The Global Language of Business

# EPC-enabled RFID the key to retailing

## GSMP Face-to-face

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Apparel and General Merchandise,
GS1 US
March 2017

# Antitrust Caution

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**GS1 US is committed to complying fully with antitrust laws.**

We ask and expect everyone to refrain from discussing prices, margins, discounts, suppliers, the timing of price changes, marketing or product plans, or other competitively sensitive topics.

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

# Agenda

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| Topics | Leads | Speaker |
|---|---|---|
| **Anti-Trust, Welcome, Introductions & Agenda** | **GS1 US, All** | **9:00 – 9:15 AM** |
| **Industry Trends – What's happening in retail** | **GS1 US, Auburn University** | **9:15 – 9:45 AM** |
| **Industry Update – Who's doing what** | **All participants** | **9:45 – 10:15 AM** |
| **Supplier Research Study** | **Auburn University** | **10:15 – 10:35 AM** |
| **Education and Training needs** | **GS1 US, All** | **10:35 – 10:50 AM** |
| **Action Items, Wrap up & Adjournment** | **GS1 US, All** | **10:50 – 11:00 AM** |

# Introductions

- Name
- Company
- Role/ Responsibility
- What are you interested in learning today


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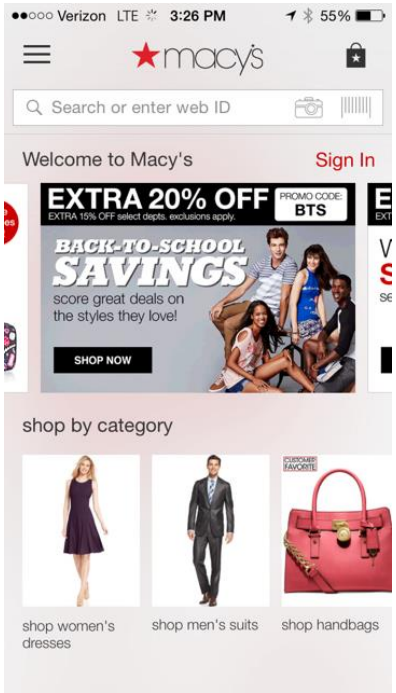
# Customers are demanding the "Always On" shopping experience

- The modern consumer expects to be served where she wants, when she wants, how she wants
- Technology and connectivity has created an arena that drives customer purchases from a variety of sources, both in store and through electronic venues
- A strategic retailer will use the entire inventory to satisfy demand





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# New Sales Channels

- Shop In Store
- Shop at Home, Ship to Home

} Traditional

- Shop Online at Home, Ship to Store
- Shop Online from Store, Ship to Home
- Shop Online from Store, Ship to Store
- Hold at Store
- Shipping to Home from Online Distribution Center
- Shipping to Home from Store Distribution Center
- Ship to Home from Store
- Store to Store Transfers

**New Channels REQUIRE Higher Inventory Accuracy !**

AUBURN UNIVERSITY RFID LAB



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# Drivers of Adoption – Retailers and Manufacturers

- The 'big four' use cases for retailers
  - Inventory accuracy
  - Out of Stock
  - Loss detection
  - Locating product
- The 'big five' use cases for manufacturers
  - Receiving Accuracy
  - Shipping Accuracy
  - Pick/Pack Accuracy
  - EPOD
  - Authentication  & Anti-Counterfeiting

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# RFID in the US market

- Bon-Ton
- Dick's Sporting Goods
- Dillard's
- Hudson's Bay
- JC Penney
- Kohl's
- Lord & Taylor
- Macy's
- Neiman Marcus
- Saks Fifth Avenue
- Sears Holdings
- Target
- Walmart

- *Many RBO's that operate their own stores as well as vertically integrated brands including American Apparel, Chico's FAS, Lululemon and others*

**The above named retailers have all discussed their RFID deployments being in various phases of testing/implementation during the 2015 / 2016 / calendar year.*



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# Item Level RFID Adoption Matrix 2016

## 25 retail banners responded = 13 Active

| Category | Banners | In DC Date | Notes | Category | Banners | In DC Date | Notes |
|---|---|---|---|---|---|---|---|
| 13 banners now confirm they have active pilots or implementations (10 in 2015) | | | | Innerwear / Basics - Men's | 8+3 = 11 | 2015 | |
| All retailers will accept tagged items even if they don't have an active program | | | | Innerwear / Basics - Women's | 8+2 = 10 | 2015 | |
| Bath - Softlines | 7+2 = 9 | 2015 | | Jewelry - Costume / Fashion | 8 | 2016/2017 | Some Tech Challenges |
| Bedding - Covers, sheet sets, etc. | 8+1 = 9 | 2015/2016 | | Jewelry - Fine | 6 | 2016/2017 | Some Tech Challenges |
| Bedding - Pillows & Pads | 7+1 = 8 | 2015/2016 | | Kitchen Electrics | 7 | 2016/2017 | |
| Belts - Men's | 7+2 = 9 | 2015/2016 | | Luggage - Display Compliance in-store | 4+1 = 5 | 2016 | |
| Belts - Women's | 7+2 = 9 | 2015/2016 | | Luggage - Packaged from vendor | 6+1 = 7 | 2016 | |
| Children's wear -Infant / Toddler | 7+2 = 9 | 2016 | | Mens Millennial | 6+1 = 7 | 2015/2016 | |
| Coats - Outerwear Men's | 7+2 = 9 | 2016/2017 | | Pants / Slacks / Bottoms - Men's | 8+2 = 10 | 2015 | |
| Coats - Outerwear Women's | 7+2 = 9 | 2016/2017 | | Pants / Slacks / Bottoms - Women's | 7+1 = 8 | 2016 | |
| Cold weather accessories | 7+1 = 8 | 2016 | | Personal Care - Equipment | 5+1 = 6 | 2016 | |
| Cookware | 6+1 = 7 | 2016 | | Ready to Wear - Men's | 5+2 = 7 | 2016/2017 | |
| Cutlery | 6+2 = 8 | 2016/2017 | | Ready to Wear - Women's | 7+1 = 8 | 2016 | |
| Denim - Children | 7+3 = 10 | 2015/2016 | | Sleepwear and Robes - Men's & Women | 7+1 = 8 | 2016/2017 | |
| Denim - Men | 9+4 = 13 | 2015/2016 | | Small Leather Goods | 7+1 = 8 | 2016/2017 | |
| Denim - Women | 8+2 = 10 | 2015/2016 | | Socks | 7+2 = 9 | 2015 | |
| Designer Apparel - Men's & Women | 7 | 2016 | | Sporting Goods - Hardlines | 2 | 2017/2018 | Expansion category |
| Dress Shirts - Women Blouse | 7+1 = 8 | 2016 | | Sportswear / Athletic - Men's | 7+1 = 8 | 2016/2017 | |
| Dress Shirts - Men's | 8+3 = 11 | 2015/2016 | | Sportswear / Athletic - Women's | 7+1 = 8 | 2016/2017 | |
| Dresses | 6+1 = 7 | 2016 | | Suit Separates / Suits - Men's | 8+3 = 11 | 2015/2016 | |
| Electronics | 4+3 = 7 | 2016/2017 | Expansion category | Suit Separates / Suits - Women's | 7+1 = 8 | 2016 | |
| Food / Designer / Candy (bulk) | 3+3 = 6 | 2016/2017 | Limited Vendors | Sunglasses | 6+1 = 7 | 2016/2017 | |
| Footwear - Display Compliance in-store | 8+2 = 10 | 2015/2016 | | Swimwear | 7-1 = 6 | 2016/2017 | |
| Footwear - Hanging sandals, boxed slippers | 8+2 = 10 | 2015/2016 | | Ties / Neckwear - Men's | 7+1 = 8 | 2016/2017 | |
| Footwear - Men's & Women Box | 7+3 = 10 | 2015/2016 | | Toys / Games | 5-1 = 4 | 2017 | Expansion category |
| Furniture | 3+1 = 4 | 2016/2017 | Limited Vendors | Watches / Jewelry - Men's & Women | 5+1 = 6 | 2016/2017 | Some Tech Challenges |
| Handbags - Display Compliance in-store | 6+2 = 8 | 2015 | | Desired - Bikes | 2 | | |
| Handbags - Polybagged from Vendor | 7+2 = 9 | 2015 | | Desired - Camping and Hiking | 3 | | |
| Headwear - Hats | 7+2 = 9 | 2016 | | Desired - Hunting and Shooting | 2 | | |
| Headwear - Scarves | 7+2 = 9 | 2016 | | Desired - Fishing | 3 | | |
| Health & Beauty - Cosmetics / Perfume | 5 | 2016/2017 | Some Tech Challenges | Desired - Paddle | 2 | | |
| Home - Table Top | 6 | 2016 | | Desired - Water Sports | 3 | | |
| Home Accessories - Table Linens | 7+1 = 8 | 2016 | | | Banner status | Saturation Level | |
| Home Décor and Accessories (ie candles, pictures, fr | 4-1 = 3 | 2016/2017 | Limited Vendors | | High Increase | High | |
| Hosiery / Leggings / Tights | 7+2 = 9 | 2016/2017 | | | Contraction | Medium | |
| Impulse RTW | 5+1 = 6 | 2016 | | | | Low | |


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# State of the Retail Industry
# Leading Categories of Implementation

| Product Categories | | |
|---|---|---|
| Bath | Dresses | Luggage |
| Bedding | Footwear | Pants / Slacks / Long Bottoms |
| Belts | Handbags | Sleepwear and Robes |
| Children's wear | Headwear | Small Leather Goods |
| Coats | Home Accessories | Socks – Dress & Basic |
| Cookware | Hosiery | Sportswear / Athletic |
| Cutlery | Innerwear - Basics | Suit Separates / Suits |
| Denim | Intimates | Swimwear |
| Designer / Collections | Jewelry | Ties / Neckwear |
| Dress Shirts | Kitchen Electrics | Toys / Games |

Includes: Children, Men, and Women. Replenishment- and Fashion-based business


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# Initial Findings

**RFID Adoption Plans:**

- Steady state within core categories
  - Adding new vendors daily
  - Solidifying processes with staff and vendors
- Category expansion to adjacent
  - Phased approach to new category deployment
  - E-Commerce growth leading specific category expansion

  **Highly searched items and those with limited substitution rank higher on retailer deployment plans
- Use case expansion
  - Testing and implementing


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# Participant Sharing

- US Market - what are brands and retailers doing
- International Market  - what are brands and retailers doing


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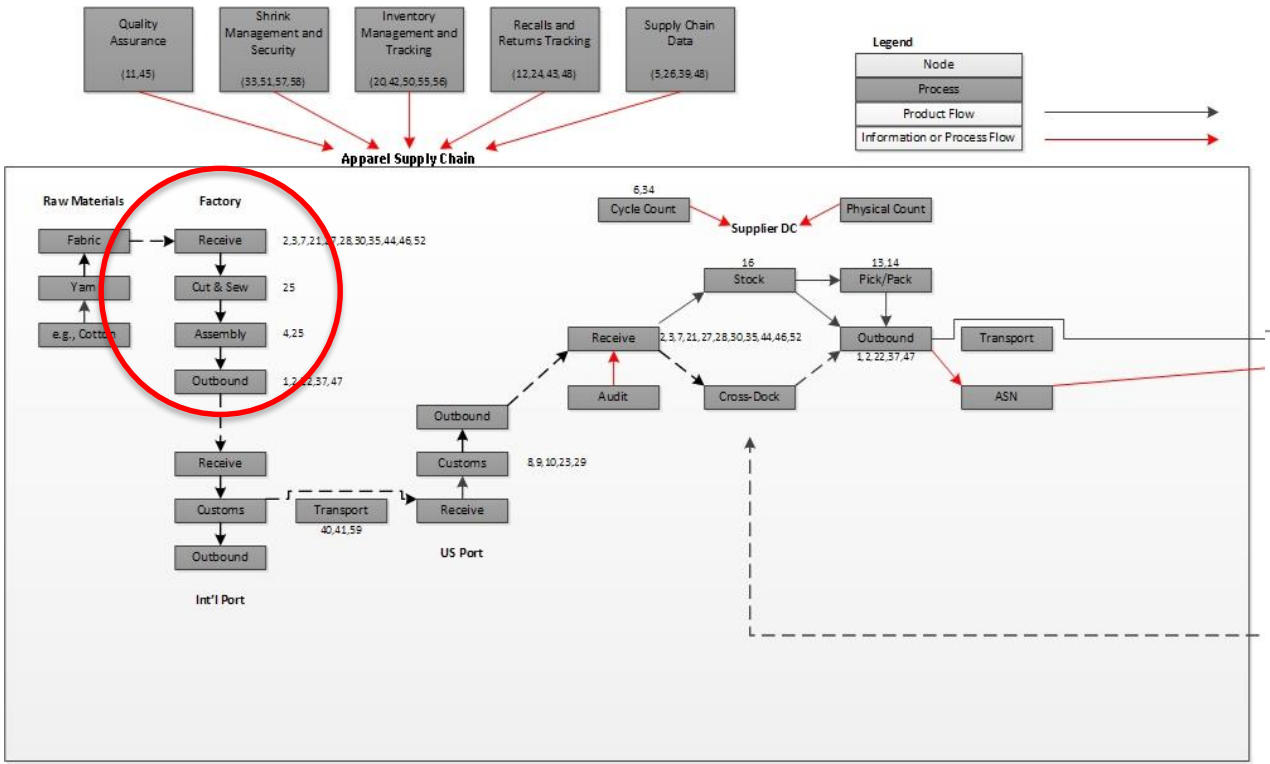
# Use Cases For RFID Adoption



| No. | Apparel Use Cases |
|---|---|
| 1 | Outbound automation |
| 2 | Inbound and outbound audit processes |
| 3 | Electronic proof of delivery |
| 4 | Right tag on product |
| 5 | Supply chain data quality |
| 6 | Could eliminate audits & manual inventory |
| 7 | Smart inspect |
| 8 | Country of origin |
| 9 | FTZ (Free Trade) |
| 10 | Trade agreements |
| 11 | Traceability through supply chain |
| 12 | Track deffectives & recalls |
| 13 | Pick/ pack speed |
| 14 | Pick/pack accuracy |
| 15 | Detail of available data |
| 16 | Item level data |
| 17 | Claims accuracy |
| 18 | Potential to eliminate claims |
| 19 | Brand visibility in store (integrated) |
| 20 | Speed and accuracy |
| 21 | Inbound quality |
| 22 | Outbound quality |
| 23 | FTZ and first sale |
| 24 | Track returns |
| 25 | Tracking through processing areas |
| 26 | Drive accurate costing |
| 27 | Vendor pack accuracy |
| 28 | Case pack accuracy |
| 29 | Source validation |
| 30 | Shipping validation |

| No. | Apparel Use Cases |
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| 31 | Plan-o-gram compliance |
| 32 | Shelf replenishment |
| 33 | EAS consolidation |
| 34 | Reduce cycle count time |
| 35 | Receiving accuracy |
| 36 | Eliminate physical inventory counts |
| 37 | Carton accuracy |
| 38 | 3rd party consolidation efficiency |
| 39 | Increased store PI accuracy |
| 40 | Country specific shipping documentation |
| 41 | Country specific care labels and placement |
| 42 | Inventory tracking within DC |
| 43 | Prodcut recall |
| 44 | Electronic proof of delivery |
| 45 | Counterfiet tracking |
| 46 | Inbound quality |
| 47 | Outbound quality |
| 48 | PI accuracy |
| 49 | Shelf replenishment |
| 50 | Dormant inventory reduction |
| 51 | Reduce shrink |
| 52 | Electronic proof of delivery |
| 53 | Shopper item interest vs. purchase |
| 54 | Density and space planning |
| 55 | Multi-channel inventory management |
| 56 | Inventory tracking |
| 57 | Security and shrink reduction |
| 58 | Shrink due to employees |
| 59 | Accurate export documentation |
| 60 | Store to store transfers |

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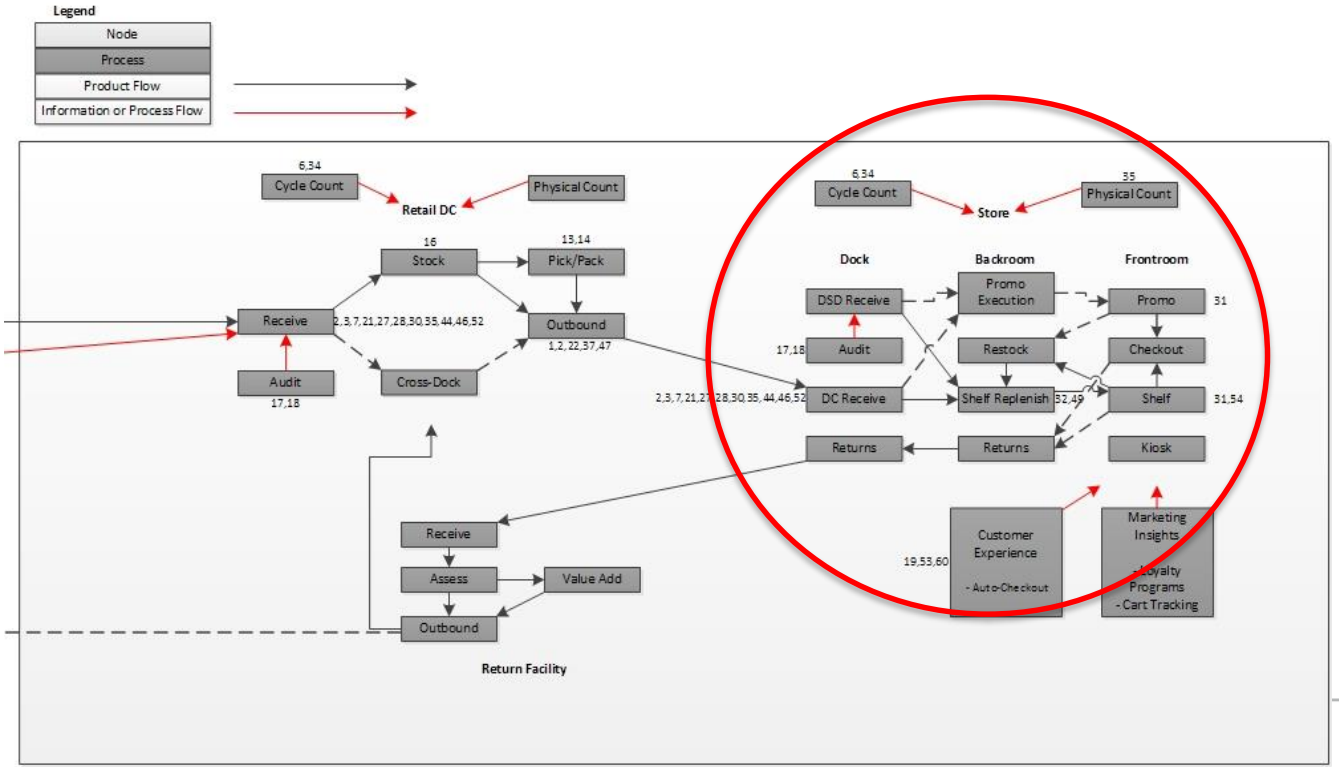
# Use Cases For RFID Adoption

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# Current DC Learnings

- RF Data Capture
  - Portal, Tunnel, or Handheld?
- Source Tagging Accuracy
  - Fix or Notify?
- WMS Case Item Quantities
  - Exporting Data for Comparison
- Size of Value Proposition
  - What portion of claims can we resolve?


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# Next Steps

**Adoption Support**

- Peer-to-Peer
  - 1:1 P2P outreach (calls / face-to-face meetings)
  - Group P2P workshop with department stores/other categories
  - ROI validation research (industry/academic/technology)
- 1:1 Statement of Work Support
  - Deployment support (Vendor roll-out)
  - Use case / Project proof-of-concept support
- Marketing / Communications
  - Case studies, Infographics, Industry Webinars, Public Speaking, Industry trade publications and vast media input for articles.


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