

Procurement optimisation: systematically improving costs, processes and delivery performance

Procurement optimisation refers to the systematic analysis and improvement of all procurement processes within a company – from requirements identification through supplier selection to order processing. The aim is to reduce costs, minimise risks and sustainably increase the security of supply for production. For technical buyers and suppliers, it is not a one-off project but a continuous improvement process with clear metrics. Those who pursue procurement optimisation methodically transform the procurement function from a mere ordering office into a value-oriented business partner.

Key facts

- Procurement optimisation encompasses strategic levers (supplier portfolio, awarding policies) and operational levers (processes, catalogue management, inbound delivery concepts).
- Typical objectives are material cost reduction, process lead times, delivery reliability and inventory levels.
- In practice, bundled volumes and economies of scale frequently yield single-digit to low double-digit percentage gains on addressed procurement volume.
- Digital tools such as AI in procurement support spend analysis, market price assessment and automated replenishment.
- Sustainable procurement optimisation combines savings categories (price, process and specification savings) with risk management and compliance.
- Metrics such as procurement volume, delivery reliability or inventory coverage must be tracked regularly and linked to clear targets.

Definition: procurement optimisation

Procurement optimisation is the planned improvement of the efficiency and effectiveness of procurement in terms of cost, quality, delivery capability and risk. It targets not only lower purchase prices but the total cost of ownership over the entire life cycle of the procured goods and services. In an industrial context, it encompasses strategic decisions as much as the operational routines of daily demand coverage.

Distinction from classic procurement

Classic procurement processes requirements: enquiry, quotation comparison, order, goods receipt. Procurement optimisation asks whether the requirement, specification, source of supply and process are actually the right choices. Typical levers are part standardisation, bundling of volumes across sites and automation of standard orders. This shifts the focus from transaction completion towards value creation.

Objective levels of optimisation

Optimisation operates on three levels: on the cost level (prices, terms, process costs), on the risk level (supplier failures, quality problems, compliance) and on the flexibility level (responsiveness to demand fluctuations). In practice, these objectives compete with one another: the cheapest supplier is not automatically the most robust. A good optimisation strategy therefore explicitly prioritises which objectives take precedence in which material class – critical A-parts demand different priorities than C-parts.

Methods and approach to procurement optimisation

Successful optimisation follows a structured sequence: assessment, prioritisation, implementation of measures and impact control. Without reliable spend data, any initiative remains superficial. The first step is therefore almost always to create transparency across the entire procurement volume.

Spend analysis and demand bundling

The spend analysis categorises procurement volume by material groups, suppliers and cost centres. Frequently, it reveals that identical or similar parts are procured by different sites from different suppliers at different prices. Bundling creates economies of scale that can be leveraged in negotiations or tenders. In addition, a slow-mover analysis is worthwhile to identify items with low and irregular demand – here, standardisation, framework agreements or, alternatively, spot purchase vs. framework agreement offer themselves as a deliberate procurement decision.

Supplier portfolio and awarding policies

At the strategic level, a supplier portfolio (often based on Kraljic) structures volume by business impact and supply risk. Awarding policies are derived from this, defining from which volumes tenders, multiple sources of supply or framework agreements are mandatory. Such rules remove arbitrary discretion from buyers and make decisions traceable. For critical commodity groups, a bow-tie analysis supplements protection against failure scenarios by combining the causes and effects of supply failure scenarios with countermeasures.

Process optimisation in operational procurement

Operational optimisation starts with order processing: approval levels, order limits and catalogue management determine how much time is consumed by routine orders. Electronic catalogues and integration with supplier systems substantially reduce transaction costs. In day-to-day business, S&OE (Sales and Operations Execution) stabilises short-term coordination between demand and supply, while detailed planning ensures procurement capacities so that bottlenecks are identified early. Inbound delivery concepts such as just-in-time, consolidation points or fixed delivery windows also belong in this toolkit.

Cost reduction: savings categories and negotiation

Cost optimisation is the most visible lever of procurement optimisation, but is often interpreted too narrowly as pure price reduction. Serious savings management distinguishes several savings categories and documents their origins in a traceable manner, so that finance and management recognise the results.

Price, process and specification savings

Price savings arise from negotiation, tendering or supplier changes and act directly on the purchase price. Process savings reduce transaction costs – for example through catalogue ordering instead of manual ordering or through reduced goods receipt inspection. Specification savings act even earlier: whoever changes the drawing or the requirements specification – for example through material substitution, tolerance adjustment or part standardisation – reduces costs without price pressure on the supplier. In practice, the specification level is often the biggest lever, but also the hardest to pull.

Total Cost of Ownership instead of unit price

Comparing on unit price alone leads astray when repair costs, quality, logistics costs or failure risks differ. A sound cost-benefit analysis evaluates offers over the entire period of use, including tooling costs, minimum order quantities and residual value considerations. For international procurement, Incoterms also play a central role: the Incoterms risk transfer point determines when risk and cost pass from seller to buyer, as with Incoterms EXW, under which the buyer bears almost the entire transport chain. Hidden costs from unsuitable clauses can quickly wipe out price advantages.

Organising competition: tender and reverse auction

Competition is procurement's most effective lever. Structured tenders with clear specifications and evaluation criteria create comparability. A reverse auction can automate price discovery for clearly specifiable standard products, but is only of limited use for complex technical services, where quality and development capability matter more than the headline price. In every case it is important that the evaluation logic is fixed and documented before the opening of bids.

Risk management and supplier safeguarding

Optimised procurement is of little use if the supply chain fails. Modern procurement optimisation treats risk as an objective of equal rank alongside cost. Central elements are the safeguarding of critical items, contractual provisions and ongoing supplier monitoring.

Identify and safeguard criticality

Not every item deserves the same level of safeguarding. An ABC-XYZ analysis combined with failure probability assessments shows where single sourcing without a fallback is existence-threatening. For critical parts, qualified second sources, safety stocks or contractually agreed stock holding at the supplier are recommended. Safety-related and regulatory requirements are safeguarded through evidence such as the Certificate of Conformity, whose verification should be integrated into the goods receipt process.

Contracts, compliance and quality

Contractual safeguards include framework conditions, price binding, delivery reliability agreements and rights in the event of quality defects. A Supplier Code of Conduct establishes binding expectations regarding compliance, working conditions and environmental standards and should be contractually anchored with strategic suppliers. In development partnerships, ownership questions are central: provisions on IP transfer ensure that tooling, design data and intellectual property remain with the customer. Anyone operating tooling at the supplier should also clarify what happens in the event of a supply failure – for example, whether return or take-over is agreed as an RTO supplier (Return to Owner).

Inventory and stocktaking as control instruments

Inventory is a buffer against uncertainty – but also tied-up capital. Blocked stock management keeps quality-rejected or obsolete material away from the available stock and makes the true supply situation visible. Periodic inventory procedures check inventory data quality, while cycle counting ensures continuous accuracy through rolling sampling without blocking operations. High inventory data quality is a prerequisite for any automated replenishment.

Key KPIs of procurement optimisation

Without metrics, optimisation remains guesswork. Established KPIs make progress measurable and create the basis for target agreements within the procurement team. It is important that metrics are not viewed in isolation: one KPI can improve at the expense of others.

Cost and process metrics

The most common metrics include procurement volume by commodity group, the number of items with cost reductions, savings rate relative to procurement volume, and the number of purchase orders per buyer as a productivity measure. The lead time from purchase requisition to purchase order reveals bottlenecks in the approval process. The share of catalogue-based or automated orders measures the degree of automation and correlates in practice clearly with process costs per transaction.

Delivery and quality metrics

Delivery reliability (OTIF – on time in full) is the central supply metric from the perspective of production. Supplementary metrics such as goods receipt error rate, number of rejected deliveries and complaint lead time measure supplier quality. Inventory metrics such as coverage, stock turnover and inventory accuracy complete the picture. Those evaluating suppliers should capture these metrics systematically and address them in regular supplier meetings – evaluation that is not communicated has no effect.

Current developments: digitalisation, sustainability, resilience

The framework conditions for procurement are changing rapidly. Three trends are currently shaping procurement optimisation: artificial intelligence, sustainability requirements and the strategic upgrading of supply chain security.

AI in procurement

AI in procurement today primarily supports spend classification, quotation comparison, market monitoring and automated replenishment of standard parts. Language models accelerate the drafting of enquiries and contracts, and price corridors can be derived from historical data. Limits become apparent with complex technical services, where relationship quality and engineering know-how remain decisive. A pragmatic approach makes sense: automate repetitive tasks, prepare strategic decisions with data analysis, but do not delegate them.

Sustainability and reporting

Sustainability requirements are increasingly cascading into the supply chain. Initiatives such as Science Based Targets shift the pressure to reduce emissions onto suppliers, and regulatory reporting obligations increase the data requirement along the supply chain, for example in intrastat statistical reporting in EU goods traffic. Buyers should integrate environmental and compliance criteria into supplier evaluation early, rather than bolting them on afterwards. Supplier integration – the systematic

involvement of key suppliers in planning and development – becomes all the more important as a result.

Resilience instead of pure cost pressure

The experience of recent years has shown that extreme cost optimisation makes companies fragile. Many companies today balance cost efficiency and robustness: more regional sourcing, multi-source strategies and larger buffers for critical parts. The art lies in differentiation – not everything needs redundant safeguarding. A sound criticality assessment helps to invest safety costs precisely where a failure would really cause damage.

Typical metrics

Savings rate: 2–5% p.a. of addressed volume

typical guideline value for ongoing optimisation programmes; heavily dependent on the current state of optimisation

On-time delivery (OTIF): > 95%

target value for reliable suppliers; critical A-parts should be higher

Share of automated purchase orders: > 60%

common in optimised organisations, measured by number of orders

Inventory accuracy: > 97%

prerequisite for automated replenishment, determined via cycle counting

Lead time from purchase requisition to purchase order: < 3 working days

typical target value for standard requirements with clear approval levels

Practical example

A medium-sized mechanical engineering company with a procurement volume of around €40 million and three sites launched a twelve-month optimisation programme. The spend analysis revealed that standard bought-in parts were sourced from over 600 different suppliers and that identical standard parts had different prices at different sites. Some items had been sourced from the same supplier for years without any tendering.

- Bundling of standard and catalogue part volumes, followed by a tender among the top 50 suppliers by volume.
- Introduction of electronic catalogues and simplified approval levels for C-parts, which significantly increased the share of automated purchase orders.
- Slow-mover analysis followed by part standardisation and replenishment via framework agreements instead of individual orders.
- Establishment of a supplier rating system with monthly OTIF measurement and quarterly reviews with strategic suppliers.

Conclusion

Procurement optimisation is not a one-off savings programme but a continuous management process that combines data, clear rules and disciplined implementation. The biggest levers often lie not in price negotiation but in spend transparency, specification and process automation. At the same time, cost reduction must not come at the expense of security of supply and compliance – risks belong in the analysis from the very beginning. Companies that consistently measure metrics and develop suppliers as partners achieve sustainable results. Those who start in a structured manner – with analysis,

prioritisation and a few, well-implemented measures – usually achieve more in practice than with an overloaded all-encompassing concept.

Frequently asked questions

What does procurement optimisation mean?

Procurement optimisation refers to the systematic improvement of all procurement processes in terms of cost, quality, delivery capability and risk. It encompasses strategic levers such as supplier portfolio and awarding policies as well as operational measures such as catalogue ordering and automated replenishment. The aim is lower Total Cost of Ownership with a stable supply.

How do you start a procurement optimisation project?

The starting point is a spend analysis that breaks down procurement volume by commodity groups, suppliers and cost centres. This allows the biggest levers to be identified and prioritised. This is typically followed by bundling and tendering measures, process simplifications and the introduction of measurable KPIs. A project timeframe of six to twelve months with clear interim milestones has proven effective in practice.

Which KPIs are important for procurement?

Key metrics include savings rate, procurement volume, on-time delivery (OTIF), purchase orders per buyer, goods receipt error rate and inventory coverage. The combination of cost, quality and process metrics is important, as one-sided targets create perverse incentives. Metrics should be linked to targets and reviewed regularly within the team.

How much savings potential is realistic in procurement?

This depends heavily on the current state of optimisation. For commodity groups that have not been reviewed for a long time, savings of a few per cent up to the low double-digit range of the addressed volume are realistic in practice. Sustainable process and specification savings are often larger than pure price savings, but take longer. Across-the-board target values should be treated critically – what matters is the addressable volume.

What is the difference between procurement optimisation and strategic sourcing?

Strategic sourcing is a subset: the systematic redefinition of supply sources and contract structures for specific commodity groups. Procurement optimisation is broader and also covers operational processes, inventory management, risk mitigation and digitalisation. Strategic sourcing typically delivers large one-off savings; optimisation secures their long-term impact.

What role do Incoterms play in procurement optimisation?

Incoterms define when risk, cost and responsibility for transport pass between seller and buyer. They therefore significantly influence the true cost of procurement and the risk – for example with EXW, where the buyer organises the entire transport chain. For international procurement, the choice of Incoterms should be part of every cost-benefit analysis.