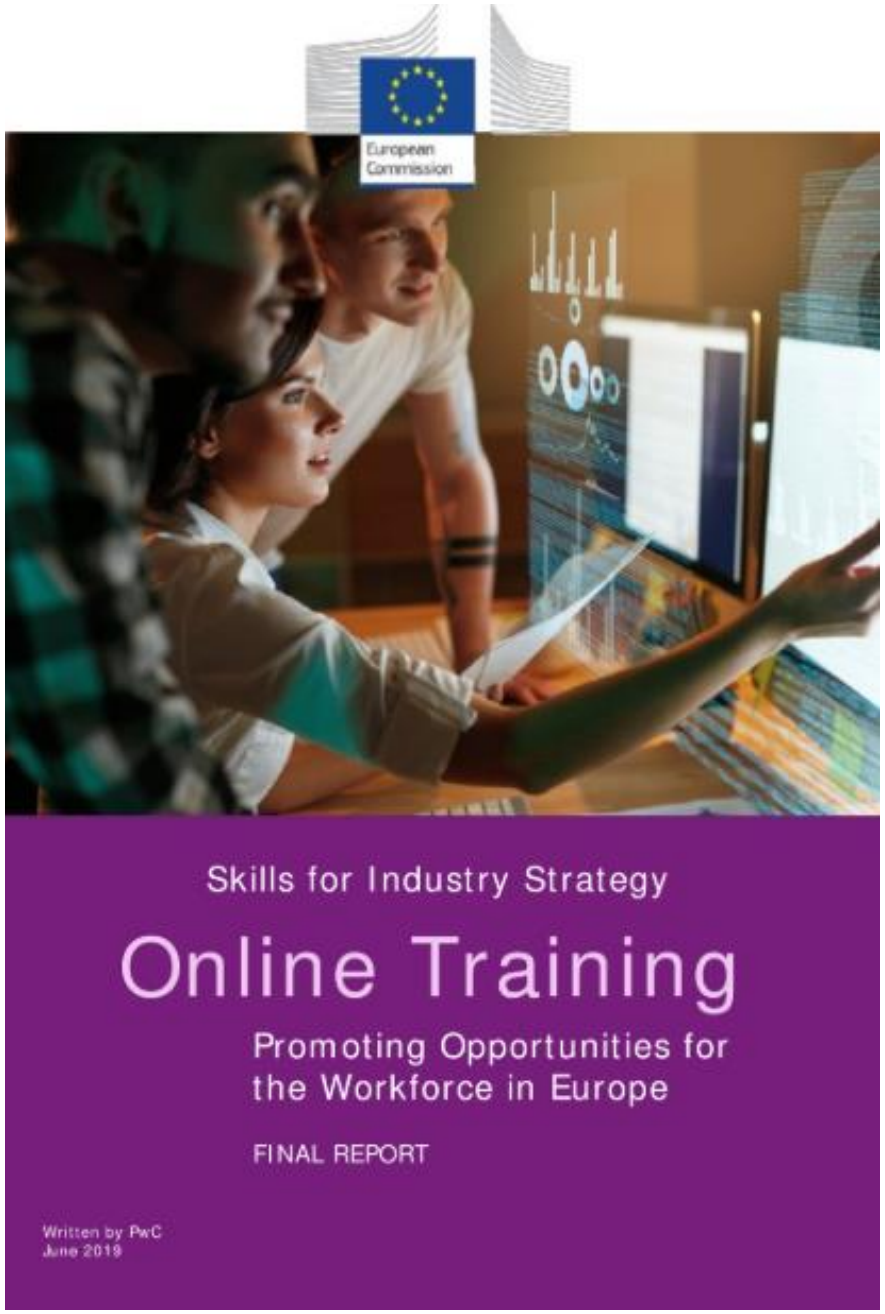
Abilităţi pentru industrie: oportunităţi de training online pentru forţa de muncă din Europa – o iniţiativă a EASME/DG GROW, Comisia Europeană

DIGITAL COMPETENCES FOR OPEN EDUCATION WORKSHOP, 7TH EDITION 6 MARCH 2020

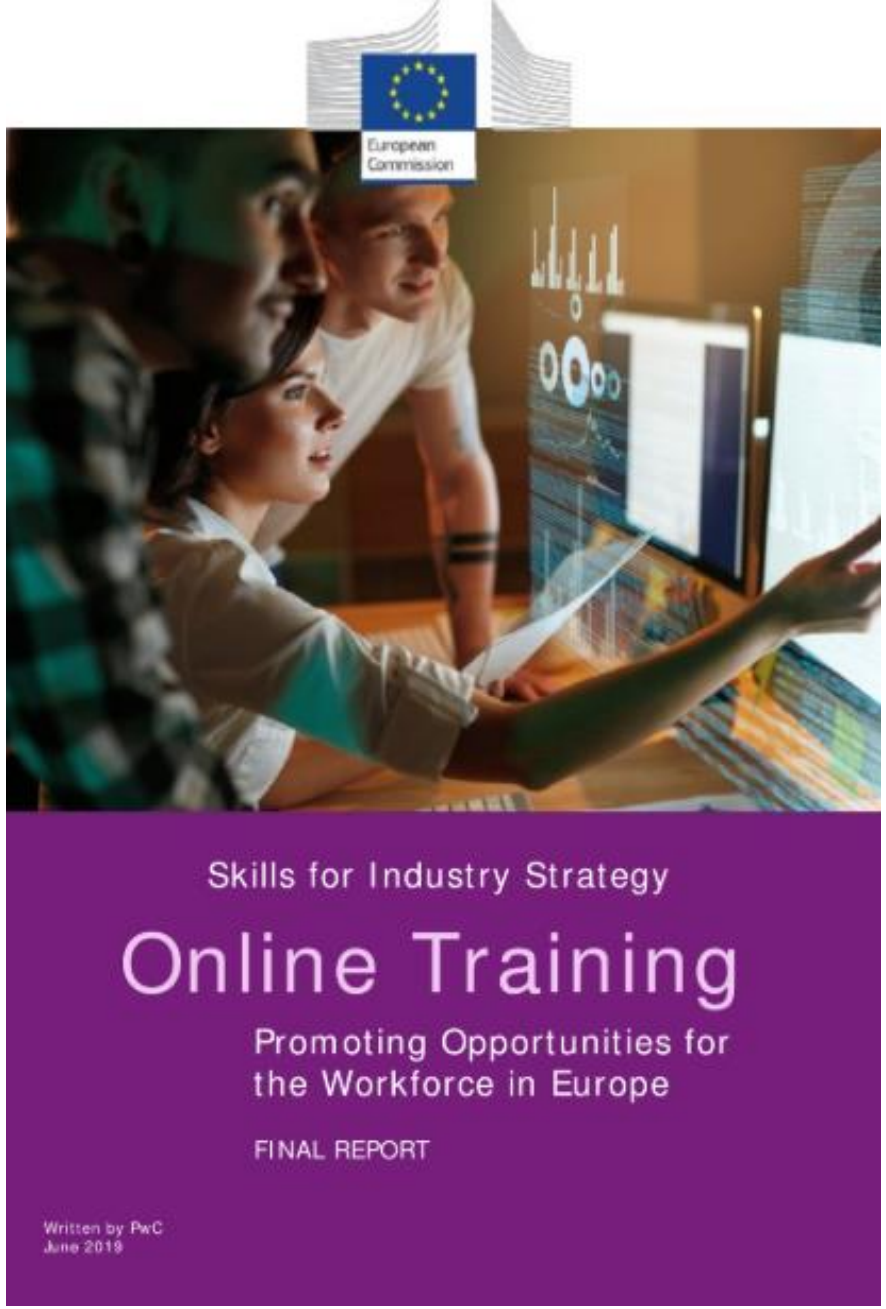
EBBA OSSIANNILSSON

PROFESSOR, DR.

EDEN EC, EDEN COUNCIL OF FELLOWS, ICDE EC, ICDE OERAC, V PRESIDENT SWEDISH ASSOCIATION FOR DISTANCE EDUCATION



Skills for Industry Strategy PWC, EASME/DG Growth



In 2019, enterprises are facing great challenges related to digital transformation of the economy. In addition, regulatory and market requirements to meet the United Nations sustainability targets by 2030, demand a significant shift in the environmental footprints of enterprises and their business processes. These megatrends will have a considerable impact on skills and their implications for the workforce and the future of work. The changes driven by artificial intelligence, robotics and automation, as well as globalisation and key topics such as demographics, diversity, gender equality and social inclusion, necessitate better and greater training opportunities for all.

Moreover, these should be made accessible throughout the entire professional life. Upskilling and reskilling strategies will be crucial for competitiveness, growth and jobs. However, lifelong learning does not yet have clear delivery and funding models to ensure massive adoption.

Furthermore, there is still no agreement on how to provide lifelong learning for all. It should not be surprising: the question of funding for primary, secondary and higher education has been one of the thorniest political topics in the 20th century.

Creating the conditions for making lifelong learning and employability a reality will be a crucial topic in the 21st century. Achieving this goal will provide a competitive advantage in the global competition for talent and in the search for social cohesion

Project Manager PWC

Dr. Kristina Dervojeda, PwC (Netherlands)

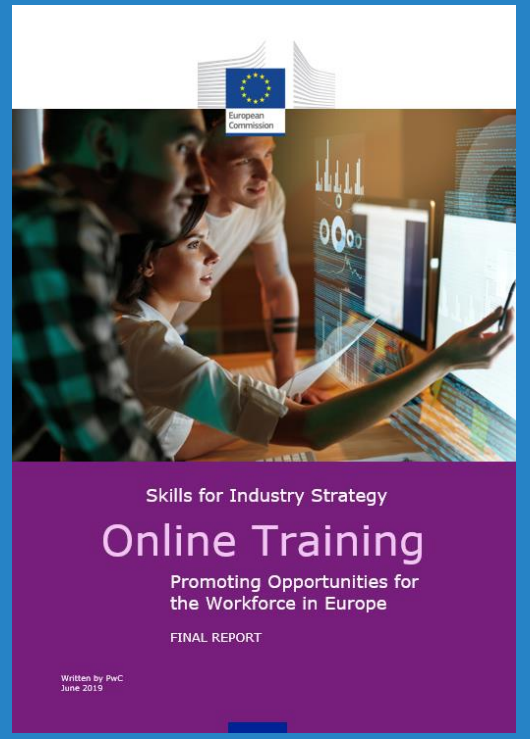
- Specialises in policy research in the fields of skills and the future of education and work;
- Specific topics of interest: technology-enabled learning, lifelong learning, Industry 4.0, Artificial Intelligence and its implications for skills, new/alternative approaches to education & training in the new industrial age etc.;
- Leads PwC Innovation Research Centre (IRC);
- Has been managing and supporting various multi-country assignments for the European Commission in a role of Project Manager and Senior Expert.

LinkedIn profile: https://www.linkedin.com/in/kristina-dervojeda-9019571/

Email address: kristina.dervojeda@pwc.com

Background and objectives

- … to identify effective approaches to stimulate the use of online training solutions
    - by European companies, especially small businesses, in order to efficiently upskills/reskill the EU workforce.
- Included performing extensive desk-research, conducting 60 in-depth interviews, 2 pan-European online surveys, organising 6 pan-European expert workshops and the final conference in Brussels.
- **Key outcomes**: state-of-play analysis and vision
    - The vision aims to include:
        - specific measures, roles and priorities at the EU and national levels for the implementation in **the period of 2021-2027 and beyond**.



Contracting authority: EASME/ DG GROW of the European Commission

Contract Nr. EASME/COSME/2017/001

Contractor: PwC EU Services (together with EDEN and Espace Mendes France)

Duration: 2 years (September 2017 - October 2019)

WHY JUST NOW?

"It's not about technology, it's about people."

- Artificial Intelligence, automation, robotics etc.
- Migration, ethical diversity, gender equality and other social inclusion issues
- Regulatory and market requirements to meet sustainability targets etc.

- Need for (new) effective approaches to develop, maintain and advance required skills

- Considerable impact on skills requirements
- Upskilling and reskilling are crucial for survival, let alone success
- Need for a new mind-set: just-in-time just-for-me solutions

Defining Online Training

Online training here is defined as training that is delivered, enabled or mediated using digital technology, for the explicit purpose of learning in organisations.

Online training refers to a wide range of digital learning solutions related to bespoke and off-the-shelf e-learning, including Massive Open Online Courses (MOOCs), Open Educational Resources (OER), video content, mobile learning (mlearning), and more recently Virtual/Augmented reality, gamification, Artificial Intelligence (AI) solutions etc.

Shifting from digital learning towards learning in a digital world

Key questions

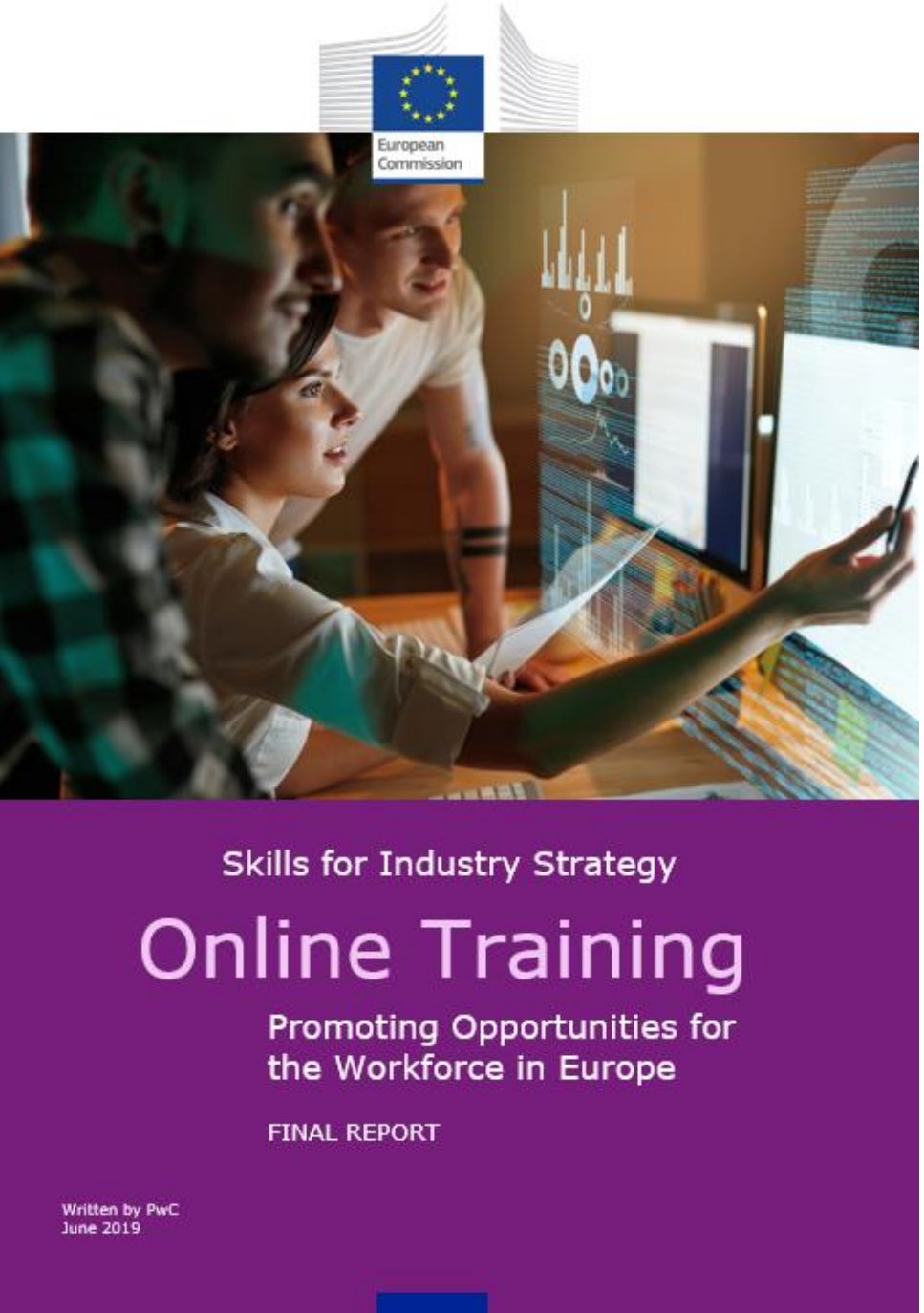
- What exactly needs to be done and by whom to stimulate the uptake of online training by SMEs in Europe?
- How should the funding of online training-related initiatives for the workforce be organised?
- How can online training best complement other (more traditional) forms of training?
- What are the most promising ways of reaching out to the workforce (particularly within SMEs), to engage them into online training?

Skills for Industry Strategy

Online Training

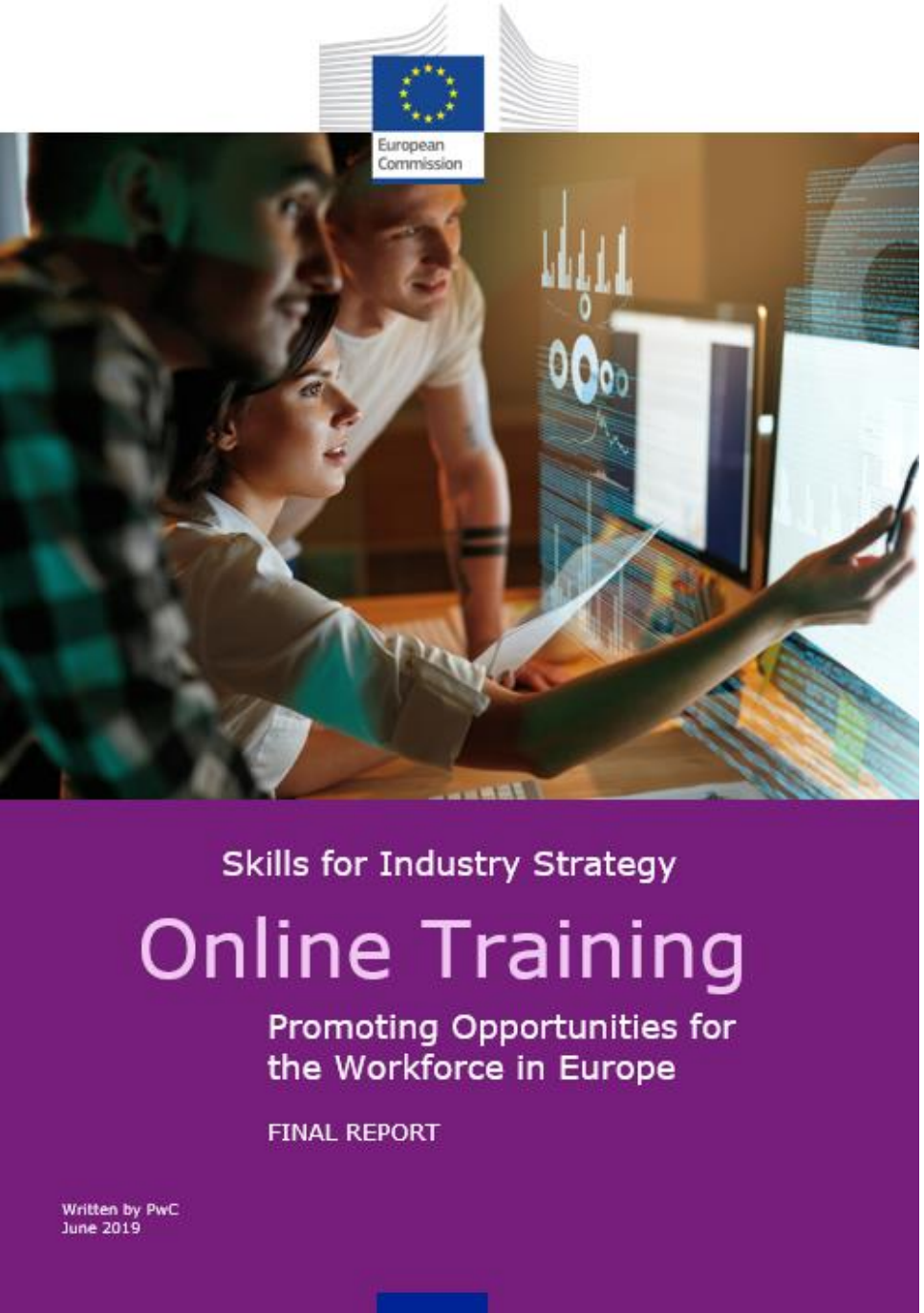
Promoting Opportunities for the Workforce in Europe

FINAL REPORT



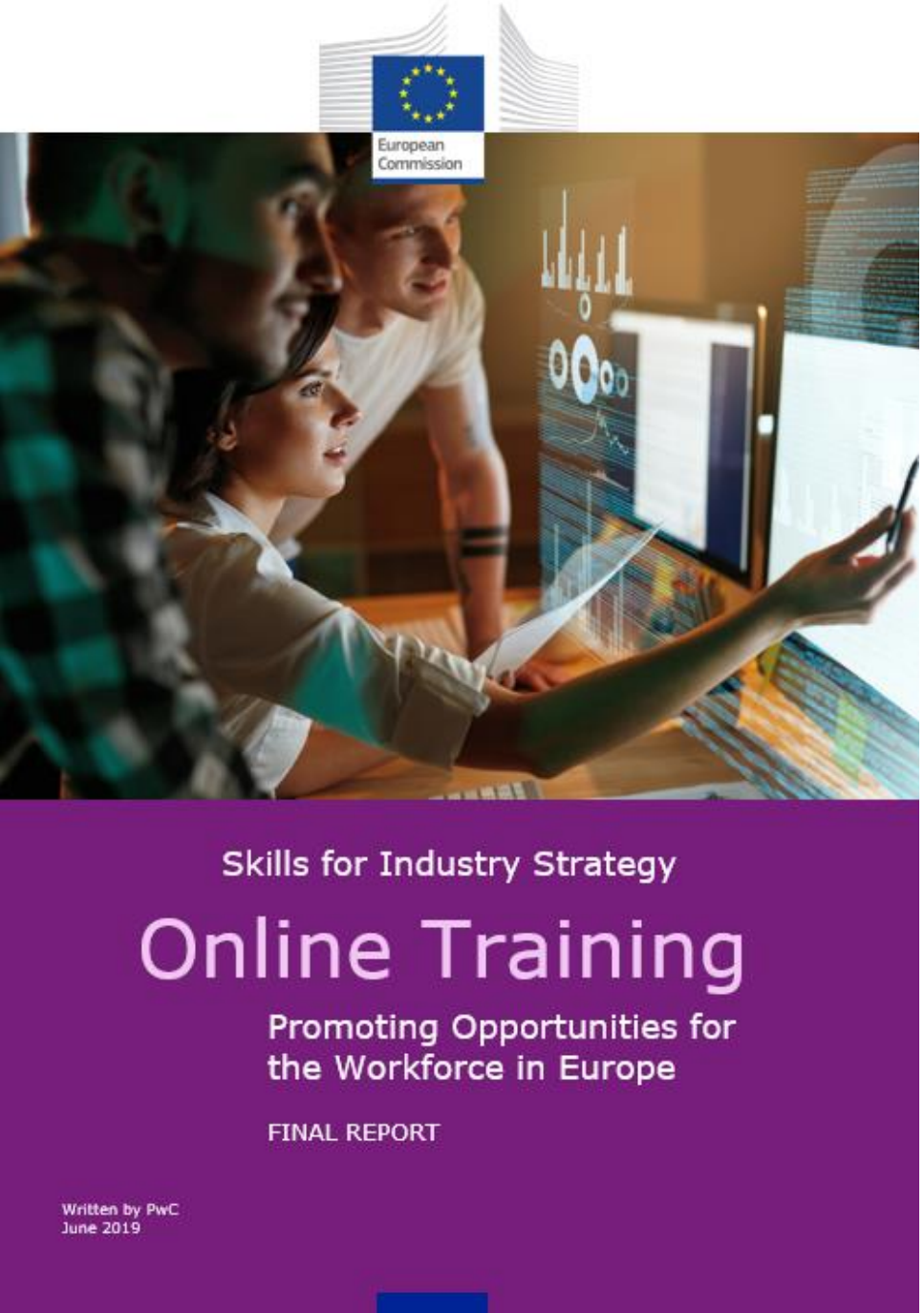
Key barriers for online training adoption

- **Lack of overall culture of learning**
- Lack of company's learning strategy
- Lack of knowledge of employers about the opportunities offered by online training
- Lack of knowledge of employees about the opportunities offered by online training
- Lack of commitment from management
- Lack of good quality courses relevant to company needs
- Lack of motivation of employees to use online training
- Insufficient technical infrastructure
- Reluctance of employees to use technologies for training
- High development costs for bespoke learning
- …



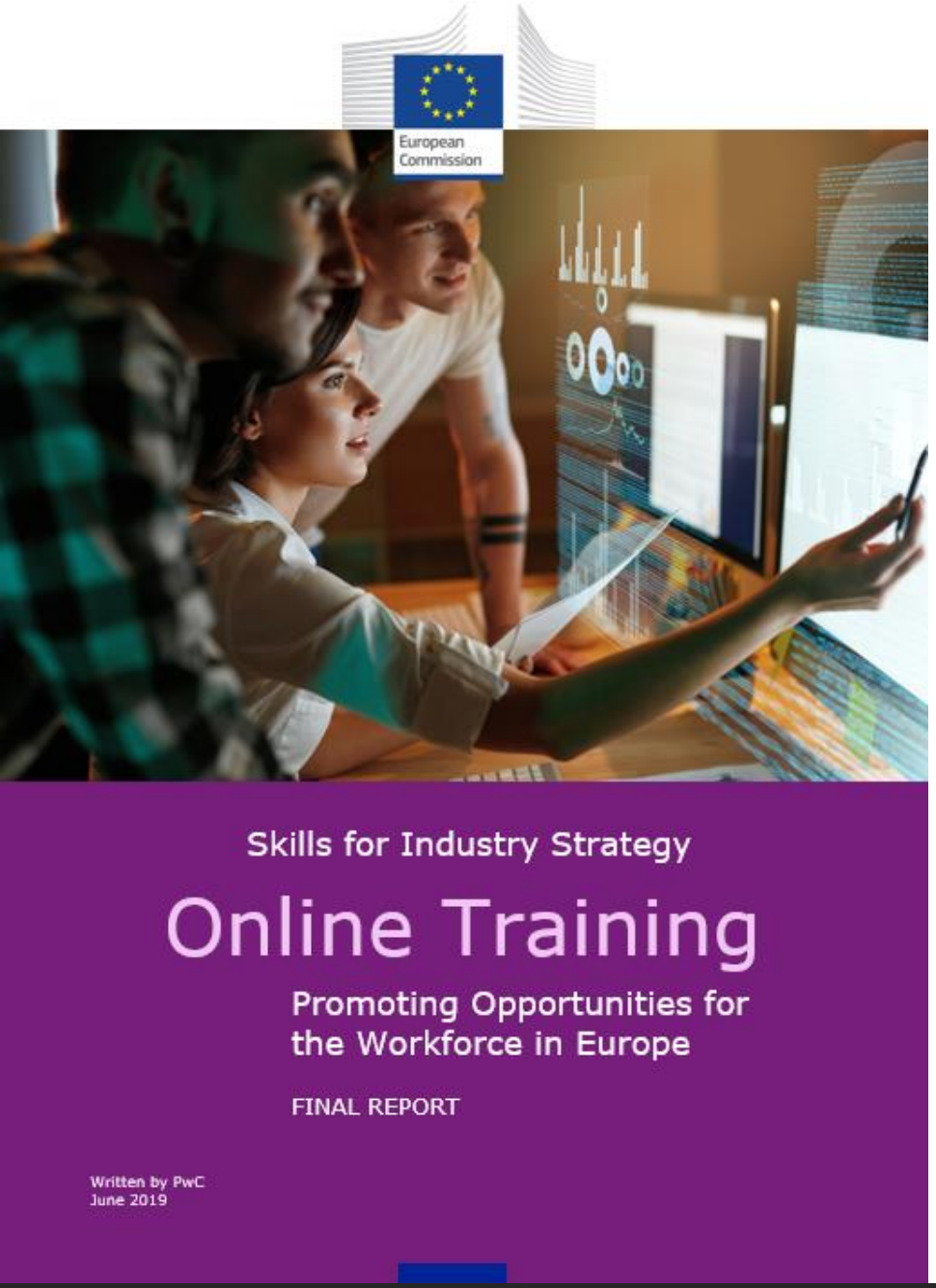
Key Outcomes 1

- Market drivers, trends and dynamics
- Availability, quality and affordability of online training for SMEs
- Adoption rate of online training among SMEs in different EU Member States
- Key players and cooperation mechanisms
- Relevant policy initiatives

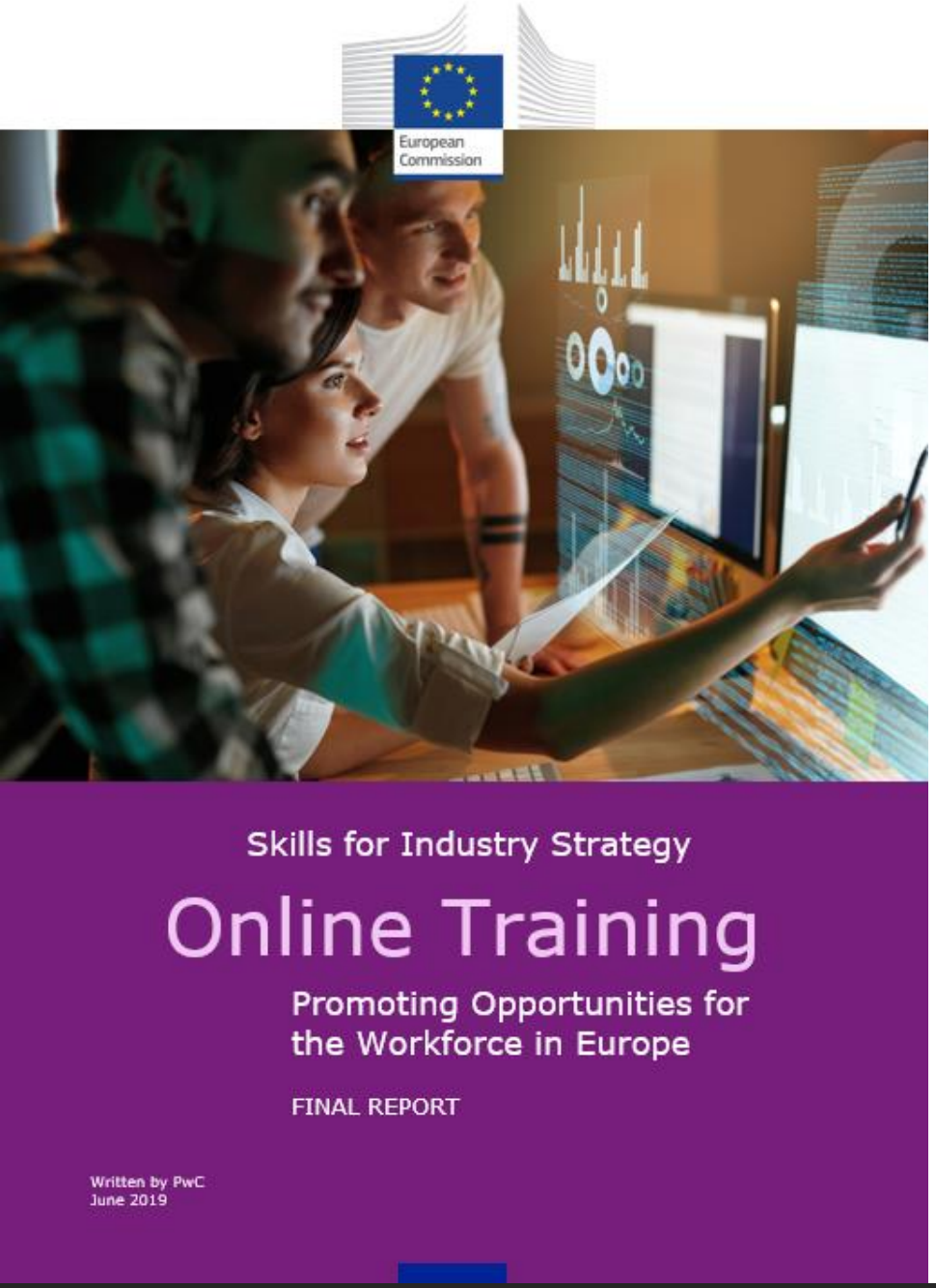


Key Outcomes 2

- Key adaptation and localisation strategies
- Key scientific, policy and business publications
- Development costs and funding models
- Latest innovations in pedagogies
- Main conditions to be fulfilled for a massive take-up of online training by SMEs
- Vision and top priority measures; overall recommendations



A need for a shift from supply-oriented towards **demand-oriented** initiatives



Different Approaches

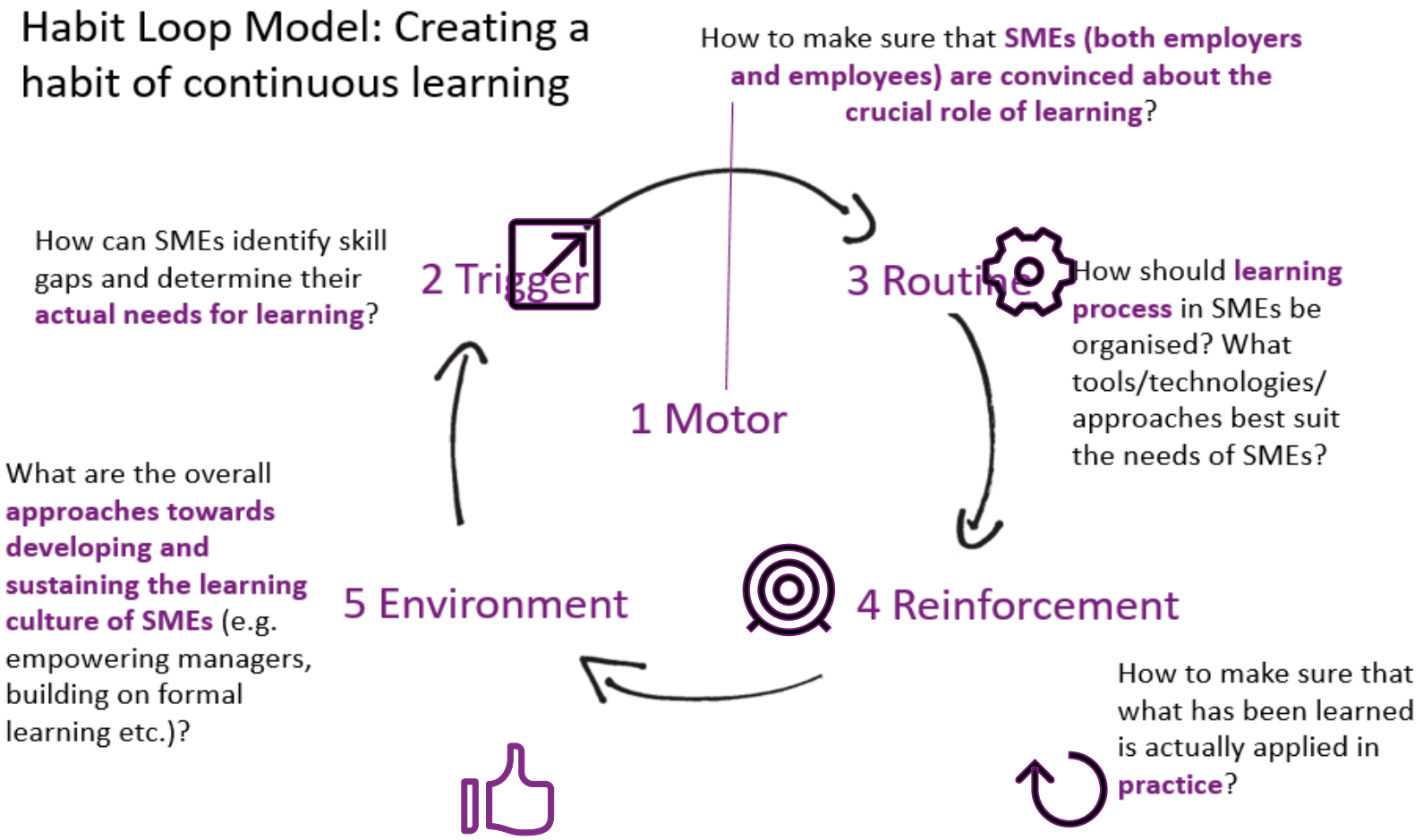
Visionary leadership

Learners in hte driving seat

Carrot and sticks approach

External push for learners

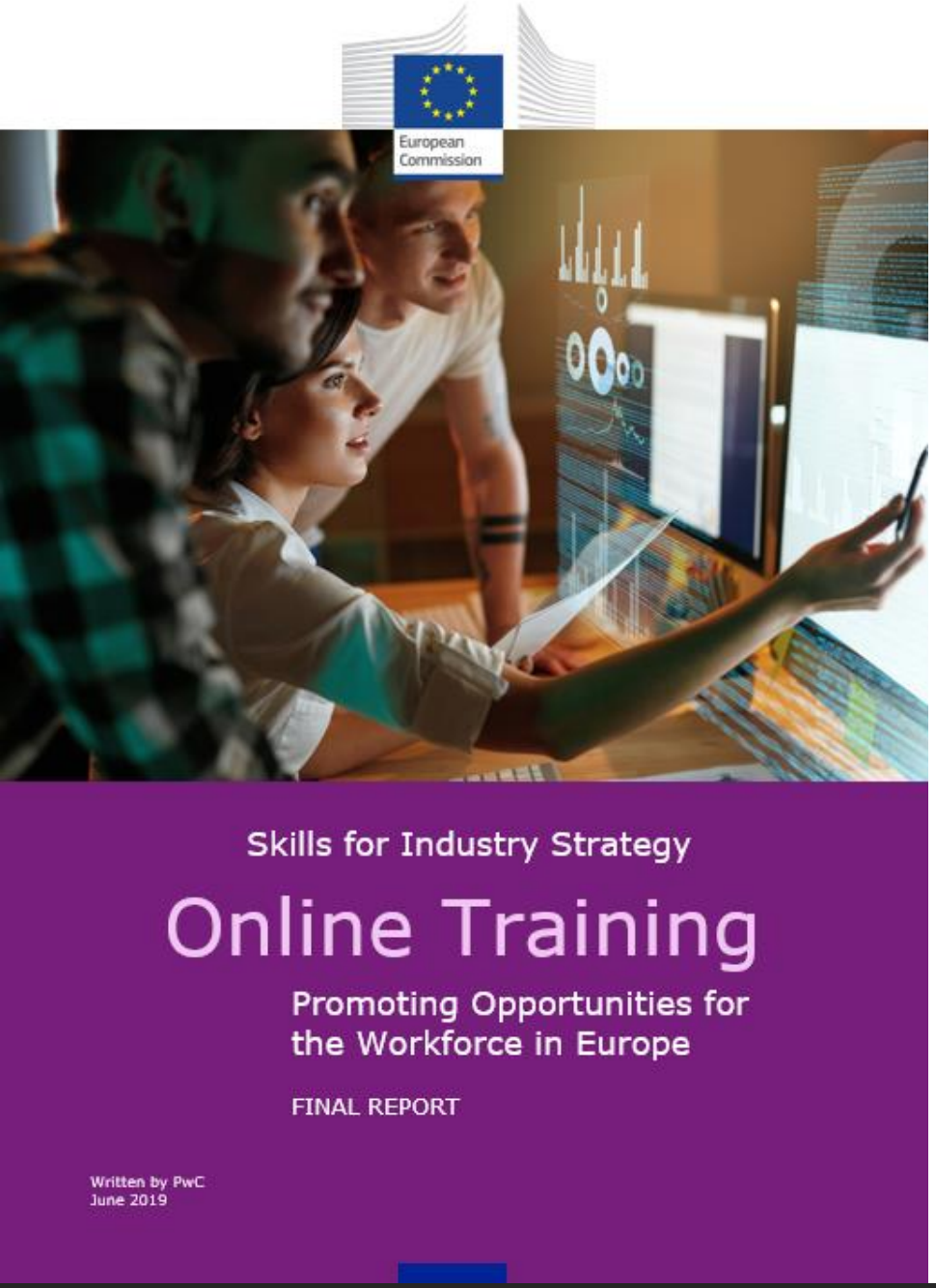
Changing SME learning habits



Based on Habit Loop Model by CUTESolutions

Applying a holistic approach:

Treating **learning as a process** rather than separate events



Cultivate diversity

There is no one best way to tackle the challenges

There is a need to respect the differences and to cultivate diversity

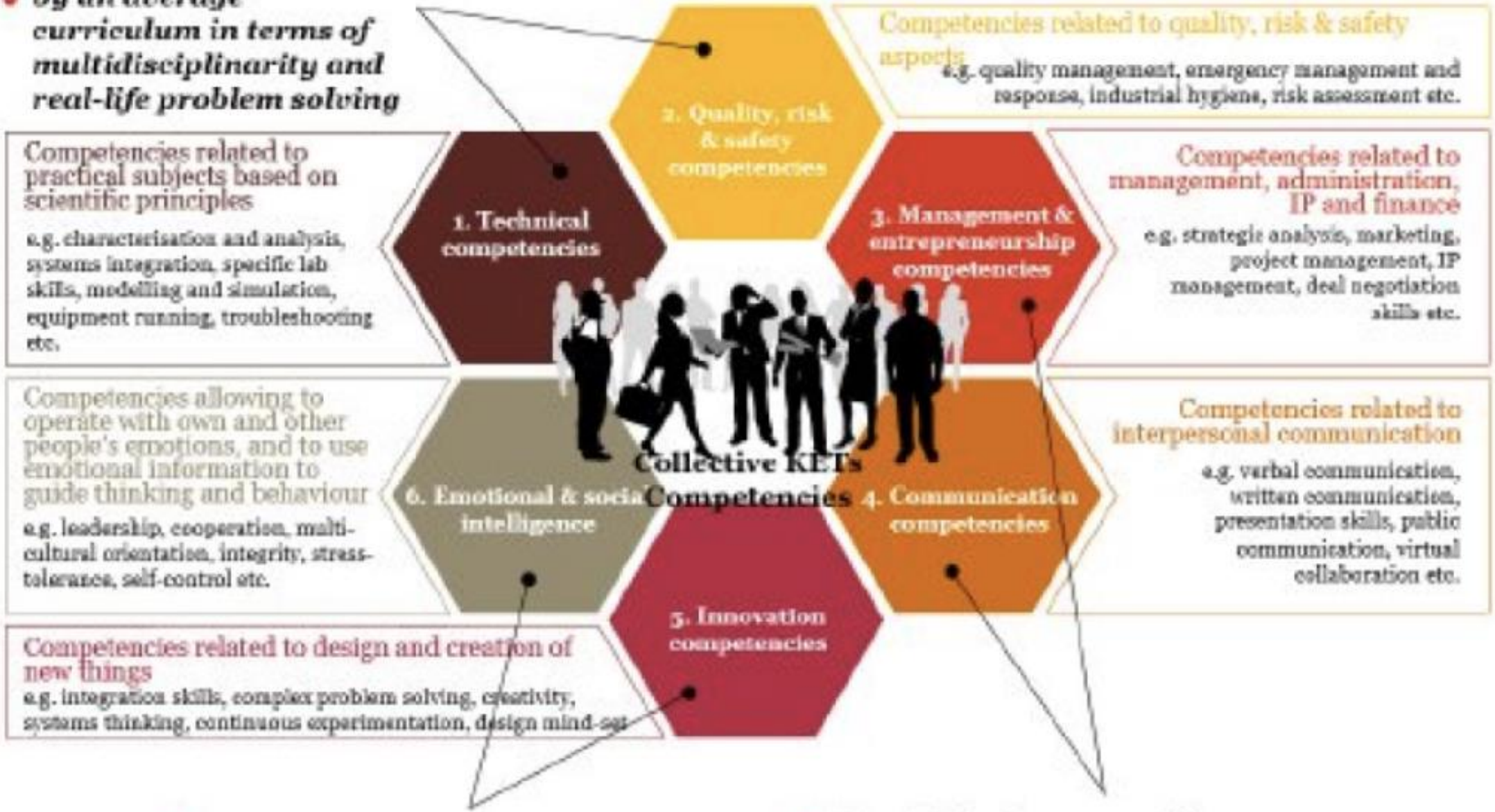
A common vision needs to follow a multi-dimensional approach

Future-proof education and training for manufacturing in Europe - Study Publication metadata

The main challenges are related to the exponential growth of digital tools that include robots, cobots, connected objects, communication systems, data centers and associated energy consumption.

The industrial environment must find new technologies, new designs, new architectures, new communication and data storage concepts, in order to increase the performances of the digital world and, at the same time, to minimise the related energy consumption

! ***Insufficiently addressed by an average curriculum in terms of multidisciplinarity and real-life problem solving***



! ***Almost entirely missing in an average curriculum***

! ***Insufficiently covered by an average curriculum in terms of***

Curriculum Guidelines 4.0

Strategy

Collaboration

Content

Learning environment

Delivery mecahnisms

Assessments

Recognition

Quality

CARING IS SHARING,
SHARING IS CARING

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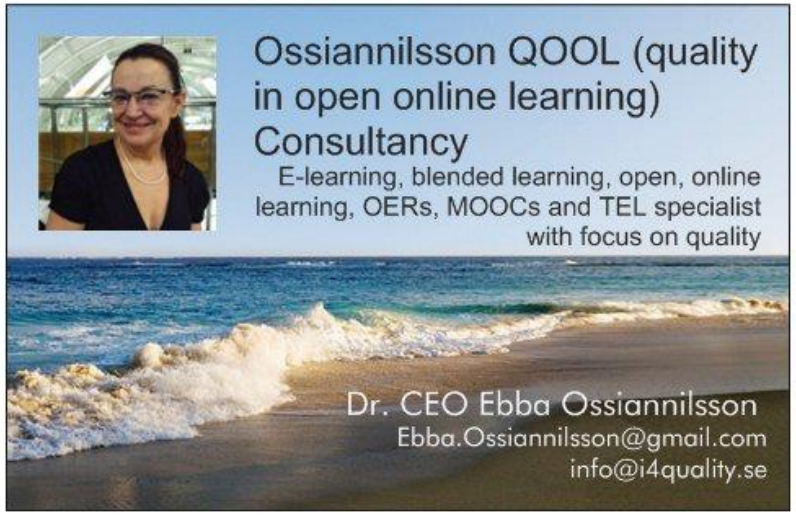
My Footprints

www.i4quality.se

Ebba.Ossiannilsson@gmail.com
info@i4quality.se



Vice President, The Swedish Association for Distance Education
Vice President, The Swedish Association for e-Competence
EDEN Fellow, EDEN NAP, EDEN EC
Open Education Europa Fellow and Ambassador
EADTU, Quality Reviewer, E-xcellence, OpenupEd
ICDE, Quality Network
ICDE OER Advocacy Committee

ebbaossiannilsson
Ebba.Ossiannilsson
@EbbaOssian
Ebba Ossiannilsson
EbbaOssiann
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