



RFID-solutions for **Fashion Retail**

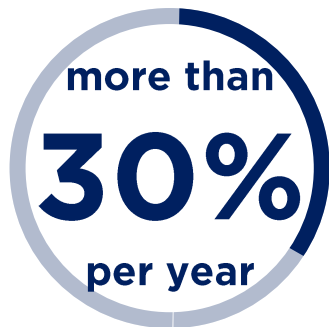


Statistics

The powerful benefits of RFID technology have been advertised for years. But for many years, retailers did not take it seriously.

However, every year more and more retailers are showing interest in RFID technology.

The spread of RFID technology is increasing as retailers are faced with the need to manage inventory and improve their supply chain to increase customer satisfaction.



**The speed of the spread of
RFID technology among
retailers around the world**

In 7 out of 10 of case studies present data showing an increase in sales ranging from 1.5% to 5.5%. For SKUs identified by RFID systems as missing from stock, growth is even higher. Based on this data, 10 companies participating in the study * could achieve an increase in sales of between 1.4 and 5.2 billion euros / year using the RFID .

* «Measuring the Impact of RFID in Retailing: Keys Lessons from 10 Case-study Companies»

Statistics

45 billion

RFID-tags will be sold to the world Fashion market *

In 2028 year

2018 - 8 billion of tags



2019 - 9,1 billion of tags



2020 - 10,8 billion of tags



2021 - 14 billion of tags



According to RFIDJournal.com inventory accuracy on level of Stock Keeping Unit (SKU) is about 65%. RFID technology can increase it to 95% or more. This applies to a wide variety of retail products, including luxury goods, jewelry and quality alcohol.

95%

Large of retailers such as Target, Kohls, Macy's, Lululemon, Uniqlo, Levi's, Adidas, and many others are already taking advantage of the radio frequency identification technology.

* According to the report IDTechEx «RFID Forecasts, Players and Opportunities 2018-2028»

RFID for fashion retail

RFID is the way of automatic identification of objects providing a possibility of contactless data exchange by means of radio-frequency electromagnetic radiation.

In comparison with "traditional" barcodes using of RFID technology will allow to consider hundreds of objects a minute, at the same time, the subject identifications of unit do not have to be visible to the reader directly as identification is made with the same accuracy and at distance.

The RFID solution for fashion will help the retailer to achieve a main goal – increase in sales volume

The RFID technology optimizes business processes at each stage from production to an ultimate consumer.

RFID in manufacture of wearing apparel



In manufacture the RFID technology is mainly used for management of commodity stocks, logistics, warehousing, supply chains and automatic tracking of objects.

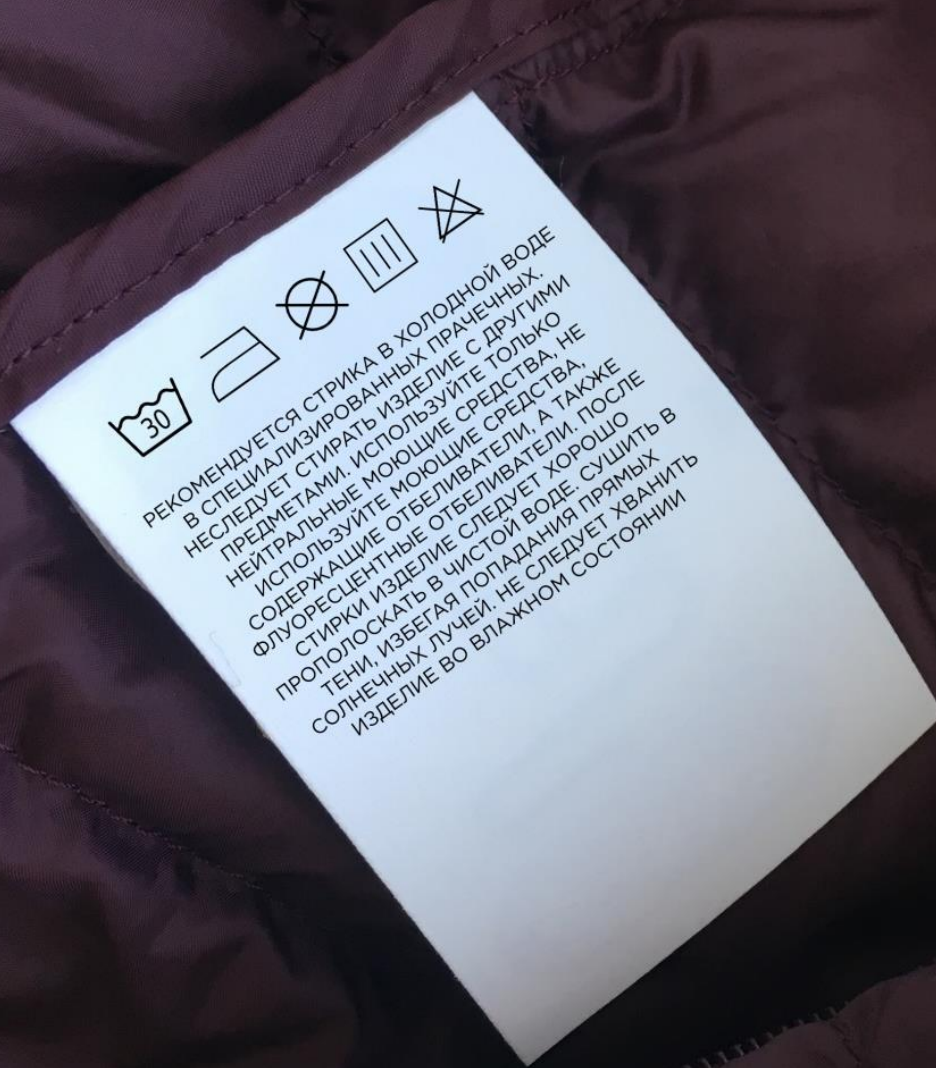
A number of retail dealers and producers, such as Walmart and P&G, already introduced this technology for increase in efficiency of the productions.

RFID increases the speed of collecting, processing and data transmission and provides the accuracy of the obtained information.

How RFID-systems can help you:

- Supply chain management and control over the movement of goods
- Group acceptance / shipment of goods
- Collecting statistics and formation of the reporting
- Expeditious inventory of a warehouse
- Protection against a counterfeit

Clothing marking of FashionTag on manufacture



The FashionTag is integrated into a nylon or satin fabric textile label which is sewn directly into the product during production.

The received of RFID tag can not be removed from the products or transferred to another, and also can not mechanically damage the products of their thin and light fabrics.

The advantages of label with using FashionTag:

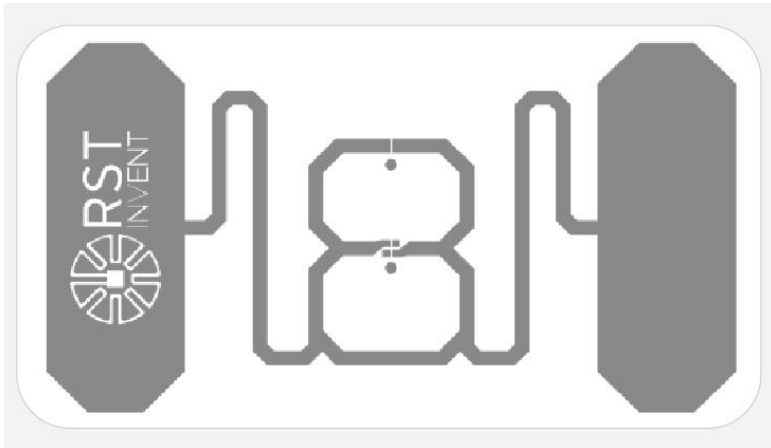
- Brand authentication
- Prevent theft
- Empowering users of the brand, for example, by showing recommendations on the dashboard for creating style

Marking of a finished product

TwinTag is a label sticker designed for labeling clothes and shoes.

It has absolutely the same advantages, as FashionTag and is intended for automation logistic and productions of the enterprise.

The difference is that the TwinTag is not integrated into the tag.



RFID in logistic



The RFID system for fashion retail will provide visibility of product data throughout the entire supply chain from its production to sales points, provided each point of the chain is equipped with RFID equipment.

The advantages of RFID in logistics cycles:

- Increasing the speed of acceptance / shipment
- Increasing speed and accuracy of delivery
- One-time registration of more than 250 items
- Online product tracking

RFID sorting:

- Reduction of the human factor (automatic scanning and data recording without human intervention)
- Reducing sorting errors
- In 8 times faster sorting of clothes

RFID in retail stores

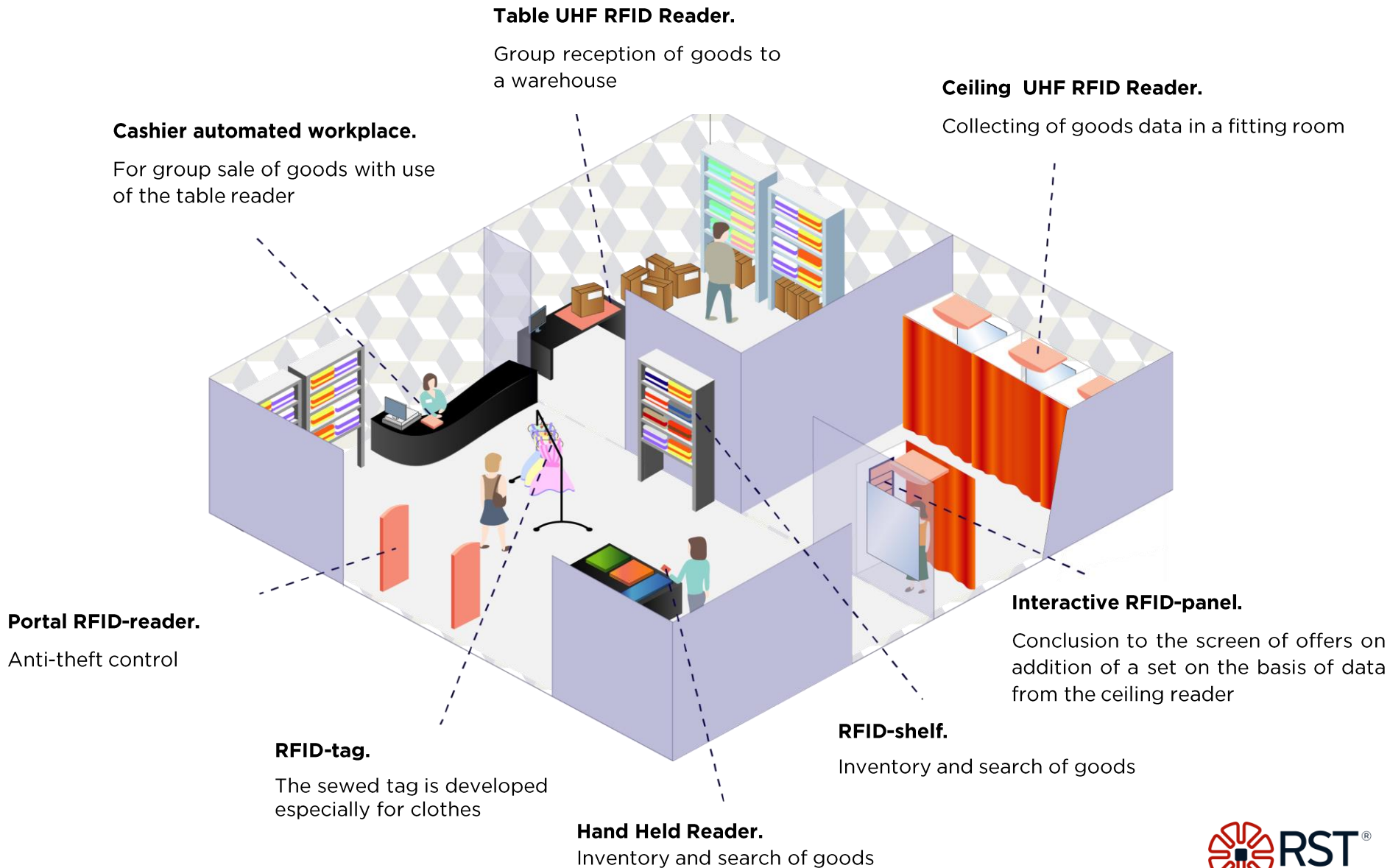


The technology provides the store with the most complete automated accounting system, which helps to prevent the loss of a retail outlet due to deviations in the inventory of goods, administrative and accounting errors, and also shop thefts, including those committed by employees.

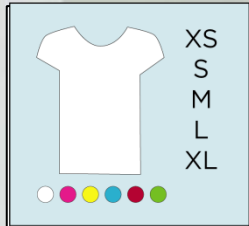
How RFID-systems can help you:

- Operational inventory and accounting of goods in the store
- Prompt replenishment of goods on the shelves and hangers in the sales area
- Collecting statistics to determine popular titles
- Cash operations and theft protection
- Refusal of anti-theft magnets
- Increase in sales in pre-season periods
- Increase customer loyalty
- Collecting information about sales and inventory online

The use of technology in retail stores



«Smart fitting-room»



Recognizes the items taken to fitting-room and displays on the interactive screen full information about all available sizes, variations of color and design in the store



A simple click of a button sends a request to the seller-consultant to replace the size or color of the selected model, or a request to bring another product



On the interactive screen shows items, which will be in harmony with already selected, based on pre-defined looks

The fitting-room is equipped with RFID-antenna and interactive panel, located near mirror. The antenna collects data about tried on goods by reading information from RFID-tags, located in label, **allows retailer to conduct analytics** and identify the most popular products, and also **provides maximum protection against theft** of goods in the fitting rooms.

«Smart shelf»

How «smart shelf» can help you:

- Correction of product layouts in retail outlets
- Assortment availability control
- Control replenishment of the size range
- Adjustment of the occupied area for a certain product
- Fast one-button inventory
- Elimination of regrading

Optimization of all the above processes stimulates the flow of visitors to the store, and, consequently, sales also grow.

«Smart Shelf» - is a reliable technological solution that will allow retailers to reduce customer dissatisfaction by reducing the number of goods missing in the sale, and sellers to free up time to serve customers.

«Smart shelf»



RFID-antenna with a shell thickness of just 14 mm.

The RFID antenna is used in the “smart shelf” to read data from the FashionTag in clothing and footwear.

The minimum thickness of the device allows you to discreetly place it on the bottom of the shelf without disturbing its appearance (the color of the antenna changes according to the customer’s request). You can also integrate it inside the shelf.

The RFID antenna connects to the RFID reader. Up to 32 antennas can be connected to one RFID reader.

The maximum size of a single RFID antenna can reach 800 * 300 * 15 mm and cover the corresponding zone.



RFID-tunnel

The RFID tunnel is intended for scanning of products in group packings.

The tunnel represents the hardware and software system allowing to scan more than 300 units instantly of the marked products without opening packing.

The device can be completed with the conveyor equipment, live rolls, the light-sound alarm system and also the system of autonomous power supply.



UHF RFID Readers



Mobile Handheld Reader is intended for reading of «FashionTag» in labels on clothes and footwear in the course of search of goods and also for inventory of a warehouse or the shop trading floor. The reader can also be used in the course of payment of the order by the buyer.

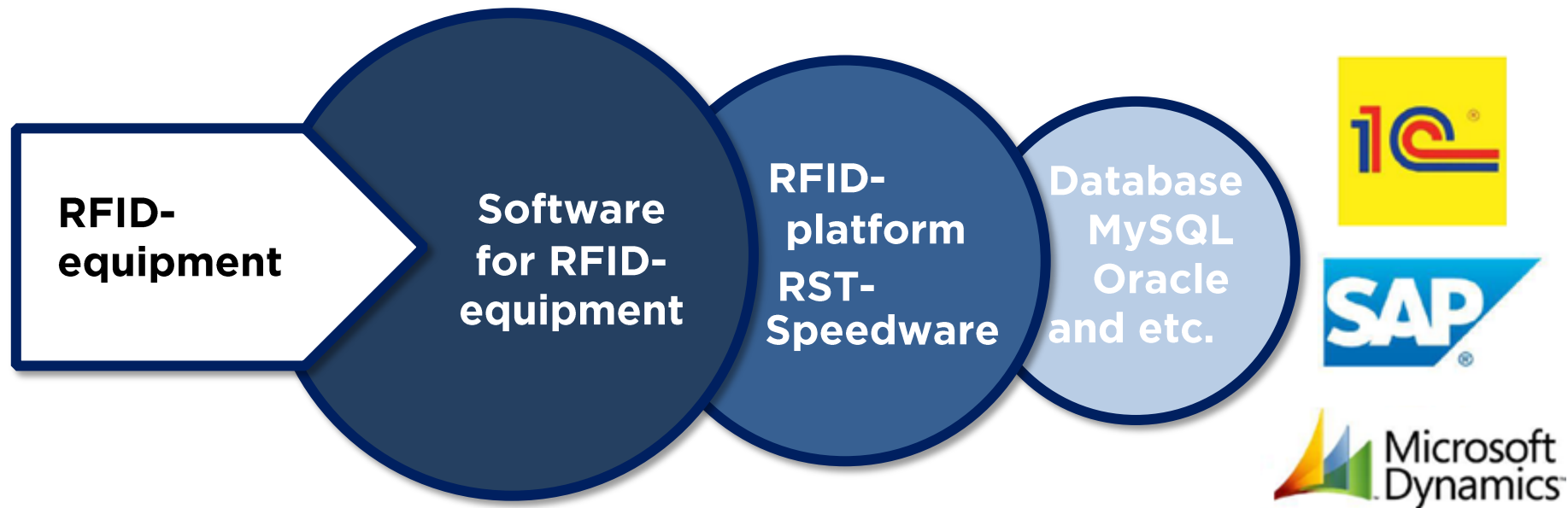
The device is calculated on industrial service conditions and allows to read out RFID tags independently at distance to 7 meters.



Desktop reader RST-Bookos is intended for implementation of simultaneous identification at the checkout of shop of all commodity positions chosen by the buyer.

Software architecture of RFID-solutions

The proposed solution includes modules that automate all the processes of the life cycle of fashion retail products, from production to sales.



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