

Improving Delivery
Performance
Creating customer-
oriented reliability



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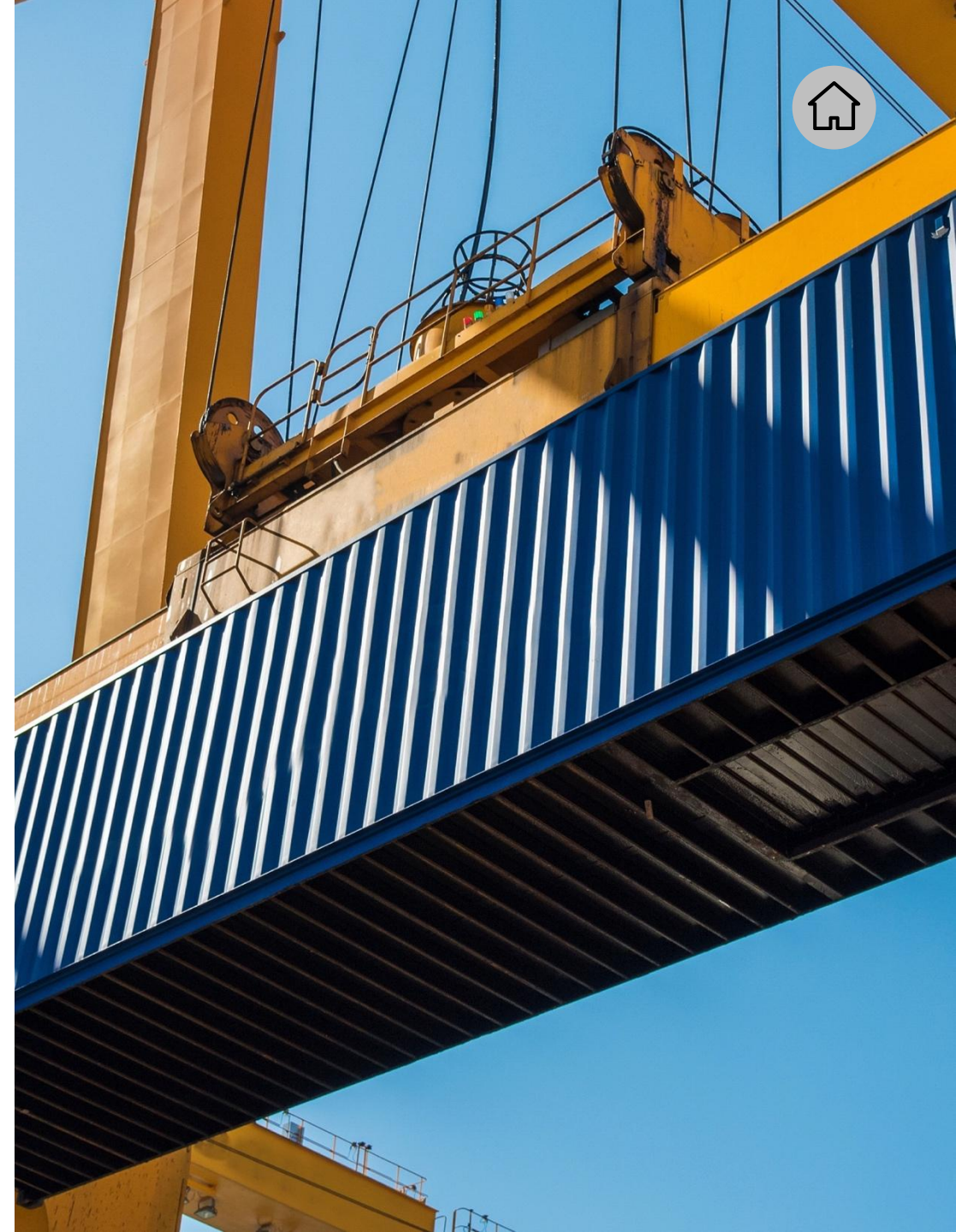
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01 | Management summary



Building customer-oriented reliability requires overcoming silos, structuring complexity through KPI frameworks and systematically converting root cause insights into coordinated actions

Driving commercial impact through customer-oriented supply chains

Supply chains have traditionally been viewed as cost centers, but leading companies increasingly use them as strategic differentiators to improve customer satisfaction. Reliability – describing the ability to consistently deliver on customer commitments – is a key enabler of this shift. However, executives often overestimate how customers assess supply chain reliability, while customers rate it considerably lower.

Customer-oriented reliability starts with understanding customer expectations and targets. Improving and sustaining reliability is challenging, as it requires a comprehensive end-to-end understanding of the supply chain. Many organizations struggle with silo thinking, limited transparency across functions and conflicting objectives.

To overcome this, stringent performance management with transparent root cause analysis is essential, ensuring each function understands its role towards the customer. This often results in a large KPI landscape, making a consistent reporting structure enabled by process-mining tools critical. Where short-term reliability cannot be achieved economically, managing shortages through dedicated bottleneck management represents best practice. This transparency also supports optimizing other value dimensions, such as reducing costs.

KPI = Key performance indicator; OTIF = On time in full; NPS = Net promoter score

How Deloitte can support you



1. Identify cost leakage through reliability root causes



2. Concept development and measure implementation



3. Reliability transformation steering



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02 | Reliability as key enabler of customer satisfaction



Customers evaluate supply chain performance in terms of transparency, reliability and capability, while executives misjudge how customers perceive trust in the supply chain

Three customer-critical dimensions driving supply chain differentiation

Traditionally viewed as a cost center, the supply chain is increasingly leveraged by leading companies as a strategic differentiator to enhance customer satisfaction and strengthen brand loyalty. At the same time, customer expectations are rising beyond competitive pricing. Therefore, three performance dimensions are particularly critical:

Reliability describes the ability to consistently deliver on customer commitments. Customers want their products in the right place, time and quantity.

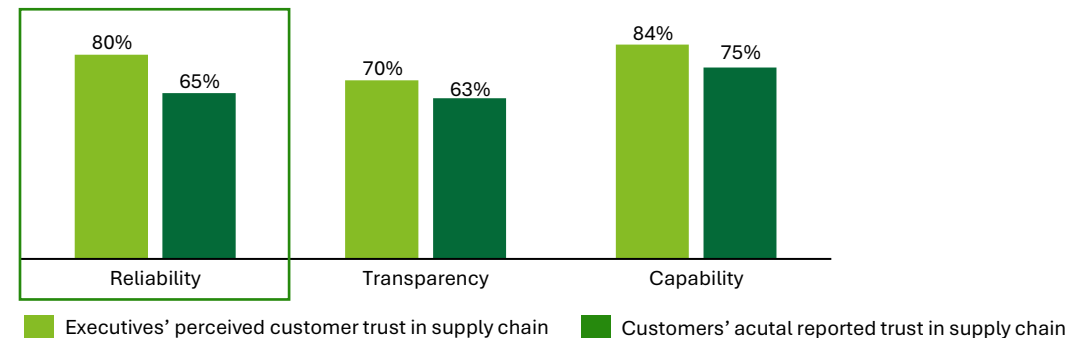
Transparency refers to clear and sufficient communication aligned with what customers expect. Striking the right balance between too much and too little information is essential.

Capability reflects the strength and flexibility of supply chain execution beyond the basics. It integrates advanced delivery options, service quality and value-added offerings.

Executives tend to overestimate customers' evaluation of their supply chain reliability, while customers assess the reliability markedly lower (see Fig. 1). In the end, enhanced reliability creates measurable value by reducing inventory levels by 10–25%, lowering expediting and special handling costs by 15–40%, and increasing customer loyalty, NPS and share of wallet by 5–15% through consistently high service performance (see Fig. 2).

Executives overestimate their perceived supply chain performance which can lead to blind spots.

Fig. 1 – Trust score per segment



Source: [Deloitte Global Supply Chain Executive Trust Survey](#)

Fig. 2 – Benefits of improved reliability

15–40%

lower expediting and special handling costs with improved service reliability

5–15%

increase in NPS and share of wallet with high service performance

10–25%

reduction of inventory level with OTIF >95%

03 | What leads to good reliability (1/2)



Improving customer-oriented reliability requires an end-to-end view of the supply chain, aligned expectations and KPIs, ensuring all functions deliver consistently on what is promised

Companies must define their own adjusted reliability targets

Good reliability starts with understanding the customer's expectations and setting realistic goals. Furthermore, reliability varies depending on industry benchmarks, as different industries operate within distinct ranges (see Fig. 3), as well as on a company's strategic positioning and supply chain capabilities. Achieving strong reliability means consistently meeting customer expectations. Typically, it can be measured by three core KPIs, which require a clear target definition for each company:

1. **OTIF** – measures how punctual and complete customer orders are.
2. **Backlog age** – indicates how late open orders are on average.
3. **Backlog size** – shows how much volume is still missing or delayed.

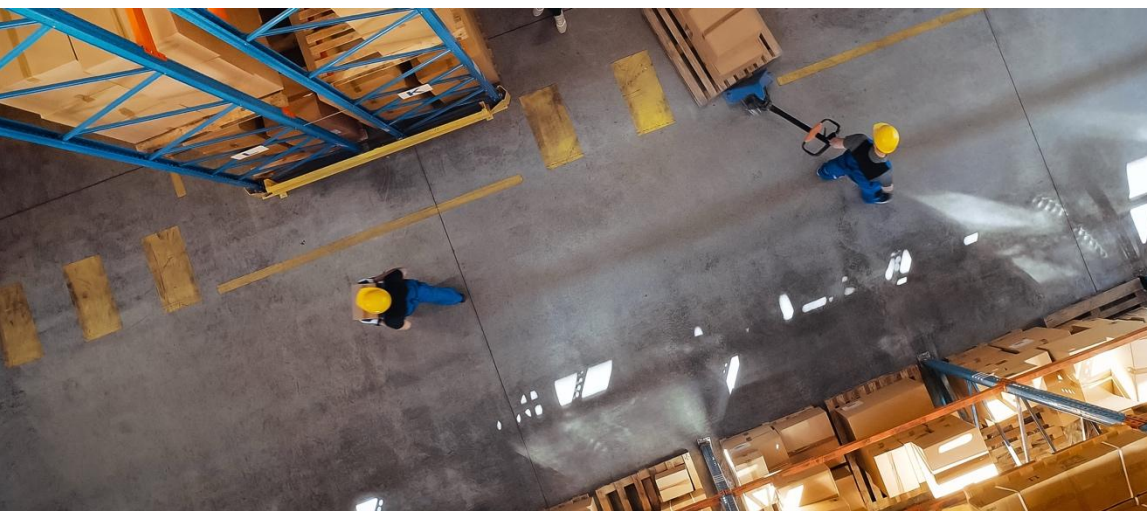
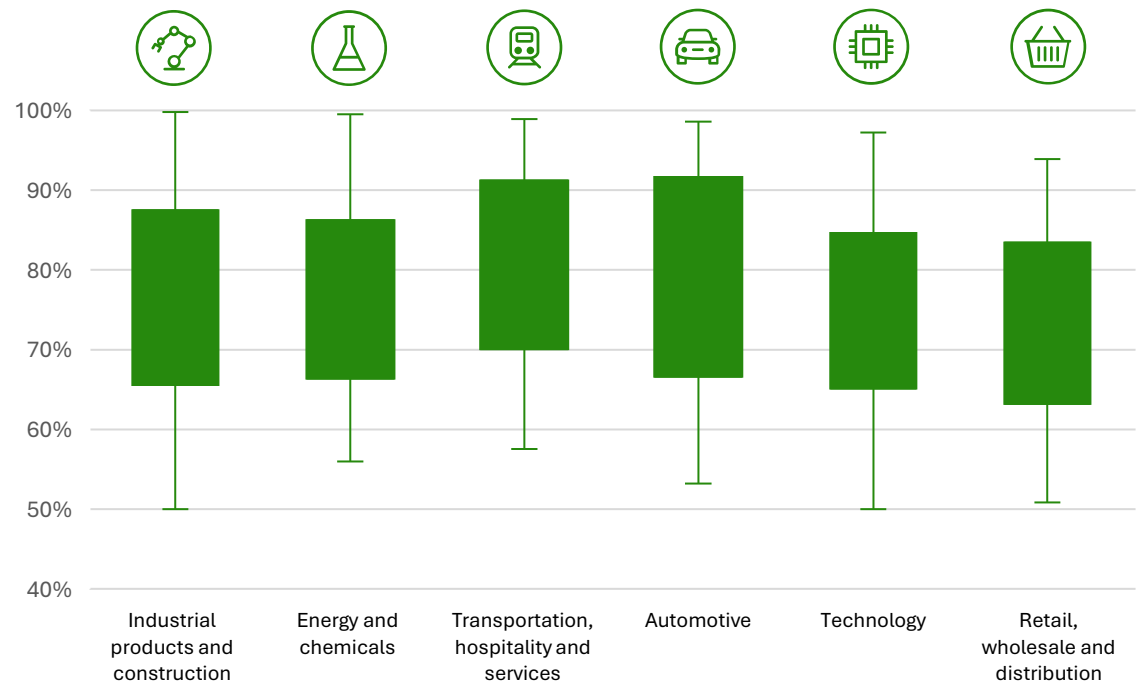


Fig. 3 – OTIF in different sectors



Source: Deloitte projects and benchmarks; n = 1,087 customers

03 | What leads to good reliability (2/2)



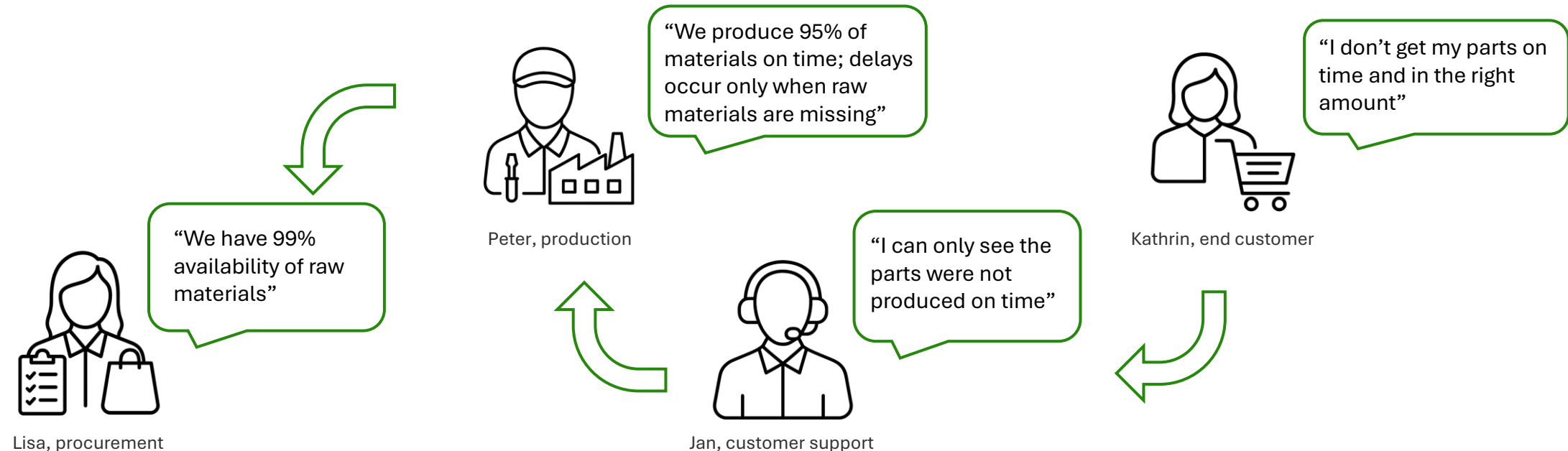
Improving customer-oriented reliability requires an end-to-end view of the supply chain, aligned expectations and KPIs, ensuring all functions deliver consistently on what is promised

Breaking silos is the first step to improved customer-oriented reliability

Improving reliability and maintaining it at a consistently high level is challenging because it requires a comprehensive understanding of the end-to-end supply chain. If one part of the chain is misaligned, overall reliability declines. Often, individual functions lack awareness of their contribution to overall value creation (see Fig. 4).

Organizations therefore need to overcome silo thinking, analyze interdependencies and eliminate target conflicts between functions – a problem supply chain management leaders struggle with. This is essential for establishing customer-oriented performance management.

Fig. 4 – Example personas with typical silo thinking



04 | Ensure customer-oriented reliability (1/2)



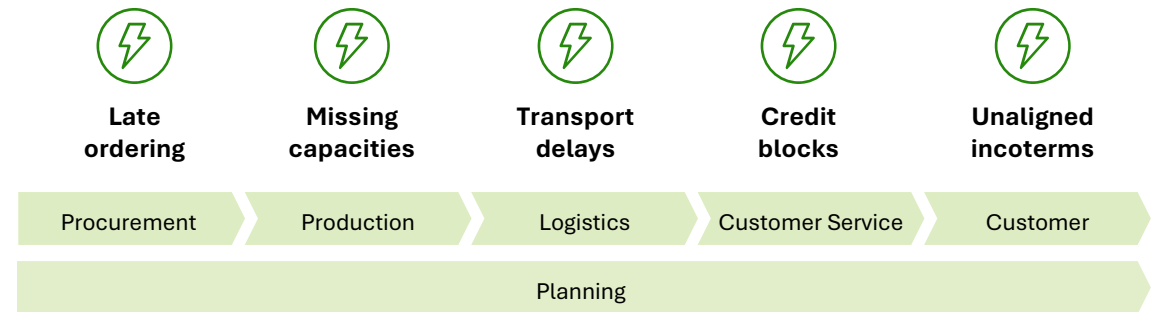
Customer-oriented reliability requires end-to-end performance management, breaking first level KPIs into functional levels to uncover root causes and resolve supply-chain bottlenecks effectively

Target key root causes to enhance delivery performance

Aligning functions around customer-oriented reliability requires transparent root cause analysis of typical supply chain issues, ensuring that each function clearly understands and owns its role towards the customer. Delays can arise at any point in the supply chain (see Fig. 5), and each delay directly affects the customer experience and delivery promise. Reliability is therefore often not caused by a single major failure but by multiple small deviations across different steps.

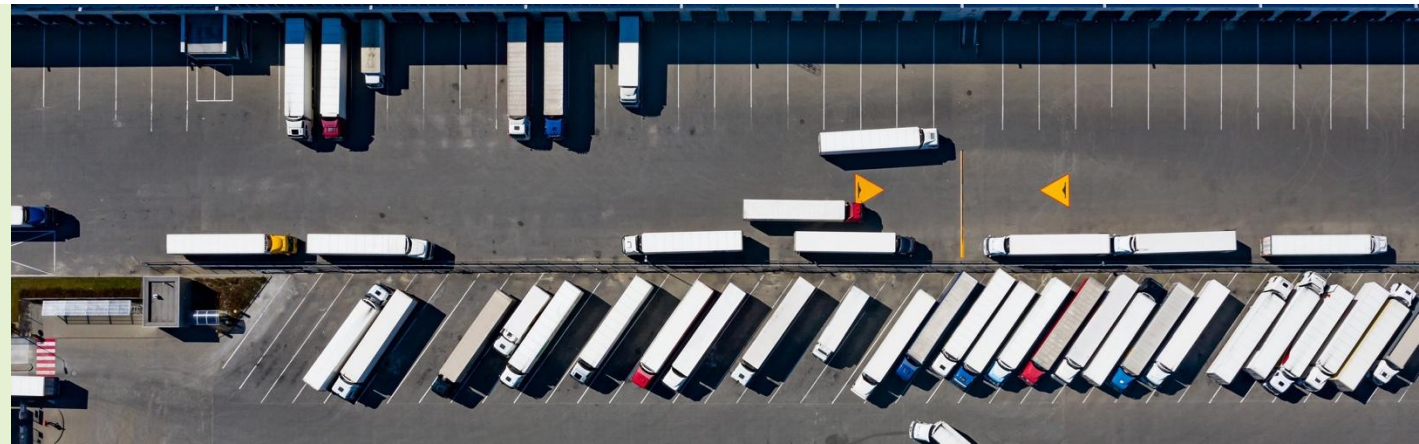
Eliminating all special cases across the supply chain is highly complex. Instead, the focus should be on identifying the core underlying supply chain issues that drive the majority of deviations, addressing the critical 80% rather than the remaining 20% with limited overall impact.

Fig. 5 – Typical sources of delays across the supply chain affecting reliability



Excuse: OTIF in production

In production, OTIF often measures only whether orders were completed on time and in full. It does not necessarily assess whether the completed orders were the right, customer-relevant or priority production orders, which is why OTIF needs to be interpreted alongside demand priorities and customer commitments.



04 | Ensure customer-oriented reliability (2/2)



Customer-oriented reliability requires end-to-end performance management, breaking first level KPIs into functional levels to uncover root causes and resolve supply-chain bottlenecks effectively

Structure KPIs for customer-oriented performance management

Root cause analyses often result in a large set of KPIs, which requires a structured approach to remain manageable and effective. This can be achieved through a KPI pyramid framework (see Fig. 6) and holistically designed automated reporting, which requires a consistent landscape through process mining tools. Within this framework, third level KPIs capture process-specific issues within individual supply chain steps. While these KPIs provide operational insights, their high level of detail makes end-to-end steering challenging.

To enable effective management, these KPIs are aggregated into second level KPIs, which group related operational drivers into coherent performance dimensions. These are further consolidated into first level KPIs, such as OTIF, which provide a customer-focused view of overall reliability. Root cause analysis is most effective at the lower KPI levels, as the underlying bottlenecks are often not visible in first level KPIs but are embedded within other levels, while still having a material impact on overall performance.

Fig. 6 – Example KPI pyramid



05 | From KPIs to reliability improvement (1/2)



Clear ownership, structured governance and defined review cadences turn KPI pyramids into measurable actions with accountable execution

Turn KPI insights into actionable performance gains

The next step is to systematically translate KPI insights into continuous improvement. This requires concrete measures, clear responsibilities and a structured organizational setup to ensure consistent execution.

Improvement initiatives should be derived primarily from third level KPIs, as these reflect the most granular and actionable root causes. For each relevant KPI, specific measures must be defined, with clear ownership assigned to the responsible function. Progress is then tracked directly against the underlying KPIs to ensure accountability and impact. To support this, a defined governance structure and meeting cadences are required.

Companies should follow these steps:



Define concrete measures and assign clear ownership based on third-level KPIs, ensuring responsibilities are well defined and progress can be tracked transparently.



Establish a structured review cadence, including weekly operational reviews and regular management reviews to discuss status updates and emerging issues.



Execute measures with a balanced focus on quick wins and long-term initiatives: improving OTIF from 60% to 80% mainly through quick wins, from 80% to 90% through process excellence and beyond 90% through early steering and integrated planning (long-term focus).



05 | From KPIs to reliability improvement (2/2)



Client Example | Clear ownership, structured governance and defined review cadences turn KPI pyramids into measurable actions with accountable execution

Achieved Project Impact

**6 months**
Project support

**+15%**
OTIF increase

**-€21M**
Backlog reduction

Process mining for reliability and bottom-line impact

The customer was experiencing rapid business growth, but its supply chain was increasingly unable to keep pace. Reliability issues became a major concern, leading to frequent delays and customer complaints.

We applied Celonis Process Mining to reconstruct the global end-to-end supply chain network within 3–6 months (see Fig. 7). This created real-time visibility into orders at risk of delay and quickly surfaced the key root causes behind performance issues (see Fig. 8).

Results showed that production-related issues accounted for 36% of all delays. Analysis focused on understanding production challenges by identifying missing components, uncovering bottleneck machines, reviewing production prioritization and assessing intralogistics inefficiencies. Using Celonis, we created a tool that enables MRP planners to rebalance capacities, find alternative routes/supplies and stabilize service performance.

WH = Warehouse; MRP = Material requirements planning

Fig. 7 – Supply chain network

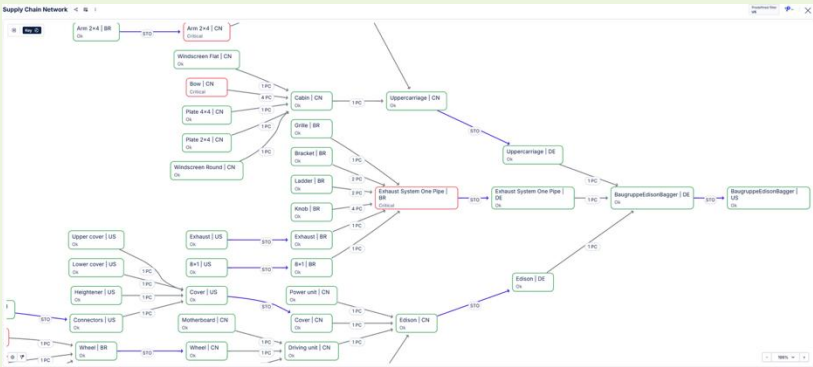
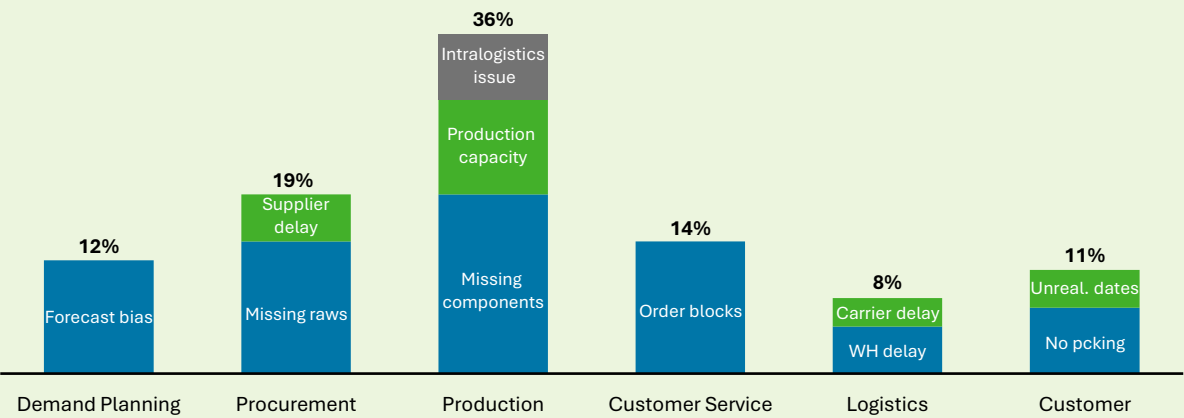


Fig. 8 – Root causes of potential delays along supply chain functional areas



06 | Bottleneck management (1/2)



Bottleneck management ensures reliability under capacity constraints by transparently prioritizing critical customers and orders

Prioritize critical customers under capacity constraints

In certain situations, it is not possible to improve reliability in the short term, for example due to capacity constraints. In these cases, effective fulfillment steering and bottleneck management are required to ensure that available capacity is allocated to high-value customers. Without a prioritization logic, decisions tend to be driven by ad-hoc urgency rather than customer focused, leading to unideal customer orientation.

An effective approach is to identify priority business areas together with the sales department. These priorities reflect the strategic relevance, considering contractual commitments, long-term partnership value or service level agreements, for example. In case of bottlenecks, available capacity is allocated to the most critical business areas to ensure reliability where it matters most.

This requires a stringent translation of priorities through a clear rule set. Order priorities must be cascaded correctly: customer priority is not the same as production priority. Production must think toward the customer, and a clear translation method between the two levels is essential. Three success factors are particularly important:

1. **Critical orders** must be clearly identified and consistently prioritized when capacity is limited.
2. **Prioritization decisions** need to be transparent and understandable, both internally and in communication with customers, to maintain trust and credibility.
3. **Assignment** of priorities in bottleneck situations must be clearly defined internally and executed automatically.



06 | Bottleneck management (2/2)



Client Example | Bottleneck management ensures reliability under capacity constraints by transparently prioritizing critical customers and orders

Achieved Project Impact



6 months
Project support



+6%
OTIF shift for
prioritised customers



+23%
FTE efficiencies in order
processing and mgmt.

Correct order sequencing plays a major role for customer-oriented reliability

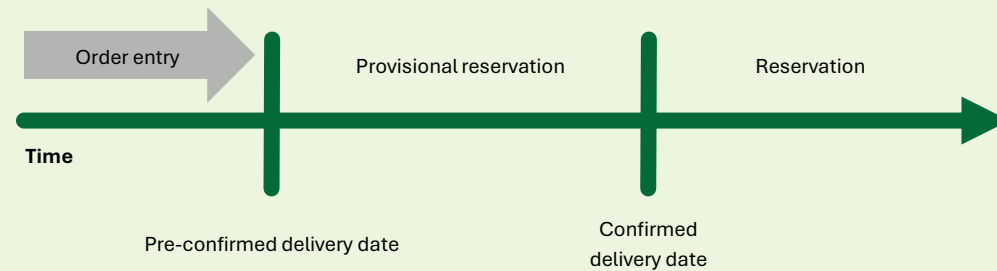
A client example illustrates how structured order sequencing can stabilize order fulfilment in capacity-constrained environments. The basis comprises three stock types:

1. Available stock, which is freely accessible and not yet assigned.
2. Provisionally reserved stock, where inventory is requested but not definitively allocated.
3. Reserved stock, which is firmly committed to a specific order.

Different reservation mechanisms were applied based on order profiles. Provisional reservations covered non-binding demand, while stock was assigned as reserved only if sufficient free inventory was available, for instance for express orders. Reserved stock definitively ensured that reservations were made in any case, even against future confirmed inbound quantities and could not be deprioritized.

Every order passed through a structured decision tree, which determined its reservation status step by step. Fig. 9 illustrates the logic: Orders move from provisional reservation at the pre-confirmation stage to reservation at confirmed delivery, while priority groups determine which orders get allocated first.

Fig. 9 – Order profiles and confirmation logic



Order profiles (descending priority)

- 1) Advanced planned order
- 2) Strategic order
- 3) Standard order (Platinum customer)
- 4) Standard order (Gold customer)
- 5) Standard order (Standard customer)
- 6) Ad-hoc order

07 | How Deloitte can support you

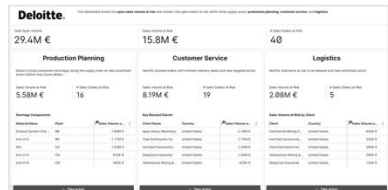


Deloitte can support you across the entire supply chain and take customer-oriented reliability to the next level

Deloitte can support you in improving customer-oriented reliability

Deloitte combines deep supply chain expertise with process bionics and a structured, execution-focused approach to improve customer-oriented reliability. We have a proven track record, from identifying reliability issues to executing sustainable improvement programs.

Deloitte Assets



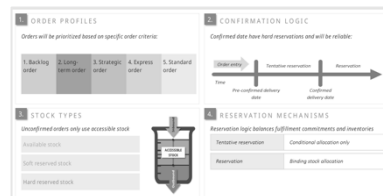
Supply Chain IQ app



TMO track record



KPI set and benchmarks



Supply chain management concepts



1. Identify cost leakage through reliability root causes

We support identifying reliability issues via a root cause analysis along the supply chain with structured methods and cross-industry know-how.



2. Concept development and measure implementation

We act as implementation support by embedding measures into daily operations and establishing review structures that enable customer-oriented reliability.



3. Reliability transformation steering

We steer identified improvements by translating insights into concrete actions, ensuring ownership and providing proven tools and governance.

08 | Appendix – Our Studies

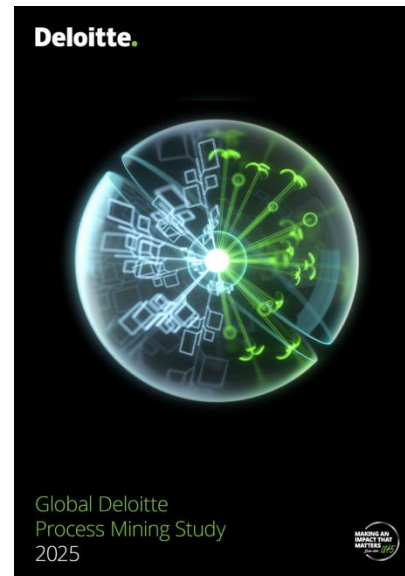


Deloitte has published a series of studies on supply chain and process mining, offering insights into resilience, efficiency and how organizations leverage data-driven process transparency



[Supply Chain Pulse Check 2026](#)

Semi-annual report on ongoing analysis of how global manufacturers address geopolitical risks and strengthen supply chain resilience.



[Global Process Mining Survey 2025](#)

Exploring how organizations leverage process mining to enhance transparency, efficiency, and digital transformation.



[Supply Chain Resilience – Status quo 2025](#)

Highlights wholesale supply chains facing low resilience maturity, limited risk monitoring and lacking contingency plans.

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Reach out to us today!



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