

# **Technology for Food Store Efficiency**

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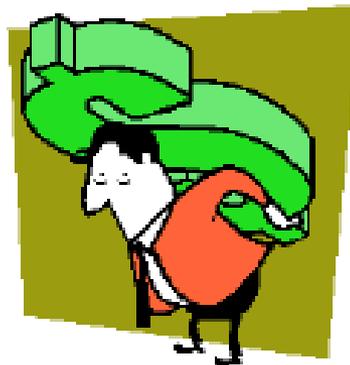


# Development of Retail Food Technology

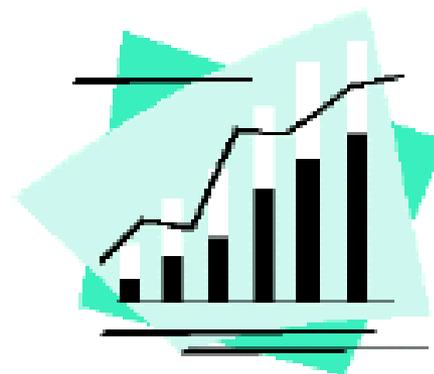
- Consumer Environment
  - Shopping Trends
  - Demographic Environment



- Industry Issues

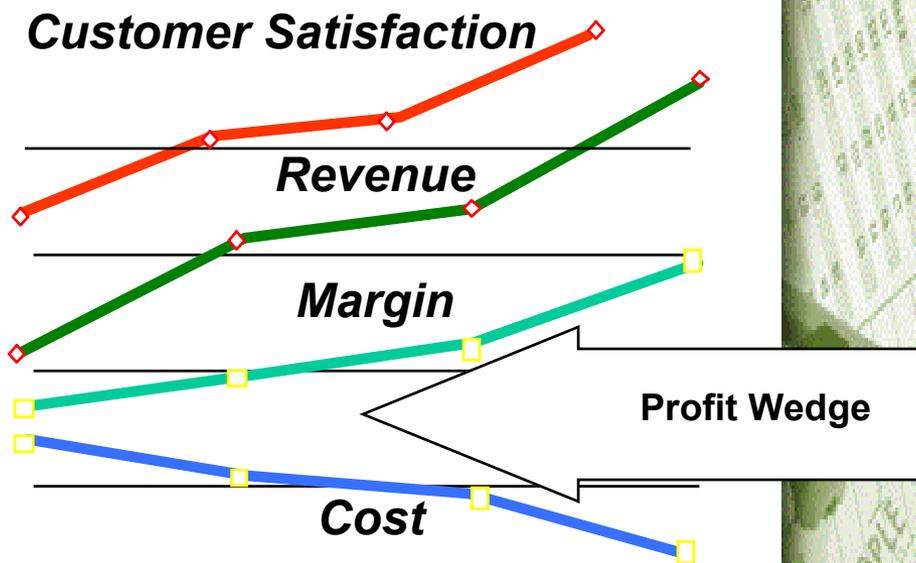


- Business Strategies



# The Profit Wedge

- Improve customer service
- Grow revenue & market share
- Increase margins
- New channels & interaction



Quantifying the value of technology investments using performance measures and metrics...



# Recent Technologies

## In-Store

- Self Checkout
- Electronic Shelf Labels
- Wireless Capability
- Self-serve Kiosks
- ATMs with expanded functionality
- Biometrics



# Customer Perception of Service



Look at these lines!

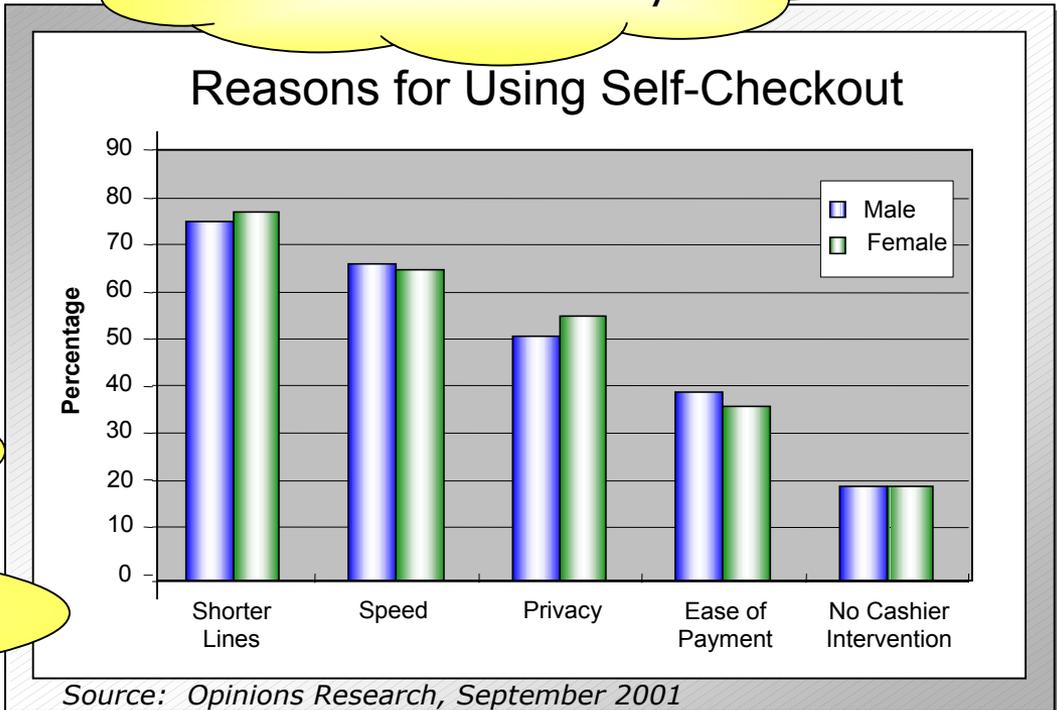
So many registers, none open!

Cashiers these days...  
I could do it better myself!

62% Agree that SCO makes shopping more convenient  
*Source: Retailer Study*

57% Agree that SCO demonstrates that retailers care about their customers  
*Source: Retailer Study*

76% Agree that SCO retailer seem more technologically advanced than competition.  
*Source: Retailer Study*



**Self-Checkout Improves Customer Service**

# Self-Checkout Growth

## News Line

- 19% of food retailers, up from 6% (1999) --FMI
  - ↳ 50% by 2004
- Estimated 500 million transactions in 2001
- Segment growth - Drug, Do-It-Yourself
- International expansion - Europe, Australia

**Newsweek**

THE WALL STREET JOURNAL.

The Atlanta Journal-Constitution

USA TODAY

REUTERS

The New York Times

SN  
Supermarket News

THE CHRISTIAN SCIENCE MONITOR  
www.csmonitor.com

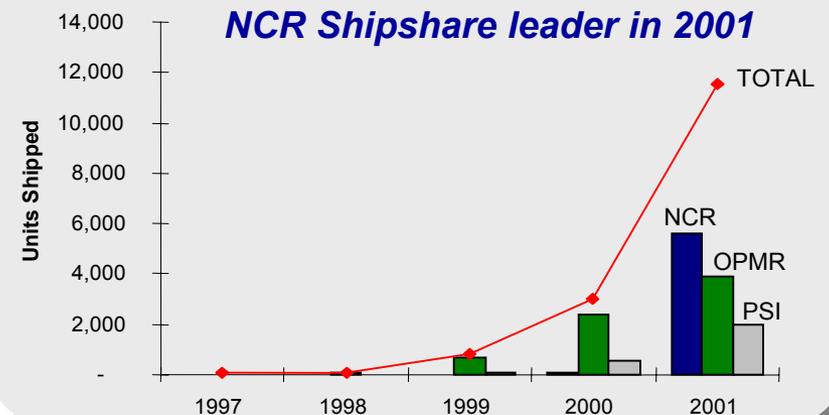
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CNN INTERNATIONAL  
CNN RADIO  
CNN AIRPORT NETWORK

## Market Dynamics

- Experimentation to widespread deployment
- Focus on operational efficiency
- Front-end throughput enhanced
- Focus on Flexibility, Usage, Service, Support and Operational Integration



***Shift from Market Acceptance to Market HAS Accepted***

# Electronic Shelf Labels (ESL)

**A wireless technology that allows the retailer to change prices at the shelf electronically, resulting in:**

- 100 % Price Accuracy
- Reduced Store Costs
- Enhanced Revenue Management



# Custom Kiosk Applications



**Lunds Deli Kiosk**



**Stop-N-Shop Deli Kiosk**

***Meeting your unique requirements***

# What is Biometrics?

**Biometrics** is the use of unique personal characteristics to identify a specific individual -Typically for controlled access

Unique characteristics include:

- Anatomical - *human structure (fingers, eyes, hand...)*
- Physiological - *human functions (voice)*
- Behavioral - *signature, typing, gait...*

Identification takes two forms:

- Recognition
  - Pick one person from a large population (*very difficult*)
- Verification
  - Match a person against a single record or “claimed” identity

# Coming Soon to a Store Near You...

- Reduced Space Symbology (RSS)



- Personal Digital Assistants (PDAs)



- Cell Phones



- Radio Frequency Identification (RFID)



# Reduced Space Symbology

Designed for the healthcare industry

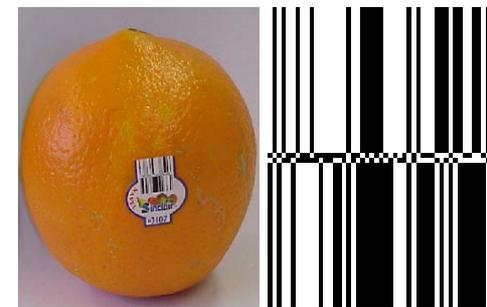
- Ampoules, Syringes, Single Unit Doses

Retail niche applications

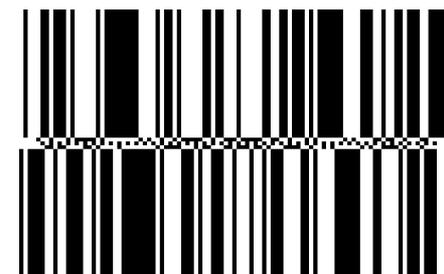
- Primary need = perishables (produce, meat)
- Reduces add-on codes (periodicals, cards)

RSS allows more data to be encoded

- Distributor, source
- Expiration date
- Weight and "extended" pricing



RSS14 Stacked



RSS14 Expanded (up to 74 characters)

*RSS will NOT replace UPC*

# RFID

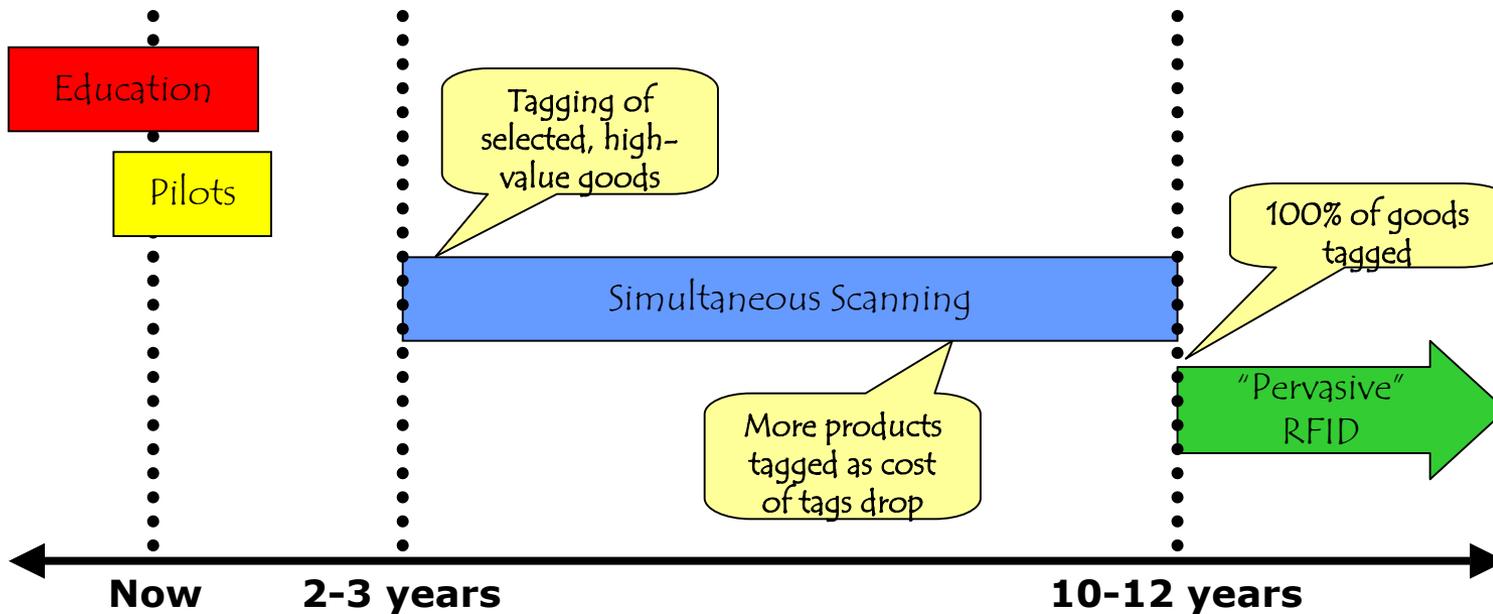
**What is it ?** - RFID tags, or “smart labels,” are tiny memory chips that can transmit electronic product codes (EPC’s) with data about the items to which they are attached

**Possibilities** - Currently being tested in warehouses, distribution centers and some stores... eventual migration from conventional bar codes to RFID tags on all packaged goods

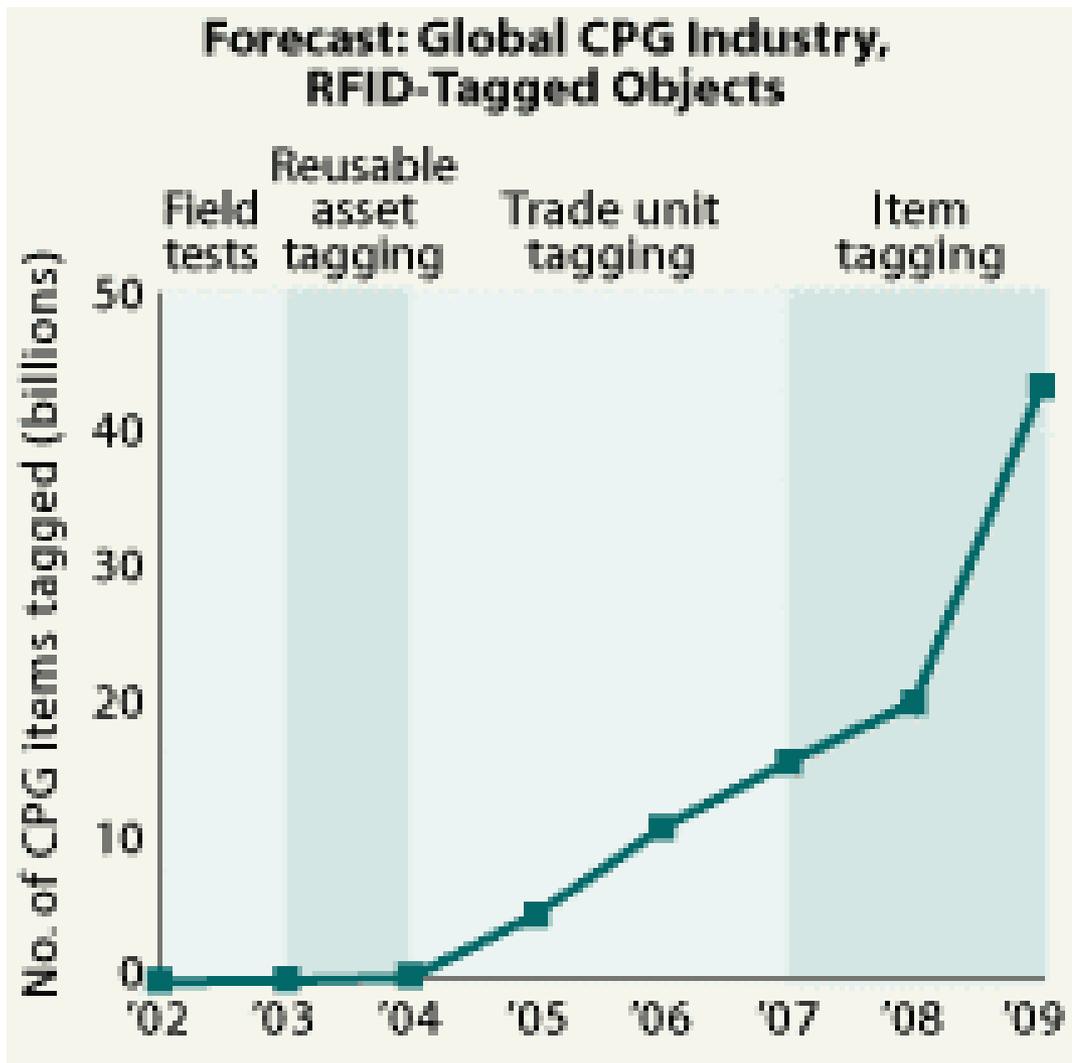
# NCR's RFID Outlook

- Pilot Tests
- Integrated Barcode/RFID Scanning
- Passive Checkout

## RFID Timeline



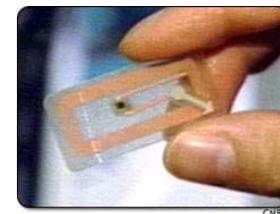
# Calendarized Tagging Forecast



Source: Forrester Research 8/02

# Summary

- Self-Checkout
- Electronic Shelf Labels
  - Wireless Devices
    - Kiosks
    - ATMs
  - Biometrics
  - RSS bar codes
    - RFID



**But the technology MUST benefit the retailer and the consumer via increased revenue, margin, satisfaction or reduced cost to be fully realized.**

# Questions

