

Soft skills are crucial to enable industry 4.0 strategies

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The Fourth Industrial revolution is underway - transforming economies, jobs and society itself. Under industry 4.0 physical and digital technologies are combining through analytics, artificial intelligence, cognitive technologies and the internet of things to create new enterprises that are both interconnected and capable of more sophisticated [decision-making](#).

Hanze's Centre of Entrepreneurship is a key partner in an Interreg funded project called [GrowIn industry 4.0](#) - the aim of which is to enable manufacturing Small and Medium-sized Enterprises (SME's) to embrace smart technologies in The Netherlands, United Kingdom, Denmark, Germany and Belgium. Critically, it is clear we need to learn more about what prevents SME's fully embracing industry 4.0? By collecting and sharing the SME best practices in business models, human resource management and firm strategies, the project partners aim to raise the level of innovation and growth within manufacturing SMEs through better exploitation of the opportunities presented by industry 4.0.

Together with other university and business partners in the participating countries, the project is tapping into manufacturing SME needs around new technology adoption, business development, data analysis and training to enhance future digital competencies among workers and management. The World Economic Forum ranked complex problem-solving skills, critical thinking, collaboration and people's management as most important for industry 4.0 present and [future](#).

Executives in SMEs struggle more with identifying effective strategies in today's rapidly changing context – due in part to rapidly changing information and the complexity of business problems. For example, while the nature of the skills gap becomes clearer, so do differences between executives and their millennial work forces. Last year, most leaders (eighty- six percent) thought their organizations were doing enough to create a workforce for Industry 4.0. This year, as more leaders recognize the growing skills gap, only forty-seven percent are as confident in their efforts. However, twice as many leaders also indicate their organizations will do what they can to train their existing employees rather than hire new ones. Managers are also more optimistic than last year that autonomous tech will augment, rather than replace humans.

The top three challenges for the transition to industry 4.0 are dealing with lack of strategic imperative, dealing with resistance to change and the pace of change (Deloitte's Insights). Of the executives a little over half indicate a mismatch between their organization's current skill sets and those needed in the future. Over two-thirds mentioned the lack of effective training programmes. More than one-third also indicate a lack of clear knowledge of what new skills are needed in the industry 4.0 future.

To overcome these barriers, we developed a transition workshop to stimulate a mindset of change with focus on the industry 4.0 future. The workshop is targeted at production workers, seniors or leaders in production, marketing & sales and strategic executive management. By giving attention and acknowledging the individual fear for change, anxiety for the new can be overcome and resistance to change reduced. In the workshop the perspective is on the future and showing the bigger picture of businesses with a need to thrive in industry 4.0.

By imagining the future new knowledge and insights are gained by participants and used to start concrete actions in the present. By collecting individual ideas on industry 4.0 and having group discussions on how industry 4.0 impacts functions, roles and competencies of workers and indeed leaders, a positive and sharing mindset is created.

The workshop is built on theories on motivation, communication and behavior and futures studies related to anticipation on [future change](#). The design was according to [Technology of Participation \(TOP\)](#) facilitation methods to stimulate an atmosphere of trust and unfold the individual wisdom of participants and bring them into the group process. In 2019 the Transition Workshop was facilitated in the firm [SCORE](#), Tolbert, and targeted at circa twenty-four production workers.



The workshop has also been provided for [Resideo](#), Emmen (former Honeywell), involving eleven leading production workers, the so called 'Cell Champions'. The Transition workshop was also presented during the launch of the [Production Platform Friesland](#) with the founder Dirk Baarda. Ten directors of leading manufacturing companies in the province of Friesland were highly engaged in the workshop and exchanged interesting and inspiring ideas and experiences in industry 4.0.

The Transition Workshop received good to outstanding evaluations and contributes to a new and innovative trainings program with focal point on people who need to embrace change in industry 4.0. In an ambiance of trust and team collaboration willingness to grow is stimulated among participants and a positive mindset created towards change in industry 4.0.

Upcoming year the Transition Workshop will be presented in Belgium, Denmark and United Kingdom.

The Hanze University of Applied Sciences is responsible for the training, education and recruitment of industry 4.0 staff and is represented by the Professorship Communication, Behaviour and Sustainable Society in developing training tools.

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