

Digital Transformation for Manufacturing Processes

A Unified Solution for UK Manufacturing

Submitted by: much. consulting (Odoo Gold Partner)

Solution: Odoo ERP - Manufacturing Implementation

Category: Manufacturing Process

Sub-categories: Assembly, Packaging & Shipping, Process Control, Testing/Validation

1. Executive Summary

We transform the physical manufacturing process by digitising the "Traveler" or "Job Card." **much. consulting** implements the **Odoo Shop Floor** application and **IoT integration** to guide operators through complex assembly, automate shipping logistics, and enforce rigorous process control.

This ensures that the physical process on the floor matches the digital plan in the office, enabling a "Single Platform" environment where human operators, connected machines, and automated logistics (AGVs) work in sync.



2. Addressing Core Business Challenges

We address the critical execution phase of manufacturing: Assembly, Logistics, and Validation.

A. Assembly & Process Control

Guiding the operator and controlling the workflow.

Challenge (Current State)	Solution (Odoo + much. consulting)
Tribal Knowledge: Only specific operators know how to assemble complex parts. If they are sick, production stops.	Digitally Assisted Assembly: Step-by-step interactive SOP's and guides (videos/PDFs) are displayed on the tablet. Any trained operator can follow the standard process, reducing training time for new hires.
Lack of Pacing: No visibility on whether an operator is ahead or behind schedule until the shift ends.	Real-Time Cycle Tracking: The tablet tracks the duration of each step against the target time. Industrial Analytics dashboards alert supervisors immediately if a station is becoming a bottleneck.
Component Errors: Operators accidentally pick the wrong screw or part for a custom assembly.	Barcoded Validation: The system requires the operator to scan the component before assembly. If it's the wrong part, the system blocks them from proceeding, ensuring "Right First Time" production.

B. Testing, Inspection & Validation

Enforcing quality within the process (In-Process Inspection).

Challenge (Current State)	Solution (Odoo + much. consulting)
"Pencil-Whipping": Operators tick "Pass" on paper forms without actually checking the measurements.	Mandatory Data Capture (IoT): For critical steps, we connect digital calipers or testers directly to the Odoo IoT Box. The measurement is captured automatically. If the value is out of tolerance, the process halts.



Challenge (Current State)	Solution (Odoo + much. consulting)
Regulatory Compliance: In regulated sectors (Pharma/Aerospace), paper records are insufficient for audits.	Digital Validation Records: Every test result is time-stamped and linked to the operator's digital signature, ensuring full compliance with EU GMP Annex 11, FDA 21 CFR Part 11, and AS9100 standards

C. Packaging & Shipping

Streamlining the "Final Mile" of the factory.

Challenge (Current State)	Solution (Odoo + much. consulting)
Packing Errors: Sending the right product to the wrong customer due to mix-ups at the packing bench.	"Scan to Pack": The system forces a scan verification of every item going into the box. It is physically impossible to close the packing slip if the items don't match the order.
Dispatch Bottlenecks: Manual typing of addresses into carrier portals causes delays.	Carrier Integration: Odoo pushes weight and address data to the carrier API (FedEx/DHL/UPS/Royal Mail/DPD) and instantly prints the shipping label. Tracking numbers are auto-emailed to the customer.
Inefficient Movement: Goods sit waiting for a forklift driver who doesn't know they are ready.	Automated Logistics: For advanced sites, Odoo triggers AGV (Automated Guided Vehicle) missions to collect finished pallets from the packing line and move them to the shipping bay automatically.

D. Process Control & Optimisation

Using data to drive continuous improvement.

Challenge (Current State)	Solution (Odoo + much. consulting)
Hidden Inefficiencies: Management knows overall output is low but cannot pinpoint which specific step is the cause.	Granular OEE Analysis: By digitising every start/stop and scrap event, we provide a heatmap of process inefficiencies. We identify exactly which machine or process step is the constrained resource.



Challenge (Current State)	Solution (Odoo + much. consulting)
Static Processes: Improving a process requires re-printing thousands of paper travelers.	Agile Process Definition: Process engineers can update the routing in Odoo, and the change is pushed to all tablets instantly. Continuous improvement becomes a daily reality, not a yearly project.



3. The much. consulting Advantage

Why choose us for your Made Smarter journey?

- **Shop Floor Reality:** We understand that software must work for the operator wearing gloves. We design simple, big-button interfaces that simplify their job rather than complicating it.
- Hardware Integration: We bridge the gap between software and hardware. We configure Odoo IoT Boxes to talk to your scales, cameras, and printers so your team doesn't have to.
- Sector Experience: From Pharma, through to Automotive assembly lines and Food & Drink packaging, we have deployed these specific process controls to reduce waste and ensure compliance.

Validated Execution: Our process controls are trusted by high-tech leaders like **iThera Medical** (MedTech) and **VoltStorage** (Energy Storage) where we have successfully deployed digital travelers that enforce SOP compliance and capture critical quality data in real-time.

Ready to Discuss Your Digital Journey?

Contact us today to schedule a free consultation.

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