

Time-to-Market: The key factor for competitive advantage in procurement

Time-to-Market refers to the period from the product idea or development release through to the market launch of a product. For technical buyers it is a key target metric, as procurement, supplier selection and prototyping frequently form the critical path in the innovation process. Those who systematically shorten Time-to-Market secure revenue potential, market share and negotiating leverage against competitors. The following article explains the definition, the key influencing factors, practical methods and key figures along the procurement chain.

Key facts

- Time-to-Market describes the duration from the product idea to series market launch and typically covers development, procurement, prototyping and production sign-off.
- In practice, procurement's share of product costs is frequently 50–70 % for many industrial products, which is why buyers have a direct impact on Time-to-Market.
- Early Supplier Involvement is regarded as the most effective lever for shortening development and procurement lead times.
- Typical delays arise from lengthy tender phases, lack of deadline monitoring, tooling lead times and unclear supplier qualification requirements.
- Agile procurement and digital connections such as ERP integration demonstrably reduce coordination and transaction times in many companies.
- Time-to-Market is closely linked to Total Cost of Ownership: speed must not come at the expense of uncontrolled additional costs.

Definition: What does Time-to-Market mean?

Time-to-Market (TTM) is the period between the start of product development – usually from concept approval – and the market launch or production readiness. In industrial practice, the term is defined more narrowly depending on context, for example as the time until production sign-off or until first delivery to the end customer.

Distinction from related terms

Time-to-Market must be distinguished from terms such as Time-to-Volume (time until production maturity at higher volumes) and Time-to-Profit (time until profitability). While TTM encompasses the entire development and launch phase, procurement management often considers only the segment from specification to supplier release. This so-called Time-to-Source is an operational sub-metric that buyers can specifically control.

- Time-to-Market: total time from idea to market launch
- Time-to-Source: time until supplier selection has been completed
- Time-to-Volume: time until stable series production

Importance for technical procurement

Procurement influences Time-to-Market at several critical points: sourcing long-lead-time items and components with long replenishment times, commissioning tools and fixtures, qualifying new suppliers and scheduling first-article samples. As a significant share of value creation is bought in across many manufacturing industries, the supplier network is frequently the bottleneck of the entire innovation project.

Influencing factors: What lengthens or shortens Time-to-Market?

Time-to-Market is determined by technical, organisational and contractual factors. Companies that systematically analyse these drivers can identify bottlenecks early and initiate countermeasures.

Supplier-side factors

The most common causes of delay include long tooling lead times, limited capacities at specialist suppliers and unclear manufacturing documentation. A structured supplier self-assessment and a supplier rating with key figures on delivery reliability and responsiveness help to identify capable partners early. For critical components, single sourcing can accelerate coordination but increases the risk of failure – a case-by-case risk assessment is required here.

Internal processes and approval stages

Delays often do not arise at the supplier but internally: multi-stage approval processes, missing drawing revisions or unclear responsibilities in scheduling. Clear project interfaces between development, quality assurance and procurement, together with a defined production sign-off checklist, typically shorten throughput times considerably. Agile procurement approaches, in which buyers work in sprint rhythms with development teams, are increasingly finding adoption in practice.

Procurement-strategic direction-setting

Make-or-buy decisions significantly influence Time-to-Market: an outsourcing potential analysis helps clarify which manufacturing services can be sourced externally more quickly, for example contract manufacturing during capacity bottlenecks. Procurement cooperations can also accelerate access to capacities and standard parts. For highly available standard components, min-max control is frequently recommended in order to remove replenishment times from the critical path.

Methods and approach: systematically shortening Time-to-Market

Effective TTM reduction is based on a few proven levers that are consistently aligned to the critical path of the project. Procurement should be involved from the very beginning – not only after the design has been completed.

Early Supplier Involvement and parallel processes

The early involvement of suitable suppliers in development (Early Supplier Involvement) enables parallel rather than sequential working: design, tooling design and process planning run in overlapping fashion. The prerequisite is reliable supplier selection based on a structured supplier rating and non-disclosure agreements. In practice, this approach often shortens the sampling phases by several weeks.

Accelerated quotation and award processes

Traditional tenders often take weeks and cause project delays before an order has even been placed.

Digitalised enquiry processes, standardised specifications and – where suitable for the commodity group – e-auctions significantly shorten the award process. For price comparison, a plan-versus-actual price comparison helps make offers quickly and objectively assessable without losing sight of quality and delivery time.

Deadline controlling and escalation management

After order placement, consistent deadline monitoring determines project success. Expediting – i.e. the active tracking of order status, material provision and inspection dates – uncovers deviations early. In addition, a supplier development plan defines measures to improve critical suppliers, for example through process support or capacity commitments. For project parts held in no stock, clear scheduling with milestones per delivery item is standard.

- Weekly status reconciliation with critical suppliers
- Defined escalation paths for schedule deviations beyond set thresholds
- Documented milestones for toolmaking, sampling and production sign-off

Key KPIs for controlling Time-to-Market

Time-to-Market can only be controlled if it is made measurable. In practice, several key figures have become established that capture both the overall project and individual procurement phases.

Key figures at project level

At project level, actual TTM is compared with the planned duration (plan-versus-actual comparison). In addition, companies measure the schedule adherence of milestones such as tooling release, first-article sampling and production sign-off. Inventory-related metrics such as stock coverage and inventory turnover show whether supply during the production ramp-up is stable or whether bottlenecks are emerging.

Key figures at procurement level

In procurement, Time-to-Source (time from enquiry to order placement), the delivery reliability of new suppliers during ramp-up and the number of schedule deviations have proven particularly valuable. The quality of supplier selection can also be measured, for example via the rate of error-free first-article approvals. These key figures frequently feed into the supplier status and thus into future award decisions.

- Time-to-Source: target values typically range from a few weeks to a few months depending on the commodity group
- First-article approval rate: proportion of sample approvals passed on the first attempt
- Milestone adherence: proportion of project milestones achieved on schedule

Risks and controls: speed without loss of control

Shortening Time-to-Market entails risks: excessive prices due to time pressure, incomplete supplier qualification and dependencies on individual partners. Effective control mechanisms keep this tension balanced.

Cost control despite time pressure

Under time pressure there is a risk of accepting prices without sufficient analysis. A total cost tree,

which makes all cost-relevant elements transparent from materials through manufacturing to logistics, enables a robust evaluation even in accelerated processes. Economies of scale from bundling several projects or spare parts can additionally be exploited in this way. With payment terms, agreed early-payment discounts can, where necessary, serve as a lever to obtain priority in the supplier's production – though this should be assessed economically.

Supplier risks and safeguards

For new suppliers and advance payments, for example for tooling, appropriate safeguards are customary. Instruments such as bank guarantees/sureties protect advance payments for tooling or long delivery times. Tool maintenance and tool retention should be clearly regulated contractually so that no hidden risks arise during ramp-up. In addition, procurement verifies the creditworthiness and identity of the supplier before making payments; in payment transactions, an IBAN check is part of the standard control against fraud risks.

Quality assurance during ramp-up

Shortened cycles must not jeopardise the quality of production sign-off. First-article sampling, measuring equipment verification and process capability studies remain mandatory even in accelerated mode. A documented supplier status with quality and schedule data creates transparency and allows consolidation of the supplier base after project completion.

Current developments: digitalisation and agile procurement

The shortening of Time-to-Market is increasingly driven by digital tools and new forms of organisation. Companies that invest here achieve noticeably shorter lead times from enquiry to delivery in practice.

Digital procurement processes

ERP integration of procurement processes reduces manual interfaces, accelerates ordering workflows and creates real-time transparency on order status. Digital marketplaces and standardised enquiry formats significantly shorten the search for suitable manufacturing partners. AI-supported tools also assist with enquiry preparation and the pre-selection of potential suppliers.

Resilience and flexible supplier structures

Supply chain disruptions in recent years have shown that pure cost optimisation can jeopardise Time-to-Market. Many companies are therefore building flexible supplier networks, combining single sourcing for efficiency with qualified second sources for critical parts and using contract manufacturing as a capacity buffer. Resilience and speed are thus understood as two sides of the same strategy.

Typical metrics

Time-to-Source: typically 2–12 weeks

depending on the commodity group and complexity of the tender

Milestone adherence: > 90 %

proportion of project milestones achieved on schedule

First-article approval rate: > 80 %

proportion of sample approvals passed on the first attempt

Delivery reliability during ramp-up: > 95 %

schedule adherence of new suppliers during the production ramp-up phase

Practical example

A mid-sized mechanical engineering company developed a new special-purpose machinery line and was under time pressure because the end customer had set a fixed commissioning date. Procurement was involved as early as the design phase and qualified two manufacturing partners in parallel for the main assemblies. Through structured deadline monitoring with weekly expediting, several schedule deviations at one supplier were identified early and absorbed through capacity support. The project achieved production sign-off on schedule, and despite short-notice design changes, Time-to-Market remained on plan.

- Early Supplier Involvement from the concept phase with two qualified partners
- Digitalised enquiry processes with a standardised specification and rapid price comparison of plan versus actual
- Weekly expediting and defined escalation paths for all A-parts
- Contractual provisions on tool retention and advance payment secured by surety

Conclusion

In technical procurement, Time-to-Market is far more than a development metric: it determines how quickly a company can convert innovation into revenue. The biggest levers lie in early supplier involvement, accelerated award processes and consistent deadline monitoring. At the same time, cost and quality objectives continue to apply, which is why instruments such as the total cost tree, supplier evaluations and contractual safeguards remain indispensable. Companies that combine digital processes with agile procurement sustainably reduce their lead times. Those who anchor Time-to-Market as a cross-functional objective between development and procurement gain a lasting competitive advantage.

Frequently asked questions

What exactly does Time-to-Market mean?

Time-to-Market refers to the period from the product idea or concept approval through to market launch or production readiness. It covers development, procurement, prototyping, sampling (first-article inspection) and approval processes. In procurement, the sub-metric Time-to-Source is often considered, i.e. the time until supplier selection has been completed and the order placed.

How can procurement shorten Time-to-Market?

The most effective levers are the early involvement of suppliers in development, standardised and digitalised enquiry processes, and consistent deadline monitoring with expediting. Clear approval processes, parallel working practices and a well-considered make-or-buy decision also shorten the critical path. A prerequisite is reliable supplier selection, for example via structured supplier rating.

Which KPIs measure Time-to-Market?

Typical key figures include the total project duration from concept to market launch, Time-to-Source, milestone adherence and the rate of error-free first-article approvals. In addition, inventory metrics such as stock coverage and inventory turnover provide indications of supply stability during production

ramp-up. An actual-versus-plan comparison reveals deviations between planned and actual durations.

What risks arise from excessively fast Time-to-Market?

High time pressure can lead to excessive prices, insufficient supplier qualification and quality defects at production sign-off. Advance payments for tooling also carry risks, which can be safeguarded, for example, through bank guarantees or sureties. Key controls include the total cost tree, documented quality processes and transparent supplier evaluation.

What is the difference between Time-to-Market and Time-to-Source?

Time-to-Market describes the entire period from the product idea to market launch. Time-to-Source is a procurement sub-metric and measures the time from demand registration to the placement of an order with a supplier. Buyers can directly influence Time-to-Source and thereby make an important contribution to overall TTM.

Why is early supplier involvement important?

Early Supplier Involvement enables parallel working: manufacturing concepts, tooling designs and material availability are taken into account before the design is finalised. This significantly reduces revision loops and sampling cycles. Suppliers also gain planning certainty, which favours capacity commitments and better schedule adherence.