Digitalisation and sustainable transformation in the EU food industry – Implications for work and workers

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EURAGRI Conference, December 2. 2020





Background

- IFAU, an SME based in Denmark, founded 1982
- Applied research within food and agribusiness
- Market studies, business development and technologies

FoodDrinkEurope-EFFAT project 2018-2019:

New Professions and Career Paths in the Food and Drink Industry

- Delivering high-level food industry skills in the digital economy







Scope of the project

Identify and analyze

- New technologies in the food and drink industry,
- The emerging jobs, and
- The new skills and qualifications required by workers

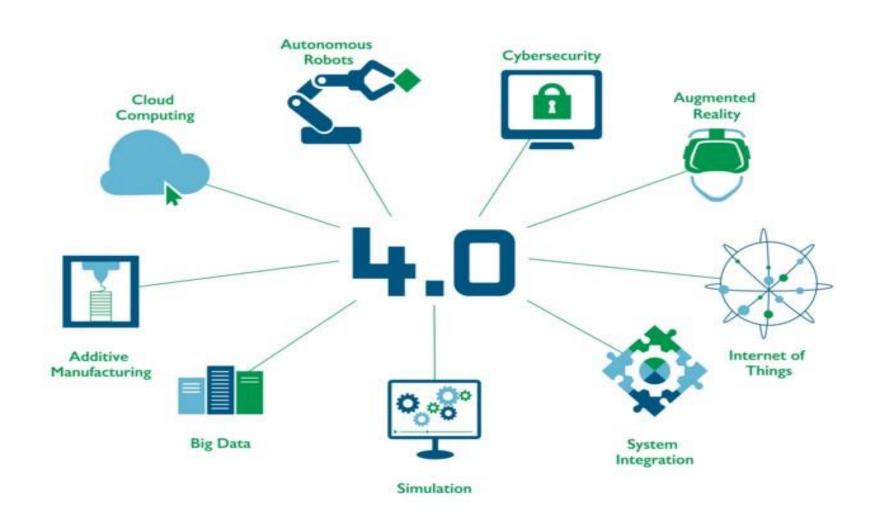
Conclude about what approaches underpin socially successful adaptation of Food Industry 4.0

Involved companies and workers (trade unions)

3 regional workshops (2018-2019)



Industry 4.0: Integration of digital systems and machines in applications for production and logistics



Food Industry 4.0



Technologies

Internet and connectedness



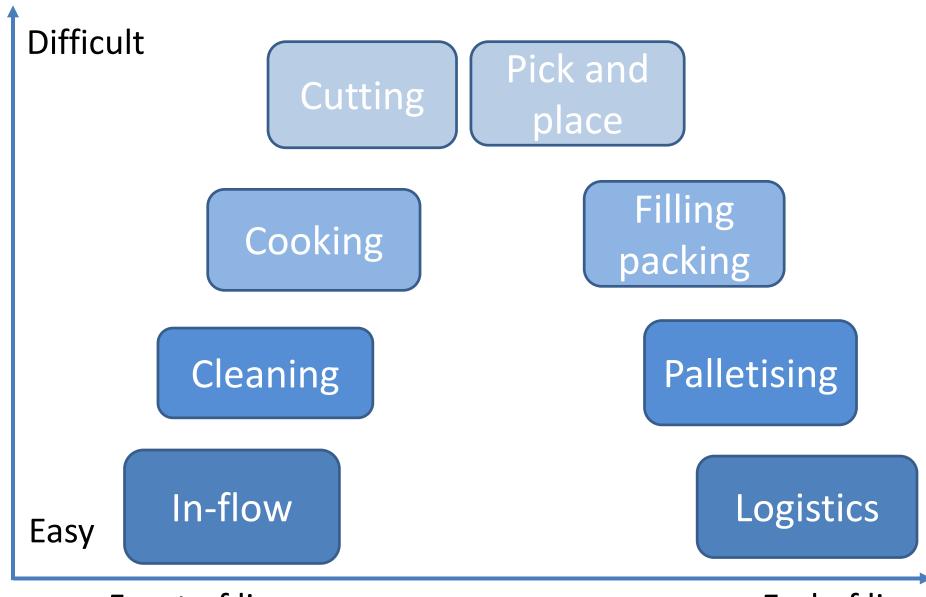


Craftmanship

Digital data



Using robots for food processing



Front of line End of line

Diversity of work in the food industry => need for many different skills



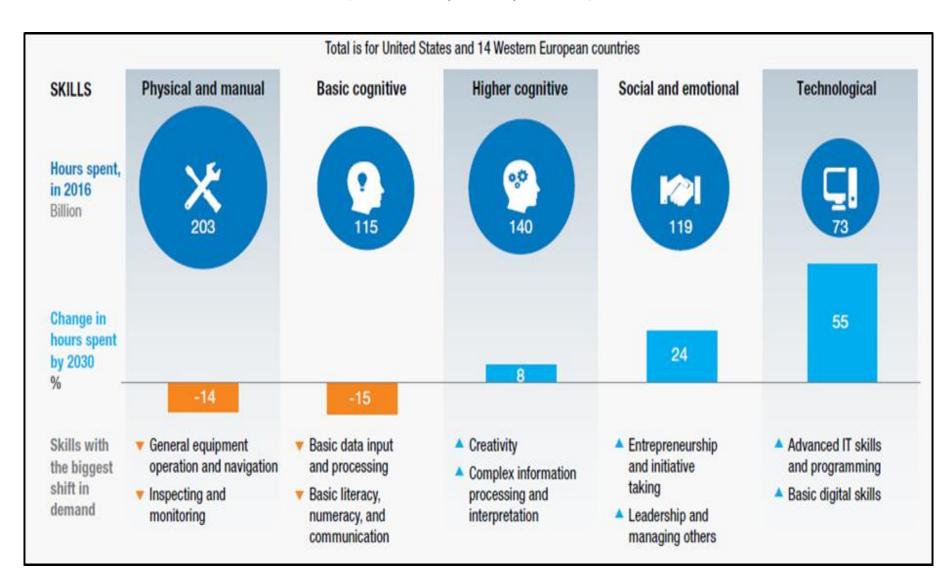




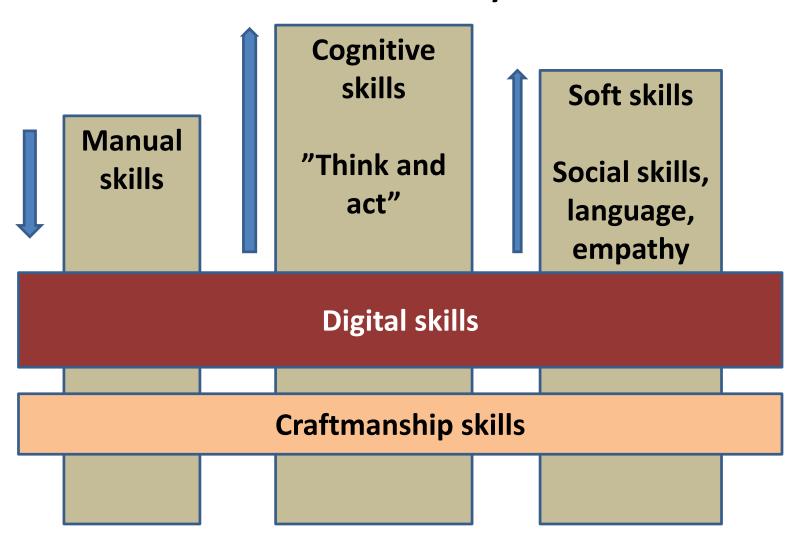


Skills required for manufacturing

(McKinsey study, 2018)



Future set of skills by workers for Food Industry 4.0



Profiles of the future worker in Food Industry 4.0

 A highly specialised super-technician with adequate IT skills, flexibility, ability to think and act, and open to changes;

 A worker who can deal with more complex matters, takes on responsibility, and is flexible to shift between tasks;

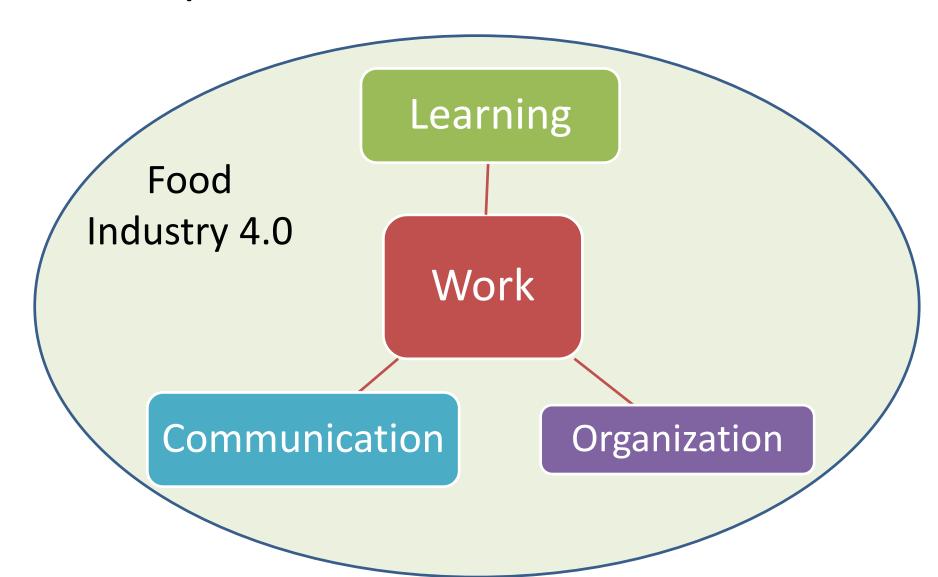
Industry 4.0 changes work organization

- <u>Teams and project-oriented work</u>, horizontal and vertical approaches
- One job becomes many tasks: mentoring of newcomers, maintenance of machine, member of LEAN team and, operate this machine
- <u>Future workforce</u>: Specialists and generalists; food-industry background not essential for industrial operators

Growing with technology – for man, machine and business

Development	How to grow
Company growth	 Understand technology benefits Combination of technology, business and workforce
Personal development	 New skills and new ways to learn New technology-oriented career paths Learn to work with new groups of staffs
Benefit from Food Industry 4.0	 Combine craftsmanship skills with technology skills Need for changes in work organization Involve management and workforce Communicate

Food Industry 4.0 and work Implications for social sciences



Thank you for your attention

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