



ADAPT Eighth Annual International Conference “Industry 4.0: Triggering Factors and Enabling Skills”

by Allissa Wade

During December 1st and 2nd 2017, the eighth edition of the International Conference organized by the University of Bergamo and ADAPT, was held in Bergamo, Italy. The conference operated under the title of “*Industry 4.0 Triggering Factors and Enabling Skills*” and focused on the features of the phenomenon and on the ways forward for success in this new paradigm. Scholars, academics, and those in the public and private sector came from all corners of the world to share their research and provide fresh insights on how these changes are affecting the way we work around the world.

As a relevant phenomenon in socioeconomic settings since 2011, Industry 4.0 has rapidly evolved to comprise a wide-ranging set of technological, social, economic and cultural transformations that have impacted long-standing models of knowledge creation and dissemination. Due to these changes, there has been the emergence of new models of business, work organization, education, and welfare systems, all of which have drastically affected labor relations. As such, **the conference endeavoured to provide a deeper understanding of, not only the technological dimensions relating to Industry 4.0, but also the qualitative elements that are fundamentally reshaping our systems** of employment relations, education, training, and work itself.

Providing a general overview of the topics to be discussed over the weekend, was an opening session that discussed **the diverse types of enablers concerning employment** that have recently rose to prominence. For example, how technology has become an enabler for work to be different than it was in the past through avenues such as new business models and employment relationships. Furthermore, the current socio-technical (i.e. skills, work organization, industrial relations, welfare) and institutional (i.e. infrastructure, political reforms, schools, labour market actors) enablers being experienced were examined, as well as the importance of using local actors to outfit a global value chain.

The discussion then moved to the first plenary session where panelists discussed **the shift from rigid to flexible models of work, the importance of digital and soft skills (for all workers), and the need for greater cross-sectoral training and collaboration between employment and educational actors**. Additionally, it was declared that security is no longer found in simply the possession of a full-time job; however, it is now found in the skills one possesses. This panel, focusing on new skills and the system of matching the supply and demand of labor, also explored social capital and the importance of reputation in the platform economy and the current state of labour market organization and regulation in Italy.

Dialogue regarding regulation and welfare systems featured conversations on the challenges for public administration in this new arena, the digitalization that is occurring in service industries, and bargaining coordination and industrial policies. The overarching message of these presentations was that **the roles being played by employees, employers, and public and private institutions have all changed and will continue to evolve with new technologies, and that to take advantage of these changes, one**

must have a mixture of relevant hard and soft skills and, most importantly, be flexible and adaptable.

Further plenary panels focused on the **global challenges and tensions related to regulation instruments and reform strategies and also on work, people, and organization within this new paradigm.** New social realities, which include the globalization of production, increases in social vulnerability, altered migration patterns and rates, and the increasing speed and reach of new technologies, were explored. We have seen these new social realities take hold most notably in the rise of hybrid jobs. These types of jobs are best distinguished by their combination and integration of skills previously characterized by consolidated occupations (i.e. technical, managerial, and professional). **These new classifications of employment have brought about, to various levels, the appreciation – and, of some, the depreciation – of sets of cumulated skills and knowledge.** Moreover, we have seen shifts throughout the industrial relations scene and the organization of work due to the rise of this new category of employment. Instances of this can be seen in a shift towards continuous training and education, the redesign of line management processes, and in an increase in knowledge transfer and sharing.

The various **actors and segments of society and employment that are affected due to this new paradigm** were also a main focus of the conference. For example, contributions focused on issues such as: challenges and responsibilities facing millennials and work-life balance; how digital competency and the digital economy have affected industrial relations, education, and the geographic dispersion of digital skills (i.e. through national technology clusters); and the importance of data protection standards, cybersecurity, and cyber-rights, and their relationships to labor law. Speakers also discussed companies' obligations to provide training for workers and how this is no longer limited to simply technical knowledge and professional skills, but that this must be extended to information and communication technologies (ICT), due to their mainstream and widespread use.

Contributions on Industry 4.0 as a global phenomenon fostered greater awareness of the revolutionary changes brought about to union participation, human resources, training mutuels, and Smart Working. Attendees were also introduced to the new professional “archetypes” found in Industry 4.0 and the relationships between them that work to link the business, process, and data functions of an organization. Additional presentations stressed the importance of regulations regarding labour and safety standards in this new paradigm. Also, it was discussed, the potential of Industry 4.0 to drastically change migration patterns – which will have economic, social, and demographic consequences – as it will allow more people to telecommunicate, thus removing the forced move that has traditionally accompanied taking a job with a company based in another country.

A clear message throughout the conference focused on, not only reorganizing work to better pair with this new paradigm, but also ensuring the ideas and beliefs of management stay modern as this group is responsible for the smooth (and correct) implementation and navigation of these changes. It is important to remember that technology and change are not new phenomena, but that how we adapt to the transformative shifts that accompany will dictate the type of future work – and society – we will achieve.

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