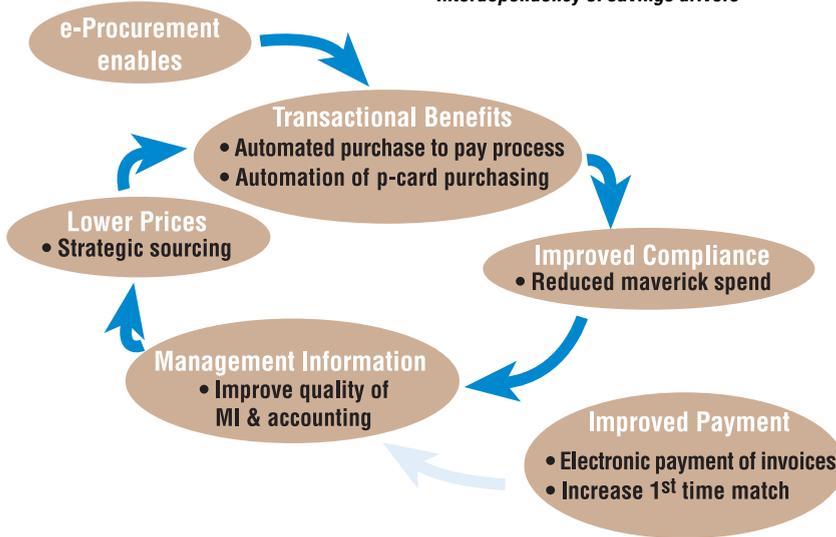# Measuring e-procurement benefits

by David Eakin

That there is potential for savings to be made from e-procurement is beyond dispute. The business case for e-procurement is based on yearly reductions in purchase prices and savings from lower process costs. However, the business case is only the start of estimating potential savings versus the costs incurred in their realization.

It is continuous measurement of the effectiveness of the key performance measures that is vital to the successful management and delivery of benefits realization. Thus measurement, especially in difficult trading conditions, is likely to be a prerequisite for project approval and the only way to demonstrate success and identify problems early enough to manage them effectively.

Measurement drives behavior and is a key element in making a successful program – and is just as relevant to projects that are already underway. Consistency, discipline, and accuracy must be applied to obtain meaningful results.

Measurement provides new and reliable input into sourcing negotiations and presents an accurate picture of procurement as a basis for improved management, whatever the organization's starting point.

In order to calculate recurring benefits, key savings drivers need to be identified and measured against. The key drivers for e-procurement include transactional, payment, management information and price benefits.

These drivers are interdependent, each enabling the others' delivery. The interaction between them is important, implying that the achievement of tangible benefit in the form of price improvement is reinforced at each successive negotiation by the improving interaction of the drivers.

The result is that e-procurement enhances subsequent negotiations with a supplier by yielding increases in business, and efficiencies in the transacting of that business.

Classification of benefits

The principle metrics that will demonstrate a return on investment (ROI) in e-procurement are:

- **hard** benefits (directly measurable) that are required to deliver enhanced shareholder value and thus gain approval, such as price savings and process cost reduction;
- **soft** benefits (indirect benefits) whose direct effect on cash flow may be difficult to quantify accurately (i.e. individual time freed up through more efficient processes), but may well be indicative of progress; and
- **intangibles**, which are beneficial but are not directly measurable in financial terms. It is important not to misclassify "soft" but measurable benefits as intangible, just because measurement may be more difficult. Intangibles include:
  - **cultural change:** recognition of strategic sourcing as a longer-term market differentiator, end-user attitude shift, and ease of implementing world-class internal processes;
  - **e-platform:** e-procurement as a step towards value-adding structures;
  - **financial approval for all spending:** ability to ensure that all spending meets organization standards; and
  - **high visibility of supplier performance:** "live" feedback from end-user to buyers.

It is also important not to "double count" benefits which are achievable through other means such as procurement centralization around an enterprise resource planning (ERP) system.

In order to identify e-procurement costs savings as distinct from those achieved through other procurement best practices, the measurement system needs to discriminate between "business as usual" type savings and those directly attributable to the implementation of the e-procurement system.

Good strategic sourcing for example will facilitate the realization of e-procurement benefit by ensuring that sound contracts are in place for use by e-procurement.

The corollary of this approach is that the e-procurement project should not have to shoulder the burden of the cost of an ERP system with which it will almost certainly co-exist via interfaces, but which is not required to practice effective e-procurement.

Interdependency of savings drivers

e-Procurement enables → **Transactional Benefits**
- Automated purchase to pay process
- Automation of p-card purchasing

Lower Prices
- Strategic sourcing

Improved Compliance
- Reduced maverick spend

Management Information
- Improve quality of MI & accounting

Improved Payment
- Electronic payment of invoices
- Increase 1st time match

Definition of benefits

1. Transactional Benefits

E-procurement enables the purchase-to-pay process online. A typical example uses a Web-based transacting tool whereby items are selected predominantly from pre-sourced catalogs and submitted for electronic approval. This tool is then linked to the back end ERP system for entry, payment of invoices, and collation of management information.

Electronic processing (including the automation of p-card purchasing) leads to great time savings and efficiency due to:

- global, automated processes incorporating best practice and eliminating unnecessary activities;
- e-enabled relationship with suppliers, which speeds procurement cycle times and facilitates supplier performance improvements; and
- greater data accuracy, which minimizes ordering inaccuracies and provides the essential foundation for better management through measurement and analysis.

2. Compliance Benefits

In many cases within an organization, compliance and maverick spending is a significant issue – not because employees deliberately purchase outside of preferred arrangements, but rather through lack of awareness. E-procurement addresses this through tools such as catalogs and standard order processing and approval processes. Compliance will be achieved due to:

- a simple and quick requisition-to-payment process including a user-friendly interface and pre-sourced catalogs tailored to the requirements of the individual user;
- a simple and quick strategic sourcing process with standard procurement processes and tools, as well as easily accessible information; and
- the e-procurement system, the only purchasing mechanism available.

3. Management Information Benefits

The fact that key information (cost center, commodity codes, etc.) is hard coded against the user dramatically reduces coding errors and provides highly detailed and easily accessible data. This is essential to maximize the financial benefits of strategic sourcing. A successful e-procurement implementation will provide high quality, detailed management information and will negate the need for data warehousing or resource-heavy data mining.

4. Price Benefits

The ability to prove to your suppliers that you are using e-procurement as a tool to ensure end users do honor their contract status will enhance ability to negotiate down prices through:

- greater enhanced capture and therefore, reliability of spending information; and
- increased confidence that spending volumes can be guaranteed from increased compliance with the system, thus allowing volume price breaks and discounts to be achieved.

5. Payment Benefits

The successful operation of the first four benefits enables electronic payment of invoices. This includes the ability to better control the business cash flow and to manage the efficient payment of suppliers due to more streamlined procurement processes providing more timely and accurate information to the accounts payable department. Potential benefits include reduced manpower (a "hard" benefit only if improvements lead to head count reduction) and reduced spending on postage and stationery.

During negotiations the procurement manager can more credibly guarantee the supplier a level of prompt payment, which was not possible prior to e-procurement.

As well, e-invoicing benefits are often under-assessed and ignored.

E-procurement applicable spending

When estimating the benefits for a business case to be derived from the implementation of e-procurement it is important to recognize that not all the spending in an organization is addressable to e-procurement processes. Opportunities to incorporate non-addressable spending in the system are still worth pursuing to the extent that the payment and management information benefits are still likely to be applicable within the scope of strategic sourcing.

1. Catalogues

Some products, such as utilities, could not be usefully catalogued or transacted. This does not mean that the spending cannot be captured within the application, as it is possible to configure the e-procurement tool so that it captures all spending. Such a configuration will greatly enhance the quality of management information and support an effective strategic sourcing strategy.

2. Long-Term Contracts

In other cases, the organization may be locking into certain long-term agreements so no e-sourcing activities such as electronic auction could be conducted. Further, certain categories of spending may involve a lack of competition between suppliers.

3. Constraints

Other key inter-dependencies should be noted, for example, the rollout of any technical IT programs such as ERP. Global LAN and desktop capabilities likely to affect IT delivery must also be noted and factored into the business case assessment, as speed of rollout is key to the speed at which benefits may be realized. These factors may have a significant impact on the amount of spending which could be e-enabled, and hence the benefits which could be derived from e-procurement.

How to measure benefits – the process

Once the key savings drivers have been identified and the scope of applicable procurement spending is agreed upon, a measurement process needs to be established to extract key measurement metrics. This should include the:

- aim of tracking the benefit or driver;
- establishment of a baseline from which to track the driver or benefit;
- tangible (hard and soft benefits) impacts of each driver;
- process by which the data may be extracted;
- frequency at which these measures should be undertaken;
- measures of benefit; and
- any risks associated with the measure.

How to measure benefits – the tools

Although it is relatively easy for procurement officials to make estimates of potential benefits against each driver, it is much more difficult to actually measure the benefits.

During the realization of e-procurement benefits, benefits are only seen as the end cost saved – the contributory factors or drivers are merged into the total saving, some of which is not e-procurement related. As previously mentioned, it is important to separate the pure "e" savings [from other types of savings], even if the methods of measurement may be subjective.

1. Benefits Realization Forms and Database

In order to record and centrally monitor the savings generated through e-procurement, a savings capturing process must be established. A portion of these savings may be attributed to business as usual activities and another portion to e-procurement.

This information should be collected, validated, recorded centrally in a database, and reported on a periodical basis. There needs to be clear guidance as to how these savings will be accrued. For example, will they be taken off the bottom lines for departments, or will they be reallocated to other areas of spending? There is a risk that if they are just recorded, they never actually materialize into real tangible financial benefits. (The complete article and a variety of sample measurement forms are available at **www.govpro.com**.)

2. Spend Analysis

A spend analysis tool allows users to "slice and dice" spend data to deliver meaningful information. Traditionally such data has been derived from information within the ERP or accounts payable functions. The quality of data inherent in the e-procurement transactions will allow procurement professionals to access this data directly via a self-service portal.

3. E-intelligence

E-intelligence is a collective term for sources of information that are made available to assist procurement professionals with finding required information. E-intelligence will incorporate supplier intelligence, news feeds, contract database, vendor surveys, customer satisfaction surveys, and transactional data such as number of returns.

Benefits monitoring – a suggested approach

The e-procurement implementation will be declared a success when the project has delivered on time and within budget, and business benefits have been realized.

Key steps to achieve results include:

- Defining key performance indicators (KPIs) early in the process. This will enable successful benefits tracking – what gets measured gets done! The business case should be distilled into measurable KPIs to be monitored throughout the project;
- Don't forget the soft benefits. Make a conscious decision as to whether you want to measure them;
- Agree on the measurement process;
- Agree on the measurement baseline;
- Get sponsor's buy-in and sign-off; and
- Visibly measure and visibly report.

Appoint a third party to track and monitor the progress of the e-procurement project. This will ensure that realization of benefits is enforced and that the business and project enablers for change are delivered. This person should drive and enforce the realization of benefits; ensure benefits are measured accurately; and, ensure that the business and project enablers for change are delivered – a user-friendly system (project enabler) and appropriate discipline for not complying with governance rules (business enabler).

Measuring program implementation performance

An e-procurement scorecard can be used to track and report the performance of the e-procurement implementation. All scorecards should be clear on what is being measured and why; link KPIs to the major benefits expected from e-procurement; be simple and tightly defined; and measured easily.

Fields on the scorecard may include:

- e-procurement transactions to date,
- savings recorded to date,
- costs to date,
- suppliers adopted to date,
- number of end users,
- improvement in payment terms with key suppliers,
- improvement in accounting processes over time, and
- e-tool usage (for electronic auctions and tenders).

A supplier scorecard may also be used to reflect the performance of an organization's key suppliers. Fields may include:

- financial spending details with each supplier,
- e-transactions to date,
- supplier performance (quality of goods, service, logistics ability, etc.), and
- payment terms. 〽