

Creating a hub of integration

"In some ways, we were waiting for machinery and technology to catch up to Omnia's ambition."

LEWIS MCKERROW



As technology becomes more sophisticated to capture increasing amounts of information to guide core farm business decision-making, moving data seamlessly between platforms is no longer simply a nice-to-have. *CPM* investigates why Omnia has made connectivity an essential function.

By Janine Adamson

From machinery and crop yield data to sensors and aerial imagery, growers can be bombarded with multiple data streams on a daily basis; all useful in isolation, yet often fragmented. The consequence of this can be administrative duplication, clunky manual uploads, information not being fully utilised, and potential user error along the way.

However, when Omnia launched its key upgrade more than two years ago, the goal was to become an all-in-one farm management software solution with connectivity at its core, explains Hutchinsons' Lewis McKerrrow.

"In fact, we've always wanted to make life easy in terms of data movement.

In some ways, we were waiting for machinery and technology to catch up to Omnia's ambition," he says.

EVER EVOLVING

During the early days of Omnia, John Deere Operations Center and Dropbox were integrated, albeit at a relatively basic level, notes Lewis. Omnia Connect then came along in 2018 – an iPad-based system that facilitated sending variable rate maps to a machine using the cloud.

However, it was during the recent upgrade that Omnia achieved the Holy Grail, comments Lewis. "With the new spray module, customers can send a task from Omnia to a

machine, complete the job, and then receive the record back in Omnia. It's a complete loop that confirms the date, time and products used. Even better, it also allocates stock and machinery



Digital nexus

The objective is to make Omnia a central part of a connected farm data ecosystem, where information can move in and out and be put to practical use, says Hutchinsons' Lewis McKerrrow.



Simplicity and reliability

According to John Deere's Dennis Schrijver, growers want to focus on completing the task at hand, rather than handling various software providers.

- operations, so that costs are accrued automatically with minimal user input."

In terms of integrating data from farm machinery, it's an ever-evolving story, he says. "We've been busy preparing for when the different manufacturers are ready to connect with Omnia. They're all at different stages in that journey, but we're beginning to welcome them on board."

In terms of integrating data from farm machinery, he says it is an ever-evolving picture. "We've been engaging with many of the manufacturers for a number of years. They are all at different stages of their own technology journeys, so we maintain a constant dialogue to ensure we can plan future upgrades as they come on stream.

"Importantly, the enthusiasm is there from the machinery sector and last year particularly, integration really ramped up, driven by the manufacturers themselves in some cases," explains Lewis.

Critically, all of this is with efficiency in mind. "For the grower, connectivity into Omnia should save time and reduce duplication, freeing up capacity for more critical tasks. Traceability of farm record keeping should improve and machinery-generated data should be better used overall.

"We know Omnia can't self-generate all of the information required on-farm, so instead, the objective is to make it a central part of a connected farm data ecosystem, where information

Connections beyond machinery

Omnia also has the capability to connect with a number of other platforms and services

TELUS FARM MANAGEMENT / GREENLIGHT

The connection with Telus Farm Management (previously Greenlight Grower), allows field and cropping information to move between the two systems. According to Hutchinsons' Lewis McKerrow, this is particularly useful where agronomists and farmers are working across both platforms, reducing the need to manually recreate the same field and cropping information.

TELUS SPRAY PLAN PDF IMPORT

Omnia can also import spray plans produced within Telus systems from PDF. "This provides flexibility where, for example, an agronomist creates a recommendation or spray plan within Telus and the farmer subsequently

wants that information within Omnia.

"It allows different systems to remain part of the same workflow rather than forcing both parties to work within a single platform," explains Lewis.

DROPBOX

Dropbox connectivity provides another straightforward route for moving files and data into and out of Omnia, supporting customers who already use Dropbox as part of their existing farm data workflow.

XERO

According to Lewis, this is in response to the Omnia team seeking to overcome administrative bottlenecks for growers. "Invoicing and accounting can be quite time-consuming, so we're working on making a connection with Xero Finance for launch later this year."

can move in and out and be put to practical use," says Lewis.

Looking at the connection with John Deere in more detail, this currently offers the broadest range of data exchange including the capacity to import field boundaries and yield data, send work plans from Omnia to machinery via the John Deere Operations Center, and receive completed task information back into Omnia.

RECORD KEEPING

This helps to create a more complete record of work carried out in the field, suggests John Deere's precision ag specialist, Dennis Schrijver. "Record-keeping is becoming increasingly important due to demands from both the supply chain and government. It's important to make that process as simple as possible, and we believe we're leaders in enabling the connectivity to achieve that," he says.

The current updated connection between Omnia and John Deere has been live for around six months, although the Operations Center was launched back in 2014. While growers have been proactively asking for this connection, Dennis raises that the demand broaches far beyond this. "Growers want simplicity and

reliability, and the ability to focus on completing the task at hand, rather than handling software.

"For us, it means being an open platform; one system alone is unlikely to ever be able to undertake all farm tasks, so it's critical that the various providers talk to each other. If we enable connectivity, from a farmer's perspective, it feels like one seamless central system."

This also helps John Deere to continue to do what it does best, he believes. "A key strength of ours is delivering tasks effectively in the field. We know that agronomists are the experts in managing a crop, so we have to be able to integrate with appropriate farm management software.

"And now the connection has been established, just as we continue to evolve and improve our Operations Center, we'll do the same with our functionality to and from Omnia."

As for CLAAS machinery, this connection is currently focused on the capacity to import yield data into Omnia, to support mapping, comparison and analysis, alongside other farm information. This is achieved using the CLAAS Connect digital platform, which was launched in October 2024.

"The aim of CLAAS Connect is to

simplify farm and fleet management, and streamline processes,” explains the firm’s James Kennedy-Walsh. “For our harvest machines, it captures yield data every second, logged from the field into CLAAS Connect and then uploaded straight to Omnia.

“We’re also integrating protein-sensing technology into the platform based on advanced Near-Infrared (NIR) sensors, with testing taking place this year in the UK.

“As for foragers, information such as protein, sugar, starch, dry matter content, ash and fat can be captured in CLAAS Connect before being sent over to farm management software like Omnia,” he adds.

James believes this all results in improved efficiency and more value from machinery. “From our customers’ point of view, it’s about reducing the amount of systems being used. We believe it’s important for APIs to work together for greater functionality across the entire farming business.

“CLAAS is an open book – we welcome new development and listen to feedback. As such, we even link third party machines into CLAAS Connect, as well as other farm vehicles, to create one machinery portal for the customer.”

James believes there’s been a tangible demand for a connection between CLAAS and Omnia. “The conversation is starting to come up as part of negotiations on deals for new machines. This is strengthened further by having digital experts at all of our dealerships to provide customers with greater support.

“Customers may not be digital experts, but they want to be able to successfully utilise and interpret the data they’re capturing across the farm. That’s why we’ve been so keen to partner with Omnia to help our customers to achieve that goal together.”

A connection is also available from Omnia to AGCO machines through the manufacturer’s PTx FarmENGAGE platform. This currently supports the movement of field boundaries and prescription files, to allow information created or managed within Omnia to be used more easily by compatible AGCO machinery and systems.

“With the growth in the Omnia platform, this connectivity to the PTx

FarmENGAGE platform is seen as a positive for all AGCO customers – the ability to share data via the best platform for the customer is a real bonus,” says Ed Dennett, AGCO’s marketing manager for Northern Europe.

“As PTx FarmENGAGE is a multi-brand platform, not limited to AGCO products, we believe this gives customers greater flexibility to work with the machinery that suits them best. The link with Omnia is another step in ensuring AGCO customers in the UK can get the best from their machinery and their farm business.”

Omnia also integrates with the CNH FieldOps platform with functionality including field boundaries and prescription files. “The CNH FieldOps API supports the transfer of agronomic information, helping customers to simplify workflows and reduce the risk of errors associated with manual file handling,” explains CNH’s Jack Halmshaw.

“Looking ahead, there are plans to extend the connection to support the import of yield data ahead of the Harvest 2027 season. This will create a valuable feedback loop, enabling machinery-generated harvest information to be brought back into Omnia for further analysis, crop planning and future agronomic

decision-making.”

He comments that for CNH, connectivity is about giving customers the freedom to work with the digital tools and agronomy platforms they already trust. “FieldOps is designed to provide a single environment for

“One system alone is unlikely to ever undertake all farm tasks, so it’s critical that the various providers talk to each other.”



Customer demand

CLAAS’ James Kennedy-Walsh believes there’s a tangible demand for a connection with Omnia, because the conversation is starting to come up as part of negotiations on deals for new machines.

machine and agronomic data, while supporting third-party partnerships that allow customers to keep all their information connected and accessible.

“By connecting machinery data with agronomic planning tools, farmers can gain greater value from the data generated throughout the season and turn that information into practical actions that improve efficiency, productivity and long-term farm performance.”

For Lewis, it’s all part of a move towards meeting customer demands. “Previously, growers may have used memory sticks or similar but with that, it requires a level of IT literacy to ensure the information is uploaded correctly into the right place.

“Being connected through APIs means the user just hits ‘send’ and it all happens automatically. By removing the human aspect, it all becomes so much simpler and more efficient,” he concludes. ●

Digital Direction

As arable farms progress towards a digital future it can be difficult to know how to navigate data generation, capture and analysis, in order to provide worthwhile benefits to a business.

Through its Digital Direction series, CPM is working with some of the industry’s leading companies to understand the latest data-driven solutions from an on-farm perspective.

CPM would like to thank Hutchinsons for sponsoring this article and for providing privileged access to staff and the material used to help bring it together.

