



HINKLER AGTECH INITIATIVE

Integrated Farm Management Software

INTRODUCTION

This trial was undertaken as part of CQUniversity's Hinkler AgTech Initiative. The Initiative aimed to increase the productivity and profitability of the Bundaberg region's agricultural sector through greater availability and utilisation of agricultural technology (AgTech). An extensive consultative process undertaken with agribusinesses identified on-farm needs that may be addressed using AgTech. Trials of selected AgTech products and services were then undertaken in partnership with agribusinesses and technology providers to determine the technologies' efficacy in on-farm conditions. This summary provides an overview of findings from one of the technology trials, including grower feedback and considerations for other growers when deciding whether to utilise the technology in their own enterprise.

Background

Modern agribusiness is becoming more complex due to a range of factors including market globalisation, climate variability, labour shortages, increasing regulations and supply chain complexity. Farmers have traditionally maintained records using paper-based methods or basic computer programs and based management decisions on experience, intuition and personal relationships. While these methods are effective, they can be labour-intensive and prone to error. With the advent of technology, farmers now have access to integrated farm management software systems that automate many of these processes and provide more accurate and efficient methods for managing their businesses.

The Technology

'Conservis' is a farm management system that provides farmers with a suite of tools to help manage their farm operations. The system offers a variety of features, including:

- **Crop Management** – Conservis provides comprehensive overviews of crop production, including planting, harvesting, and yield data.
- **Farm Mapping** – The system includes a mapping feature that can create and manage digital maps of entire farms, including irrigation systems and equipment.

- **Inventory Management** – Conservis provides tools to manage supply inventories and to monitor plant and equipment, including maintenance schedules and repair history.
- **Financial Management** – The system helps growers manage their finances through budgeting, expense tracking, and financial reporting tools.
- **Labor Management** – Conservis provides tools for scheduling and tracking employee hours, as well as managing payroll and benefits
- **Agronomic Data** – The system provides access to agronomic data, including weather and soil data
- **Mobile App** – Conservis also offers a mobile app that allows growers to access their data and tools from anywhere, at any time

The Trial

InformAg was engaged to trial the Conservis farm management software package for two large family-run agribusinesses (a strawberry grower and a macadamia grower) in the Bundaberg region. InformAg also provided the system set-up and modifications, historical data entry and training services. Both growers trialed Conservis for approximately 4-5 months following this set up phase, with the system in use during both harvest seasons for each crop across multiple farm locations.



RESULTS

While the growers saw the potential of Conservis to improve farm management decisions throughout the trial, both reported that the system was complicated to use and not flexible enough to meet their particular needs. For example, both growers reported problems in issuing work orders to staff through the system, with some activities that occurred on-farm not included in available work order selections. The system was also not compatible with the harvesting system deployed by the macadamia grower. Both growers also commented on the large time commitment required to set up. Conservis is a financial records-based system, requiring significant financial detail to get started in the system. The flexibility of the system was also an issue for the strawberry grower who was adding new chemicals and equipment to their inventory on a regular basis, which necessitated significant staff time entering new data.

Despite the challenges the growers had with Conservis, both commented on the high level of support and training provided to them by InformAg, who were easily contactable and responsive to requests for assistance. InformAg also spent a significant amount of time and resources in assisting the growers during the initial set up and training phase of the trial. Both growers also commended the availability of their data from Conservis, which will allow them freedom to easily transfer their data to new systems and to be shared with external contractors for analysis.

Value to Business

The growers involved in this trial reported that the collection of highly detailed data into one central system including financial, labour and crop insights, could be a very powerful tool in the management of their businesses. The growers also commented that historical record keeping could be made much simpler with a management system and would allow them to meet their reporting and compliance needs. With a wave of new digital agricultural technology becoming available in the region, the growers also noted that a system such as Conservis will be an important consideration for their future growth and adoption of new technologies. The growers commented that a lot of technology currently in use requires their own platforms and considerations, making an integrated management system valuable to their business needs. Both growers are more aware of what they require in a farm management system because of this trial, with both now trialing and exploring other systems that may be more suitable for their farms.

Grower Feedback

Trial Summary Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I see value in this technology			✓		
I found the technology easy to use		✓			
The technology was easy to integrate within my business		✓			
I was satisfied with the service provided by the AgTech company			✓		
I intend using this technology in my business		✓			
I recommend this technology to other growers		✓			

Other Considerations

The results of this trial highlighted that each grower's requirements are unique to their production systems. When considering adopting this technology, it will be important for growers to identify and prioritise their requirements of a farm management system to ensure they get the most value from their investment. Because of the uniqueness of each system, it is unlikely that one system will meet all needs in the current market of available products. Growers should also be aware that there are multiple companies that provide bespoke software solutions for growers with specific requirements such as tracking yield, managing labour schedules or monitoring inventory. It is also important for growers to be aware of data ownership, should they ever want to change systems or export data for third party use.

Further Information



For further information on this trial and results, email CQUniversity's agricultural research team:
agriculture@cqu.edu.au

Summaries of other technology trials undertaken through the Hinkler AgTech Initiative are available at:
bundbergagtechub.com.au

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