

## The Connected Farm

Sagentia Innovation works across the entire agricultural supply chain and at every touchpoint of the connected farm

### In your hands

*User-centred display of key metrics, insights and actions*

- A single, central platform for up-to-date information, to enable tactical and strategic planning
- Tailored information for workers, managers and business owners

### Data and planning

*Converting a wealth of data into actionable insights and to determine what to do, when, where and why*

- Using a variety of data sources to identify and solve high priority problems, plan harvests, spread fertiliser, solve irrigation, and apply pesticides
- Predictive analytics based on external data sources such as: weather, climate, best practices, and local knowledge

### Ground truth

*Realtime insight into local soil and crop condition enabling informed interventions*

- Distributed sensing units for soil (moisture, nitrogen/NPK), crop (health & growth), pest (identification and presence)
- Positioned static (in soil), on tractor, implement or UAV based
- Low power, long life, robust sensing and communications

### Chemical and biological interventions

- Precision delivery systems that identify the issue and treat locally
- Formulation development
- Scouting for new active ingredients
- Regulatory guidance

### Animal health monitoring

*Empowering farmers to make proactive choices to protect herds, increase yields and make smart decisions*

- Implantable, worn and remote solutions for monitoring of position, locomotion, productivity, fertility, health and disease state
- Veterinary diagnostic instruments
- Drug delivery systems

### Controllable environments

- Indoor, hydroponic & aeroponic growing systems
- Seed germination and transplantation for higher productivity
- Just-in-time logistics, automated warehousing for chemicals and biologics
- Bioreactors and cell culturing facilities

### Automated solutions

*Addressing the trend of fewer people working on farms*

- Working through a 24-hour cycle to identify challenges and use novel means to solve problems
- Precision chemical delivery systems, new non-chemical corrective control systems, and automated picking systems and harvesting

