



Master's Thesis

Creating Digital Trust for Data-driven Business in Digital Ecosystems

The Bosch IoT Lab is currently looking for students who want to write their master thesis at the Institute of Technology Management

The convergence of the Internet of Things (IoT) with its smart connected products and Artificial Intelligence (AI) is collectively referred to as AIoT. AIoT is a key enabler for the innovation of products, processes, and services of industrial companies. Within the realm of AIoT, industrial companies collaborate and compete in digital ecosystems. Hence, sharing and exchanging data becomes a key driver for value creation of AIoT business models. However, data sharing is heavily dependent on digital trust, i.e. the willingness to engage in a digital value exchange that bears potential risk. Digital trust is the result of a very diverse set of activities that span different domains such as security, privacy, AI ethics, as well as data sovereignty. In light of this complexity, managers face the challenge to drive digital trust without compromising their AIoT business. One instrument to create trust in a digital ecosystem is a cross-company *code of conduct*.

The agriculture industry is the leading industry in respect to IoT and AI driving initiatives such as smart farming and Agriculture 4.0. This industry was also the first one that set up an industry-wide code of conduct *"to ensure that data-sharing leads to a prosperous agri-food chain"*. Thereby, the industry has become the role model for other industries. For further information on this code of conduct please also refer to:
https://www.cema-agri.org/images/publications/brochures/EU_Code_of_conduct_leaflet.pdf.

To learn from this specific solution in the agriculture industry and leverage these learnings for other AIoT-industries (e.g. manufacturing, automotive), the following questions need to be answered:

1. Why is there a code of conduct and what were the fundamental drivers for its creation?
2. What specific obstacles does the code of conduct address and how are they addressed? What are the key design decisions that the code of conduct is based upon?
3. What challenges did the stakeholders face when creating the code of conduct and how did the companies overcome these challenges?
4. Are there already any benefits the companies gain from it?

What we offer at the Bosch IoT Lab:

- Qualitative research with a high practical relevance and impact
- Methodological support
- Working at the intersection of business and technology

Your profile

- Interests for new data-driven business models, digital technologies (AI, IoT) and strategy research and privacy-related topics
- Analytical thinking and a structured working approach
- First practical experiences in strategy consultancies or in a corporate strategy department are beneficial

Whom to contact?

To apply for this topic, please send an email to Fabian Schäfer (fabian.schaefer@unisg.ch) and attach your current CV, transcripts and mention your preferred starting date.