



RFID RADIO FREQUENCY IDENTIFICATION

OVERVIEW

- History of RFID
- Technology behind RFID
- Current uses of RFID
- Privacy concerns
- FAQs

History of RFID

- Use of reflected radio signals, dates back to WWII in 1939.
- 1946, Leon Theremin invented an espionage device using radio signals.
- 1948, a paper entitled “Communication by Means of Reflected Power” published.

Technology behind RFID

- RFID system consists of a tag and a reader.
- Types of tags:
 - Active
 - Passive

CURRENT USES

- Health Care
- Security
- Manufacturing
- Retail
- Animal tracking and disease prevention
- Defense
- Transportation
- Anti-piracy

RFID VS. Barcode

- Tag must simply be in range of a reader
- Identifies the unique item
- Costs more to implement
- Less vulnerable to damage/loss
- Requires line-of-sight technology
- Identifies only manufacturer and product
- Less expensive
- More vulnerable to damage/loss

Privacy Concerns

- RFID in currency
- Digital identification
- Consumer tracking

FAQ'S

- Are there any health risks associated with RFID and radio ?
- If RFID has been around for so long and is so great why aren't there more companies using it ?
- Will RFID lead to massive layoffs of workers

Class discussion and Questions

