

Supplier rating model: systematically evaluating and steering suppliers

A supplier rating model is a structured assessment system with which procurement organisations evaluate suppliers against defined criteria such as quality, delivery reliability, price and service. It translates numerous individual observations from day-to-day operations into comparable key figures and scores. In doing so, it forms the foundation for supplier selection, development and deselection and is a core component of professional supplier evaluation in procurement controlling.

Key facts

- A supplier rating model evaluates suppliers using weighted criteria such as quality, delivery date, price, service and sustainability.
- Typically, grading systems from 1 to 5 or point scales up to 100 are used, often supplemented by traffic-light levels (green, yellow, red).
- Supplier rating is the basis for classifications such as A-, B- and C-tier suppliers and steers the allocation of resources in supplier management.
- Key data sources are incoming goods inspection, complaint rate, supplier PPM target, delivery punctuality and price data.
- In practice, evaluation is often carried out periodically, usually monthly or quarterly, via a supplier portal or ERP system.
- Rating results feed into actions such as supplier meetings, qualification programmes, value analysis or ultimately delisting.

Definition: supplier rating model

A supplier rating model is a standardised assessment system that regularly and comparably measures supplier performance against predefined, weighted criteria. It converts operational data such as goods receipts, complaints and delivery punctuality into an overall result.

Distinguishing it from supplier evaluation

Supplier rating and supplier evaluation are often used synonymously but differ in focus: the rating refers to the methodical model with scales, criteria and weightings, while the evaluation covers the ongoing process of data collection and analysis. In many companies, the rating model is the standard against which the evaluation is carried out automatically. What matters is that model and process work together: a good model is of little use if the data situation remains patchy.

Purpose and benefits for procurement

Rating objectifies decisions that would otherwise rest on subjective impressions. Buyers can identify risks early, concentrate resources on strategic suppliers and back up weak points in negotiation meetings with hard figures. For procurement controlling, the model also provides reporting-ready key figures with which the supplier base can be steered over time.

Position within supplier management

The rating model is a building block in overall supplier management: it links to supplier selection, accompanies supplier onboarding and provides impetus for make-or-buy decisions when internal alternatives are compared with supplier performance. It also serves as an objective reference for audits and supplier development.

Methods and approach in supplier rating

A practical model is created in several steps: defining criteria, determining weightings, defining scales, connecting data sources and regularly analysing results. The effort should match the strategic value of the supplier.

Criteria and weightings

Typical criteria blocks are quality (e.g. complaint rate and supplier PPM target), logistics (OTIF, quantity accuracy), cost (price level, price stability), service (response times, claims handling around warranty) and increasingly sustainability and compliance. The weighting depends on the procurement item: for serial components, quality and OTIF dominate; in prototype procurement or tooling procurement, flexibility and punctuality in small lot sizes matter. In practice, quality criteria often account for between 30 and 40 per cent of the overall grade.

Scales and grade bands

Uniform scales have proven effective, usually 1 to 5 or 0 to 100 points, with clearly defined thresholds per criterion. For example, OTIF above 98 per cent receives the top grade, below 90 per cent the worst. It is important that the same banding logic applies to all suppliers so that results remain comparable. Traffic-light displays (green, yellow, red) make communication to management and suppliers easier.

Data sources and automation

The basis is primarily system data: incoming goods and quality inspections according to inspection instructions, inventory and schedule deviations, invoice and price data as well as audit results. In addition, master data quality is factored in, e.g. maintenance via catalogue content management or identification quality in the sense of a golden record. Modern set-ups collect the data automatically and provide results via a supplier portal, allowing suppliers to view their grades themselves.

Key KPIs in the supplier rating model

Key figures are the heart of any rating model. They should be measurable, capable of automated collection and comprehensible for the supplier.

Quality metrics

Key quality metrics are the complaint rate, the scrap and rework rates and achievement of the supplier PPM target (parts per million defect rate). Compliance with agreed inspection instructions and documentation quality also count. Quality criteria often receive the highest weighting, as the cost of defects frequently exceeds the savings from lower prices.

Logistics and delivery metrics

OTIF (on time in full) measures the share of punctual and complete deliveries, with quantity accuracy supplementing the picture. Further metrics are flexibility in response to short-notice changes and

compliance with agreed Incoterms such as FCA or CFR Incoterms, e.g. regarding correct shipping documents and dispatch handling. For stock-supplying suppliers, stock-holding performance and readiness to hold inventory can also be evaluated.

Cost and service metrics

On the cost side, price level compared with the market, price stability, budget compliance and, where applicable, settlement processes such as early-payment (discount) invoicing or evaluated receipt settlement (ERS) count. Service criteria include response times to enquiries, technical support, e.g. in FMEA workshops or value analysis, and claim management in warranty and guarantee cases. Sustainability aspects such as a completed supplier energy audit round off the picture.

Risks and controls in supplier rating

A rating model only works if it is accepted and operated cleanly. Typical risks are data gaps, incorrect weightings and misuse of the rating as a pressure tool.

Data quality and distortions

Missing goods receipt data, unrecorded delivery punctuality or manual grades distort the result. This can be controlled through clear data owners, automated capture and regular plausibility checks. Master data should also be kept consistent, to which a golden record for supplier master data contributes.

Lack of consequence and escalation levels

Ratings without consequences quickly lose credibility. Defined escalation levels have proven effective: from a red result, supplier meetings follow, then action plans with deadlines, and finally delisting. Conversely, good results should be rewarded, e.g. through preferential awards or strategic partnerships. Emergency management processes kick in when critical suppliers fail at short notice, regardless of their rating.

Fair procedure and traceability

Suppliers must understand how their grade is arrived at. Transparency about criteria, weighting and data basis is therefore a must; a supplier portal with self-service visibility supports this. Legal aspects such as governing law in framework agreements or contractual consequences of ratings should be reviewed by the legal department on a case-by-case basis, especially where ratings influence award decisions.

Current developments: digitalised and sustainable ratings

Supplier rating models are evolving from static grade tables to dynamic, data-driven systems that also capture sustainability and resilience.

Automation and real-time data

Modern systems pull key figures almost in real time from ERP, quality and logistics data and calculate scores continuously rather than on an annual rhythm. Supplier portals enable feedback, action tracking and joint improvement projects. AI-supported analyses can detect patterns, such as seasonal dips in delivery punctuality or rising complaint rates ahead of series launches.

Sustainability and compliance in the rating

Sustainability criteria are gaining weight: assessments of the carbon footprint, energy efficiency, e.g.

evidenced by a supplier energy audit, or of the Product Environmental Footprint (PEF) for product life cycle assessments are moving into the criteria catalogues. Compliance and risk data are also being factored in. Legal foundations such as the German Supply Chain Act and the CSRD make sustainability-related ratings increasingly relevant for many DACH companies; the concrete implementation should be legally reviewed on a case-by-case basis.

Resilience and risk assessment

Following supply chain crises, many companies additionally assess supplier risks: single-source dependency, geopolitical exposure, financial stability and the existence of business continuity plans. Such risk scores supplement the performance rating and feed into emergency management. This creates a holistic picture that combines performance and robustness.

Typical metrics

OTIF (on time in full): > 98%

typical benchmark for top grades in the logistics block

Supplier PPM target: < 500 PPM

frequently agreed benchmark for serial parts, varies by industry

Complaint rate: < 2%

usual target range, depending on product complexity

Rating coverage: > 90% of procurement volume

share of volume systematically rated

Practical example

A medium-sized mechanical engineering company with around 400 active suppliers introduced a supplier rating model with the criteria quality (40%), logistics (30%), cost (20%) and service (10%). The data sources were primarily automated goods receipt and inspection records as well as inventory data from the ERP system.

- Introduction of quarterly ratings with traffic-light logic and self-service visibility for suppliers via a supplier portal
- Linking the quality points to the complaint rate and the supplier PPM target
- Mandatory improvement meetings for red ratings with an action plan and deadlines
- Incentives for top suppliers through preferential awards and involvement in value analysis projects

Conclusion

A supplier rating model makes supplier performance measurable, comparable and manageable. It creates a shared, objective data basis for negotiations, development and risk management and relieves procurement controlling through automatable key figures. What matters is less the perfect formula than reliable data, clear weightings and consistent consequences from the results. Suppliers should be able to view the logic of their rating at any time so that the model works as a joint improvement lever. Those who interlock rating, emergency management and supplier development build a more resilient and higher-performing supplier base.

Frequently asked questions

What is a supplier rating model?

A supplier rating model is a structured assessment system that measures supplier performance using weighted criteria such as quality, delivery reliability, price and service. The results are typically summarised as grades or point scores. They serve as the basis for supplier selection, development and award decisions.

Which criteria belong in a supplier rating?

Proven criteria blocks are quality (complaint rate, PPM), logistics (OTIF, quantity accuracy), cost (price level, price stability), service (response times, claim management) and increasingly sustainability. The weighting should be adjusted per procurement item. It is important that all criteria are measurable and verifiable from data.

How often should suppliers be evaluated?

In practice, monthly to quarterly evaluations have become established, with strategic suppliers sometimes assessed continuously. C-tier suppliers are often rated at longer intervals to limit effort. What matters is a fixed rhythm so that trends become visible and actions can be tracked on time.

What is the difference between supplier rating and supplier audit?

A rating continuously assesses performance based on ongoing performance data from goods receipt, logistics and accounting. An audit is a one-off, often on-site examination of a supplier's processes and systems. The two complement each other: audits explain the causes, while the rating shows the effect.

How is a supplier score calculated?

First, point scores are derived for each criterion from defined thresholds, e.g. OTIF is mapped onto a 1-to-5 scale. The points are then multiplied by the defined weights and added up to the overall grade. Transparent thresholds and the same logic for all suppliers are essential.

How do I move suppliers onto a rating without alienating them?

A gradual introduction with clear communication has proven effective: disclose the criteria and weighting, agree trial periods without consequences and actively involve suppliers. A supplier portal with self-service visibility creates transparency. Good results should be visibly rewarded so that the rating is perceived as a fair comparison.