



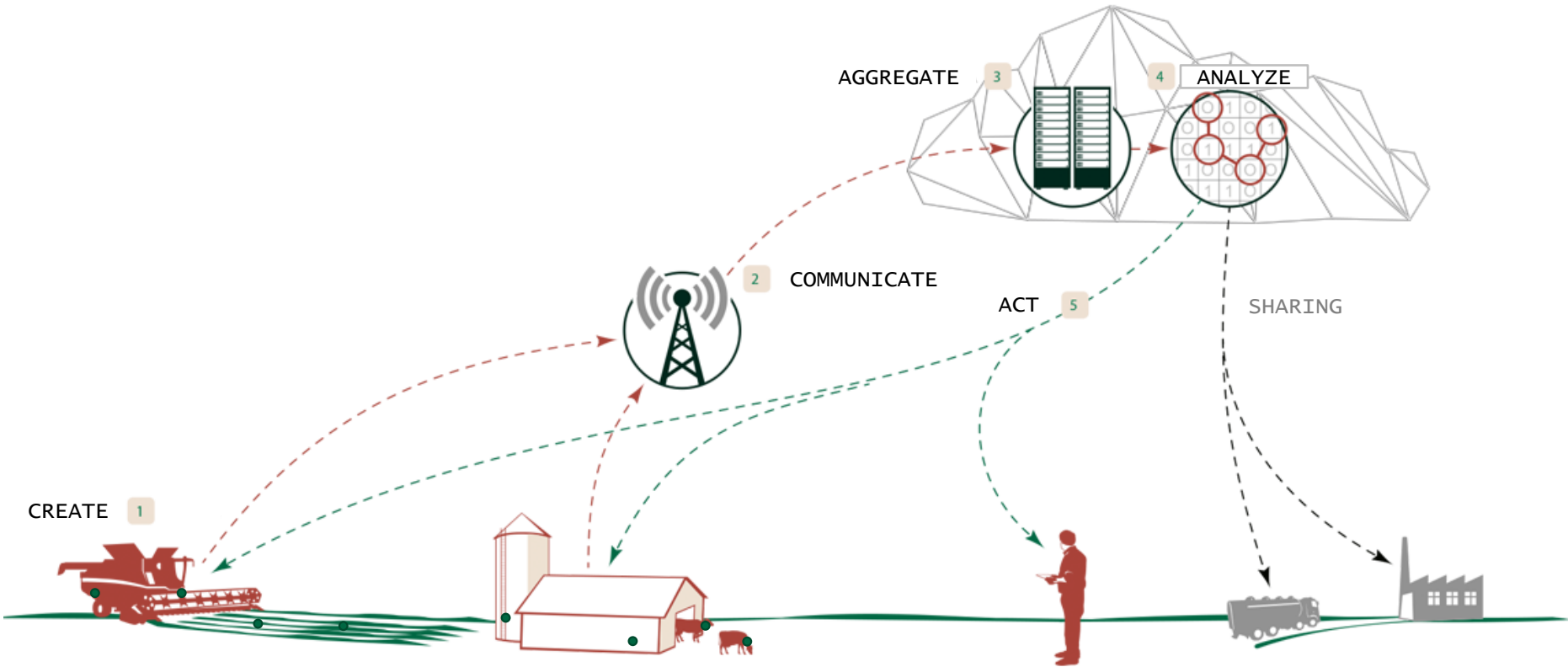
Digital transformation and IoT

– How it's revolutionizing agriculture and what the current state in Sweden looks like

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ICT Agri
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The power of IoT – creating value by digitizing physical and biological farm-level processes



THE DEFINITION OF IoT

Small **sensors** are placed in "things", such as machines, green houses, animals and the ground. The sensors enable a situational behavior, given that the "things" can register and communicate with the environment.

The sensors are generating large amounts of cloud based data, which is aggregated and analyzed in order to **automatically instruct** machines or facilitate farm-level **decision making**

SWOT-analysis in regards to digital transformation in agriculture – Sweden is positioned to gain a lot from it

General

Sweden



Opportunities

- The next driver of **profitability** and **efficiency** (with the help of **data driven decision making** and **automation**)
- New data value creation from **benchmarking & knowledge transfer**
- **Integration of multiple data sources** into advanced solutions – better overview
- **New business models** favorable to farmers



Strengths

- **High fiber-broadband** and **4G penetration**
- **Highly IT-proficient farmers**
- Favorable **sharing culture** – e.g. farm level data
- Farmers are **willing to test new solutions** and **change established processes & behaviors**
- **High labor costs** and **low capital costs** – making investments in **automation** and **new productions systems** advantageous



Threats

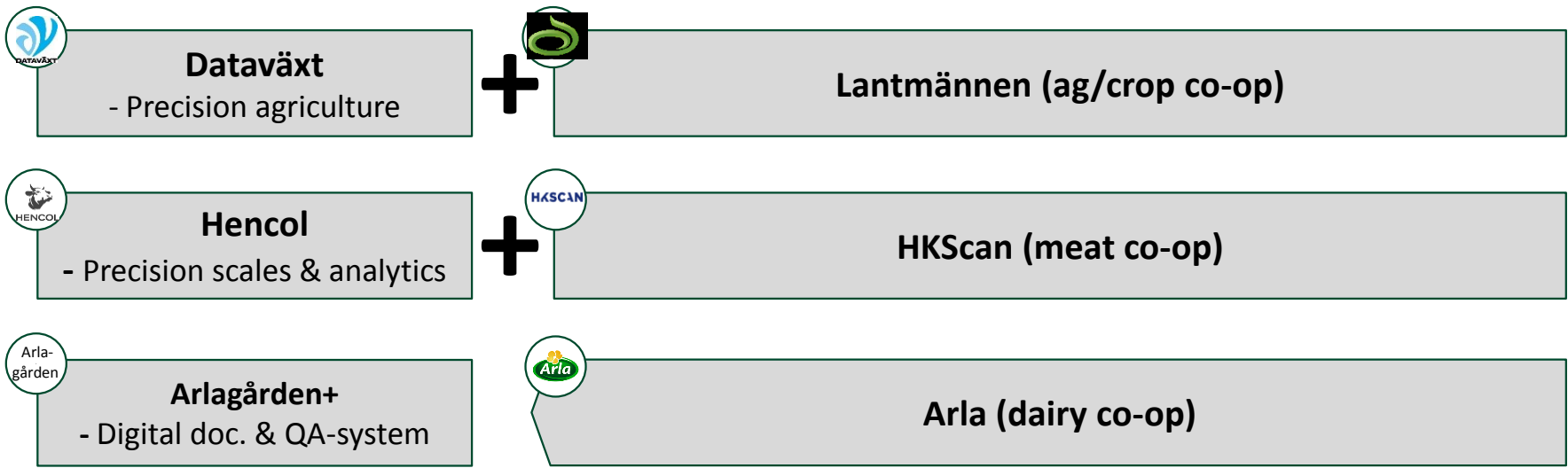
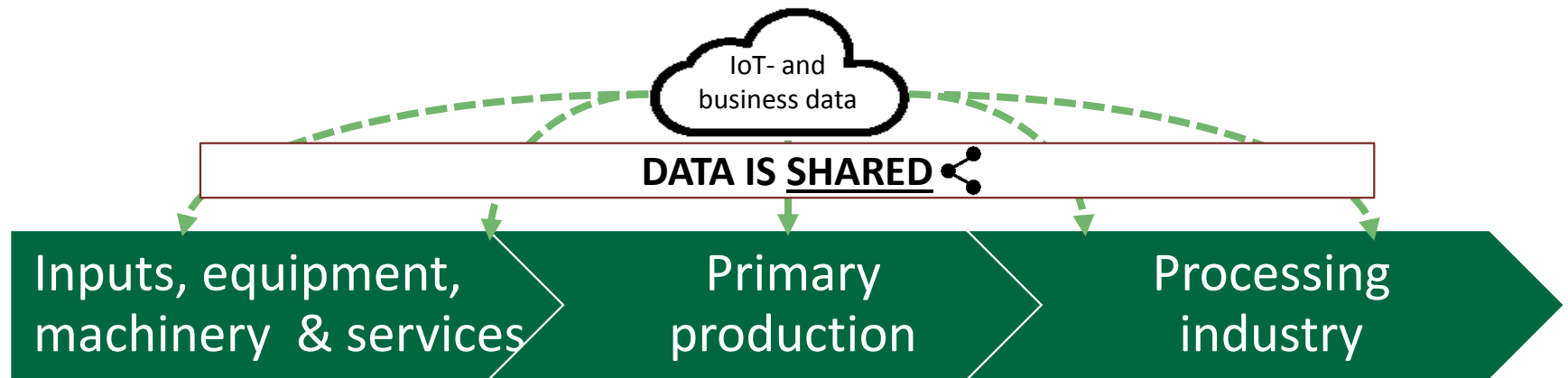
- Farmers are **locked in** to production systems – risk for oligopoly
- **Low transparency** in usage of farm data
- High vulnerability for **unstable communications infrastructure**



Weaknesses

- One of Europe's least densely populated countries – getting country side **5G coverage** might be an issue
- Large share of **small part-time farmers** – less likely to adopt digital solutions

Multiple cross-value chain initiatives are driven in Sweden in order to capitalize on the potential in digitally transforming agriculture



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