

RFID Journal Live! 2006

May 1-3, 2006
MGM Grand Conference Center
Las Vegas, Nevada



Putting RFID to Work

May 3, 2006



ROI from RFID-Based Promotions

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Putting RFID to Work

May 3, 2006



Discussion Topics

- How can RFID improve promotions?
- What is the ROI?
- How to get started?

OAT is Setting the Standard in RFID

Innovation Acceleration

- 2005** ● 1st RFID-based Promotion Execution
1st RFID-based Invoice Reconciliation
Over 75 customers
- 2004** ● 50% Market Share Retailer Mandates, "Elite 8"
1st RFID Framework
- 2003** ● 1st Multi-site, 100 reader scale system
- 2001** ● 1st RFID Middleware
1st Field Trail of RFID in Supply Chain
OAT founded

1999



Sanjay Sarma, OAT CTO,
Founds Auto-ID Center
EPCGlobal Governor

Evaluating RFID Middleware

"OAT is leading the way in RFID middleware with an impressive list of early adopter customers."

Christine Overby

FORRESTER

Making RFID Middleware Decisions in a Changing Marketplace

"OAT is the early leader in this marketplace with one of the largest RFID customer bases, and was on the short list of almost every reference we spoke with."

Dennis Gaughan

AMR Research

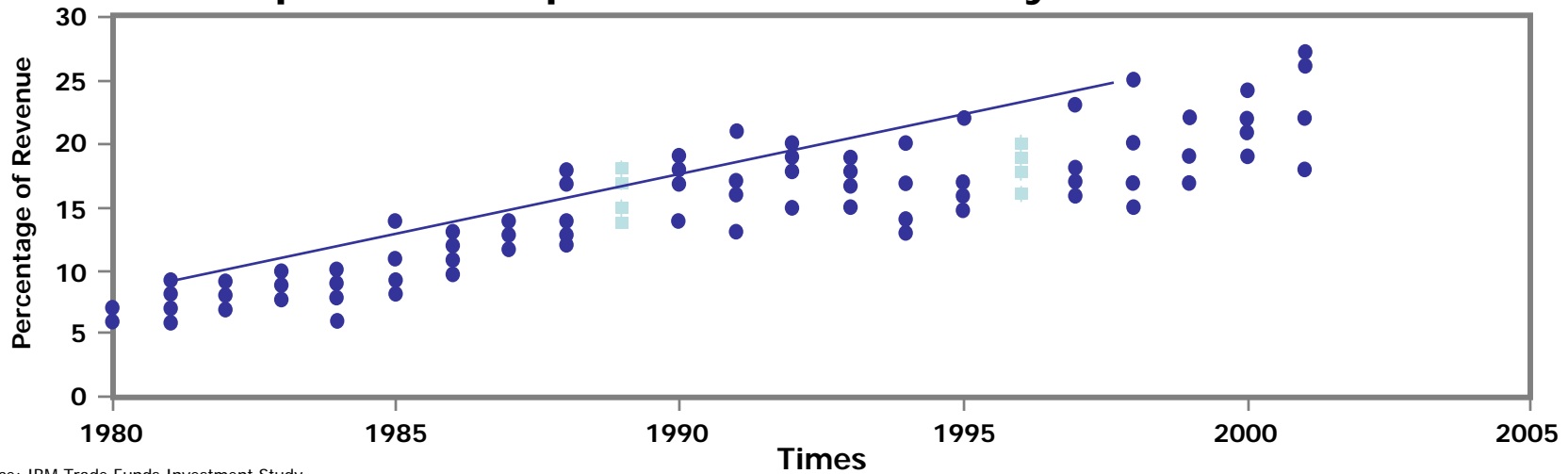
"OAT has the most sophisticated middleware to handle the data generated by RFID technology. People are buying OAT for strategic use and strategic applications, which existing (business applications could never support."

Jeff Woods

Gartner

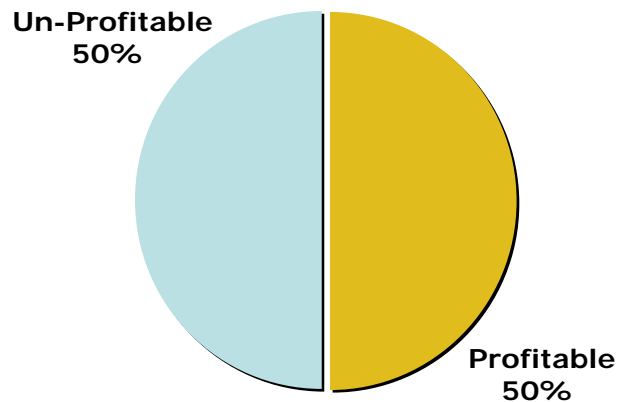
Promotional Spend Increasing, Results Disappoint

Trade spend has tripled over the last 20 years

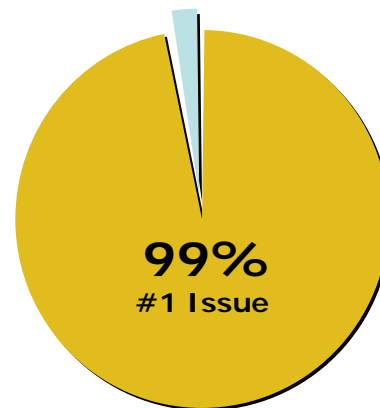


Source: IBM Trade Funds Investment Study

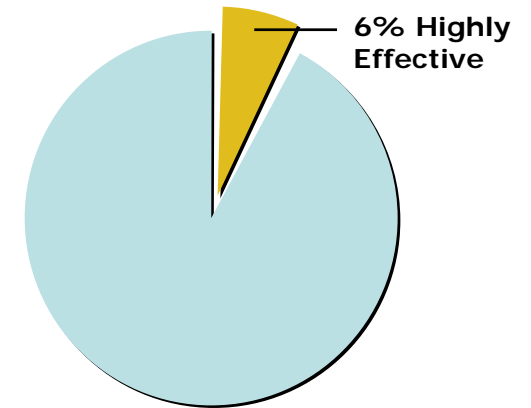
Only half of promotions are profitable



Promotion effectiveness is #1 issue

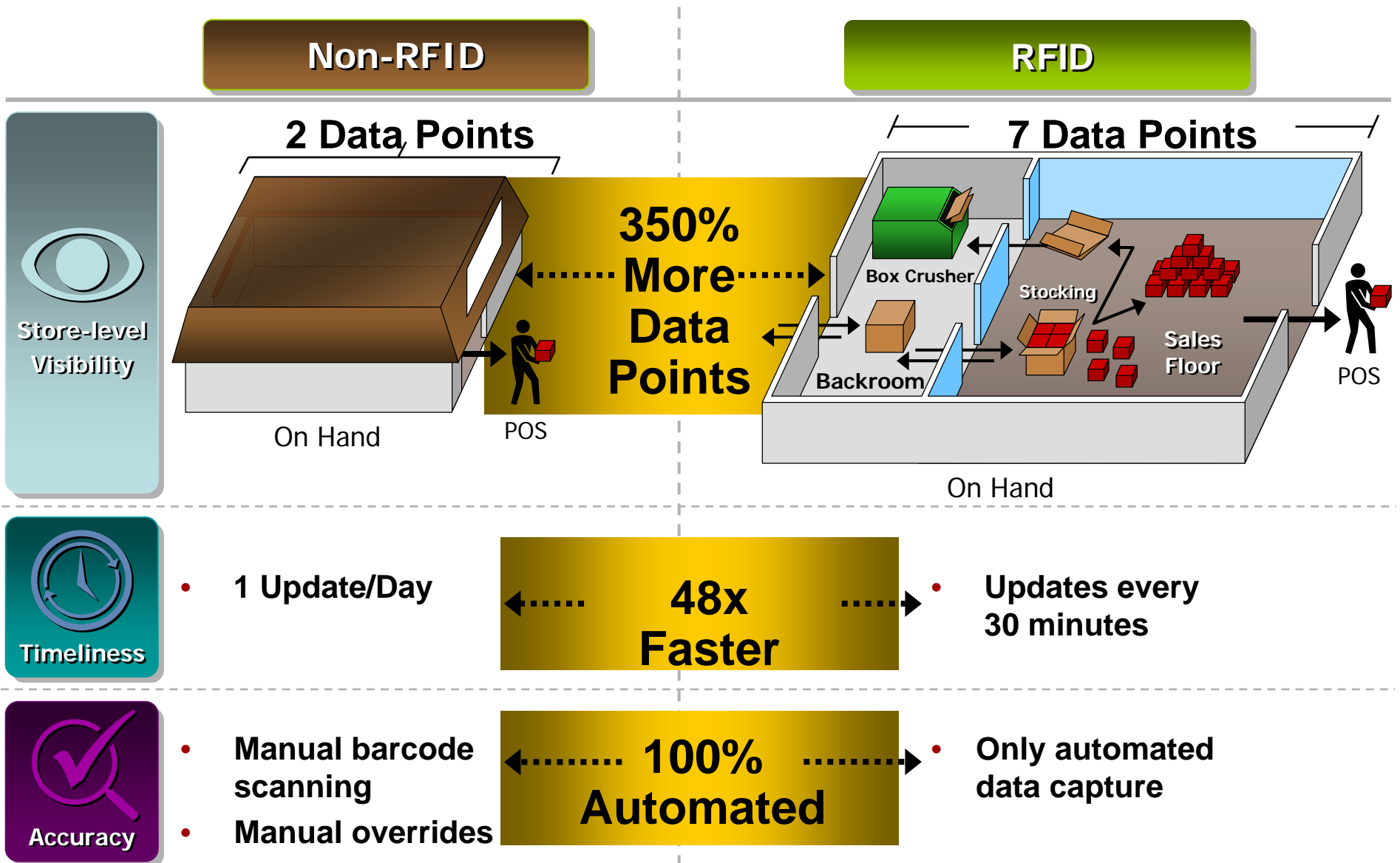


Only 6% Highly Effective at assessing Promotional effectiveness






Source: AC Nielsen, 14th Annual Trade Promotion Practices and Emerging Issues Study, 2004. IBM Trade Funds Investment Study

RFID increases visibility, timeliness



RFID Enables a Real-Time Approach

	Legacy	Real-Time Promotion Execution
	<ul style="list-style-type: none">⦿ Limited to no tracking of store level promotion execution	<p>Track arrival of promotional material at each store</p> <ul style="list-style-type: none">⦿ Alerts:<ul style="list-style-type: none">⦿ Stores that move out early⦿ Stores that have yet to receive product
	<ul style="list-style-type: none">⦿ Track aggregate POS sell-through - if within range, do nothing⦿ Schedule-based allocation of store coverage personnel. Limited to no tracking	<p>Identify stores with promotional material that have not moved to sales floor and either:</p> <ul style="list-style-type: none">⦿ Contact store managers⦿ Alert store coverage personnel
	<ul style="list-style-type: none">⦿ No execution data to support increases in forecast for future promotions⦿ No execution data to defend poor promotional sell-through⦿ No systematic learning	<ul style="list-style-type: none">⦿ Store-level execution data to support increases in forecast⦿ Store-level execution data to defend lower sell-through numbers⦿ 6 Sigma Process improvement

Wal-Mart at Sufficient Scale & Support

30% of all stores wired



Wal-Mart will continue its rollout during 2006 and double the number of stores that are enabled. . . By the end of 2006, more than 1,000 stores, clubs and distribution centers will be using RFID to deliver improved service to customers.

October 14, 2005

RFID “Fast Lane” for Promotions



Wal-Mart Advances RFID Project

Employees will soon have automated notifications alerting them when promotional items and cardboard displays filled with Gillette razor blades or Johnson & Johnson baby powder need to move onto the store floor from the stockroom, for example.

Langford said tagging displays is a way for suppliers to step into RFID. "If the displays don't make it onto the floor in time, Wal-Mart has not maximized sales and is carrying too much stock at the end of the promotion," Langford said.

January 17, 2006

Discussion Topics

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Independent Studies Show a 19% Sales Increase from RFID-based Promotions



EPC Changing the CPG Industry

Improving Retail Promotional Execution

Situation:

Secondary Promotional Displays are a key element to driving impulse, incremental sales of supplier product. Some displays support time sensitive advertisements and product launches. Lack of timely movement of displays from the back room to the sales floor:

- Hinders expected sales lifts and store profit.
- Jeopardizes on-shelf in-stock levels to the point of modular shelf out-of-stocks.
- Makes inefficient use of the time sensitive, premium priced, promotional vehicle and real estate being utilized.
- Delays replenishment ordering.
- Increases idle, non-productive inventory.

How EPC Meets the

Challenge:

EPC technology is delivering on its promise to improve supply chain visibility, and has been directly applied to improving retail execution of promotional displays. Gillette and Wal-Mart have conducted experiments which yield significant improvements of sales performance as well as identify areas of process improvement.

For these experiments, Gillette used Wal-Mart Retail Link™ to monitor movement of promotional displays through the supply chain.

Promotions were observed moving from the DC to the Store backroom and ultimately to the Store floor. These observations successfully demonstrated whether a store has executed moving these secondary displays to the store floor for consumer sale or if inventory remained in the back room past the promotional start date.

From these experiments, Supplier Retail Operations (SRO) representatives were able to visit stores and aid in setting the promotion resulting in immediate sales. This experiment identified opportunities for specific store execution improvement. Identifying these specific stores enables the SRO to better allocate resources to work with specific stores and improve future promotional execution.

Prior to and during these experiments Gillette and Wal-Mart have measured read rates of these promotional displays and have found that these displays exhibit read rates ranging between 97%-100% of total cases shipped. These levels of read rates were achieved through a "multi read" strategy which combines DC reads and store reads. These strong results enable robust inventory tracking, especially

at store level, as well as the efficiency of movement of product from the DC to the store.

Resolution:

This experiment illustrates how EPC is changing the CPG industry by improving retail promotional execution. The implications of this experiment lead to a number of benefits including:

Consumer Benefits:

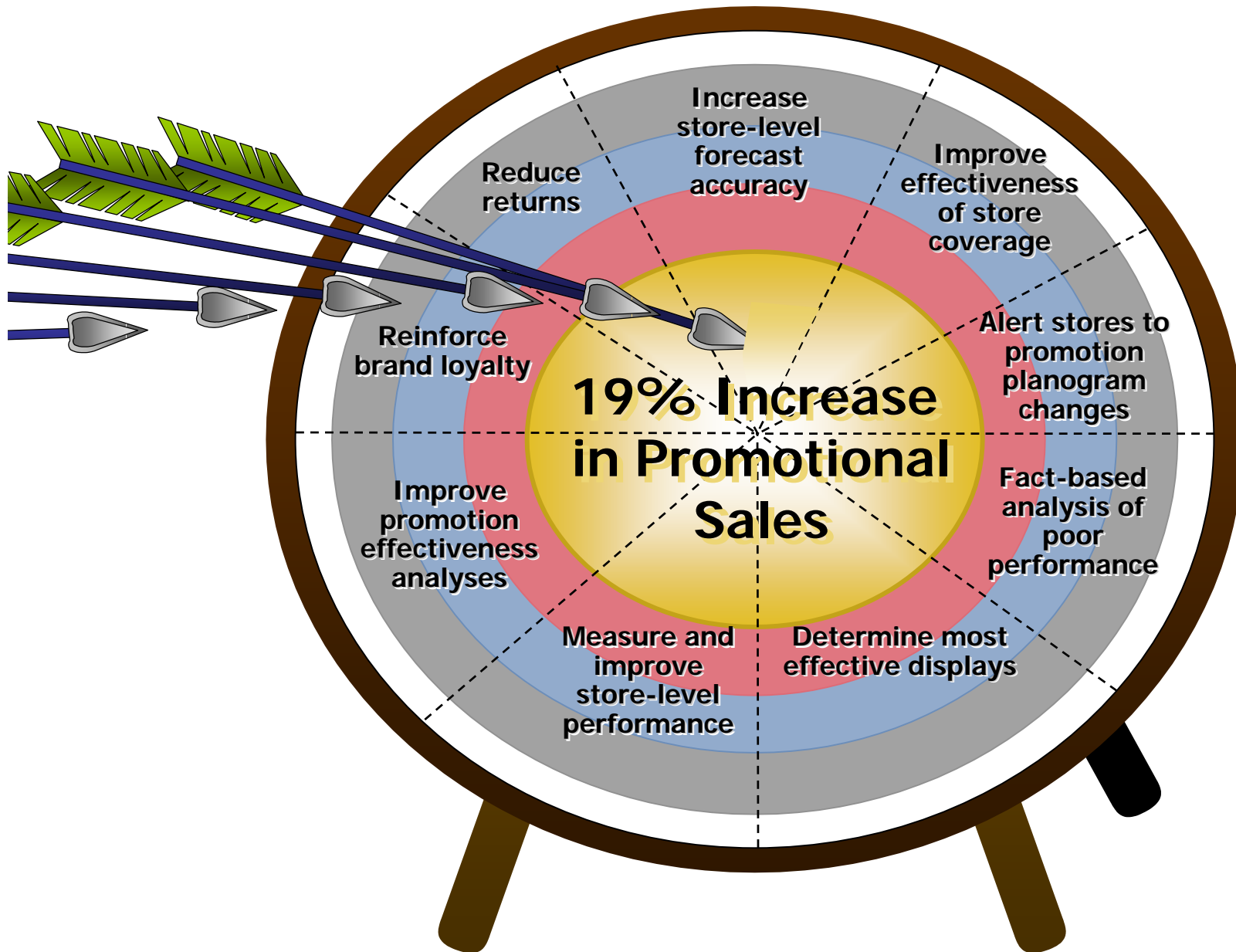
Advertised and promoted product is available for purchase at the store providing:

- An overall satisfying shopping experience
- Good return on consumer investment of their shopping time.
- No rain checks or return visits required.

Retailer Benefits:

- Sales data during the test indicate that stores that execute promotions on time experience 19% sales lift over stores that do not. Retailers will benefit from more timely execution yielding greater sales and profits.
- Reinforces store loyalty
- Improved utilization of working inventory and capital.

Other Areas of Significant Benefits



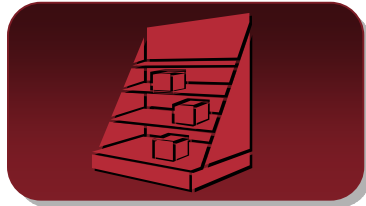
Tag Costs for Promotions are Marginal

RFID tagging promotions is a small investment

	Display	Promotional Cases
Stores	500	500
Units/store	1	30
Tags	500	15,000
Cost/tag	\$0.14	\$0.14
Tag cost	\$70	\$2,100
Labor/hour	\$10	\$10
Tags/hour	20	500
Total Labor	\$250	\$300
Total Cost	\$320	\$2,400

- Conservative estimates: may not be any additional labor costs
- Depending on product margins, as few as 1 additional unit per store may cover the tag costs
- Compare this cost against total promotional budget or shipper cost. What percent of that budget should be allocated to execution?

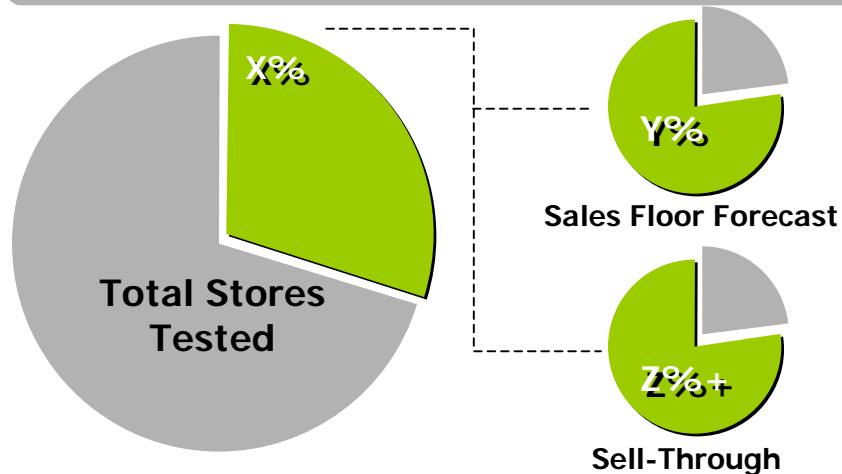
Performance Analysis Summary – Primary Areas



Stock-Outs

- Early product movement to sales floor: EPC movements as 'lead indicator' to promotional **Stock-Outs**

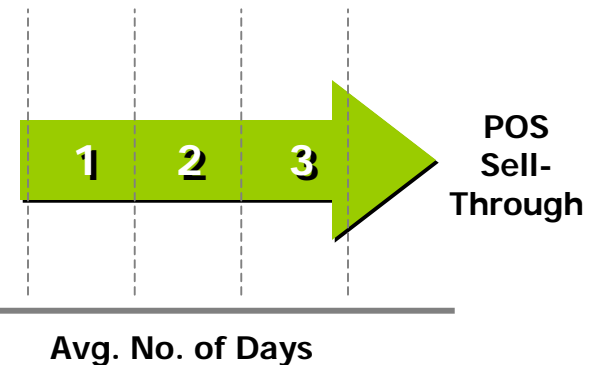
Measure¹:



- X% of stores placed Y%+ of forecast on sales floor from 2 days to 2 weeks before launch and had Z%+ sell-through soon after, creating a **potential stock-out** before the promotion launch date

Insight:

EPC Sales Floor Movement Indicator



- ~2-3 days time between the EPC sales floor movement indicator and POS sell through for these stores. Opportunity to replenish these stores before launch or increase future event forecasts for these store

¹ All measurements and results based on retailer feature event for tagged SKU's

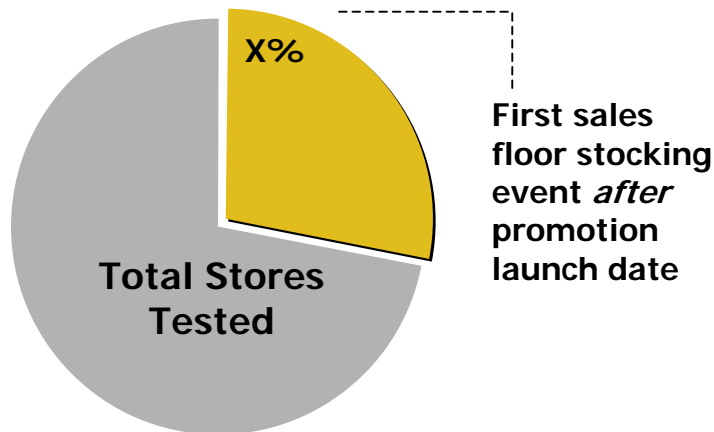
Performance Analysis Summary – Primary Areas



Store Event Execution

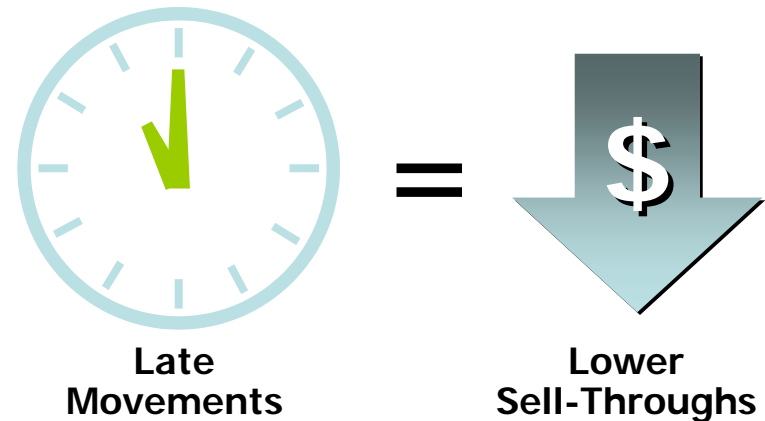
- Late product movement to sales floor: EPC movements as an indicator for *Store Event Execution* of promotion

Measure:



- X% of stores had their first sales floor stocking event *after* the promotion launch date

Insight:



- Late movements correlated to lower sell through at those stores. Opportunity to alert the sales team or buyer/store managers in exception cases

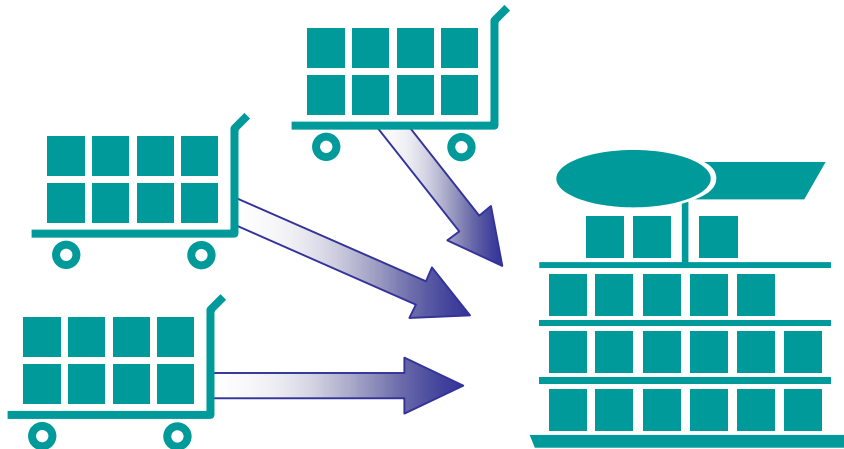
Performance Analysis Summary – Primary Areas



Correct Display Execution

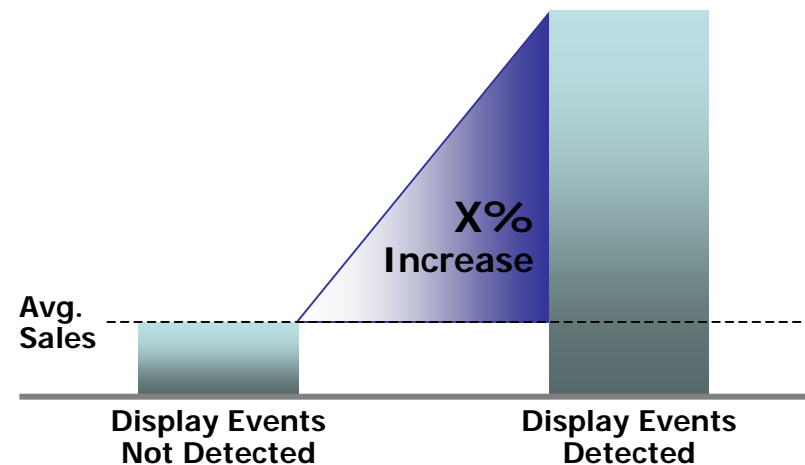
⦿ *Correct display execution* (based on amounts moved) on sales floor

Measure:



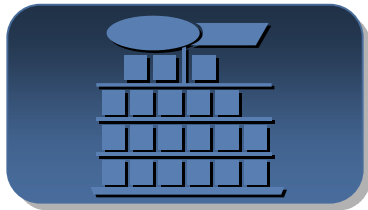
- Large groups of EPCs moving together to the sales floor identified a store building a display

Result:



- Average sales of stores where “display quantity stocking events” were detected was X% higher than stores where those events were not detected

Performance Analysis Summary – Primary Areas

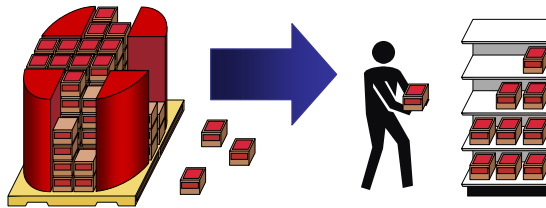


Correct Display Execution

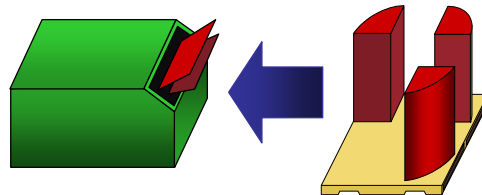
⦿ *Scavenging the display pallet*

Measure:

- 1 When the display arrives to store, it is taken apart by associates. Items and parts of the display go to the regular shelves.



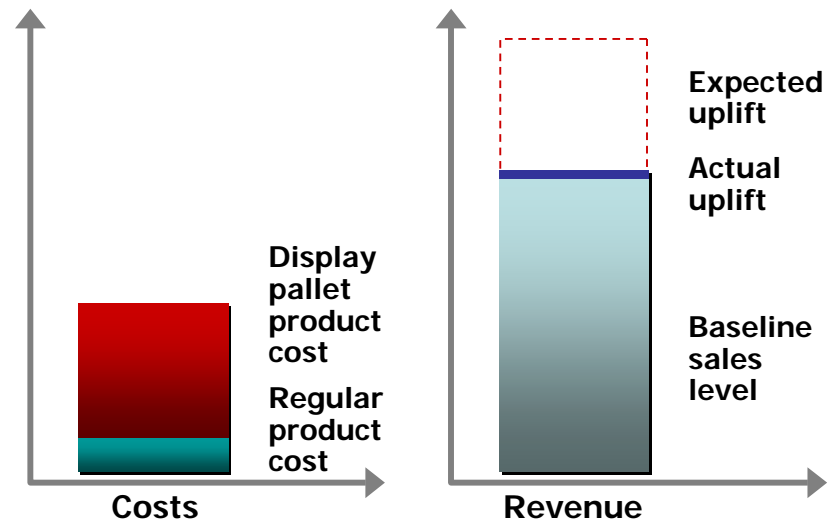
- 2 Then, the empty display pallet is trashed at the box crusher instead of going to the sales floor as a unit.



Causes:

- No space available for display pallet in backroom or sales floor when received.
- Or, the display was too large for the store format, such as a pallet display where only endcap space is available.

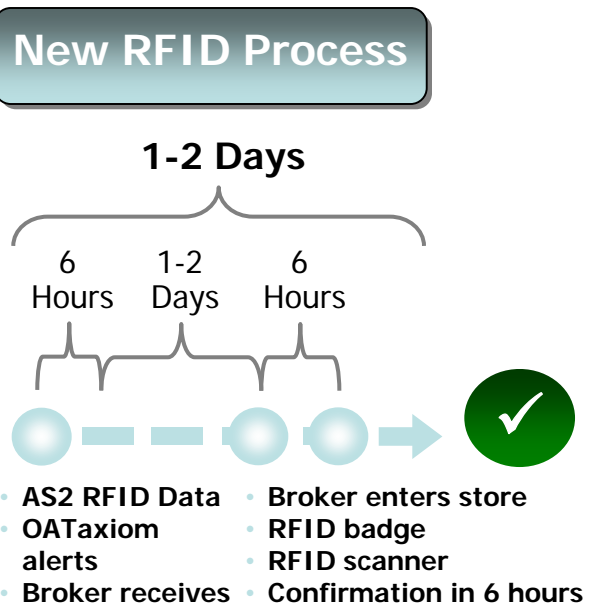
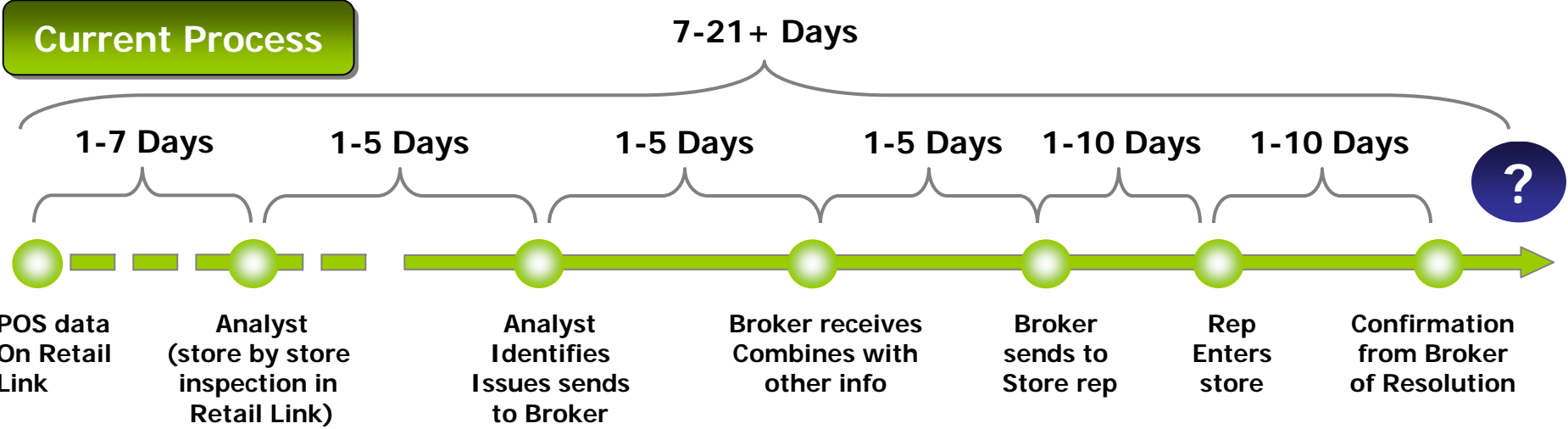
Result:




How do we detect it?

- Exception reporting of display pallets that spend less than 1 day on the sales floor then are seen at the box crusher on the same day.

RFID Dramatically Reduces Store Execution Cost & Cycle Time



Discussion Topics

- How can RFID improve promotions?
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- 
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Which Promotional Events are Best Suited to RPE?

	Tightly Managed Promo Event (e.g. "TAB")	Loosely Managed Promo Event (e.g. Standard Feature)
Tag Display Materials (Temp Displays, PDQs, Trays)	Medium	High
Tag Products (Pallets, Cases, Items)	Low	Medium

PROMOTIONS EXECUTION



	BASELINE PERFORMANCE / IDENTIFY PROMOTION	LIVE-MONITOR PROMOTION	IDENTIFY PERFORMANCE / VALUE CREATION ISSUES AND OPPORTUNITIES	SHARE FINDINGS
MAIN STEPS	<ul style="list-style-type: none"> Identify promotion to pilot Define business context of promotions (e.g. Thanksgiving) Determine performance metrics and performance expectations 	<ul style="list-style-type: none"> Tag promotion Use OATAxiom to monitor pilot Analyze ongoing performance Suggest real-time intervention to remedy performance issues 	<ul style="list-style-type: none"> Identify all promotions issues / opportunities Determine \$ impact of issues / opportunities Identify any process issues (RFID or otherwise) 	Final meeting to present <ul style="list-style-type: none"> Summary / \$ impact of promotions issues and opportunities Path to scale RFID benefits
CUSTOMER INPUT REQUIRED <small>(LIGHT=Need to have)</small>	<ul style="list-style-type: none"> Interviews with promotions stake-holders (sales, supply chain) Promotions Plan/SLA's Order script / forecast info Access to select Enterprise data 	<ul style="list-style-type: none"> Meetings with Promotions team (Sales, Customer Service, Supply Chain) Store coverage resources Access to select Enterprise data (POS, Order, Inventory) 	<ul style="list-style-type: none"> Promotions team inputs (Sales, Customer Service, Supply Chain) Access to select Enterprise and value data 	<ul style="list-style-type: none"> Final meeting with promotions team and business stake-holders (Sales, brand management)
OUTPUT	<ul style="list-style-type: none"> Identify specific RFID-enabled promotion (time, stores, SKU's) to evaluate Understanding of performance expectations for both supplier and retailer List of performance metrics to monitor. Connect metrics with revenue and cost implication 	<ul style="list-style-type: none"> List of tagged promotional SKU's OATAxiom reports detailing promotional product movement Frequent (weekly or earlier) promotion progress update for Promotions team Real-time intervention (e.g. new order, store visit) for issues detected (e.g. stock-out, non-movement of promotion product) 	<ul style="list-style-type: none"> List of specific promotions performance opportunities and issues Compare promotions performance to expectations Determine cumulative \$ impact of all issues and opportunities surfaced through promotion pilot 	<ul style="list-style-type: none"> Findings / Recommendations <ul style="list-style-type: none"> Order Forecasting Process (store / RFID) Business Case for using RFID on an ongoing basis to improve promotions effectiveness
TIME	Span (-4 weeks) to start of Promotion Period	(-2 week) through Promotions Period (+2 week)	(-1 week) through Promotions Period (+3 week)	1 day (Final meeting)
Customer commitment	~ 1 man-week	~ 1-2 man-weeks	~ 1-2 man weeks	~ 1 man week