Nuovi casi d’uso per implementare la tecnologia RFID nel tessile e fashion retail: da strumento di riduzione dei costi a leva per lo sviluppo del business

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Founder and Head, RFID Lab
Int. journal RF tech.: R&A EIC
Global RF Lab Alliance Network, Past President

Charter member of:
Powered by:

Department of Industrial Engineering
University of Parma
ITALY

Scientific coordinator of:
Agenda

- Introduccion
  - RFID Lab
  - retail research roadmap

- RFID and retail
  - Why retail&apparell?
  - What are current and future use cases?
### Research center mission

**how to create value through RFID and EPC Network deployments**

### Research fields

RFID and EPC network Implementation, **BPR, business value and ROI, BI & data analysis**

### Business processes

**Operations, Industrial Logistics and supply chain management**

### Industries

**Food, FMCG, Fashion & Apparel, Pharmaceutical and Healthcare, public administrations**
Global RF Labs Alliance network

- Confederation of RF-focused labs
- Purpose is to provide a mechanism for communication and collaboration among RF labs
- GRFLA members share resources, such as students and professors, and collaborate (as appropriate) on research projects
- Leveraging each other competencies to:
  - avoid duplication of efforts;
  - handle large scale projects and better access to research funding;
  - Speed up the dissemination of research results to industries
- RFID Lab is a charter member of GRFLA
Internet of Things e scenari innovativi di implementazione: la tecnologia RFID nel retail
Research

International Journal of RF Technologies: Research & Applications

IJRFT:R&A will establish a forum for exchanging information and research results regarding RF technology deployment, data analytics, and business value creation.

For technology deployment, articles should focus on how to deploy the technology to ultimately create business value.

For data analytics, the Journal will publish articles that focus on how and where to capture the data, present approaches for finding patterns in the data which may reveal process anomalies or areas for improvement, and examine the development and use of software related to RF technologies.

Ultimately, all articles should have a clear link to the creation of business value. Business value is taken in its broadest context. It can thus be transferred to different industries or different business functions, including retail, aerospace, automotive, manufacturing, pharmaceutical, public administration and logistics providers, among others.
Research

International Journal of RF Technologies: Research & Applications

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## RFID Lab

**www.rfidlab.unipr.it**

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**Technology & media partners**

### Board of Advisors
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RFID Lab

RFID warehouse

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**Fabbrica Futuro**
Idee e strumenti per l’impresa manifatturiera di domani
10 Giugno 2014
Starhotel Majestic - Torino
RFID Lab

RFID fashion store

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RFID Lab – BoA Fashion

Research & technology transfer: From lab to field

2008

April – Board of Advisors fashion was set
Charter members: 13 major brands in fashion industry

2008 - 2011

Research Projects:
- The impact of RFID in the fashion supply chain
  - Business case
  - Technology Tests
- RFID for anti counterfeiting
- RFID for Electronic Article Surveillance

2009 - 2013

Pilot activities:
- RFID fashion store (http://www.rfidlab.unipr.it/eventi/fashion/2009/)
- RFID fashion pilot (www.rfp.unipr.it)
- Diffusione tessile pilot

2011- 2013

RFID 4 fashion certified program

RFID deployments:
consultancy and support, PM, KPIs, BI & data analysis
RFID adoption in retail & apparell

Questions to address

– Why is retail leading the way?

– What are the current use cases?

– What are the benefits?

– What are the likely future scenarios?
Fashion & apparel projects - overview
RFID adoption in retail & apparel

Current status

– Retail makes about 75% of consumption of UHF tags (3.2 B tags)
– In 10 years 10% of items are tagged
– 12 years from the introduction of the first mobile phones for consumers to reach 10% penetration in the US market
– Only seven years to reach 40% penetration.

25B garments/year is the potential tag consumption by top 50 retailers

Graph showing potential growth from 2009 to 2021, with a peak at 2.4Bn/yr in 2013.
10 years of RFID projects

2008 - 2010
Logistics and supply chain automation

Cost reduction

Process automation
Loss prevention

2010 – 2012
Retail

Inventory accuracy
OOS & store replenishment

2013 - 2018
Customer experience

Turnover increase

Omnichannel strategies – distribution stores
Smart and Social fitting rooms

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