



Extending Beyond Specification - a case study from automated warehousing in Unilever

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Agenda

1. Background to case study
2. Specification of system requirements
3. How to stretch the boundaries
4. Learning from experience

Unilever UK Home & Personal Care National Distribution Centre, Doncaster



Unilever U.K. Personal Care N.D.C.

- High-bay automated warehouse
- 30 suppliers
- Delivers to all major U.K. retailers of Health and Beauty products
- Includes high level of aerosol safety measures
- Operational on-time and under budget

Warehouse Protection System

- Designed to prevent stock outside tolerances entering high-bay storage.
- Designed to identify pallet labels outside specification
- Designed to ensure safety and reduce downtime
- Design specification of 3% pallet rejection.

Warehouse reality

- Manual Versus Automated warehousing
- Warehouse Protection System information
- Information was not supplier-friendly
- Some faults could not be related to the supplier

Manual or automated warehouses

- Manual = check documentation against load.
- Automated = check against system information and standards
- Manual warehouses more likely to spot damage, discrepancies against paperwork, and quantity errors
- Automated warehouse more likely to identify label quality and pallet profile errors

Customer requirements

- Focus on E.D.I.
- Move to automation by retailers
- Reduced tolerance from customers
- Reduced tolerance of errors at retailer warehouse
- Communication failures between supplier and customer

Supplier requirements

- Pallet stacking and profile
- Pallet board quality
- Paperwork and documentation
- In-transit delay and damage
- Master Data creation and maintenance
- Continuous Improvement methodology
- Data to reflect severity not quantity

Warehouse Protection System

- Written to protect not to enable communication
- Written to capture critical issues not all issues
- Unable to add extra data to aid clarification
- Faced with volumes of rejection beyond design specification

Warehouse Protection System

- Data uncovered issues not previously measured at manual warehouses....
-but also data that was misinterpreted.....
-and failed to communicate some issues to suppliers....
-so suppliers were trying to rectify issues in the wrong order.

Change the focus.....

- Communication Process changed
- Warehouse Protection System analysed
- Calibration and Cleaning
- Additional information recorded

.....and increase the scope

- Incorporate Feedback
- Establish standards
- Improve verification
- Reduce rotation of rejected pallets

Learning from experience

- Expand initial specifications
- Consider how the system will communicate its output to others
- Ensure users understand how the system works
- Check output before communicating
- Be positive!

Thank you

