The New Power Couple: Automation and Lithium Ion Technology

Presented by:

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The New Power Couple:
Automation + Lithium
Hiring & retaining a skilled workforce
Customer demand for faster response times
Customer demand for lower delivered costs

2016 MHI ANNUAL REPORT
AEROSPACE

AUTOMOTIVE

WAREHOUSE AND DISTRUBTION

MEDICAL

ELECTRONICS

DEFENSE
Material Handling: Automation and Lithium

NEW PRODUCT ADOPTION

I THINK I CAN
I THINK I CAN

I'M KING OF THE WORLD

SMOOTH SAILING

JUST WORKING OUT THE KINKS

OOF, I'M PATHETIC

WHAT NEW PRODUCT?

WON BRILLIANT

INNOVATORS EARLY ADOPTERS EARLY MAJORITY LATE MAJORITY LAGGARDS

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KEY: Lithium Automation

The Industry That Makes Supply Chains WORK®
GROWTH OF AN INDUSTRY

Percentage change in retail jobs over the last 15 years

- E-commerce up 334%
- Warehouse clubs and others up 90%
- Electric lift trucks up 77%
- Retail industry overall flat
- Department stores down 25%

Source: Bureau of Labor Statistics

25 other retail sectors
CUSTOMERS DEMAND . . .

QUICK-TURN PRODUCT

LOWER COSTS $$$

. . . RESULTS

INCREASED NUMBER OF OPERATORS

INCREASED TRUCK DEMAND
INDUSTRY SOLUTIONS

- Increase efficiency
- Increase productivity
- Reduce costs
- Improve reliability
- Environmentally friendly
SUPPLY CHAIN CHALLENGES

- Increased SKUs while reducing cycle time
- Workforce continuity
- Adoption rate – conservative MH industry
- Costs
TECHNOLOGY CHALLENGES

➢ Perceived risk
➢ Supply base
➢ Up-front cost
ROBOTICS / AUTOMATION ADVANTAGES

- Reallocate workers to value-add tasks
- Working together AGVs + people
- Increase efficiencies / productivity
- Remove workers from hazardous environments
LITHIUM
ADVANTAGES

➢ Increased energy efficiency
➢ No traditional maintenance
➢ Positive ROI
SOLUTION BASED TECHNOLOGY

Hiring & retaining a skilled workforce
Customer demand for faster response times
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Automation & Lithium
FUTURE OF AN INDUSTRY

REMOTE WORK INSTRUCTIONS
System Control

REPORTS

NAVIGATION SYSTEM

VEHICLE VMS
LIGHTS OUT
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