



Growing Sussex

Insight - How the University of Brighton is helping to create sustainable agriculture using AI-driven analytics, business insight and skills development

PROJECT OVERVIEW

The University of Brighton (UoB) plays a strategic role in the Growing Sussex "Advancing technology and data driven decision making in food, drink and plant production" project, supporting the adoption of data-driven innovation across key agricultural sectors including horticulture, viticulture and farming. Its contribution focuses on translating advanced digital technologies into practical, evidence-based decision-making that improves productivity, sustainability and commercial outcomes for growers. Central to the University's impact is its expertise in data analysis, modelling and artificial intelligence.

THE CHALLENGE

Modern growing environments generate complex data streams from sensors, cameras and monitoring platforms, often supplied by multiple technology companies. The UoB integrates these diverse datasets into a unified analytical framework, enabling AI to be applied across the entire production system rather than in isolation. This whole-system approach allows patterns, trends and performance drivers to be identified that would otherwise remain hidden.

THE APPROACH

Through AI-driven analytics, the UoB supports improved monitoring of crops and animal health, enabling earlier detection of stress, disease or sub-optimal growing conditions. This allows growers to intervene at the right time, make timely decisions, and optimize the delivery of nutrition, water and food resources. This approach also supports the creation of more suitable and responsive controlled environments for both plants and livestock, improving growth conditions while reducing waste and inefficiency.

The use of historical and live datasets further strengthens decision-making by placing real-time conditions in context. By understanding how crops and animals have responded over time, growers can move from reactive management to proactive and predictive control, improving consistency, resilience and output.

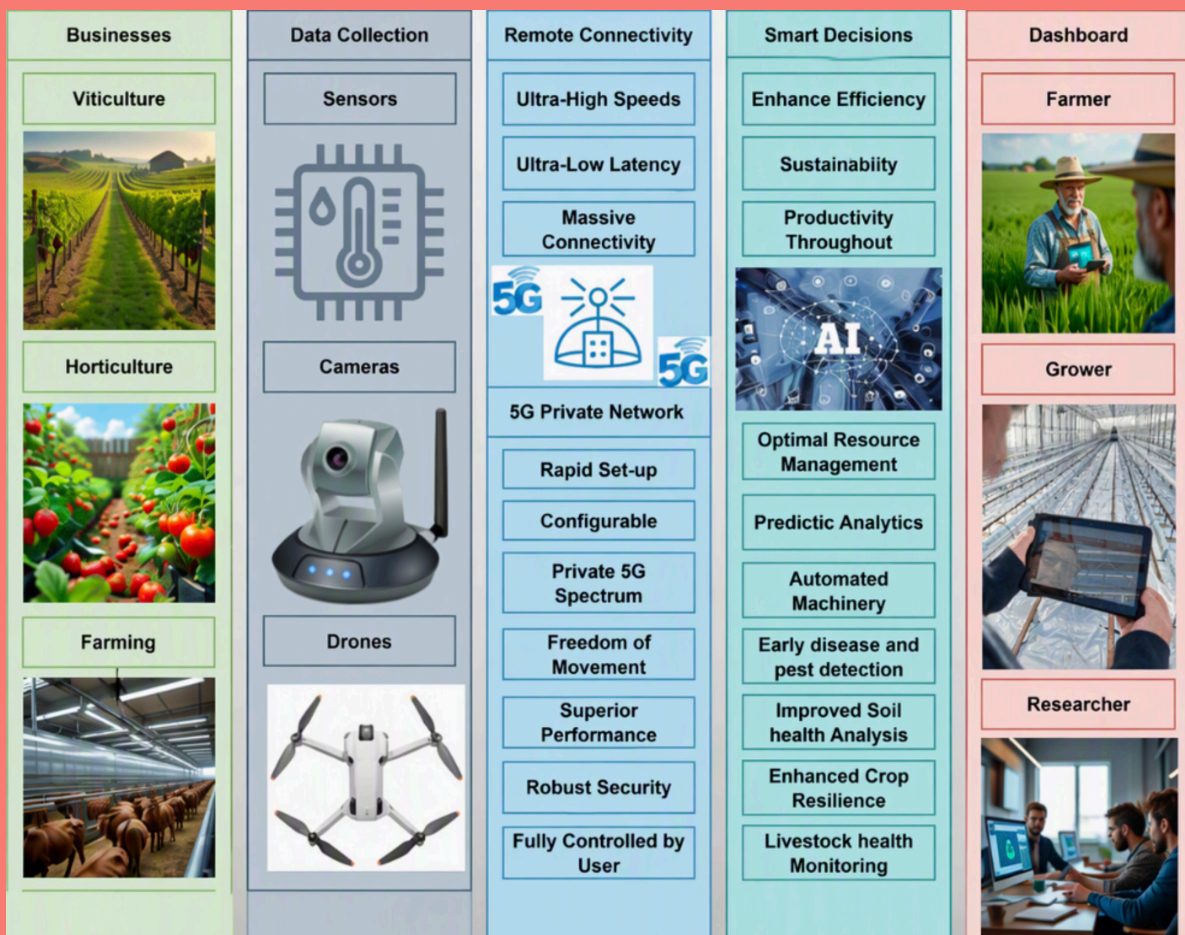
THE IMPACT

Alongside the technical innovation, the UoB contributes to the development of clear and robust business cases for investment in connected agriculture. These business cases link AI-driven insight with operational efficiency, yield improvement and cost reduction, helping growers assess the commercial value of integrated digital solutions. The focus is on generating higher yields, increased profitability and improved return on investment (ROI), supporting informed and confident adoption of advanced technologies.

The UoB also supports skills development by working with colleges and training providers to align education with real-world growing environments. Through access to live data, analytical tools and applied use cases, learners and experts are better prepared to operate in modern, technology-enabled agricultural systems.

Through its integrated approach to analytics, AI-driven decision-making, business insight and skills development, the UoB strengthens the overall impact of the Growing Sussex 5G Innovation Project. Its contribution supports smarter farming practices, improved commercial outcomes and a more resilient and future-ready agricultural sector.

END-TO-END SMART GROWING ECOSYSTEM: FROM DATA TO DECISIONS





KEY TAKEAWAYS

- Integrated data enables better decision-making.
- AI supports proactive crop and livestock management.
- Connected agriculture can improve productivity and profitability.
- Skills development is essential for future adoption.
- Data-driven approaches strengthen resilience across the sector.

USEFUL LINKS

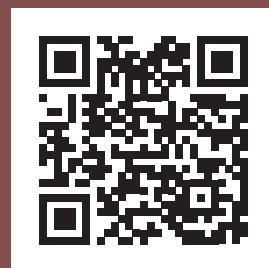
- [University of Brighton News Article](#)
- [South East Business Magazine Article Page 28](#)

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CONTACT US

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Led by West Sussex County Council and funded by DSIT, Growing Sussex is an exciting project to advance digital technology and data driven decision making in food, wine and plant production.

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