

*How RFID and
Reusable Packaging
Contribute to a
Successful Supply
Chain Track and
Trace System*



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October 7, 2009

Agenda

1. Current State of Traceability
2. The New Power of the FDA
3. PTI Requirements and Expense
4. RFID Finally Ready For Prime Time
5. New RPC study validates using RFID in the Supply Chain
6. How a RFID enabled Reusable Packaging System can reduce costs and increase control over the supply chain
7. Traceability's benefits will accelerate adoption

Current State of Traceability

- FDA Role
 - One step forward and One Step Back
 - Reportable Food Registry Requirements (September 2009)
- H.R. 2749 Food Safety Act of 200
- Represents the full empowerment of the FDA as a regulatory agency with the ability to act swiftly without interruption in the event a suspected food safety issue
 - All new regulations will apply to equally to US and Foreign grown food

A Sea Change For Traceability

- Section 107 states-
 - “The Secretary shall by regulation establish tracing system for food that is located in the United States or is for import into the United States.
 - The Secretary shall-identify technologies that:
 1. Maintain the *full pedigree* of the origin and previous distribution history of the food
 2. Link that history with the subsequent distribution of food”

Creates An Ocean Of Data

Let's start with the Reportable Food Registry Information

(<http://www.fda.gov/Food/GuidanceComplianceRegulatoryInformation/GuidanceDocuments/FoodSafety/ucm180872.htm>)

1. Responsible Party Information - questions regarding the identity of the Responsible Party and the identity of the individual submitting the report.
2. Location of Reportable Food - questions regarding the facility where the reportable food problem was first identified, as well as contact information for individuals and entities that can provide additional information about the reportable food.
3. Problem Origination Site - questions about the location that is the suspected or known source of the problem. The Problem Origination Site may or may not be a facility owned by your firm. You will see this section if you indicate that you know where the problem originated. If you indicate that you know where the problem originated and that the Problem Origination Site is the same as the Location of Reportable Food, this information will be pre-populated for you.

More Oceans Of Data

4. Product Problem - questions about the reportable food and its supply chain, where applicable:
 - Description of the Problem - questions about the discovery of the reportable food problem and description of the problem.
 - Received Product Information - if you indicate that you received reportable food, you will see questions about reportable food you received and its supplier's).
 - Distributed Product Information - if you indicate that you distributed reportable food, you will see questions about outbound shipments of reportable food you distributed and its recipient(s).
 - Product Information - if you indicate that you are not ready or required to report supply chain information, you will see questions about reportable food you manufactured, processed, packed, or held.
5. Submit Report and Confirmation this section provides an opportunity to review your report before submission, instructions for attaching supplemental information to accompany your report, and assigns an FDA-issued unique identifier number (also known as an Individual Case Safety Report number (ICSR), or ICSR number) with which to identify your report.

Produce Traceability Initiative

- With the support of over 60 major companies including retailers, food services, grocery and grower firms this initiative sets out to barcode label cases and pallet and eventually item level clam shells, etc.
- With milestones in place and the support of the largest trade associations this PTI movement is off to an uneven start
- The resistance to change is coming from retailers who will now have to scan each case and every pallet inbound and outbound from the distribution center to the store.
- High labor costs, often unionized labor and additional time, printing and information costs will be serious challenges to wide implementations



PTI Use Case

- Requires all cases to have barcodes in a 4 inch by 2 inch format
- Example: 2,000 cases per truckload, 50 truck loads a week for 30 weeks= 3M labels and 6M scans @ 5 seconds a scan
- What is the cost? 8,333 additional hours and without counting at least 20,000 errors @ 1/300 scans (see <http://www.adams1.com/faq.html> and <http://loftware.wordpress.com/2009/04/06/gs1-and-university-researcher-at-odds-over-barcode-error-rate>)
- Would it be better to automate this process?

RFID and Reusable Packaging

- New study confirms that standard off the shelf RFID tags can be used multiple times with reusable containers.

This is a game changer

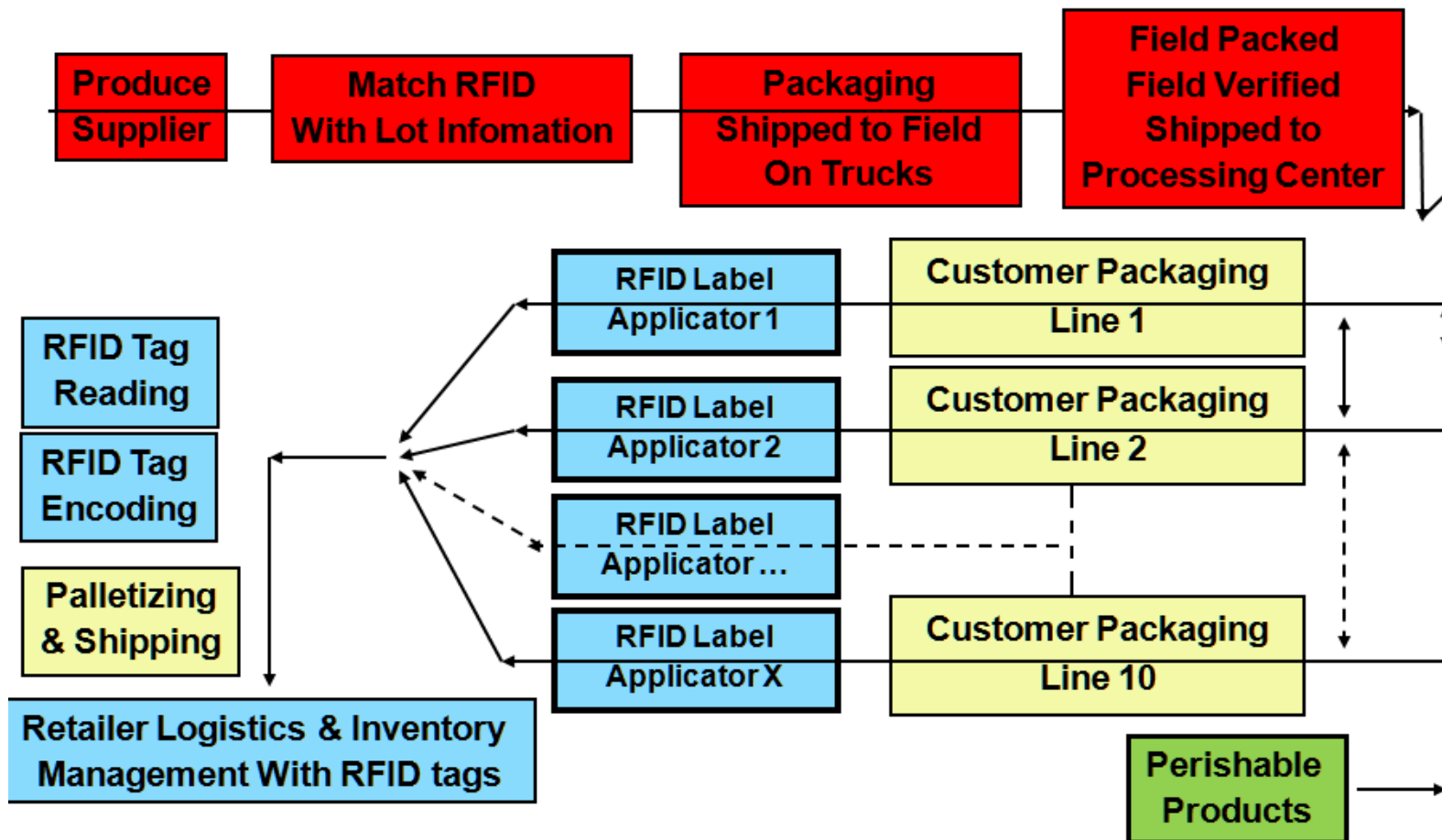
- Up until now RFID was viewed as an expensive slap and ship process, requiring a new printer and expensive and sensitive equipment, consultants etc.

Changing the Packaging Paradigm

- No printers needed
- No expensive setup
- One reader, and
- A RFID label that can be re-written up to 100,000 times
- No labor need to scan
- Immediate confirmation of order specific information

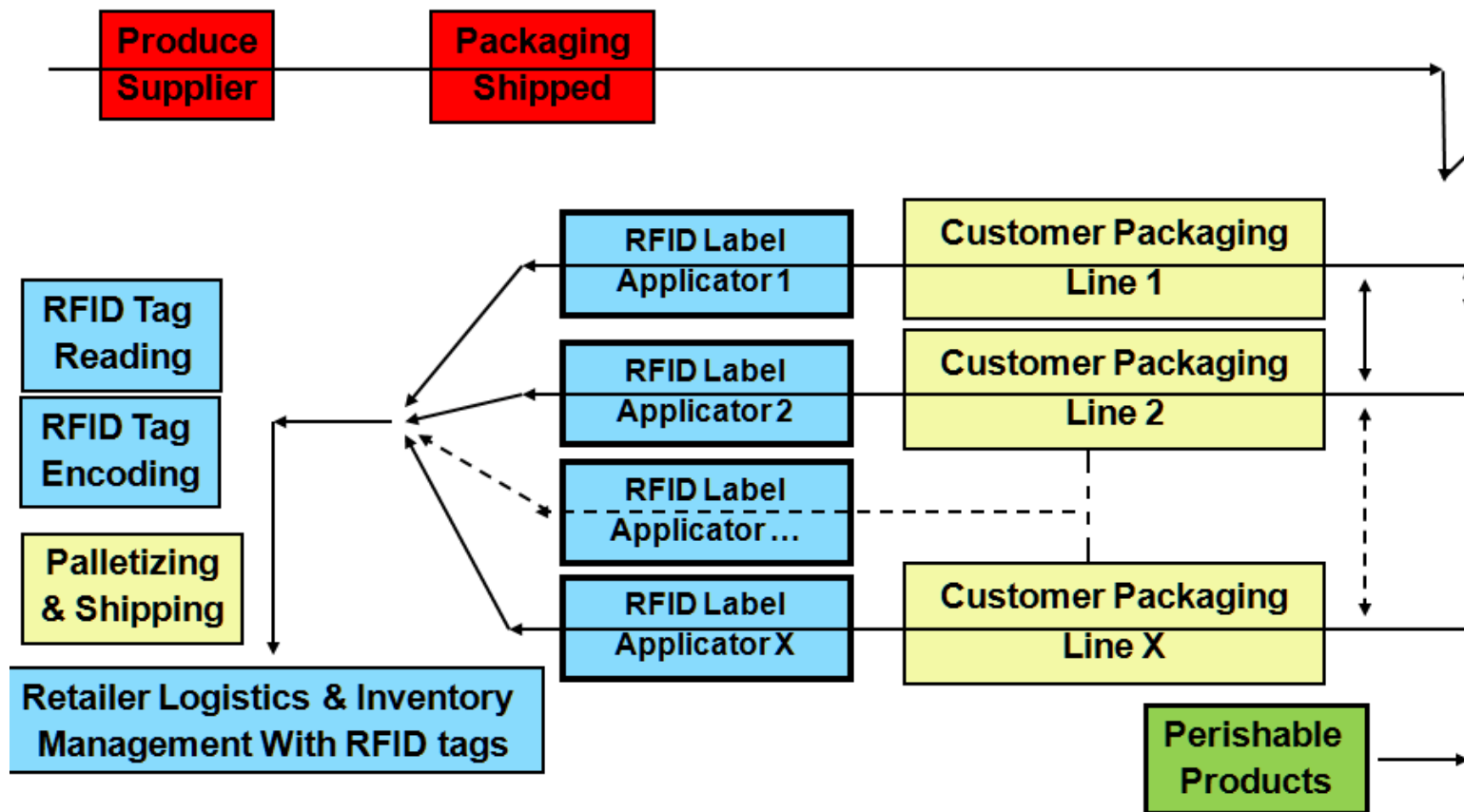
Barcode & RFID Same Approach

RFID Implementation Approach Field Packed



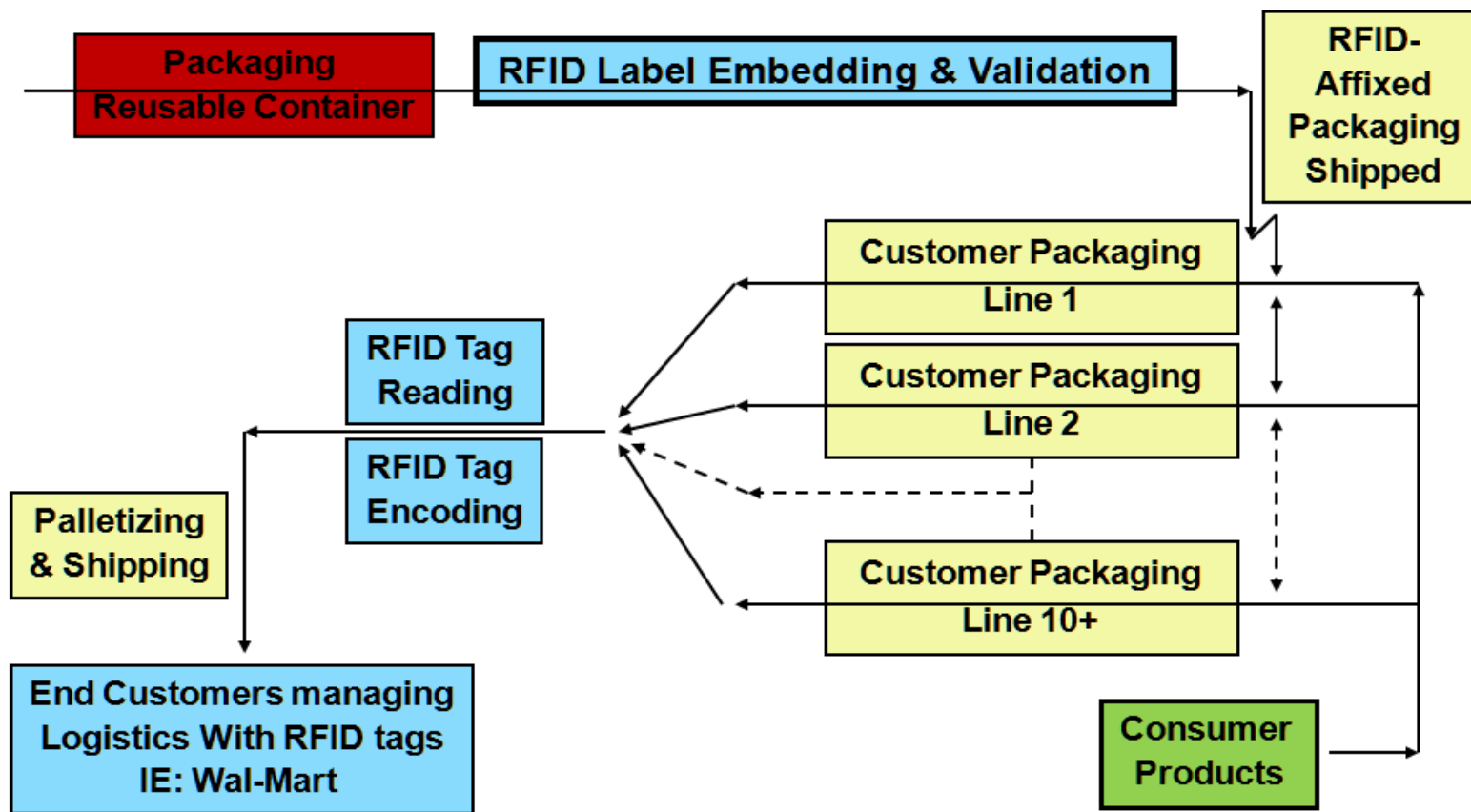
Barcode & RFID Same Approach

RFID Implementation Approach Food Processing

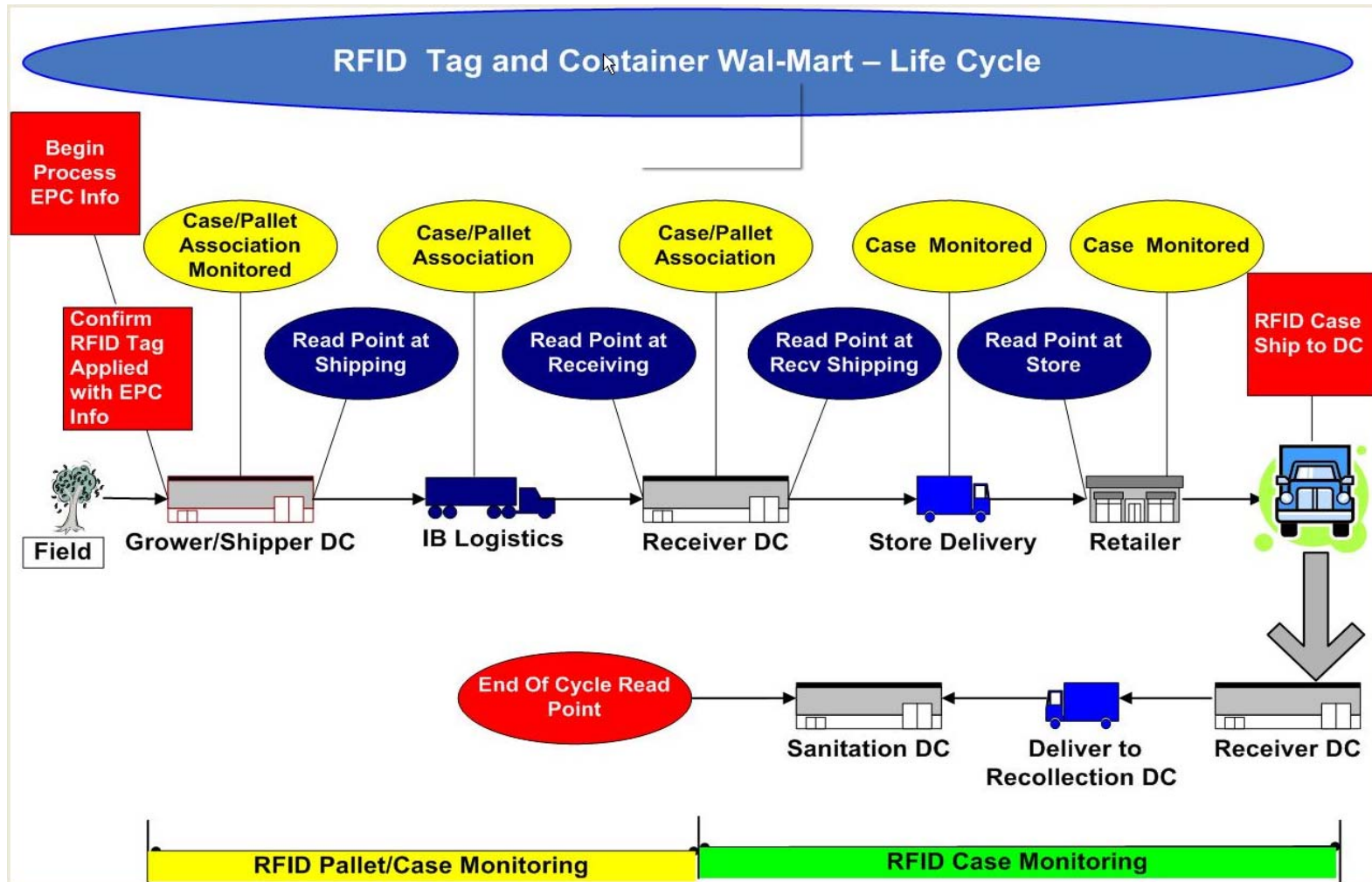


Changing the Packaging Paradigm

RFID Reusable Label Container Approach



Changing the Packaging Paradigm



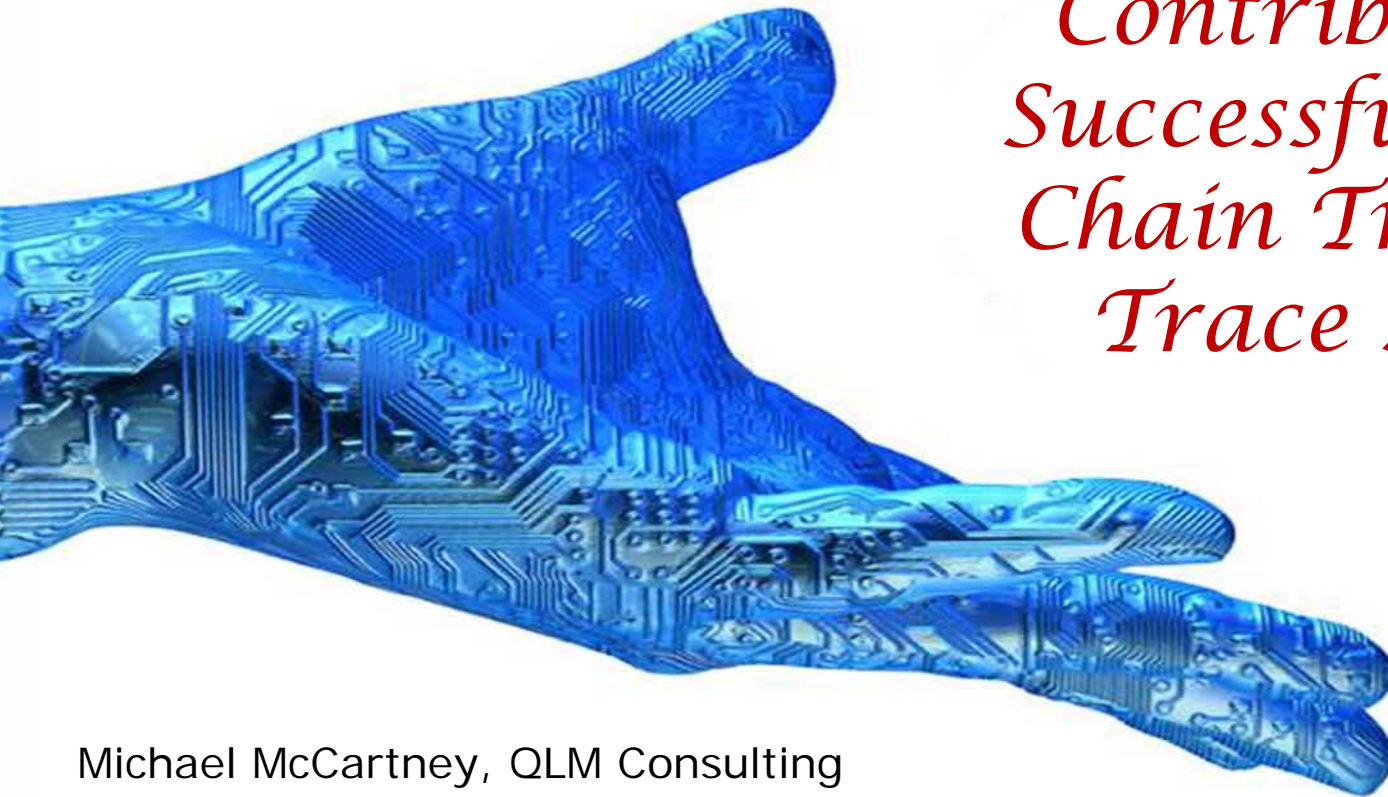
Traceability's benefits

- Better Inventory Management
- Real Time Business Decision Support Information
- Creates Continuous Improvement Metrics
- Allows for real time monitoring to improve operational performance
- FEFO can replace FIFO
- Low Cost FDA Compliance Solution
- Real Time Shelf Life Management

Questions

- Email: m@qlmconsulting.com

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