TECHNOLOGY FOR FOOD STORE EFFICIENCY

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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

Reasons for Using Self-Checkout

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

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

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

Source: Opinions Research, September 2001

Self-Checkout Improves Customer Service

Look at these lines!

So many registers, none open!

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

**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**

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**NCR Shipshare leader in 2001**

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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

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

Now

2-3 years

10-12 years

Education

Pilots

Tagging of selected, high-value goods

Simultaneous Scanning

100% of goods tagged

“Pervasive” RFID

More products tagged as cost of tags drop
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