

## **The 4<sup>th</sup> Industrial Revolution and Social Innovation**

### ***[Presentation Title] Social Impacts of the 4<sup>th</sup> Industrial Revolution and Preparedness of the EU***

#### **Abstract**

It is obvious that the 4th Industrial Revolution would change the nature of industry, businesses and work and hugely influence people's lives.

Industry 4.0 offers both opportunities and challenges. Benefits are expected to be, for instance, improved productivity, flexibility, efficiency, critical decision-making, and so forth. However, at the same time there will be new operational risks for connected, smart manufacturers and digital supply networks are expected to appear. The interconnected nature of Industry 4.0-driven operations and the pace of digital transformation mean that cyberattacks can have far more extensive effects than ever before.

With the ubiquity of data, data protection and privacy become a pressing concern. The European Union has taken such new challenges very seriously, and decided to create a safeguard to protect people against unpredictable attacks in coming cyber-based society.

Regulation (EU) 2016/6791, the EU's new General Data Protection Regulation (GDPR), regulates the processing by an individual, a company or an organisation of personal data relating to individuals in the EU. As of May 2018, with the entry into application of the GDPR, there is one set of data protection rules for all companies operating in the EU, wherever they are based. Stronger rules on data protection mean people have more control over their personal data businesses benefit from a level playing field. The EU's GDPR has been recognised as an important step in the right direction and could be a model for other governments around the world.

From the global point of view, the EU is a strong supporter of the 4th Industrial Revolution, not just in terms of boosting ICT use, but also in terms of resource efficiency, environmental impacts, interaction of humans with Cyber-Physical Systems, and improved working conditions and skills development.

The New Skills Agenda for Europe addresses skills as a pathway to employability and prosperity. Following the Communication in 2016, the Digital Skills and Jobs Coalition was launched under the Digital Single Market initiative, and in January 2018 the update of the European Qualification Framework was adopted. Also the Digitising European Industry initiative under the Digital Single Market priority addresses skills as a priority.

We know that there is nothing to stop progressing technologies, but at least we should try to predict what can face with throughout the whole possible aspects and start to prepare for balanced growth.