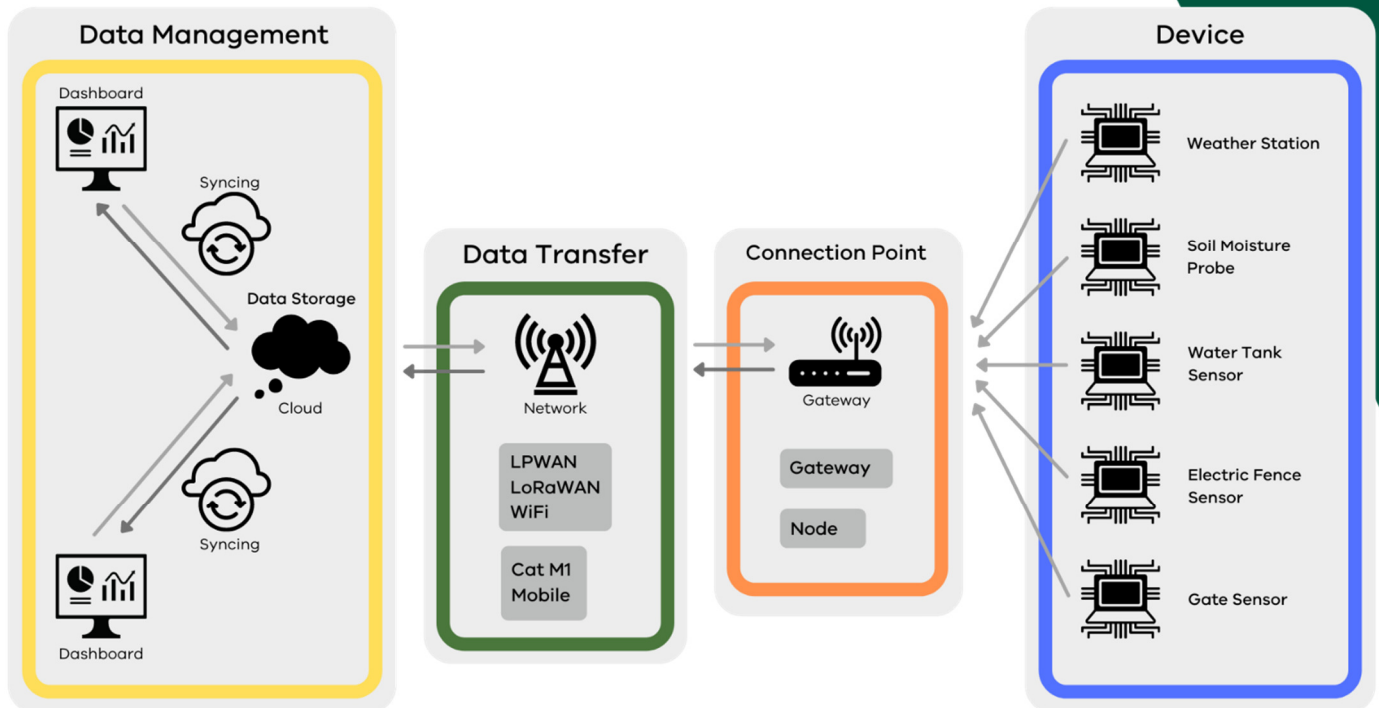





















Glossary



Data Management	
	Dashboard - a website that is used to view and interpret data from devices and can be viewed on a computer, phone, or tablet. Ag Tech Bytes 3*
	Syncing - abbreviation of synchronising. It refers to the transfer of data between two devices, usually via the cloud.
	The cloud - off site storage of data accessed via the internet.
Data Transfer	
	Network - two or more physically or wireless-connected components that exchange data e.g., a gateway and a device.
	LPWAN (Low Power Wide Area Network) – a broad term to describe a range of networks that are low power, low cost and long range. This makes them ideal for IoT technologies.
	LoRaWAN (Long Range Wide Area Network) – an unlicensed and readily accessible LPWAN. Ag Tech Bytes 1*
	Cat M1 (Category M1) - a purpose built IoT network based on a mobile phone network. It transmits small packages of data and requires a small amount of power which can be supplied by battery or solar.
	Mobile - a network with a series of mobile base stations that relay a wireless signal, that allows devices to connect and transmit and receive data e.g., mobile phone networks LTE (Long Term Evolution) , 3G – third generation, 4G – fourth generation. Ag Tech Bytes 4*

	Wi-Fi (Wireless Fidelity) - a wireless network commonly used in domestic and industrial settings.
	Bluetooth - a wireless technology used to connect devices in order to transmit and receive data over a very short distance (1-2 metres).
Connection Point	
	Gateway - an access point to or between networks that allows connection and data transmission e.g., device to gateway via LoRaWAN (network) and Gateway to the internet via cellular
	Node - a device that connects several devices to a gateway.
Device	
	Device - a 'thing' that collects and transmits data e.g., soil moisture probes, water level sensors, electric fence sensor, weather stations. The devices have a technology embedded such as a microchip or SIM allowing it to sense and communicate data.
	Ag Tech Bytes 2*
Other Terms	
	API - Application Programming Interface, is a software intermediary that allows two application to talk to each other.
	IoT - Internet of Things, the development of the internet to connect to "things", such as devices to transmit and receive data through technology such as a microchip or SIM that allows the devices to sense and communicate.
	Base station - a fixed location from which a wireless network is transmitted. Similar to a mobile phone tower but on a smaller scale.
	Bandwidth - the rate at which data can be transferred across a network.
	Unsecured - has no security measures to protect devices from a malicious attack.
	Secured - has security measures in place to protect the device from a malicious attack.
	Push notifications - notifications or alerts that are sent to a device automatically, to provide information.

*Ag Tech Bytes is a series of short, explanatory notes that provide simple and practical information about technology available for farms.

About the project

Smart Farm Sensor Demonstrations is a collaboration project between Glenelg Hopkins CMA, Agriculture Victoria, Grasslands Society of Southern Australia, Southern Farming Systems and Southern Grampians Shire Council. The project runs from 2019-21 and tests and demonstrates a range of devices on farms in the south west region, including stock water and tank monitors, soil moisture probes, electric fence sensors and weather stations. The sensors provide real-time feedback to producers enabling them to make more informed decisions and better use of labour, time and capital.