Spend Analysis:
Know What You Spent – And What You Bought

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Spend Analysis Management

Every procurement manager faces this inescapable question: “How much did we spend with the supplier?” The answer is a key factor in the amount of contracting leverage a customer will have with a supplier. But there are many variations on the question. “How much did we spend on the XYZ project?” “How much did we spend to manufacture this part?” “How much did we spend on travel (or furniture, or software, etc., etc., ad infinitum)”?

Answering each of these questions may pose its own challenges, but there is excellent justification for making the effort. Practically unique among the processes within your company, reducing the cost of buying what you need to run the business has a direct benefit on the bottom line - and is far more effective, dollar for dollar, than a similar increase in revenue.

Why make the effort? Based on your spend by category, you can:

- Prioritize which suppliers or products should be consolidated
- Determine which contracts need to be executed, re-negotiated or allowed to expire
- More effectively allocate your contract managers’ time and priorities
- Determine if company-wide policies and procedures may be needed or may need revision
- Target which purchasing systems or ERPs may need to be enhanced, upgraded, retired or replaced
- Decide which items need to be in your online catalog for purchasing by your employees

These steps can have a significant impact on what you spend. If this analysis hasn’t been done for your company in some time, or if you’ve merged with another company recently, it should probably be done. Savings of 5 to 10% on the cost of goods and services are common and attainable.

A whole cottage industry has grown up around helping companies reduce what they spend, to the point where service companies will frequently just charge you a percentage of the amount they save you. Clearly a win / win proposition, but isn’t there a nagging feeling that you should be able to do internally what they proposed to do for you? After all, it’s a straightforward process: find out what you’re spending, do some consolidation of suppliers to increase the purchasing leverage and negotiate better discounts with the suppliers.

Then what’s to stop you from doing it yourself? The barriers that quickly arise are breathtakingly straightforward:

- You probably don’t know what you bought
- You probably don’t know what you paid for it
- You probably don’t know who you bought it from

Before you protest too quickly that your company is different, here's an actual incident from our experience.

Data, Data, Who's Got the Data?

Only a few weeks into a new assignment managing the Information Systems Contracting organization for a large Pacific coast telecom, we learned one morning that one of our most experienced contract managers was preparing to negotiate and renew the contract with a major supplier of printers and other office equipment. Almost as an afterthought, we asked how much our company had spent with the supplier in the last year. The contract manager replied, without a shred of irony, "They're going to tell us this morning."

Well, that certainly wasn't going to satisfy our sense of confidence, propriety, and negotiating advantage. We should have that information from our own company sources. The manager agreed to do some research, but was convinced it wasn't going to be easy. He was more right than he knew. It quickly became evident that not all purchases of these products went through our company's primary purchasing system. Some of the supplier's products and services were purchased directly from them and some were purchased through distributors or bundled into turn-key systems from other suppliers. Despite the obstacles, in only a few short days, we had the results of our analysis. It wasn't encouraging. The dollar amount we showed for purchases through our purchasing system seemed too small, but even worse, the amount our accounting system showed we had paid to the supplier was even less than that.

Armed with our less-than-satisfactory data, however, we approached the negotiating session. When we did ask the supplier how much we had spent with them, they proudly provided a number, which, of course, bore no resemblance to either of the numbers we had. We put up a brave front. After a bit of shuffling and stammering, the account rep admitted they couldn't always get good sales data from one of their subsidiaries and really weren't very confident in their reports.

Despite the poor quality of our collective data, the negotiations went well and we got better discounts for their products than we had had with the expiring contract. Clearly, though, multi-million dollar decisions were being made, by both parties, using data that was aromatic, at best.

The Spend Analysis Niche

The question that this little allegory brings to mind, then, is if you don't know what you spend, then how would someone brought in under contract be able to tell you? The answer is that they do it very indirectly, using a combination of human-applied assumptions, rule-based data manipulation and a process that makes it unlikely the results can be recreated or even inspected effectively. “Drilling down” to great levels of specificity in the data presented typically results in what we like to call “spurious accuracy”.

Your results may differ … maybe.

What makes this spend analysis so attractive as a service offering? The simple fact is that even a mid-sized company spends a lot of money. Putting a microscope on any aspect of the spend and applying some procurement expertise can result in the savings of a few percent. As noted above, depending on the amount of contracting centralization, organizational maturity of the procurement function and effectiveness of the purchasing systems, the cost savings that can result from analyzing your spend and applying what you learn to high-value contracts can be from 5 to 10%. Multiplying that percentage times a substantial spend results in a large number - and even a percentage of that number can generate a tidy revenue stream for those who do spend analysis for others. Make no mistake about it, service agencies are being well paid to analyze what other companies spend.

With a Little Massaging…

Let’s look at how spend analysis is typically accomplished.

Most companies have well-managed invoice verification and payment authorization processes. But, while the invoice may specify the product purchased, usually by SKU, seldom is there any way of classifying the product. We’ve just started our analysis and you have a problem already: while your accounting system might actually be able to tell you how much you paid for that last telecom seminar, it couldn’t tell you how much you spent on the larger category of training. As another example, you might find it useful to know what you spent in total for those ½” No. 8 sheet-metal screws you bought last year, but you have no easy way to roll that data up to a category like “hardware”. Service companies in some vertical product areas can do the roll-up for you - at a price and with a substantial labor involvement from you.

Of course, when a purchase is made, if the product was merely identified as “merchandise”, or something equally generic, you wouldn’t be able to determine later what the cost was for at any level of classification.

Since companies must “account” for their purchases, they will frequently put in place a post-payment process that applies accounting codes to the purchase. While this is a labor-intensive process, proper accounting demands the distinction be made between expenditures for capital and expense items, so the effort may be necessary. The coding is needed to satisfy taxation requirements and is based not on what the item is, but on how it's used. This accounting coding can contribute to the ability to analyze how a company spends its money, though, and the more precise and specific the coding, the better the results. Recognize though, that post-assignment of accounting codes is frequently done by administrative staff personnel far removed from direct knowledge of the item purchased or its use, or by operational personnel who may have a limited knowledge of accounting codes. You may draw your own conclusions about the resulting level of accuracy.

A further tool used to analyze your spend is knowing which of your company's organizations made the purchase. If your company's installation organization spends a few million dollars with a manufacturer of optical fiber, it's a reasonable assumption that optical fiber was purchased. If the same company also manufactures telephone headsets, however, and your company's marketing organization spends a few thousand dollars with the supplier, it's more likely that the purchase was for headsets and not cable. If your installation organization spends millions of dollars from a supplier that provides optical fiber, software and consulting services, all bets are off. Clearly this is art, not science.

With the best tools (read clues) available, the process shown in is typically used to analyze a company's spend. Knowledgeable employees analyze invoices to determine what the product description is, who the supplier is and who bought it. They assign an accounting category, if the purchaser hadn't already done so. This service group uses the clues available, with a big impact on your resources, applies both programmed and human rules and produces a breakdown of your spending by category.

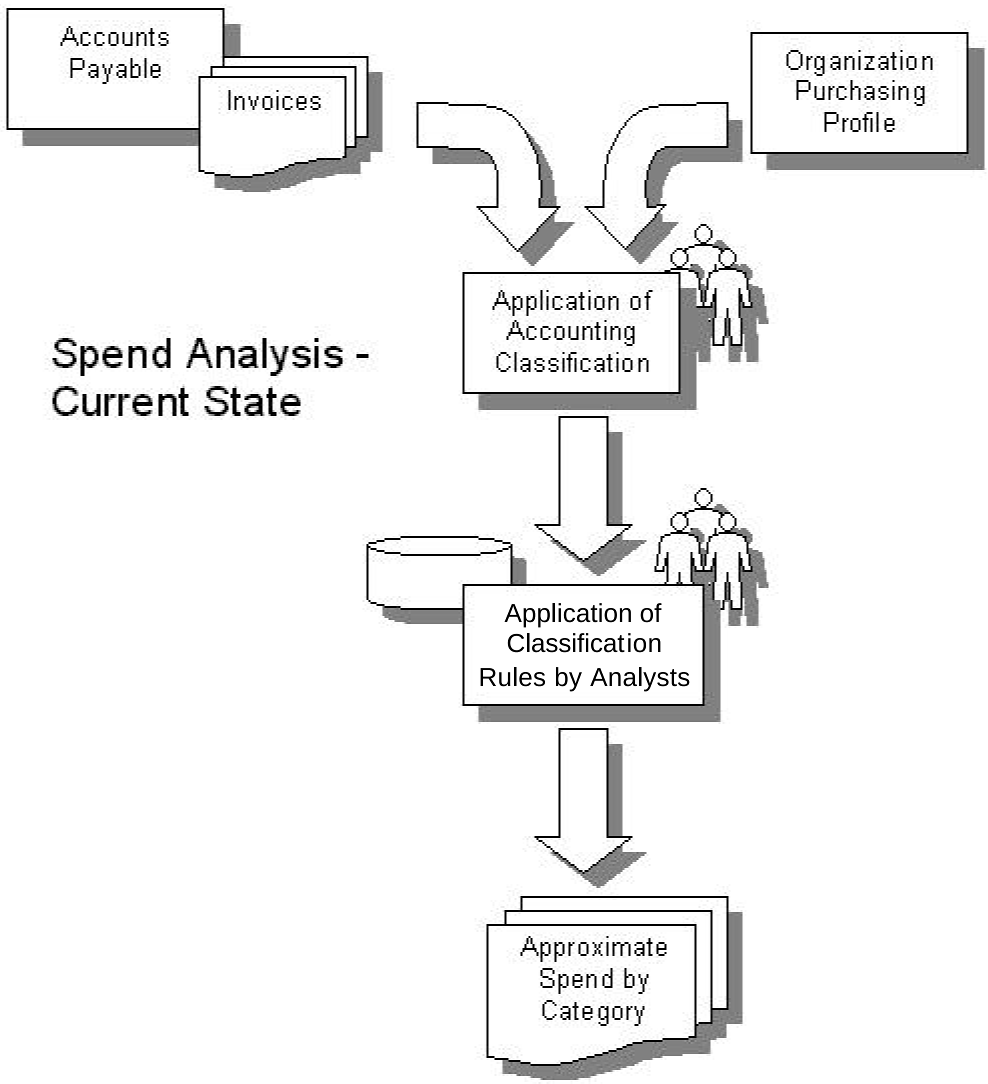

Figure 1

This, then, is the approach most often used to accomplish spend analysis: if the purchase was made by *this* organization from *this* supplier and it was given *this* accounting code, then it was probably *this* category of product or service. That's a lot of inferences accomplished with indirect data, yielding an accuracy level that makes your teeth ache. But if you have nothing else, it's better than not doing it at all.

A Different Approach

There are a few key building blocks that would enable construction of a more satisfactory and responsive method for analyzing your spend. Here are the critical processes that would have to change:

- Buy and pay for your products and services using the familiar U.P.C code
- Require that your suppliers classify their products and services according to the UNSPSC classification methodology and publish that classification
- Use the UNSPSC classification structure for your spend reporting applications

Why use the U.P.C. code? We recommend it because over a million companies use it in 140 countries. It's used in many, many retail industries. It has the striped bar code symbology shown in Figure 2 that enables asset management by both suppliers and customers. And, for our purposes here, the U.P.C. has the advantage that a supplier can use it as the single identifier for its products and services with *all* its customers.

0 90771-6095-2 6

Figure 2

The code is called the U.P.C. in the United States - for the Universal Product Code, and it's administered internationally by the EAN.UCC (for European Article Number.Uniform Code Council). There are also links to its global cousins (like Europe's EAN) and an emerging path to advanced electronic product code standards.

Why use the UNSPSC for classification? Because it's the only viable "standard" coding scheme for all the items you want to buy. The United Nations Standard Product and Services Code (UNSPSC) is an outgrowth of an effort Dun & Bradstreet undertook years ago as an internal project and product offering. D&B worked with the UN, eventually turning over its work to become the basis for a global coding system. The coding structure is available from www.unspsc.org.

Using the approach we've laid out, the resulting Spend Analysis process would look like Figure 3:

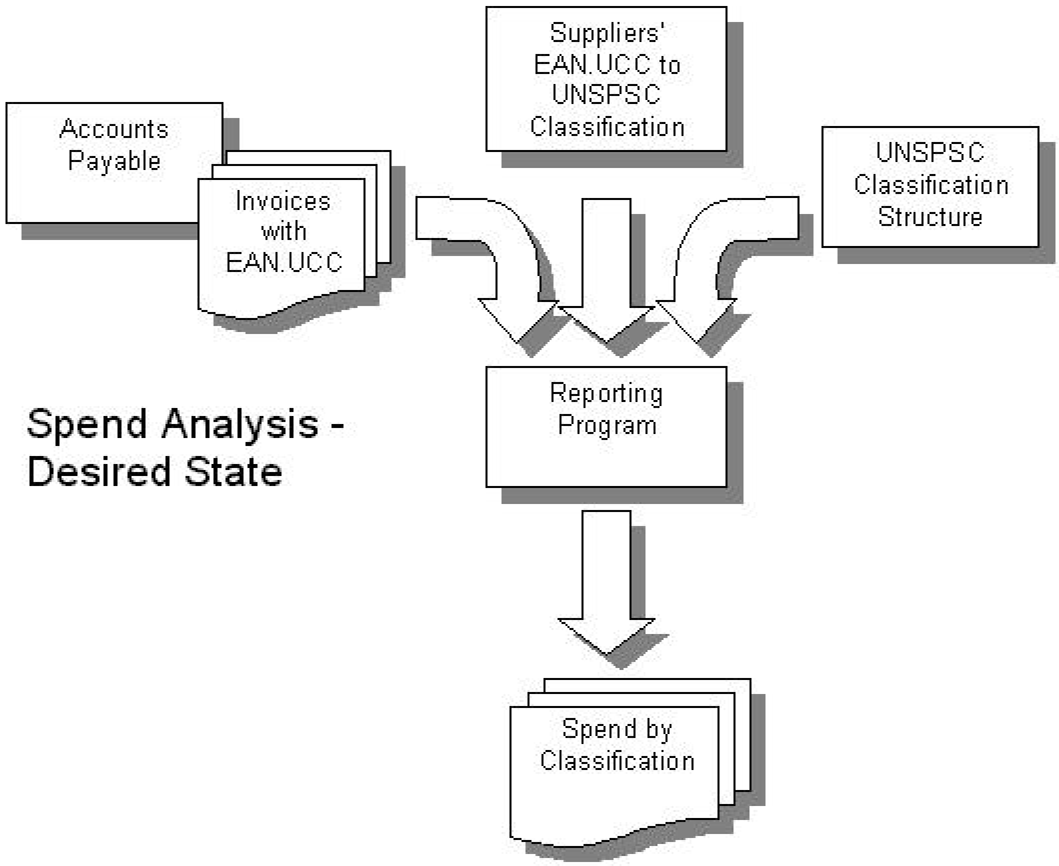

Figure 3

This approach has the benefit of placing responsibility for information with the party best equipped (and having the best incentive) to enter it and keep it up to date. As long as both customer and supplier agree that Purchase Orders and invoices will refer to the EAN.UCC numbering scheme, purchasing transactions can then automatically carry the crucial identification needed for classification. The individual purchase or payment transactions need not be "processed" - by humans or by analytical programs - at all.

The second piece necessary for this vital change in business-to-business commerce to work is for the supplier to make a simple table available (probably on the web), that classifies each of its EAN.UCC numbered products and services with its proper UNSPSC code. That data table, of course, has the benefit for the supplier that it can be used for *all* the supplier's customers; the supplier only needs to maintain one table. Table 1 shows how that data table might look.

A Sample Supplier's U.P.C. to UNSPSC Data Table (illustrative data only)

U.P.C.	UNSPSC ID	Item
6 31625 00771 8	43231510	CD Stomper Pro
7 18659 16130 9	43232112	Adobe Acrobat
0 37648 20960 1	43233205	Norton Anti-Virus
6 45606 70731 3	43232500	Encyclopædia Brittanica
0 28287 00119 0	43231601	Quicken Deluxe

Table 1

The only other piece needed is the current UNSPSC classification structure, available from www.unspsc.org. Table 2 is a small extract from the UNSPSC; the bolded entries show how the embedded hierarchy works.

An Extract of UNSPSC Classification Coding

Identifier	Description
43000000	**Information Technology Broadcasting and Telecommunications**
43230000	**Software**
43231500	Business function specific software
43231501	Helpdesk or call center software
43231503	Procurement software
43231505	Human resources software
43231507	Project management software
43231600	**Finance accounting and enterprise resource planning ERP software**
43231601	**Accounting software**
43231602	Enterprise resource planning ERP software
43231603	Tax preparation software
43231604	Financial Analysis software
43231605	Time accounting software

Table 2

Assume that you've just bought (licensed, actually) a copy of the Quicken software package from one of your suppliers. On the Purchase Order, you designated the appropriate U.P.C. number for the product: 0 28287 00119 0. The supplier invoices you using the same number. Concurrently, the supplier makes available on its web site a data table like Table 1.

You now have all the data you need to know what you've spent on this product (even if you were to buy more of the same product from other suppliers.) By simply (and programmatically) looking up the U.P.C. code in the supplier's table, you know the UNSPSC code for the product is **43231601**. By then looking up that code in the UNSPSC database, you know the product is classified as **43231601 - Accounting Software** and can even continue rolling up to the broader categories of **43231600 - Finance accounting and enterprise resource planning ERP software**, then to **43160000 - Software** and even to **43000000 - Information Technology Broadcasting and Telecommunications**.

You now have the foundation for a full range of spend analyses. You can determine what *other* Accounting software you've bought, and perhaps find that you can standardize on one package, thereby improving discounts, reducing training costs and improving personnel movement flexibility. You can determine what other types of software you're buying and how much you're spending for software as a category. You can conduct this kind of analysis whenever you choose, since the data is as current as your purchasing processes can make it. Data selection and report generation are as simple and repeatable. You can work to refine your processes to improve your results with the data properly structured to continually support your efforts. The assignment of accounting codes to transactions can now be done at whatever point in the process that makes sense based on real *accounting* requirements. Or, you could at least partially base the accounting code assignment on the UNSPSC code and do it programmatically.