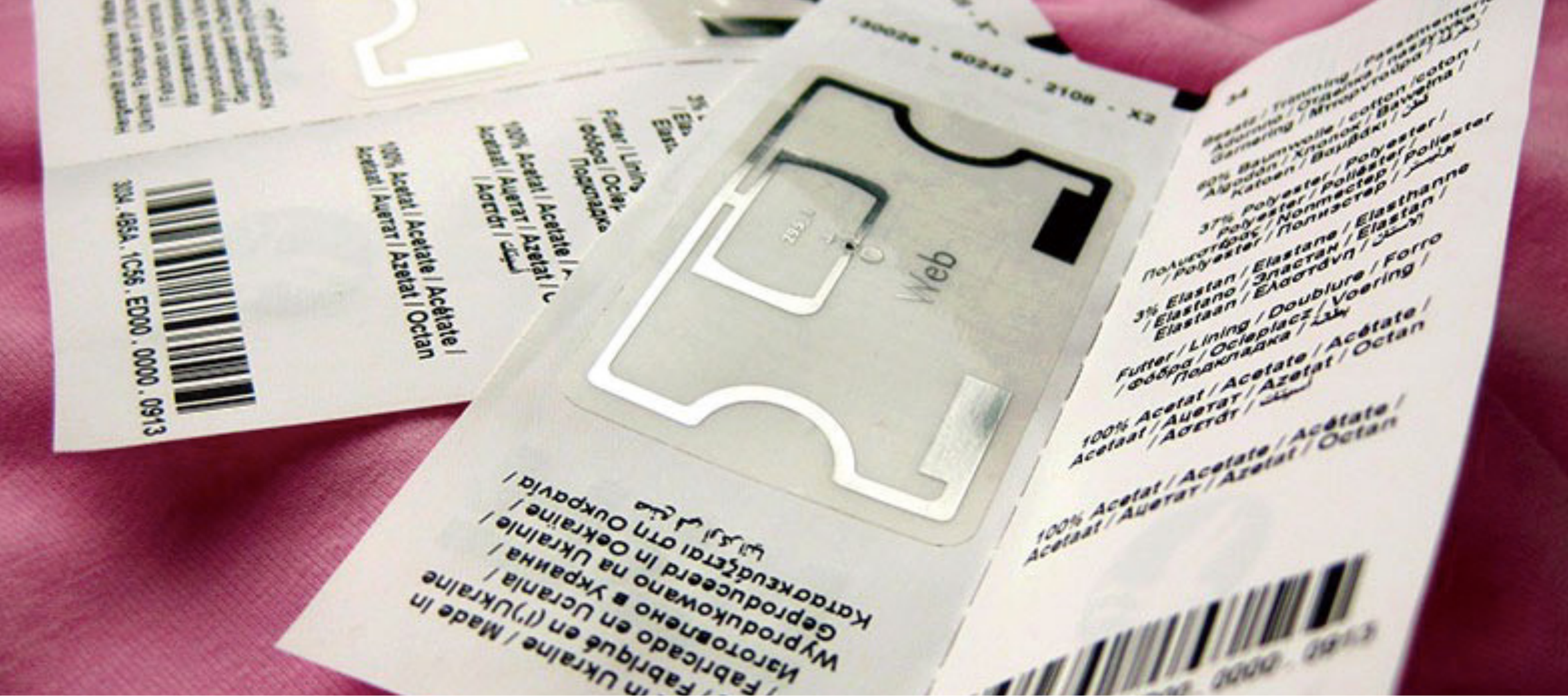


**MAXIM**

LABEL AND  
PACKAGING

**RFID SOLUTIONS**





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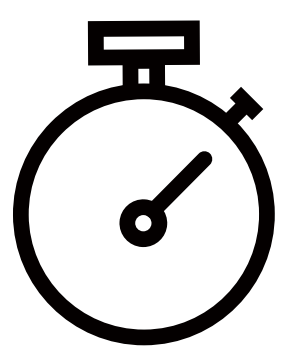
Maxim RFID Showroom  
*Maxim Shanghai, China*



# Introduction to RFID

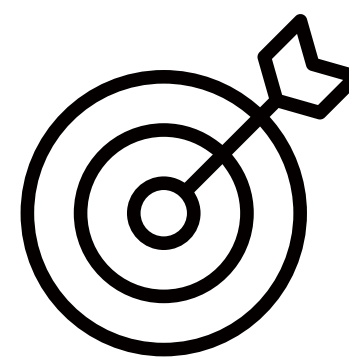
**Radio-Frequency Identification** (RFID) enables you to maximize the efficiency in your supply chain by applying our RFID labels for item-level tracking. Next to that, in store and on-line it will help the improvement of your customers experience.

## INVENTORY MANAGEMENT



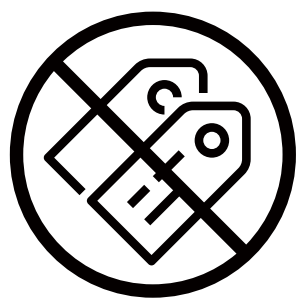
### REDUCE TIME

Reduce the time for cycle count



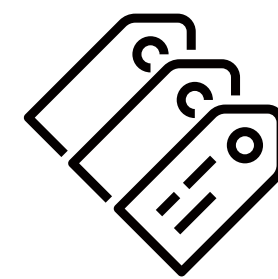
### IMPROVE ACCURACY

Improve the inventory accuracy



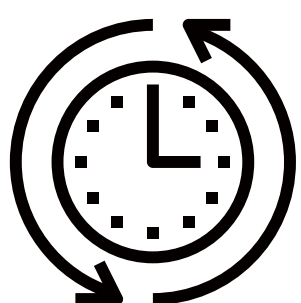
### REDUCE OUT OF STOCK

Reduce out of stock, increasing sales



### REDUCE OVERSTOCK

Reduce overstock, decreasing unnecessary price mark downs



### INCREASE SPEED

Increase the speed of time to shelf (replenishing)



### FIND GOODS

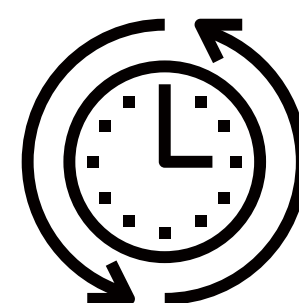
Find misplaced goods easier

## CUSTOMER EXPERIENCE



### AVAILABILITY

Better availability of your products



### INCREASED SPEED

Increased speed of checking out



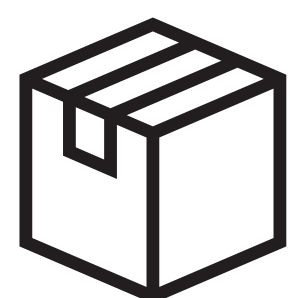
### ONLINE PRODUCTS

Optimized web online product location accuracy



### INSTANT ACCESS

Easier retrieving your latest product information



### PRODUCT SUGGESTIONS

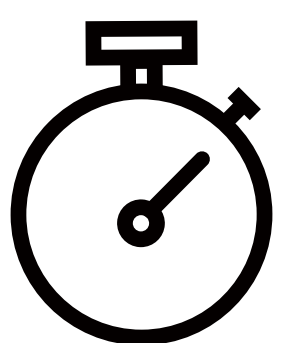
Allow for add-on's during shopping experience



# Introduction to NFC

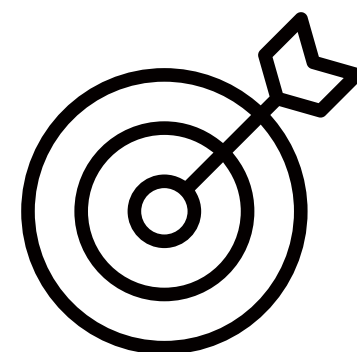
Your customers experience can further be improved with the use of NFC inlays in your labels, tags, or products. **NFC** (Near Field Communication) enables your customers to interface with your products by tapping with their mobile phones.

## BENEFITS OF NFC



### **DIRECT CONTACT**

NFC gives you the opportunity to directly contact with your customers

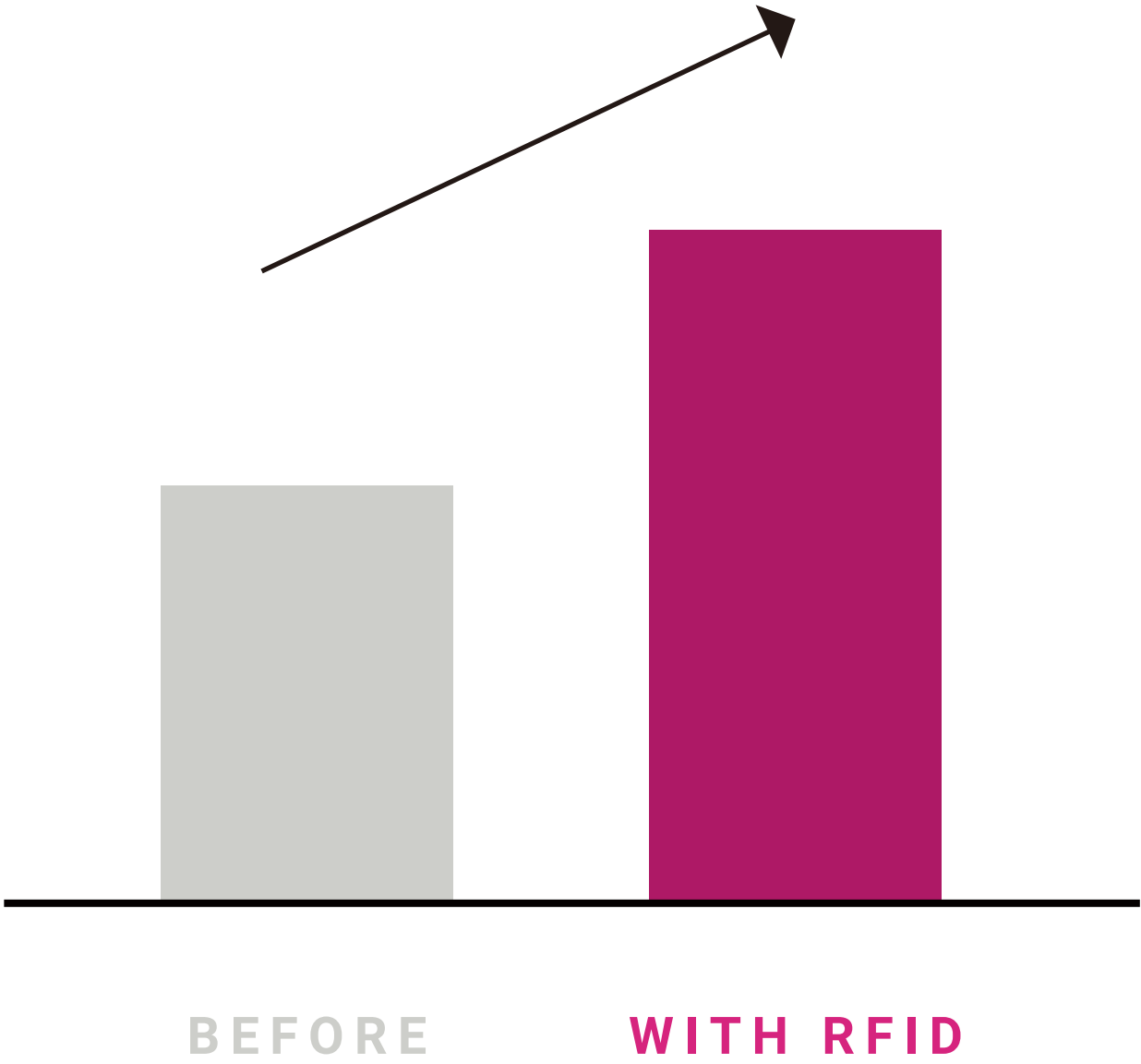


### **PROACTIVE SUGGESTIONS**

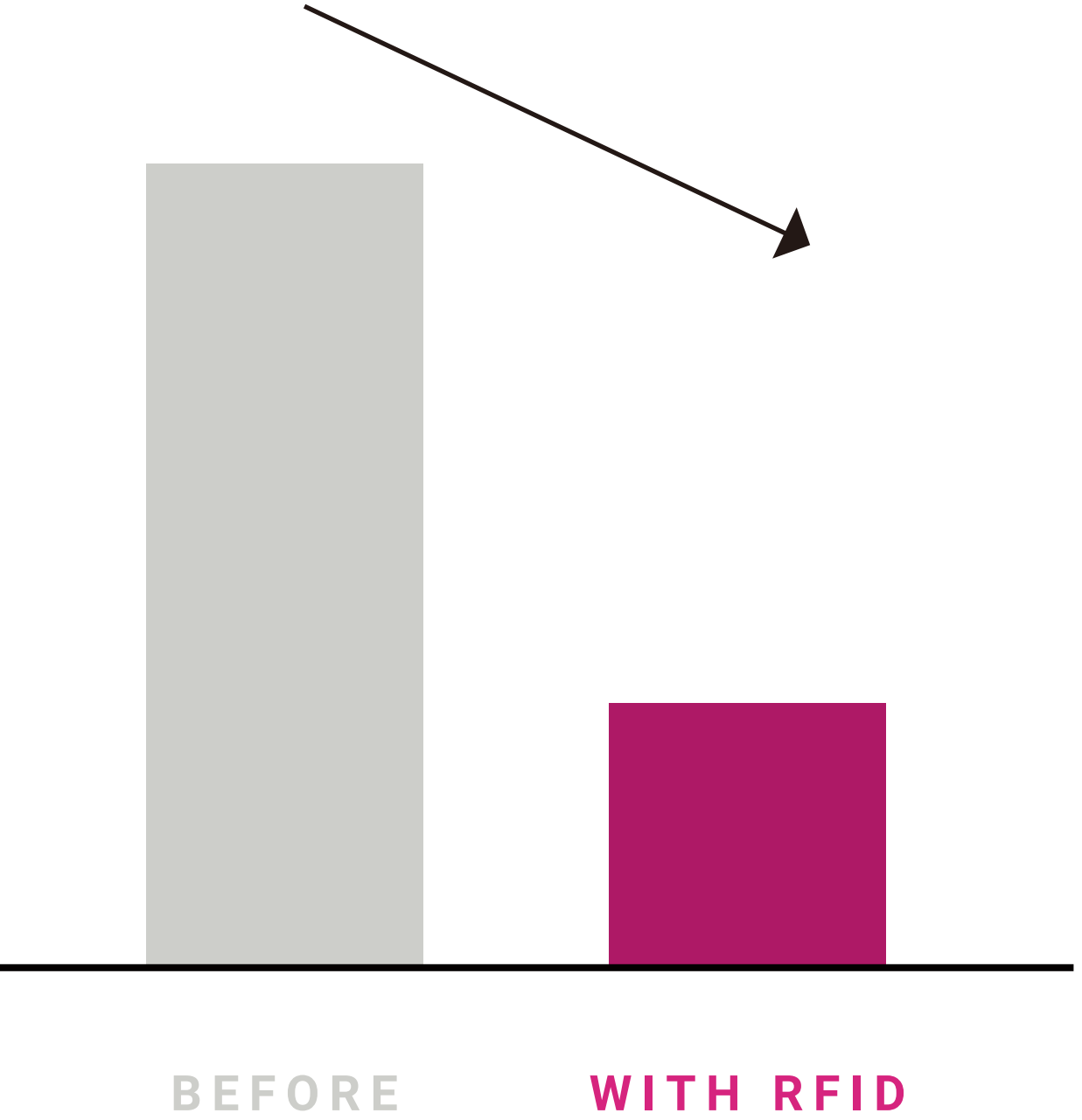
Customers receive latest information on projects, other products in the same range, movies, and 3D VR.

# Benefits to RFID

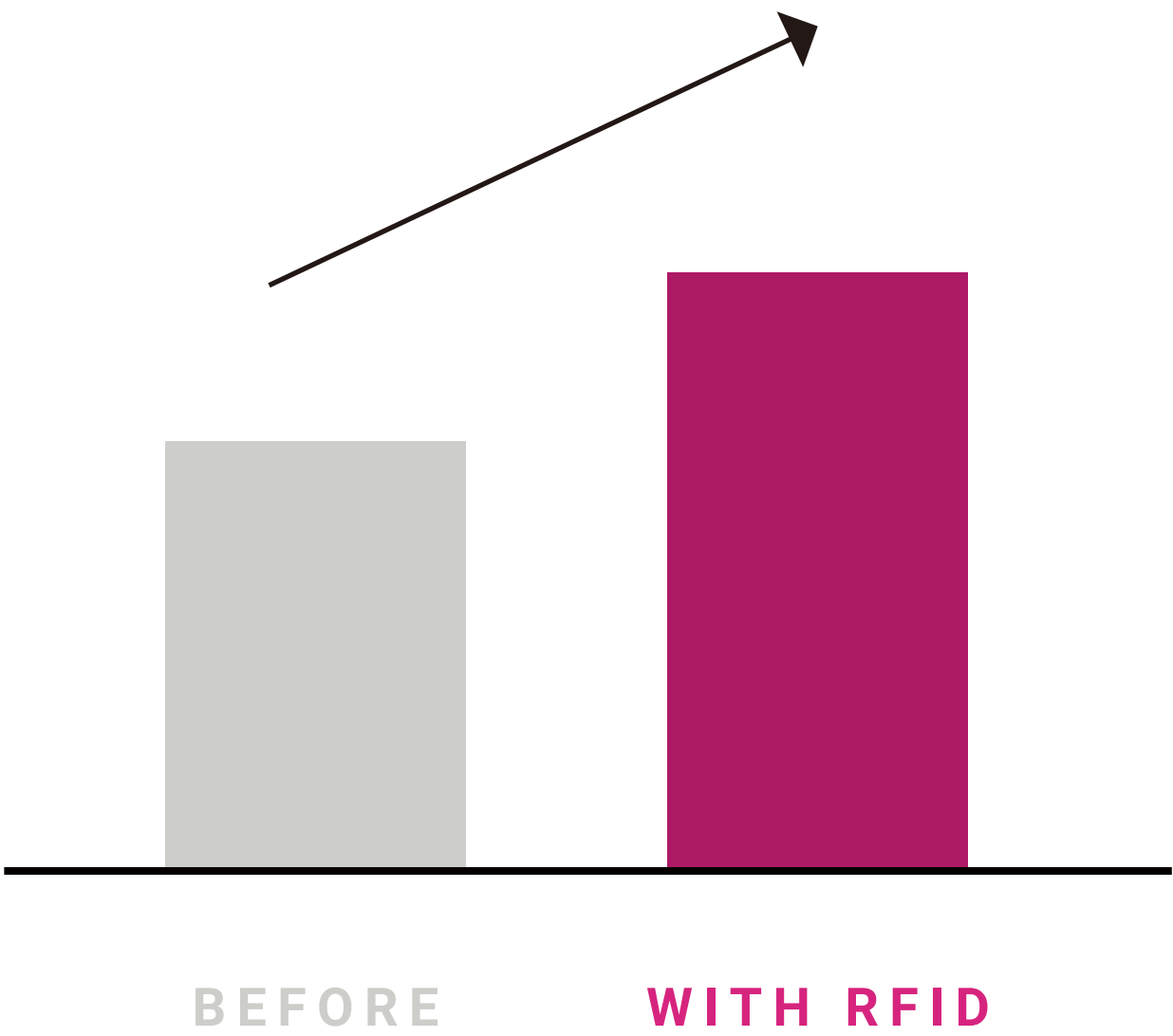
**INCREASE ACCURACY STOCK**



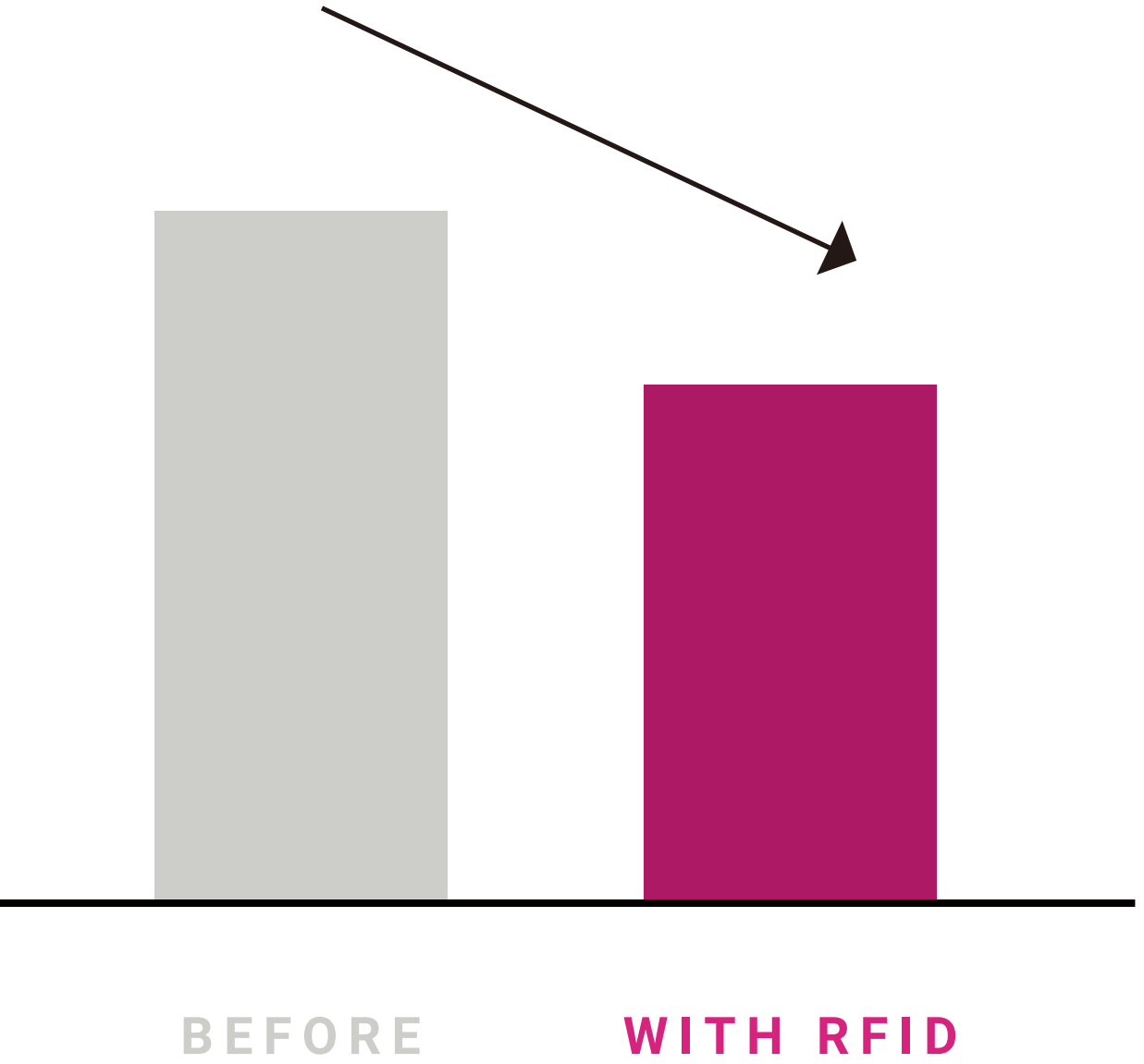
**DECREASES OUT OF STOCK**



**INCREASE SALES WITH**



**DECREASES WORKING CAPITAL**



# IMPROVEMENT IN KEY RETAIL METRICS: BEFORE + AFTER RFID

## Measuring the Impact of RFID in Retailing:

Keys Lessons from 10 Case-study Companies



By  
Emeritus Professor Adrian Beck  
University of Leicester

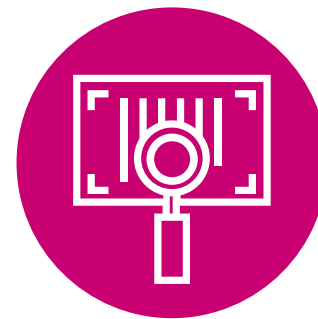
February 2018



Sales Increased



Stock Loss Reduced



Stock Holding Reduced



Staff Costs Reduced

\* Improvement is reflected by reduction

SOURCE: University of Leicester 2018

## COMPANIES STUDIED:



DECATHLON



lululemon



Jack Wills  
EST. GREAT BRITAIN

MARKS &  
SPENCER

JOHN LEWIS  
& PARTNERS

TESCO

Marc O'Polo®



# Omni-Channel

**Omni-channel** is a multichannel approach to sales that works to provide customers with a seamless shopping experience. This includes shopping online from their desktop or mobile device, by telephone, or brick-and-mortar.

## TRADITIONAL



The good, old-fashioned brick and mortar store

## E-COMMERCE



Online shopping has skyrocketed in recent years

## MULTI-CHANNEL



Various, disconnected channels for customers to use independently

## OMNI-CHANNEL



An integrated, seamless experience across multiple devices and touchpoints

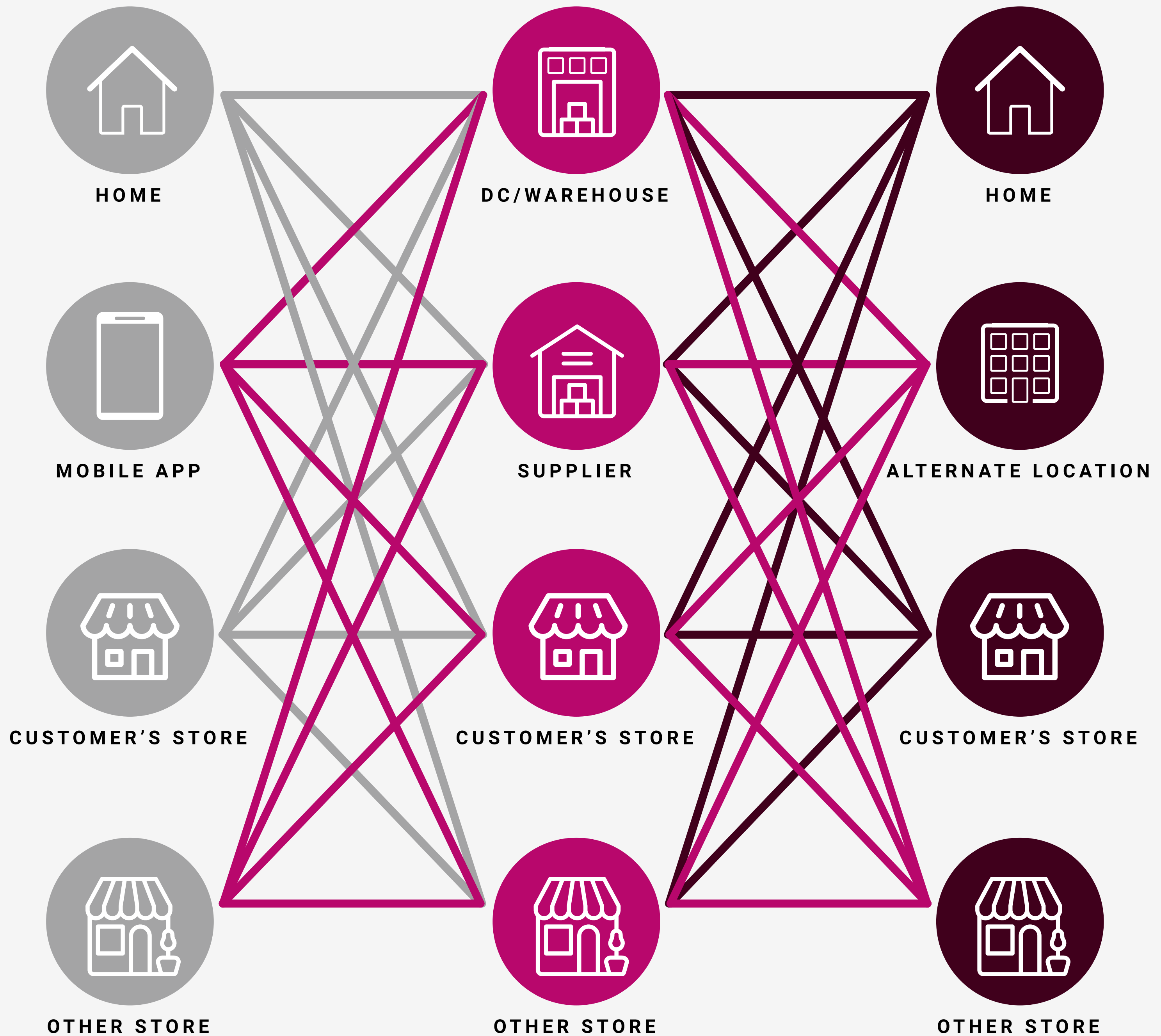


# Omni-Channel Complexity

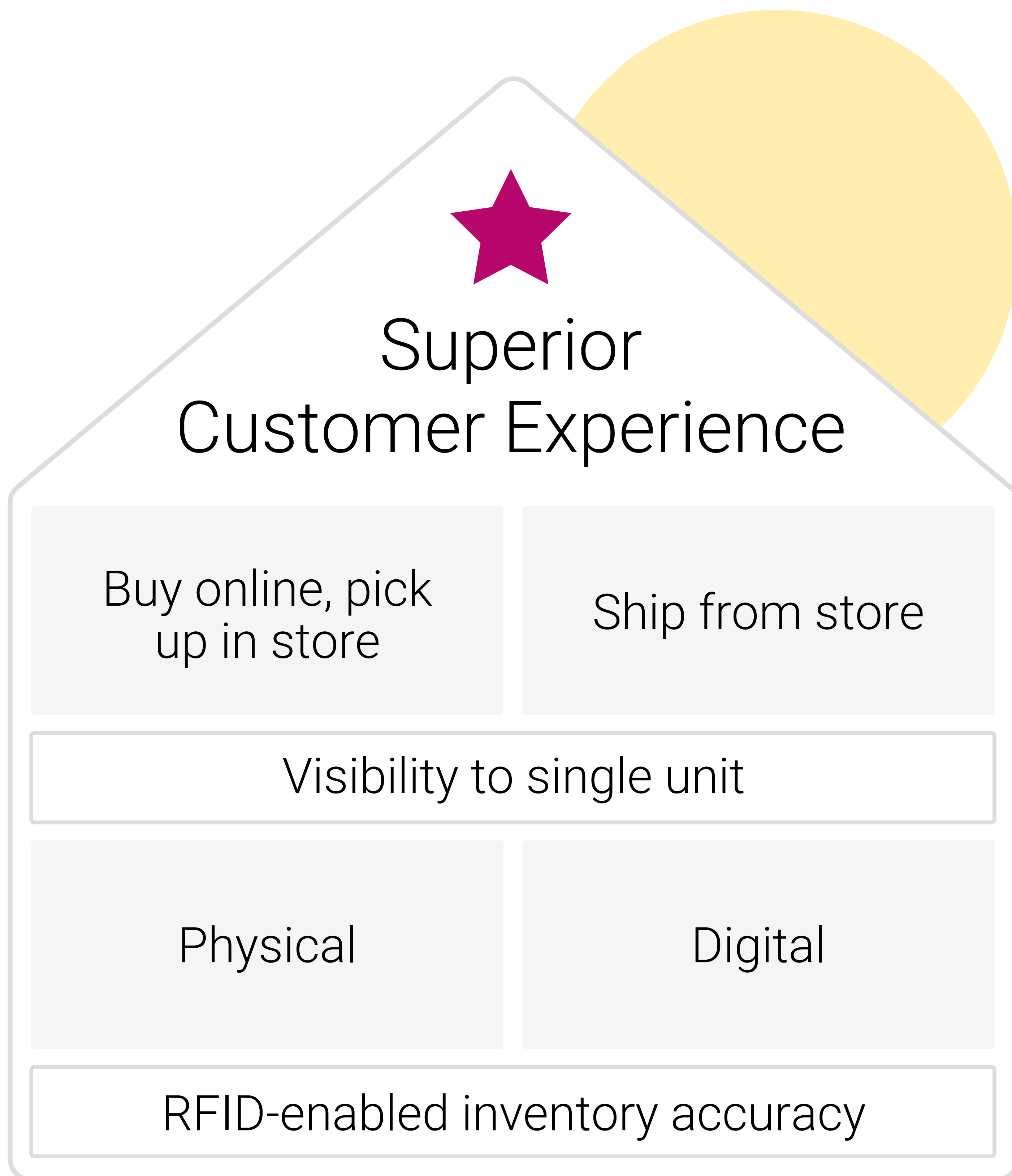
Ordered From:

Fulfilled From:

Received At:

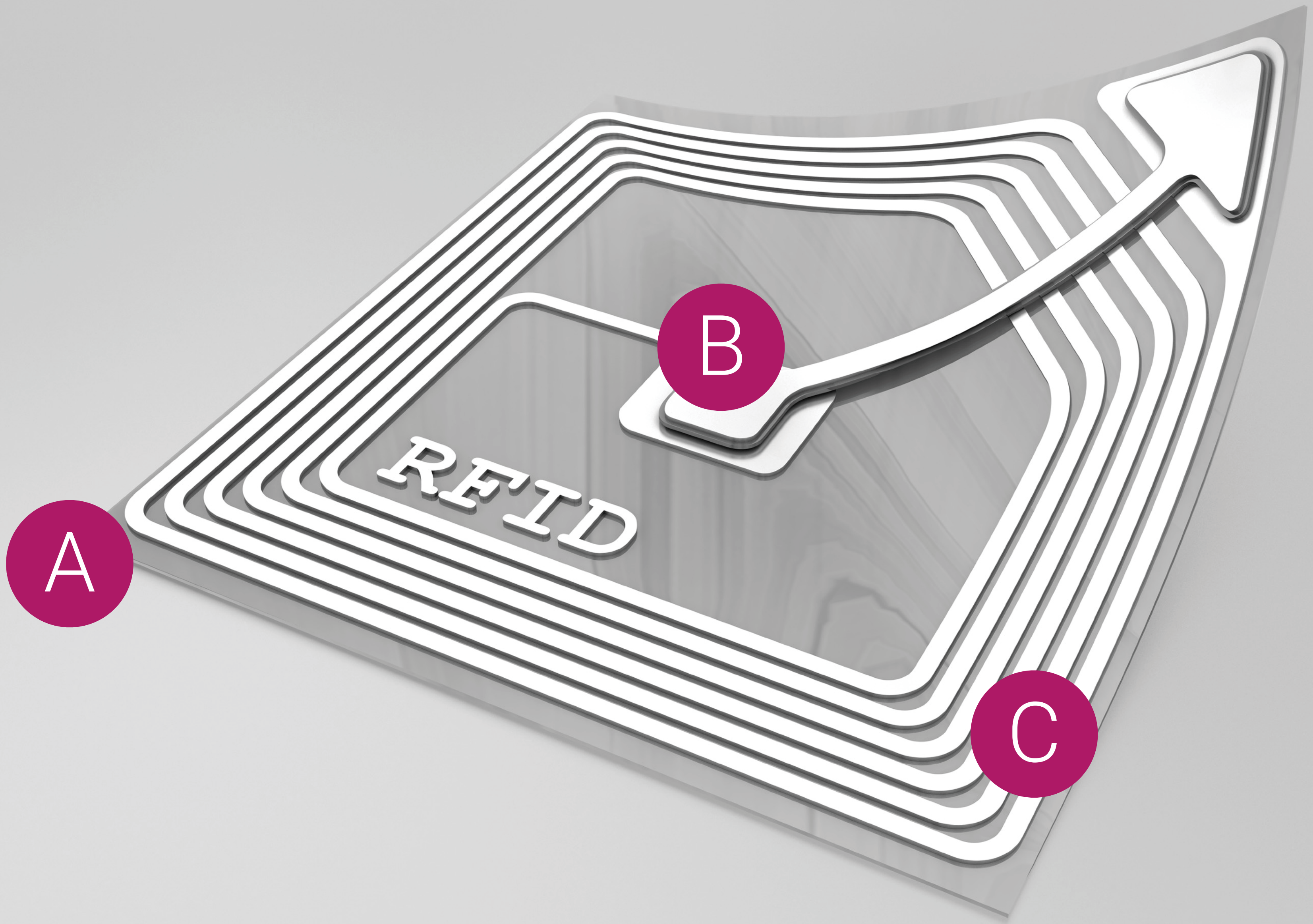


# Omni-Channel House



Source: University of Auburn 2019

# RFID Anatomy



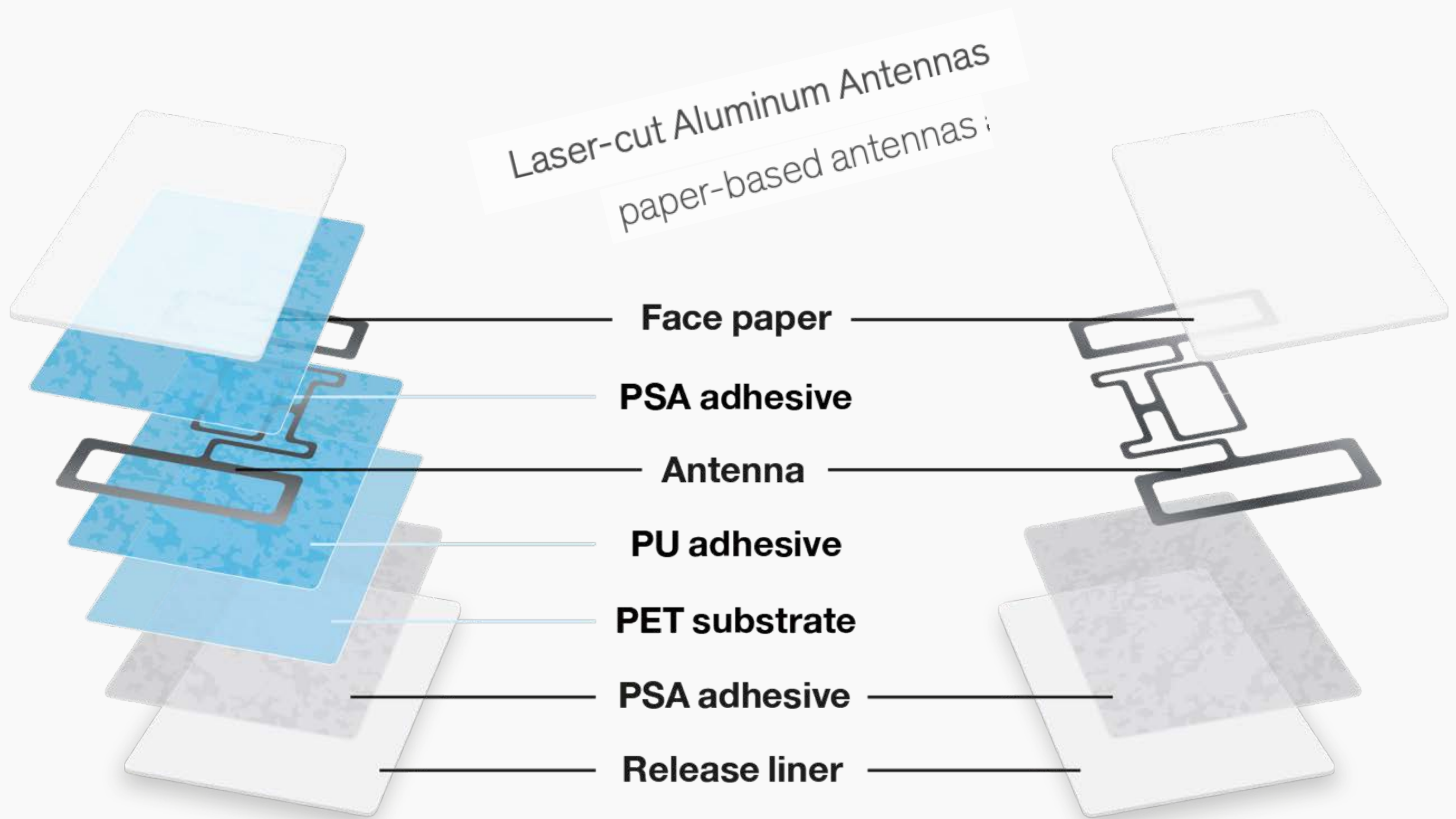
**A** Laminate Carrier

**B** RFID Chip

**C** RFID Antenna

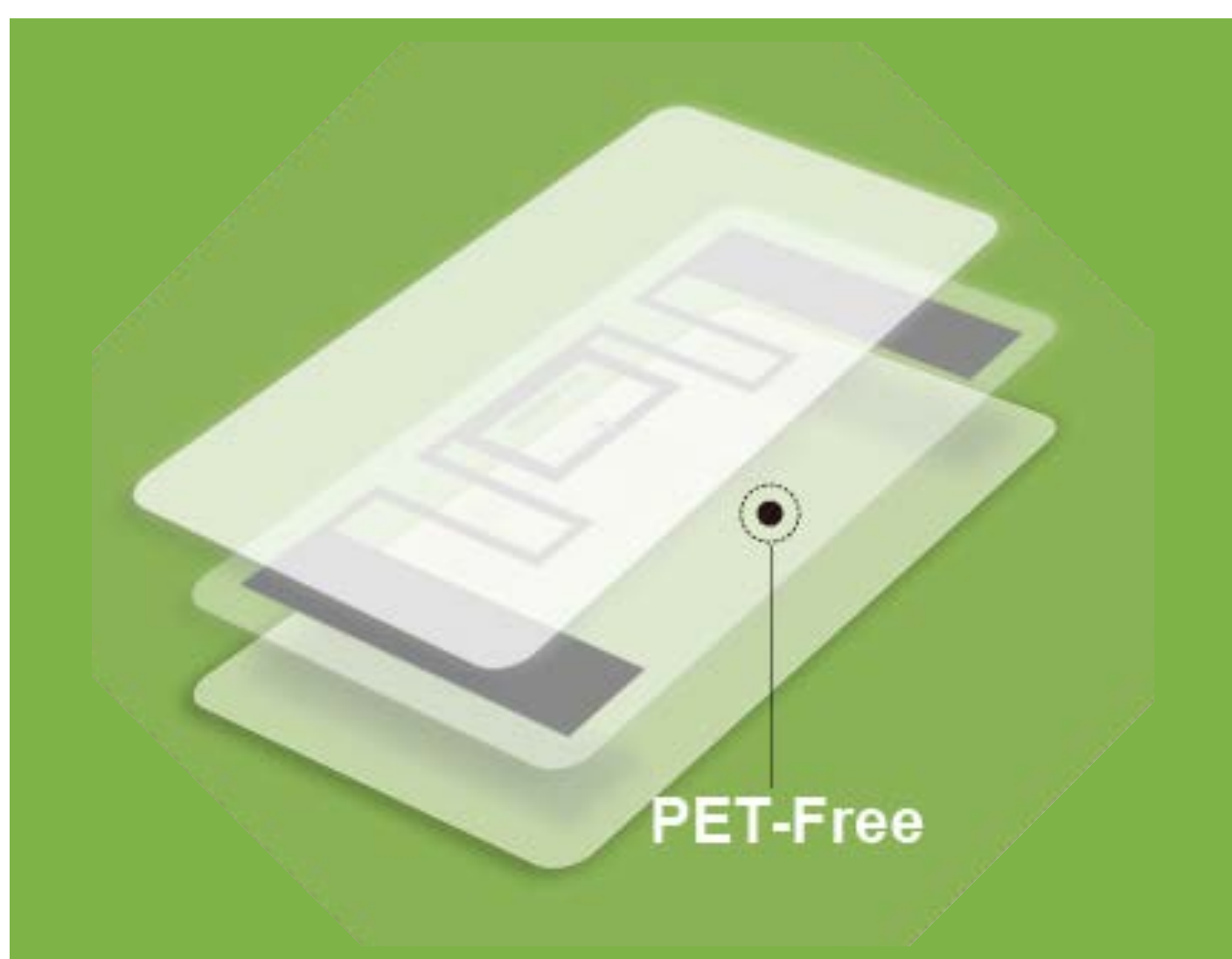
# RFID Anatomy

PAPER-BASED, PET-FREE RFID INLAYS



**Traditional** RFID Structure  
6 layers + release liner

**Eco** RFID Structure  
3 layers + release liner



## Two Options on Paper

Liquid printed or traditional aluminum



51-A-?%?1



K+<0\$&/%?1

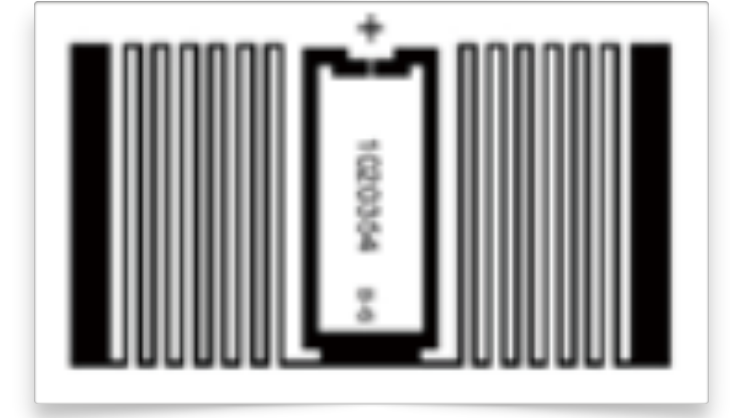
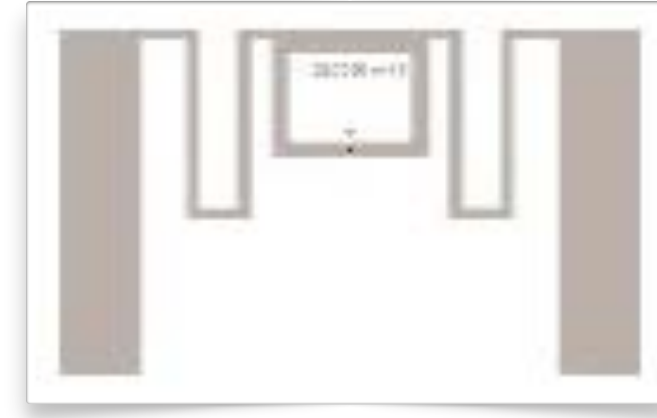


**IEC**  
61249-2-21

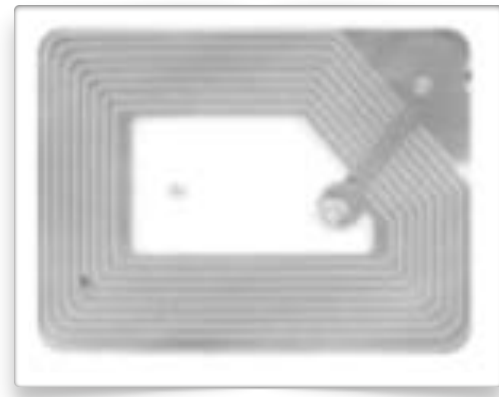
# RFID Offerings

RFID, RF, AND NFC EXAMPLES

RFID



RF (EAS)



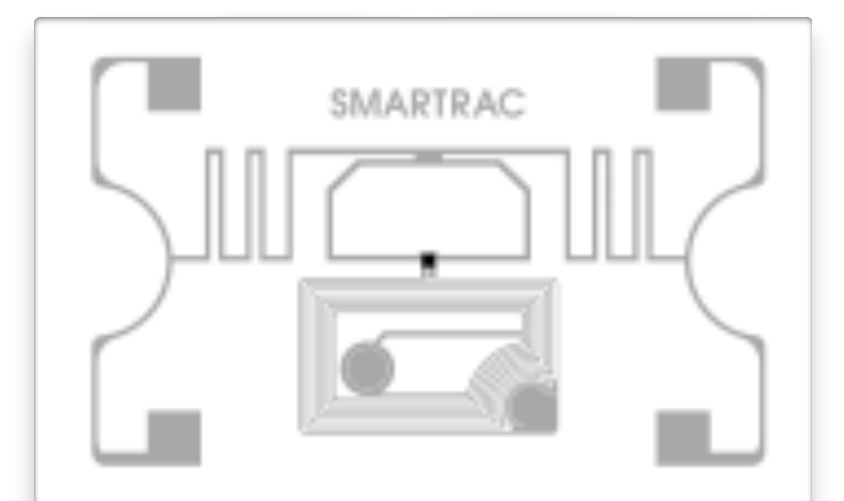
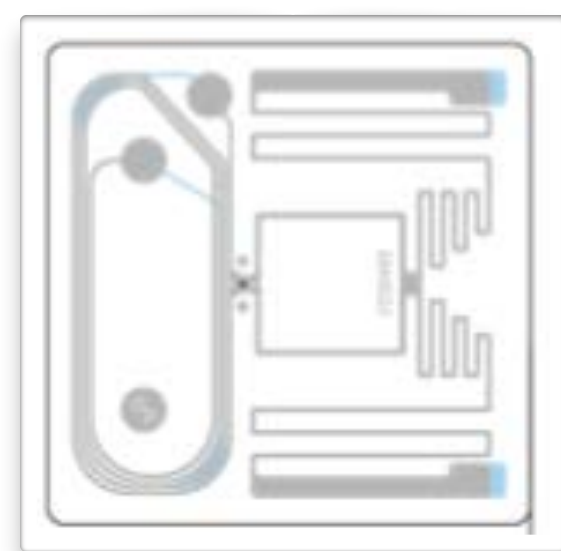
RFID/RF  
DUAL



NFC



RFID/NFC  
DUAL

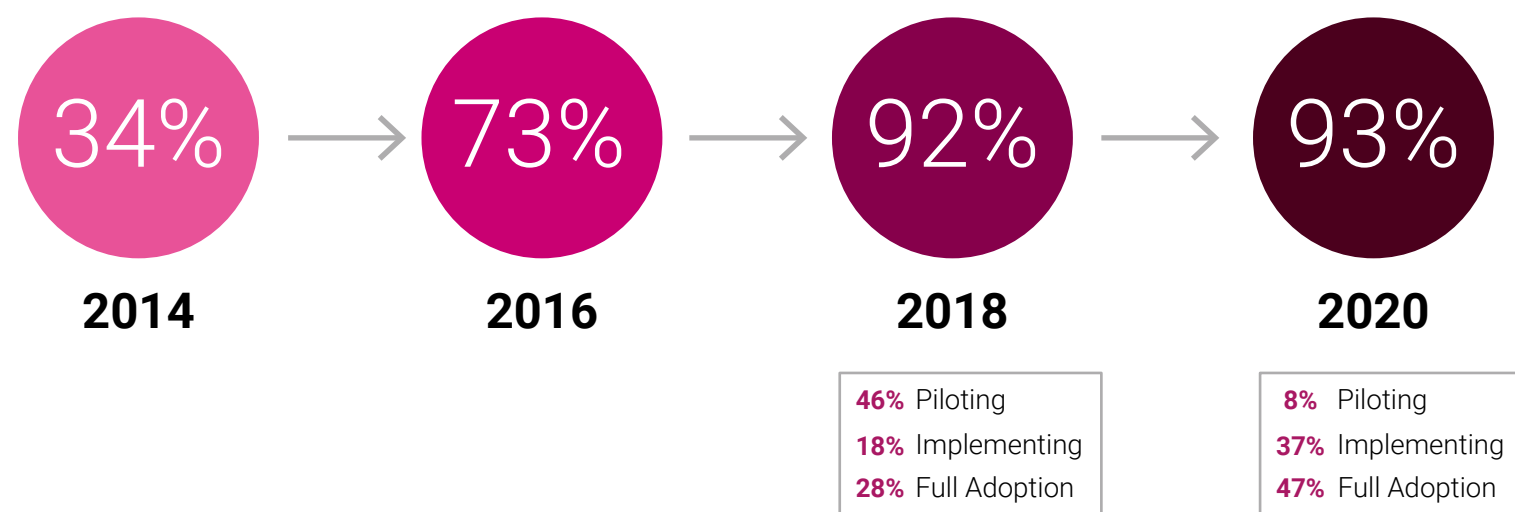


# Global Capabilities

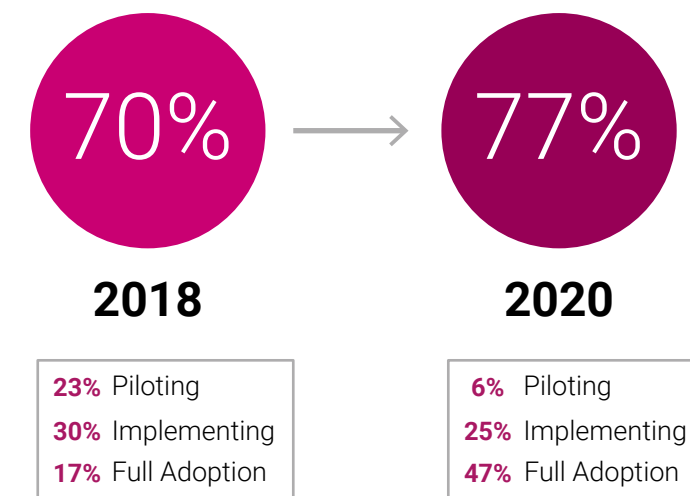
Maxim Location	RFID Item Conversion	RFID Printing / Encoding
Bangladesh	✓	✓
Cambodia		✓
Germany		✓
Guatemala		✓
India	✓	✓
Pakistan		✓
Shanghai	✓	✓
Spain		✓
Sri Lanka	✓	✓
Taiwan	✓	✓
Thailand		✓
Turkey		✓
United Kingdom		✓
United States	✓	✓
Vietnam	✓	✓

# Rising Business of RFID

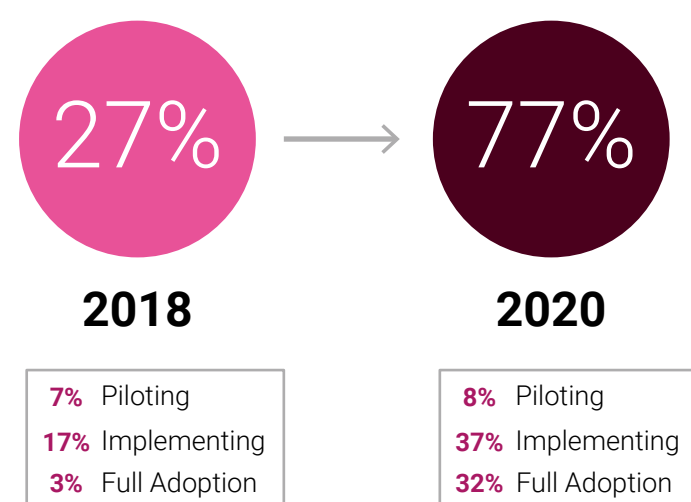
## NORTH AMERICAN RFID ADOPTION



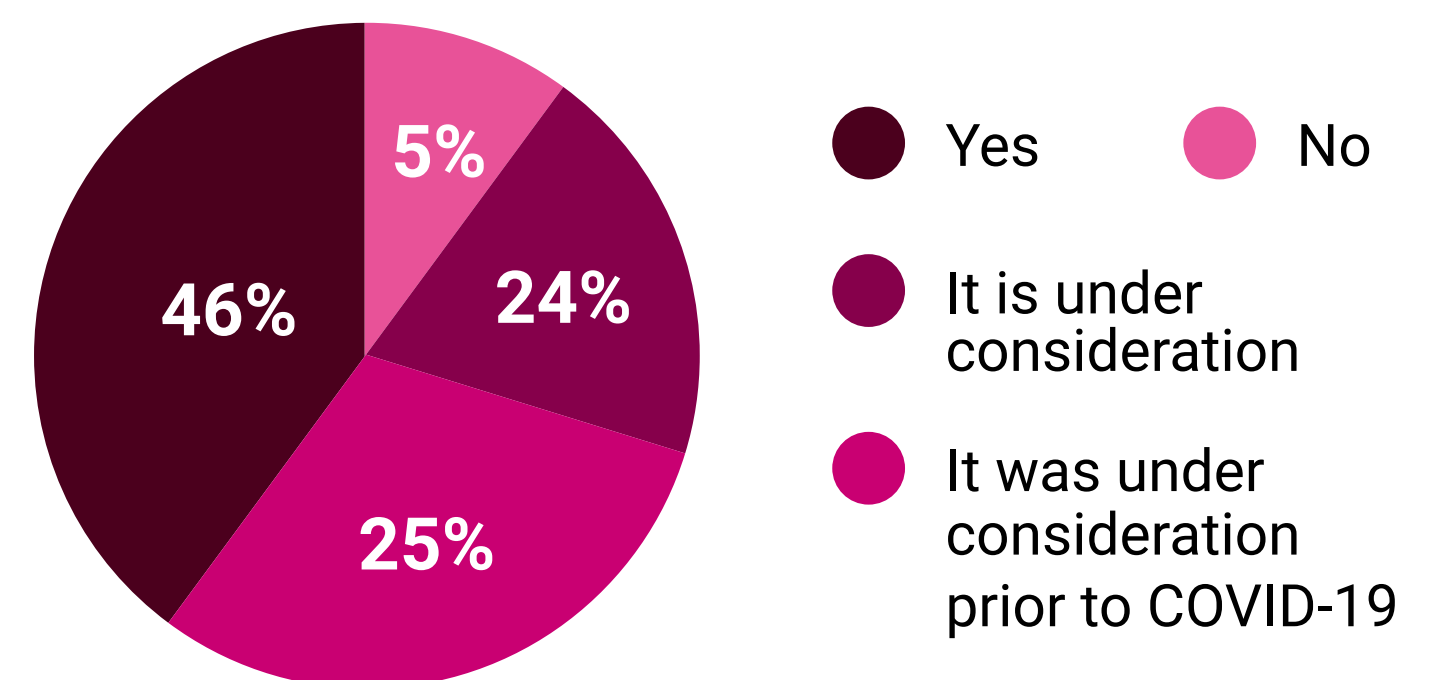
## ASIA-PACIFIC RFID ADOPTION



## EUROPEAN RFID ADOPTION



## RFID IN RESPONSE TO COVID-19



## RETAILERS FUTURE USES FOR RFID:

24% Collaboration with blockchain

22% Supply chain and analytics

22% Self-checkout

22% Improving customer engagement with smart technology

## HARDLINES RETAILERS FUTURE USES FOR RFID:

33% Collaboration with blockchain

28% Support for omnichannel fulfilment

24% Improving customer engagement with smart technology

19% Reducing stockouts

## GROCERS FUTURE USES FOR RFID:

45% Reducing stockouts

36% Improving customer engagement with smart technology

33% Collaboration with blockchain

24% Inventory tracking and visibility

THANK YOU FOR READING

Contact your local Maxim Sales Representative for more information.



**MAXIM** | LABEL AND PACKAGING

**RFID SOLUTIONS**

[www.maxim-group.com](http://www.maxim-group.com)