One place destination for data-driven decisions

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Innovation Digital Direction

Developments of the digital platform MyFarm are bringing efficiencies, ease and a more seamless way of working for its users, says Frontier. *CPM* takes a tour through the changes.

By Tom Allen-Stevens

How much of your time on your farm do you suppose is spent looking for things?

It may be a copy of your grain contract, your spray recommendation sheet, or your yield map from last harvest. If you add it up, unless you're that rare breed of someone who combines farming prowess with excellent office efficiency, it's probably a considerable chunk of your life. But if those key bits of information aren't readily at hand, your ability to make decent decisions about your farm is paralysed.

Move into the digital world, and don't expect things will magically fall into place. A recent study by the Independent Directors Council found IT workers spend an average of 4.5 hrs/week searching for, not finding and then recreating files. That's before taking into account rekeying data because one bit of software doesn't talk to another.

These are among the infuriating

inefficiencies that MyFarm seeks to put right. According to Andrew Flux, commercial strategy director at Frontier, the company's digital platform has undergone quite a transformation. "If you interact with a business, you should do so in one place," he says.

Guiding principle

"Our aim is to support decision making on farm, and it's a guiding principle for Frontier that if you can go to one place and get as much information as you can to help your decision-making, that's a really good place to be."

MyFarm is that place, he explains. "We've made it simple and intuitive for the modern farm manager, and their agronomist, to use, with a tiled interface that takes you straight to the area you're looking for."

Enter this portal and those who do business with Frontier will find four key areas where all the recommendations, invoices, movements and maps can be readily accessed:

- MySoyl the precision-farming hub, where variable-rate plans are created and stored, data can be uploaded and crop performance viewed as layers over a farm map.
- MyRecs the spray-recommendation hub, now available as an app, where you receive, create and confirm applications and transfer them to operators and to your agronomist.

- MyCropMarketing Frontier's brand new on-line live portal to the grain market, allowing you to view prices, set targets and strike a deal, by day or night.
- iTRAC View all Frontier contracts, track grain and input movements, and reconcile financial information.

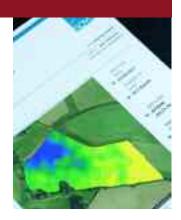
There's a range of on-line tools to control budgets and track profitability and a technical crop protection library. There's also the ability to import data, such as information captured by drone or soil imagery.

"We've been in this space a long time," Andrew points out. "We know it's not just about gathering data or viewing an interesting picture of it. The trick is to pull it all together and help the farmer analyse it."



MyFarm has undergone quite a transformation, says Andrew Flux.

MySoyl is where it all started, back in 1995, when Soyl first launched its GPS sampling service to generate maps of in-field variation of pH and major nutrients. The variablerate application maps for N, P, K and Mg over more than one million ha still form the core activity of the service, explains Tom Parker, head of technology at Soyl. "What's changed is the power with which we can now bring layers of data together and help farmers run their business smarter."



The variable-rate application maps for N, P, K and Mg over more than one million ha still form the core activity of the Soyl service.

Along with the variable-rate

Useful addition to the overall service

In a month that's seen wheat prices see-saw by around £20/t, Rob Greatorex has been grateful to have the market at his fingertips through MyCropMarketing. "I often get stuck on fieldwork all day and miss the opportunity to phone the farm trader," he says.

"Being able to get a picture of what the market's doing at 8:00 in the evening or on a quiet Sunday afternoon really is useful."

Farm manager for AP Goddard and Sons, north of Dorchester in Dorset, Rob has a total of 400ha of winter wheat, oilseed rape and spring malting barley. "I have traded grain through the site, but you can't beat the conversation with the well informed farm trader who sits on the market all day. They see reports and have an insight you'll never get from just looking on a website."

Another feature he finds useful is the ability to set alerts. "It's very easy — you set the Jan price for, say, $\pounds190/t$, click the bell icon and it sends you a text when your target is reached."

Rob also uses MyRecs for crop inputs. "You can go in and complete the records when the job's done, adding application details. MyRecs then notifies my agronomist, which means he knows when the treatment was



Rob Greatorex finds being able to get a picture of what the market's doing at any time of the day really is useful.

made for the next time he visits, which helps keep spray intervals right, for example.

"You can also change the recommended dose rate, and a neat feature instantly shows you the cost implication. And having all the applications there in the palm of your hand is a benefit — when I'm looking round the OSR, deciding on herbicides, for example, it's useful to know what we sprayed a year ago."

With no computer-based crop-recording software, Rob still prints off the recommendations for Red Tractor compliance. "I can see this getting more popular and being able to access more information through your phone. For me, it's the convenience — being able to see crops inputs and especially prices when I want, where I want, without having to bother my farm trader or agronomist," he says.





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Digital Direction



iSoylscout allows you to capture an in-field observation, such as a blocked drain or weed infestation, and bring it in.

► maps, you get satellite-generated near real-time NDVI (normalised difference vegetation index) images of your crop. Upload your yield data and all these layers can be pulled in to analyse past as well as anticipated performance.

"There's now iSoylscout," adds Tom. "This app allows you to capture an in-field observation, such as a blocked drain or weed infestation, and bring it in. There's also a simple interface to import drone data, for example — three clicks and it's in."

Also new is the ability to collaborate. With the appropriate permissions you can give your agronomist, other farm staff or third parties access to the whole platform to send information back and forth.

And there's a new feature that'll appeal to those who carry out on-farm trials. "We've noticed more and more growers doing field-scale trials, so have introduced the ability to define a trial area within a field — either tramlines or a distinct block — and treat it differently, then analyse the results."

Compatibility — previously a big issue with the various bits of kit used to capture data and apply inputs — is less of a problem these days, he continues. "We've always been at the forefront of ironing these issues out, whether that's dealing behind the scenes with manufacturers or sorting out issues in the field through our 24/7 customer support helpline. The difference with MySoyl is that we know it works and have thousands of farmers who use it every day and rely on it."

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feedback and help shape the service, he adds. "We're bringing in the ability to view data from other areas of MyFarm — it's an underlying principle that it should be as straightforward but as powerful as you want it to be. That's ensured a simple, easy to use interface, with large buttons you can find and select easily, for example. And it's capable, but the focus is on the 'so what' — we know that the important bit of sowing a variable-rate crop for the grower is actually sowing it, rather than the iterations, calculations and steps needed to get there."

One-stop shop

An integral part of MyFarm is the crop recording system, Greenlight Grower Management by Muddy Boots, explains Frontier farm IT support manager Lewis Cracknell. "Our focus with MyFarm is on providing a one-stop shop for farmers that's what we have today. The Greenlight system allows for more developments to plug in, so it's scaleable."

MyRecs is the first grower-facing example. It's an iOS app for iPhones and iPads, launched in 2014, that gives users direct and paperless access to spray recommendations made by their Frontier agronomist. "It works both online and offline — the app is synchronised to download the latest recommendations that can be taken out into the field by the spray operator. It has the same, familiar, intuitive interface as the rest of the MyFarm family, with a colour-coded system giving operators a quick indication of their outstanding field work to complete.

"When a job's done, the operator can input application details even if there's no connectivity. When back online, records will synchronise and update centrally. The beauty of the system is that when anyone makes a change, it cascades to all users, including the agronomist and other third parties who have the relevant permissions."

The MyRecs app was developed by Muddy Boots Software, and it's the company's Greenlight crop-recording system that Frontier agronomists use to make recommendations. Within MyFarm, there's access to orders and invoices,



MyRecs has a colour-coded system giving operators a quick indication of their outstanding field work to complete.



A customer helpline brings 24/7 support to the thousands of farmers who use MySoyl every day and rely on it.

while those growers who use Greenlight benefit from seamless integration with crop records, Lewis notes.

"For those who use other crop-recording packages, such as Gatekeeper, software developers are working towards seamless data transfer."

A closer integration with MySoyl is on the way, he adds. "MyRecs already gives you access to maps, so you can easily distinguish between fields when recording in-field applications, for example. We're developing the ability to exchange information on crop boundaries and product applications between the two packages too.

"The aim is to get away from systems where you're endlessly keying in or manually importing data. We differentiate ourselves on our service and our expertise, and we're continually developing the platform. That means it's already at the stage that gives you an up-to-date picture of what's applied and when, and the information you'll automatically access will improve," notes Lewis.

MyCropMarketing is the very latest development of the MyFarm family, and brings in grain sales, explains Frontier grain origination manager Andrew Hill. "We trade grain through a network of 75 farm traders. Farming's generally fallen behind other industries in terms of providing a good web-based platform to trade, so we've set about addressing this."

Accessed through MyFarm, users can set up an account through their Frontier farm trader. This brings live access to ex-farm prices available for two crop-marketing years (2018 and 2019 harvests currently) for feed wheat, feed barley and oilseed rape.

"It's very user-friendly and simple to use. We ran a six-month pilot with growers before launching it fully this harvest, which included stress-testing to ensure a reliable platform that works. The feedback we've had has been very positive and we already have hundreds of active users."

Access to live prices and the ability to trade is available from 6:00am to midnight, and you can set a desired target price, with a notification sent when this is reached. Once a deal is struck, the contract is stored on the platform and the user receives a copy by email. "This is also where you can access any other grain contracts you have with Frontier — many growers check the price online but still prefer to talk to a farm trader," notes Andrew.

The new system will take over from iTrac, Frontier's current web-based portal, that gives its 4000 users online access to grain movements and point-of-delivery details, such as weights and moisture content. "iTrac will be phased out and brought into MyCropMarketing. Our intention is to continue to develop the platform so that it joins up with other elements of MyFarm, so there's seamless integration of tonnages for yield purposes and access to varietyinformation."

The priorities for Andrew are to encourage more growers to use the new platform, and



The aim of MyCropMarketing is to add another dimension to the service Frontier's people already provide, says Andrew Hill.

implement changes already suggested by those who are. Introducing quality spec for milling wheat and malting barley is a development that's on the cards, for example.

But this won't reduce the value of growers' relationships with Frontier's farm traders, rather it will enhance it he assures "We want to allow growers to check prices and trade grain at whatever time suits them. But Frontier remains a people business and the aim is to add another dimension to the service our people already provide." ■

Digital Direction

As arable farms progress towards a digital future, it can be difficult to know which forms of data generation, capture and analysis provide a really worthwhile benefit to the business, and which are costly and time-wasting distractions. CPM is working with some of the industry's leading companies in this area to bring growers some Digital Direction. These articles track the significant steps on the journey towards the data-enabled farm, and also explain and profile the technologies involved. CPM would like to thank

Frontier for sponsoring this Digital Direction article and for providing privileged access to staff and material used to help bring it together.

MyFarm is a digital portal through which Frontier customers can access and work with their farm data. MyFarm gives growers access to a range of powerful tools to help them manage farm operations and profitability.





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