



Fabbrica Futuro

Idee e strumenti per l'impresa manifatturiera di domani

10 Giugno 2014

Starhotel Majestic - Torino

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

Department of Industrial Engineering
University of Parma
ITALY

Charter member of:

Powered by:



Scientific coordinator of:



Agenda



✓ Introducion

- ✓ RFID Lab
- ✓ retail research roadmap

✓ RFID and retail

- ✓ Why retail&apparell?
- ✓ What are current and future use cases?



Internet of Things e scenari innovativi
di implementazione: la tecnologia
RFID nel retail....



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RFID Lab

www.rfidlab.unipr.it

Research centre 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



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Research

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**

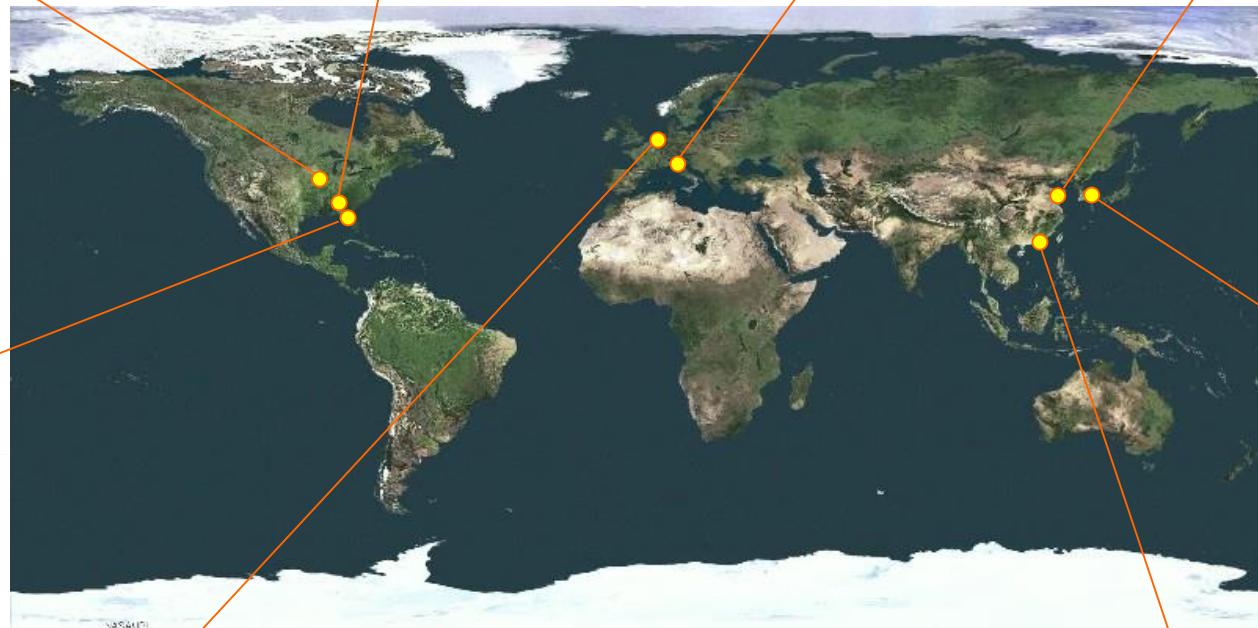


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Research



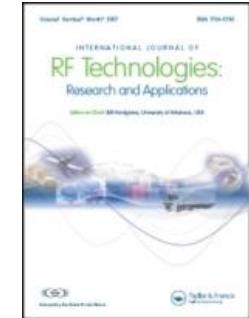
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Research

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.



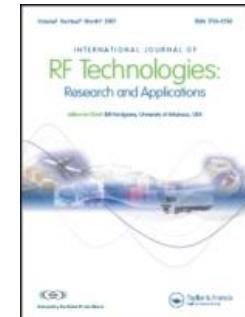
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Research

International Journal of RF Technologies: Research & Applications



Editorial board

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Dieter Uckelmann - University of Applied Sciences Stuttgart - Germany

Indexed

✓ Cabell's Guide or Directory

✓ Compendex

✓ SciVerse Scopus



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Technology transfer models

Technology & media partners



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Technology Transfer

Alliance partner



ID-SOLUTIONS
The future behind

Technology
partners



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RFID Lab – Board of Advisors

FMCG - Members



RFID Lab – Board of Advisors

FASHION - Members

AEFFE

UNITED COLORS
OF BENETTON.

ABD apparel

Diffusione Tessile
Capi firmati, smarcati, scontati

IMAX

DOLCE & GABBANA
INDUSTRIA S.P.A.
 

GUCCI

E
FENDI

 **lotto**
ITALIAN SPORT DESIGN


Miroglio
FASHION

NORBERT
DENTRESSANGLE


PINKO


TRUSSARDI

Gruppo
ZUCCHI
biancheria per la casa, hometextiles



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Board of Advisors

RFID Lab: 2,000 sq.ft. Closed loop high speed roller and belt conveyor, sorter (cases), roller conveyor (pallet), wrapping machine, FLT, drive in storage shelf, full scale dock door

Facility & equipments



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RFID Lab

RFID warehouse



RFID Lab

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RFID fashion store



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RFID Lab

RFID fashion store



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

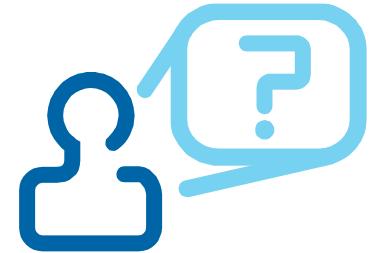


RFID deployments:

consultancy and support, PM, KPIs, BI & data analysis

RFID adoption in retail & apparel

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?



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Fashion & apparel projects - overview

GUCCI


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Capi firmati, smarchiati, scontati

LUXOTTICA

PINKO

MAX&Co.

NORBERT
DENTRESSANGLE



IMAX

CALZEDONIA



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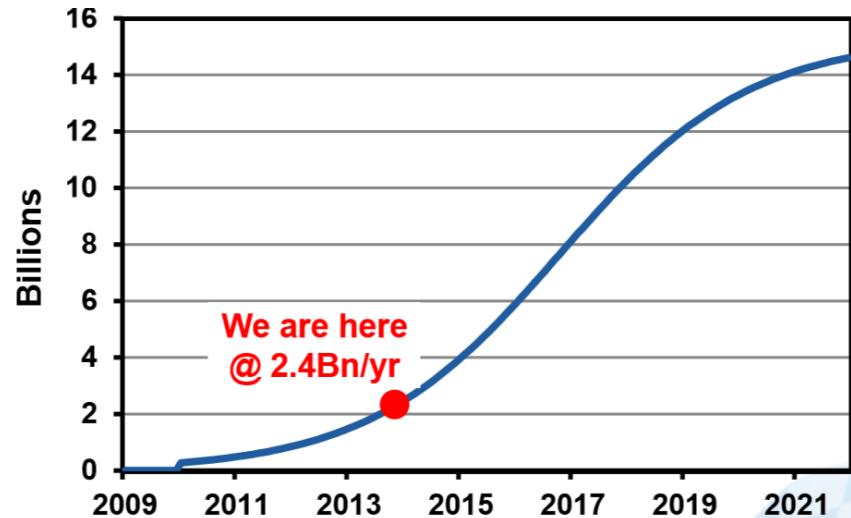
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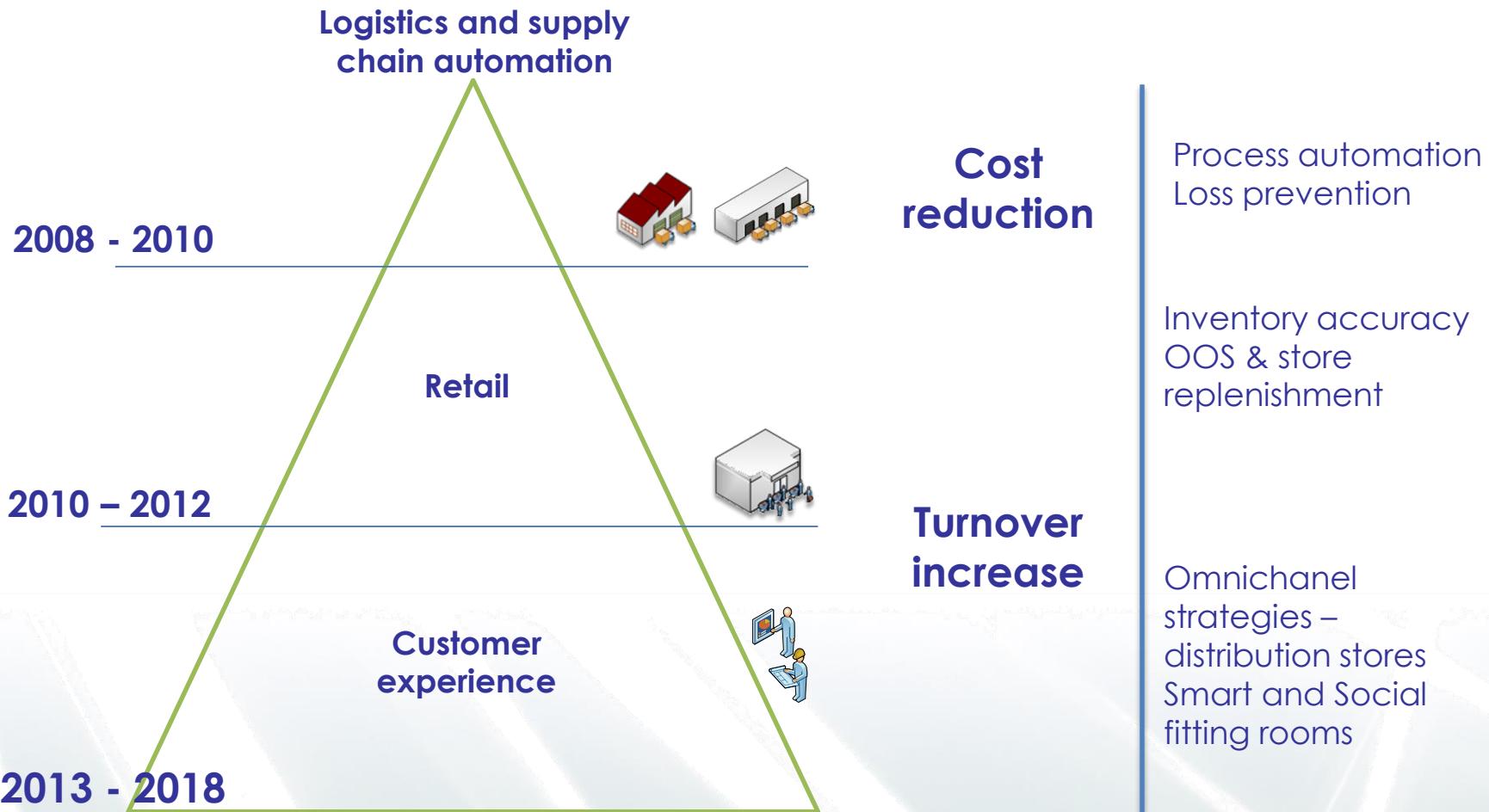
Current status

- 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



10 years of RFID projects





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Charter member of:

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Scientific coordinator of:

