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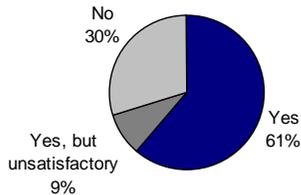
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Measuring Procurement Cost Savings to the Bottom Line

Procurement's Measuring Systems
Percentage of companies using a basic cost measurement system



Source: Purchasing Magazine (2000)

In response to senior management's interest in evaluating purchasing's impact on the bottom line, procurement executives increasingly implement cost savings measurement systems. The Procurement Strategy Council examines three key factors organizations must consider before implementing a new cost savings initiative.

Executive Summary

CREATING EFFECTIVE COST MEASUREMENT SYSTEMS

The Dilemma in Brief

Measuring procurement's performance and return on investment is a critical issue for senior management. With the increasing need to prove procurement's impact, senior procurement executives seek to validate procurement generated cost savings by linking savings claims to the bottom line. In addition, with procurement functions demanding a larger strategic role within most organizations, executives strive to measure procurement's return on investment. Many procurement organizations struggle to determine the most effective method for measuring actual cost savings. While measuring procurement's performance proves complicated, successful implementation of a cost savings measurement system is a key contribution a procurement executive can make to developing purchasing's role with the organization.

Steps to Consider

Procurement Strategy Council research indicates that firms must implement three important objectives to successfully measure procurement cost savings:

- **Secure senior management support:** Procurement executives must incorporate senior management in the cost savings measurement process design and implementation stages. By gaining executive support, the purchasing function can devote the required time and resources (e.g., capital and staff) to the development of an effective cost savings measurement program.
- **Collaborate with Finance to quantify cost savings:** The procurement function should seek assistance from Finance in the development of a savings measurement program. Financial experts can help Procurement determine the company's definition of cost savings, participate in the savings approval process, and audit final cost savings figures. By involving Finance, Procurement can develop accurate, credible cost savings figures.
- **Develop technological capabilities:** With effective technology, procurement executives can create a manageable, user-friendly cost savings measurement process. Through the use of a general procurement platform to evaluate spend, partnered with an e-tool, database, or spreadsheet to track approved savings, procurement can track and quantify cost savings initiatives.

Overview of Current Practice

AGGREGATING ESTIMATES OF COST SAVINGS

The majority of procurement organizations currently report a single aggregate cost savings figure based on actual cost savings, cost avoidance estimates, and any purchasing value-added activity.

Senior management and procurement executives must measure purchasing's performance to validate contributions to the bottom line and return on investment. A good performance measurement system encourages better decision making, enhances communication within purchasing and across the company, improves performance feedback, and motivates staff behavior. According to council research, chief procurement officers value cost savings and cost avoidance metrics above all other measuring tools, including internal customer satisfaction measures, supplier base measures, spend measures, and resource utilization measures.

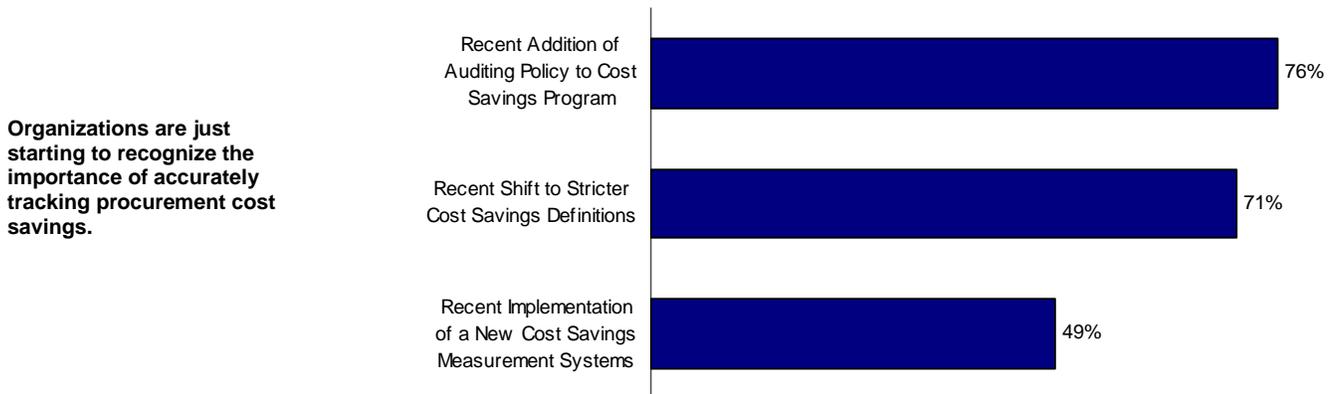
For the past 50 years, procurement professionals have attempted to establish accurate cost savings measures with little or no success. Traditionally, most procurement organizations evaluated cost savings, cost avoidance, and any value-added activity influenced by procurement. Due to inconsistent definitions of these measures, traditional methods lead to high claims of procurement's contribution to the bottom line. These exaggerated cost savings claims had senior management questioning the validity of savings claims, as management can often not identify savings in financial records.

Recently, many organizations have redefined cost savings evaluation practices. The graphic below illustrates how organizations have adapted cost savings programs.

TRENDS IN REDEFINING COST SAVINGS AND DEVELOPING MEASUREMENT SYSTEMS

Within the Last Year, Most Organizations are Devoting More Time and Resources to Measuring Cost Savings

Survey of Purchasing Executives at over 500 Organizations



Organizations are just starting to recognize the importance of accurately tracking procurement cost savings.

Source: "Cost Reduction Becomes Execs' Battle Cry," *Purchasing* (April 2003)

Many companies attempting to determine the validity of savings figures question the true impact of cost avoidance and value-added savings on the bottom line. In a recent survey, 60 percent of senior procurement managers noted that cost avoidance figures can help determine purchasing's contribution to the organization, but should not be aggregated with actual cost savings, as cost avoidance cannot be linked to the bottom line.

Shortcoming of Current Practice

INACCURACY IN COST SAVINGS REPORTING

While organizations attempt to report accurate savings figures, most are unsuccessful because of a lack of common cost savings definitions and objective measurements.

Procurement organizations encounter several challenges when evaluating cost savings. First, procurement executives struggle to determine accurate and concise definitions for cost savings and cost avoidance. Second, as the entire procurement function attempts to develop believable cost savings figures, many employees both external and internal to the purchasing function question the accuracy of this data.

Some of the following key challenges hinder the successful assessment of the procurement organization:

- **Common Definitions:** There is no universally accepted or standard definition of cost savings or cost avoidance. Without communicating exactly how to measure and calculate cost savings to purchasing staff, data will be difficult to normalize, compare, and validate. In addition, procurement executives and senior management will continue to debate savings relevance.
- **Objective Measurements:** Even with clear definitions, certain measures (e.g., cost avoidance and value-added metrics) can lack relevancy when relating savings to the bottom line. Since procurement staff often correlate an increase in efficiency to an estimated dollar savings value, cost avoidance and value-added metrics are often meaningless, as the measures cannot be directly related to bottom line savings.

These three obstacles lead to unbelievable, overstated cost savings figures. Lacking the ability to prove the procurement organizations value, purchasing executives struggle to convince business units to utilize procurement expertise and senior management to fund procurement initiatives.

While these challenges inspire procurement executives to design and implement a cost savings reporting system, purchasing organizations must manage the following three key areas of concern when building a cost savings program:

- A. **Credibility of savings:** Without an established process in place approved by such key stakeholders as senior management, the procurement organization's cost savings claims are often not believable. By earning executive approval of a cost savings measurement system, procurement professionals can ensure management and business unit belief in cost savings figures.
- B. **Accuracy of savings:** Typical procurement staff, such as buyers and commodity managers, specialize in soft skills such as negotiation and supplier relationship management, but lack analytical experience required to critically evaluating cost savings. In order to track true, valid cost savings claims, procurement employees must methodically address savings tracking with a rigor expected of financial analysts. To ensure rigorous reporting, procurement organizations can incorporate the finance function in process creation and execution.
- C. **Ability to track savings:** Most procurement organizations now use procurement platforms and e-procurement systems. These systems are necessary to record and track spend by commodity and business units. Only then can procurement organizations begin to identify, realize, and track cost savings.

Without a single, established cost savings measurement system, procurement organizations have no example to use as a model for a new program.

To ensure credible, accurate cost savings measures, procurement executives must include key stakeholders in the program development.

Member Imperative

INVOLVE KEY STAKEHOLDERS FOR COST SAVINGS SUCCESS

Before implementing a cost savings measurement program, procurement executives must gain approval and support of senior management and financial experts, while ensuring technological requirements are in place.

Procurement executives recognize the relative importance of effective cost savings measurement within the multitude of other purchasing initiatives. Organizations should place cost savings measurement at the top of the executive agenda in order to validate procurement's performance across the entire business.

For organizations to successfully develop and implement an effective cost savings measurement system or program, procurement executives must implement the following three actions:

A. Secure senior management approval and support for the program:

Senior management support is critical to the success of any procurement cost savings measurement system. Without senior level assistance, procurement executives cannot devote the necessary resources, such as capital and procurement staff, or incorporate finance expertise to the program.

Procurement executives can ensure senior management support by building a business case for the development and investment in this critical initiative. To prove cost savings measurement can benefit the entire organization, procurement organizations highlight several significant advantages, including the following:

- **Basis for improved cross-functional communication:** With an established, agreed upon, and well-understood definition of cost savings, the procurement organization can clearly and concisely communicate the importance of involving purchasing staff in all business units purchases.
- **Target for performance:** By using validated and normalized data, procurement executives can set realistic goals for procurement savings instead of inflated goals based on overstated savings figures of the past. Measurement systems will also ensure that Purchasing sets attainable buyer goals, commodity group goals, and overall procurement goals.
- **Tool for improvement:** A cost savings program provides a diagnostic framework for identifying areas of improvement and helping senior management to set priorities. By evaluating each business unit on cost reduction achievements, procurement can dedicate necessary resources to specific cost savings initiatives that improve overall savings.

For organizations with a traditional cost savings system in place, building a business case for the further development of the system is extremely straightforward, as management deems believable savings figures a valuable investment. Senior executives prefer credible numbers demonstrating procurement's contribution to the bottom line rather than rough savings estimates that are often inflated, incomparable across the organization, and not seen on the bottom line. In addition to supporting the development of a cost savings process, senior management must completely support any changes to an established cost savings measurement program.

Building a business case for a cost savings measurement program is necessary to gain senior management support.

B. Include Finance in program development and savings validation:

While tying purchasing cost savings figures to the bottom line, procurement's severest critics often originate from the finance department due to finance's involvement in budgeting, planning, and spending. By involving key finance employees in program development, implementation, and execution, procurement executives can ensure financial expert support and belief in valid cost savings figures.

To validate cost savings, procurement executives must ensure the support of Finance in several key stages, including the following:

- **Set clear cost savings definitions:** With Finance focusing on the actual savings delivered and Procurement focusing on purchasing's contribution to the organization, a cross-functional team will find it difficult to develop mutually agreed upon savings definitions. However, by resolving different opinions early in the process development stages, procurement can ensure the credibility of savings figure, while earning the support of finance. By involving finance in this early step, procurement executives can guarantee support in the basic principles of the cost savings process and figures.
- **Approve any definition exceptions:** When setting clear cost savings definitions, procurement and finance cannot anticipate every cost savings activity. As managers identify new cost savings activities, the organization may need to alter savings assumptions. Procurement must involve Finance in these alterations to ensure continued program support.
- **Develop the measurement process:** Involving Finance in the development of the cost savings measurement program will help ensure savings validity. With the finance department's expertise in accurately measuring the fiscal success of the company, the group can provide significant insight on process development to ensure accuracy in reporting for Procurement.
- **Verify the final savings figures as actuals:** Procurement should seek Finance's assistance when approving cost savings initiatives. With Finance verifying and auditing cost savings figures, Procurement can ensure savings validity. In addition, with financial controllers' direct involvement with Accounts Payable, Procurement can ensure expected cost savings are accurately verified as realized cost savings.

By including financial experts in every key stage, procurement executives ensure cost savings measurement support.

During the creation of **Corning's** Cash Preservation System (CPS) (*profiled on pages 8-10*), procurement executives involved financial experts in several key stages, including the development and adoption of cost savings definitions, creation of several general cost savings assumptions, and establishment of the actual cost savings process. In addition, Corning's procurement team established a Central Review Board with financial experts and procurement executives to approve, adjust, or reject cost savings submissions.

Procurement executives at **Clorox** (*profiled on pages 11-12*) recognized the need to utilize Finance expertise to educate buyers on savings measures. Annually, the company's finance and accounting group presents cost savings definitions, cost avoidance definitions, and calculation examples to the entire procurement function. This frequent reminder to buyers ensures full understanding and accurate reporting of cost savings.

C. Ensure implementation and utilization of the required technology:

Procurement executives must ensure the purchasing department can evaluate current spend before the organization can identify, realize, or track cost savings. Access to information technology influences the way that a company measures cost savings. With a procurement platform that tracks all spend, the organization may only need to add a spreadsheet or database to efficiently and effectively track cost savings.

Cost savings systems should use one standard process and unit of measure for all commodities, buyers, or business units. When procurement executives consider purchasing external cost savings technology systems or develop systems internally, they must consider three key functionalities of the software, including the following tools:

- **Tracking Capability:** Whether companies choose to use a manual or automated system, buyers must have the ability to not only submit achieved cost savings, but also to provide supporting documentation. Procurement organizations must collect detailed savings records to validate and audit actual cost savings. *(See Appendix A and B for two sample cost savings submission forms)*
- **Validation Ability:** Best-in-class cost savings measurement systems automate the savings approval process by forwarding buyer submissions directly to the appropriate individual for signoff. Some organizations require a different level of approval based on the value of the cost savings; others require a finance or procurement director to approve all savings; and still others require procurement and finance teams to review and approve every possible savings. No matter the level of cost savings approval required, procurement organizations can realize great efficiencies by simplifying and automating the approval process.
- **Reporting Functionality:** A savings measurement system must have the ability to generate monthly or quarterly savings reports for all key stakeholders. As procurement executives need to report various results to different stakeholders, the system must enable procurement staff to create customized reports. In addition, procurement staff should be able to generate ad-hoc reports as required. These reports should show trend charts presenting data over time and savings by business unit, commodity, or buyer.

Whether developing a tracking system internally or with a third party software provider, procurement executives must ensure the system has tracking, validating, and reporting capabilities.

When developing a cost savings program, procurement executives at **Cable and Wireless** *(profiled on pages 13-15)* collaborated with an external third party to develop the necessary online system to accurately track cost savings. This tool allows buyers to submit benefit realization forms with documentation, enables internal customers to approve cost savings, and generates a number of reports to aid procurement executives in accurately and effectively portraying purchasing cost savings success.

Procurement executives at **SAIC** *(profiled on pages 16-19)* developed a rigorous reporting mechanism in the cost savings measurement program. While only utilizing a spreadsheet, the procurement department developed several key cost savings reports. This simple spreadsheet allows procurement to report savings to all key stakeholders through an annual report to the CEO, a procurement scorecard to all business units, and an internal web site for all buyers and commodity managers.

Practice Profiles

SUMMARIES OF PROFILED COMPANIES

Company Capsule	Problem	Solution	Results
 <p><i>Profiled on Pages 8-10</i></p>	<p>Previously, Corning's procurement organization considered three cost reduction measures: cost savings, cost avoidance, and value added activities. While the system detailed Procurement's overall contribution, purchasing did clearly define savings, leading to questionable cost savings figures.</p>	<p>With the assistance of the finance function, procurement executives at Corning developed the Cash Preservation System (CPS) to establish clear cost savings and cost avoidance definitions.</p>	<p>At Corning, employees across the entire organization now have a thorough and detailed understanding of cost savings and how Procurement contributes to organizational success. In addition, senior management deems Procurement's cost savings figures more valid.</p>
 <p><i>Profiled on Pages 11-12</i></p>	<p>Previously, the procurement organization at Clorox simply considered buyer-estimated cost savings. Without strict cost savings definitions, procurement executives realized these cost savings estimates were not credible and required validation.</p>	<p>Over the past three years, Clorox has developed strict cost savings and cost avoidance definitions. In addition, the procurement function involved finance in a cost savings approval process to ensure accuracy and validity in savings reporting.</p>	<p>Through this initiative, Clorox's procurement group has increased function credibility, as well as company-wide understanding of procurement's contribution to organizational success.</p>
 <p><i>Profiled on Pages 13-15</i></p>	<p>With a decentralized organization, the individual procurement functions across the business units reported savings based on different definitions. While purchasing aggregated these savings for a general contribution figure, the company could not compare savings between different business units and regions.</p>	<p>With the implementation of an e-procurement platform, procurement executives established common savings definitions and began tracking Purchasing's overall contribution to the bottom line. Procurement executives also collaborated with finance and senior management at every business unit to develop the cost savings program.</p>	<p>Today, procurement executives have more credibility in reporting savings figures. In addition, due to the comprehensive savings forecasting process, procurement can effectively allocate resources to the most valuable savings initiatives.</p>
 <p><i>Profiled on Pages 16-19</i></p>	<p>To encourage business units to utilize Procurement, SAIC's centralized purchasing group needed to prove and validate the impact Procurement had on spend reduction.</p>	<p>After implementing SAP, the procurement organization began to track spend and identify, realize, and track cost savings opportunities.</p>	<p>For the first time ever, SAIC's procurement group can justify the cost of strategic sourcing and supplier management programs by immediately demonstrating procurement's value.</p>

Practice Profile



Company Capsule

Industry: Telecom: Switching & Transmitting

- 2002 Sales: US\$ 1 - 5 Billion
- 2002 Employees: 10,000 – 50,000

When Corning's procurement executives developed the Cash Preservation System, staff collaborated with Finance to develop mutually agreed upon savings definitions.

CORNING'S STRICT COST SAVING RULES

With the assistance of financial controllers, procurement executives at Corning set strict, detailed cost savings definitions to ensure the accuracy and validity of cost savings figures.

Corning Incorporated is a global, technology-based corporation that operates in two reportable business segments, Telecommunications and Technologies. The Telecommunications Segment primarily produces optical fiber and cable, which the company invented more than 30 years ago. The Technologies Segment manufactures specialized products with properties for customer applications utilizing glass, glass ceramic and polymer technologies. Corning is the largest maker of large-format liquid crystal display glass for flat panel displays, and the environmental unit makes ceramic substrates for automobile and diesel applications.

Corning began measuring procurement savings over ten years ago. Utilizing conventional methodologies and practices, procurement executives evaluated three general savings categories: cost savings, cost avoidance, and value-added savings. While this system accurately portrayed procurement's general contribution to the organization, it did not detail procurement's financial impact on the bottom line. Many employees external to the purchasing department, as well as some internal staff, questioned the validity and significance of these figures.

To address validity concerns and to increase the credibility and visibility of procurement's contribution to the company, procurement executives began to develop and deploy a 'Cash Preservation System' (CPS). The CPS system, developed over the past year, evaluates procurement's positive financial impact on the bottom line. After selecting a dedicated project manager to champion and oversee the new system, procurement executives involved financial controllers and the senior management team to aid in rule definition, process creation, and execution. Through the inclusion of key stakeholders in system transformation, procurement executives at Corning ensured the credibility and visibility of this important metric.

During system development, procurement linked their traditional procurement savings process to the finance function by adopting and redefining concise metrics. In an effort to validate savings to the financial department, procurement executives at Corning repositioned traditional cost savings and cost avoidance terms. Procurement now categorizes savings as Profit and Loss (P&L) and non-Profit and Loss (non-P&L). P&L is actual cost savings the company relates to the bottom line while non-P&L is cost avoidance estimates. Procurement uses non-P&L only to evaluate performance. Corning does not tie this metric to the bottom line. It remains an important measure within the function as it recognizes the impact of "doing the right thing." This change in terminology demonstrated procurement's commitment to declare only true cost savings.

DEFINING COST SAVINGS

Determining Procurement's True Contribution to the Bottom Line

"Our previous system measured cost savings, cost avoidance, and value added savings. Within the past year, we worked with the control function to review the old rules and adopt them into the new P&L categorization. This was an extremely time and resource intensive process, but one that ensured key stakeholder support."

Ruth Riesbeck
CPS Process Manager
Corning Incorporated

While redefining the general savings metrics, Corning established a set of 'Cash Preservation System Rules', which described actual cost savings in concise detail. Before evaluating specific, commodity-based rules, the project development team established a list of general assumptions to guide the savings evaluation process, including the following:

Before developing strict cost savings rules, purchasing executives and financial experts at Corning established a set of general assumptions to guide the savings process.

- All calculated savings result solely from proactive procurement involvement with programs and projects.
- In most cases, the organization will compare this year's purchase price to last year's purchase price to establish a cost savings figure.
- Buyers must remove any cost incurred during the procurement process to attain actual savings such as payments to auction or recovery companies, additional equipment costs, and any write-offs.

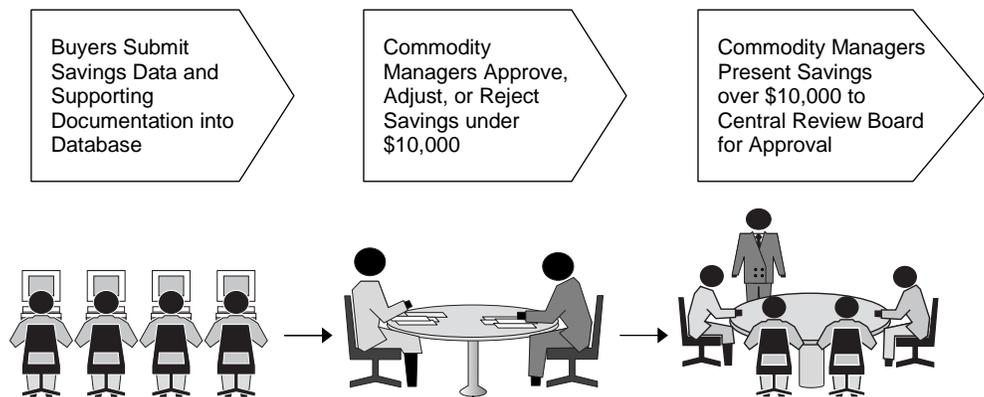
After setting the above assumptions, the group evaluated different types of purchases to establish specific savings measurement rules. (*See Appendix A for a sample of Corning's cost savings definitions.*) To ensure the rules were usable and understood by all buyers, commodity managers, and controllers, the team encouraged feedback from all parties involved to thoroughly revise and clarify the rules. By thoroughly defining these measurements, Corning ensures that all savings figures are accurate and valid.

The process development team also sought to develop a user-friendly savings reporting system to obtain data accurately. With the assistance of a third party vendor, Corning developed an information database focused solely on capturing savings data. The system allows buyers to submit savings data, with the appropriate supporting documentation via an intranet website. Procurement accepts invoices, contract sections, checks, and ERP system output stating old price, new price, and variance as documentation. From this data, the system can generate several established reports. In addition to these pre-designed reports, two employees have access to the actual data allowing procurement to run queries and create specialized reports, as needed.

With the Cash Preservation System (CPS) in place and buyers actively submitting savings data, Corning began a monthly review of reported savings. While every buyer is responsible for submitting savings into the database, the individual Commodity Managers must evaluate these savings and present savings valued over \$10,000 to the Central Review Board. The Central Review Board includes the original process manager, financial controllers, and members of the procurement leadership team. The graphic below illustrates the CPS review process.

Corning's Cash Preservation System Review Process
Involving Buyers, Commodity Managers, and the Central Review Board

Corning's Cash Preservation System requires the input of buyers, commodity managers, and senior management during the cost savings approval process.



Source: Council Research

After the board approves the monthly savings, procurement generates a report for the Chief Procurement Office to report to all senior management. The procurement organization also distributes specialized, detailed reports for commodity and business unit managers.

In the future, Corning's Central Review Board will continue to formally review reported procurement savings once a month. In addition, Corning's procurement organization is now considering how to supplement this 'good news' system with a second tracking function designed to look at net savings. Ideally, the net savings system, combined with the CPS process, will furnish management with an accurate depiction of procurement's true contribution to the organization and the bottom line.

CLEAR BENEFITS OF MEASURING COST SAVINGS

Determining Procurement's True Contribution to the Bottom Line

"From an organizational perspective, we've realized benefits through an increased understanding of what exactly 'cost savings' are and how the procurement organization contributes to organizational savings. Procurement now has increased credibility with senior management and the organization at large."

Tom Wilber
Director of Strategic Sourcing
Corning Incorporated

Practice Profile

CLOROX THREE YEARS OF MEASUREMENT SUCCESS



By requiring buyers to submit all possible cost savings to financial analysts, procurement executives at Clorox ensure all cost savings are valid.

Company Capsule

Industry: Customer Goods

- 2003 Sales: US\$1 - 5 billion
- 2003 Employees: Under 10,000

Clorox is one of the world's leading consumer products companies, manufacturers laundry and cleaning products, insecticides, cat litter, car care products, charcoal briquettes, plastic wraps, storage bags, and containers. Clorox sells products in over 110 countries.

Over the past three years, procurement executives at Clorox developed and implemented a rigorous cost savings measurement system. Currently, the company only considers cost savings (not cost avoidance). Recognizing cost avoidance as a major savings contributor, procurement executives are currently evaluating the need to measure and track cost avoidance, but are not planning to link these savings to bottom line savings. The company does take into account any market movement, reallocation of resources, and any initiative not appearing in actual costs as cost avoidance. Clorox definitions help buyers determine which saving figures to report, as indicated below:

CLOROX'S COST SAVINGS AND COST AVOIDANCE DEFINITIONS

Concise Definitions Ensure Strict Compliance.

Annually, Clorox's finance and accounting group presents cost savings definitions, cost avoidance definitions, and calculation examples to the procurement department to ensure accurate cost savings reporting.

Cost Savings	Cost Avoidance
<ul style="list-style-type: none"> ▪ Action taken to reduce or improve current cost of input of production ▪ Will appear in actual costs 	<ul style="list-style-type: none"> ▪ Action taken to reduce or improve future cost of input of production ▪ Will not appear in actual costs

Source: Council Research

Clorox's procurement organization encourages buyers to implement cost savings initiatives to save money on existing production purchases. Cost savings initiatives can affect any portion of the supply chain, including purchasing of raw materials at a lower price, manufacturing changes that lead to lower operating costs, reducing transportation costs, and changing to a lower cost packaging material. The company calculates any cost savings resulting from a procurement initiative as the difference between last price paid and new price paid. The company only considers validated cost savings for one fiscal year.

Clorox only considers identifiable, measurable, and specific procurement actions as cost savings.

INVOLVING FINANCE
Clorox's Concise Cost Savings Definition

"When we evaluate cost savings, we look for identifiable, measurable, and specific procurement actions that result in a reduction of cost. So specific activity targeted at existing cost that results in a measured change in our cost structure is considered cost savings."

Flo Sparks
Procurement Manager
Clorox

The actual cost savings reporting process begins at the buyer level. When a buyer believes they have identified actual cost savings, he or she completes the Cost Savings Form outlining any assumptions, the basis for the cost savings, and the estimated value of cost savings for the fiscal year. (See Appendix B for a sample cost savings form.) After receiving commodity manager approval, buyers submit completed forms to financial analysts who examine the forms for validity. While reviewing the forms, analysts either validate buyer assumptions, alter assumptions based on the situation, or

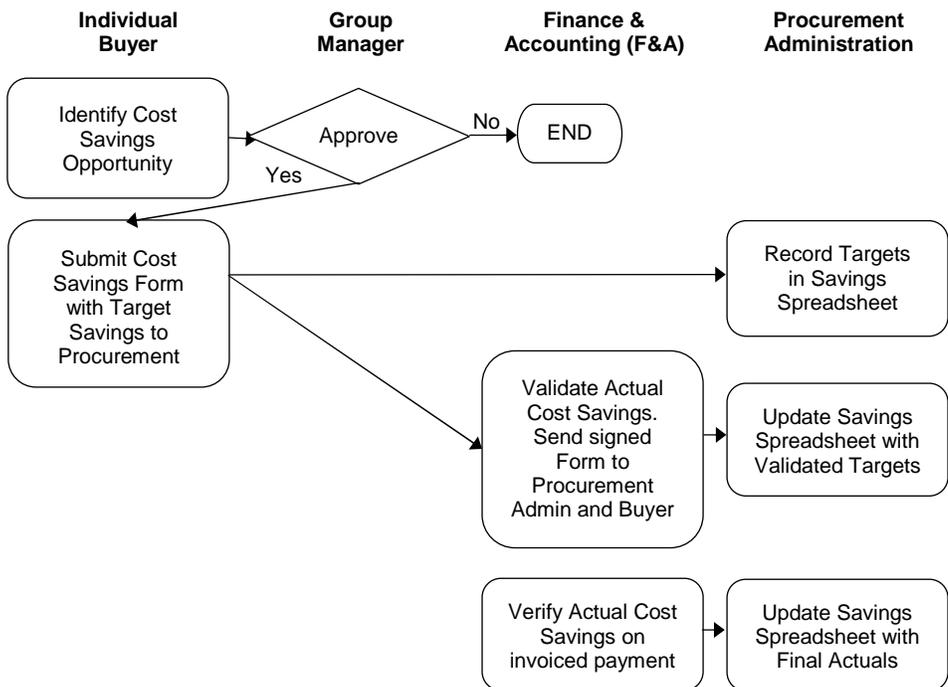
reject cost savings. Once Finance approves a Cost Savings Form, the analysts return the forms to the buyer and procurement manager for tracking purposes.

Finance is responsible for not only approving buyer assumptions, but also validating approved cost savings once the transaction is complete. While the manual process can be extremely cumbersome, the system in place ensures procurement is only tracking actual cost savings, rather than cost estimates.

To ensure clear process understanding, procurement executives developed the flow chart below details all individual contributions to the validation and tracking cost savings system.

CLOROX'S COST SAVINGS PROCESS
Cost Savings Validation and Tracking Process Flow Chart

Clorox involves procurement and finance employees in the cost savings validation process.



Source: Council Research

Every six weeks, procurement reports validated cost savings against target savings, and any next steps in process development to Clorox's Cut Cost Everywhere (CCE) Steering Committee. Since reducing costs everywhere is a strategic priority at Company A, the committee includes high-level executives, which provides high project visibility. The committee ensures that this particular project is in line with corporate initiatives and is executed efficiently and appropriately.

Through implementation of this cost savings initiative, Clorox's procurement executives have increased function credibility within the entire organization. In addition, employees across the company now have a better understanding of procurement's total contribution to the bottom line. In the future, the company plans to automate the cost savings reporting and tracking system. Procurement and Finance hope to develop a common system to store all savings data, which will automatically generate management reports. This will help eliminate or reduce procurement administration's task of recording and updating the savings spreadsheet, as a separate tracking and reporting mechanism.

Practice Profile

CABLE & WIRELESS' COST SAVING PROCESS USES AN ONLINE PLANNING TOOL

After implementing an e-procurement system, procurement executives at Cable & Wireless established a cost savings measurement system with the assistance of an online planning tool.

Cable & Wireless is a leading international telecommunications company based in the United Kingdom, with customers in 80 countries. Cable & Wireless provides IP (Internet Protocol), voice, and data services to business and residential customers, as well as services to other telecom carriers, mobile operators, and internet services.

With a decentralized group organization, Cable & Wireless' Group Purchasing and Supply Chain organization traditionally measured local cost savings at the individual business units using various methods. This ad-hoc measurement system occasionally led to exaggerated claims of savings and made it difficult to compare cost savings across business units.

In September 2001, Cable & Wireless' procurement organization implemented an e-procurement system across the entire company. In an effort to validate the cost of the purchasing system and the value of procurement, Cable & Wireless began a centralized effort to evaluate cost savings attributed to the procurement function by thoroughly defining hard and soft dollar savings.

To track cost savings, procurement executives employed a third party software provider to develop an online planning tool, the Procurement Office Tool (POT). This tool enables buyers to submit forecasted savings, actual savings, and savings documentation for approval. To increase cost savings tracking and visibility, procurement executives only consider savings projects registered on POT. Additionally, POT generates reports tailored to the needs of senior management, business units, and other groups.

Last year, due to the economic condition of the telecommunications industry, Cable & Wireless implemented very strict budget limitations on all business units. With this shift in budgeting, the procurement organization decided to further clarify the cost savings definitions. Executives split hard dollar savings into 'off budget savings' and 'gap closure savings' and soft dollar savings became 'cost avoidance'. After determining these three different types of savings, Cable & Wireless established rigorous definitions for each term:

- **Off budget savings:** When the negotiated price is less than the established baseline budget for that item. Procurement calculates off budget savings as the difference between the negotiated price and the budgeted baseline.
- **Gap closure savings:** When the negotiated price is less than the price paid last year. The purchasing group determines gap closure savings by evaluating the difference between the negotiated price and the baseline price paid last year.
- **Cost avoidance:** When the negotiated price avoids any proposed increase in price. Procurement calculates cost avoidance as the difference between the proposed increase and the negotiated price.

In all cost savings calculations, Cable & Wireless only tracks reported cost savings benefits in the fiscal year in which they initially occur. Therefore, validated cost savings can only count as contributions to the bottom line for one-year at most.



CABLE & WIRELESS

Company Capsule

Industry: Telecommunication Services

- 2003 Sales: Over US\$ 5 billion
- 2003 Employees: 10,000 - 50,000

Cable & Wireless' purchasing executives developed cost savings definitions based on economic conditions and organizational needs.

With the one-year limit on cost savings, monies saved at the end of the year would have a small impact on buyer cost savings goals, as the initiatives are only effective through the end of the fiscal year. As such, procurement executives quickly recognized the challenge of encouraging buyers to continue to strive for savings achievements. Therefore, at the end of each year, procurement executives have established a three-month planning and forecasting period from January through March. During this planning period, buyers continue to negotiate any necessary contracts, but primarily focus on meeting with internal customers to understand the procurement needs of the business units for the upcoming year. After meeting with the business unit managers, buyers plan cost savings initiatives for the next nine-months. From the projected plan, procurement staff creates a cost savings forecast. While buyers set personal savings forecast, procurement executives expect at least £1 million in annual savings from each buyer.

Once the business units realize the forecasted cost savings, buyers submit a Benefits Realization Form with supporting documentation to the director of benefit realization using the Procurement Online Tool. Benefit Realization Forms reports only realized cost savings approved by the internal stakeholders.

Recently, procurement executives at Cable & Wireless have included the CFO of each business unit in the approval process.

CFO INVOLVEMENT

Cable & Wireless Ensures Data Credibility by Involving the Business Unit CFOs in the Approval Process

“If the CFO does not recognize Procurement’s cost savings figure at the end of the year, the savings claims will not have credibility. Therefore, a big piece to our effort is to have the business unit CFO approve the savings as well as the internal customer. Every month, I meet with each of the business unit CFOs to discuss realized cost savings affecting their business unit. This ensures that key stakeholders recognize savings benefits in the bottom line.”

Daniel Cameron
Director of Benefits Realization
Cable & Wireless

Cable & Wireless’ procurement group creates customized cost savings reports depending on the audience’s needs and interest.

To ensure the cost savings program is effective, procurement executives at Cable & Wireless review a management information pack at the CPO’s weekly meeting. To supplement the internal review, procurement executives review the saving pack every month with the COOs of the individual business units and distribute the information pack to all CEOs. The informational packs consist of a monthly summary and analysis of the actual realized savings for the business unit and region with savings forecasts through the end of the fiscal year. In addition, POT is available online 24 hours a day, allowing anyone within the production team to review personal performance, team performance, business unit performance, or purchasing department performance.

One key challenge Cable & Wireless’ procurement team is currently facing relates to drawing realized benefits through to the bottom line. With business units operating independently, procurement cannot prevent business units from spending savings on other initiatives. The procurement group has had some success by involving business unit CFOs in the approval process, as the finance officers then expect those savings from the business units. In addition, the procurement group has considered working with Finance to remove realized savings from operation budgets.

CAPTURING SAVINGS

Procurement Driving Savings without Removing Business Unit Budget Funding

“We have considered casting identified savings out of business unit operating budgets. We quickly realized that it would create a significant engagement problem between the businesses and Procurement. When driving a sourcing initiative, Procurement must have the absolute cooperation of the business unit. If the business units see that savings are removed from their budget, they are not inclined to incorporate Procurement’s expertise to drive the optimal amount of value from the exercise.”

Martin Perminas
Vice President of Group Procurement
Cable & Wireless

By implementing and developing a cost savings measurement system, Cable & Wireless’ Group Procurement and Supply Chain organization realized several key benefits. First, by capturing all savings projects on the online tool, procurement executives have the ability to prioritize savings initiatives and allocate resources accordingly. Second, with the requirement to register all cost savings projects on the Purchasing Online Tool, purchasing staff now approach cost savings measurement with a disciplined and rigorous approach. Finally, the Global Procurement and Supply Chain organization now has more credibility with senior management.

Practice Profile

SAIC'S COST SAVING PROGRAM AND REWARD PROCESS



Company Capsule

Industry: Services: Information Technology

- 2003 Sales: Over US\$ 5 Billion
- 2003 Employees: 10,000 - 50,000

As a first step in creating a cost savings measurement program, executives at SAIC set four key project goals to guide the development process.

By involving business units in the cost savings approval process, SAIC ensures support of cost savings figures. Additionally, the procurement organization offers buyers incentives to identify and realize cost savings.

Science Applications International Corporation (SAIC) is a leading provider of systems integration, engineering, and research and development services to the US government. SAIC also provides professional services to the commercial sector, including consulting, software implementation, and network engineering. SAIC is the nation's largest employee-owned research and engineering company.

After implementation of SAIC's ERP system (SAP) in 1995, the procurement group could evaluate spend and better identify cost savings opportunities. By quantitatively demonstrating cost savings, the organization began to increase company awareness of procurement's contribution to corporate profit.

When developing the cost savings program at SAIC, procurement executives set four key project goals, including the following:

- Encourage procurement personnel to achieve maximum cost savings and cost avoidance.
- Ensure cost savings process and documentation consistency throughout the organization.
- Provide timely, accurate, and quantitative reports to management and internal customers.
- Measure procurement's effectiveness and contributions to company profitability.

After establishing program goals, the procurement group created a definition of cost savings that details cost savings categories. SAIC captures cost savings in three categories including individual staff actions (through negotiation, new source development, etc.), commodity management activities, and value added reseller (VAR) activities. For individual staff actions, SAIC defines cost savings as the difference between the proposed or quoted prices and the negotiated price. Cost savings can also result from obtaining prompt payment discounts, freight paid by suppliers, any 'no cost' maintenance or training, or 'no cost' warranties. For a savings to be considered as procurement's contribution, spend reductions must result from procurement's direct involvement in the purchasing process. On most commodity contracts, Procurement will consider cost savings for three years before the last competitively negotiated price will become the new benchmark for the last price paid.

CONSERVATIVE REPORTING

SAIC Tracks Savings to Individual Commodities or Contracts

"We are relatively conservative in our cost savings reporting. We try not to report something as cost savings unless we can legitimately go back and track the savings to the purchase. We determine what we would have paid, had it not been for procurements involvement, and calculate the cost savings. By tracking savings to the purchase, we ensure accurate cost savings reports."

Mark Ingram
Associate Director of Corporate Procurement
Systems and Measurements
Science Applications International Corporation

To calculate cost savings, the procurement organization developed an Individual Cost Savings Form. (See Appendix C for a sample cost savings form.) When funds are

committed for a purchase, buyers complete the form, identifying a realized cost reduction through negotiation, competitive sourcing, combining quantities, or another procurement activity. After receiving the appropriate level of approval, the buyer forwards a copy of the completed form to the group procurement director for tracking purposes. For auditing and validation purposes, buyers are required to maintain a copy of the cost savings form with the purchase order documents.

To ensure the appropriate level of validation, procurement executives have established different approval requirements depending on the cost savings. The chart below details the required approval for each spend value.

SAIC's Approval System

Depending on Savings, Procurement and Finance Requires Various Levels of Approval

By involving the internal customer in the cost savings approval process for large savings, SAIC's procurement executives ensure business unit support and validation of cost savings figures.

Cost Savings	Required Approval
Less than \$2,500	Individual Buyer
Between \$2,500 and \$50,000	Commodity or Group Procurement Manager
Over \$50,000	Internal Customer

Source: Council Research

On a quarterly basis, every group procurement director submits all cost savings to the associate director of corporate procurement for systems and measurements who aggregates the data and creates management reports. Since SAIC strives to validate every savings figure, the organization decided not to utilize an automated tracking system. Instead, procurement uses a tracking spreadsheet to aggregate savings data.

During the cost savings reporting process, procurement evaluates data by contributions from individual buyers, procurement groups, and line organizations. Additionally, procurement views savings by commodity, specific contract or agreement, and supplier. Procurement's management team evaluates these savings every quarter at the Procurement Directors' Forum, where the associate director of corporate procurement reports several key cost savings figures.

In addition to the quarterly procurement directors' forum reports, the procurement department reports cost savings achievements in several reports made available to employees across the entire organization, including the following:

- **Internal Web Site Report:** SAIC's procurement organization publishes cost savings data for all business units on an internal web site. By visibly posting cost savings, the company hopes that internal customers will be more likely to use procurement and buyers and report every dollar saved. Having no savings reported is also a strong incentive for buyers to achieve greater savings.
- **CEO Report:** This annual report includes cost savings targets and achievements along with graphs and analysis demonstrating procurements impact on the organization.
- **Procurement Scorecard:** In this new initiative, the procurement organization reports cost savings achievements more frequently. The scorecard will include cost savings data, accompanied by data demonstrating spend per FTE, number of procurement FTEs to company FTEs, cost of procurement to total spend, and number of completed purchase orders. Procurement executives plan to distribute this scorecard to all business units and senior management.

SAIC ensures that every key stakeholder has access to cost savings data through three the distribution of specialized reports.

One of SAIC's largest challenges relates to tracking only actual cost savings. Since buyers cannot submit the Individual Cost Savings Form until funds are committed to the purchase, procurement staff occasionally needs a reminder to track these savings months

or even years after their initial involvement. One means of addressing this challenge is the company's Cost Savings Recognition Program.

COST SAVINGS RECOGNITION PROGRAM

Recognizing and Rewarding Individual Buyers for Extraordinary Cost Savings Contributions

"We have developed the Cost Savings Recognition Program to recognize individual buyer contribution based on either frequency of cost savings initiatives, total cost savings dollar value, a process change resulting in cost savings, or discovering a new means of doing business resulting in cost savings. Individual procurement directors nominate employees. A team of senior procurement staff evaluates nominees and award top cost savings contributors on a bi-annual basis. Any exceptional cases are forwarded to an executive vice president for recognition and stock awards."

Bob Berg
Chief Procurement Officer
Science Applications International Corporation

The key goals of the Cost Savings Recognition Program is to provide recognition to employees who have made significant contributions through effective negotiation of purchase orders and subcontracts that lead to cost savings for SAIC and their customers. The plan provides all procurement staff the opportunity to qualify for recognition. While SAIC considered basing recognition solely on total dollars saved, the company wanted to foster creativity and maximize savings return, regardless of division size, mission, and scope.

Procurement Managers submit nominees on a quarterly basis. Managers recommend employees that have provided significant cost savings through negotiation and implementation of progressive procurement practices and agreements. Managers nominate employees based on one or more of the following criteria:

- Employee negotiated a significant cost savings during the quarter.
- Employee consistently submits cost savings report forms throughout the quarter.
- Employee negotiated significant cost savings in support of a proposal effort that resulted in bringing new business to the company.
- Employee effected innovative process changes resulting in efficiency and cost savings or avoidance.

To ensure all purchasing staff are eligible for a Cost Savings Award, procurement executives at SAIC recognize contributions to cost savings based on four key

All nominations are required to describe in detail the employee's contribution to the cost savings program with quantitative data to support the nomination. A small, select panel of senior procurement managers recommends several finalists to the chief procurement officer, who makes the final selections. Senior management present trophies to those selected at a semi-annual procurement meeting.

The company also established a special award for extraordinary achievement in cost savings. The stock awards, consisting of 500 - 1000 stock options per quarter funded by the corporation, is equally divided between two awards per quarter (eight awards over the course of a year). At the CPO's discretion, the organization can award more than two employees per quarter if appropriate. Similarly, if there was not an "extraordinary" achievement in cost savings, the organization will not award anyone.

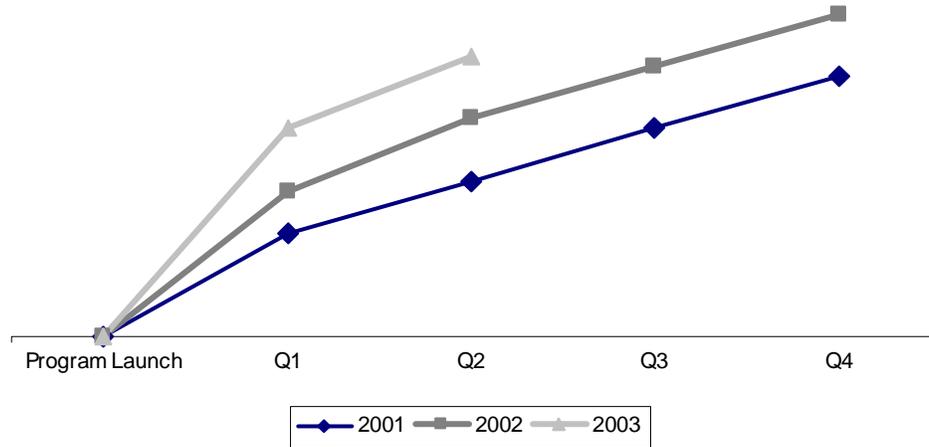
Procurement also encourages individual business units to offer rewards and incentives for buyers identifying and achieving cost savings opportunities within the unit. So far, many functions have begun to offer bonus cash awards, stock awards, or stock option awards.

While successfully managing several challenges, the procurement organization has realized one key benefit through the implementation of a cost savings measurement initiative. The CPO is able to justify the cost of strategic sourcing and supplier management programs by demonstrating procurement's value to the entire enterprise. Through cost reductions and savings validation in almost every area of spend, executive

management is now more willing to invest in procurement initiatives, such as increasing the number of commodity managers and adding new technology enhancements (such as e-procurement and sourcing tools). Going forward, the organization plans to centralize administrative spend areas to reallocate procurement employees to more critical areas of spend. The chart below depicts achieved cost savings in a sample program.

Cost Savings Trend Analysis Report

This Sample Chart Displays Cost Savings Achieved Since the Beginning of the Program Year



Source: Council Research

Appendix A



Company Capsule

Industry: Telecom: Switching & Transmitting

- 2002 Sales: US\$ 1 - 5 Billion
- 2002 Employees: 10,000 – 50,000

CORNING'S SAVINGS RULES DEFINED

Corning's procurement executives developed rigorously detailed Profit & Loss (P&L) and non-Profit & Loss (non-P&L) measurements. By thoroughly defining these rules, Corning ensures that all cash preservation figures are accurate and valid. As a result, measured savings are solely from procurement's contribution to the business unit.

Corning's definitions of P&L, or actual cost savings, are outlined below.

Profit and Loss Rules

Samples of Corning's P&L Measurement Definitions

Measurement	Assumptions	Calculation
Standard Savings	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Must use same material, part, or service (can be different supplier) 	Cost Savings = (Old Price – New Price) * Number of Units Purchased
Material or Service Replacement Savings	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Replacement part serves some functionality (due to different source, part, easing of specifications) 	Cost Savings = (Original Material or Service Cost – New Material or Service Cost) * Number of units Purchased
Negotiated Price for Capital Spend Savings	<ul style="list-style-type: none"> ▪ A one time savings 	Annual Cost Savings = Negotiated Reduction / Number of Years of Depreciation
Negotiated Price for non-Capital Spend Savings	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Applies to first time non-Capital Spend only (to be used when last year's price is not set) ▪ Must obtain three quotes (unless a documented exception is approved) 	Cost Savings = Accepted Quote - Negotiated Reduction
Competitive Quoting for Capital Spend Savings	<ul style="list-style-type: none"> ▪ A one time savings ▪ Must obtain three quotes (unless a documented exception is approved) 	Annual Cost Savings = (Average of all Quotes – Accepted Quote) / Number of Years of Depreciation
Competitive Quoting for any non-Capital Spend Savings	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Applies to first time non-Capital Spend only (to be used when last year's price is not set) ▪ Must obtain three quotes (unless a documented exception is approved) 	Cost Savings = Average of all Quotes – Accepted Quote
Supplier Rebate Savings	<ul style="list-style-type: none"> ▪ A one time savings ▪ Must provide proof of rebate receipt ▪ Rebates can NOT be used to offset a price increase 	Cost Savings = 100% of money received (less any fees)
Invoice Error Savings	<ul style="list-style-type: none"> ▪ A one time savings ▪ Must be inaccurate invoice for payment ▪ Must provide proof of error and resulting savings receipt 	Cost Savings = 100% of money received (less any fees)
Operational Efficiency Savings	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Must be a reduction in headcount (no partial reductions) directly linked to procurement's involvement 	Cost Savings is determined by that business units controller

Source: Council Research

Corning's definitions of non-P&L, or cost avoidance estimates, are outlined below.

Non-Profit and Loss Rules

Samples of Corning's Non-P&L Measurement Definitions

Non-Profit and Loss Rules		
Measurement	Assumptions	Calculation
All Value Added Savings	<ul style="list-style-type: none"> ▪ A one time savings ▪ Includes free training 	Cost Avoidance = Value of additional service (which is at no cost)
Early Delivery Savings	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Good delivered must be critical to production (and without the delivery production would stop or be substantially delayed) ▪ Must receive Business Unit Controller Approval 	Cost Avoidance = (Additional Days of Production * Value of Production per Day) – Cost of Early Delivery
Price Increase Avoidance	<ul style="list-style-type: none"> ▪ A repeat savings ▪ Must receive supplier documentation of price increase and final negotiated price ▪ Excludes general market increases 	Cost Avoidance = (Increased Price per unit – Negotiated Price per unit) * Volume
Inventory Reduction Savings	<ul style="list-style-type: none"> ▪ A one time savings ▪ Must be inventory reduction due to procurement's involvement 	Cost Avoidance = Net value of inventory reduction <i>This also has a P&L component: P&L = Net value of inventory reduction * Corning's current cost of capital</i>
Cost Reduction for One Time Purchase	<ul style="list-style-type: none"> ▪ A one time savings ▪ Restricted to one time non-capital purchases (not the beginning of a repeat purchase) 	Cost Avoidance = (Quoted Price – Negotiated Price) * Volume -OR- Cost Avoidance = (Market Value – Negotiated Price) * Volume

Source: Council Research

Appendix B

CLOROX'S COST SAVINGS FORM



Company Capsule

Industry: Customer Goods

- 2003 Sales: US\$1 - 5 billion
- 2003 Employees: Under 10,000

Clorox's procurement and finance functions developed a Cost Savings Form, similar to the one below, for buyers to use for accurate cost savings reporting. When a buyer believes they have identified actual cost savings, he or she completes the Cost Savings Form outlining any assumptions, the basis for the cost savings, and the estimated value of cost savings for the fiscal year. (For more detail on the cost savings process, see Clorox's profile on pages 16-17.)

COST SAVINGS FORM

Similar to Clorox's Form Used to Validate All Cost Savings

Cost Savings Form		
Project Title:	Date:	
Project Leader:		
Affected Spend Categories:		
Items Involved: <i>List old item numbers and new item numbers</i>		
Description: <i>Describe the Cost Savings Initiative and related benefits</i>		
Savings Summary		
	Current Year Impact	Annualized Impact
Total Months of Savings	\$	\$
Gross Savings	\$	\$
Less Offsetting Costs	\$	\$
Less Depreciation	\$	\$
Net Profit Impact	\$	\$
Total Estimate		\$
Major Assumptions: <i>Describe assumptions, risks, and purchasing milestones</i>		
Approval:		
Project Leader Signature	Date	
Finance Signature	Date	
Others deserving of special recognition:		

Source: Council Research

Appendix C

SAIC'S COST SAVINGS FORM



- Company Capsule**
 Industry: Services: Information Technology
- 2003 Sales: Over US\$ 5 Billion
 - 2003 Employees: 10,000 - 50,000

To enhance cost savings reporting, SAIC procurement managers developed a Cost Savings Form, similar to the one below, to ensure accurate cost savings figures. When funds are committed for a purchase, buyers complete the form, identifying a realized cost reduction through negotiation, competitive sourcing, combining quantities, or another procurement activity. After receiving the appropriate level of approval, the buyer forwards a copy of the completed form to the group procurement director for tracking purposes. (For more detail on the cost savings process, see Company A's profile on pages 21-24.)

COST SAVINGS FORM
 Similar to SAIC's Form Used to Validate All Cost Savings

Report of Cost Savings	
PO Number:	Order Date:
Buyer Name:	Procurement Group:
Supplier Name:	
Original Quote	\$ (1)
PO Total Value	\$ (2)
Total Cost Savings	\$ (1-2)
Method of Cost Reduction	Type of Cost Reduction
<input type="checkbox"/> Negotiation <input type="checkbox"/> Competitive Sourcing Development <input type="checkbox"/> Combining Quantities for Discount <input type="checkbox"/> Other (explain below)	<input type="checkbox"/> Annual <input type="checkbox"/> One Time Buy
Explanation and Comments:	
Approval:	
Buyer Signature (Savings < \$2,500)	Date
Purchasing Manager Signature (Savings between \$2,500 & \$50,000)	Date
Internal Customer Signature (Savings > \$50,000)	Date

Source: Council Research

THE RESEARCH PROCESS IN BRIEF

Project Aims and Research Methodology

This document seeks to provide senior procurement executives with a brief overview of the latest trends in measuring cost savings to the bottom line. Because it employs an abbreviated research process to maximize its timeliness, this project (by design) does not provide an examination of every problem contingency. That said, the Procurement Strategy Council attempts to provide objective insight into problems expressed by the initial member inquiry. While this report reproduces the opinions of experts and others regarding an issue of key strategic concern, we cannot emphasize enough that (consistent with our charter) we are not recommending any particular course of action.

Council staff conducted approximately six weeks of research on this project, reviewing proprietary Corporate Executive Board data and projects on this topic, thoroughly reviewing secondary literature and conducting interviews of companies which have recently restructured supplier relationship models and strategies.

Professional Services Note:

This project was researched and written to fulfill the specific request of a single member of the Procurement Strategy Council and as a result may not satisfy the information needs of other members. In its short answer research, the Procurement Strategy Council refrains from endorsing or recommending a particular product, service or program in any respect, nor to provide an exhaustive solution framework for the underlying problem. Sources are contacted at random within the parameters set by the requesting member, and the resulting sample is rarely of statistically significant size. That said, it is the goal of the Procurement Strategy Council to provide a balanced review of the study topic within the parameters of this project. The Procurement Strategy Council encourages members who have additional questions about this topic to assign research projects of their own design.

BIBLIOGRAPHY

Author Unknown. "Measuring the Benefits: What to measure and how to measure it." *BuyIT* (March 2002)

Author Unknown. "PPV Challenged as Top Purchasing Performance Metric." *Supplier Selection and Management Report* (November 2002)

Baitler, Jay. "The Power of Effective Procurement and Strategic Suppliers." *Strategic Finance* (August 2003)

Eakin, David. "Measuring e-Procurement Benefits." *Government Procurement* (August 2002)

Morgan, Jim. "Cost Reduction Becomes Buying Execs' Battle Cry." *Purchasing* (April 2003)

Morgan, Jim. "How Effective are Your Measurement Systems." *Purchasing* (December 2000)

Nageotte, Mark. "Performance Measures: Different, Different, Different." *Purchasing Today* (April 1997)

Procurement Strategy Council. "Procurement Efficiency and Productivity Measures." *Corporate Executive Board* (June 2003)

Sostrom, Carolyn Pye. "Leveraging Knowledge, Reaping Rewards." *Purchasing Today* (April 2002)