WMS Systems: Drive Efficiencies, Reduce Costs and Improve Service Levels

> Presented by: Mark Bondurant Nate Cass





Natural Life

- Founded in 1996 by Patti Hughes
- Lifestyle apparel, gift and accessories for women
- Located in Jacksonville, FL
- www.naturallife.com





Natural Life Customer Profiles







POWERED BY POSSIBILITIES.

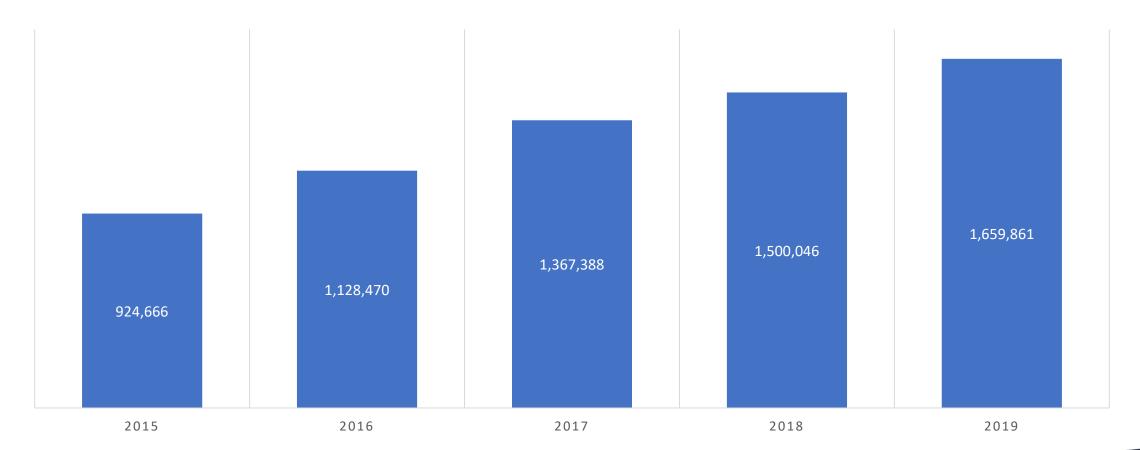
Natural Life Products

- Apparel
- Home décor
- Gifts
- Accessories
- Over 2,000 products





Annual Growth – Number of Order Lines





Exit 3PL – Setup Natural Life Warehouse

3PL

- 3/2015 9/2017
- Tier 1 WMS
- Conveyor
- Gravity flow racks
- Wireless devices
- 20,000 Square feet

Natural Life Warehouse

- 10/2017 Present
- Twin Oaks WMS
- Conveyor
- Gravity flow racks
- Wireless devices
- 40,000 square feet

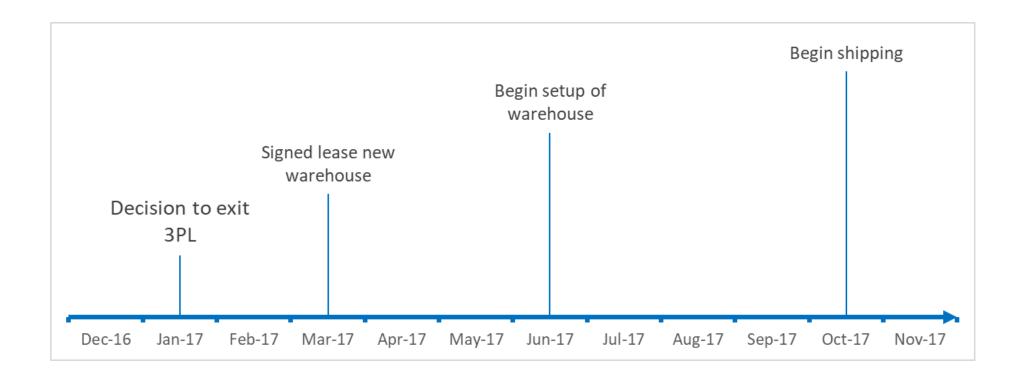


3PL Issues

- Picking errors
- Order turnaround could not keep up during peak
- Inventory accuracy
- Inbound receiving slow
- Chargebacks due to labeling, cancel dates, shipping errors
- Interface issues missing orders
- Shipping process slow measure boxes and manual rate shop
- Expensive to make changes
- Inflexible took a long time to make a change
- Returns process was manual and slow



New Warehouse Timeline





Better WMS Interfaces Drive Improvements

WMS to ERP live integration

• Orders, shipping, products, returns, receiving, inventory adjustments

WMS to material handling equipment

- Laser curtain automatic carton dimensions
- In-line scales automatic carton weight
- Diverters small package, LTL, International

WMS to carriers via web api

• Shipping, address validation, rate shopping



Laser Dimensioner, In-line Scale, Shipping



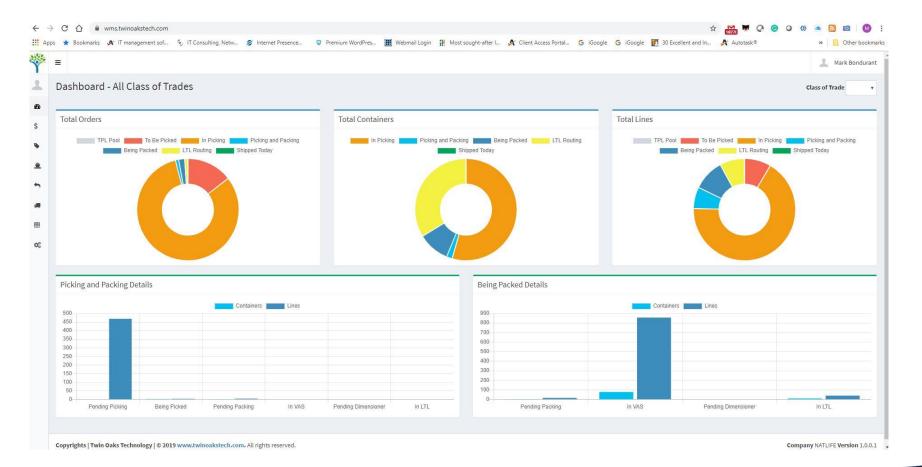


Results: Reduced Costs & Improved Service

- Inventory accuracy improved by 68%
- Ship station processing improved by **500%**
- Accurate carton dimensions saved on dimensional fees
- Accurate shipping addresses saved on address correction fees
- Automated rate shopping with last second conversion to 2 Day, First Class and GFP



WMS Dashboard to Monitor Throughput





WMS: Improved Order Management

- Ability to manage order flow to picking
 - Consumer, wholesale or key
 - Shipping zones
 - Cancel dates
 - Order priority expedited ship
 - International
 - Preconfigured releases

Choose Specific	Orders	Choose Fi	reconfigured	l Release				
Choose your filte	ers							
Warehouse		Order Prio	ority		Weight Rang	je	Routi	nį
Order Type		Customer			Ship To State	e l	UCC1	28
Early Ship		Customer	PO		Ship To Zip		Cance	el
Order Entry Date	2	Ship Date			Ship To Zone		Juris	C
		Ship Date						
DC Release Date		Ship To Co			Ship Via		Class	
Release Results Show 10 Ter	ntries	Ship To Co	puntry		Ship Via			0
Release Results	ntries		puntry			PO Number	Class	
Release Results Show 10 Ter	ntries	Ship To Co	puntry		Ship Via			0
Release Results Show 10 Ter ATS Number	ntries	Ship To Co	Lt c	Drder Date	Ship Via	PO Number		0
Release Results Show 10 • er ATS Number B2000550329	ntries	Ship To Co 15 Order 396892	puntry	Drder Date 08/15/2019	Ship Via	PO Number 2000550329		0
Release Results Show 10 • er ATS Number B2000550329 B2000550331	ntries Image: state	Ship To Co Ship To Co Softer 396892 396893	Lt 0 0	Drder Date 08/15/2019 08/15/2019	Ship Via	PO Number 2000550329 2000550331		



Better Management of Picking Workload

- Real time monitoring by supervisors
 - Identify bottlenecks
 - Reposition pickers to high volume areas
 - Suggest picker locations to maximize output
 - Dynamic zone expands and contracts

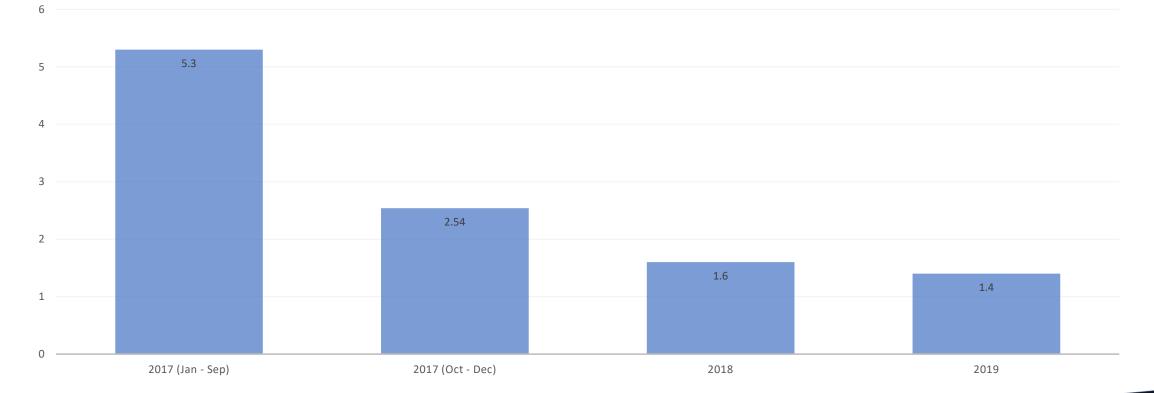
Label	Picker	Picks	Starts	Available	во	Restock	Disc
А	Picker1	356	301	25	0	0	0
В	Picker2	301	287	29	0	0	0
С	Picker3	401	301	42	2	0	0
D	Picker4	425	315	25	0	1	0
E	Picker5	280	115	52	0	0	0
F	Picker6	213	98	39	0	0	0
G	Picker7	305	142	27	1	0	0
н	Picker8	197	65	15	0	0	0

PA01	А	PB01	С	PC01	Ε	PD01	G
PA02	А	PB02	С	PC02	Ε	PD02	G
PA03	А	PB03	С	PC03	Е	PD03	G
PA04	А	PB04	С	PC04	Ε	42 Pic	s
PA05	А	PB05	С	PC05	Ε	15 Sta	rts
PA06	А	PB06	С	PC06	Е	PD06	G
PA07	А	PB07	С	PC07	Е	PD07	G
PA08	В	PB08	С	PC08	F	PD08	G
PA09	В	PB09	С	PC09	F	PD09	G
PA10	В	PB10	С	PC10	F	PD10	G
PA11	В	PB11	D	PC11	F	PD11	G
PA12	В	PB12	D	PC12	F	PD12	Н
PA13	В	PB13	D	PC13	F	PD13	н
PA14	В	PB14	D	PC14	F	PD14	Н
PA15	В	PB15	D	PC15	F	PD15	Н
PA16	В	PB16	D	PC16	F	PD16	Н
PA17	В	PB17	D	PC17	F	PD17	Н
PA18	В	PB18	D	PC18	F	PD18	Н
PA19	В	PB19	D	PC19	F	PD19	Н
PA20	В	PB20	D	PC20	F	PD20	Н
PA21	В	PB21	D	PC21	F	PD21	Н
PA22	В	PB22	D	PC22	F	PD22	Н
PA23	В	PB23	D	PC23	F	PD23	н



Results: Avg days to ship improved 378%

Average Order Turnaround in Days





WMS Picking Efficiencies

- Minimal picking errors
 - Leverage GTIN barcodes to validate unit
 - Item and grid pick location image available to pickers
- Automated restock with high priority when out of stock
- Faster picking with visual cues and voice commands
- Multiple pick methods available based on workload
 - Rush, cart, dynamic zone, waveless, mini-pick aisle
- Multiple devices
 - Wearables, guns, glasses, phones and Bluetooth ring scanners



WMS Picking with Glasses





Results: Improved Pick Speed and Less Errors

- Average lines picked per hour improved **174%**
- Employee record single day LPH 171 LPH
- New pickers start picking on Day 1
- Picking accuracy 99.37%
- Expedited order turnaround at peak < 4 Hours

WMS Packing Improvements

- Customized packing list by class of trade
- QC checklist to validate picking accuracy
- Integrated returns label on packing list
- Ability to print gift messages
- Breakable items flagged for carton packing vs envelopes

POWERED BY POSSIBILITIES.



Hello future Rachel, it is me past Rachel. Just remember, you are so amazing, confident, kind, caring, capable, athletic, brave, strong, clever, smart, funny, pretty, honest, peaceful, and charming!!!



Results: Improved Customer Experience



Gift card personalized gift giving



Integrated return label simplified process for customers QC checklist proved very helpful finding pick mistakes



Decrease in carrier damages by packing in correct container



Better customer experience tailored to customer class



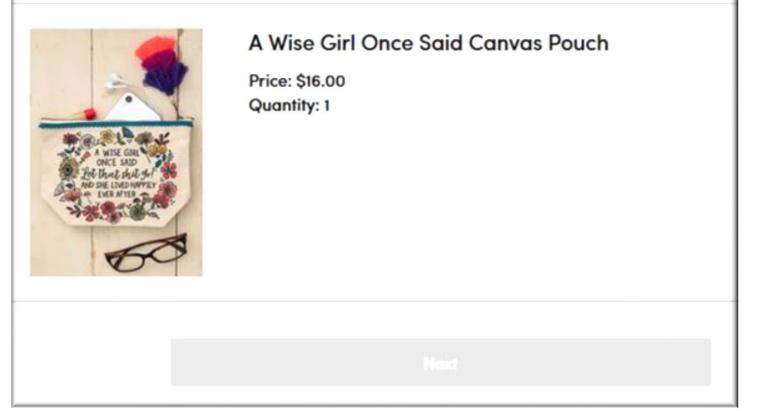
WMS Returns Processing

- Integrated return label enabled scan of tracking number
- Integration with Narvar enabled online returns processing
- Live integration with ERP
- Sellable product transferred back to forward pick location

What would you like to return?

•·····O·····O

These items from order 2000603678 can be returned until Dec 21, 2019.





Results: Faster Returns Processing



Reduced daily returns processing by **1 Hour**

Return rules enforced for non-returnable product Return analysis automated with return reason codes Return shipping cost reduced with rules based return options



WMS: Data Drives Continuous Improvement

A 🔮 🜑	涂 ▼ 3:40 PM
Scan Pa	ackage ID
PID712	3080001
Picks Per Hour	Qty Per Hour
110.24	127.52
Voice Options:	Start, Close, Quit 🦊

- Real time statistics for all job functions
- Track both productivity and quality
- Establish employee goals
- Employees receive real time feedback
- Evaluate new hire performance
- Tiered bonus program



Results: Increased Performance, Quality and Employee Satisfaction

Choose your	r type of statistic									
Warehous	e Picking	Packing	OB QC	Ticketing	Shipping	Cycle Count	Drivers			
Choose your	r timeframe									
Hourly	Daily	Monthly								
Choose your	r filters									
Start Month				End Month			Sł	nipper		
January			v	January			v		Search	
Start Year				Start Year						
2019				2019			Ψ			
Stat Results										
Show 10	• entries									
Shipper 🎼	Shipping Month 🛛 🕸	Hours Shipping	Lines SPH 🔱	Quantity SPH 🗍	Cartons SPH	Total Lines 🕸	Total Quantity	Total Cartons	Shipping Started	Shipping Ended
CASBRA	01/2019	182.88	715.55	2693.53	2693.53	130861	492594	23583	01/02/2019 07:20:16	01/31/2019 15:20:20



WMS Cost Saving Tools – Shipping Models

nipping Rate Comparis	son Report		
Start Date 12/02/2019	Rates to Use Discount	Email Address ▼ info@twinoakstech.com	
End Date	Package Count Modif	ier	
Ship Via Comparisons	3% s to Analyze		
		Residential Y/N	Add Ship Via Comparison Best Rate Y/N
Ship Via Comparisons	s to Analyze	Residential Y/N Yes	



WMS Cost Saving Tools – Shipping Models







		1
	-	

Run multiple models to negotiate better rates Use historical package volume

Compare multiple carriers and ship methods Run models against proposed rates

Identify impact of different surcharges



Results: Significant Savings in Shipping Fees

- Comparative models improved negotiation
- Solidified decision to change carriers
- Annual savings in shipping fees + \$100K



Quotes from Natural Life Management

• Patti Hughes, CEO:

"We're making everything look easy this year! Woohoo!!! Good job team!" "So crazy fast you guys!!!!"

• Lesli Schmachtenberger, CFO:

"Huge shout out to CE and warehouse....how much more relaxed are we this year" "Great job Warehouse Team!"

• Eve Chien, VP of Supply Chain:

"Nice job everyone! You break records again! Wow!"





2020 plans

- Integration with Fetch robots
- Integration with Amazon Alexa





For more information:

Speaker email: mark.bondurant@twinoakstech.com Website: www.twinoakswms.com

Speaker #2 email: ncass@naturallife.com website: www.naturallife.com

Or visit MODEX Booth 7291

