

SOLVE FOR X.

***Automate Your Way
to Improved Retail
Compliance and
Eliminate Customer
Chargebacks***

Presented by:

Dave Lodwig



CONVEYCO
Good people. Great solutions.

Priorities of Distribution Operations

- Lowest Fulfillment Costs
 - Increased speed
- Order Accuracy
 - Fill rate
 - Carton contents
 - Multi-carton consolidation
- Compliance
 - Labeling
 - Paperwork & ASN



PACKING LIST		
ABC Company, Inc. 234 S. Main Ave. Hubert, WI 54016-0000 234-567-8901		
Order: 041000	Shipped: 21404	Weight: 5 lbs.
Shipped To: ABC Company, Inc. 234 S. Main Ave. Hubert, WI 54016-0000 United States 123-456-7890		
Package Contents		
Quantity	Part Number	Description
25	1234	Socket Wrenches
10	2345	Chest Sets
100	5678	Screen Cleaner Sets
Comments: Contact us at 1-800-800-2345 for more information about this package.		
Fold Here		
74113-0000		3
XJF 3V		
Source: Exports		
Routing		
ABC Company, Inc. 234 S. Main Ave. Hubert, WI 54016-0000 United States 123-456-7890		
Packing Slip on Opposite Side of Label		

FROM:	QTY - 1	6 OF 11
T.L. ASHFORD	SKU#: 081501200076	
502 W. FIFTH ST.	VEN#: TSHSGR	
COVINGTON, KY 41011		
TO: ACE HARDWARE CORPORATION		
9801 EAST VALLEY ROAD		
*****WAREHOUSE*****		
PRESCOTT VALLEY AZ 86314		
(420) 86314	PDF: A108610	
MARK FOR: (B1) 008928	ORD#: 237854	
STORE:		
0010 0086355 000964869 2		

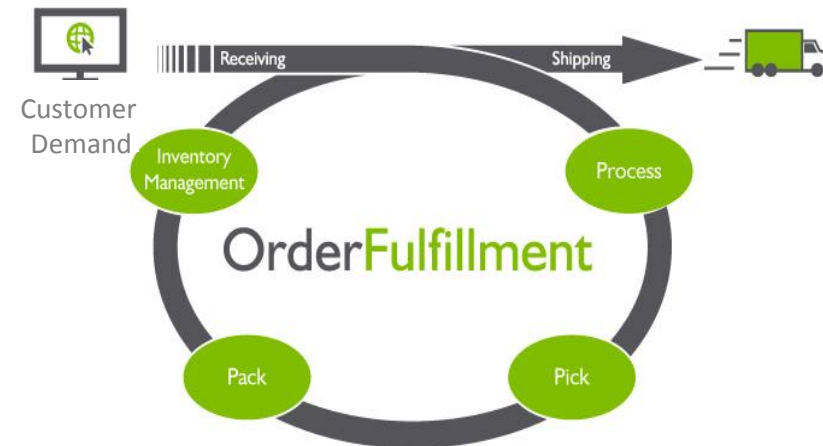
Order Fulfillment

- Definition

One integrated process of picking, packing, and shipping orders to the full satisfaction of the customer.

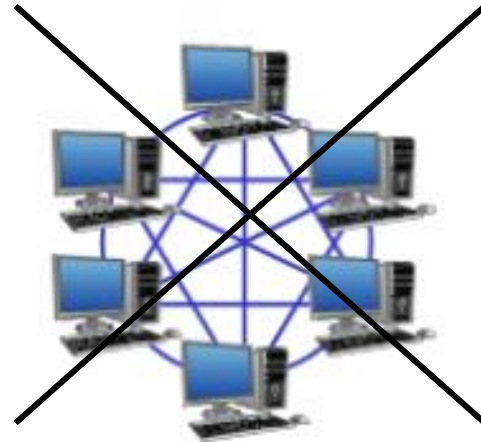
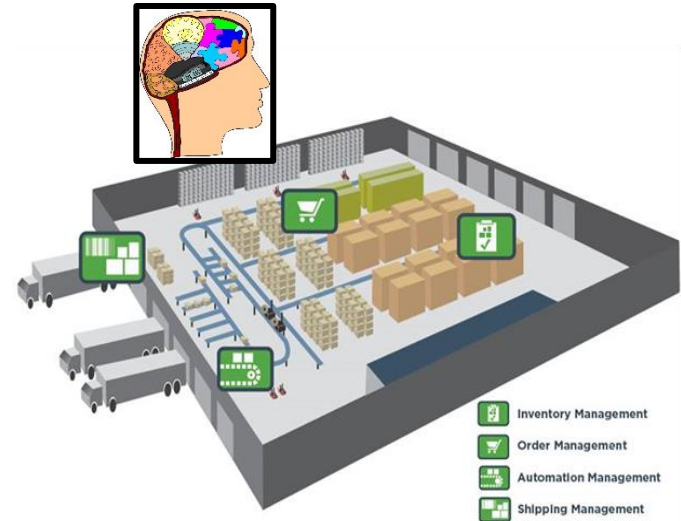
- In Practice

- Process an increasing volume of orders
 - Retail & eCommerce
- Decrease the cost per order shipped
 - Labor, materials, and freight
- Process orders in less time



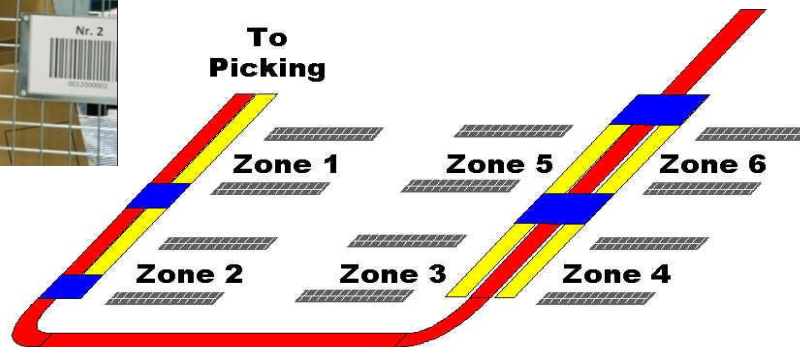
Software

- Coordinates and maximizes efficiency of the 3 process area
- Should be a single system or tightly integrated group of systems planning and driving distribution operations
- Can help reduce labor costs 20-50%



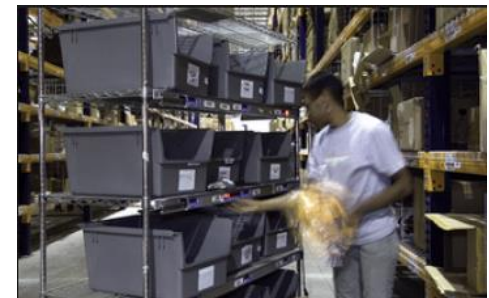
Order Picking

- Solutions and technologies are based on order type and volume
 - Low volume: Discrete order system directed picking
 - Medium volume: Semi-automated discrete and batch picking
 - High volume: Batch picking with automated sorting to discrete orders



Order Picking: Low Volume

- 2,000 to 5,000 orders per day
- Manual picking optimization
 - Reduce travel distance and time
 - SKU profiling and slotting- Right size the forward picking area
 - Group orders to be picked at one time
 - Identify SKUs by pick type and velocity
 - Spread fast movers out
 - Separate really slow movers



Order Picking: Medium Volume

- 5,000- 10,000 orders per day
- Break SKUs down by velocity
- Automate the highest labor cost area(s)
 - Use conveyor to bring orders to the pickers
 - Consider a 2 step picking method
 - Batch picking
 - Consolidation to discrete orders
- Integrate packaging automation
 - Group orders together by pack type
 - Automatic checking and labeling



Order Picking: High Volume

- 10,000+ orders per day
- Automate both the picking and consolidation areas
- Consider upgrading or redesigning existing automation
 - New technologies have emerged in the last 5 years
 - Goods-to-Person
 - Consolidation buffers
 - Unit sortation

Order Picking: High Volume

- Pick-to-Light & Pick-to-Voice
 - More accurate: 99.5+%
 - More productive than paper/RF
 - Lights: 300-350 lines per hour
 - Voice: 150-200 lines per hour
- Goods-to-Person
 - Most accurate: 99.9%
 - More productive all day: 350-600 line per hour
 - Most efficient and ergonomic
 - One touch per order line
 - No walking
 - Most Flexible
 - Picking products in any order desired
 - Automates stock rotation, FIFO, & FEFO



Order Picking: Technologies

- Pouch Sorters
 - Applications
 - eCommerce
 - Retail (apparel & consumer goods)
 - Returns



Checking & Packing

- Checking
 - Directed picking is the first step in checking
 - Post picking checking
 - In-motion scales check weigh orders
 - In-motion dimensioning
 - Image capture: Contents and carton labeling
- Make stations package specific
 - Will always need manual stations
 - Make the as efficient and ergonomic as possible



Checking & Packing

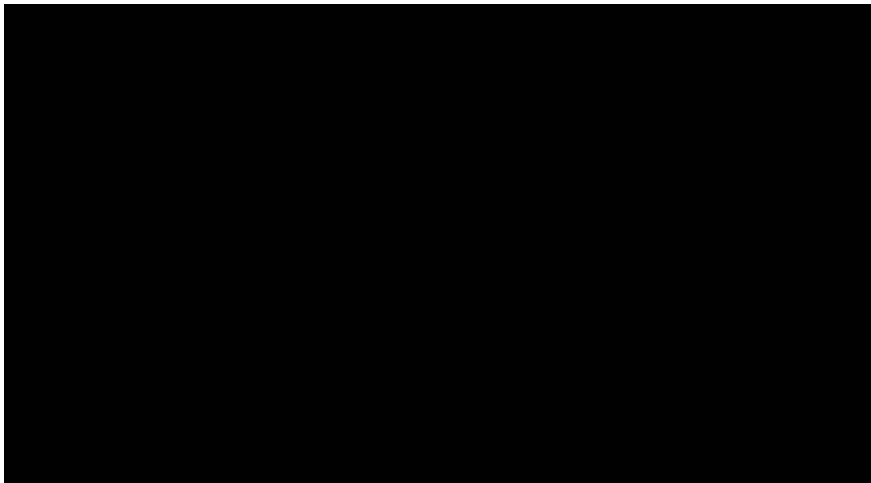
- Packaging automation
 - Different technologies for different products
 - Automatic bagging
 - 600-1200 bags per hour (1 operator)
 - \$0.09-0.25 per bag (no void fill)
 - Can eliminate dimensional weight surcharges
 - Automatic Cartoning
 - 450-600 cartons per hour (1 operator)
 - Eliminates void fill labor and cost
 - Automatic Labeling
 - 900-6,000+ cartons per hour
 - Shipping and contents labels
 - Image capture for compliance verification



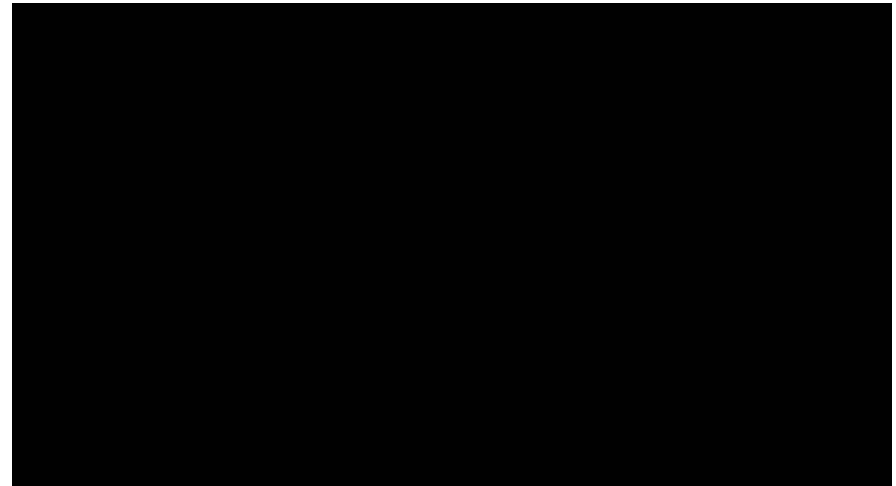
SOLVE FOR X.

Automated Packaging and Labeling

Automated Bagging System

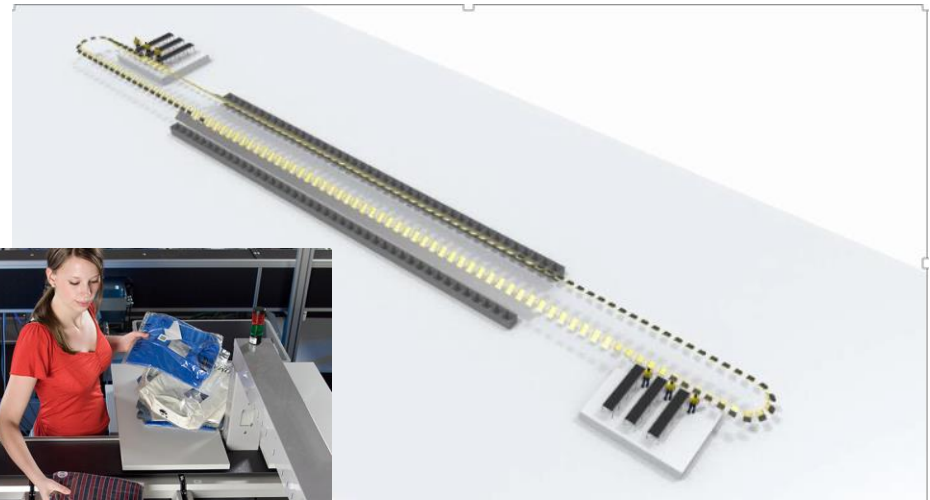
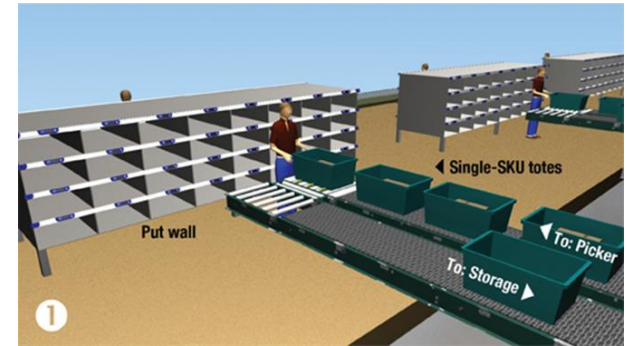


Automated Cartoning System



Order Consolidation & Shipping

- Unit Handling
 - Put Walls: Manually sort to discrete orders
 - 200-300 units per hour, 20-50 orders per wall
 - Can be paired with pack station
 - Tray Sorter: Automatically sort to discrete orders
 - 7,000-14,000+ units per hour
 - Requires remote packing stations



Order Consolidation & Shipping

- Case Handling

- Case Sorters

- 720-12,000 cases per hour
 - Can be paired with pack station

- Tray Sorter:

- 7,000-14,000+ units per hour
 - Same sorter can be used for units sorting to pack stations and case sorting to shipping



SOLVE FOR X.

Automated checking & Shipping



Summary

- Centralized software optimizes the fulfillment process
- Directed picking requires less checking
- Automated checking and packing is easy to implement
- An integrated fulfillment system incorporates all picking, checking, packing, and shipping functions

SOLVE FOR X.

Questions and Comments

For More Information:

Dave Lodwig

Account Manager

Conveyco Technologies

email: dlodwig@conveyco.com

Website: www.conveyco.com

Or visit ProMat Booth #S4840