



INTEGRATING TOOLS FOR BETTER IRRIGATION DECISIONS
felicity turner







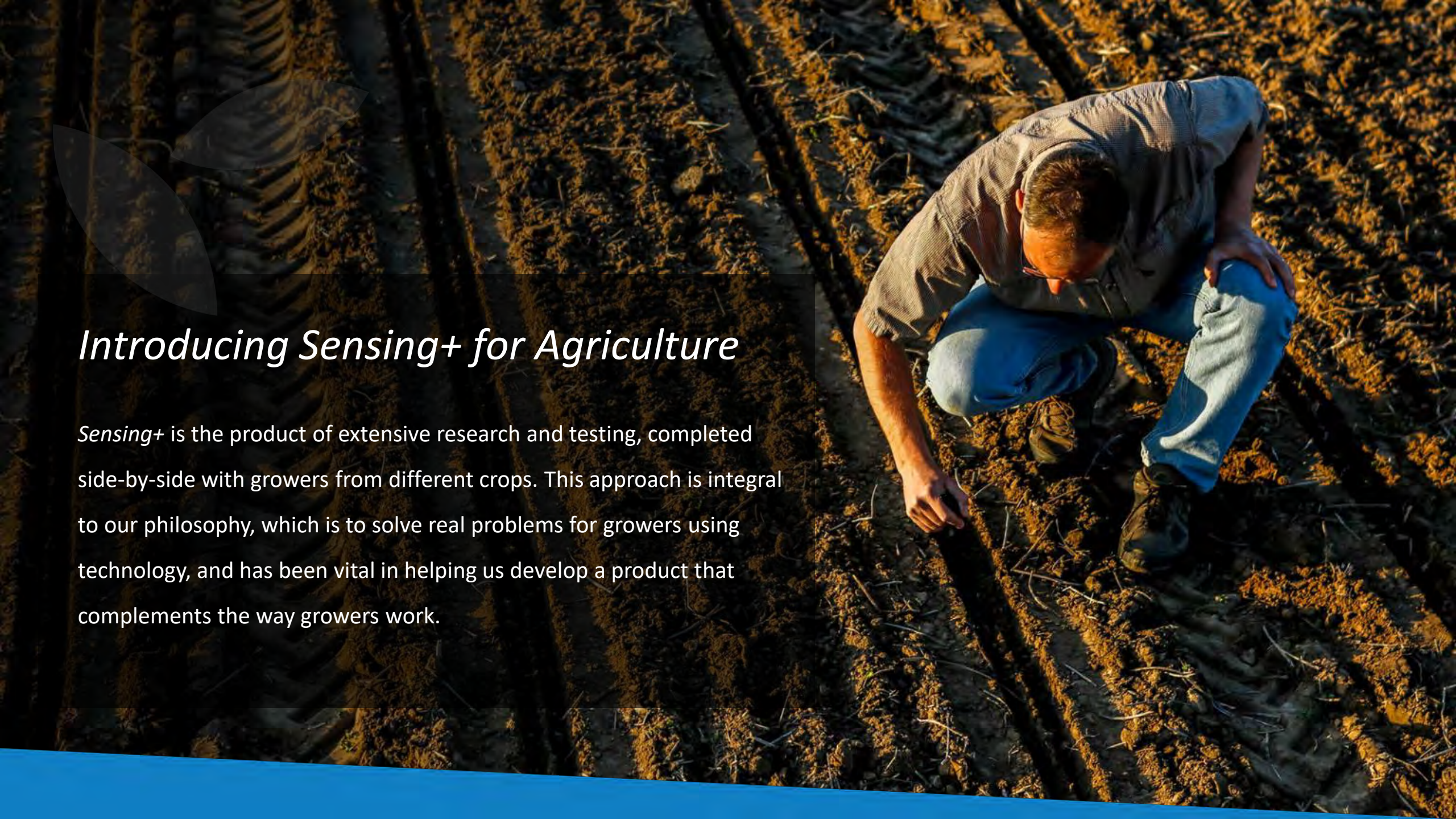
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About Us

The Yield is an Australian AgTech company on a mission to transform food and farming with scalable, reliable, enterprise-grade technology.

A high-angle photograph of a man in a grey short-sleeved shirt and blue jeans crouching in a field of dark, tilled soil. He is looking down at the ground, and his hands are near the soil. The field is marked with deep, parallel furrows from a tractor, and the lighting suggests late afternoon or early morning, with long shadows and warm tones. In the top left corner, there is a faint, stylized leaf logo.

Introducing Sensing+ for Agriculture

Sensing+ is the product of extensive research and testing, completed side-by-side with growers from different crops. This approach is integral to our philosophy, which is to solve real problems for growers using technology, and has been vital in helping us develop a product that complements the way growers work.



COMMUNICATIONS GATEWAY



ANALYTICS PLATFORM

SENSOR NODE CONFIGURATIONS

SENSOR NODE On-farm weather

- Air temperature
- Relative humidity
- Atmospheric pressure
- Total solar radiation
- Photosynthetic active radiation
- Wind speed
- Wind direction
- Rainfall

SENSOR NODE In-field Perennial

- Air temperature
- Relative humidity
- Atmospheric pressure
- Total solar radiation
- Wind speed
- Wind direction
- Rainfall
- Leaf wetness
- Soil moisture (multiple)
- Soil temperature, depths 1-4
- Electrical conductivity, depths 1-4

SENSOR NODE In-field Annual

- Air temperature
- Relative humidity
- Atmospheric pressure
- Rainfall
- Leaf wetness
- Soil moisture, depth 1
- Soil temperature, depth 1
- Soil moisture, depth 2
- Soil temperature, depth 2
- Electrical conductivity, depth 2

SENSING+ MOBILE APP



SENSE



ANALYSE



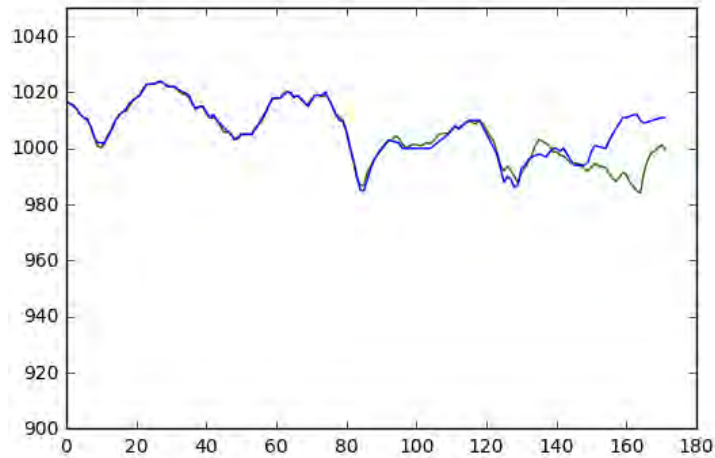
PREDICT



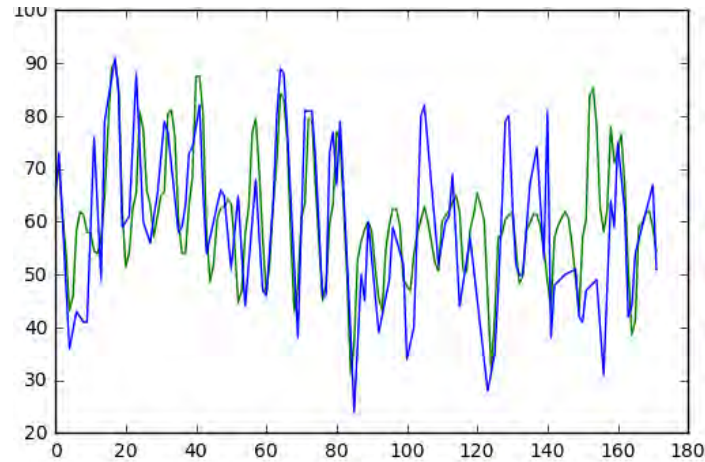
INFORM

Your base install will include three nodes: 1 x On-farm Weather plus 2 x Perennial OR 2 x Annual

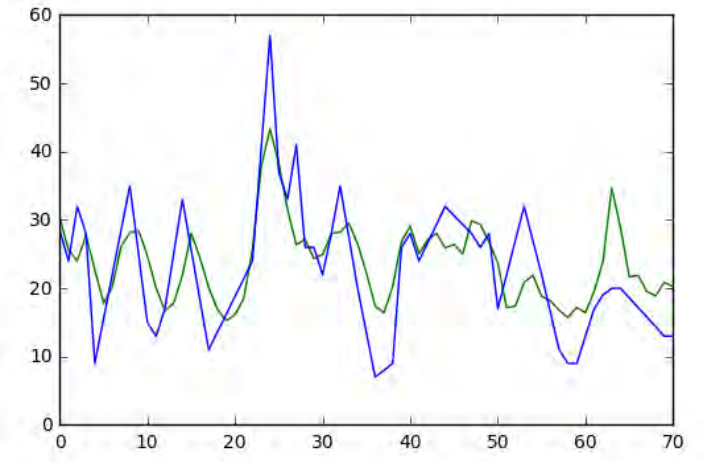
Predictions Accuracy – The Yield hardware



Air Pressure: The prediction of Air Pressure for 180 hours (7.5 days)



Humidity: The prediction of Humidity for 180 hours (7.5 days)



Wind speed: The prediction of wind speed for 180 hours (7.5days)

Legend:

Blue lines – Actuals

Green Lines – Predictions



Why Sensing+?



how irrigation integration can help

Pain Point

All relevant information in one place

Forward looking

Historical insights

Value Proposition

I am often balancing decision making across multiple factors.

Those multiple factors might be stored in different systems, and often require a calculation

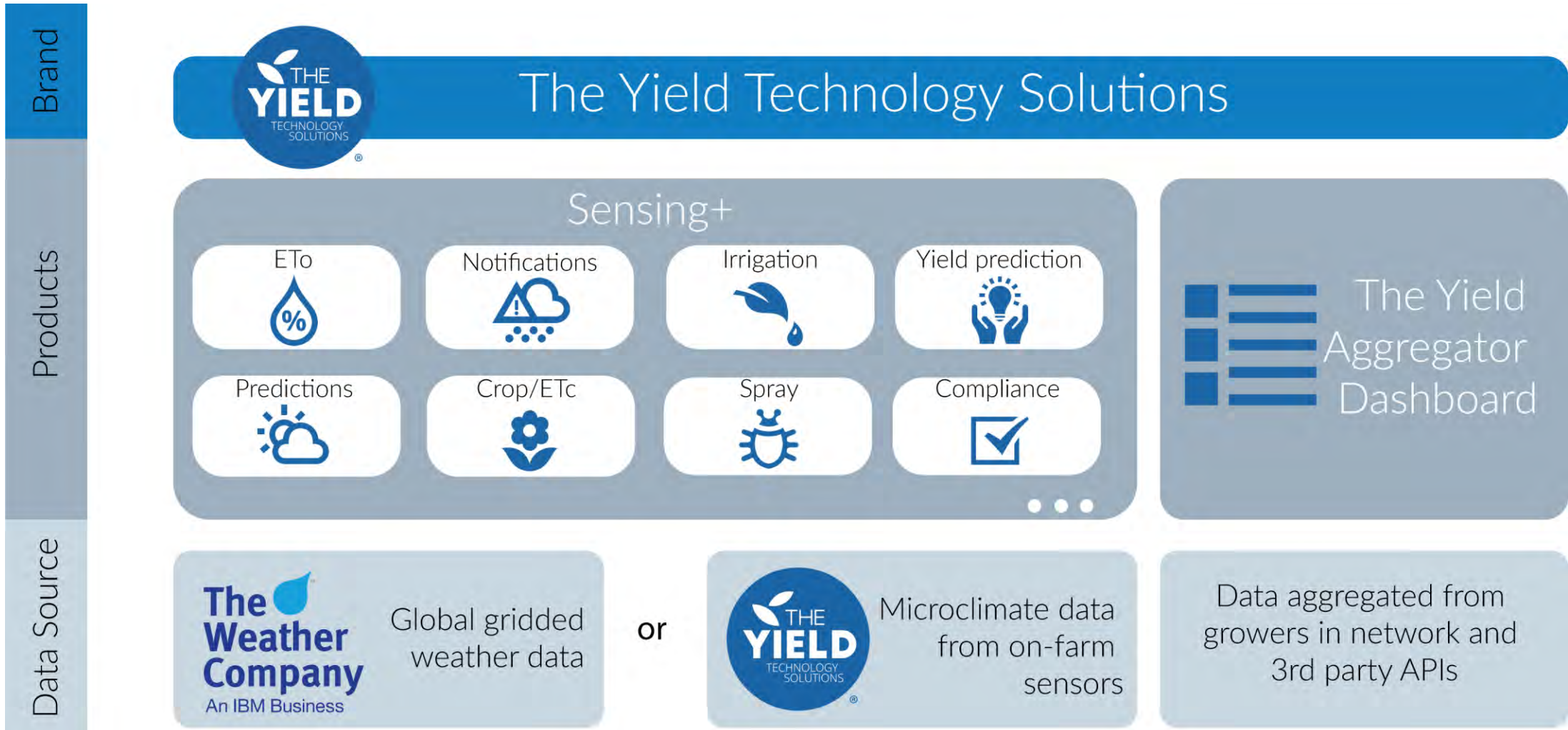
A decision for today might be different if I could see ahead.

Forward looking should be with same level of accuracy and baseline.

Being able to review the same relevant information historically to better inform future decision making



A single product ...



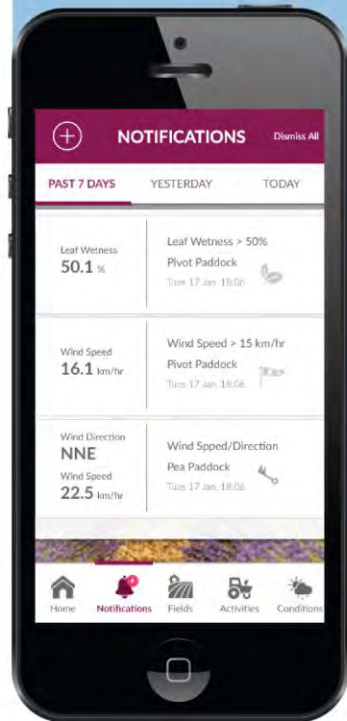
Inform

View in-app information on water balance & growing conditions



Protect

Get notifications to your phone when conditions are reached



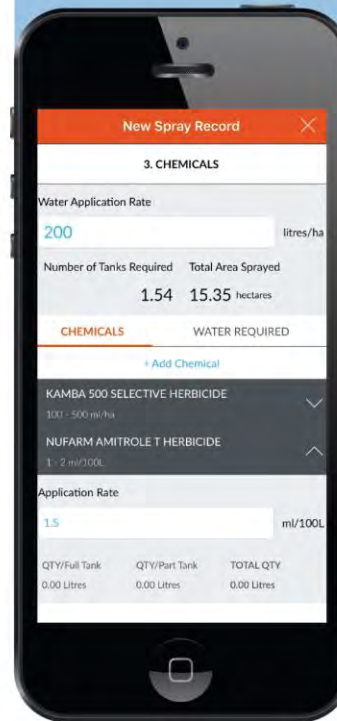
My Crop

View information specific to your crop type and land



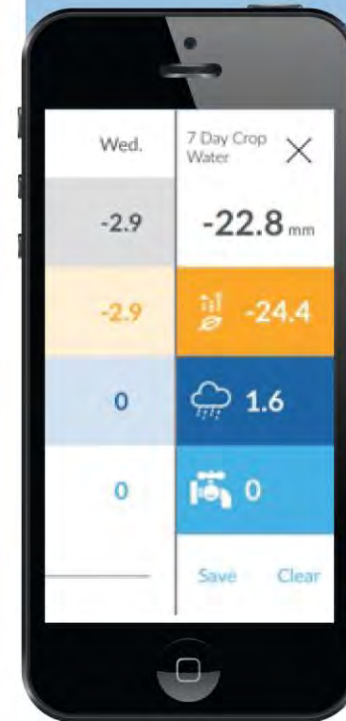
Compliance

Record spray and chemical details for inventory and compliance

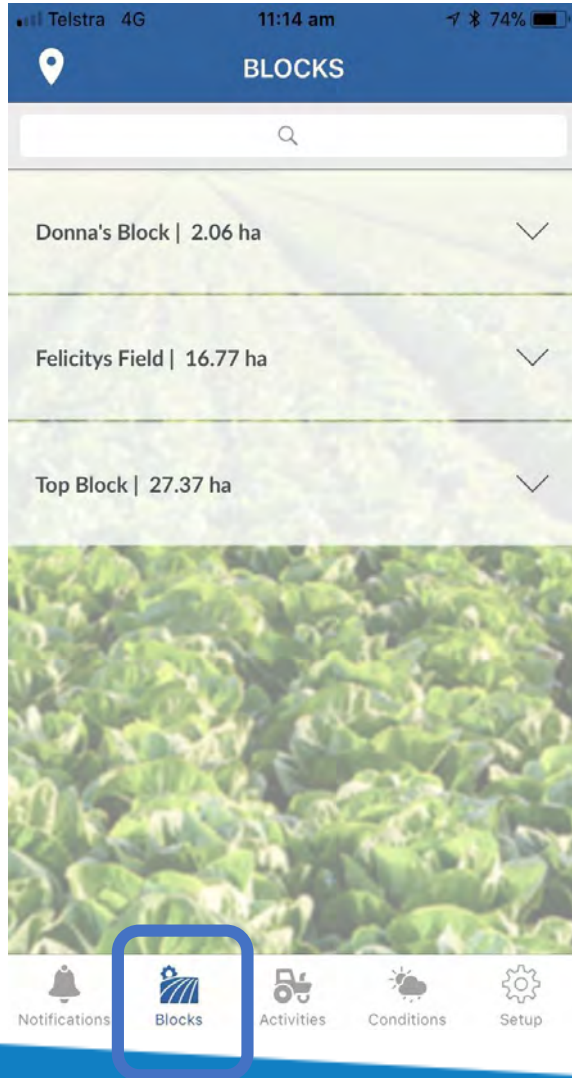


Integration

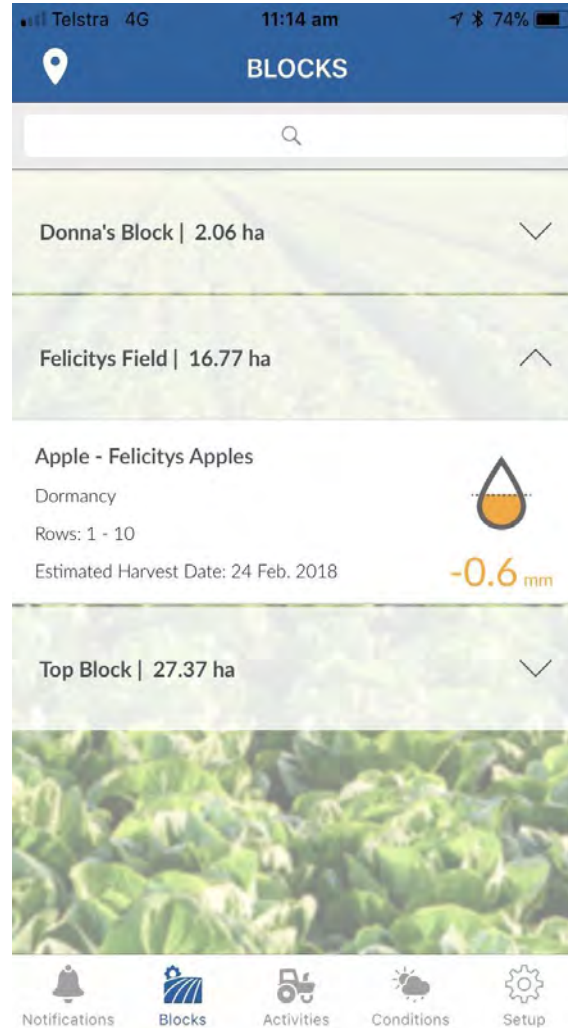
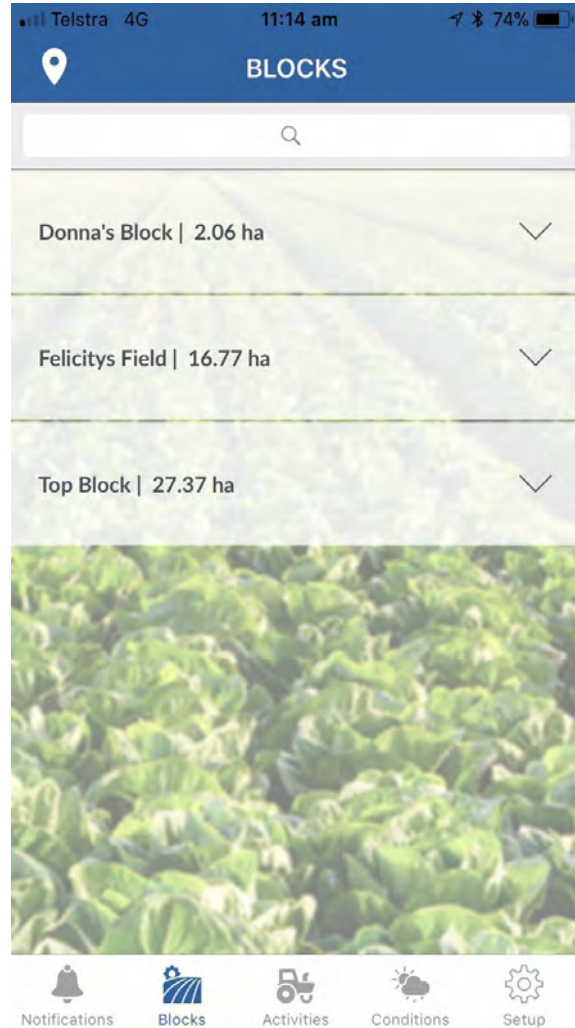
Integrate with other farm management software for a complete picture



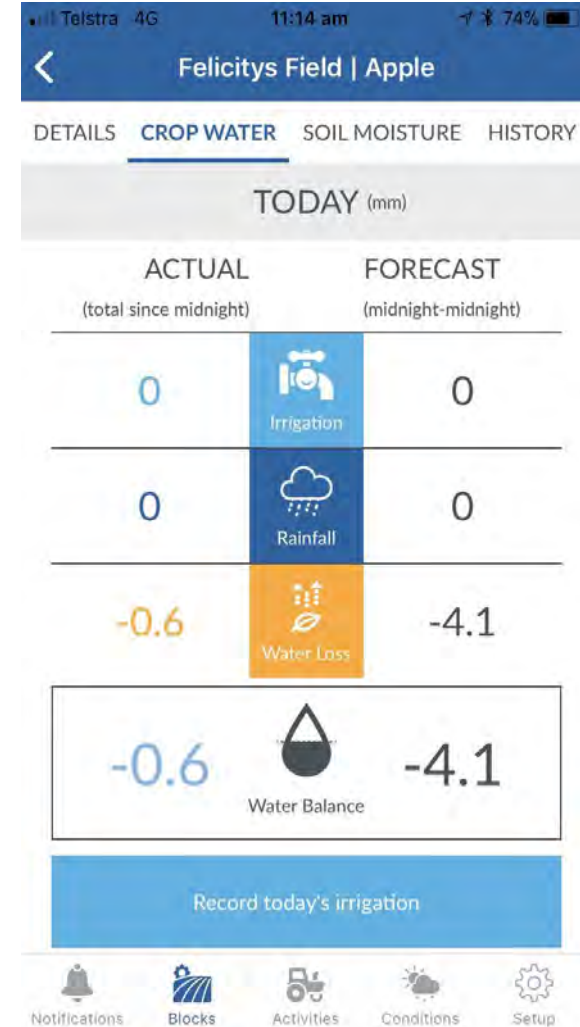
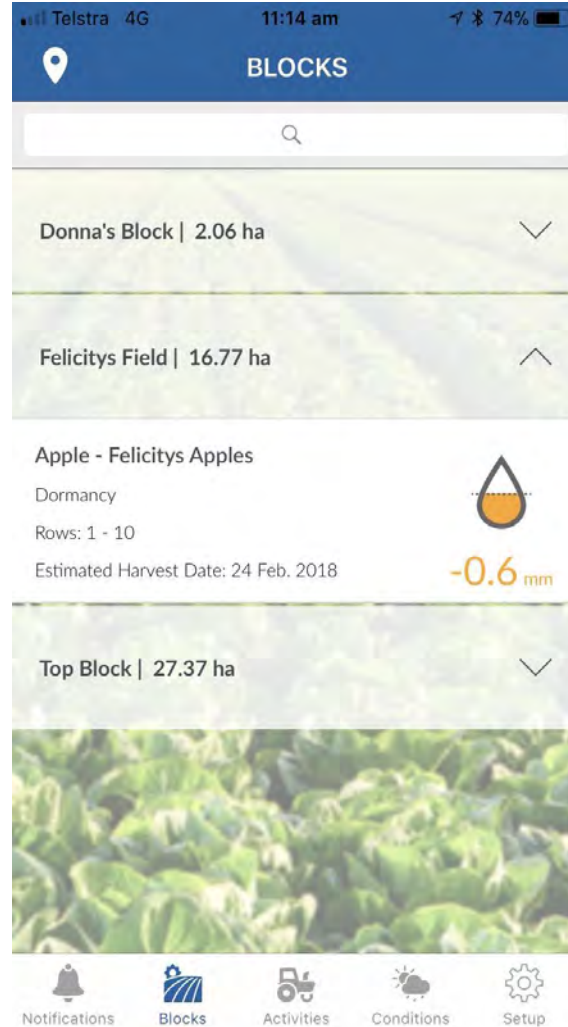
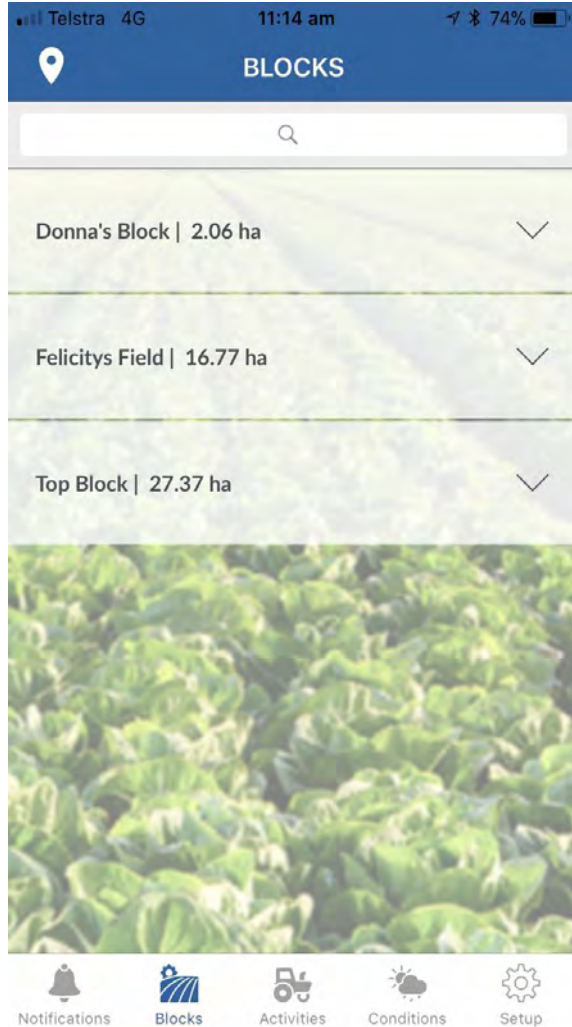
Making decisions today...



Making decisions today...



Making decisions today...



Making decisions today...

Telstra 4G 11:14 am 74%

< Felicitys Field | Apple **Apple Irrigation**

How do you want to record your irrigation? By:

Hours Amount

Select date and time of irrigation:

22 Nov 2017 11:00

When did you finish?

22 Nov 2017 12:00

Irrigation Rate: 5 litres/hour

Total Irrigation Time: 1 hours

Finish Time: 22 Nov. 2017 12:00 PM

Amount Applied: 3.33333E-05 mm

Total Applied to Variety: 5L

Save

Notifications Blocks Activities Conditions Setup



Making decisions today...

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DETAILS **CROP WATER** SOIL MOISTURE HISTORY

7 DAY TOTALS (mm)

PAST 7 DAYS		NEXT 7 DAYS
0	Irrigation	0
0.2	Rainfall	1.8
-27.6	Water Loss	-24.4

-27.4 Water Balance -22.6

Plan Next 7 Days Irrigation

Notifications Blocks Activities Conditions Setup

Making decisions today...

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Water Balance

Plan Next 7 Days Irrigation

Notifications Blocks Activities Conditions Setup

Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	7 Day Crop Water
-4.7	-3.1	-3.3	-3.7	-2.4	-2.7	-2.9	-22.8 mm
-4.8	-3.4	-3.7	-4	-2.9	-2.7	-2.9	-24.4
0	0.3	0.4	0.4	0.5	0	0	1.6
0	0	0	0	0	0	0	0

Tap and slide to add irrigation

Save Clear



Making decisions today...

Telstra 4G 11:14 am 74%

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0	0.3	0.4	0.4	0.5	0	0	1.6
0	0	0	0	0	0	0	0

Tap and slide to add irrigation

Save Clear

Thu.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	7 Day Crop Water
-4.7	-3.1	5.7	-3.7	9.6	1.3	-2.9	2.2 mm
-4.8	-3.4	-3.7	-4	-2.9	-2.7	-2.9	-24.4
0	0.3	0.4	0.4	0.5	0	0	1.6
0	0	9	0	12	4	0	25

Tap and slide to add irrigation

Save Clear



Historical Review

The screenshot displays the SENSING+ application interface for 'South Arm Farm'. The top navigation bar includes the SENSING+ logo, the farm name, and a user profile for 'Libby'. A sidebar menu on the left lists various application features, with 'ADMIN' expanded to show 'Block Setup'. The main content area is titled 'BLOCK SETUP' and features a 'Start Tour' button. Below this is a list of field blocks, each with a name, area in hectares, and a right-pointing arrow. To the right of the list is an aerial map of the farm with several blue polygonal overlays representing field blocks and pink location pins. A toolbar with icons for map navigation is visible in the top right corner of the map area.

Field Name	Area (ha)
Rosidale-Aulton Park 1	5.5
Back Lane Field	2.5
Front Pivot	3.2
Top Grigio Block	4.5
Pivot 2 South West	2.1
Bottom Paddock	4.3



Thank You

Contact

felicity.turner@theyield.com

Register for updates

www.theyield.com

Join the conversation

@theyield and @turnerflick on Twitter

