# USE CASE: DUNCAN, OYSTER FARMER



**AgriFutures Australia** 



# **USER ENVIRONMENT**

LOCATION:

Rural ~8Ha.

# AGTECH IN USE

Farm Management App<sup>1,2,5,6</sup>, Maintenance App<sup>1,2,5,6</sup>, Water Monitor Sensors<sup>1,2,4</sup>, Weather Station (x1)<sup>1,2,5</sup>

#### CONNECTIVITY IN USE

- 1. NBN FTTN broadband.
- 2. Wi-Fi.
- 3. Ethernet over Power
- 4. LoRaWan
- 5. 4G/LTE
- 6. 5G
- 7. UHF Radio
- 8. Cellular (personal phones)

# **Connectivity Persona: Duncan**



"I usually have mobile signal, I use my phone mostly to speak to customers, keep track of production and to check weather conditions."

Duncan manages a shared farm business on the NSW Central Coast, farming oysters with 4 other farmers. He recently adopted a mobile app for farm management, which helps him optimise his business. The app tracks oyster growth and bag numbers using GPS for physical location. Duncan can access information on the go, allowing him to communicate with customers and fulfill orders even when he's away from the office. His team also uses the app for maintenance tracking. They communicate through WhatsApp, iMessage, and phone calls. Duncan utilises LoRaWan connected flow sensors to monitor water characteristics and temperature. He also has access to NSW DPI data and uses his phone and the office computer to check the weather and to fulfil orders. Although 4G/LTE signal isn't perfect, it doesn't pose significant issues, and 5G is being introduced in the area. Wi-Fi is used across the farm station, with broadband in the office.

### GOALS

TASKS:

Business Administration<sup>1,2,3,4,5,6,7,8</sup>, Production and Resource Management<sup>1,2,4,5,6,7</sup>, Sales and marketing<sup>1,2,3,5,6,8</sup>. Security and monitoring<sup>1,2,5</sup>. Staff management<sup>1,2,5,6,7,8</sup>.

#### **OBJECTIVES**

To support production and resource efficiencies, enable better planning and maintenance, increase sales.

### PAIN POINTS

BUSINESS CASE:

Connectivity is not generally an issue for Duncan both on land and on boat however he struggles to be aware of the new technologies that could help his business.

#### **TECHNOLOGY**

Duncan doesn't generally face prolonged connectivity issues as he has mobile and wi-fi connectivity but frequently reboots his NBN modem due to poor service from the supplier. Staff use their personal mobile phones over which Duncan has no control.

#### SUPPORT

Duncan, who manages his farm's technology independently, keeps up with new advancements by reading technology websites and industry press. However, he struggles to find reliable and affordable specialist support to manage his technology effectively.

