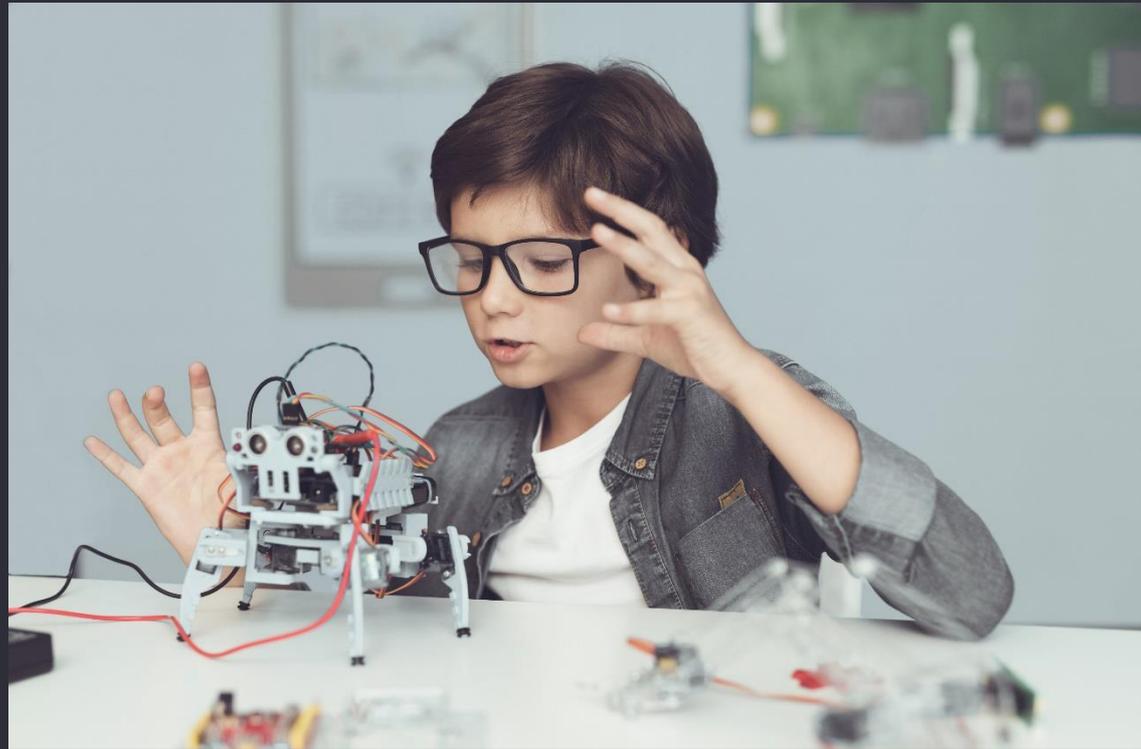


Module 7

Big data and AI – the new horizon



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**Data**

How the businesses can profit from reusing the personal data legally

- Big data= 3 Vs: “...high-Volume, high-Velocity and high-Variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making”
- AI = “...the analysis of data to model some aspect of the world. Inferences from these models are then used to predict and anticipate possible future events.”
- Personal data can contribute to the AI’s data sets
- AI can be applied to personal data

AI need data like plants need water



How the businesses can profit from reusing the personal data legally

Tension between Big data and AI and GDPR is just a challenge ... to overcome towards bigger goals

- Assess to what extent the processing is likely to affect the individuals whose data is being used
- Identify mitigation measures
- Be innovative with the privacy notices and consent collection
 - Say it all
 - Keep it simple and clear
 - Reassure people as to the amount and type of personal data being held about them
- Reduce regulatory risks to reduce the underlying risks of the technology
- Use GDPR compliance as a selling point: trustworthy AI systems highly depend on secure and well protected underlying data sets used to train and refine AI
- GDPR compliant reuse of data improves data quality and paves the way for innovation



What are the benefits and opportunities of introducing AI in the data processing

Deployment of AI critical for the success of SMEs as they can:

- Help optimize processes
- Predict problems
- Develop more efficient services
- Save resources

Practical uses of personal data in AI

- Personal data can contribute to data sets used to train machine learning
- Personal data can be used to analyse, forecast and influence human behavior e.g negative example of Cambridge Analytica
- Automated decision-making can be cheaper, more precise and impartial but can negatively affect individuals

Big data is too big without AI



European Commission's Proposal for a Regulation on AI:
- AI regulatory sandboxes
- Measures to reduce regulatory burden on SMEs and start-ups

How the businesses can profit from reusing the personal data legally

Reuse of personal data consistent with GDPR is possible

- Purpose limitation as a flexible application of the idea of compatibility in case reuse is not incompatible with the purposes of collection
- Reuse for statistical purposes
- Data minimization: requiring the personality of data rather than their amount
- Exceptions to the prohibition of profiling
- The right to opt out from profiling and exercise the right to be forgotten to be made easy via appropriate user interfaces
- Use of personal data in a training set to be distinguished from their use for individual profiling
- Spanish Regulator: if consent for profiling is not provided directly by the data subject the Data Controller has to make sure that the person acting on their behalf is actually authorized



How the businesses can profit from reusing the personal data legally

Open data in the EU

- From the Public Sector Information Directive to the Open Data Directive:
 - overcoming the remaining barriers to full reuse of public sector information, in particular by SMEs
 - updating the legislative framework to meet the developments in digital technologies
- The EU strategy for data will establish trusted mechanisms and services for the re-use, sharing and pooling of data that are essential for the development of data-driven AI models of high quality
- Envisaged Government-to-Business data re-use subject to:
 - Transparency and societal participation in connect to the purpose of the reuse
 - Transparency and clear purpose definition between the licensor (public authority) and the licensees
- Concept of high-value datasets = documents the re-use of which is associated with important benefits for the society and the economy
- Processing of public-sector data via AI could have a transformation effect of various industry sectors



What are the benefits and opportunities of introducing AI in the data processing



AI in the processing of health data can help:

- Detect diseases
- Treat diseases
- Improve decision-making
- Provide treatment solutions

What are the benefits and opportunities of introducing AI in the data processing



AI in the processing of data for AML and anti-fraud prevention can help:

- Reduce cost
- More effectively manage risk
- Increase productivity

In 2019 just around 10% of the suspicious transaction reports filed by financial services institutions led to further investigation by competent authorities according to Europol