



Patties to Montague EPC/RFID Pilot - Case Study

The Patties Foods to Montague Cold Storage EPC/RFID Pilot project originated from discussions between the various participants at GS1 Australia's Impetus conference in Melbourne, July 2005.



Background

Patties Food's, a GS1 Australia and EPCglobal member, were keen to learn more about the business benefits emerging EPC/RFID standards could deliver, after having successfully implemented GS1 eMessaging and bar coding standards across their business.

Montague Cold Storage, a strategic third party logistics partner of Patties, were invited to participate in the pilot project, as were Patties provider of bar coding and print solutions, Matthews Australasia. VeriSign were selected by GS1 Global Office to host the EPCIS database, while GS1 Australia's Professional Services team were assigned to manage the pilot.

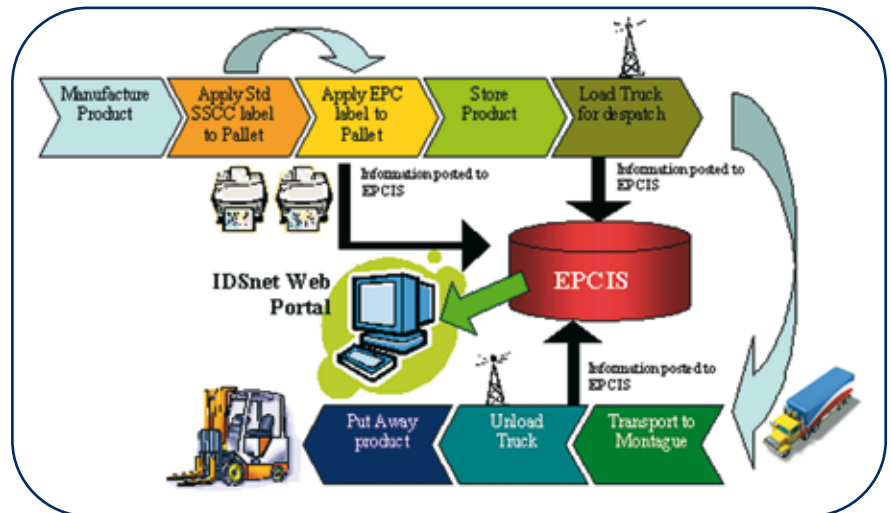
Pilot Objectives

The pilot project set out to test an RFID Class 1 Gen 2 implementation in a real world environment using the EPC Network™.

The primary objective of the trial was to determine the reliability and ease of integration of RFID Class 1 Gen 2 EPC technology into a production environment, in a true business-to-business setting.

The pilot project was set-up and completed in a production environment that is characterised by sub-zero temperatures, frozen product, frozen water and condensation. The pilot was seen as a world's first for testing the EPC/RFID standards in such a low temperature environment.

GS1 Australia's John Hearn, General Manager - Business Development and Professional Services, said "We saw this initial EPC/RFID pilot project as a great opportunity to gain valuable implementation experience with these new and emerging standards.



Above: Project scope illustration.

"Based on the international momentum EPC/RFID was gaining, a key objective was to use this pilot as foundational learning, which we would then build on and share with our GS1 members, customers and business partners."

Project Scope

Four'N'Twenty Pies and Jumbo Sausage Rolls, both manufactured at Patties Foods in Bairnsdale, Victoria, were chosen to be tracked at pallet level between Patties production facility to Montague in Narre Warren, approximately 300 kms away.

EPC/RFID labels were applied to the pallets and 'read' when loaded onto a truck at Patties, then 'read' again when being unloaded at Montague Cold Storage.

The project aimed at trialling all facets of the EPC Network. The information generated was transferred from the shop floor directly into the VeriSign hosted EPCIS database and made available through Matthew's web portal IDSnet.

Challenges

Whilst the physical design and set-up of the project was simple in concept, the project generated a range of challenges for the project team.

Owen Baker, Software Delivery Manager at Matthews and responsible for the design and implementation of the software explained, "We had to develop new software and hardware interfaces for the newly released RFID Class 1 Gen 2 Technology. After the design phase, our next challenge was to integrate the software and hardware components into the existing shop floor networks, and link these back to the EPCIS via the Internet"

All end-to-end testing of the pilot system was carried out whilst working in a 'live' production environment. Initially EPC/RFID tag read rates did not achieve a high level as was first anticipated, with varying results from a low 22 per cent at the beginning to 100 per cent at project end.

GS1 Australia's John Szabo, Senior Advisor - Professional Services, who project managed the pilot said, "Factors that may have impacted read rates ranged from local RF interference, environmental interference, data over-filtering, systems being unavailable, and even the positioning of the label in close proximity to products on the pallet."





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