The story of Baiada began with the arrival of a young Maltese teenager, Celestino Baiada, in Australia in 1916. By the Second World War, Celestino had married and he and his wife, Giovanna, were processing a small number of chickens by hand each day in the family business.

From these humble beginnings arose one of the leading poultry companies in Australia. Today, Baiada is still proudly privately owned by the Baiada family.

The company now has breeding farms, processing facilities and warehouses throughout Australia, however, the wireless networks required upgrading across nearly all plants. A key driver for the upgrade was a quality control system called iLeader, which requires wireless access at all times.
THE CHALLENGE

Baiada provides Steggles and Lilydale fresh produce to many of the retail and fast food businesses in Australia including Coles, Woolworths, KFC and Red Rooster. Their full range of products include live poultry, poultry feed, fertile eggs, day-old chickens, primary processed chicken (raw), further processed and cooked chicken products, and a range of rendered products.

Head office of the company is located at Pendle Hill, west of Sydney, in the original family home where the company began operation. Other major operating centres are located in Far North and South East Queensland, Northern and Central New South Wales, Victoria, South Australia and Western Australia.

The company is in the process of rolling out upgrades to or new wireless networks throughout their sites. The fifth and largest site – Beresfield in New South Wales – was completed recently. Throughout 2014, another six sites will be installed or upgraded.

One of the major drivers for the rollouts is the iLeader project – a quality control system that requires 24x7 wireless coverage.

Across the business there was a mixed wireless environment, with some sites having older equipment and others having none. Where there was existing wireless infrastructure, often the original design was inadequate or failed to cover the entire site. Uniformity of technology throughout the sites was also a driving factor.

Grant Hicks, technology delivery manager, explains: “All the processing sites had some wireless networks in place, but there were disparate access points across the sites, and we wanted them to be uniform. At Beresfield the network was old and architecturally not well designed. There were switches in the roof, in closets and other places that were difficult to access. Also, there was no overall management architecture so each device had to be manually configured, installed and implemented, which was very time-consuming.”

“As a fresh produce supplier, we have a very short timeframe in which to process and deliver our products. With our commitment to deliver the highest quality, on time, the scanning environment needs to provide uninterrupted high speed access to our systems to facilitate the volume of product being handled.”

Grant Hicks, technology delivery manager, Baiada Poultry
THE SOLUTION

Baiada Poultry worked with Sonar Technologies to implement the upgrade. Sonar Technologies, formerly Trans Data Communications Pty Ltd, has been providing enterprise technology solutions to customers in Australia and overseas since 1991.

“Sonar Technologies goes the extra mile in making things happen and are very responsive to our needs. They deliver in a timely manner and are backed by good technical skills and resources. They are also very proactive in looking after our needs,” says Hicks.

Running at close to 24 x 7 operation at most sites, each upgrade must be performed within a short time frame to minimise disruption to production.

“One of the larger NSW sites had to be done on a weekend between Saturday night and Sunday night before the next shift started, and was completed in 20 hours. We even had four to six hours to spare!” says Hicks.

THE BENEFITS

Reliability of connectivity is a major requirement of the new wireless infrastructure. While scanning technology has been in use at Baiada plants for five years, the upgraded wireless network guarantees the capacity to scan at all times and extends the range of the scanners throughout the plants. The devices – Motorola MC9090 bar code scanners – are used for scanning all product movements including customer orders, inter-site transfers, and receipt of incoming goods. Scan data uploads to the main inventory and customer order system and feeds into the generation of invoices.

"Without wireless we wouldn’t be able to operate in the way we need to. It’s a fundamental component to our business,” says Craig Ford, national IT manager at Baiada. “Redundancy is also a key aspect. We can’t afford for the distribution environment to be offline for long, or even at all. If the process was impacted to a point where it stopped altogether – if we were completely off the air – all deliveries between sites and to customers would stop. This is because scanning is an integral component of the delivery process and invoicing. Without it we couldn’t invoice the customer. It’s a critical component.”

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Wireless network coverage is also an essential component of the new iLeader project, which is a quality control solution, facilitating quality assurance of the production process in real time. This information is sent to a central database, where reports can be generated. As this data is relayed in real time, it helps Baiada meet its regulatory requirements.

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“There’s an incredible amount of regulation of food handling," says Hicks. “These are often legislative, so not only is compliance mandatory but we must also prove our compliance via reporting. With the wireless-enabled iLeader software, we can track consistency with quality metrics which are now available because timely and accurate data is available in real time in the inventory system. Our reporting can be standardised so we can measure quality levels across various sites, elements such as pH levels, temperatures and other parts of the manufacturing process.”

A reliable wireless network is also essential in supporting the delivery process. With increasing volumes of product being delivered into the large distribution centres, it is vital that trucks leave on time in order to meet their allocated delivery time slot.

As Hicks describes it, customer service is key.

"As a fresh produce supplier, we have a very short timeframe in which to process and deliver our products. With our commitment to deliver the highest quality, on time, the scanning environment needs to provide uninterrupted high speed access to our systems to facilitate the volume of product being handled,” says Hicks.

The Motorola devices themselves have proven to increase the efficiency of the business, while being simple for staff to operate.
“With scanning, stock moves more quickly and people can do more in less time because it removes the manual process, which definitely improves the efficiency of the organisation,” says Hicks.

“The staff can work with them easily, either by scanning or by keying in data manually on the device if necessary. We can manage the level of access on the device by locking particular menus with a password; so users are presented with only the options needed to perform their role. The ruggedness of the devices is also very appealing as they get some rough treatment, including exposure to very low or high temperatures.”

A maintenance agreement with Motorola Solutions provides swap-replace-repair services for the devices, continues Hicks. “Repairs are done in a reasonable time with a five-day turnaround. The registration of devices through the maintenance agreement also allows lost devices to be recognised by Motorola as a Baiada device and returned.”

Hicks concludes with future developments made possible by the new wireless network:

“We are already looking at further options such as the use of tablet devices as well as catering for a bring-your-own-device (BYOD) capability in the future.”

About Sonar Technologies
Sonar Technologies Australia Pty Ltd, formerly Trans Data Communications Pty Ltd, has been providing enterprise technology solutions to customers in Australia and overseas since 1991. The company specializes in providing mobile task and resource management solutions to businesses of any size, targeted at field service, logistics and supply chain, assets management and healthcare in both the government and private sectors.