. (2025), "Dynamic capabilities and data-driven culture for digital transformation: evidence from agri-food SMEs", *British Food Journal*, Vol. 128 No. 8, pp. 3377-3393, doi: 10.1108/BFJ-02-2025-0119.

Csapody, B., Miskolczi, M. and Jászberényi, M. (2026), "Embracing or resisting AI? Mapping restaurant managers' views on AI-based front-of-house solutions", *British Food Journal*, Vol. 128 No. 8, pp. 3257-3277, doi: 10.1108/BFJ-04-2025-0417.

Dominici, G., Tani, M. and Luongo, S. (2026), "A Kano analysis of food delivery apps in Italy: fair riders' pay matters", *British Food Journal*, Vol. 128 No. 8, pp. 3530-3554, doi: 10.1108/BFJ-04-2025-0449.

L'Abate, V., Raimo, N., Vitolla, F. and Tiron-Tudor, A. (2026), "Digital transformation and corporate accountability: biodiversity disclosure via social media in the food sector", *British Food Journal*, Vol. 128 No. 8, pp. 3470-3487, doi: 10.1108/BFJ-04-2025-0521.

Liu, Q., Tian, Q., Li, X. and Tan, H. (2026), "How does organizational AI adoption affect employees' job crafting behaviors? An approach-avoidance perspective", *Frontiers in Psychology*, Vol. 16, 1690238, doi: 10.3389/fpsyg.2025.1690238.

Maione, G., D'Arco, M., Troisi, O. and Hysa, X. (2026), "From the kitchen to the feed: how internal and external influencers shape consumer behavior in restaurant marketing", *British Food Journal*, Vol. 128 No. 8, pp. 3488-3509, doi: 10.1108/BFJ-04-2025-0500.

Manetti, S., Ni, M., Supino, S. and Troisi, O. (2026), "Rethinking the circular economy in agri-food: human-centred AI for a new circular Economy 5.0 paradigm", *British Food Journal*, Vol. 128 No. 8, pp. 3355-3376, doi: 10.1108/BFJ-04-2025-0506.

Marolla, G., Sabbagh, P., Rosa, A. and McDermott, O. (2026), "Leveraging generative artificial intelligence for process innovation: the moderating role of IT culture and organisational flexibility", *European Journal of Innovation Management*, Vol. 29 No. 11, pp. 427-444, doi: 10.1108/EJIM-09-2025-1269.

Martínez-Falcó, J., Sánchez-García, E., Marco-Lajara, B. and Dorta-Rodríguez, A. (2025), "Digital transformation, innovation ambidexterity and competitive advantage in the wine industry: a PLS-SEM and IPMA analysis", *British Food Journal*, Vol. 128 No. 8, pp. 3216-3237, doi: 10.1108/BFJ-02-2025-0196.

McDermott, O., Moloney, C., Noonan, J. and Rosa, A. (2024), "Green lean six sigma in the food industry: a systematic literature review", *British Food Journal*, Vol. 126 No. 13, pp. 455-469, doi: 10.1108/BFJ-01-2024-0100.

Panigrahi, R.R., Singh, N. and Muduli, K. (2025), "Digital technologies and food supply chain: a scoping view from 2010 to 2024", *International Journal of Industrial Engineering and Operations Management*, Vol. 7 No. 2, pp. 150-174, doi: 10.1108/IJIEOM-05-2024-0030.

Romeo, E., Virglerova, Z. and Giampaola, V. (2026), "Cultural and organizational challenges of adopting technology, traceability and blockchain in the Italian agri-food supply chain: a qualitative study", *British Food Journal*, Vol. 128 No. 8, pp. 3318-3339, doi: 10.1108/BFJ-04-2025-0555.

Rosa, A. (2025), "New business organizational models for governing in times of change: from classical HR models to the role of AI", in *Springer Part of the Book Series: Future of Business and Finance (FBF)*, doi: 10.1007/978-3-032-04091-6.

Rosa, A., Capolupo, N. and Marolla, G. (2024), "The role of employees' perceptions of corporate social responsibility in the relationship between organizational reputation and organizational attractiveness. Evidence from Italy", *Corporate Social Responsibility and Environmental Management*, Vol. 32 No. 1, pp. 1-15, doi: 10.1002/csr.2938.

Rosa, A., Romeo, E. and Durst, S. (2026), "Aligning perceptions and action: the role of organisational coherence in driving employee engagement for SDG 13 implementation", *Business Strategy and the Environment*, Vol. 35 No. 3, pp. 1-16, doi: 10.1002/bse.4218.

Shah, S.K., Acevedo-Duque, Á, Ardito, L. and Oláh, J. (2026a), "Adoption of immersive technologies in the food industry: the role of unlearning through the AIDUA framework", *British Food Journal*, Vol. 128 No. 8, pp. 3278-3295, doi: 10.1108/BFJ-04-2025-0554.

Shah, S.K., Yuan, J., Tajeddini, K., Gamage, T.C., Oláh, J. and Acevedo-Duque, Á. (2026b), "Exploring the intention–behavior gap in food delivery applications: a digital transformation perspective in smart tourism", *British Food Journal*, Vol. 128 No. 8, pp. 3510-3529, doi: 10.1108/BFJ-12-2024-1293.

Smaldone, F., Supino, S., Sica, D. and Esposito, B. (2026), "Profiling employability skills for the digital and circular transition in the agri-food sector: a big data analysis", *British Food Journal*, Vol. 128 No. 8, pp. 3443-3469, doi: 10.1108/BFJ-04-2025-0525.

Verhoef, P.C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N. and Haenlein, M. (2021), "Digital transformation: a multidisciplinary reflection and research agenda", *Journal of Business Research*, Vol. 122, pp. 889-901, doi: 10.1016/j.jbusres.2019.09.022.

Vial, G. (2021), "Understanding digital transformation: a review and a research agenda", in Hinterhuber, A., Vescovi, T. and Checchinato, F. (Eds), *Managing Digital Transformation*, Routledge, pp. 13-66, doi: 10.4324/9781003008637-4.

Zheng, D., Wei, B., Waris, I. and Bhutto, M.Y. (2026), "Adoption of AI-powered technologies for food upcycling in green hotels: a technology-organization-environment and natural resource-based view perspective", *British Food Journal*, Vol. 128 No. 8, pp. 3296-3317, doi: 10.1108/BFJ-04-2025-0436.