IS RETAIL MOVING TOWARDS FIXED RFID?

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Identification, Measurement & Integration
AGENDA

01. Current Trend

02. Fixed Infrastructure

03. Case Studies
CURRENT TREND IN RETAIL
EVERYTHING IN-FOCUS

Retail with RFID = Delivering exceptional visibility

Towards ZERO
RFID systems provides exceptional inventory control moving towards zero OSS

Towards ONE
RFID systems measurement helps towards producing lot sizes of ONE

Towards INFINITY
RFID systems provides INFINITE number of read points to maintain inventory

R = Range
F = Flexibility
I = Intensity
D = Density

4 RETAIL WITH RFID

Range

15 Meters
WHAT DO WE KNOW ABOUT RFID IN RETAIL?

Study

Adoption

2018 ADOPTION

69%

BOPUS

72%

Of retailers who have adopted or piloted RFID offer a BOPUS capability

Use-Case

55%

Of retailers that have adopted or piloted RFID plan to enable smart technology such as smart checkout and smart fitting rooms to improve customer engagement

ROI

98%

Of RFID adopters reported an ROI of at least 5% for at least one use case

- Inventory Accuracy: 67.4%
- Customer Satisfaction: 64.6%
- Store Out-of-Stocks: 16.5%

- Sales Increased: €1.4 billion
- Stock Holding Reduced: 15%
- Stock Loss Reduced: 12%
FIXED INFRASTRUCTURE
FIXED VS HANDHELD READER IN RETAIL?

Handheld

- 99% of HH are used as Geiger counter
- Human Coordination required
- Single functionality – stock take

Fixed

- Variety of application – Location Tracking, In-Out, Robots etc.
- Completely M2M Interaction
- Self-configuring (Location tracking in the day vs Inventory in the night)
# FIXED INFRASTRUCTURE IN A STORE

<table>
<thead>
<tr>
<th>In-Out</th>
<th>Need</th>
<th>Benefits</th>
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<tbody>
<tr>
<td></td>
<td>Retail stores becoming more dynamic with a range of products and</td>
<td>Fixed readers provides the best data possible to manage products and</td>
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<tr>
<td></td>
<td>customer behavior</td>
<td>customer expectation</td>
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<tr>
<td>Grid</td>
<td>Increasing labour costs – Significant time spent on Stock take and</td>
<td>Fixed Readers eliminates the need for Human Interaction thereby</td>
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<tr>
<td>Dense</td>
<td>reconciliation</td>
<td>enable full M2M Communication</td>
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<tr>
<td>Loose</td>
<td>Dual focus on Lot Size of One Vs. managing large SKU</td>
<td>Fixed readers have the dual-capability to provide location tracking and</td>
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<tr>
<td>Last Seen</td>
<td></td>
<td>stock-control</td>
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<tr>
<td>Smart Shelf</td>
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RETAIL COVERAGE MODELS

1. In and Out
   - In-Out Coverage
2. On the aisle
   - Grid Coverage
3. Everywhere
   - Dense Coverage
4. Loose Coverage
5. Last Seen
6. Smart Shelf
Dense Coverage Model

1. Tracking every item on the shop floor to eliminate OOS
2. Improved customer interaction with the items and store associates
3. Dual-purpose of stock-take and location tracking
OMNI-CHANNEL SUPERMARKET

1. Tracking every item on the shop floor to eliminate OOS
2. Minimise effort to find missing items with approx. locationing
3. Minimise labour cost to perform periodic stock-take (with RFID HH)
1. Improving trying-buying ratio: Items in fitting room made to POS

2. Deep learning techniques for servicing different customer needs

3. Track back-store to front-store efficiency
THANK YOU

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