Digital Innovation across Sectors

DIGITAL APPLICATIONS

AGRO-FOOD

- **Precision farming** (i.e. use of digital technologies to optimize use of inputs for crops to grow optimally)
- **Big data analytics & AI** to inform farm management decision making
- Potential to **trace products** along supply chains (using IoT & blockchain)

AUTOMOTIVE

- **Autonomous** / self-driving cars
- **Car sharing services** & other alternatives to car ownership
- **Smart factories** (use of IoT & robotics in production processes)

RETAIL

- **Big data analytics** for customized advertisement
- **Enhanced shopping experiences** (e.g. 3D visualizations)
- **IoT & robotics** for better inventory management

DIFFERENCES ACROSS SECTORS

Digital technology opportunities

Digital technologies (e.g. AI, Iot) offer different opportunities to sectors for digitizing products, services, processes & creating new business models and markets.

Data needs & challenges

Data needs differ across sectors, ranging from satellite data (agriculture), to consumer data (retail, to real-time traffic information (automotive). Access & privacy conditions differ for these data.

Digital technology adoption & diffusion trends

Adoption & diffusion due to differences in capabilities, sectoral characteristics (e.g. firm sizes) and consumer demands.

Within-sector differences across countries, regions & firms are often also important