



Spend Analysis you can not live without it

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Executive Summary

Sourcing strategy, category expertise and procurement execution are all critical components of a highly effective supplier management program. However, the success of such a program is also heavily dependent upon your ability to access, organize, and analyze spend data. Spend analysis offers invaluable insights into spending patterns, contract compliance and supplier performance. Such an insight is critical for identifying hard-dollar savings opportunities and improving sourcing strategies.

However, research by multiple industry analyst organizations has uncovered a harsh truth: few enterprises have clear and detailed visibility into what they spend, on which products, or with which suppliers. As a result, many decisions get made based more on intuition rather than on facts.

This article reviews the four steps required to get clear and detailed insights into spend across products and services within your organization. Whether you decide to deploy a spend analysis application or use a managed service, the methodology and the steps required to get to the analysis are the same.

The Spend Analysis process consists of four key steps:

Step 1: Extracting information from Various Source Systems

Step 2: Data Normalization

Step 3: Data Enrichment

Step 4: Data Analysis

Step 1: Extracting information from Various Source Systems

The spend data may exist in various source systems such as Purchasing and Accounts Payables module of ERP systems; eProcurement applications; travel and expense reports from Purchasing Cards etc. Each of these data sources contain detailed information about how much is spent on buying what products and services from which vendors at a transactional level detail. Such information is extracted from these systems by the Spend Analysis application into its common repository. Most spend analysis applications come with out-of-the-box capability to extract data from popular ERP systems into its repository. The applications also contain easy-to-use mapping tools and software that make it easy to create customized mapping from other systems into its common repository and extract the transactional spend data.

Step 2: Data Normalization

Once the data is in the common repository, a normalization process should then be applied to ensure that spend analysis produces accurate and meaningful data. The two key steps in this process include data classification and data cleansing.

A single product may appear multiple times in multiple source applications, including the inventory item master, purchasing systems, e-Procurement systems, etc. In an enterprise, different systems often describe the same product or service in many different ways, making it difficult to aggregate spend for the same product or service across multiple systems into one line item. In addition, relationship between similar product or service items may not be described well in these systems, making it difficult to roll up spend for similar products or services under one line item at a product/service family level. An enterprise can reconcile such disparities by classifying each product or service according to a consistent taxonomy and to a level of detail that is meaningful for analysis. Popular standards-based taxonomies used include Universal Standard Products and Services Classification (UNSPSC), eCl@ss etc. Adding the corresponding UNSPSC classification information to each transaction record within the spend analysis repository allows spend analysis applications to aggregate spend for the same commodity across various source applications, as well as once aggregated, analyze spend at various levels of detail such as commodity or commodity family. Most spend analysis applications offer advanced tools and a rich library to enable you to add standards based taxonomy to all records in your spend analysis repository.

If you buy a managed service, the vendor brings advanced tools to help you add standards-based product/service taxonomy to your spend data.

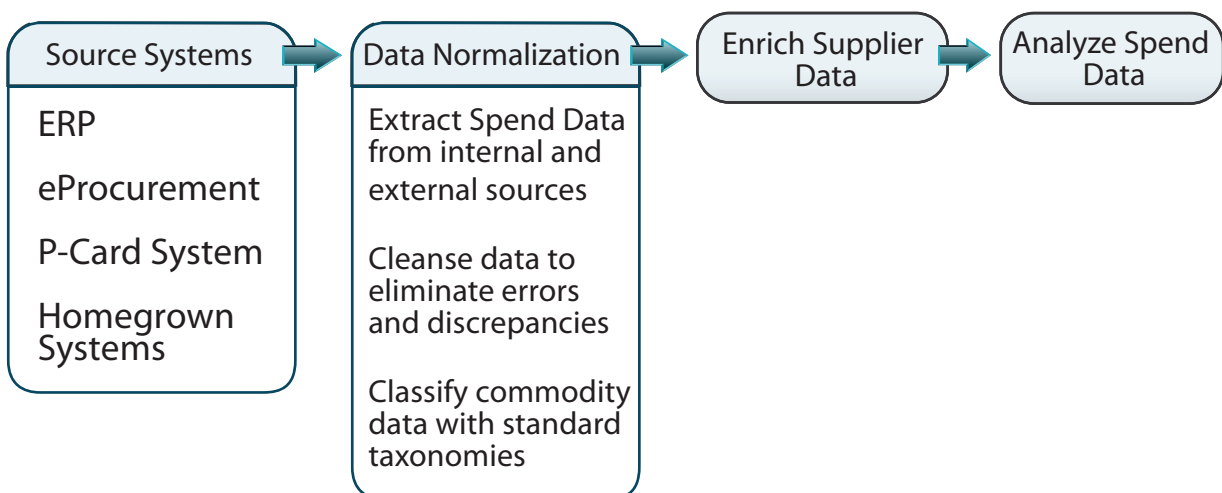
In addition to classification, other data must also be normalized due to discrepancy in how the same information is described in various source applications. For example different source systems may refer to the same supplier as IBM or IBM Corporation or I.B.M. The spend analysis application should allow customers to easily normalize such data, once it is extracted into the repository.

Normalization of data addresses inconsistencies such as different spellings / abbreviations of supplier names, different commodity codes, etc across systems – a key requirement for improving data quality, as well as accuracy of the analysis.

Step 3: Data Enrichment

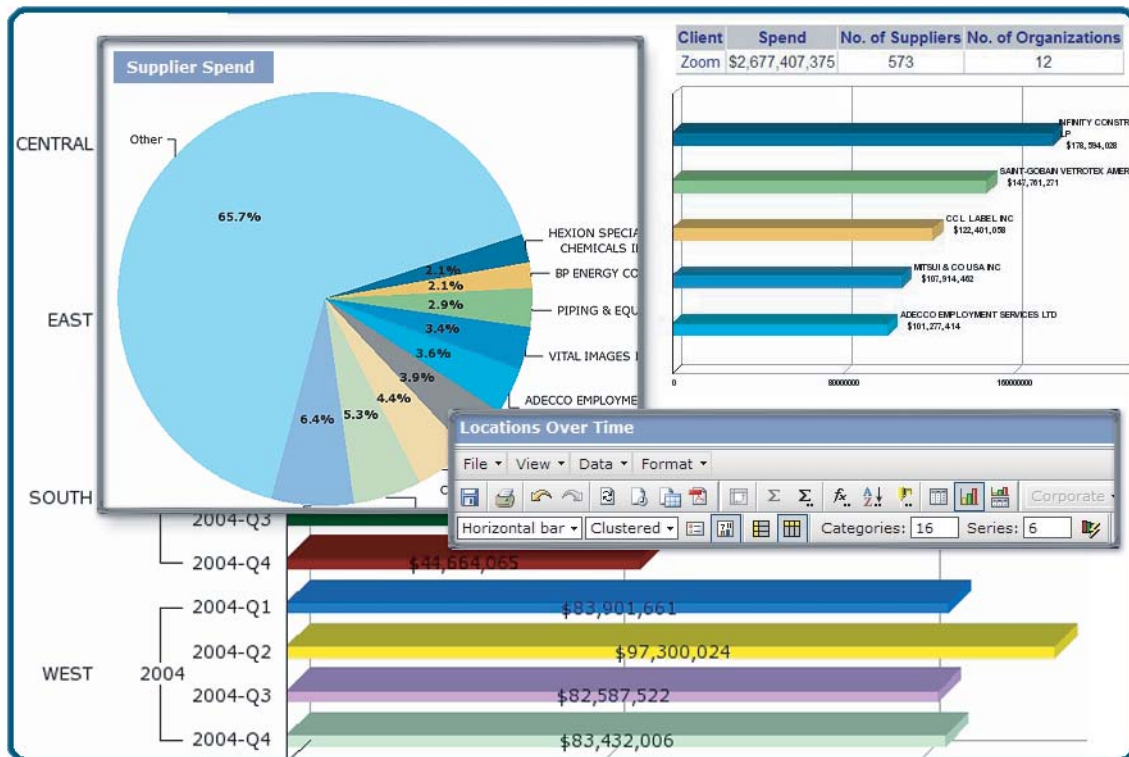
This optional step is normally done to make the data more meaningful for analysis. Typically information added to the supplier record in this step includes supplier's parent name, revenues, credit rating, Standard Industry Code, diversity status etc. Data enrichment allows for deeper spend analysis – for example you may be able to aggregate your total spend with a supplier, including all its subsidiaries to gain a better negotiating leverage.

The Spend Analysis process consists of four key steps



Step 4: Data Analysis

Once the data is normalized and enriched, the analytics capabilities in a spend analysis application can help you slice and dice the data across multiple dimensions such as suppliers, product at commodity or family level, size of spend etc. and gain compelling insights.



From this analysis, you may discover issues in your indirect procurement process that give you immediate savings opportunities. For example you may find that you were using multiple suppliers for a particular product category family, and only 60% of the spending was actually going to its preferred supplier. You can now determine who your suppliers are, how much business was being allocated to them, and gap between contracted value and actual placed purchase volume. This visibility will allow you to rationalize supply base and reduce costs by getting a better negotiating leverage with selected suppliers, while simultaneously saving on invoice processing costs. In some instances you may even source a master agreement “at significant savings” with one supplier.

You may also find that you were often accepting all three forms of payment (PO related invoice, P-card, or check request) from the same supplier and can now cut-off non-preferred procurement and payment methods for specific suppliers and categories to deter maverick spending, while saving on payment processing costs.

You will find that such insight is accessible to people across the company, for example, strategic sourcing professionals can access it for market making activities, as well as buyers in individual plants can use this information for compliance analysis. It is no longer one or two people who have the knowledge in the company, but everyone has it, which changes the game. The table below provides a summary of benefits from a spend analysis solution.

Improvement Area	Performance Impact
Material/services costs	Reduce costs 2% - 12% through informed strategic sourcing strategies
Supplier management	Eliminate duplicative suppliers. (Reduction depends on previous efforts).
Contract compliance	Improve compliance 55%. Save 7%, through use of contract pricing.
Regulatory compliance	Meet regulatory reporting rules.
Inventory management	Cut excess stocks >50%. Lower inventory costs 5% - 50%. Reduce expediting costs.
Product management	Cut unnecessary part introductions by 20%. Increase part reuse. Align design and supply strategies. Facilitate early supplier integration.
Process cycles	Reduce spend analysis project cycles 30% to 50%. Refocus sourcing and business managers on strategic tasks

Leading companies across various industries use Ketera's Spend Analysis solution, as well as Ketera's Spend Analysis Managed Service to access, organize and analyze spend data on both products and services and gain complete and clear understanding of their spend along various levels of detail. Such information has enabled them to:

- identify immediate savings opportunities
- drive compliance
- bring more spend under management
- develop and execute sourcing strategies

Ketera Spend Analysis solution allows users to cleanse, normalize, and classify spend data by leveraging automated and patent pending technology to ensure high accuracy and quick turn around time in providing actionable and intelligent spend reports. Ketera Spend Processing leverages the enriched standard learning based algorithms like Bayesian and K-Nearest Neighbor (KNN) and rich knowledge libraries to cleanse the data and accurately classify Spend information. An integrated collaboration tool ensures that the various team members on the project including commodity managers and IT team can work together to review and address any open issues. Ketera's Software-as-a-Service approach ensures that the cross-industry knowledge library leverages the learning from past implementations and improves the quality and speed of data cleansing and classification initiative for a new client – a distinct advantage over traditional software vendors, where past learning can not be applied easily.

About Ketera's Spend Process Solutions

Ketera is the fastest-growing provider of on demand spend management solutions, providing companies with the applications and services needed to control and reduce corporate spending. Ketera's closed-loop spend management solutions include applications for spend analysis, sourcing, contract management, procurement, supplier enablement & content management, supplier performance management, and invoice management.

Since its inception, Ketera has supported enterprises customers of all sizes, industries and geographies, including numerous Fortune 500 companies. In 2006, Ketera surpassed \$4 trillion in spend analyzed and more than \$1 billion in transactions between buyers and suppliers. Many of the world's leading enterprise companies, including ServiceMaster, American Express, Kennametal, Con-way, and Northrop Grumman Corporation depend on Ketera Spend Management to deliver real, hard-dollar savings quickly.

For more information on Ketera's Spend Analysis or Ketera's family of solutions for managing and streamlining corporate procurement processes, visit us at www.ketera.com

