

P21 - Digital and sustainable transition in R&D processes: Bridging technologies and practices

8. SUSTAINABILITY TRANSITIONS

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Track summary: Nowadays, organisations are devoting great effort towards integrating sustainable and digital perspectives into their processes, as a consequence of Industry 4.0 (Centobelli et al., 2022). Specifically, the research and development function (R&D) assumes a central role in such a realm (Gusmao Caiado et al., 2018; Varela et al., 2019; Del Río Castro et al., 2021).

The convergence of sustainable and digital transitions in R&D has the potential to reinforce one another, thus leading to innovative dynamics to enhance the sustainable production of goods and services while optimising costs and quality (Foster-McGregor et al., 2021; Napoleão et al., 2021; Stornelli et al., 2021). In this evolving scenario, knowledge management (KM) has the potential to significantly influence the achievement of sustainable development goals, including work conditions, organisations' processes and the promotion of innovation (Lateef & Keikhosrokiani, 2022). Indeed, Industry 4.0 has led to the emergence of managing an abundance of digital data, that can be used to improve decision-making (Cerchione et al., 2023).

Given these considerations, the track aims to shed light on the sustainable and digital transition in R&D processes with a focus on the crucial role of cutting-edge technologies and practices to achieve sustainable development goals (Del Río Castro et al., 2021). Additionally, it seeks to identify suitable reference frameworks and impact indicators that may effectively monitor and evaluate practices in businesses that strive for sustainable and digital advancements.