



Case Study: Factory Documentation Project

Executive Summary

A legacy Honeywell HDMS workflow had become a structural constraint in a high-volume manufacturing environment.

With 45,000+ production orders per year, documentation was slow, error-prone, and dominated by non-value-added manual activity. The factory could not increase throughput without removing this bottleneck.

This case study shows how a clear operating-model diagnosis, supported by data and cross-functional collaboration, unlocked flow, capability, and long-term scalability.

The Project

A Six Sigma project to improve factory documentation revealed that the existing Honeywell HDMS-based workflow was slow, error-prone, and heavily reliant on manual rework. With 45,000 production orders per year and rising volumes from lean initiatives, the documentation process had become a structural bottleneck.

Measurement showed that over half of the process time was consumed by stable but non-value-added activities such as tearing paper, marking bags, and manually obtaining drawings. Defect analysis confirmed a sigma level of 2.85, with drawing-related issues dominating.

The solution was a full process redesign. Standard A4 paper and high-speed printers eliminated mechanically printed, perforated form tearing, and bag-marking was reduced by printing the information needed, drawing access was improved, and SAP R/3 was implemented to replace HDMS.

The results were significant: cycle time reduced from 2.38 minutes to 1.05 minutes, cost per order fell from £0.88 to £0.53, and process capability improved to 3.2 sigma. Annualised savings exceeded £23,000 (noting that this was in 2006).

The most compelling outcome emerged in the years that followed: the same-sized team later supported more than 100,000 production orders per year, more than double the original volume, demonstrating that the redesigned process was structurally scalable. The removal of this major constraint within the process enabled the business to double its output multiple times.

Following this successful deployment, I went on to implement the same solution in two further manufacturing business units, with great success, and the solution endures to this day, ahead of its eventual upgrade to S/4 HANA.

This project remains a strong example of systems thinking, cross-functional collaboration, and IT-enabled operational transformation.

Learnings

This project sowed the seeds for Datum Advisory, the approach seemed simple at the time. With leadership support and clarity of the required objectives, a team of subject matter experts from across the businesses were assembled and given autonomy to work with the implementation team to build strong processes.

Further, a great deal of effort was placed on reviewing thousands of parts, BOMs and routings to ensure high-quality data was loaded and validated.

During the final implementation stages, release to the business, folks were provided with basic and detailed training sessions with a fully prepared sandbox, and then were supported by the SMT team and implementation team together during the hypercare phase.

Why This Case Matters for Datum Clients

This project demonstrates the core principles of Datum Advisory:

Systems thinking	Documentation was the real constraint, not the ERP.
Governance-first transformation	Data quality, ownership, and process discipline were prerequisites.
Sequenced change	Redesigning the workflow before implementing SAP ensured stability and adoption.
Capability building	Training, sandbox practice, and structured hypercare created confident users.
Scalability	The redesigned process later supported more than double the original volume with the same team.

This remains one of the strongest examples of how removing a single operating-model constraint can unlock multi-year growth and resilience.