

Supplier segmentation: differentiate strategically rather than treat everyone the same

Supplier segmentation refers to the systematic division of the supplier portfolio according to criteria such as business volume, risk potential and substitutability. The aim is to focus procurement resources deliberately on the suppliers that are strategically or critically important to the company. The term is a core discipline of supplier management and the basis for differentiated support models.

Key facts

- Typical classifications are A, B and C suppliers by revenue share, supplemented by risk and criticality perspectives.
- In practice, around 80 % of procurement volume is often concentrated in about 20 % of suppliers (Pareto principle).
- Segmentation steers the intensity of quality inspections, audits, framework contract maintenance and development measures.
- Combined matrix models (volume, risk, substitutability, innovation potential) are considered more robust than a pure revenue view.
- Segmentation should be reviewed at least annually and adjusted to supply and market risks.
- It is a prerequisite for structured supplier risk management and compliance requirements such as the supply chain act.

Definition: supplier segmentation

Supplier segmentation means the structured classification of all of a company's suppliers according to defined criteria such as procurement volume, supply criticality, risk profile and cooperation potential. It assigns each supplier to a segment and links that segment to binding measures, responsibilities and levels of support.

Distinction from supplier evaluation

Supplier evaluation measures the performance of individual suppliers, such as incoming quality, on-time delivery and response times, typically using point systems. Segmentation, by contrast, assigns suppliers to groups in order to intervene in a steering capacity. The two instruments interlock: evaluation data feeds into segment assignment, while the segment determines the depth of inspection and evaluation frequency. A poorly rated A supplier requires intensive development, a similarly rated C supplier rather a replacement source.

Why segmentation matters to buyers

Procurement resources are limited; treating all suppliers equally results in strategic partners being

under-supported and marginal suppliers being over-supported. Segmentation creates transparency over the portfolio, legitimises priorities vis-à-vis management and makes the delegation of authority in day-to-day operations manageable. It is also the basis for tender strategy, price negotiations and macroeconomic hedging such as forwards & swaps with critical raw material suppliers.

Methods and approach of segmentation

A multi-stage approach has proven its worth: build the data foundation, define criteria and weightings, classify suppliers and link the segments to sets of measures. Any two dimensions can be displayed graphically as a matrix, which makes communication with management and departments easier.

Classic ABC analysis

The ABC analysis sorts suppliers by annual procurement volume. Usually, A suppliers (typically around 80 % of the volume) account for only a small part of the supplier base, often about 5 to 20 %. The pure volume view has limits, however: a small specialist supplier for a component with special characteristics can be more critical to supply than a large supplier of standard goods. The ABC analysis is therefore a starting point, not the end product.

Criticality and risk dimension

The second dimension is supply criticality: what happens if the supplier fails? Criteria are substitutability, lead times, sole-supplier status, technology barriers, export control and location risks. In addition, country risk is assessed, for example with pre-products from regions with geopolitical tensions. Raw material and energy dependence also count; an energy audit at the supplier can provide insight here into susceptibility to price spikes and supply bottlenecks.

Matrix models and segments

From volume and criticality a four- or nine-field matrix typically emerges: strategic partners, leverage suppliers, critical niche suppliers and routine suppliers. In addition, many companies assess innovation potential, sustainability risks and conformity, for example whether REACH-relevant substances or valid declarations of conformity are in place. Each segment receives a defined set of measures: from annual audits and supplier days for strategic partners to a pure catalogue ordering process for C suppliers.

Data foundation and criteria: what matters

The quality of segmentation stands or falls with the data foundation. In addition to master data and volumes, performance indicators, quality data, contract situation and compliance status count. It is important to define criteria in advance and apply them consistently in order to avoid a distorted perception by individual account managers.

Combining hard and soft criteria

Hard criteria are volume, incoming quality, on-time delivery, days payable outstanding (DPO) as a reflection of the payment relationship, and audit results. Soft criteria capture willingness to cooperate, innovative strength and responsiveness in change management. In practice, a weighted overall score has proven effective; the weighting should be agreed with departments such as logistics, quality inspection and development so that the segmentation is accepted.

Incorporating operational data

Data from demand planning and framework delivery schedules is useful: it shows how plannable demand is and whether the supplier can deliver quantities on time. The state of framework contract maintenance also belongs here: does business run via robust framework contracts with clearly defined terms and conditions, or via individual call-offs? Large shipping contracts with advance payment or bank guarantee/surety, by contrast, signal a risk topic that feeds into segment assessment.

Compliance status as a mandatory criterion

At least one criterion should reflect compliance and sustainability: supplier approval status, certificates, declarations of conformity, REACH and raw material notifications, and due diligence results under the supply chain act. Segmenting suppliers by risk allows due diligence checks to be carried out on a risk basis rather than across the board. This keeps the effort manageable while simultaneously documenting a transparent, auditable approach.

Key KPIs for steering the segments

Segments without indicators remain theory. Every segment should be monitored using defined KPIs and review cycles so that changes in supplier status are detected early. The metrics differ by segment: strategic partners are measured more broadly and more deeply than routine suppliers.

Delivery and quality indicators

Key indicators are on-time delivery (OTD, typically a target value above 95 %), incoming quality measured in PPM (in practice target values below 100 PPM are common for production-relevant parts) and the complaint rate. For strategic partners, supplier development indicators such as the improvement rate of incoming quality are added. For critical segments, replenishment lead time in the event of failure also counts as a risk indicator.

Financial and portfolio indicators

Portfolio indicators describe the segment itself: share of volume in A suppliers, number of single-source positions, share of non-approved suppliers. From a financial perspective, days payable outstanding (DPO) per segment are of interest, as they combine the liquidity and relationship perspective. For raw-material-dependent categories, price dynamics are additionally monitored, for example via raw material surcharge clauses, whose effect shows in material cost development.

Review cycles and escalation

Quarterly reviews for critical segments and annual overall reviews of the portfolio are customary. If a supplier leaves defined thresholds, an escalation process applies: from monitoring status via development plans through to activation of the crisis team in the event of an impending supply failure. In this way, segmentation combines operational steering with contingency preparedness.

Risks and controls of segmentation

Segmentation itself carries risks: outdated assignments, subjective evaluations and blind spots for suppliers that are small in volume but critical to supply. Controls and a regular re-segmentation process keep the model robust.

Typical sources of error

Common mistakes: the segmentation is created once and then not updated; it is based only on revenue and overlooks niche suppliers; it does not take account of Tier-2 sub-suppliers. Political factors also play a role when A suppliers are given preferential treatment without performance justifying it. Regular plausibility checks through second-opinion reviews and departmental feedback reduce these distortions.

Controls and approval processes

A clear supplier approval process is important: only approved suppliers may be commissioned, and approval is linked to segment assignment. Changes to segment assignment should follow a defined approval process, for example via the head of procurement or in accordance with the applicable delegation of authority. Audit and inspection frequencies per segment are documented and spot-checked in internal reviews.

Legal and sustainability contexts

For suppliers with higher sustainability risks, the supply chain act gives rise to due diligence obligations, which are organised on a risk basis. Segmentation provides the systematic foundation here. The same applies to export control and REACH: critical segments undergo intensified screening. All legal assessments must be examined on a case-by-case basis; segmentation does not replace legal advice, but prioritises review effort.

Current developments: digitalisation and resilient supply chains

Segmentation is increasingly data-driven: systems combine internal performance indicators with external risk indicators and update segments almost continuously. At the same time, the focus is shifting from cost optimisation towards resilience and sustainability, which broadens the criteria landscape.

Automated re-segmentation

Modern ERP and SRM environments allow continuous updating of segment assignment, for example when on-time delivery, incoming quality or financial indicators breach thresholds. AI-supported approaches weight additional information such as supply failures in a region or raw material price movements. The human decision remains important for status changes, especially when exiting strategic partnerships.

Resilience as a second-order criterion

Since the supply shortages of recent years, many companies have additionally assessed segments against resilience criteria: degree of dual sourcing, transparency over Tier-2 suppliers, strategic buffers for pre-products and edge safeguards such as framework delivery schedules or Kanban agreements to secure material flow. For raw material positions, hedging via forwards & swaps or contractual raw material surcharge arrangements are added.

Sustainability and partner development

Sustainability criteria are moving into core segmentation: emissions data, social standards and due diligence status under the supply chain act are becoming regular assessment dimensions. For strategic segments, collaboration intensifies, for example through supplier days, joint energy efficiency projects (supplier energy audit) and development programmes. Segmentation thus becomes a steering instrument for partnership and transformation rather than a mere classification tool.

Typical metrics

On-time delivery (OTD): > 95 %

Customary target value; often set higher for critical segments

Incoming quality: < 100 PPM

Customary practical guideline for production-relevant parts

A supplier volume share: approx. 80 %

Typical Pareto characteristic value of procurement volume

Single-source share: as low as possible

Risk indicator; actively reduce critical single-source positions

Review frequency critical segment: quarterly

Annual review for the overall catalogue

Practical example

A medium-sized mechanical engineering company with around 1,200 active suppliers had previously segmented its portfolio only by revenue. After a supply shortage at a very small supplier for a safety-relevant component with special characteristics, the company introduced a two-dimensional segmentation by volume and supply criticality. Within a year there were tangible effects: the effort spent on C suppliers fell, while critical niche suppliers were systematically monitored and developed for the first time.

- Two-dimensional matrix of volume and criticality with defined sets of measures per segment.
- Quarterly reviews for the critical segment, annual overall review, escalation process incl. crisis team.
- Dual sourcing established for the five most critical niche suppliers, plus supplementary framework delivery schedules and Kanban agreements.
- Compliance screening under the supply chain act and REACH prioritised by risk per segment.

Conclusion

Supplier segmentation is one of the most powerful steering instruments in strategic procurement because it concentrates limited resources on the suppliers that really matter. It combines volume, risk and compliance perspectives into a robust portfolio structure and makes the level of support, depth of inspection and development measures transparent and justifiable. What is decisive is keeping the model alive: regular reviews, clear escalation paths and a solid data foundation. Those who implement segmentation consistently not only reduce supply and compliance risk, but also create the foundation for sustainable partnerships with strategic suppliers.

Frequently asked questions

What is supplier segmentation?

Supplier segmentation is the systematic division of the supplier portfolio according to criteria such as procurement volume, supply criticality, risk and cooperation potential. This produces segments such as strategic partners, leverage, critical and routine suppliers. Each segment has defined levels of support, checks and measures. The aim is targeted resource allocation in procurement.

How does the ABC analysis work for suppliers?

The ABC analysis sorts suppliers by annual procurement volume: A suppliers account for the majority of the volume, B and C suppliers significantly less. In practice, around 80 % of the volume is often concentrated in a small proportion of suppliers. It works well as a starting point, but should be supplemented with criticality and risk criteria, since small suppliers can be critical to supply.

Which criteria belong in a supplier segmentation?

Typical criteria are volume, supply criticality, substitutability, incoming quality, on-time delivery, risk profile (country, raw materials, single source), compliance status such as REACH and the supply chain act, as well as innovation and cooperation potential. The weighting should be agreed with the relevant departments and documented. It is important to combine hard and soft criteria in order to avoid bias.

How often should suppliers be re-segmented?

In practice, an annual overall review has established itself, supplemented by quarterly reviews of critical segments. Automated systems can continuously indicate threshold violations and trigger a change of status. In the event of market shocks, supply failures or significant volume shifts, an ad-hoc re-segmentation makes sense.

What is the difference between supplier segmentation and supplier evaluation?

Supplier evaluation measures the performance of individual suppliers against defined criteria such as quality, on-time delivery and service. Segmentation assigns suppliers to groups and uses this to steer the level of support. Evaluation results feed into segmentation, while the segment determines evaluation and check frequency. The two instruments interlock.

How many supplier segments are sensible?

In practice, three to four segments have proven effective: strategic partners, critical or niche suppliers, leverage and routine suppliers. More segments increase the steering effort and quickly lead to barely distinguishable sets of measures. More important than the number is that each segment is clearly delineated and underpinned by binding measures, responsibilities and review cycles.