

Spend Analytics: Expenditure Analysis as the Foundation of Strategic Procurement

Spend Analytics refers to the systematic collection, cleansing, classification and analysis of all of a company's procurement expenditure. For buyers and supply chain professionals in the DACH region, it is the data-driven foundation for identifying savings potential, driving forward supplier consolidation and meeting sustainability requirements. Without reliable spend data, strategies such as category management or e-sourcing remain purely intuitive exercises.

Key facts

- Spend Analytics encompasses the systematic preparation and evaluation of all procurement expenditure across systems and sites.
- Core steps are typically data collection, the procurement ETL process, classification (e.g. according to ECLASS), deduplication and analysis.
- In practice, sound spend analyses frequently deliver savings of 5 to 15 per cent in consolidatable commodity groups.
- Typical KPIs are spend under management, maverick spend, degree of supplier consolidation and price level per commodity group.
- Data quality is the critical success factor; this is where the data steward and match-and-merge rules come into play.
- Modern approaches use AI for automatic classification and anomaly detection.

Definition: Spend Analytics

Spend Analytics is the process of systematically collecting, preparing and evaluating procurement data in order to create transparency on purchasing volume and derive decisions from it. The term is often used synonymously with "Spend Analysis", with Analytics emphasising the continuous, partly automated evaluation.

Distinction from Reporting and Controlling

While classical procurement controlling usually focuses on predefined reports and budget reconciliations, Spend Analytics aims at exploratory analysis: which suppliers are sharing volume? Where are we buying the same item at different prices? Which departments are circumventing framework agreements? Reporting answers questions defined in advance, analytics generates new questions. Both disciplines complement each other, but the strategic added value typically arises in the analysis phase.

Data sources in industrial companies

In practice, relevant data comes from purchase order and invoice systems, ERP core and secondary systems, credit card transactions, expenditure of sites and subsidiaries, and from contract and catalogue systems. In manufacturing companies, material master data is added, such as ECLASS

classifications, which enable product-related analysis. Data from catalogue management and delivery schedule call-offs also flow into the analysis, as call-off volumes can be reconciled against framework agreements there.

Methods and approach: from raw data set to decision

A Spend Analytics project follows a proven sequence in practice. The challenge lies less in the analysis itself than in data preparation: widely varying supplier names, divergent commodity group definitions and duplicates make comparable evaluations difficult.

Data collection and procurement ETL process

The starting point is the extraction of expenditure data from all relevant sources. A clean procurement ETL process (extract, transform, load) harmonises formats, currencies, tax keys and periods. In practice, it is recommended to include at least twelve, ideally 24 months of history in order to identify seasonal patterns and one-off orders. A completeness check is important: payment data alone often does not capture the entire spend, for example in the case of credit notes or open items balances.

- Inventory the source data: ERP, P-card, freight costs, leasing
- Field mapping and standardisation of currencies and periods
- Reconciliation with financial accounting as a control figure

Classification and data cleansing

At the core is classification: each transaction is assigned to a uniform commodity group, ideally according to an open industry standard such as ECLASS, supplemented by a company-specific hierarchy. Fuzzy matching and deduplication condense supplier master data, for instance when the same supplier is maintained under four spelling variants. Match-and-merge rules help to consistently bring purchase orders, goods receipts and invoices together at item and supplier level. A data steward is responsible for ensuring that classification rules are documented, applied and continuously updated.

Analysis: classical and with AI

The actual analysis uses proven perspectives: the spend cube (supplier × item/commodity group × organisational unit and time), Pareto analyses to identify volume-relevant line items, and price spread analyses for identical materials across sites. In addition, machine learning approaches are increasingly used that automatically classify transactions, detect anomalies such as unusual price levels or split orders, and forecast future demand. The results then determine the choice of instrument: tendering, price negotiation techniques or supplier consolidation.

Key KPIs and evaluation perspectives

Spend Analytics only unfolds its value through consistent metrics that compare the state before and after improvement measures. In practice, a number of metrics have established themselves as standards, whose concrete target values vary depending on industry and maturity.

Transparency and steering metrics

The most important metric is spend under management, i.e. the proportion of procurement volume actively steered through procurement processes – values well above 80 per cent are typically targeted. The payment term adherence KPI shows how reliably agreed payment terms are observed and is often combined with dynamic discounting to systematically exploit early payment discount potential. The

share of purchase orders outside framework agreements (maverick spend) is also part of the standard evaluation, as it directly shows where negotiated terms are being wasted.

Supplier and category perspective

At supplier level, spend concentration (share of the top ten suppliers in total volume), the number of active suppliers per commodity group and volume per country are of interest. In category management, the spend baseline serves to separate strategic from operational groups and to derive suitable procurement strategies for each group. For the transport sector, transport costs can be evaluated separately to examine shifts between carriers and Incoterm variants such as DAP or DPU for their cost impact.

Commitment and compliance

Spend Analytics is increasingly also used to monitor contractual and regulatory requirements: are framework agreement call-offs actually being drawn down? Is an automatic contract renewal quietly taking effect? For sustainability and compliance analyses, the spend provides the coupling quantity, for example to prioritise challenges such as the EUDR in procurement on a risk-weighted basis: the greater the volume from affected raw material categories, the higher the scrutiny.

Risks and controls in spend analysis

The biggest risk factor is not a lack of software, but poor data quality and a lack of commitment to the results. Without clear governance, classifications become outdated, evaluations diverge between departments and lose credibility.

Data quality and governance

Typical problems are duplicates in the supplier master, missing classification of free-text purchase orders and incompletely recorded freight or ancillary costs. Countermeasures are a defined procurement ETL process with documented rules, a data steward as an explicit role (even part-time), and matching rules that make inconsistent document chains visible. Regular sampling – in practice frequently 2 to 5 per cent of transactions – safeguards classification accuracy; many companies aim for hit rates of over 95 per cent.

Avoiding misinterpretation

Spend data does not automatically tell the truth: high volume with one supplier may be order-related, and a price spread between sites may be explained by different specifications. Before any consolidation or re-tendering, the data must therefore be validated for plausibility with the business departments. Legal restrictions such as competition law in price enquiries, or special features of export processing and dangerous goods management, can also distort the comparability of expenditure and must be examined on a case-by-case basis.

Acceptance and organisation

Analysis results only have an impact when they are translated into ownership. Coupling with targets has proven effective: savings potential from the spend analysis is assigned to supplier managers and category owners as a target metric and tracked quarterly. Equally important is the interface to the procurement principles: the analysis must reflect the company's strategic guidelines – such as supplier risk, sustainability or regional sourcing – otherwise a contradiction arises between data and strategy.

Current developments: AI, sustainability and the digital supply chain

Spend Analytics is evolving from a periodic analysis task into a continuous, partly automated function within the digital supply chain. Three trends are shaping practice in the DACH region.

Automated classification and anomaly detection

AI-supported methods classify free-text line items at a significantly higher speed than manual preparation and learn from corrected results. Anomaly detection automatically highlights unusual patterns: split orders below approval thresholds, price jumps on standard parts or unusual deviations in payment terms. The results do not replace buyers, but prioritise where manual review has the greatest leverage.

Spend as a basis for sustainability and compliance requirements

Expenditure data serves as the volume and risk basis for sustainability requirements: for CO2 extrapolations per commodity group, for supplier ratings prior to a supplier energy audit, or for risk segmentation in regulatory matters such as the EUDR in procurement. Since such requirements demand supplier evidence, Spend Analytics is increasingly interlinking with supplier portals and certificate data – expenditure becomes the interface between procurement, compliance and sustainability reporting.

Integration into procurement processes

Analysis no longer waits for quarterly reports: modern platforms link spend data with e-sourcing so that tenders arise directly from identified potential, and with catalogue management and framework agreement steering so that call-off volumes are monitored against negotiated terms. Feedback loops also emerge in the operation of material bookings: those with strong spend transparency can optimise delivery schedule call-offs and detect deviations between demand and contract early.

Benefits and implementation: from analysis to result

Spend Analytics is not an end in itself. Its value is measured by how quickly and bindingly insights are translated into measures – from tendering through supplier consolidation to process controls against maverick spend.

Typical levers

In practice, savings arise mainly through four levers: consolidation of suppliers and volumes, comparability of prices across sites and business units, exploitation of negotiated terms (less maverick spend, consistently used payment term tiers) and avoidance of unnecessary demand through demand and inventory reconciliation. The implementation lever often lies in the process, not the price: when purchase orders consistently run through catalogues and framework agreements, negotiated prices take effect without new negotiation.

Prerequisites and stumbling blocks

Successful Spend Analytics initiatives share three characteristics: clear governance with a data steward and defined classification rules, a dedicated tool or data model instead of ad-hoc spreadsheets, and an organisational anchoring of the results in targets and reviews. Common stumbling blocks are over-ambitious classification depths at the outset, a lack of reconciliation with financial accounting, and

analysis results without owners. Realistically planned, first reliable results can be expected in practice after three to six months, and a mature operation after twelve to 24 months.

Typical metrics

Spend under Management: > 80%

Proportion of volume actively managed by procurement; ambitious organisations aim higher.

Maverick Spend: < 5–10%

Proportion of expenditure outside framework agreements and catalogues; lower is better.

Classification accuracy: > 95%

Proportion of correctly classified transactions, verified by sampling.

Payment Term Adherence: > 95%

Proportion of payments within agreed payment terms.

Practical example

A medium-sized mechanical engineering company with three sites and around 120 active indirect spend suppliers discovered in a spend analysis that identical wear parts were being sourced from four suppliers across fifteen duplicate item records, with price spreads typically of 10 to 25 per cent between sites. Around 30 per cent of indirect volume was also supplied outside framework agreements. Building on this, the company consolidated the affected category to two framework suppliers, harmonised material master data according to ECLASS and introduced monthly maverick spend reports.

- Procurement ETL process across three ERP systems with a uniform currency and time axis
- Automatic classification according to ECLASS with data steward approval of critical groups
- Consolidation of duplicate items and re-tendering of the top line items
- Monthly maverick spend reporting with owners per site

Conclusion

Spend Analytics is the data-driven foundation on which strategic procurement decisions only become reliable. The difference between a report and an analytics lies in the commitment: insights must lead to classification rules, responsibilities and concrete measures. The most important investment is therefore not the software, but data quality and governance – exemplified by the data steward. Those who operate Spend Analytics continuously rather than as a one-off project create the transparency that category management, e-sourcing and sustainability requirements alike need.

Frequently asked questions

What is Spend Analytics?

Spend Analytics is the systematic collection, cleansing, classification and analysis of all of a company's procurement expenditure. The aim is transparency on volumes, suppliers and prices in order to identify savings potential and steer procurement strategies on a data-driven basis. The term is used synonymously with Spend Analysis.

What steps does a spend analysis involve?

Six steps are typical: extract data from all sources, standardise procurement in an ETL process, classify

and deduplicate items and suppliers, analyse (e.g. spend cube, price spread), derive potential and implement measures. In practice, data preparation usually accounts for the greatest effort.

How much savings potential does Spend Analytics deliver?

In practice, savings of 5 to 15 per cent in consolidatable commodity groups are frequently cited for consolidated expenditure analyses, depending on the starting situation and maturity. The value is generated primarily through supplier consolidation, better price comparisons and the consistent use of negotiated terms. Reliable statements require a company-specific analysis.

What data is needed for Spend Analytics?

The basis is purchase order, invoice and payment data from all ERP systems and sites, supplemented by credit card transactions, contract, catalogue and freight data. Complete supplier master data and classifications, for example according to ECLASS, are important. At least twelve, ideally 24 months of history are considered a sound basis.

What is the difference between Spend Analytics and Spend Management?

Spend Analytics is the analysis and evaluation discipline: preparing data, forming metrics, identifying patterns. Spend Management is the overarching steering approach that translates these insights into strategies, contracts and processes. Analytics provides the "where and why", management the "what to do".

What role does AI play in Spend Analytics?

AI is used mainly for automatic classification of free-text line items, supplier deduplication and anomaly detection, for example with split purchase orders or unusual prices. It considerably accelerates data preparation, but does not replace expert plausibility checks. A clean data foundation and documented classification rules remain a prerequisite.