RFID RAIN 2019

The RFID Technology, a tremendous enabler for Fashion
Who is Temera
Temera, Smartrac and Lab ID join forces to enhance IoT impact on the High Fashion and Luxury markets
TEMERA Smartrac and Lab-Id Global Footprint

TEMERA Directs Locations
Firenze (HQ)
Bologna
Milano
London
Stuttgart
New York
San Marcos USA (PM, Delivery and Technical Office)
Shanghai (PM, Delivery and Technical Office)
Hong Kong (Sales Office next Opening)

Headquarter
Manufacturing
Sales and Services
R&D, Software and Solutions
Temera: Delivering RFID since 2009

Since 2009 FOCUSED in delivering RFID for FASHION & LUXURY Market

<table>
<thead>
<tr>
<th>Year</th>
<th>Clients</th>
<th>Y/Income</th>
<th>Team peoples</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>~5</td>
<td>1.3M €</td>
<td>12</td>
</tr>
<tr>
<td>2011</td>
<td>~5</td>
<td>1.3M €</td>
<td>12</td>
</tr>
<tr>
<td>2013</td>
<td>~30</td>
<td>3.8M €</td>
<td>25</td>
</tr>
<tr>
<td>2016</td>
<td>~30</td>
<td>6.5M €</td>
<td>45</td>
</tr>
<tr>
<td>2019</td>
<td>~70</td>
<td>13.5M €</td>
<td>95</td>
</tr>
</tbody>
</table>

SMARTRAC

Clients: ~40
Y/Income: 6.5M €
Team peoples: 45

New Headquarters

Clients nr: ~70
Y/Income: 13.5M € (2018)
Team peoples 2019: 95
Standard RFID Applications for F&L Market
The RFID Key Values in the Luxury market

MANUFACTURING
- Production Progress
- Quality Control
- Anti-Counterfeiting

LOGISTICS
- Process Optimization
- Inbound/Outbound
- Management Work Peaks
- Inventory Visibility
- Grey Market
- Traceability Supply Chain

STORE
- Costs Reductions
- Stock Visibility
- Seller Assistant
- Sales Uplift

CUSTOMER EXPERIENCE
- Magic Mirror
- Digital Warranty
- Fitting Room
Production & Logistic Applications

1. Anti Counterfeiting
2. Grey market control
3. Quality Control
4. Automatic Inbound
5. Automatic Outbound
Warehouse logistic flow - OUTBOUND

- PICKING
- OUTBOUND (WITH RFID SYSTEM)
- TRUCK LOAD

Enhance standard WMS capabilities
Retail Operation

1. Automatic Inbound
2. Store to store
3. Sales & Return management
4. Seller assistant
5. Antitheft system
6. Inventory
7. RTLS
01 Inbound and Anti-theft

**IMPACT**

- The store operator scans the incoming products to the store warehouse through a PDA or a fixed workstation, verifying the consistency between physical and theoretical.
- The operator does not have to apply the anti-shoplifting hard tag because the RFID label also performs this function.

**BENEFIT**

- Dramatic reduction of time devoted to the activity of receiving goods: from tens of minutes to seconds.

ABOUT 4H SAVED PER STORE PER WEEK
02 Inventory

**IMPACT**

- An accurate inventory of variant / size can be done in less than 30 minutes
- The same can be done to verify the stock with the affiliates

**BENEFIT**

- Inventories much more frequent and much more precise

**OBJECTIVE:** GREATER PRECISION UP TO 99%
**03 Outbound (Store-to-Store)**

**IMPACT**
- Automatic creation of the shipping list with scanning the actual products through a PDA
- Verifying the consistency between physical and theoretical at the receiving

**BENEFIT**
- Better Store-To-Store product accuracy
Fitting Room

Movement - Fitting room

ITEMS - A

ITEMS - B

1st ROI between tried and sold

2nd ROI between tried and sold + people entered in the store

Better Insight on success rate for SKU
The Seller Assistant

The seller assistant is one of the applications that "downloads" the benefits of an implementation of RFID technology, leveraging the availability of a constantly updated stock, made possible by the frequent inventories that can be done in a store.
RTLS
Real Time Location System

- Real time Inventory
- Real Time Movement

Locate your time anywhere and in any moment
New keywords for RFID
End-User Traceability and 360° integration

Society is evolving, IoT is now IoE
Millennials are always connected, informed, influenced

People wants to know what they are buying and if it is sustainable
End-To-End traceability and 360° integration

Global traceability between production to end-user

- **Tag Supplier**: TAG production associated to production order and worker
- **Factory #1**: Verification of the TAG in the production facility
- **CDC**: Reading TAG in distribution center
- **Warehouse**: Outbound and TAG association to final destination so Store or Wholesaler
- **Store**: Verification of goods arrival in the store
- **End-User**: End-User verification of product authenticity and product lifecycle
End-User verification

Customer can autonomously verify the authenticity of products. Strong fidelization messages
## RFID in Retail

**from Retail operation to realtime stock and Omnichannel**

<table>
<thead>
<tr>
<th>Retail Operation</th>
<th>Realtime stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Automatic receiving</td>
<td>- Common stock</td>
</tr>
<tr>
<td>- Store-to-Store</td>
<td>- effective replenishment</td>
</tr>
<tr>
<td>- anti theft</td>
<td>- Customer Satisfaction</td>
</tr>
<tr>
<td>- inventory</td>
<td>- Fidelization</td>
</tr>
</tbody>
</table>

Customer wants to be **unique** and buy **unique** products

The number of seasons per year increased considerably in the last years

Nowaday it is fundamental to have the right product in the right moment and know where customer can find it
Inventory challenges & improvement possibilities

<table>
<thead>
<tr>
<th></th>
<th>BEFORE RFID</th>
<th>AFTER RFID</th>
<th>IMPROVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory accuracy</td>
<td>67,4%</td>
<td>84,5%</td>
<td>25,4%</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>64,6%</td>
<td>71,7%</td>
<td>11,0%</td>
</tr>
<tr>
<td>Store Out-of-Stocks</td>
<td>16,5%</td>
<td>9,8%</td>
<td>40,6%</td>
</tr>
<tr>
<td>Shrinkage</td>
<td>17,8%</td>
<td>11,8%</td>
<td>33,7%</td>
</tr>
<tr>
<td>Profit Margin</td>
<td>8,9%</td>
<td>14,3%</td>
<td>60,7%</td>
</tr>
<tr>
<td>Average Markdown</td>
<td>14,8%</td>
<td>11,9%</td>
<td>19,6%</td>
</tr>
</tbody>
</table>

- The ROI model for RFID is relatively mature and these figures are taken from multiple deployments in many different retailing sectors.
- A project can normally return a significant ROI from one of these metrics, not all are required.
- The overall aim is simple: Earn more for doing Less.
Why Retail Market is evolving

MARKET EVOLUTION AND CUSTOMERS EXPECTATIONS
- Increasing number of seasons per year and increasing number of SKU, but decreasing n. of pieces per SKU.
- Increasing worldwide number of stores
- Increasing Competition (Including Fast Fashion brands)
- Increasing Customer Expectations - Check availability by CustomerCare or WebSite and collect in Store
- Customer looking for specific SKUs in store
- Ever-evolving Technology

COMPANY ORGANIZATION
- Small stock availability for each store
- Increasing number of shipments from MainWH
- Increasing the importance to certificate the shipments
- Increasing number of transfer Store2Store

It’s not possible to reserve the item in the stock of the store because the stocks are shared.
Use Case

Different channels playing a different role in a bigger game

1

Only Buy Online

Both Channels

3

Only Buy In Store

4

7-13
Use Case
Experiences with in-store returns of online purchases

45%
Made an additional purchase when processing a return on a website

70%
Made an additional purchase when returning in store
RFID TAG history and r/evolution
UHF

Single embedded TAG or dua/multiple TAG per product

Item tracking
Integration in Production
• Anti Counterfeiting
• Grey market control
• Quality Control

Logistic process Optimization
• Automatic Inbound
• Automatic Outbound
Single TAG combining UHF with NFC technology for customer engagement (limited to Android devices)

Introduced even before the rumors about iOS enabling NFC (low penetration in fashion&luxury market)
Not optimal for logistic process (dual TAG)
2017 Apple introduce first compatibility with NFC technology for iOS devices

This finally enabled NFC technology for Fashion & Luxury market

Better performance
Better integration into garments
More freedom in NFC/UHF selection

Additional application for end-user authenticity verification and customer engagement
RFID for brand protection

The cost of counterfeiting for the global apparel industry is estimated to $1.8 trillion. According to a recent study, the counterfeiting good represents the 10% of the global market.

Wine & spirit Market use case:
- **Mediterranean (East):** 56.2%.
- **South-East Asia:** 69%.
- **Russia:** 35-50%.
  The market for counterfeit whiskey in Russia is estimated to be 166 million euros.

- According to the International Center for Alcohol Policies, **30% of alcohol consumed Worldwide is illicit** and experts from Wine Spectator estimate that **20% of the wine Consumed worldwide is counterfeit.**
Headquarter

Florence
Via di Pianvallico, 5
50129, Scarperia - IT

Milan
Via Vittor Pisani, 20
20144 - IT

London
242-246 Marylebone Road
NW1 6JQ

New York
377 Park Ave S, New York,
NY 10016 - US

Tel: +39 055 53.92.960 - Fax: +39 055 53.92.959

www.temera.it