IoT in Retail

Identify

Authenticate

Locate
## IoT connectivity in retail

<table>
<thead>
<tr>
<th>Technology</th>
<th>Capability</th>
<th>RAIN Alliance Mission: To enable businesses and consumers to identify, locate and authenticate items in our everyday world</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAIN</td>
<td>Identify, locate, authenticate <strong>items</strong></td>
<td></td>
</tr>
<tr>
<td>NFC</td>
<td>Payment</td>
<td></td>
</tr>
<tr>
<td>Bluetooth/ BLE</td>
<td>Locate mobile device</td>
<td><strong>RAIN Alliance Vision:</strong> A future where everyday things are part of a connected world … like raindrops to the sea</td>
</tr>
<tr>
<td>WiFi</td>
<td>Connect to mobile device</td>
<td></td>
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</tbody>
</table>
RAIN RFID: item connectivity

RAIN RFID Alliance

- Consumer-grade handle for UHF Gen2 RFID
- Like WiFi Alliance and Bluetooth SIG
- 70 member companies and growing

Google
Impinj
Intel
Smartrac
RAIN RFID is Mainstream in Retail

10 billion connected items (1 million read points)
“Omnichannel is most importantly about creating a compelling, integrated customer experience that spans all the customer’s interactions with Saks – regardless of it being in-store, online or in any other way.”

Saks Direct President, Michael Burgess
2012
Item intelligence for Omnichannel

- Analytics & Optimization
- Product Experience
- Flexible Fulfillment
- Availability & Assortment

Geoffrey Moore on Retail IT
- Systems of Intelligence
- Systems of Engagement
- Systems of Record
RAIN RFID for Systems of Record

“…About 15 to 20 percent of your inventory is accounted for by the last unit in the store…pick to the last unit”

“RFID is the air supply for retailers.”
RAIN RFID for Systems of Engagement

Item Intelligence at NRF 2015

Figure: Forrester Wave: B2C Commerce Suites, Q1 2015
RAIN RFID for Systems of Intelligence

What data do you need?
Item Intelligence Platform

Systems of Record → Systems of Intelligence → Systems of Engagement

Item Intelligence Software: ItemSense

Portals/Gateways/Handhelds

Readers

Reader ICs

Tag ICs

Retail Items
Supplier’s perspective

Ken Duane, CEO
Heritage Brands

“...my margins improve, I’m selling stuff at full price…”

Q: What would you tell retailers who are on the fence [about RFID]?
A: “Are you crazy”
Supplier perspective

- Increasing volume
- Decreasing unit cost
What is the role of your store?

We are piloting... RFID to give customers better access to the item they are looking for, including online inventories while they shop.

Celeste Burgoyne, Lululemon, VP Store Operations
IoT depends on connectivity: item intelligence about trillions of everyday items

- Locations
- Apparel
- Healthcare
- Fresh Food
- Logistics
- Pharmaceuticals
- Liquor
- Electronics
- Consumables

ITEM INTELLIGENCE
Identify • Locate • Authenticate

ITEM CONNECTIVITY

Internet of Things

DEVICES CONNECTIVITY

Internet of Devices