

P6 - Digitalization, innovation and sustainability: the triple helix of the Industrial Revolution (IR4.0)

2. DIGITAL TRANSFORMATION of ORGANIZATIONS and INDUSTRIES

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Track summary: Nowadays humanity may face a major series of challenges related to the effects of the climate change, the scarcity of natural resources, the population growth, the industrialization, urbanization and globalization like never before. Sustainability has gained more attention in all the social spheres since the publication of the Sustainable Development Goals (SDGs) in 2015 for the adoption of the 2030 Agenda. In the industrial context, SDG-7 (Affordable and Clean Energy), SDG-12 (Responsible Consumption and Production), and SDG-13 (Urgent Action to Combat Climate Change and its Impacts) are of special interest exhibiting a strong interconnectedness. The digitalization of production models together with innovation allow firms and industries transitioning to an environmentally friendly paradigm which improves production efficiency, reducing wastes and environmental impacts, thus, transforming industrial activity into a more sustainable one. Although the interlink between innovation, sustainability and digitalization in the Industrial Revolution (IR4.0) context has been previously suggested, there still exists a lack of studies about the influence of both digitalization and sustainability on innovation, as well as about the interaction between them for fostering innovation. Along this line, the following key topics should be addressed:

1. How do the relations between innovation, digitalization and sustainability facilitate the transition to IR4.0?
2. Understanding the interaction between innovation, digitalization and sustainability in the context of SMEs and family firms
3. The role of green digitalization in the IR4.0
4. Digital technologies and sustainability as drivers of innovation: individual and combined effects
5. Digitalization and innovation for SDGs