TECHNOLOGY AND BUSINESS INNOVATIONS TO IMPROVE OPERATIONS

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Agenda

1. Introduction & Team Structure
2. Supplier Data Optimization Review
3. Warehouse Management Review
4. Conclusion
Introduction

- Sloan Valve
  - Industry Leader and Innovator
  - Green Initiatives, Commitment to Sustainability
  - www.SloanValve.com
- IIT Students
  - Diverse Group of 9 INTM & ME students
- IPRO 306
  - Creating Process Efficiencies Through the Use of Technology
    - Optimization of Supplier Data
    - Warehouse Improvements via Warehouse Management System (WMS)
Team Structure

- Sean Delahanty (MITO)
  Team Lead

- Hammad Toor (MITO)
  Team Coordinator

- Hetul Thakkar (MITO)
  Project Lead
  Supplier Data Optimization

- Julien Jaouen (MITO)
  Project Lead
  Warehouse Management

- Yayan Zhang
  INTM

- Sikander Soleja
  M.E.

- Arjun Jalan
  M.E.

- Sung Kim
  M.E.

- Santiago Guerrero Jones
  MITO
Supplier Data Optimization – Global Sourcing
Issues

- 109,000 Suspect Data Records Currently in SAP
- Data Records Are Obsolete, Duplicate or Have Incomplete Information
- Currently No Process Exists to Manage and Accurately Maintain Data
To-Be Process

1. Download Data (109,000)
2. Cleanse (30,000)
3. Poll suppliers (95 vendors correlates to 90% spend)
4. Validate

Repeat

5. Upload into SAP
6. Format data
7. Consolidate

Check random sampling

Repeat based on quarterly/annually

Info Records
- Material Master
- Vendor Master
Tactical Solution (Short)

Mass Emailing
Quarterly Review

Tool
- Microsoft Access
- Mail Merge
- Mail Group

Quarterly Business Review
- Data Update
  - No Action
  - Supplier Update Template
    - Review & Upload to SAP
Solutions (cont’d)

• **Strategic Solution (Long)**

Supplier Web Portal

- Log Into Supplier Portal
- Download Self Service Template
- Updates Relevant Data
- Upload Template
- Sourcing Validates
- Negotiate
- Updates SAP
Implementation

- Supplier Portal Development / Creation
  - Web Development Process
- Data Record Management Process
- Refine Process
Warehouse Management Review

- Introduction & Team Structure
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- Warehouse Management Review
- Conclusion
Supply Chain Optimization – Current Issues

- Increased operational complexity
- No formal procedures on how to store items
  - Manual processes
  - Wrong people making put-away decisions
- Warehouse organization
  - Hard to identify products in storage locations
  - Bins not clearly defined
  - Inventory is not stored by volume of transactions
- Shipping errors on outbound and internal orders
Accomplishments

New ABC — Identify fast movers
Accomplishments

New and Improved PROCEDURES

Current Process

Future Process
Additional Accomplishments

• Definition and quantification of BIN LOCATIONS
  • BULK 294 Bins
  • PALLET RACK 719 Bins
  • FLOW RACK 172 Bins
  • GRAVITY RACKS 136 Bins

• Identification of products and bins

• DEMO development, testing and instruction material
Expected Implementation Results

Picking Productivity Improvement

- Increased Inventory Control
- Better Information Accuracy and Visibility
- More Efficiently Managed Workforce

Savings

Returns: 25%
Labor: 25%
Scrap: 30%
Carrying Cost: 15%
Recommendations

- Radio Frequency technology is required to maintain accuracy level and achieve expected results
- Move the demo site to a fully configured warehouse management module in the testing system
- A comprehensive implementation project plan needs to be developed
- Further enhancement to Unit and Integration test scripts
Conclusion

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Conclusion

**IPRO 306 Takeaways**

- Common, Real World Issues
- Collaboration, Working “With”, Not “For”
- Impact! Both Short and Long Term
Questions?

Thank You for Your Time and Attention!
Questions?
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