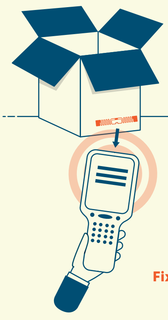
RFID VS NFC

RADIO FREQUENCY IDENTIFICATION | NEAR FIELD COMMUNICATION

NFC IS A SUBSET OF RFID

ITEM CENTRIC

- **Invented in the 1980's**
- **Improves upon printed barcodes**
  - Does not require line of sight
  - Increased read range
  - Can be read quickly in batches
- **Stores and transmits simple ID's**
- **Inventory tracking through the supply chain**
- **Loss prevention**



Time to connect: <1ms

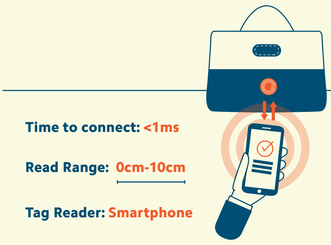
Read Range:
(passive) 1m-10m
(active) 10m-100m

Tag Reader:
Fixed infrastructure reader
Handheld reader

Tag Price: <$0.10

USER CENTRIC

- **Invented in 2002**
- **Improves upon QR codes**
  - Does not require line of sight
  - Increased security
  - Added intelligence
- **Stores and transmits multiple data types**
- **Adds utility to products during use**
- **Product authentication**



Time to connect: <1ms

Read Range: 0cm-10cm

Tag Reader: Smartphone

Tag Price: <$0.10

WHAT CAN RFID BE USED FOR?

Track and trace inventory management

Locate items within a space

Loss prevention

Alerts stolen products

Access control

Race timing

Provides a seamless race-day experience

Attendee tracking

Eliminates registration lines

Pet / livestock identification

WHAT CAN NFC BE USED FOR?

Content Channel

Embedded experiences
Exclusive content
1:1 messaging
Product gamification

Customer acquisition across sales channels

Product registration
Store check-in

Product authentication / Brand protection

Protect your brand

Mobile payments

Upsell experience
Resell experience

RFID FREQUENCY RANGES

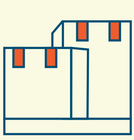
longest read range	0-10cm nfc	0-10cm works through metals, liquids, and skin
Ultra High Frequency (UHF)	High Frequency (HF)	Low Frequency (LF)

shorter wavelength higuer frequency higuer energy	longer wavelength lower frequency lower energy

DEVICE COMPATIBILITY

- iPhone 7 and newer
- Android
- Windows Phone
- Blackberry
- Tablets

PRODUCT LIFECYCLE



FACTORY ▶ SHIPPING ▶ WAREHOUSING ▶ RETAIL INVENTORY

RFID Track and Trace

NFC Customer Experience

IN-STORE EXPERIENCE ▶ **POST-SALE EXPERIENCE** ▶ **RECYCLE**

IN-STORE EXPERIENCE:
- check-in
- authentication
- product info
- purchase

POST-SALE EXPERIENCE:
- upsell
- feedback
- tutorials
- gamification
- exclusive content
- product registration