Streamlining the beef export business from Australia to the U.S.

This pilot focused on the boxed beef export-import supply chain between Australia and the United States. It demonstrated that by using GS1 standards along with data sharing, trading partners can automate processes and increase visibility throughout their global supply chain. Pilot results noted an increase in visibility of supply chain events from 43 percent to 93 percent.

Missing marks means lost revenue

Australia is the world's largest beef exporter, valued at A$9.3 billion in 2015. The United States is the main export destination with 32 percent of all exports. As a major meat exporter, Australia's volume of shipments is so significant that even small cost- and time-savings can add up to considerable gains.

The pilot originated in Australia and covered its boxed beef destined for the U.S. market. The intent of the pilot was to use a standardised system to share product data and GS1 standards to uniquely identify products in order to drive significant efficiency gains in trade between the two trading partners.

Australia's boxed meat export to the U.S. loses around A$14 million each year due to missing shipment marks. The mark is a "stamp" that indicates the meat contained in the box has the proper health certificate to enter the U.S. market.

Challenge

Australia's boxed meat exports to the U.S. loses millions of Australian dollars each year due to missing shipment marks, indicating the meat in the box has the proper health certificate to enter the U.S. market.

Solution

GS1 barcodes were used as backups to marks. Other GS1 standards in electronic interfaces and EPCIS were used for data sharing, including EDI messages between ERP systems, event notifications and transport instructions.

Results

The automation of messages of transport instructions reduced manual entry errors and delivered potential savings of A$57,000 and more than 1,000 hours of manual labour annually. By using GS1 standards in the supply chain, Australian meat exporters saved an estimated A$14 million each year.

The solution tested included the use of GS1 barcodes as backups to marks. If implemented, this could be a major development that would deliver important trade benefits by reducing administrative burdens and costs as well as inevitable human errors from the U.S. Customs' clearance process.

Cargo clearance at the border

The boxed meat supply chain included the transport of products from the processor in Queensland, Australia through the Port of Brisbane to the Port of Philadelphia in the U.S. After entering the United States, the shipment proceeded to a storage facility for distribution to retailers and customers.

The parties involved in the pilot project included logistics, shipping line, and local transportation companies; the meat processing industry; and the industry association, Meat and Livestock Australia. Government participants included the U.S. Department of Agriculture Food Safety and Inspection Services, Biosecurity Australia, Australian Customs, and U.S. Customs. All played critical roles in the development and implementation of the pilot work efforts, together with GS1 Australia and GS1 US.

The major benefits included improved visibility of supply chain events from 43 percent to 93 percent and the automation of messages around transport instructions, reducing manual entry errors for a potential savings of A$57,000 and more than 1,000 hours of manual labour each year.

Reduced costs was also a direct benefit for the meat industry while efficiency gains was a relevant benefit for the governments controlling the imported products—specifically the U.S. Food Safety Inspection Service as well as the supply chain stakeholders.

One of the largest barriers to efficiency for industry is its inability to leverage commercial-system data for regulatory purposes since data from these systems is not recognised as sufficient for purposes of cargo clearance at the border. The potential for global data standards (GDS) to streamline this clearance process depended on coordination between government regulatory agencies and the ability of each agency to interface with not only the trading partners, but with each other.

The supply chain included a mix of electronic messaging capabilities. The pilot tested the use of GS1 standards in existing electronic interfaces and introducing EPCIS, a GS1 standard that "matches" a cargo item with a transport asset in a supply chain event across supply chains. GS1 identifiers and data sharing were used for all 15 events in the supply chain, including EDI messages between ERP systems, event notifications and transport instructions. Three pilot shipments were completed using GDS.

Substantial savings and traceability benefits

The major benefits included improved visibility of supply chain events from 43 percent to 93 percent and the automation of messages around transport instructions, reducing manual entry errors for a potential savings of A$57,000 and more than 1,000 hours of manual labour each year. Even though these savings may seem marginal, the savings are quite noteworthy in the context of the entire business of the transport firm.

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The pilot report documented examples of how supply chain participants are using GS1 standards to create additional benefits such as large efficiency gains, added cost savings and greater supply chain visibility.

Beyond the pilot

Findings indicated significant cost savings as well as unprecedented improvements in traceability. However, the report also highlighted the implementation challenges, especially in the area of coordination among supply chain partners and government agencies. This should be recognised in any future pilot projects, especially when it comes to having active government involvement in the execution.

The final study recommended potential future actions to enhance supply chain performance through the application of GS1 global data standards. Building on this existing APEC pilot, the objective is to identify next steps to act on commitments by ministers and leaders related to this issue. This may include policy recommendations to facilitate compatibility among APEC member government frameworks.

By using GS1 standards in the supply chain, the savings for the Australian meat exporters was an estimated A$14 million each year.

Based on the first pilot, recommendations to governments may focus on the following: Support industry's understanding and acceptance by working with trade and logistics organisations and standards providers; and, conduct analysis on how GDS might be utilised in gathering data to improve the efficiency of trade regulation activities.

Learn more

To learn more about this pilot, contact Mark Fuller, GS1 Australia, at mark.fuller@gs1au.org.

About GS1

GS1 is a neutral, not-for-profit, global organisation that develops and maintains the most widely used supply chain standards system in the world. GS1 standards improve the efficiency, safety, and visibility of supply chains across multiple sectors. With local Member Organisations in over 110 countries, GS1 engages with communities of trading partners, industry organisations, governments, and technology providers to understand and respond to their business needs through the adoption and implementation of global standards. GS1 is driven by over a million user companies, which execute more than six billion transactions daily in 150 countries using GS1 standards. More information at www.gs1.org.