Solve the pain of claims compliance with RFID

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www.gs1us.org/gs1-us-antitrust-compliance-policy

Agenda

- Introductions

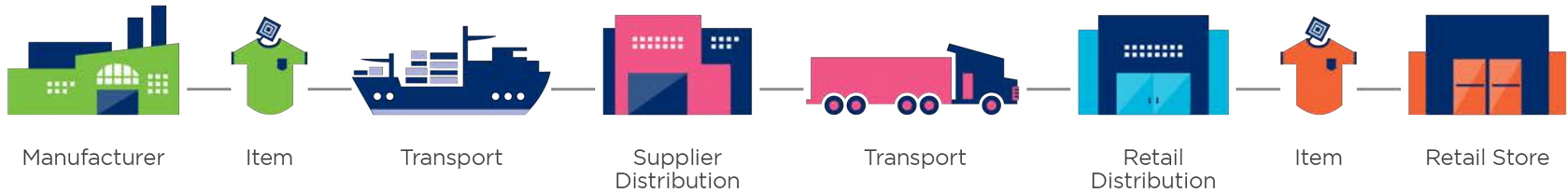- The Pain of Claims

- Solving the Pain of Claims

Speakers

Jonathan Gregory

Director of Community

Engagement, GS1 US

Justin Patton

Director, Auburn

University RFID Lab

Retail Pain Points

| Manufacturer | Item | Transport | Supplier Distribution | Transport | Retail Distribution | Item | Retail Store |

$98B
Counterfeiting

$35B
Claims

$47B
Shrink

*Data from FY 2017, per CHIP Whitepaper

Supply Chain Claims & Causes

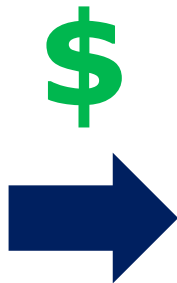## $35B Claims Yearly

Full Case Shortage

Partial Case-Pack Shortage
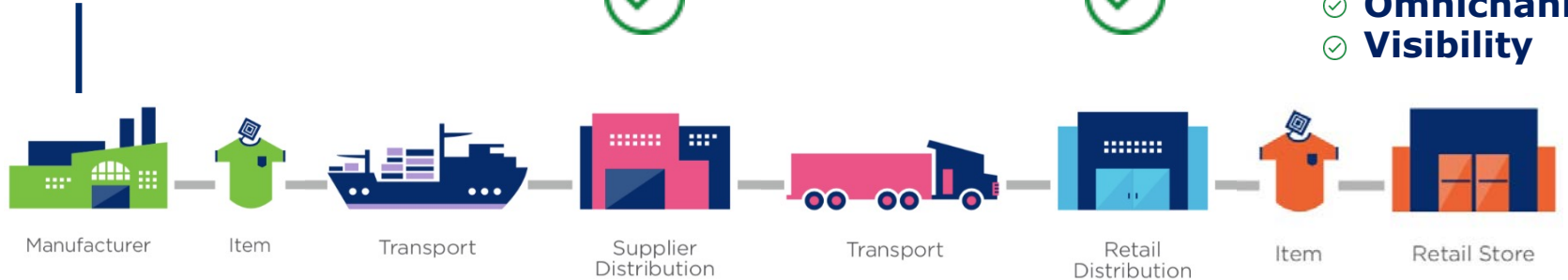
Effects of Case-Pack Accuracy

Case-Pack Inaccuracy

$

- Claims costs + associated labor

- Low inventory accuracy

- Inability to fulfill sales

- Difficulty with **omnichannel** picks

- Cost of substitution

- Poor replenishment cycles

Effects of Case-Pack Accuracy

RFID Source Tagging

Validate

Validate

⊘ **Accurate Inv.**
⊘ **Omnichannel**
⊘ **Visibility**

Manufacturer

Item

Transport

Supplier Distribution

Transport

Retail Distribution

Item

Retail Store

Challenges

- How do I **avoid mis-packing** cases/cartons?

- How do we **reliably read** case/carton-pack data?

- How do we **share this data** with trade partners?

Southern Fried Cotton Case Study

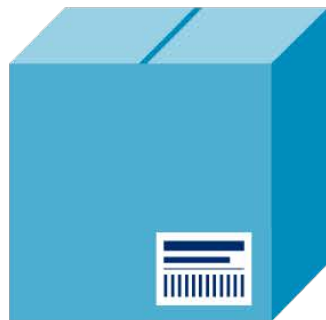**Successful EPC/RFID solution deployment achieves high levels of order accuracy and operational efficiency**

https://www.gs1us.org/sfc

After RFID deployment, chargebacks were reduced by 98.8%—improving accuracy, delivering a solid ROI and payback in less than eight months.
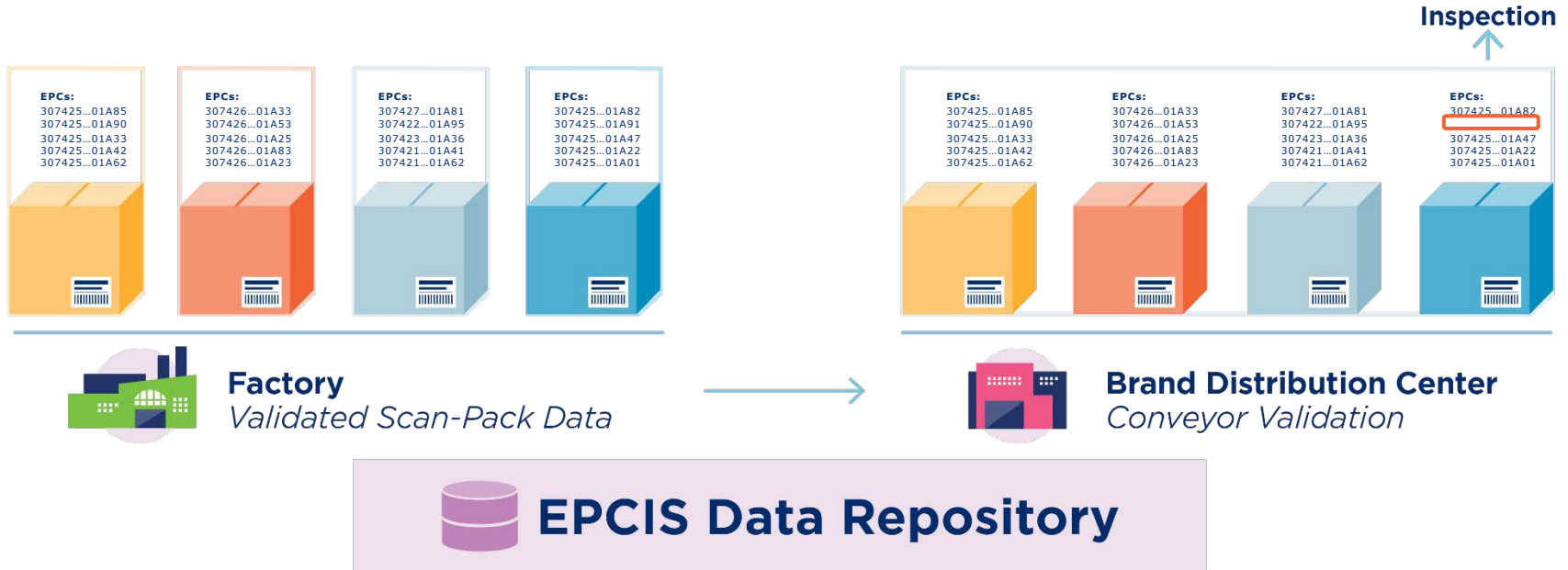
Share Case/Carton-Pack Data: EPCIS Format

eventTime: "2020-11-12T20:35:28.114-06:00"
eventTimeZoneOffset: "-06:00"
parentID: "urn:epc:id:sscc:0614141.0123456789"
      childEPCs:
      epc: "urn:epc:id:sgtin:0614141.107346.2017"
      epc: "urn:epc:id:sgtin:0614141.107346.2018"
      epc: "urn:epc:id:sgtin:0614141.107346.2019"
      epc: "urn:epc:id:sgtin:0614141.107346.2020"
      epc: "urn:epc:id:sgtin:0614141.107346.2021"
bizStep: "urn:epcglobal:cbv:bizstep:packing"
disposition: "urn:epcglobal:cbv:disp:in_progress"
readPoint: "urn:epc:id:sgln:0614141.00000.100"
bizLocation: "urn:epc:id:sgln:0614141.00000.0"

Factory
Validated Scan-Pack Data

Solution Approach

Inspection

EPCs:	EPCs:	EPCs:	EPCs:
307425...01A85	307426...01A33	307427...01A81	307425...01A82
307425...01A90	307426...01A53	307422...01A95	307425...01A91
307425...01A33	307426...01A25	307423...01A36	307425...01A47
307425...01A42	307426...01A83	307421...01A41	307425...01A22
307425...01A62	307426...01A23	307421...01A62	307425...01A01

Factory
Validated Scan-Pack Data

Brand Distribution Center
Conveyor Validation

EPCs:	EPCs:	EPCs:	EPCs:
307425...01A85	307426...01A33	307427...01A81	307425...01A82
307425...01A90	307426...01A53	307422...01A95	
307425...01A33	307426...01A25	307423...01A36	307425...01A47
307425...01A42	307426...01A83	307421...01A41	307425...01A22
307425...01A62	307426...01A23	307421...01A62	307425...01A01

EPCIS Data Repository

EPC "Blast" Conveyor Components

Brand Distribution Center
Conveyor

Physical Components:

• Fixed readers with multiple antennas

• Antennas spread over extended portion of conveyance

• No shielding or carton isolation required

GS1 US: RFID Claims Compliance Workgroup

- Developing best practices to address carton pack accuracy claims

- Working to create an industry-specific guideline
  - Data capture, validation, sharing, and claims harmonization

- Currently has 55 people from 31 organizations

- You are welcome to join!

Contact Information

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Also see: https://site.gs1us.org/rfid

Thank You!

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Appendix

GS1 US Cross-Industry RFID Discussion Group

- GS1 US is establishing the **GS1 US Cross-Industry RFID Discussion Group** to bring together stakeholders from various industries to discuss how RFID can support supply chain and inventory management imperatives.

- If you have any questions, please contact Jonathan Gregory (jgregory@gs1us.org).

New GS1 US RFID Web Experience

Unlock Inventory Visibility with EPC-Enabled RFID

EPC-enabled RFID is unique identification technology that helps capture product identity at scale for more efficient, accurate, and transparent tracking from start to finish.

- Centralized web experience to help users easily find resources related to EPC-enabled RFID

- Experience will get expanded iteratively as new content and user needs emerge

https://site.gs1us.org/rfid.html

GS1 Standards in Apparel and GM

Timeline

Discovery Phase			Guideline Creation Phase		
June	July	Aug	Sept	Oct	Nov...
Monthly Full-Workgroup Meetings					
Bi-Weekly Focus Group Meetings			Realigned Focus Groups		

Define Guideline Scope
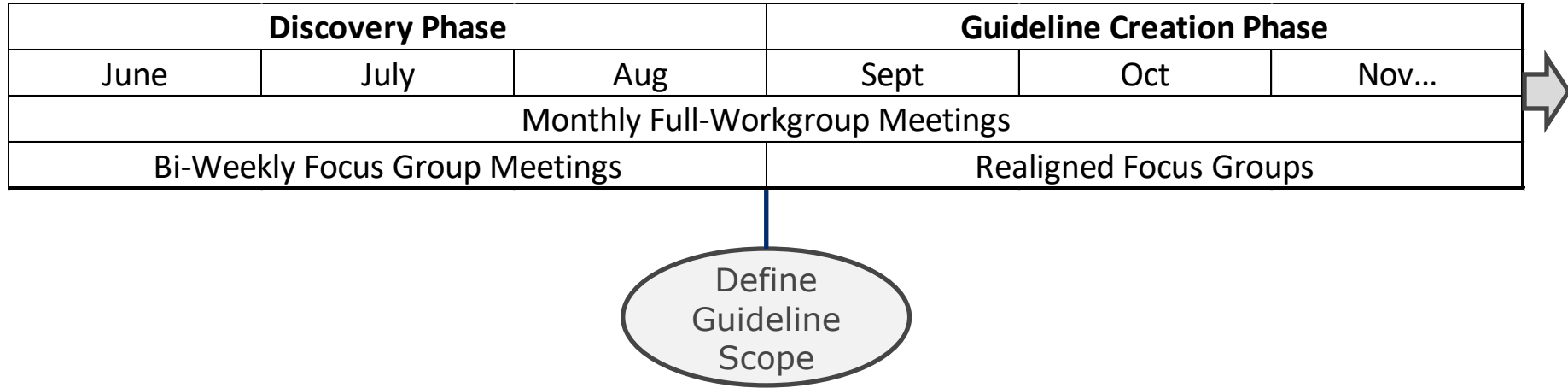
Validated Carton Scan Pack Station Components
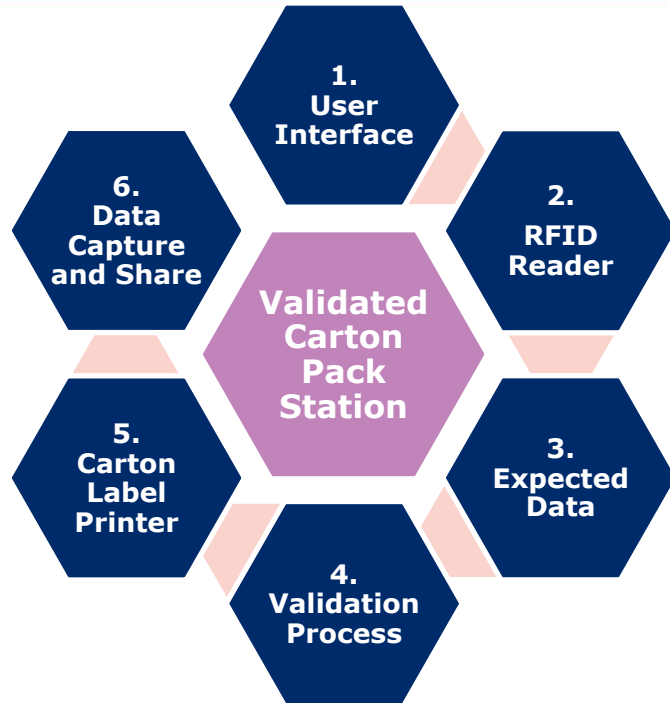
Distribution Center Conveyor Challenge

- Conveyor Capture Challenge:
  - Items in a carton on a conveyor
  - No impact to throughput
  - Minimal/no change to infrastructure
  - Traveling at variable speed
  - Varied categories (footwear, basics,…)
  - Near 100% accuracy requirement
  - Associating items to the right carton
  - With the prior/next carton in close proximity.

EPC-Blast Case Validation

o Case-receipt is validated based on prior knowledge of case content. If at least one EPC in an expected case is read, the case is verified as received.

Factory
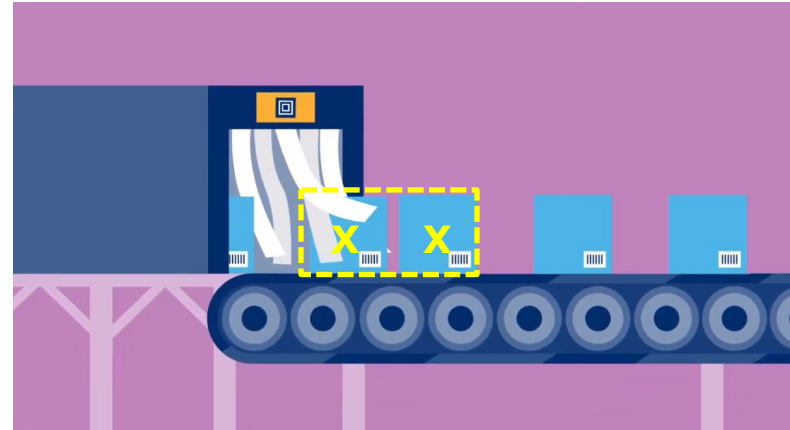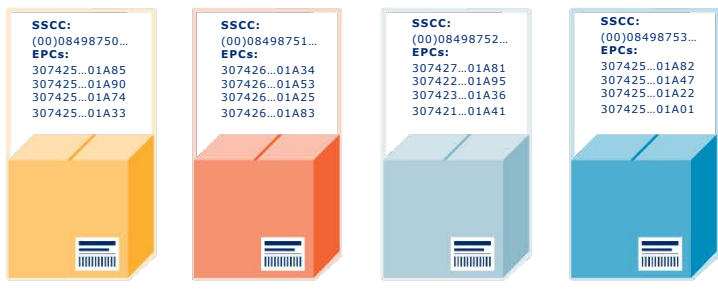*Validated Scan-Pack Data*

SSCC:
(00)08498750...
EPCs:
307425...01A85
307425...01A90
307425...01A74
307425...01A33

SSCC:
(00)08498751...
EPCs:
307426...01A34
307426...01A53
307426...01A25
307426...01A83

SSCC:
(00)08498752...
EPCs:
307427...01A81
307422...01A95
307423...01A36
307421...01A41

SSCC:
(00)08498753...
EPCs:
307425...01A82
307425...01A47
307425...01A22
307425...01A01

Brand Distribution Center
Conveyor Validation

SSCC:
(00)08498750...
EPCs:
307425...01A85
307425...01A90
307425...01A33
307425...01A42
307425...01A62

SSCC:
(00)08498751...
EPCs:
307426...01A33
307426...01A53
307426...01A25
307426...01A83
307426...01A23

SSCC:
(00)08498752...
EPCs:
307427...01A81
307422...01A95
307423...01A36
307421...01A41
307421...01A62

SSCC:
(00)08498753...
EPCs:
307425...01A82
307425...01A91
307425...01A47
307425...01A22
307425...01A01

EPC Data Repository

EPC-Blast Unit Validation

o Receipt of individual units is validated based on prior knowledge of case contents. All EPCs from expected cases are expected to be read.

Inspection

EPCs:
307425...01A85
307425...01A90
307425...01A74
307425...01A33

EPCs:
307426...01A34
307426...01A53
307426...01A25
307426...01A83

EPCs:
307427...01A81
307422...01A95
307423...01A36
307421...01A41

EPCs:
307425...01A82
307425...01A47
307425...01A22
307425...01A01

EPCs:
307425...01A85
307425...01A90
307425...01A33
307425...01A42
307425...01A62

EPCs:
307426...01A33
307426...01A53
307426...01A25
307426...01A83
307426...01A23

EPCs:
307427...01A81
307422...01A95
307423...01A36
307421...01A41
307421...01A62

EPCs:
307425...01A82
307425...01A91
307425...01A47
307425...01A22
307425...01A01

Factory
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