

Tomorrow’s Competitiveness Starts with Today’s Supply Chain

Why digital management only delivers results when it is built on reliable data

By Olaf Kessel, Manager.

Digitalisation projects and the lessons they share

Digitalising the supply chain creates value when it improves control of day-to-day operations. That was the objective of our client projects.

- At a manufacturing site, overall equipment effectiveness (OEE) data capture, a digital shift log, audit and process checks, and a reporting dashboard were brought together in an integrated digital solution.
- For a company operating in a project-based business, we developed a robust key performance indicator (KPI) framework. Power BI dashboards created transparency and enabled consistent reporting across sites.
- In another project, sales and production planning were integrated into a standardised, digitally supported sales and operations planning (S&OP) process.
- In textile manufacturing, an app with a central database and analysable formulation histories replaced a paper-based formulation management process.

These applications differ, but they share the same goal. Information must be available sooner, decisions must be based on a common understanding, and deviations must become visible earlier. Teams need to analyse OEE losses by plant, production line or cause. Planning requires an end-to-end view of demand, inventory, capacity and delivery dates. Formulations must be traceable, reusable and available for analysis. Digitalisation therefore connects processes, roles and information to create an effective system for operational management.

During implementation, technology was rarely the main constraint. Common definitions were often missing, data were incomplete or out of date, responsibilities were unclear, and local ways of working conflicted with the intended overall process. Without this foundation, digitalisation exposes existing inconsistencies faster, while reliable transparency remains elusive.

» **One important lesson emerged from these projects. The quality of the decisions made with a digital application determines how effectively the supply chain is managed.**

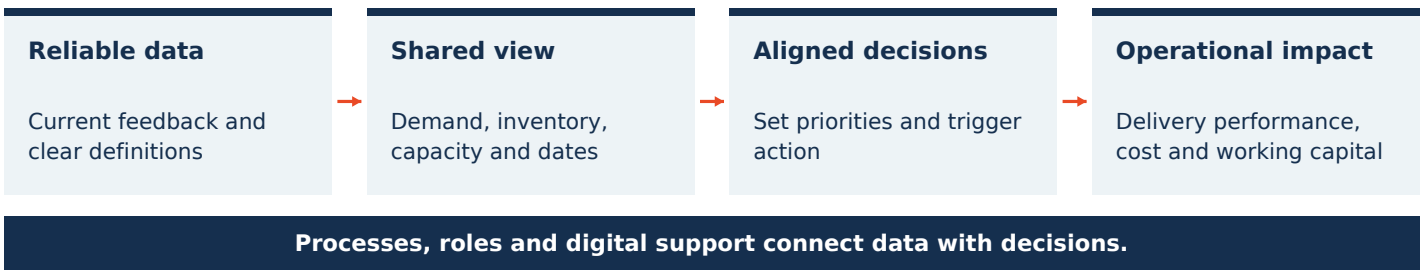


Figure 1 · How a reliable data foundation strengthens supply chain performance. Author’s illustration based on the article.

Data quality translates into operational performance

In supply chain management, data quality shows up in daily operations. Unrealistic lead times produce plans that cannot be met even when they are released. Without reliable production feedback, bottlenecks stay hidden for too long. Inconsistent KPI definitions lead teams to debate the numbers instead of agreeing effective action.

The consequences go beyond additional coordination. Production sequences have to be changed at short notice, materials require expedited procurement, customer delivery dates have to be revised, and safety stocks may rise. Costs and working capital increase as delivery reliability and customer confidence decline.

» **Poor data quality is a performance and competitive risk across the entire value chain.**

A shared view enables supply chain decisions

Supply chains are becoming more volatile, more international and more time-sensitive. Effective management must identify change early and translate it quickly into coordinated decisions. An integrated S&OP process can provide this discipline. Sales, production, procurement, logistics and finance assess the same situation, align demand with the ability to deliver, and agree priorities. This requires a shared understanding of the relevant data and performance indicators.

A single source of truth does not require every detail to be centralised. It requires an agreed view for business-critical decisions. Which demand should inform the plan? What inventory is actually available? What capacity can be committed? How are backlogs, inventory coverage and delivery performance calculated? Clear answers allow dashboards, planning tools and automated workflows to provide reliable support.

A sound data foundation improves transparency, shortens decision paths, strengthens scenario analysis and makes cross-functional collaboration easier. It builds the capabilities that matter in uncertain markets. These include responsiveness, reliability and the ability to allocate scarce resources to the demand that creates the greatest economic value.

Prioritise reliable decisions

Trying to clean up every dataset before making improvements would delay progress and weaken the connection to the business. Start with the decisions the process needs to support. A monthly S&OP cycle requires a different level of timeliness and detail from daily production control. An OEE dashboard needs consistent loss categories and reliable run-time data. A formulation app needs complete approvals, version histories and consumption data.

Data quality is always specific to its purpose. It is sufficient when decisions can be made at an acceptable level of risk and processes can run reliably. Four questions provide a practical starting point. Is the information complete? Is it accurate and current enough for the use case? Are terms and performance indicators understood consistently? Is it clear who resolves deviations and develops the standards?



Figure 2 · Four questions to assess whether data are fit for purpose. Author's illustration based on the article.

From a digital project to a reliable supply chain management model

The four project examples show that lasting impact comes from designing processes and digital solutions together. A dashboard needs to be embedded in a management and decision-making cadence. A digital shift log adds value when handovers, escalation and problem-solving are organised consistently. An S&OP tool works when roles, decision rights and planning logic are aligned across functions. An app improves quality when data capture and approvals are practical parts of the workflow.

Implementation should be focused. Start with a relevant supply chain problem, such as poor on-time delivery, high inventories, unstable production plans or limited visibility of losses. Determine which decisions need to improve, which information they require and where data quality gaps arise. A clearly scoped pilot brings together process standards, roles, data rules and digital support. Measure its impact through operational results.

If the approach proves effective, expand it step by step. Standards, responsibilities and technical solutions should develop together. This creates a scalable model for managing the supply chain.

Data ownership is a leadership responsibility

Responsibility for a reliable data foundation extends across the business. Functional teams must define the information they need for planning and control, how to interpret performance indicators and the data quality required by the process. IT provides integration, availability and technical safeguards. Leaders set priorities, resolve competing objectives and ensure standards are followed even under time pressure.

Employee involvement is equally important. People capturing data need to understand which downstream decisions depend on it. Input rules must be simple, workflows practical and feedback on errors prompt. Sustained improvement in data quality requires clear processes, suitable systems and visible, consistent leadership.

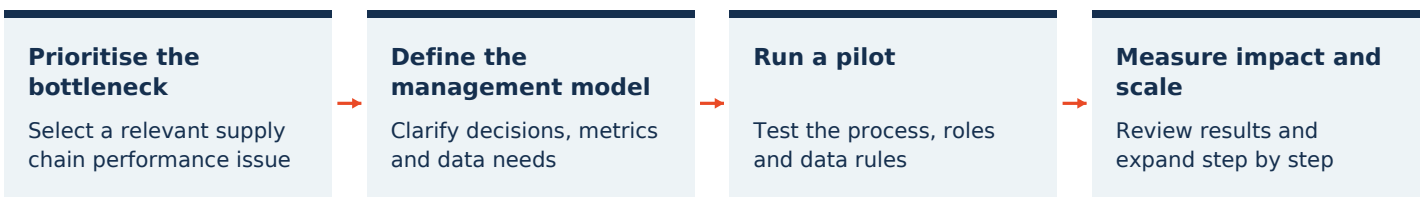
What business leaders should consider now

The next steps should focus on improving data for a clear operational purpose. Prioritise deliberately across the supply chain. Business leaders should identify the value stream or management process in which unreliable information currently causes the greatest damage. This could be delivery commitments, materials planning, production planning or loss analysis. That priority determines which data need attention first and the economic benefits expected.

1. Start at the bottleneck. A specific performance problem creates focus and makes progress measurable. Examine, for example, why production plans change frequently, why material shortages are identified too late or why delivery dates cannot be committed reliably.

2. Make the decision framework explicit. Define processes, performance indicators and responsibilities before or alongside the technical solution. This includes consistent definitions, approval and escalation routes, and named business owners for data rules.

3. Embed impact in the management cadence. Better information creates value when it leads to regular decisions. Reviews, shopfloor routines and S&OP cycles should visibly use the new data foundation. Translate deviations into actions with named owners and deadlines. Over time, the digital project becomes an established management practice.



Process standards, data rules and ownership develop together.

Figure 3 · From a digital project to a scalable supply chain management model. Author's illustration based on the article.



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Conclusion.

A reliable supply chain starts with reliable data.

Digitalisation makes supply chains faster and more transparent when their decisions are based on reliable information.

Clarifying business-critical data, establishing ownership and embedding digital solutions in effective management processes creates the conditions for stronger delivery performance, greater resilience and lasting competitiveness. Investing in the ability to manage the supply chain from a shared, reliable foundation is what makes the next digital tool effective.

About Lischke Consulting.

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Lischke Consulting takes a comprehensive approach to supporting companies as they reshape their businesses. It turns strategic objectives and opportunities for improvement into new processes and structures that people adopt in their daily work. Enabling employees to help shape the transformation is central to this approach. Their knowledge, ideas and capabilities provide the foundation for lasting success.



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