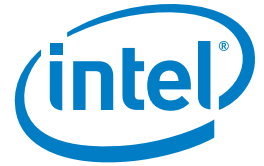


CASE STUDY

FarmWatch* from Yanzi*, Rotage Agri* & Intel
Intel® Atom™ Processor



Delivering a Remote-Access Solution for Farmers

The Yanzi* system is used by farmers to monitor, maintain and manage livestock, heating systems, overall temperatures and provide surveillance (for the management of many assets, across large areas).



yanzi
networks

“Yanzi* helps me be closer to my cattle. I’m a busy person! Yanzi helps me feel close to my livestock, even though office work demands my attention.

I know all of us here feel a connection to the farm, and Yanzi strengthens that connection.”

– Martina, Lindholms Gård
Farmer
Eskilstuna, Sweden

Challenges

Workloads are increasing and the areas needing to be managed are getting bigger and bigger. Companies like dairy, beef, grain, hog and poultry farms typically have one or just a few employees responsible for overall operations. This usually also includes the care and management of livestock.

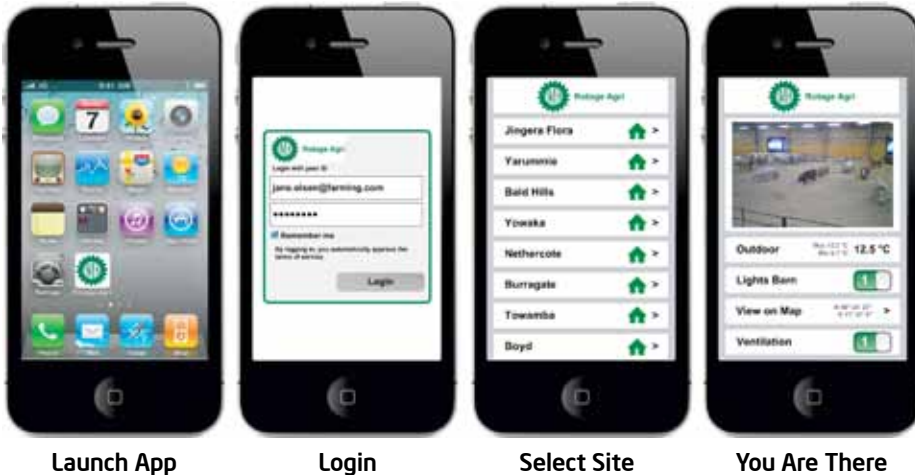
Need technological solutions that are easy to install, maintain and manage. Farmers need to simplify their operations to be truly mobile, with plug-and-play deployment that requires little-to-no I.T. knowledge or management.

Too many data points to manage. Farmers need to have weather pattern, livestock, feed, temperature sensors, smoke detectors and video camera information at the tips of their fingers. They need to be alerted to potentially costly issues before it’s too late. Being able to see if the pig pen is too hot or cold, or a calf injury, can prevent livestock death—a costly outcome for any farmer.

Providing the farming industry low-cost, low-power, and high-performance systems required for remote control and surveillance using video and sensors. Preferably using reliable, “always on” solution such as an Intel® architecture based system and the standard communication interfaces: Ethernet, Wi-Fi, 3G and 6LoWPAN.

Today’s modern farmer is faced with increased operational complexity, margin pressure and the need to manage more assets and areas with less staff. Farmers are looking for new ways to leverage technology—quickly, easily and cost-effectively. Smart phones and tablets have revolutionized many industries—among them, agriculture and farming. The ability to monitor, maintain and manage a farm operation from a handheld device is no longer nice to have, it’s a reality.

You are never more than 3 clicks away from your farm site:



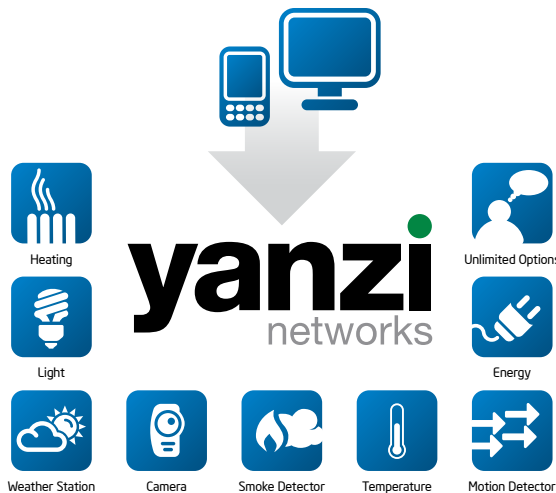
Always on-line, always available

This always on-line, always up-to-date, always available solution called FarmWatch*, offers advanced Machine-to-Machine features through a simple user experience. Its high-performance, low-power processors and true plug-and-play deployment provides the farmer with real-time information about his farm to enable decisions based on hard facts. Combine this with the ability to record up to two weeks' worth of video and you have effectively consolidated the management of all farm operations into a handheld device of the farmer's choice.

Reduce reliance on manpower

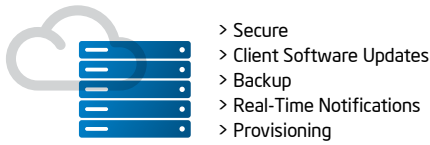
Rather than spend precious time and man hours performing manual checks on electric fences or irrigation equipment, crop farmers can boost profitability and productivity with FarmWatch.

Remote-access monitoring provides critical information on water pump efficiency and alerts the farmer to any equipment malfunctions in the field before crops are compromised. Farmers that raise chickens or dairy cows can get real-time reports on environmental conditions inside coops or barns, regulate energy use indoors, and monitor the animals' well-being while simultaneously attending to other areas of the operation.

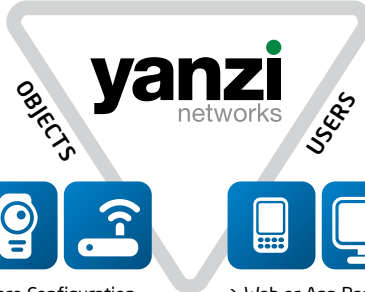


Using technology to your advantage

A rancher with hundreds or thousands of acres for grazing and multiple corrals simply cannot be everywhere at once. Whether putting cattle out to pasture, making sure smoke or burglar alarms are working, or watching for oncoming storms that could endanger the animals, the rancher and his cowhands can now manage vast acreage and livestock assets efficiently with help from this solution.



CLOUD SERVERS



- > Zero Configuration
- > Automatic Discovery
- > Automatic Security
- > Firewall Traversal
- > IPv4/IPv6
- > Web or App Based
- > Single Sign-On
- > Aggregated View of Locations
- > Aggregated View of Objects

Making informed decisions

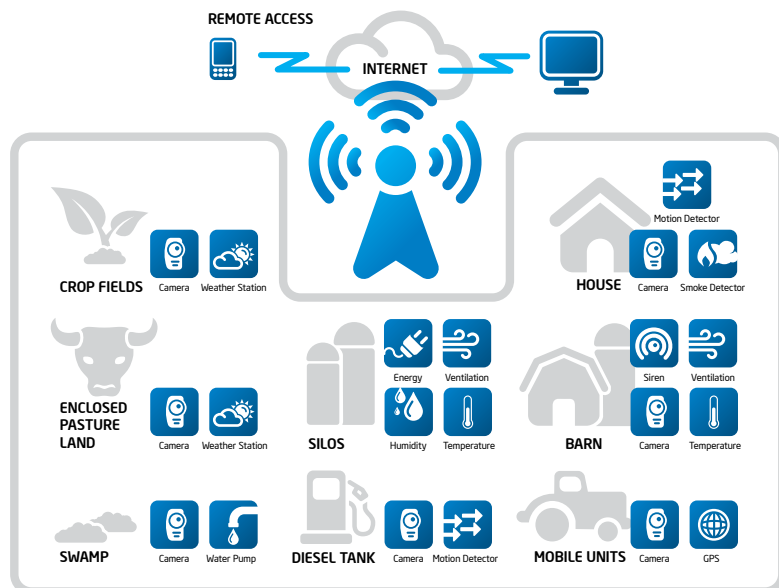
FarmWatch with Intel technology enables ranchers to make on-the-spot informed decisions that affect the ranch's operation and profitability. With FarmWatch on tablets and smart phones, the ranch owner



or foreman can monitor the livestock and watch for signs of calves in trouble or unwelcome predators who can wreak havoc on a herd. No matter where he is –on or off the property–the rancher can stay close to his livestock (and ward off potential problems), adjust barn conditions, or stay apprised of storm warnings instantaneously on a handheld device.

Benefits to this solution:

- Proactive monitoring and management of all aspects of farm operations, including temperature sensors, cameras, smoke and motion detectors, alarms, etc.
- Improves security, safety and efficiency of farm and staff, while reducing manual tasks and accelerating decision-making
- Ability to control and monitor energy operations and expenses (heating, cooling, etc.) as well as feeding operations, resulting in improved product quality
- Provides an always on, always accessible view of environment, livestock and personnel
- Easily integrates video surveillance of key operations



"This solution was truly "plug and play" for us. It was simple to install, use and upgrade. We didn't need any PC software and everything is web-based and accessible via browser, smartphone, tablet, etc. It gives me instant and 24/7 access to all of my operations."

- Veronica von Celsing
Farmer
Biby Gård

About Yanzi* Networks

Yanzi Networks, a high tech Swedish company based in Kista, provides solutions for automatic provisioning and remote access of smart objects based on IP technologies. Yanzi is quickly establishing itself as an important player in the development of the "Internet of Things," offering a platform for service providers to deploy a variety of M2M services today.

About Rotage Agri*

Rotage Agri* has a long tradition in the field of agricultural machinery. As a customer of Rotage Agri you have access to a modern portfolio, dedicated to your needs. Rotage Agri offers individual products and complete solutions for today's agriculture.

M2M with Intel Inside®

Powered by intelligent Intel® Atom™ processors, M2M technologies connect people, devices and systems – turning machine data into actionable information for revenue and profit. M2M solutions based on Intel technologies span the network and use advanced intelligence to enable:

- Smart services
- Optimum performance-per-watt density
- Continuity of architecture across all embedded applications
- Standards-based, off-the-shelf efficiency for lower TCO (Total Cost of Ownership)

For more information about the Yanzi Networks, visit www.yanzi.se

For more information about the Rotage Agri, visit www.rotageagri.se

For more information about M2M solutions from Intel, visit www.intel.com/go/m2m

