

Dipartimento di Economia Marco Biagi

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Ten years later, Industry 4.0 remains a vision: the fast diffusion of digital technologies in manufacturing and the development of fully interconnected digital factories have not materialised (yet). Nonetheless it is a vision that has already triggered a series of transformations that are changing both the way manufacturing processes and work are organised and the way we look at the future of work, employment and manufacturing. On the one hand, it has raised new important questions about the capacity of algorithms of creating/capturing value in traditional manufacturing sectors; about the development of digital platforms for manufacturing and their implications for products and value chains architectures; and about the impact of technological change on global value chains and on the international division of labour and value. On the other hand, it has also brought back old, crucial debates about technological unemployment, the replacement of humans by machines, the polarisation of skills induced by automation, and the dialectic/contradictory effects of technological innovation on the capital/labour nexus. A fast-growing multi-disciplinary literature has developed on all these topics, contributing both to the theoretical debates raised by the diffusion of I4.0 technologies and the empirical analysis of the concrete changes brought by these transformations in factories and organisations.

With the present call, we aim to bring together different theoretical and empirical contributions with a double perspective. Firstly, we want to look back at what we have learned so far and how this has changed our collective understanding of what I.40 is and how it impacts workers and organisations. Contributions may analyse different sectors and companies, different stages of the production chain, different regions and countries. Secondly, we would like to start an interdisciplinary discussion on how these results may













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lead to new empirical questions, theoretical perspectives and methodological approaches. The call for papers is organised in three streams.

In the first stream we call for contributions covering the **theoretical** debates raised by the diffusion of I4.0 and more generally by the recent processes of digitalisation and automation of manufacturing processes and work.

In the second stream we call for papers that develop and/or contribute to comparative analyses between and within **sectors**, by looking at different companies and/or stages of production in the value chain. Special attention will be given to contributions that focus on the automotive sector as a reference sector for analysing the diffusion of these new manufacturing technologies. We also welcome works that analyse how different productive models are transformed by these technologies: what are for instance the differences between premium/high value added companies and generalist/lower value added companies in implementing these technologies? How is the dominant lean paradigm changed/transformed by the process of digitalisation? Do different/alternative models of organising work and production emerge/diffuse in these new contexts of digital manufacturing? Depending on this variety of factors and contexts, what are the concrete implications for workers and what role do trade unions and social dialogue play in these transformations?

In the third stream, we call for contributions focusing on how these digital technologies are promoted and diffused in different **countries and regions**, and on the main differences and specificities of these national processes and developments. We welcome papers analysing the interplay between industrial policies, national systems of innovation and national industrial relation systems in shaping the diffusion and implementation of these technologies. We also welcome contributions investigating how these new digital technologies affect/transform power relations between transnational global companies and different national industries and their small-medium enterprises both in developed and developing countries. Do these new technologies reinforce the capacity of leading companies of capturing value? Do they open up new possibilities for functional upgrading amongst subordinated companies and suppliers? What role do and can public policies and state agencies play in these processes of upgrading and in the inherent struggles for controlling/capturing more value added?

Accepted papers will be selected for submission to journal special issues. Proposals for journal special issues and edited books will be discussed during the conference. Papers not accepted for oral presentation or presenting results of work in progress may be submitted for presentation in a poster session.

The conference "Industry 4.0 – ten years later" will be held in the heart of Motor Valley, at the Department of Economics "Marco Biagi", University of Modena and Reggio Emilia. The conference will be structured













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into sessions: selected papers will be presented and discussed in thematic panel, which will be organised along with plenary sessions, networking spaces and social events. The conference will be held in English: translation English/Italian will be provided for specific sessions/round tables.

For more information and updates, please see the website: https://www.i40-demb2023.unimore.it/

New deadline for abstract reception (between 500 and 1.000 words): 28 February









