



Demand Solutions[®]

DEMAND MANAGEMENT INC.

Inventory Risk

- **The Aim:** Reduce Inventory Levels at the same time as Increasing Customer Service
- Most businesses have a very common problem with inventory.
- Their inventory levels are too high, however they continue to run out of inventory.
- This means that they do not have enough of the products that customers want, but have way too much of the product for which there is less demand.



Too much inventory - RISK

- Risk of product becoming obsolete
- Risk of product passing its expiry date
- High cost of financing stock
- Insufficient warehouse space often resulting in the necessity to rent more space
- Inefficient warehouse operations due to overload



Too little inventory - RISK

- Lost sales & Customer dissatisfaction.
 - This can lead to risk of losing business.
- High cost of emergency transportation.
e.g. airfreight
- Too much effort spent on dealing with shortage problems, rather than positively managing the future.



Forecasting

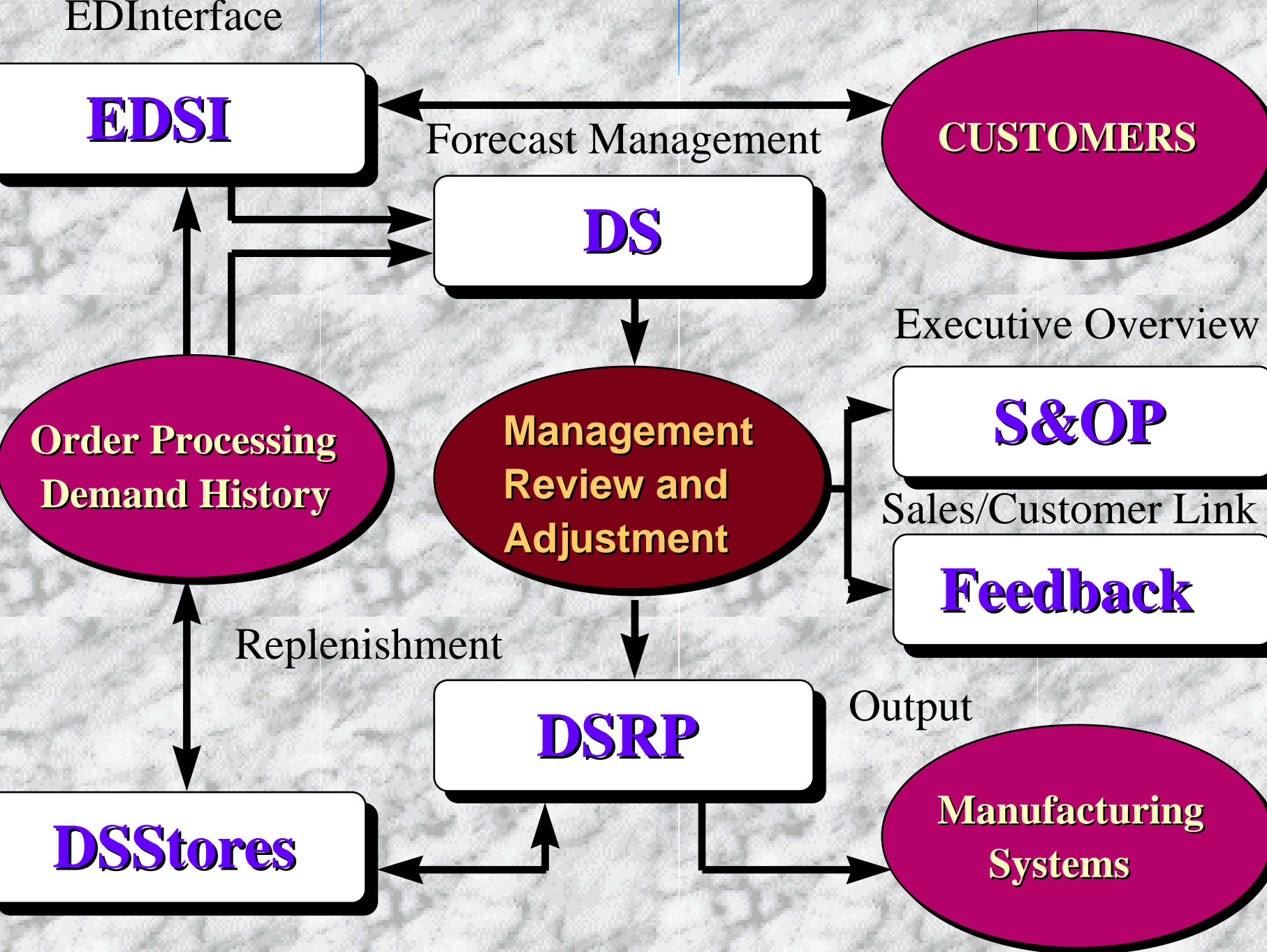
- The FORECAST is the most significant driver of inventory levels as it dynamically processes through the supply chain.
- A high (optimistic) forecast will result in too much inventory.
- A low forecast will result in not enough inventory to satisfy demand.

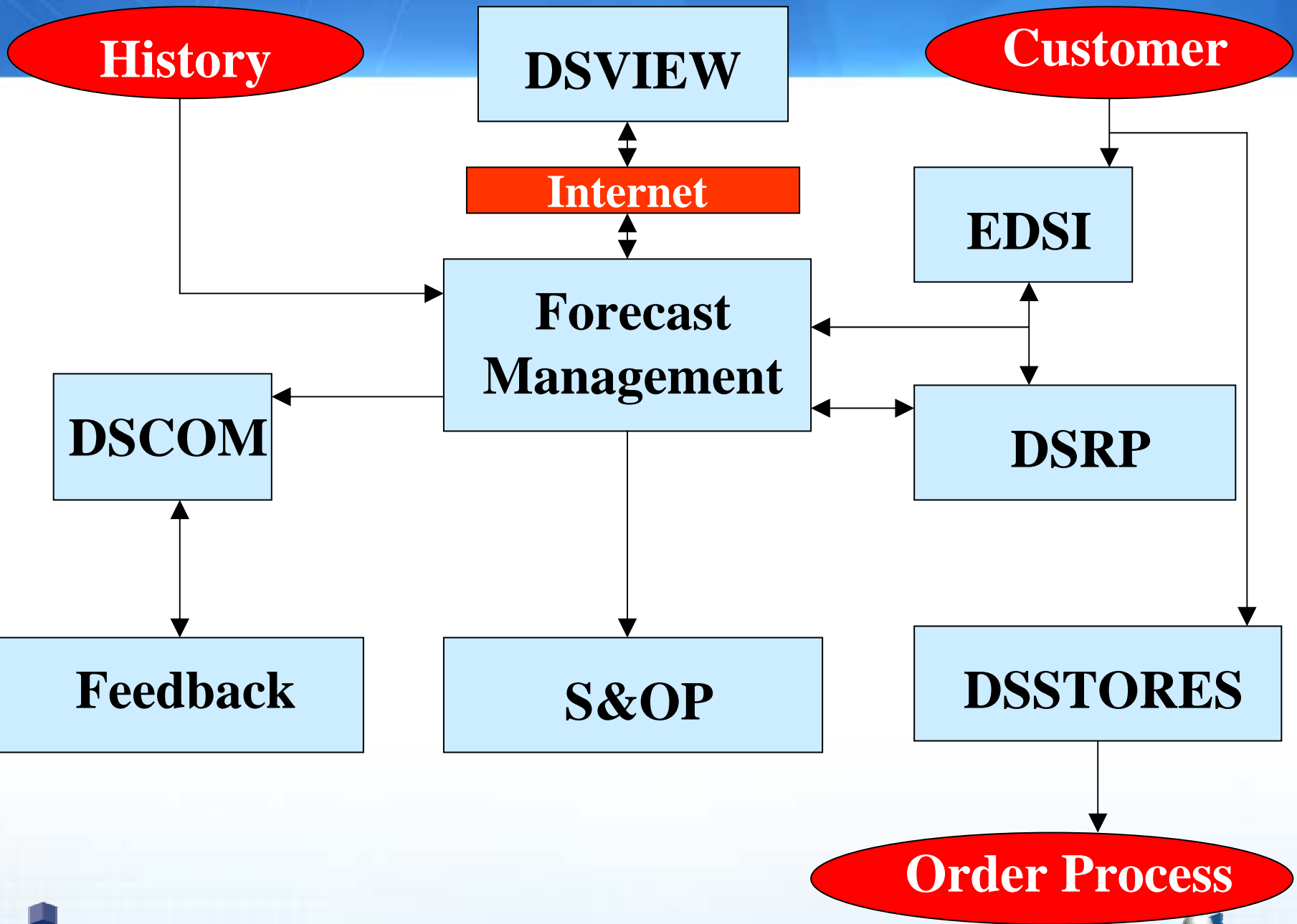


Planning

- The REPLENISHMENT PLAN (planned orders) is the result of applying the forecast to:
- Safety stock policies (company)
- Lot sizes (manufacturing)
- Minimum order quantities (supplier imposed)
- Lead times (demonstrated)





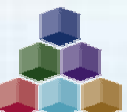


What is Demand Management?

- **Demand Management is the process of co-ordinating of all activities relating to demand for product. These activities include:**
 - Sales
 - Order processing
 - Planning and scheduling
 - Marketing
 - Purchasing/Production
 - Forecasting



- **Visibility**
- **Communications**
- **Flexibility**
- **Manageability**
- **Planning**
- **A process, not an event**



Who is Involved?

- **Field Sales and Sales Management**
- **Order Processing Personnel**
- **Customer Service Personnel**
- **Product Managers**
- **Marketing Managers**
- **Master Schedulers/Production Planners**
- **Top Management**



The Challenge

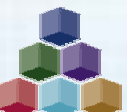
SUPPLY

DEMAND



Forecasting

- **As close to the source as possible**
- **Involvement of sales and marketing**
- **Performance analysis a must**
- **ABC analysis recommended**
- **Aggregation primarily for review**
- **Provides bottoms up input to financials**



Replenishment Planning

- **Applying planning parameters to the forecast**
- **Reacting to the variability in demand**
- **Optimizing inventory investment**
- **Visibility of the distribution network**
- **Bridge between forecaster and production**



Collaborative Forecasting

- Collaborative forecasting is the sharing of forecasted requirements between supplier and customer with the goal of achieving a mutually agreeable forecast that will drive a replenishment system.



Consequences of Not Managing Demand

- **Inventory Spirals Upward**
- **Increased Pressure on Production**
- **Quality Declines**
- **Service Level Declines**
- **Less Competitive**
- **Increased Cost Pressure**



What about Management?

- **Commitment**
- **Involvement**
- **Business Plan ?**
- **Information ?**
- **A process ?**



Return on Investment

- **Increased customer service**
- **Reduced inventories**
- **Smoother production**
- **Increased competitiveness**
- **Firm customer partnerships**
- **Excellence in the eyes of the customer**



Global Solutions, Delivered Locally

APPAREL



CPG



OIL & GAS



WHOLESALE DIST.



SERVICE PARTS



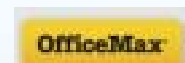
FOOD & BEVERAGE



PHARMACEUTICAL



RETAIL



Proven Rapid Results

3M • Abbott Laboratories • Avery Dennison • Cott Beverages • Cooper Bussmann Industries • PPG • Dawn Foods • Playtex • Schlumberger • Jacuzzi • Kimberly Clark • Home Depot • Chevron • Carrier Corporation • Lindt & Sprungli • Roche Diagnostics • Ace Hardware • Sprint • Valmont • Irwin Tools • Bell Helicopter • Day-Timers • Formica Corporation • Hunter Fan • Just Born Inc. • Lamb-Weston • Newell Rubbermaid • Pilkington • Reckitt Benckiser • Thermo King Corporation • Xango • ARAMARK • Carhartt • Epson America • Gold Toe Brands • Ingersoll Rand • Kellwood • Mr. Gasket Company • Parker Hannifin • Ridge Tool Company • Tektronix • Unilever Canada • Yaskawa Electric America • Briggs & Stratton • Delmonte Foods • Fiskars • Homax Products • Johnson Components • Leviton Manufacturing • National Manufacturing Company • Peerless Chain Company • Rheem Manufacturing Company • Sears Manufacturing • University of Campbell Hausfeld • Elkhart Products Corporation • Goodyear Tire & Rubber Company • Intermatic • Kimball International • Marshall Brass • O'Sullivan Industries • Quadrant Engineered Plastic Products • Saab Aircraft AB • Under Armor Performance Apparel • Wrigley Company LTD • Bemis Manufacturing Company • Dana Corporation • Fellowes Inc • Haggard Clothing • Johnson Outdoors • Liz Claiborne • Novartis Consumer Health • Piedmont Healthcare Inc • Rawlings Sporting Goods • Toro Company • Val-Matic Valve & Mfg • Water Pik Technologies Canada • Aventis Pharmaceutical PTY LTD • Californian Eastern Laboratory • Evenflo • GE Industrial Systems • Kodak Polychrome • Manhattan Toy Company • Quality Park Products • Sanford Corporation • Tumi Luggage Inc • Wagner Spray Tech • Black & Decker • Goldwell Cosmetics • Hyundai Motor Company • La-Z-Boy • Sara Lee International • Toro Company



Proven Rapid Results

3M • Abbott Laboratories • Avery Dennison • Cott Beverages • Cooper Bussmann Industries • PPG • Dawn Foods • Playtex • Schlumberger • Jacuzzi • Kimberly Clark • Home Depot • Chevron • Carrier Corporation • Lindt & Sprungli • Roche Diagnostics • Ace Hardware • Sprint • Valmont • Irwin Tools • Bell Helicopter • Day-Timers • Formica Corporation • Hunter Fan • Just Born Inc. •

Lamb-Weston
Xango • ARAMCO
Mr. Gasket Co
Yaskawa Electric
Johnson Controls
Chain Comp
Campbell Haus
Intermatic • Kir
Plastic Products
• Bemis Manu

Corporation •
Kellwood •
er Canada •
Products •
Peerless
University of
Company •
Engineered
Company LTD
Johnson

Outdoors • Liz Claiborne • Novartis Consumer Health • Piedmont Healthcare Inc • Rawlings
Sporting Goods • Toro Company • Val-Matic Valve & Mfg • Water Pik Technologies Canada •
Aventis Pharmaceutical PTY LTD • Californian Eastern Laboratory • Evenflo • GE Industrial
Systems • Kodak Polychrome • Manhattan Toy Company • Quality Park Products • Sanford
Corporation • Tumi Luggage Inc • Wagner Spray Tech • Black & Decker • Goldwell Cosmetics
• Hyundai Motor Company • La-Z-Boy • Sara Lee International • Toro Company

Hyundai Motor America:

- Implemented in 2 months
- \$8 million in savings
- Reclaimed 125,000 square feet of warehouse space
- Fill rates improved to 95%
- Dropped Fed-Ex costs by 50%



Proven Rapid Results

3M • Abbott Laboratories • Avery Dennison • Cott Beverages • Cooper Bussmann Industries • PPG • Dawn Foods • Playtex • Schlumberger • Jacuzzi • Kimberly Clark • Home Depot • Chevron • Carrier Corporation • Lindt & Sprungli • Roche Diagnostics • Ace Hardware • Sprint • Valmont • Irwin Tools • Bell Helicopter • Day-Timers • Formica Corporation • Hunter Fan • Just Born Inc. •

Lamb-Weston
Xango • ARAMCO
Mr. Gasket Co
Yaskawa Electric
Johnson Controls
Chain Comp
Campbell Haus
Intermatic • Kir
Plastic Products
• Bemis Manufacturing Company •

Saab Aircraft:

- **Implemented in 3 months**
- **Reduced inventory by \$6 million**
- **Reduced staff**
- **Improved service levels from 95% to 97%**



Corporation •
Kellwood •
er Canada •
Products •
Peerless
niversity of
Company •
Engineered
mpany LTD
Johnson

Outdoors • Liz Claiborne • Novartis Consumer Health • Piedmont Healthcare Inc • Rawlings
Sporting Goods • Toro Company • Val-Matic Valve & Mfg • Water Pik Technologies Canada •
Aventis Pharmaceutical PTY LTD • Californian Eastern Laboratory • Evenflo • GE Industrial
Systems • Kodak Polychrome • Manhattan Toy Company • Quality Park Products • Sanford
Corporation • Tumi Luggage Inc • Wagner Spray Tech • Black & Decker • Goldwell Cosmetics
• Hyundai Motor Company • La-Z-Boy • Sara Lee International • Toro Company



Proven Rapid Results

3M • Abbott Laboratories • Avery Dennison • Cott Beverages • Cooper Bussmann Industries • PPG • Dawn Foods • Playtex • Schlumberger • Jacuzzi • Kimberly Clark • Home Depot • Chevron • Carrier Corporation • Lindt & Sprungli • Roche Diagnostics • Ace Hardware • Sprint • Valmont • Irwin Tools • Bell Helicopter • Day-Timers • Formica Corporation • Hunter Fan • Just Born Inc. •

Lamb-Weston
Xango • ARAMCO
Mr. Gasket Co
Yaskawa Electric
Johnson Controls
Chain Comp
Campbell Haus
Intermatic • Kir
Plastic Products
• Bemis Manufacturing Company •

Corporation •
Kellwood •
er Canada •
Products •
Peerless
University of
Company •
Engineered
Company LTD
Johnson

Day Timers:

- **Implemented in 13 weeks**
- **Reduced inventory requirements by 50%**
- **Customer service improved from near 70% to high 90 percentile range**
- **Forecast accuracy improved from 50% to over 90%**



Outdoors • Liz Claiborne • Novartis Consumer Health • Piedmont Healthcare Inc • Rawlings Sporting Goods • Toro Company • Val-Matic Valve & Mfg • Water Pik Technologies Canada • Aventis Pharmaceutical PTY LTD • Californian Eastern Laboratory • Evenflo • GE Industrial Systems • Kodak Polychrome • Manhattan Toy Company • Quality Park Products • Sanford Corporation • Tumi Luggage Inc • Wagner Spray Tech • Black & Decker • Goldwell Cosmetics • Hyundai Motor Company • La-Z-Boy • Sara Lee International • Toro Company



Proven Rapid Results

3M • Abbott Laboratories • Avery Dennison • Cott Beverages • Cooper Bussmann Industries • PPG • Dawn Foods • Playtex • Schlumberger • Jacuzzi • Kimberly Clark • Home Depot • Chevron • Carrier Corporation • Lindt & Sprungli • Roche Diagnostics • Ace Hardware • Sprint • Valmont • Irwin Tools • Bell Helicopter • Day-Timers • Formica Corporation • Hunter Fan • Just Born Inc. •

Lamb-Weston
Xango • ARAMCO
Mr. Gasket Co
Yaskawa Electric
Johnson Controls
Chain Comp
Campbell Haus
Intermatic • Kir
Plastic Products
• Bemis Manufacturing Company •

Ericsson Manufacturing:

- Implemented in 2 months
- Increased annual rate of inventory turns from 4 to 6.5
- Increased service levels from 75% to 90 %

ERICSSON 

Outdoors • Liz Claiborne • Novartis Consumer Health • Piedmont Healthcare Inc • Rawlings Sporting Goods • Toro Company • Val-Matic Valve & Mfg • Water Pik Technologies Canada • Aventis Pharmaceutical PTY LTD • Californian Eastern Laboratory • Evenflo • GE Industrial Systems • Kodak Polychrome • Manhattan Toy Company • Quality Park Products • Sanford Corporation • Tumi Luggage Inc • Wagner Spray Tech • Black & Decker • Goldwell Cosmetics • Hyundai Motor Company • La-Z-Boy • Sara Lee International • Toro Company

