



RFID4fashion

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NXP Semiconductors RFID
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NXP Semiconductors

- ▶ Established in 2006
(formerly Philips Semiconductors)
- ▶ Builds on a heritage of
50+ years of experience in semiconductors
- ▶ 37.000 employees
- ▶ Sales of € 4.8 Bln (2005)
- ▶ Sales: 35% Greater China, 31% Rest of Asia,
25% Europe, 9% North America
- ▶ Headquarters: Eindhoven, The Netherlands
- ▶ Key focus areas: Mobile & Personal, Home, Automotive &
Identification, Multimarket Semiconductors



Identification

Lead in focus areas

- ▶ #1 in RFID solutions, with more than 2 billion ICs shipped
- ▶ #1 in NFC technology
- ▶ More than 80% of the world's e-passports use our ICs
- ▶ Approximately 80% of all public transport schemes use our MIFARE® technology
- ▶ Chosen by leading medical industries worldwide to track medical tests and authenticate medications
- ▶ More than 50% of all RFID installations in libraries use NXP's ICODE
- ▶ Over 50% of all fashion RFID projects use NXP ICs.





Product Guide

Size	Color 1	Color 2	Color 3
36	✓	✗	✗
37	✓	✓	✗
38	✓	✓	✗
39	✓	✓	✗
40	✓	✓	✗
41	✓	✓	✗

Available on High Heel

Accessories Video 79,90 €

Speed up counting in production



Tunnel reader count 60 shirts in box within 1 second.

Imagine to see your inventory real-time any time



With mobile readers and smart shelves.

Enhance the shopping experience of your customers

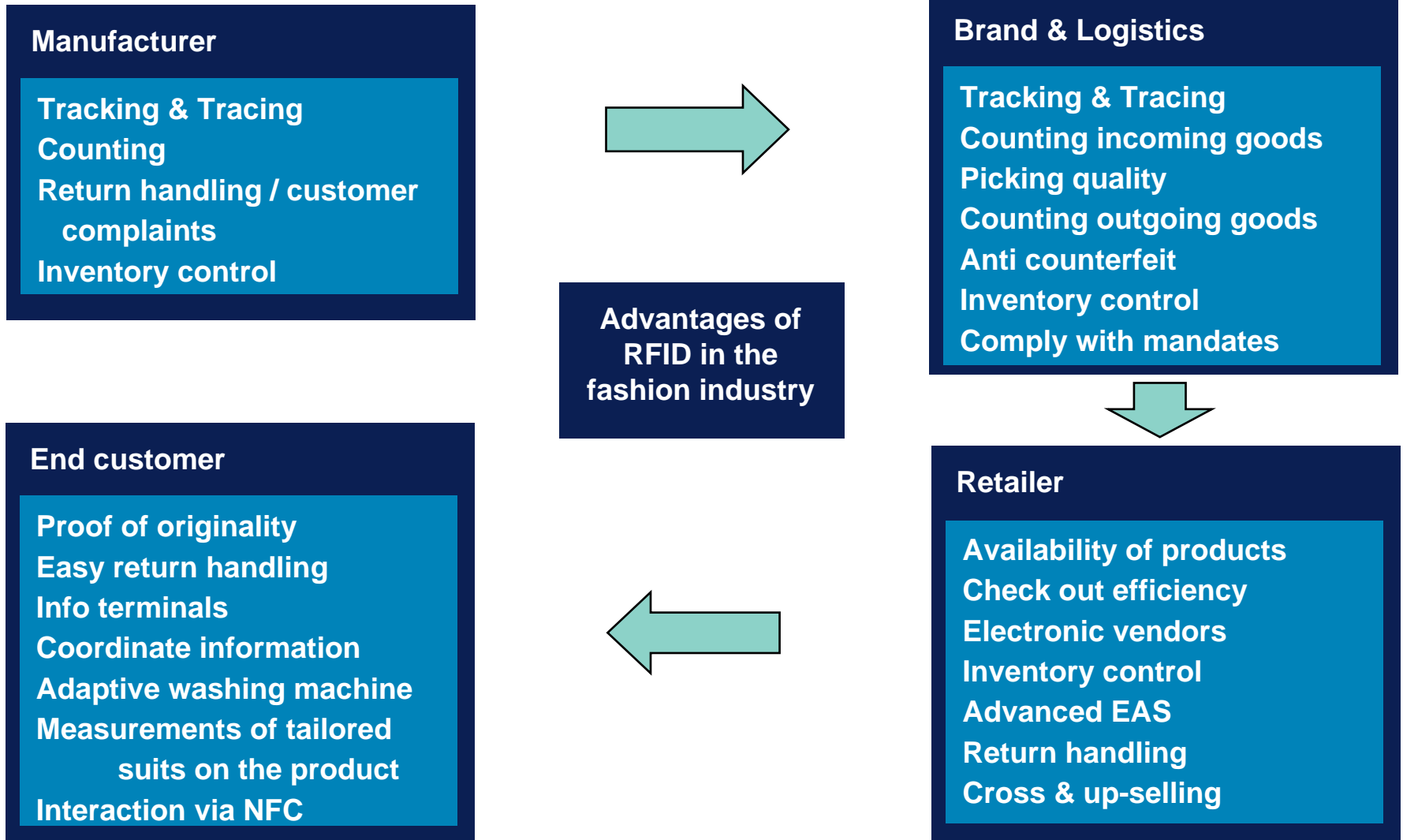


Fashion is on the fast track to RFID item tagging

- ▶ RFID friendly environment with limited metal or water
- ▶ Appropriate average price level of textile vs. transponder
- ▶ No time to waste in the supply chain



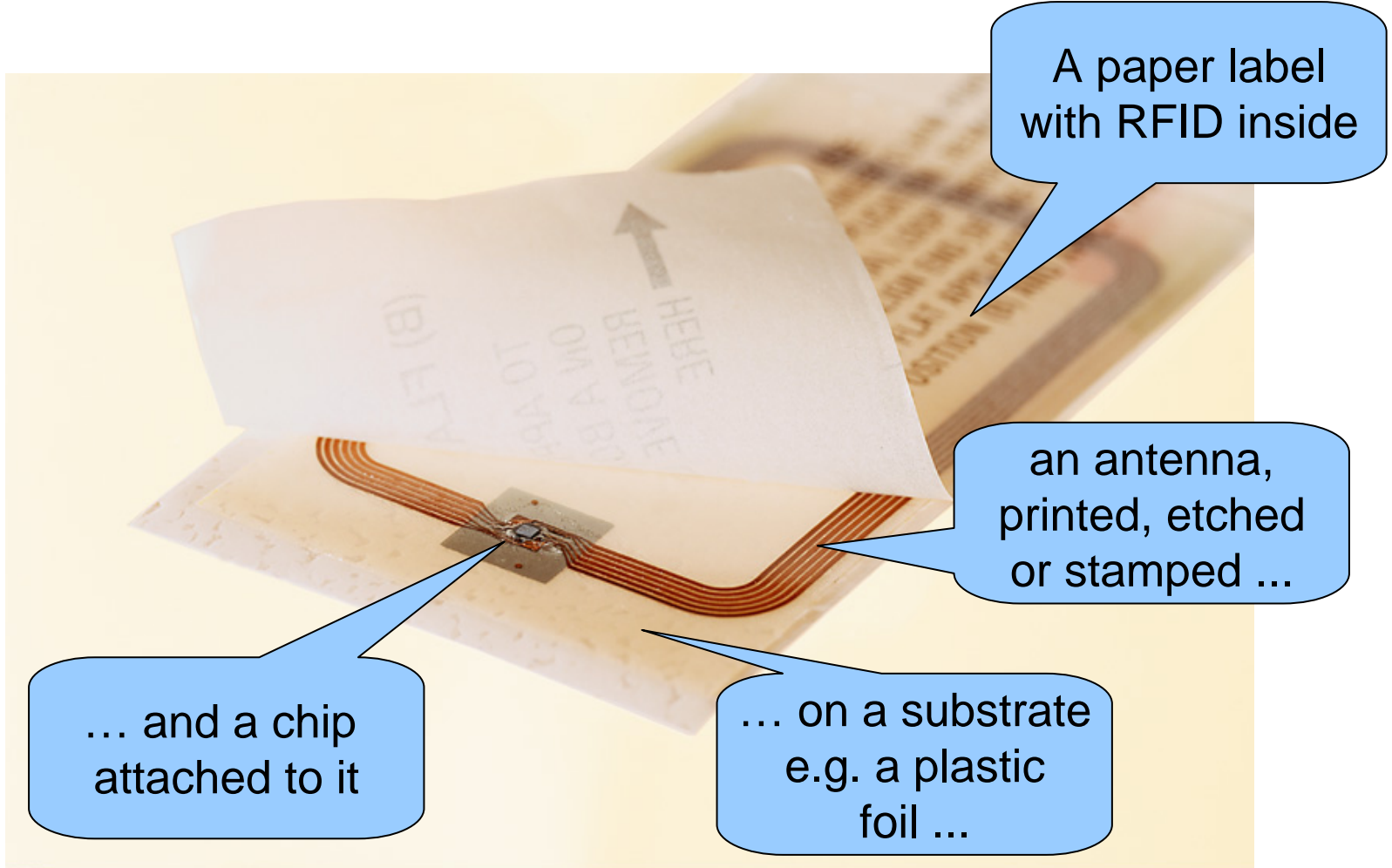
Advantages of RFID along the fashion SCM



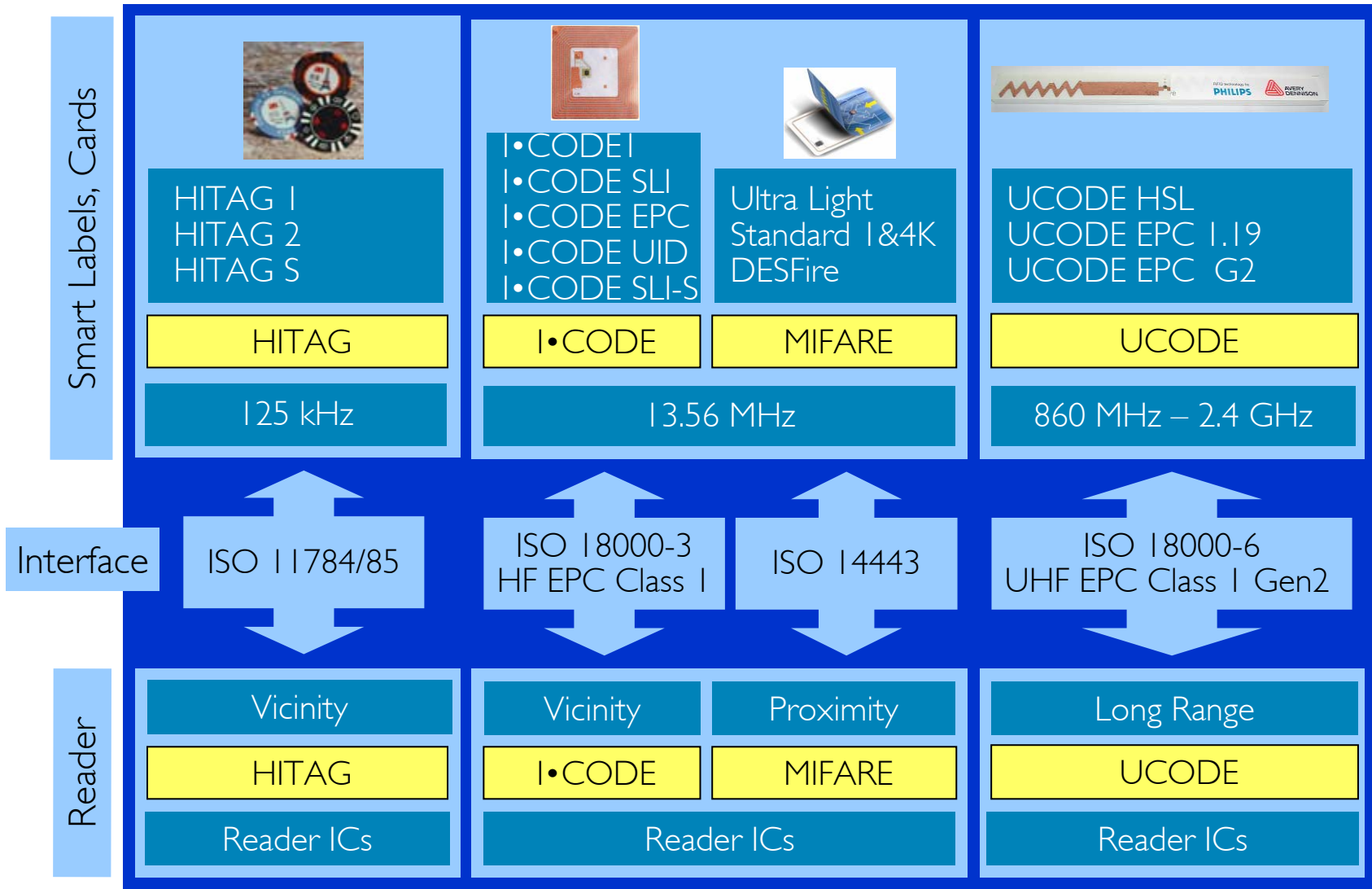
Generic benefit calculation (EU example)

Step	Benefit	Value
Production	Counting outgoing goods	2ct
Warehouse	Counting incoming/outgoing goods	4ct
	Picking & Packing	4ct
Transport	Verification, processing	3ct
Brand	Anti counterfeit	3ct
	Less stock -> less bound capital	2ct
Retail shop	Verification incoming goods	3ct
	Attach EAS label	5ct
	Detach EAS label	5ct
	Inventory control	2ct
	Check out efficiency	2ct

What is a Smart Label ?



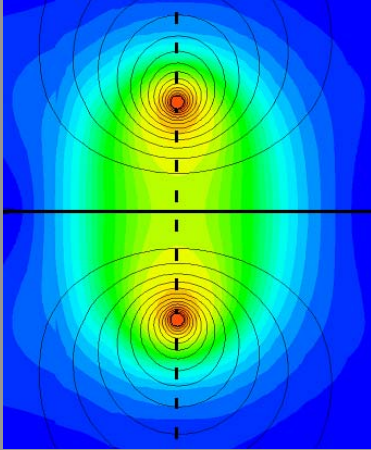
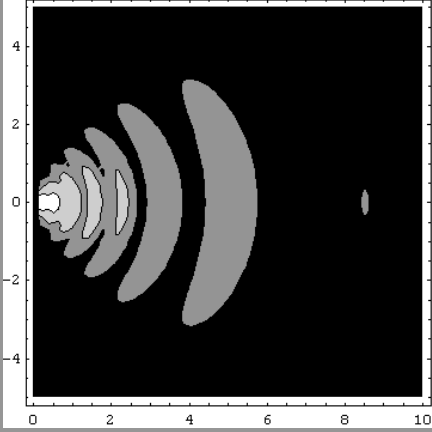
NXP RFID Product Portfolio



Business Development: Value Chain & Partners



HF vs. UHF

	13.56 MHz	UHF
Reading range	→	↗
Influence of materials	↗	→
Global use	↗	→
Field characteristics		

A range of specific labels for the fashion industry are available.

- ▶ Hard coins tags mainly for professional laundry applications.
- ▶ Cost effective paper hang tags.
- ▶ Labels, which can be integrated like traditional care label.
- ▶ Re-usable hard tags with integrated EAS features.
- ▶ Development of textile labels with woven antennas.



Privacy needs to be carefully addressed

- ▶ Open communication is key. Why and how RFID is used.
- ▶ Features like the destroy command empowers the customer.
- ▶ After sales benefits for the end customer will increase acceptance.



NFC will open a new dimension of customer interaction based on RFID

HF Reader will be integrated in mobile phones.

-> Your product becomes the key to a multimedia universe.

-> Authenticity checking by your customers.



Manufacturer

Retailer

Alignment groups

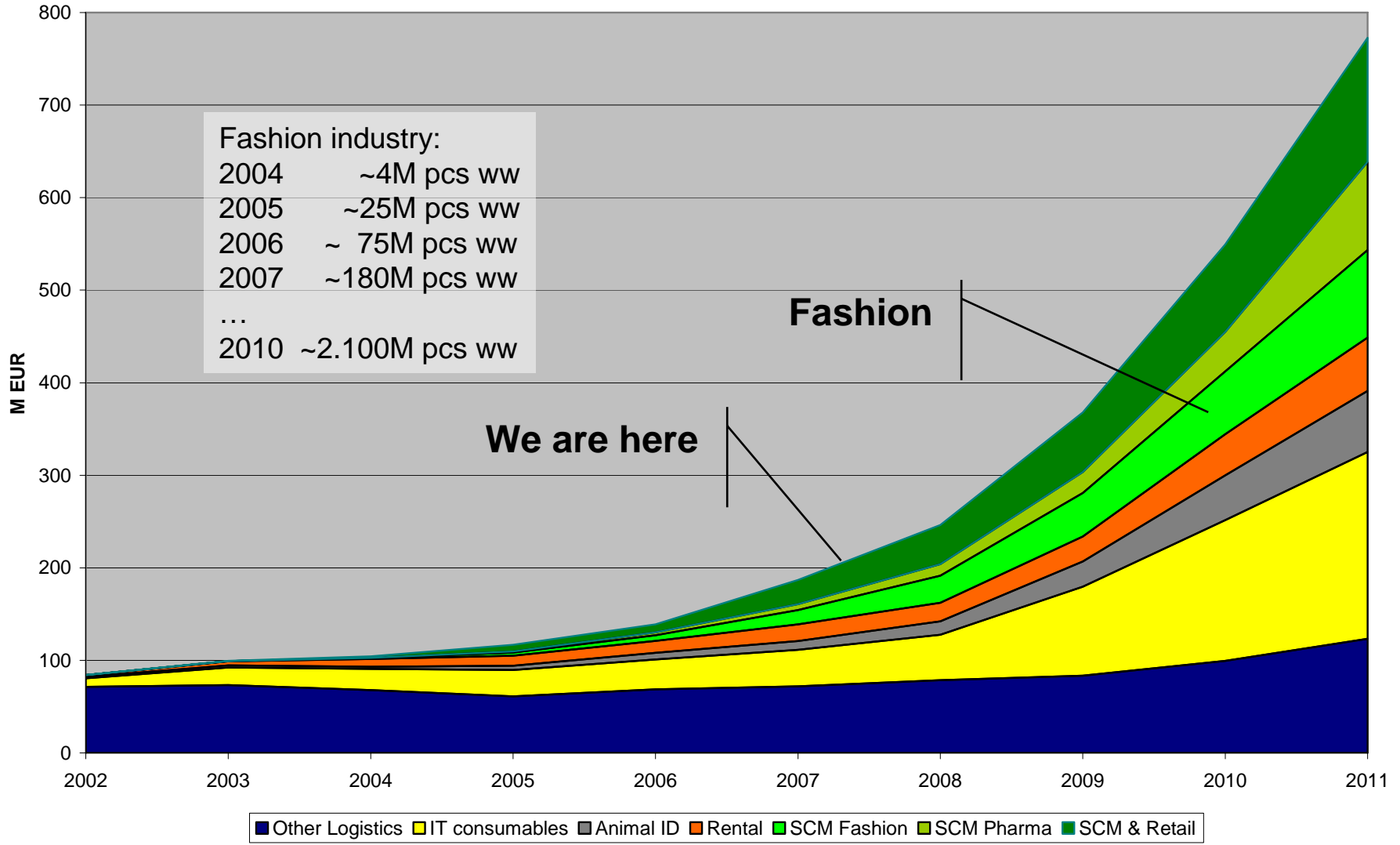
Manufacturers: GERRY WEBER, MARKS & SPENCER, HOUSE OF FRANK, PINKIE, H&M, DEMMI® fash Germany, KOHLS, NIKE, EL CORTE INGLES, MUSTANG JEANS, LIZ CLAIBORNE, DASSI, NAFNAF SHOP, SIXT rent a car, ROSHER, Triumph INTERN, KAUFHOF WARENHAUS AG, BURBERRY, camel active, PRADA, CRYSTAL GROUP, MEPHISTO, s.Oliver®, BREUNINGER, GARDEUR, MEXX, JOOP!, Peek & Cloppenburg KE DÜSSELDORF, PADDOCK'S JEANS, Champion, C&A, OTTO, Sinn Leffers, VF Corporation, UNITED COLORS OF BENETTON, Vögele, jacadi PARIS, ABERCROMBIE & FITCH, WIPRO Applying Thought, KARSTADT, BELLA EAST FASHION STUDIO, INÉD HOMME, VÉRONIQUE DELACHAUX, RENÉ LEZARD, BIG BAZAAR, LAWSGROUP, Dohmen Solutions Logistics & Services, ESQUEL GROUP.

Retailers: H&M, Esprit, Nike, Burberry, Prada, s.Oliver®, Peek & Cloppenburg KE, OTTO, KARSTADT, BIG BAZAAR.

Alignment groups: EPCglobal, GS1 Germany, VDI, GCS, German Fashion Modeverband Deutschland e.V., JAIG (JAHN, APPHEL, INDUSTRY, COUNCIL), Liti, VICS (VOLUNTARY INTERINDUSTRY COMMERCE STANDARDS), AAFA (american apparel & footwear association).

RFID Market development

January 2007



Questions for each project

Item tagging / unit tagging: complying to unit tagging mandates or full control on item level?



ROI: Which benefits can be realized in my company?



Labels: paper label, re-usable tag or textile integration? EAS?



Privacy: information policy, RFID for end customers?





Questions?

