European initiatives to support skills in manufacturing

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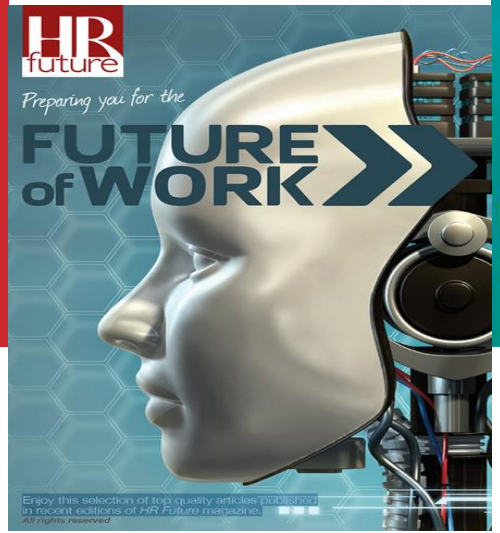
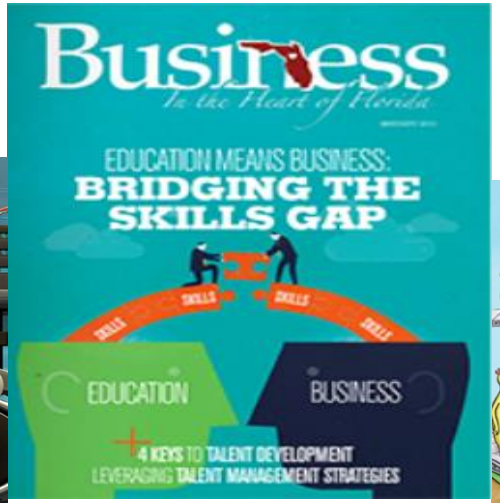
European Commission

How does the future look like?





Challenges and future trends

The 2020 Workplace

- Networked
- Flexible
- Integrated
- Open
- Innovative

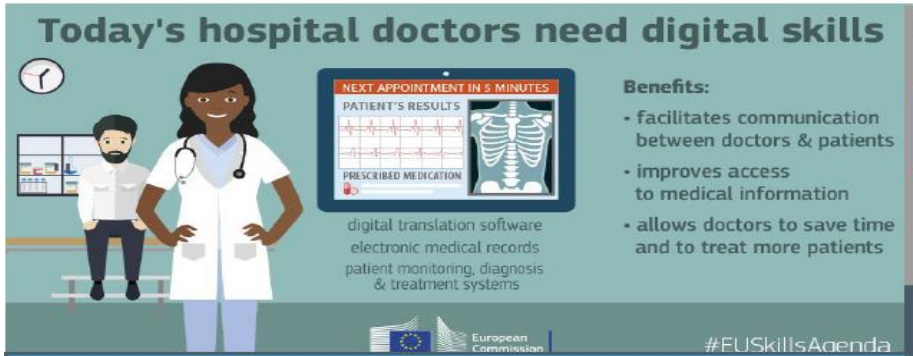
Critical skills for the workforce

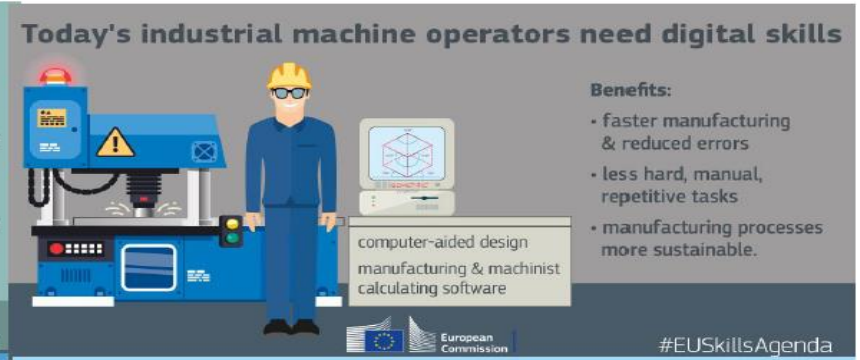
- Social Intelligence
- Novel and adaptive thinking
- Cross-cultural competency
- Computational thinking
- Transdisciplinary
- Virtual collaboration

Skills demand in 2020

- Complex problem solving
- Critical thinking
- Creativity
- People management
- Co-ordinating with others
- Emotional intelligence
- Judgment and decision-making
- Service orientation
- Negotiation

Digitisation is transforming the economy





Skills in Manufacturing in EU- key facts

Europe is a world leader in developing advanced manufacturing technologies

- ***2013 =>*** *32 million people were employed in the manufacturing sector as a whole across the EU-28;*
- ***2015 =>*** *Manufacturing in EU employed people as: trades workers; operators and assemblers; associate professionals; metal & machinery workers; machine & plant operators; (CEDEFOP-Skills Panorama)*
- ***By 2025:***
  - ***The number of jobs in manufacturing as a whole requiring high-level qualifications is projected to rise by 1.6 million (21%)***
  - ***Automation of production processes will see the number of low- and medium-skilled jobs decrease by over 2.8 million***
- *90% of jobs require some level of digital skills whatever the sector; all jobs will change and many will disappear.*
- *40% of enterprises trying to recruit ICT professionals have difficulty doing so.*

EU Answer: New Skills Agenda for Europe [x)]

Inscribed in "Renewed EU Industrial Policy Strategy" (Commission Communication)

- *Digital transformation*
- *Skills mismatches (affect productivity and growth)*
- *EU workforce ageing and shrinking*
- *Quality of education and training varies in EU*
- *Perceptions not rooted in reality (e.g. VET)*
- *Importance of learning outside the formal system*

Research and Innovation

[x)] Commission Communication July 2016

European Commission

STRUCTURE OF THE NEW SKILLS AGENDA

Skills formation

1. Skills guarantee
2. Key Competences Framework
3. VET a first choice
4. Digital Skills and Jobs coalition

Visibility and comparability

5. Revision of EQF
6. Skills profile tool for 3rd country nationals

Skills intelligence

7. Revision of EUROPASS
8. Blueprint for Sectorial Cooperation on Skills
9. Best practice on brain drain
10. Initiative on graduate tracking

Research and Innovation

Blueprint for Sectoral Cooperation on Skills

Framework for strategic cooperation between key stakeholders

To increase the **talent pool** and deliver **sector-specific skills** solutions

Builds on previous work (e.g. Sector Skills Alliances) -> Links to policy -> **Systemic and structural impact**

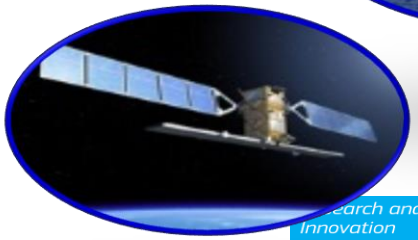
Funded under ERASMUS+

Blueprint for Sectoral Cooperation on Skills

Selection of sector

EU partnerships

National partnerships



European Commission

2018
Six further sectors

1 Additive manufacturing
2 Construction
3 Maritime shipping
4 Green technologies & renewable energy
5 Paper-based industry
6 Steel

2018 Call for Sector Skills Alliances implementing the Blueprint

Call: Oct./Nov. 2017
Deadline: end Feb. 2018
Budget: 4 M€/4 yrs
Start: env. beginning Sep. 2018

Proposals are about EU partnerships to build a strategy and programmes with commitment for later roll-out

Digital Skills and Jobs Coalition

1 of 10 actions in New Skills Agenda for Europe

- *Network that brings together Member States, companies, social partners, non-profit organisations and education providers.*
- *Take action to tackle the lack of digital skills in Europe.*
- *Four target areas: ICT professionals, labour force, citizens, education.*
- *Strong Member State involvement through digital skills strategies by mid-2017 and national coalitions*

Goals by 2020

Train 1 million unemployed young people for digital jobs

- *Support the upskilling and retraining of the workforce and in particular support small and medium enterprises (SMEs)*
- *Modernise education and training*
- *Reorient and make use of available funds to support digital skills*
- *Awareness raising*

Grand Coalition priority areas for action

Innovative learning & education, including "coding"

Awareness raising

ICT training

Mobility

European e-Competence Framework

Certification

Research and Innovation

European Institute of Innovation & Technology

- **Supported under Horizon 2020**
- **Working through Knowledge and Innovation Communities to connect researchers, entrepreneurs, companies in partnerships**
- **Education and training, incubators, accelerators**

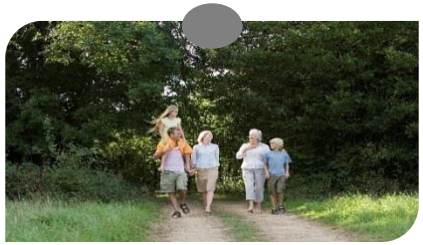
EIT Climate-KIC

EIT Digital

EIT InnoEnergy

EIT Raw Materials

EIT Health



EIT Food

Existing KICs

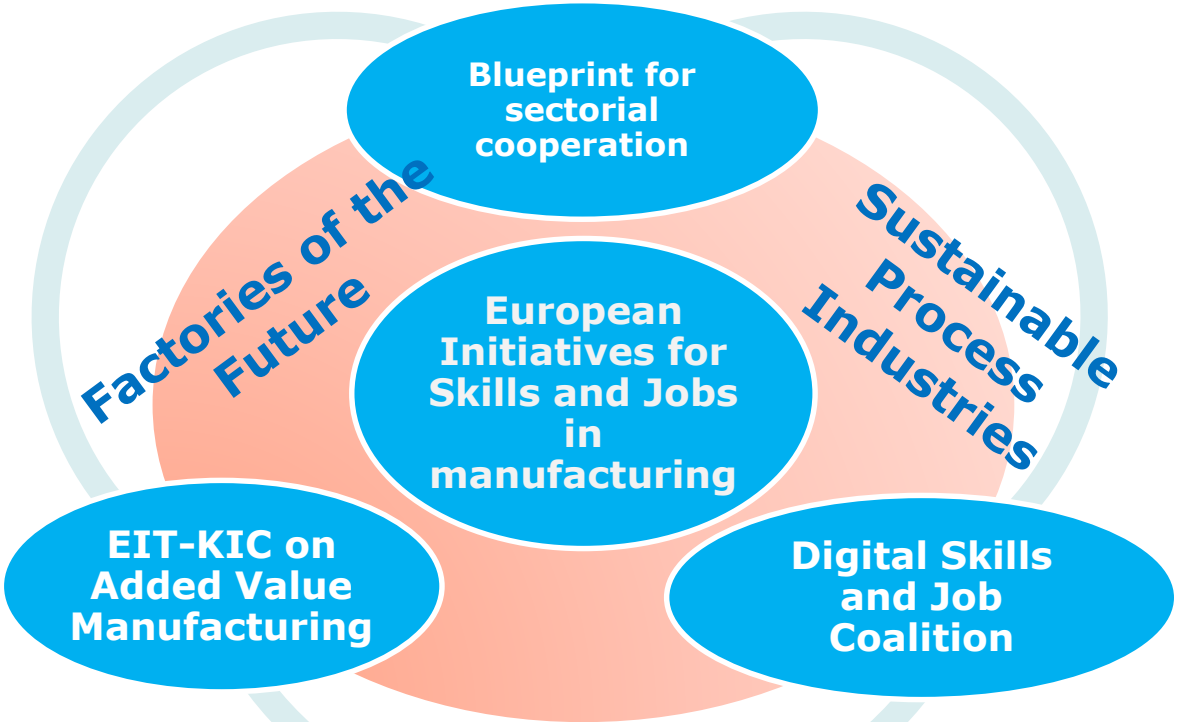
Knowledge and Innovation Communities (KICs)- 2018 Call for proposals

EIT Urban Mobility*
Smart, green and integrated transport

EIT Manufacturing*
Added-value manufacturing

Key dates for the 2018 Call for KICs

- ***12 January 2018**: Launch of the EIT's 2018 Call for KIC Proposals: EIT Manufacturing and EIT Urban Mobility*
- ***13 February 2018**: EIT Information Day in Brussels*
- ***12 July 2018**: Closure of the 2018 Call for KIC Proposals*
- ***December 2018**: EIT's two new Innovation Communities selected: EIT Manufacturing and EIT Urban Mobility*


Blueprint for sectorial cooperation
Factories of the Future
Sustainable Process Industries
European Initiatives for Skills and Jobs in manufacturing
EIT-KIC on Added Value Manufacturing
Digital Skills and Job Coalition

Further information

Horizon 2020: http://ec.europa.eu/research/horizon2020/index_en.cfm

Key Enabling Technologies, R&I website :
http://ec.europa.eu/research/industrial_technologies/index_en.cfm

Participant Portal - Funding Opportunities and support services :
http://ec.europa.eu/research/participants/portal/desktop/en/home.html

National Contact Points in your country (NMP)
http://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html#c,contact=country/sbg//1/1/0&+person.last_name/desc

Research Enquiry Service: http://ec.europa.eu/research/index.cfm?pg=enquiries

CORDIS database with EU funded research projects :
http://cordis.europa.eu/projects/home_en.html

European Institute of Innovation & technology:

www.eit.europa.eu

Blueprint for sectorial cooperation:

http://ec.europa.eu/growth/content/new-skills-agenda-blueprint-sectoral-cooperation-skills-1_en