What Is Spend Cube Analysis?

Like runners, artists, or musicians, businesses that invest time in measuring and analyzing their performance gain valuable insights they can put to good use in their efforts to achieve continuous improvement. For procurement teams—whose actions directly impact the success of business units across their entire organizations—effective spend management is the goal and improved efficiency and savings are the rewards.

Spend analysis (including spend cube analysis) is the toolset used to monitor and improve strategic sourcing, procurement process efficiency, and value creation within the supply chain while supporting greater profitability and competitive advantage for the company as a whole.

Spend Cube Analysis: The Basics

It might sound like an extremely unlikely game show for maths fiends, but the “cube” in “Spend Cube Analysis” is actually a data analysis tool generated by spend analytics. The process involves the collection and review of spend data to achieve insights that drive performance and profitability improvements.

These can include:

- Greater cost savings (both short and long term) through greater spend visibility, process

https://www.purchasecontrol.com/blog/spend-cube-analysis/
improvements, improved contract compliance, etc.

- Greater efficiency within the procurement function and the organization it supports
- Stronger and more strategic supplier relationships
- Improve buying power and implement more strategic sourcing
- Identifying and managing risk exposure

By creating a baseline for spend data, spend analysis supports more strategic procurement and financial planning in support of company goals. It also helps reduce total cost of ownership (TCO) and maximize return on investment (ROI) to shift procurement away from mere cost reduction and toward value creation.

Procurement teams perform spend analysis by identifying, collecting, cleansing, enriching, classifying, and analyzing spend data sets.

- **Identification** is the measurement of total spend and the selection of target groups within it to narrow the scope of the analysis to specific product categories (and sub-categories), suppliers, departments, business units, etc.
- **Collection** (also called data extraction) is the actual capture of spend data and its consolidation from one or more formats. Multiple data formats can come into play because businesses often rely on a range of programs, including Enterprise Resource Planning systems (ERP systems), accounting solutions, and office programs like Microsoft Excel to track and manage their data. Using dedicated procurement software can make corralling information from disparate data sources much easier.
- **Cleansing** is the stage where data is reviewed for discrepancies, file corruption, and redundancies. Transaction data is carefully examined for accuracy and errors are removed. Redundant stakeholders and suppliers can be excised and records updated to reflect the most current information.
- **Enrichment** involves taking the cleansed and corrected raw data and refining it using standardization. All files are updated to use the same formatting and naming conventions, and product and category codes are added or corrected as needed.
- **Classification** is the further refinement of spend data by supplier. Simultaneously, the data is sorted into specific groups based on (for example) sources of demand. In addition to grouping all products purchased from a copier manufacturer (copy machines, toner, paper, etc.) into a supplier-based category, each product can also be broken out by demand and usage in different departments and business units. This preserves the groupings while ensuring all transaction and spend data is connected and can be examined, analyzed, and manipulated within a single taxonomy, or system of classification.
- **Analysis** takes the carefully collected, cleaned, and categorized data and uses data analytics to provide concrete answers and verify (for example):
  - Buyers are following internal controls and only buying from preferred suppliers
  - Contract terms and conditions are optimal for every product in the supply chain
  - Actual spending patterns are in line with those forecast

https://www.purchasecontrol.com/blog/spend-cube-analysis/
Which items are within target TCO parameters, and which need improvement

Equipped with complete and consolidated data, the procurement team can now generate a spend cube.

“The spend cube is effectively a real-time, multidimensional representation of a single sourcing strategy. It’s a contextual expression of select portions of your consolidated spend data, connected to the whole but readily “sliced and diced” to identify potential contract management, supply chain optimization, and continuous improvement opportunities.”

**Spend Cube Overview and Benefits**

Bringing together three dimensions of spend data—Suppliers, Corporate Business Units, and Item Categories—the spend cube is a graphic representation of spend analysis output.

The three different categories are each assigned an axis of the cube:

- **Category Analysis (X axis)** specifies the goods and services purchased.
- **Cost Center Analysis (Z axis)** specifies the sources of demand within the organization
- **Supplier Analysis (Y axis)** identifies the suppliers being paid
The heart of useful and efficient spend cube creation is a technology known as *Online Analytical Processing*, or OLAP. A key component of many business intelligence, procurement, and finance applications, OLAP does the “grunt work” of consolidating, categorizing, and connecting data to be manipulated and reviewed in a multidimensional format (such as a cube).

Organizing spend data in this manner makes it easier to obtain detailed focus on specific areas of interest while contextualizing the data’s role within your spend as a whole.

Several types of spend cubes can be generated with a focus on different dimensions of spend. They’re created using different types of spend analysis, including (but not limited to):

- **Contract Spend Analysis**: Used to verify contract compliance and improve contract management by optimizing terms, conditions, and pricing from preferred vendors.
- **Payment Term Spend Analysis**: Used to streamline the procure-to-pay (P2P) process and eliminate waste, fraud, and maverick spend through examination of payment patterns, purchase order cycle times, approval bottlenecks, etc. It also provides insight on cash flow.
improvements and greater savings from early payment discounts.

- **Tail Spend Analysis**: Used to “trim the fat” and eliminate rogue/maverick spend by providing total visibility for all purchasing (and therefore all transaction data) in indirect spend. It also improves internal compliance while helping to optimize the supply chain through vendor consolidation.

- **Vendor Spend Analysis**: Used to specify the percentage of spend dedicated to essential suppliers. Supports supplier management and strategic sourcing by measuring supplier performance and compliance. Also helps reduce the number of suppliers and create strategic contingencies for essential production materials.

- **Category Spend Analysis**: Used to examine the dimensions of spend by category. Supports improvement of category management, supply chain management, internal spend controls, and contract management through negotiation informed by more precise forecasting and risk management.

- **Item Spend Analysis**: Used to parse expenditures to the line-item level. It reveals redundancies and discrepancies (e.g., are Plant A and Plant B both buying Widgets, but from different suppliers at two very different price points?). Exposes maverick spend and suboptimal vendor selection as well.

**It’s Hip (and Strategic) to Be Square**

The spend cube is effectively a real-time, multidimensional representation of a single sourcing strategy. It’s a contextual expression of select portions of your consolidated spend data, connected to the whole but readily “sliced and diced” to identify potential continuous improvement, supply chain, and savings opportunities. It gives companies the reliable and comprehensive business intelligence needed to achieve smarter, more agile decision making.

*Use Business Data Analysis to Get More for Your Money With PurchaseControl*

[Find Out How](https://www.purchasecontrol.com/blog/spend-cube-analysis/)
About PurchaseControl

PurchaseControl is cloud based procurement software for business spend management. We empower businesses by providing greater transparency and oversight into the purchasing process. With PurchaseControl, you have the flexibility to manage how spend actually happens instead of how you wish it would happen.

The entire PurchaseControl team has experience within a range of businesses, and as such, we bring a practical, holistic approach to purchasing. We understand what it takes to run a business and apply that knowledge to make PurchaseControl as effective as possible for all users.

Learn more at www.purchasecontrol.com

Contacts

EU Office Information
UK: +44 845 591 27 24
Ireland: +353 1 513 4623
enquiry@purchasecontrol.com

US Office Information
US: 800 737 5605
inquiry@purchasecontrol.com

Connect With Us
Facebook: https://www.facebook.com/PurchaseControl/
Twitter: https://twitter.com/purchasecontrol/
LinkedIn: https://www.linkedin.com/company/purchasecontrol/

https://www.purchasecontrol.com/blog/spend-cube-analysis/