



# Honeywell Operating System

**Pasquale Abruzzese**

VP Transportation Systems  
Integrated Supply Chain

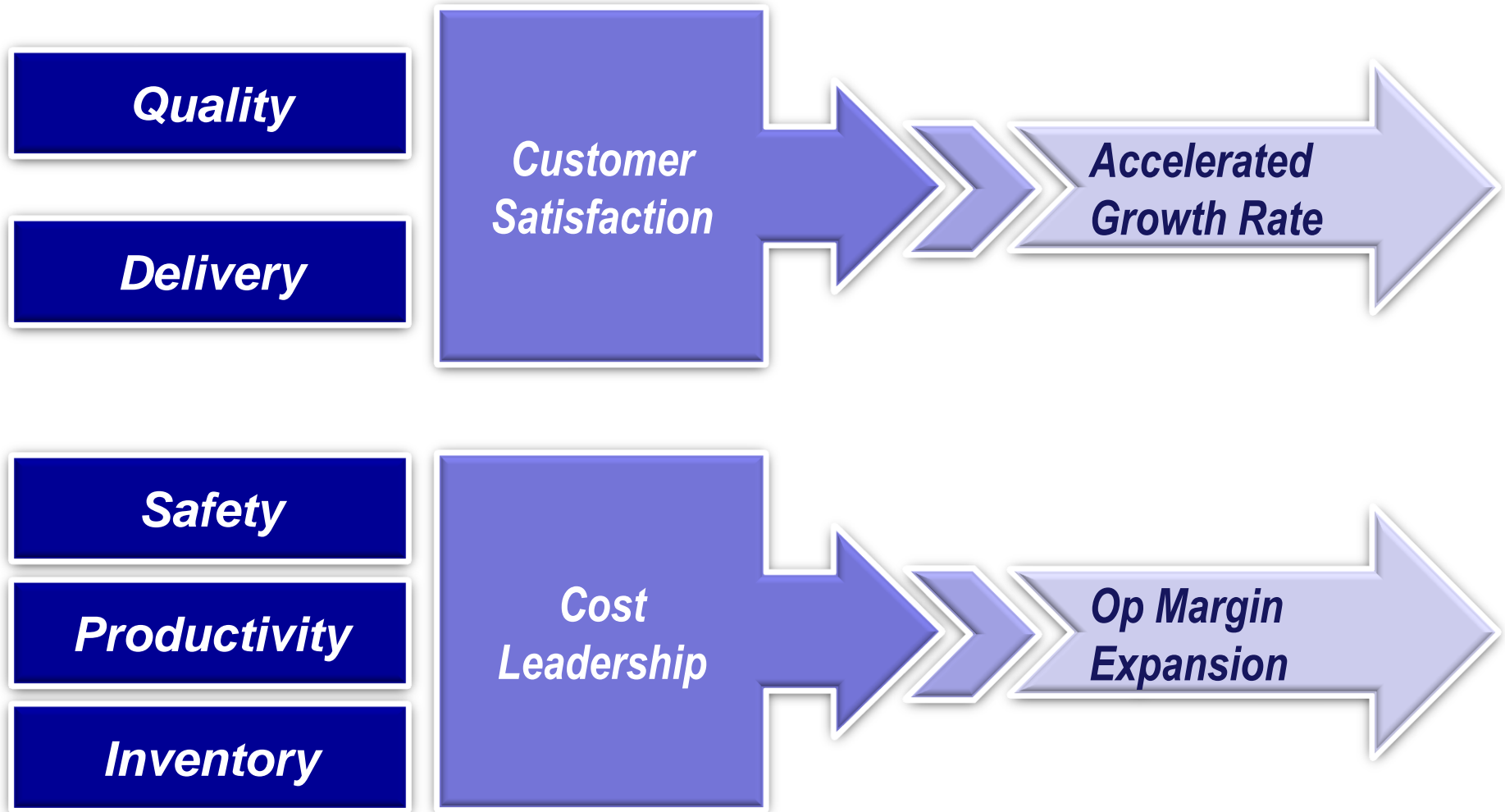
**Mike Owens**

VP Aerospace  
Integrated Supply Chain

**Honeywell**

# Driving Growth With HOS

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***HOS Maturity Drives Top And Bottom Line Results***

# HOS: A Shift In Mindset

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## From

- Top Down Plant Leadership
- Project Based Improvements
- Operators as Doers
- Unrealized Improvement Ideas

## To

- Leaders Acting as Coach
- Continuous Improvements
- Operators as Doers and Thinkers
- Rapid Problem Solving Culture

***People Working Smarter Not Harder***





# Driving Continuous Improvement

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## Improvement Ideas



GRUPPO DI LAVORO		SCHEDA IDEA KAIZEN	
MACCHINA / SEZIONE	PROBLEMA	AZIONE CORRETTIVA	NOTE
Final Line VNT20	Mancato attivarsi della protezione della girante Volvo	Implementare il poka yoke: premere la Tappo su girante come su linea PSA	
PRIMA DEL KAIZEN		DOPO IL KAIZEN	
			

- 100,000+ New Ideas Annually
- Input Locally/Implemented Globally

## Process

Before



Daily walk of  
2.7km

After



Daily walk of  
150 meters

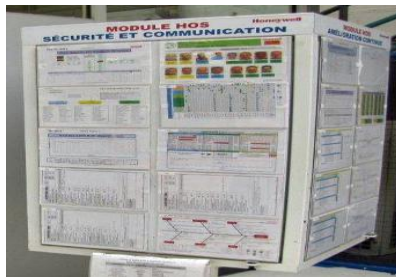
- Reduced Inventory by 50%
- Operator Led Improvements

***Continuous Improvement Culture Ingrained***

# Process Standardization

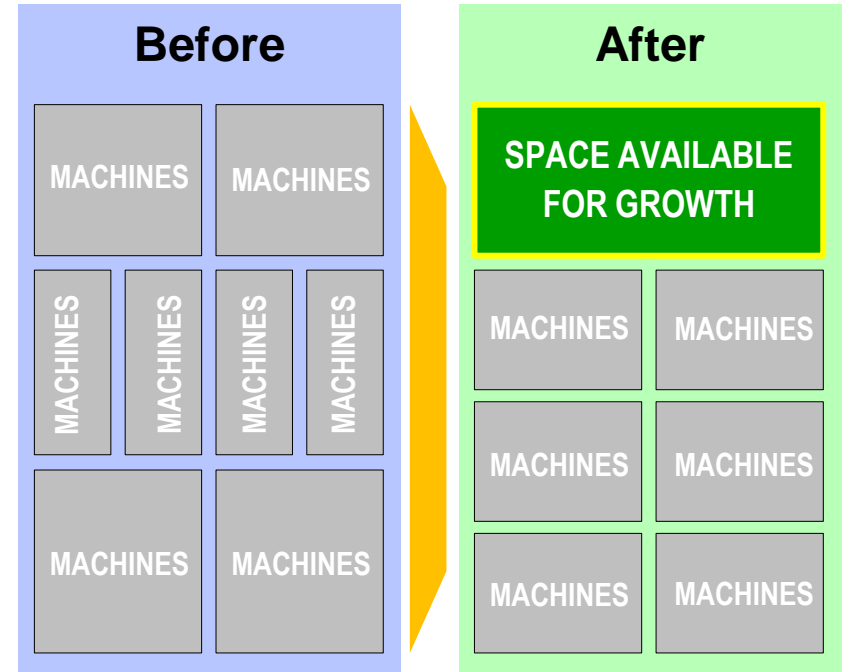
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## Visual Management



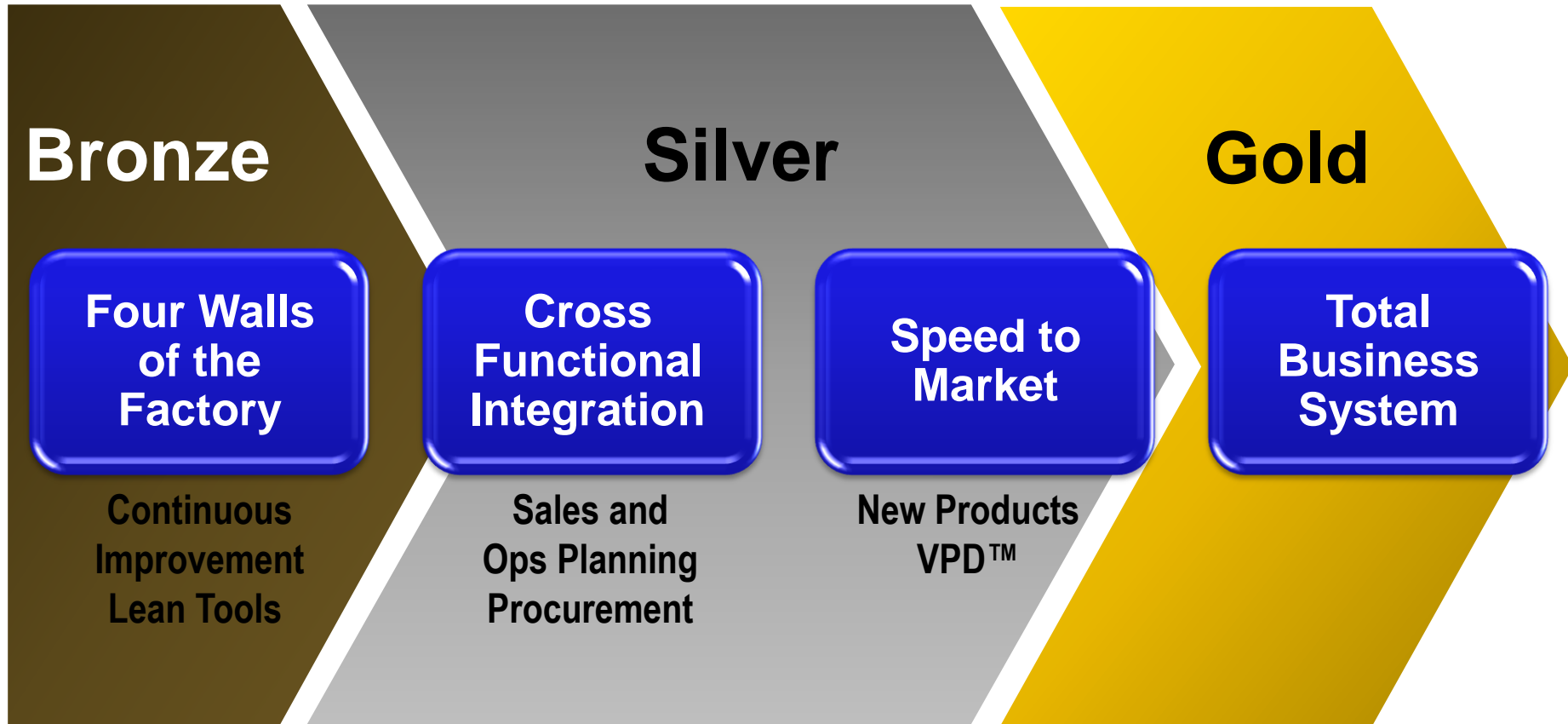
- Rapid Problem Solving on Floor
- Learning Shared Across Sites

## Capacity Optimization



- +25% Output / Square Feet
- Space Available for Growth

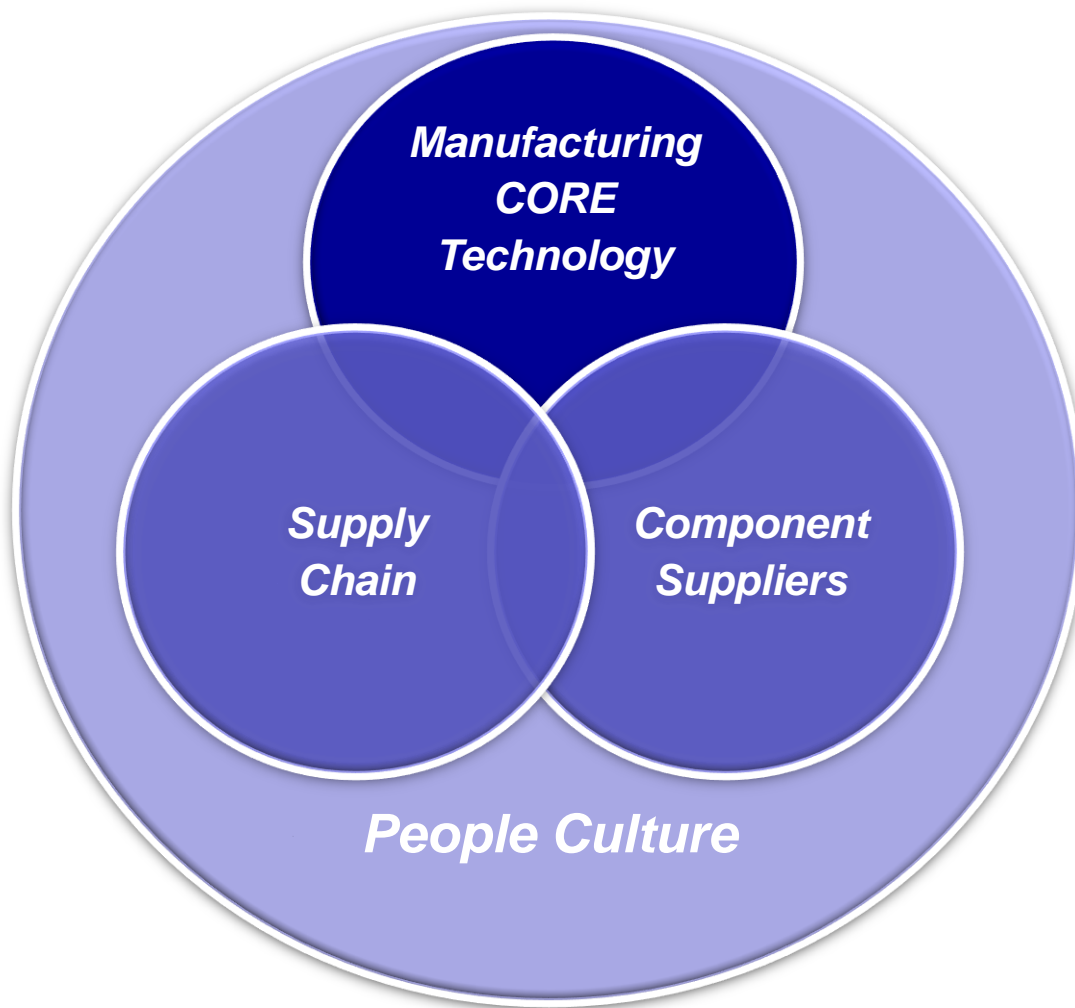
***HOS Implementation From 3 Years To 1 Year***



***HOS Now Impacts All Aspects Of Business Model***

# Turbo Operations Overview

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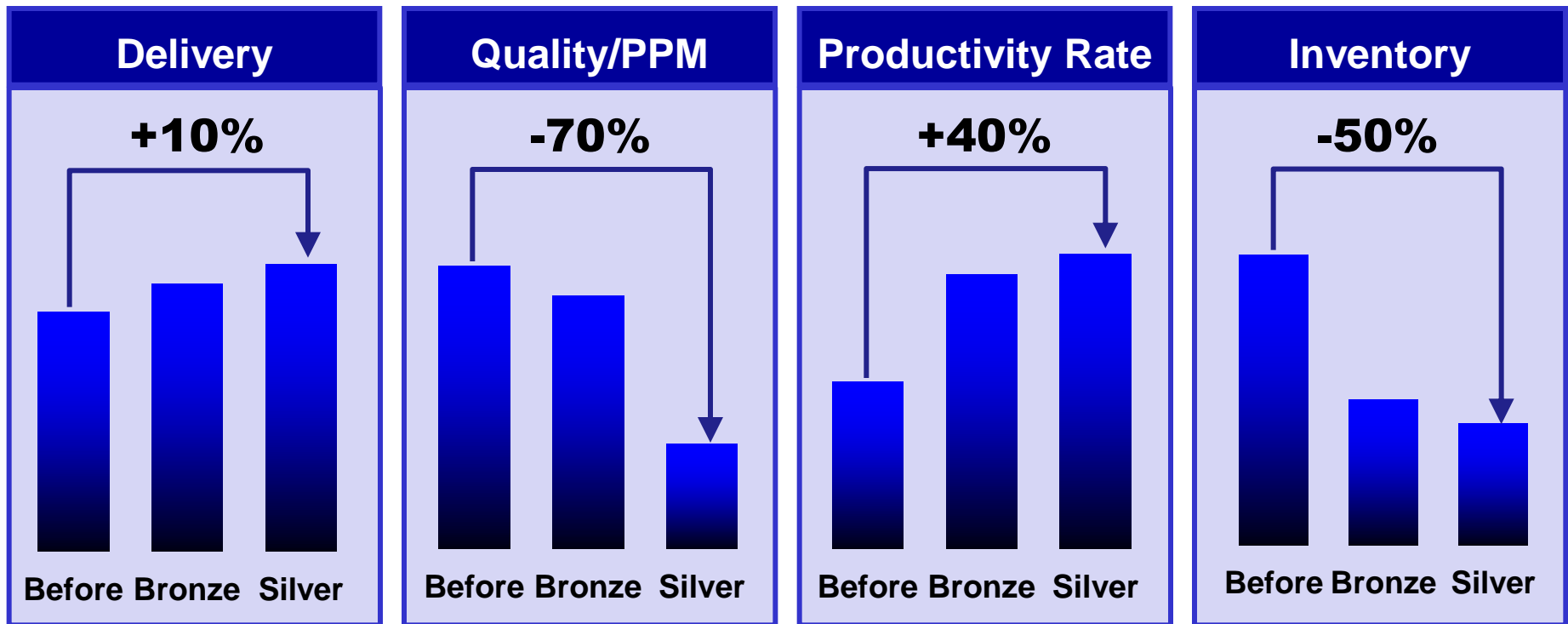


- Full Product Range 1L to 100L
- Global Footprint – 13 Countries
- Global Sourcing – 30 Countries
- Just in Time Delivery
- 10,000 SKUs
- 1,000+ Suppliers

***Broad Portfolio; Complex Global Supply Chain***

# Key Results: Silver Turbo HOS Sites

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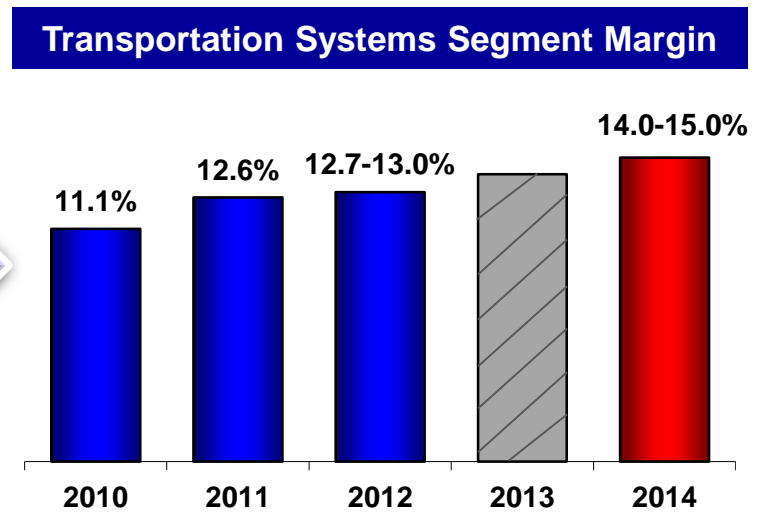
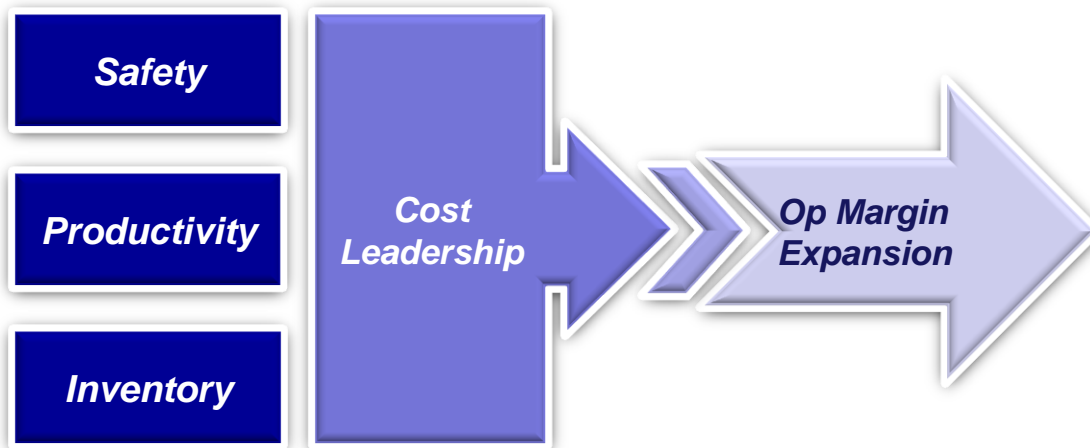
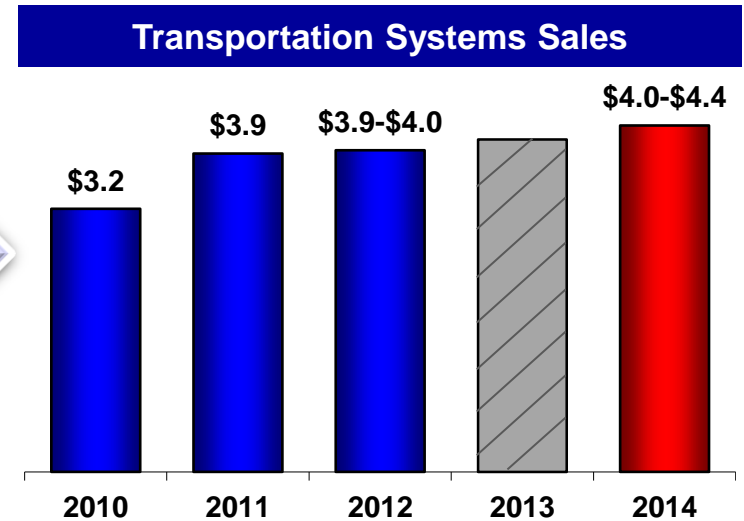
- Industry Best in Class Performance
- Customer Satisfaction and Cost Leadership

***Long Term Competitive Advantage***



# HOS: Turbocharging Growth

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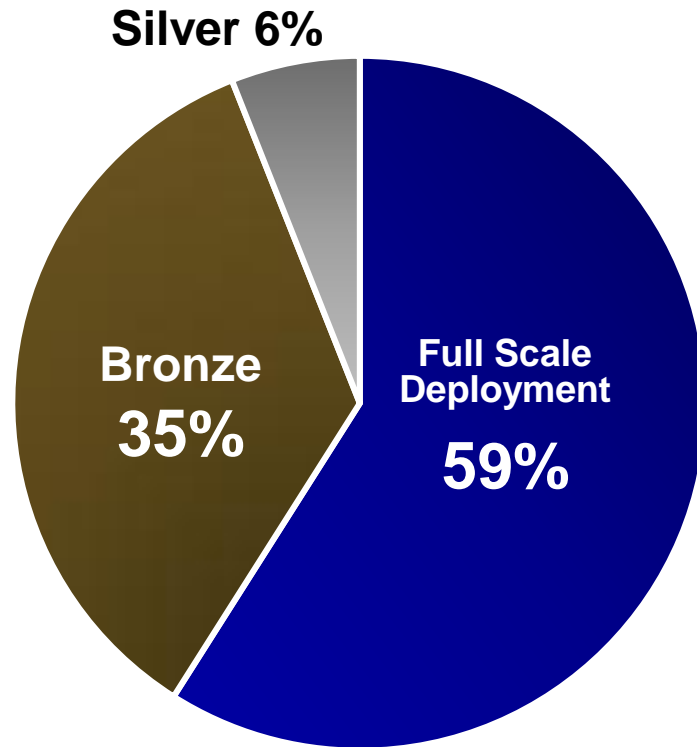
***Great Position In Growing Industry***

# Aero HOS – Building On TS Success

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## % Aero Manufacturing Cost

Year End 2011

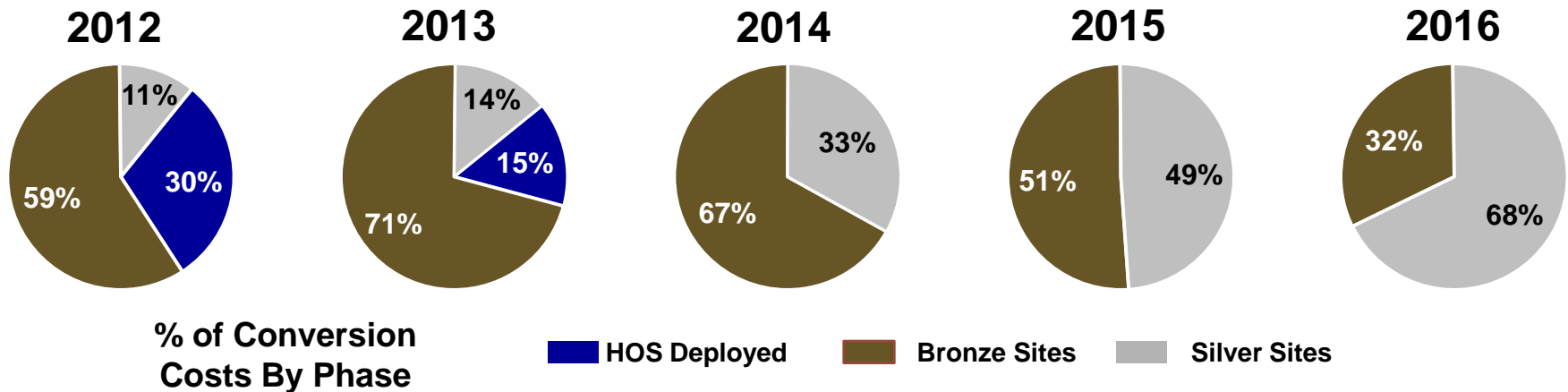
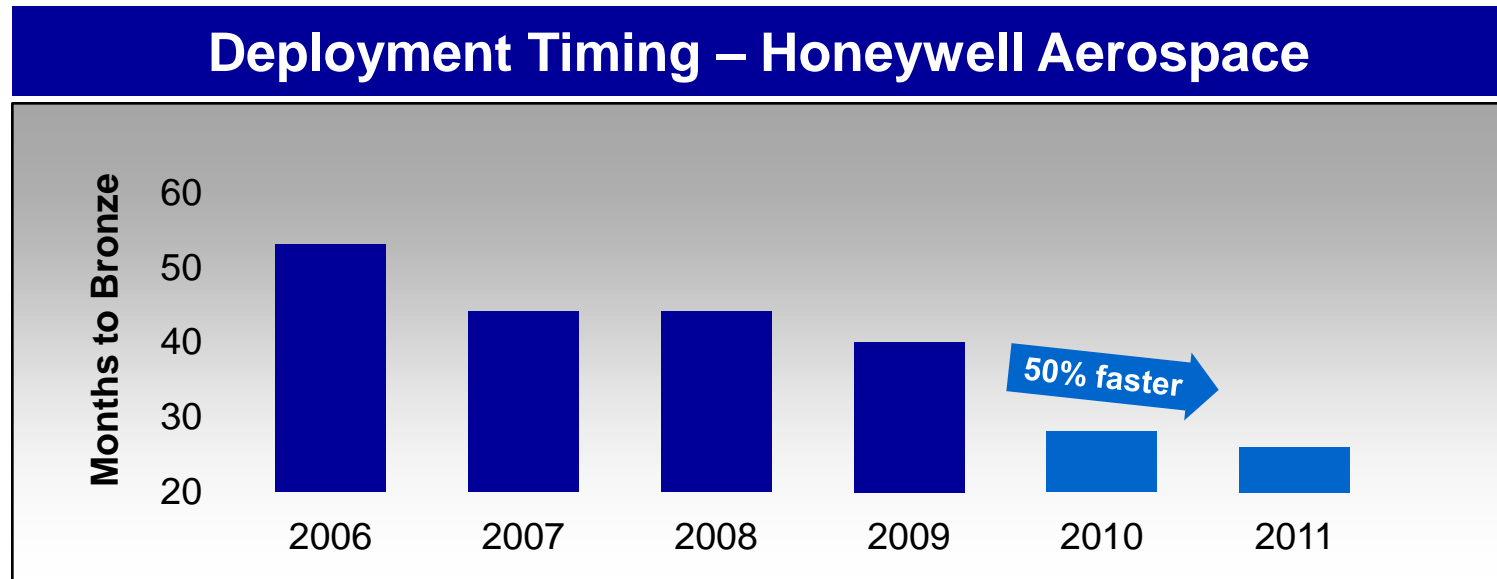


- HOS Now Deployed Across All Aero Sites
- Leveraging HON-Wide HOS Success
- Silver/Bronze Sites Productivity Up 50%

***Accelerating Aero HOS Deployment To Maturity***

# Accelerating Aero HOS Deployment

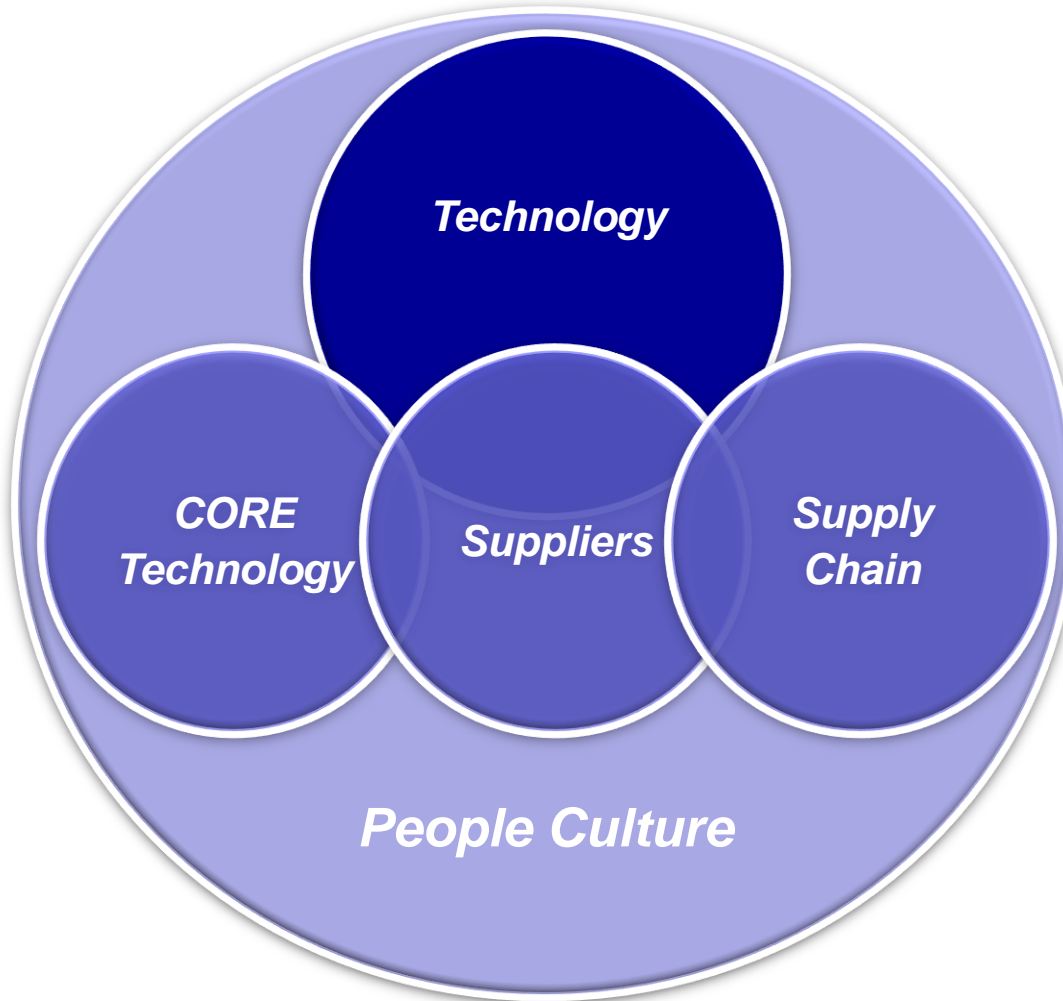
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**100% Of Manufacturing HOS Bronze+ By 2014**

# Aerospace Operations Overview

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- 84 Product Lines/10 Product Families
- Global Footprint - 17 Countries
- Global Sourcing - 41 Countries
- Plan for Every Part Delivery
- 80,000 SKUs
- 14,000 Suppliers

***Accelerating Productivity And Flexibility Through HOS***

# HOS Silver – Minneapolis Site

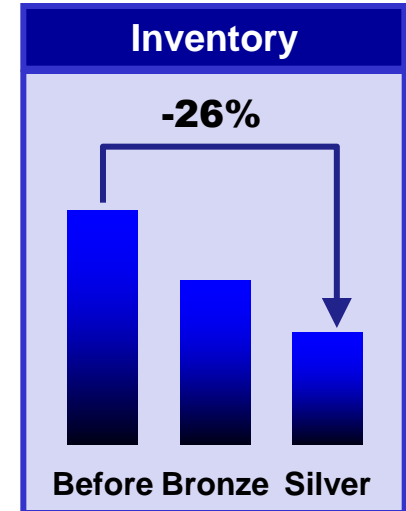
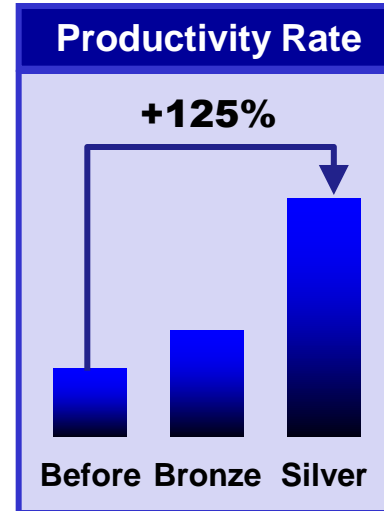
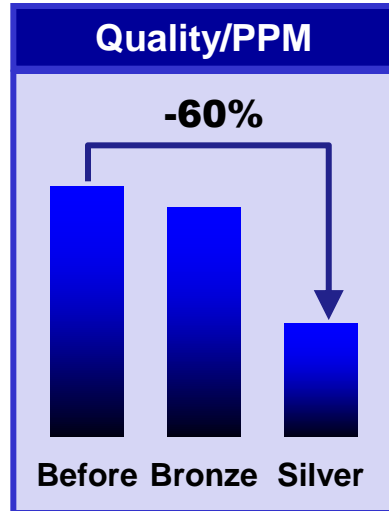
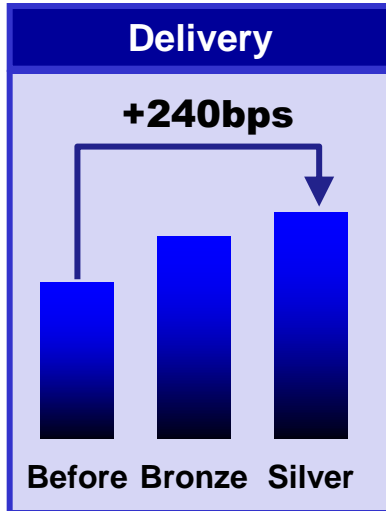
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## Best Practices

- Accountability Down to Shop Floor
- Processes to Enable Issue Escalation
- Sites Connected to WW Functions

## Employee Culture

- Empowerment of Operators
- Leadership Support and Coaching
- Employee Driven Improvements



***Customer Improvement Without Walls***



# Customer Feedback

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***“Overall, HOS provides the framework for gains in productivity and quality beyond that typical in manufacturing. It is an industry best practice.”***

***“HOS is engrained, and it is evident that leadership is committed.”***

***“[Recent] results are strong evidence that key ISC initiatives rolled out at the site...including HOS projects are paying huge dividends.”***

***Customers Seeing Real Value Of HOS***

# HOS – A Jet Engine For Growth

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**Honeywell**

- **Foundation of Continuous Improvement Culture**
- **Building Upon Lean Tools and Standardization**
- **Reaching Beyond the Factory Walls**
- **Customer Satisfaction and Cost Leadership**

***HOS Accelerates Growth Rate And Margin Expansion***