

# Supplier Segmentation Matrix: Strategically Classify and Specifically Steer Suppliers

The Supplier Segmentation Matrix is a strategic procurement tool used to classify suppliers into categories according to defined criteria and manage them with varying intensity. It typically combines the dimensioning ABC analysis with an assessment of the supplier's market position, as in the well-known Kraljic scheme. In this way, procurement steers which suppliers it develops in partnership, which it manages in a standardised manner, and where it actively reduces risks.

## Key facts

- The matrix classifies suppliers along at least two dimensions, commonly spend volume and supplier risk.
- It forms the basis for different levels of management intensity, from framework agreements to strategic partnerships.
- Classic four-quadrant models comprise strategic, leverage, bottleneck and non-critical suppliers or commodity groups.
- The segmentation should typically be reviewed annually and adjusted in the event of material changes.
- Results feed into supplier evaluation, procurement planning, contingency management and negotiation strategy.
- The matrix is a steering tool but does not replace ongoing supplier evaluation and risk monitoring.

## Definition: Supplier Segmentation Matrix

The Supplier Segmentation Matrix is a two-dimensional classification model that divides suppliers or supplier-material combinations into segments according to business significance and supply risk. Each segment is linked to a defined management strategy, such as development partnership, cost pressure, risk mitigation or standardisation.

### Purpose and Benefit for Procurement

Procurement resources are limited; managing all suppliers uniformly leads to wasted effort. The matrix prioritises: strategic suppliers receive management attention and joint projects, while non-critical suppliers are handled as automatically and catalogue-based as possible. Segmentation thus combines portfolio strategy, negotiation planning and operational supplier management into one consistent approach.

### Distinction from ABC Analysis

ABC analysis evaluates only spend volume and classifies items into A, B and C categories. The Supplier Segmentation Matrix goes further because it adds a second dimension such as supplier risk, substitutability or technological importance. While it can build on ABC results, it also answers the question of how critical a supplier is to security of supply.

## Dimensions and Classic Models

Several segmentation approaches have become established in practice. The choice of model depends on the industry, commodity group and procurement maturity; what matters is that the criteria are defined in a measurable and comprehensible way.

### Kraljic Portfolio: Volume and Risk

The portfolio shaped by Peter Kraljic maps the axes of spend volume (profit impact) and supply risk. This yields four segments: strategic suppliers with high volume and high risk, leverage suppliers with high volume and low risk, bottleneck suppliers with low volume and high risk, and non-critical suppliers low in both dimensions. Different tactics apply per segment: partnership and IP co-creation for strategic suppliers, competitive processes and e-tendering for leverage suppliers, risk mitigation and diversification for bottleneck suppliers, and simplification for non-critical suppliers.

### Supplier Classification by Potential and Performance

Alternatively, many companies classify suppliers by delivery performance, quality and development potential, often supplemented by categories such as "preferred", "approved", "conditionally approved" and "blocked". This form focuses more on operational performance than on material costs and works well as an entry filter for sourcing events and framework agreements.

### Extended Criteria

Increasingly, sustainability and compliance aspects are incorporated into segmentation, such as ESG status, certifications or AEO status in the customs context. Suppliers' financial ratios, geographical dependencies or the company's own depth of in-house production can also serve as criteria. It is important that every criterion has a consequence in the management model.

## Methods and Approach for Segmentation

Robust segmentation is not created ad hoc but through a structured process from data preparation to the adoption of strategies.

### Data Basis and Criteria Weighting

The foundation is master data and transactional data: spend volume of the last typically twelve to 24 months, number of purchase orders and call-off orders, number of suppliers per commodity group, quality and delivery performance data, and information on the market situation. A weighting is defined for each criterion, for example 50 per cent volume and 50 per cent risk. Subjective assessments by category managers are documented so that the deviation analysis remains traceable in later review rounds.

### Workshops and Consensus in the Stakeholder Team

Because risk assessments cut across functions, workshops with procurement, development, quality, logistics and senior management have proven effective. There, it is discussed whether a supplier with low volume is nonetheless business-critical because it is a sole supplier of a safety-relevant component. The result is a matrix per business unit or commodity group, not a single company-wide classification.

### Strategy Derivation per Segment

Measures are defined per segment: for strategic suppliers, joint product costing, long-term framework

agreements and development cooperation; for leverage suppliers, competitive pressure through tenders; for bottleneck suppliers, second sourcing, safety stocks and integration into contingency management; for non-critical suppliers, catalogue purchasing, framework agreements with release limits and the highest possible automation with clear match-and-merge rules in the procurement IT systems.

## Key KPIs for Steering the Segments

The matrix only works if its impact is measured. Typical metrics check whether the segment strategies are taking effect and whether the classification still holds.

### Concentration and Decomposition Metrics

The share of spend with A or strategic suppliers shows the degree of concentration; in practice, 70 to 80 per cent of volume often sits with around 20 per cent of suppliers. If this share continues to rise, dependency risk grows. The number of C suppliers eliminated and migrated to catalogue purchasing measures consolidation success.

### Performance and Risk Metrics per Segment

Per segment, delivery reliability, quality rate, throughput times in the processing workflow and price development are tracked. For strategic suppliers, joint metrics such as cost savings, innovation contributions and response times in the 8D containment process are added. Bottleneck suppliers are assessed based on security of supply and the completeness of contingency plans.

### Link to Ongoing Supplier Evaluation

Segmentation is the static map; supplier evaluation is the ongoing radar. If evaluations permanently deviate from the expected segment level, this leads to reclassification or to measures such as a supplier ESG improvement plan. An inventory health dashboard can additionally show whether safety stocks for critical segments are actually being maintained.

## Risks and Controls in Segmentation

Common mistakes are an overly coarse data foundation, lack of currency, and strategies that exist only on paper. Countermeasures are clear processes, responsibilities and regular reviews.

### Typical Weaknesses and Misdirection

Risks arise when the matrix is created once and then not maintained: shifts in spend, insolvency risks or new technologies quickly render the classification obsolete. A purely volume-based segmentation also underestimates bottleneck suppliers with low volume but high business criticality. Finally, segment strategies can fall into oblivion if contracts such as FCA delivery terms, retention of title or letter-of-credit business are not aligned with the segment logic.

### Controls and Governance

An annual or semi-annual review with documented decision papers has proven effective, along with a short trigger process: in the event of material events such as supply failures, large-scale order cancellations or planned changes in depth of production, the affected segment is reviewed immediately. The procurement manual should define which segments require which approvals, contract types and checks.

## Compliance and Sustainability References

For approved and strategic suppliers, due-diligence legal reviews, evidence of supply chain requirements and, where applicable, a supplier ESG improvement plan must be scheduled. Legal and tax matters in individual cases, such as contract or tax arrangements with international suppliers, should always be examined by experts on a case-by-case basis.

## Current Developments: Digitalisation and Dynamic Segmentation

Modern ERP and SRM systems make it possible to update the matrix far more frequently and on a data-driven basis. Segmentation thus evolves from an annual workshop to an ongoing steering instrument.

### Automated Data Processing

Evaluations of spend, delivery performance and risk signals can today be generated largely automatically. Standardised data integration with clear match-and-merge rules reduces duplicates and errors in the supplier master data. For segments dominated by non-critical and leverage suppliers, e-tendering platforms and catalogue solutions significantly simplify operational implementation.

### Integrating Risk and Sustainability Signals

External signals on supply chain disruptions, credit risks or ESG topics are increasingly incorporated into the risk dimension. Companies combine the static matrix with early-warning indicators and align it with capacity planning and netting scenarios in supply chain planning in order to detect bottleneck situations earlier.

### Outlook

Going forward, segmentations are likely to become more granular, for example at the level of individual supply sites rather than just supplier numbers. The coupling with bid evaluation tiers and standardised sourcing processes will also be expanded so that segment strategy and operational sourcing come from a single mould.

## Typical metrics

### Volume share of strategic suppliers: typically 60–80 %

High values mean negotiating power, but also dependency risk.

### Supplier consolidation (C segment): often 20–40 % reduction

Measure of success in consolidating non-critical suppliers.

### Delivery reliability in the bottleneck segment: > 95 %

Critical segments require greater diligence than the supplier average.

### Revision of the matrix: annually to semi-annually

More frequent updates are sensible with a digital data foundation.

## Practical Example

A mid-sized mechanical engineering company with around 900 active suppliers created a Supplier Segmentation Matrix per commodity group for the first time. In workshops with development, quality and logistics, it emerged that several low-volume suppliers had to be classified as bottleneck suppliers

because they were sole suppliers of safety-relevant components. The results were documented in the procurement manual and implemented in the following quarters.

- For 15 bottleneck suppliers, second sources were sought, safety stocks defined and contingency plans created with defined escalation processes.
- Strategic suppliers entered annual reviews with joint product costing and long-term framework agreements.
- Around 300 C suppliers were consolidated, largely converted to catalogue purchasing, and standard sourcing processes linked to bid evaluation tiers were introduced.
- The matrix was reviewed semi-annually; after one year, the deviation analysis showed noticeably more stable delivery reliability in the critical segments.

## Conclusion

The Supplier Segmentation Matrix translates spend data and risk knowledge into a clear management logic for procurement. It prioritises management attention, makes segment strategies binding and creates the foundation for negotiating power, security of supply and supplier development. Key success factors are reliable data, cross-functional consensus on classification and regular reviews. Those who integrate the matrix with ongoing supplier evaluation, contingency management and digital analytics obtain an effective steering instrument. As a static chart alone, however, it remains ineffective.

## Frequently asked questions

### What is a Supplier Segmentation Matrix?

It is a two-dimensional model for classifying suppliers, typically by spend volume and supply risk. A distinct management and negotiation strategy is defined for each segment. The best-known model is the Kraljic portfolio with the segments strategic, leverage, bottleneck and non-critical.

### Which criteria belong in a supplier segmentation?

Common criteria are spend volume, share of revenue, supply risk, substitution options, quality and delivery reliability, as well as strategic factors such as technological importance or sustainability. Financial stability, certifications and geographical risks can also be included. It is important that every criterion is measurable and has consequences in the management model.

### What is the difference between ABC analysis and supplier segmentation?

ABC analysis ranks items by spend volume and only reflects one dimension. The Supplier Segmentation Matrix adds a second axis, usually supplier or supply risk. This makes low-volume but business-critical suppliers visible, which ABC analysis would classify as C items.

### How often should supplier segmentation be updated?

In practice, an annual or semi-annual review has proven effective. In addition, there should be a trigger process that initiates an immediate reassessment in the event of material events such as supply failures, insolvency signals or changes in the company's own depth of production. Digital evaluations now enable more frequent updates.

### What measures follow from each segment?

Strategic suppliers receive partnerships, joint development and long-term framework agreements. Leverage suppliers are put under cost pressure through competitive processes and tenders. Bottleneck

suppliers are secured through second sourcing and contingency management, while non-critical suppliers are simplified through catalogue purchasing and automation.

### **Is the Supplier Segmentation Matrix also useful for small companies?**

Yes, even with a manageable supplier base the classification is worthwhile, because resources are even scarcer there. A simple two-axis matrix with a few criteria is sufficient. What matters is consistently implementing the segment strategies in sourcing, contract design and management intensity.