CUTTING COSTS, NOT EMPLOYEES

William McNeese and Don Sanders
Business Process Improvement
Cypress, TX 77433
http://www.spcforexcel.com

SUMMARY

You hear it almost everyday – a company laying off part of its workforce - to improve profitability or as a last ditch effort to survive. Why does it reach that point? Why do leaders resort to this tactic? Why can't companies cut costs without cutting employees? The answer is they can. But it can't be in response to a crisis. It must be proactive. Cost cutting most become a core competency of the company. And the quality professional can play an active role.

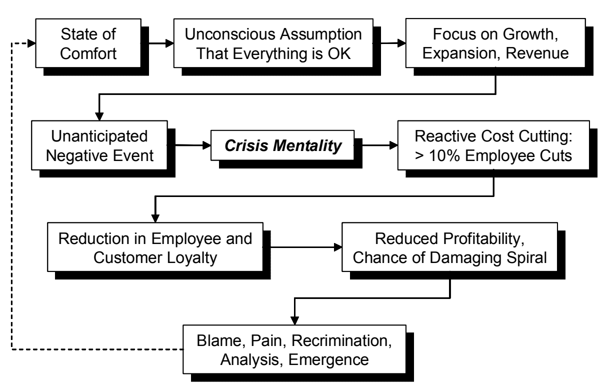
This paper introduces a proactive strategy to achieve this. The methodology progressively reduces needless and avoidable expenditures. It is designed to prevent the layoff of a company's greatest assets – its employees while maintaining a strong customer focus. This systematic approach has saved one company over 14 million dollars (1.5% of revenues) in two years. The approach blends the financials (Chart of Accounts, General Ledger, Profit and Loss Statements) with the proven techniques of process improvement (such as Six Sigma and lean) and motivation. Understanding the financial side of the business represents new skills the quality professional must learn!

The paper reviews the comfort/crisis cycle of American business and why so many companies are caught off-guard when the unanticipated negative event occurs – and then their leaders respond the only way they know how – cutting people to try to remain competitive. The quality professional must learn the financial side of the business to help make cost cutting a core competency – this includes how to apply the proven tools of process improvement to optimize the financial results of the company. This paper includes a list of generic cost cutting ideas that the quality professional can use immediately to help generate bottom-line results. The major component to create a cost cutting core competency is the Challenger Every Cost (CHEC) team. This is a team that is composed of senior leaders. This team addresses the generic opportunities for cost cutting in the company, but the real opportunity lies in tunneling down through the Chart of Accounts using time series (control charts). This paper introduces the methodology this team uses and the guidelines to ensure that cost cutting does not hurt the company's ability to focus on the customer.

INTRODUCTION

Over the past 10 years we have seen the comfort/crisis cycle represented in Figure 1 many times. A company is in a state of comfort and unconsciously assumes that everything is great. The company's leaders focus on revenue growth. Sales are king. Then the unanticipated, negative event occurs. It could be a downturn in the economy or the loss of a major customer. Leadership then assumes the "crisis mentality." How can costs be cut so the company can remain profitable? Too often, the leaders look at the one of the easiest way to reduce cost – their employees.

Figure 1: The Comfort/Crisis Cycle of American Business



Reactive cost cutting is simply laying off employees. But this leads to a reduction in employee (as well as customer) loyalty. There is reduced profitability. Leaders blame everything (though seldom themselves). Eventually, after a lot of pain and analysis, the company usually emerges to survive –

though it will never be the same company it was before.

Quite recently this cycle has been seen in the airline industry, but it has also been seen in nearly every other industry from aerospace to fast food, from software development to professional services and from distribution to telecommunications. Looking at Figure 1, where would you suggest that the cycle needs to be broken?

If you said that the problems were in the "crisis mentality" or reactive cost cutting steps, you were too far "downstream." In fact, the real problems are found in the second and third steps-—the unconscious assumption that everything is okay and the exclusive focus on growth, expansion, and revenue. These steps are ultimately responsible for the crisis mentality that pervades companies after a negative event such as the slowdown/recession of 2001, September 11, or simply the loss of a major customer.

This model is real life for most American companies. Most have experienced it to a greater or lesser degree over the past five years. The real problem is that once organizations are in a response mode, once they are in the crisis mentality phase, it is almost assuredly a downward spiral—some might call it a correction—but it is definitely a reduction in everything from number of employees to growth, revenue and profitability.

The Wall Street Journal (April 2, 2001) has an opinion about cost cutting efforts that primarily focus on reducing head count:

> *"Before making any announcements, executives should reflect on the last time they cut back during a slowdown. They downsized, but so did their competition; they lowered costs and the competition matched. When the dust cleared, their company survived, but was smaller, weaker, demoralized and still without a competitive advantage."*

Further, as Frederick Reicheld and Thomas Teal demonstrate in their book, *The Loyalty Effect*, there is a strong correlation between the organization's loyalty to its employees, the customer's loyalty to the organization and the organization's profitability.[1] So the more that the company resorts to employee layoffs, the less customer loyalty, and therefore the less profitable a company is. With all the other research that has come out since the publication of their book in 1996, this salient fact seems to have been forgotten; laying off employees is usually a negative quick fix. Sure, sometimes it is unavoidable given the circumstances, but the objective is to avoid those circumstances

So, how do you prevent your organization from getting into the crisis mode, how do you keep from laying off employees after an unanticipated negative event? The answer is simple. You constantly challenge your organization. You refuse to assume that things are "okay" as they are; and you focus not simply on expansion and growth, but also on reducing costs by relentlessly pursuing a policy of effective efficiency. In short, you make cost cutting a core competency. It can work if it is done right, i.e., systematically and within guidelines. Making cost cutting a core competency dramatically lessens the potential of crisis by making you lean, but not mean. It represents a blending of the financials (Chart of Accounts/General Ledger) with the proven tools of process improvement and motivation. Cost cutting has a negative sound to it. People often relate it to laying employees off or to taking away something from the customer. So, you probably need to call it something else. The company that saved 1.5% of revenues over two years called it "Cost Busting."

THE ROLE OF THE QUALITY PROFESSIONAL

Can quality professionals help prevent these types of numbers: Ford slashes 35,000 jobs, Lear Corporation cuts 6,500, AOL cuts 1,700, Compaq (now HP) cuts 18,000, and AT&T cuts 27,000? According to the Bureau of Labor Statistics, there were 1,576 mass layoffs (greater than 50 people) in April 2003. Can quality professionals help?

They do to a certain extent with Six Sigma, lean, process improvement, etc. But these efforts often fall short of preventing the layoffs shown above. Cost cutting must become a core competency of the company. To do this, quality professionals must become knowledgeable in the financial aspects of the company. This means that quality professionals must learn to read and understand profit and loss statements, the Chart of Accounts and General Ledger, balance sheets and the company's financial reports as well as the company's financial software. They must become familiar with and concerned about ROI (return on investment), IBIT (income before interest and taxes), cash flow, gross profit, depreciation, and many other financial terms.

The American Society for Quality's Futures Team identified seven key forces that are going to shape quality in the foreseeable future.[2] The first factor is that "Quality Must Deliver Bottom-Line Results." For this factor the Futures Team says this:

> *"To demonstrate quality's true impact and investment value, we must fully engage the language of finance, economics, and business. This must become our own natural language, not a foreign language."*

So, the quality professional must move into the world of business and finance with a strong focus on the bottom line. But this move requires the quality professional to learn much more about business and finance. How to read a profit and loss statement or how to obtain and understand a company's financial reports are not usually included in standard "quality" training – including Six Sigma. Six Sigma, lean, and the rest of the process improvement techniques are all techniques to help the quality professional. The quality professional can become the consultant to leadership on how to cut costs – without cutting people and with still maintaining a customer focus (a strong point for quality professionals). The key is to fully understand the impact of cost cutting efforts on the bottom line – and it is not on the bottom line unless it shows up in the financial reporting – and on employees and the customer.

BOTTOM LINE RESULTS

The systematic cost cutting system described below is designed to generate significant bottom line results – and some that might not seem so significant at first. But remember the words of Senator Everett Dirksen: "A billion here, a billion there, pretty soon it adds up to real money." Below are a few examples of cost cutting ideas that have resulted in savings for companies.

> *Review Telecom Invoices:* Pull a random sample of invoices to you from the provider and compare them with the contract from that provider. In about 65% of the cases you will find issues/discrepancies, due in no small part to the incredible array of rates depending on type and kind of usage per type and time of service. These audits should go back 12-18 months. Three companies saved over $200,000 by doing this. And this goes directly to the bottom line.
>
> *Review Cell Phone and Pager Use*: One company was reviewing current policies and discovered that sales reps were carrying both pagers and cell phones. They had to ask the question, "If an employee seldom travels on company business why does he/she need a company cell phone and/or pager?" They decided to look at costs and determine whether, on a case by case basis, an individual would be better off with a cell phone or a pager. The net result was an annual savings of nearly $20,000 per year. Not a lot of money, but why spend unnecessarily in this area? While pagers appear to be going the way of four-barrel carburetors, they still may be a less expensive option for some employees in some situations as this company discovered for some sales support staff that seldom had direct customer contact.
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> *Turn off the Silent Thieves:* Up to 15% of your annual electrical usage may be the unnecessary operation of lights, computers, monitors, copiers, etc. Have a policy of ensuring that everyone turns off these items when leaving. Also consider installing motion sensors in areas of low traffic such as storerooms. One company saved $12,000 per year on electrical usage.
>
> *A Travel "Win-Win"—Coach versus Business Class:* Consider paying those who travel

internationally and who are accepted for business class a flat fee of $1,000 to fly coach. With the cost of business class tickets typically $2,500 to $5,000 more per ticket; it's a win-win. Some companies who didn't believe that people would give up a business class seat for "only $1,000" were surprised when they did—especially when they checked and found there were a lot of open seats in coach. One company saved $46,000 per year with this policy.

Notice that all of these cost cutting ideas did not affect customers or customer perceived value! And there are thousands and thousands of these types of ideas. Where do these cost cutting ideas come from? Actually cost savings ideas can come from anywhere – employees, books, the internet, customers, the competition. The ones above are generic. But if you want to make cost cutting a core competency of the company, you must set up a systematic approach.

PURPOSE OF MAKING COST CUTTING A CORE COMPETENCY

The purpose is to progressively reduce needless and avoidable expenditures while increasing profits. Basically, the goal is to help the company exist, create value to the customer, and provide jobs for people – even when the unanticipated event occurs.

Why does your organization exist? Ask that question the next time you are in a meeting. The reaction to this may be stunned silence, looks of incredulity, references to the company mission and vision statements, quiet mumbling of "isn't it obvious." The fact is that this question and its answers are fundamental to systematic cost cutting. In truth, most organizations take on a life of their own and people tend to forget both the purpose of the organization and the role of the individual worker in helping the organization achieve this purpose. If most managers were to ask the average accounting clerk or programmer what the purpose of the company is and how they help the company achieve that purpose on a daily basis, the clerks and programmers would likely be hard pressed to answer. Research indicates that most employees simply focus on their work, not their role in helping to achieve the company mission.

So, why do companies exist? According to Eli Goldratt (developer of the Theory of Constraints) "the goal of any company is to make money in the present—as well as in the future."[3] To determine how to make decisions on a day-to-day basis, Goldratt defines three terms (all financial in nature):

Throughput: the rate at which the system generates money through sales
Inventory: all the money that the system invests in purchasing things it intends to sell
Operating Expense: all the money the system spends in turning inventory into throughput

In terms of these three variables, the goal becomes to increase throughput while simultaneously reducing inventory and operating expense (cost). Goldratt contends (and correctly so) that there is more opportunity for increasing throughput than decreasing inventory and operating expense. There is almost no bound (except market size) for increasing throughput, while there is a limit to how much you can reduce inventory and operating expense. If you reduce inventory or operating expense too much, you will begin to hurt the organization (and thus throughput).

But, you don't ignore inventory and operating expense as many companies are prone to do – particularly in good times. You build a culture that focuses on both. Cutting costs is not easy. There is a lot of company politics involved and many, many sacred cows. Senior management must be behind this effort and committed fully to it. This is why the approach described below is headed by a team composed of senior leadership. This team is called the CHEC (Challenge Every Cost) team.

THE CHALLENGE EVERY COST TEAM

The CHEC team forms the backbone of creating cost cutting as core competency. The purpose of the CHEC team is to:

"Challenge every assumption behind every cost in the Chart of Accounts and General Ledger throughout the company in order to achieve the goal of continuously reducing costs while increasing profit and efficiency"

The CHEC Team should be comprised of the most senior managers of the company or the business unit. Training in how to perform as a CHEC team precedes actual performance. You can't work as a team if you don't know how. The most important qualities that can be brought to this team are openness to change/innovation, and a willingness to challenge assumptions (even popular "sacred" ones) in order to reduce costs and/or increase profit.

The CHEC team is facilitated by a quality professional who has been trained in problem-solving skills (such as Six Sigma). Equally important, the facilitator must have excellent people skills. And, he/she must have a solid understanding of the business and the financial statements and software used to run the business.

The CHEC team accomplishes its purpose in three phases:

Phase 1: Setup and Training
Phase 2: Review Generic Cost Cutting Ideas for Opportunities
Phase 3: Analyze and Challenge the Chart of Accounts Using Time Series Charts

Most teams are formed with the goal of pinpointing problems and generating solutions. In contrast, the CHEC team is tasked with asking questions and challenging assumptions. Only after they have asked the right questions and challenged relevant assumptions does the team move on to develop solutions. In fact, many times the CHEC team will not actually find the solution. This is given to a project team to investigate further and come up with a solution.

PHASE 1: SETUP AND TRAINING

During this phase, the CHEC team is set up by leadership. Because the objective of this team is to reduce overall costs in the company while maintaining current levels of employee safety and customer service, each participant must commit to:

- Challenge each line item in the General Ledger for cost cutting opportunities;
- Assist the team in reducing costs by a predetermined goal (usually 1-3% of revenues) during the next 12 months;
- Hold themselves and each other accountable for cost cutting, not just in terms of lines from the Chart of Accounts, but from all opportunities to reduce costs company-wide;
- Generate innovative questions, then work to implement solutions;
- Understand and live by the "Ten Laws of Cost Busting" (see below).

Leadership then selects the facilitator for this team. As described above, the individual should be well founded in the financial aspects of the business plus have broad knowledge of process improvement and motivation techniques. In addition, the facilitator must be a good trainer. One of the first steps for the facilitator is to train the CHEC team.

The exact training the CHEC teams goes through depends on what training the members have had in the past. Topics to consider include reviewing why the company exists, team dynamics, brainstorming, and team-related topics. Two topics that must be included are variation and creativity. Variation is included because the financial results are examined using time series (control) charts – not because you are looking for out of control points, but because you are looking at the story that the chart is telling you. Creativity is included because the team needs to be creative and innovative as they move towards their mission. There are many tools to help people and teams become more creative.

The next part of the training involves the "Ten Laws of Cost Busting." These ten laws provide the ground rules for the cost cutting efforts and are critical. Whenever the CHEC team looks at cutting costs, participants must make certain that the cost cutting steps are consistent with all these guidelines. The ten laws are given below.

Law #1: Focus First on Process, Then on People
Do not take the easy way out and simply cut positions, rather, examine every process for waste and needless expense.

Law #2: Use a Structured Process to Bust Costs
Do not engage in casual and unsystematic cost cutting. Making cost cutting a core competency is minimally a semi-structured process and ideally a very structured process. Poorly designed cost cutting includes asking every department to cut 10 to 15% of its cost. In truth, some departments may be able to cut 20 or 25% while others are working at peak levels of efficiency. In military terms, think "surgical strike' rather than "carpet bombing." Identify a specific target rather than some vague or fuzzy goal. Make sure what it is that you are going to cut, why you are going to cut it, how it is to be done, and what the potential consequences of the "surgical strike" will be on all affected parties.

Law #3: Cost Busting is Everyone's Job
Cost Busting should be conducted at all levels and in all departments of the organization. Cost Busting is not just the job of accounting, finance and the CFO, but of all departments and all individuals within the company.

Law #4: Understand the Law of Unintended Consequences
Seek to investigate and identify the impact of each cost cutting activity on all aspects of its implementation. Know and live the law of unintended consequences: beware of the potential unanticipated effects of any action. Teams must examine the impact of every cost cutting solution across the organization before implementing that solution.

Law #5: Cost Busting is the Job of Every Manager and Supervisor
Evaluate managers partially on their ability to reduce costs. Cost Busting must be an integral part of every manager and supervisor's job.

Law #6: Know the Difference between Financial Sleight of Hand and Cost Cutting
Do not engage in financial sleight of hand and call it Cost Busting. Be wary of thinking that costs are being cut when in reality the responsibility for the cost is simply being transferred from one department/function to another.

Law #7: Know the Difference between Price and Cost
Always consider long term cost, not simply short term price. There is a difference between cost and price; it is too easy to focus on the price of something (short-term) rather than the true cost (long-term) of that same item or approach.

Law #8: Seek to reward the Innovative Cost Buster
Wherever possible, acknowledge creative and effective Cost Busting.

Law #9: Aggressively Attack "Muda" in All Its Forms
Actively pursue the reduction and/or removal of muda (waste) in all processes.

Law #10: Efficiency and Value Must Be Co-considered
Do not reduce real or perceived customer value as you cut costs. Efficiency and value must be seen as the two sides of the cost cutting coin.

PHASE 2: REVIEW GENERIC COST CUTTING IDEAS FOR OPPORTUNITIES

The CHEC Team does not need to reinvent the wheel. There are many cost cutting ideas out there. Below is a list of generic cost cutting ideas. Reviewing these ideas helps get the process moving. These 43 generic ideas are divided into seven categories. The CHEC team can review them as a team or divide the categories among team members for investigation. Note that many of these ideas are "outside" what, in the past, has been the quality professional's turf. That must change in the future if we are to be part of the business.

Category 1: Throughput

The opportunities to increase throughput (that is, generating more income with the same or reduced expenses) are often a forgotten area in cost savings programs because the organization is so focused on reducing costs that it overlooks the opportunities for increased income. In its efforts to increase throughput, the team may want to look at opportunities such as:

1. Lost customers who may be recoverable
2. Strategies to increase sales with current customers
3. Internet intellectual property sales
4. Licensing the sale of product through certified distributors

Category 2: Telecommunications

Telecommunications is often seen as so complex in its usage and billing, that companies often take a "we give up" attitude and just pay whatever they are billed. The opportunities to reduce costs in this area include:

1. Audits of bills going back 12-18 months against contract specifications
2. Use of "net zero cost" consulting group to review current usage plans, conduct audits of contractual billing accuracy, and consolidate expenses. Net zero cost companies take a percentage of savings over a specified period of time.
3. Review of procedures (or writing of procedures) to control the distribution and usage of pagers, cell phones, etc.
4. Renegotiating current contracts
5. Review advantages of a single telecom source rather than multiple sources

Category 3: Salaries and Benefits

The opportunities to save money through a review of salaries and benefits are significant, but not without danger. Part of the opportunity of the CHEC Team is to review and establish consistent guidelines if they do not already exist and certainly to look at benefits, which is an increasingly "out of control" cost in many organizations. But, it is not recommended that you take away part of employee's salary. In its efforts to improve the impact of salary and benefits on performance, the team may want to look at opportunities such as:

1. Salary range guidelines and the percentage of employees in the upper ranges as well as any who are outside any of the guidelines
2. Commission and bonus structure and whether it really contributes to company goals
3. Incentive programs to increase employee attendance
4. Whether there is a consistent salary administration program
5. Employee retention and whether turnover is a major cost in the company
6. Guidelines for managers to use in awarding annual raises. Is it fair and consistently applied? Are some managers consistently able to reward their people at higher levels than others?
7. How expensive it is to administer benefits programs such as 401(k)
8. Comparison with other firms in the area who are in similar industries to ensure your organization is generally consistent (and competitive)

9. An aggressive safety program to reduce accidents and thereby reduce worker's comp insurance (as well as provide a safe place for employees)
10. Vacation policies and/or policies for sick and personal days that require these to be taken within the time they are earned (i.e. not carried over so that when someone quits they can ask for 12 weeks of vacation time).

Category 4: Utilities

The opportunities to reduce the cost of utilities have increased dramatically over the past few years as de-regulation of the industry takes place and real competition starts to exist within the industry. In examining the cost of utilities, the assigned CHEC Team may want to look at opportunities to reduce costs such as:

1. A net zero cost consulting firm to review costs and make recommendations
2. Energy conservation strategies including reduced wattage lighting, motion sensors, accurate thermostats
3. Audits of utility bills (especially if multiple sites and/or multiple vendors)
4. Adequate lighting to ensure safety

Category 5: Consulting, Training, and Other Professional Fees

This is another one of those categories with a lot of potential hidden costs based on accepted practice. In other words, if expenses in this category are not regularly examined, reviewed, and monitored, they can easily become "accepted costs." For example, many companies pay $1500 to $2000 per day for an outside trainer to present information on how to run an effective meeting. Might this just as well, and for less money, be presented by an in-company resource armed with a video or two and a training plan that comes with the video? Other considerations for this category include:

1. Use of external legal resources. Specifically: how often are they used; are there guidelines for use; at what rates; and are the invoices from these legal firms audited?
2. Use of external consultants — particularly the same consultant over a two or three year period where the same information is being delivered time after time
3. Frequency of review of external legal, training, and consulting contracts for prices and services
4. Review of all training in terms of delivery, attendance, and cost per participant whether internal or external (remember that this is a judgment/value issue; some training that costs $2500 per participant per day may or may not have more value than others at $150 per participant per day)
5. Guidelines for when legal cases are settled—when were these last reviewed?

Category 6: Building, Equipment, and Facilities Fees

Perhaps your company bought or leased a property during boom times without adjustment clauses and times are now considerably leaner. If so, it may be appropriate to try to renegotiate the current contract or move to another building, even with a forfeiture fee. There may also be cost savings in moving from an older building to a newer building even if the "price" appears higher (but beware of hidden costs such as lost time, changes to business identity items, etc.) Other costs to examine include:

1. Maintenance service fees including trash and file storage

2. Unused equipment that may have value on the open market
3. Equipment maintenance and repair costs (including autos and trucks)
4. Other vendor contracts related to equipment such as heating and AC repair (ensure that you are not receiving standard price escalations for services that are in the 3-5% neighborhood)
5. When was the last time you challenged a tax assessment for your facility
6. Facility insurance costs—ensure that they are competitive with other facilities of your type in the area and that the insurance is adequate for potential need
7. Potential excess property costs—value in leasing or selling
8. Recycling

Category 7: Miscellaneous

Other miscellaneous costs to examine include:

1. Insurance administration costs
2. Financial institution fees
3. Effectiveness of marketing and advertising program
4. Public relations costs—everything from the cost of the agency used to the brochures, ads, and paper used
5. Those related to office services including, printing, copying, mailing (e.g. Fed Ex vs. UPS vs. USPS) and freight/delivery
6. Other tax savings or tax credits—particularly those that are enterprise zone related
7. Gasoline usage—if the company has a fleet of cars and light trucks make sure that employees aren't just using premium fuel because "someone else is paying for it." At twenty cents per gallon difference, there may be significant savings in using regular over premium during a year's time.

PHASE 3: ANALYZE AND CHALLENGE THE CHART OF ACCOUNTS USING TIME SERIES CHARTS

The real opportunity of the CHEC Team is to achieve significant cost savings through an analysis of the Chart of Accounts. The CHEC Team's basic mission is to ferret out and eliminate those hidden costs buried in the systems, processes and thinking that most people in the organization accept as an inevitable fact of being in business. Many companies, for example, throw up their hands at controlling telecom costs; so many vendors, so many plans, so many options within the plans, so many offices, so much variation. The CHEC Team cannot afford this attitude. For the CHEC Team, nothing is off limits.

Experience has shown that the ongoing examination of the Chart of Accounts will reveal both significant and relatively minor opportunities for cost savings. There is a temptation to forego the small savings opportunities for the "big wins." Most of us would rather hit the "grand slam" than the bunt single. While the focus should initially be put on projects with significant and relatively quick potential returns, it is often a mistake to ignore the projects that seem to offer less of a return.

The major tool for challenging the Chart of Accounts is the time series (control) chart. However, the use of the time series chart is different than the traditional manufacturing application. In manufacturing, an operator is using a control chart to keep his/her process in statistical control and to respond to any out of control situations.

The application of time series charts to financial data is different. The formulas and the calculations are the same; however, the interpretation of the chart is different. The individuals chart, without the moving range chart, is used to analyze financial data. The steps in constructing an individuals chart are covered extensively in the literature.[4]

To understand how time series charts are used with financial data, consider monthly sales for a company. Sales are something everyone understands. The more you sell, the better; the less you sell the worse. Below is part of a typical financial report. In these reports, you typically compare this quarter (or month) to the previous year's results and to budget and then you do the same for the year-to-date (YTD) results. First quarter results are shown, followed by second quarter results and YTD results. How do you think sales are going?

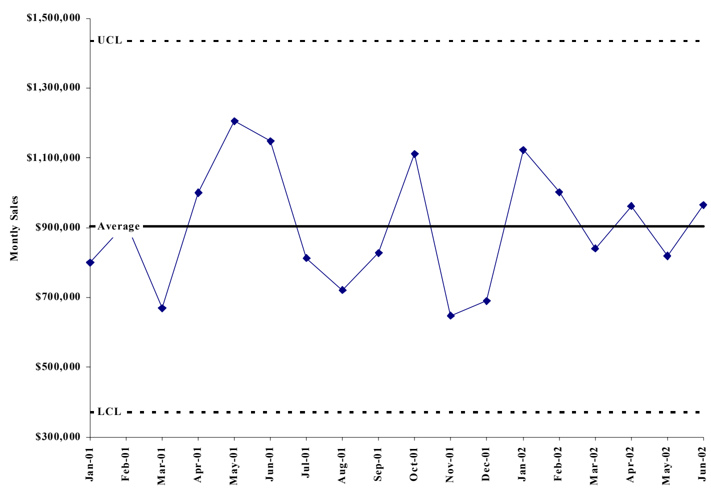
First Quarter 2002 Results					
	1Q 2002	***Budget***	***Variance***	***1Q 2001***	***Variance***
Sales $	$2,964,736	$3,000,000	($35,264)	$2,382,225	$582,511
Second Quarter 2002 Results					
	2Q 2002	***Budget***	***Variance***	***2Q 2001***	***Variance***
Sales $	$2,746,041	$3,000,000	($235,959)	$3,354,470	($608,429)
2002 Year-to-Date Results					
	2002 YTD	***Budget***	***Variance***	***2001 YTD***	***Variance***
Sales $	$5,710,777	$6,000,000	($289,223)	$5,736,695	($25,918)

You might say the first quarter was pretty good – a little below budget, but definitely better than the first quarter of 2001. The second quarter looks pretty bad. It is below budget and definitely a lot worse than the second quarter of 2001. YTD results are not very good. Sales are in trouble.

The problem with these reports is that they hide what the underlying process is doing – the voice of the process. To understand the voice of the process, you must examine the results over time in a time series chart. Figure 2 below is the time series chart (based on monthly results) that were used to generate the above report. What does this figure tell you?

In the classical interpretation, the chart tells you the sales process is in control. Some months it might be as high as about 1.4 million; others as low as about 0.35 million with an average of about $900,000 per month. Tell this to leaders and know what they will say? So what.

Figure 2: Time Series Chart for Sales



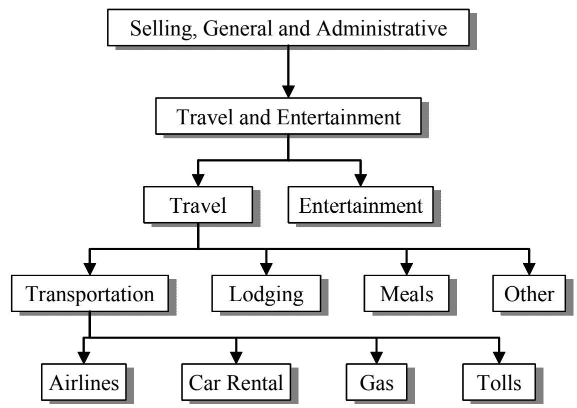
The control limits are too wide to do the leaders any good. In fact, they will tell you that they can predict next month's sales result within a much tighter range than the control limits. And they will be correct. This is often true with financial data. But it is not the control limits that matter with financial data. It is the story that the control chart tells. In this sales example, the story is different from the one that the financial report showed. It is still not good news. The time series chart shows that the sales in 2002 are no different than the sales in 2001. Any efforts to increase sales have not worked. This is how time series charts are used with financial data. They are used to see if a financial variable is staying the same, trending up, or trending down. Leaders do not want "stable" financial data. They want sales to increase; of course, they want inventory and operating expenses to decrease at the same time. Time series charts provide the tool for monitoring this.

So, lets return to cost cutting. One large expense category is called SG&A for selling, general and administrative. Like many accounting categories, this, by itself, is too broad to provide any clear insight into their composition. It is relatively easy to speculate on the details of each expense without fully understanding the component expenses of the item. This is where the Chart of Accounts becomes an important tool. SG&A will be used in the example below because it provides a graphic and familiar area related to how a team can implement this phase of cost cutting.

Figure 3 graphically shows why the Chart of Accounts is so important to cutting costs and why this process must occur at the micro rather than macro level. SG&A is composed of many categories. To reduce this expense, you must tunnel down into the Chart of Accounts (like tunneling down to find the root cause of a problem). One of the categories within SG&A is Travel and Entertainment. Within Travel are four groups of accounts: transportation, lodging, meals, and other. Within transportation, you get down to the individual account: airlines, car rental, gas, and tolls.

The process the CHEC team uses to tunnel down through the Chart of Accounts for this example is shown below.

Figure 3: Tunneling Down Through the Chart of Accounts



ROOT COST ANALYSIS OF THE CHART OF ACCOUNTS —A FOUR STEP APPROACH

A four step process has been designed to successfully use the Chart of Accounts for cutting costs. The example below shows how a real CHEC team used these four steps to tunnel into the Chart of Accounts. The four steps are:

1. Identify and Assign
2. Examine Data at the Macro Level
3. Tunnel Through the Account and Ask the Critical Questions
4. Change the Process, Document the Potential Savings, Monitor the Process, and Implement Controls

Step 1: Identify and Assign: A CHEC team had identified the sub-account "Travel and Entertainment" (T&E) within SG&A as an area where members felt there could be opportunity for cost savings. This particular CHEC Team was comprised of nine members. Three of these CHEC Team members volunteered to research the Travel and Entertainment category and began their work. In this example the three team members actually worked with the facilitator, but this is not a requirement.

Step 2: Examine Data at the Macro Level: The first step was to review the data for T&E at the macro level. It was July 2002. The team reviewed data from January 2001 through June 2002. The time series chart for this shown in Figure 4.

The chart shows the T&E expenditures to be in control over time. The average cost per month is $50,460 ($908,281 over the 18 months) with an UCL =$70,597 and a LCL = $30,323. The expenditures were not increasing but not decreasing either.

The team then broke down the expenditures further into Travel and into Entertainment. They found that 85% of the expenditures went to Travel.

It should be noted that the team decided to focus on the actual dollars in the T&E category. In some cases, you may to look at the data compared to another variable, such as sales. Many financial results will increase as sales increase or decrease as sales decrease. If this is the case, you may want to look at the variable as a % of sales.

Step 3: Tunnel Through the Account and Ask the Critical Questions: The team next examined the sub-accounts under Travel (see Figure 3). This is tunneling. The category of Travel is still too broad so the team "tunnels" into the next level of the Chart of Accounts. Travel was broken out between transportation, lodging and meals, and other.

A Pareto diagram on the sub-accounts for Travel is shown in Figure 5. The sub-account Transportation accounts for 71% of the expenditures in Travel. This is where the team decided to continue tunneling.

It should be noted that you don't always go after the "largest" bar on the Pareto diagram for cost savings. Often, there are areas where some team members know there are potential savings that can be achieved quickly. If so, this knowledge should be used to determine where to head next.

The team continued to tunnel down into the Transportation sub-account and found the following data: $330,061 was spent on airlines, $198,037 for car rentals, $16,503 for gas and $5,501 for tolls.

Figure 4: Travel and Expenses Time Series Chart

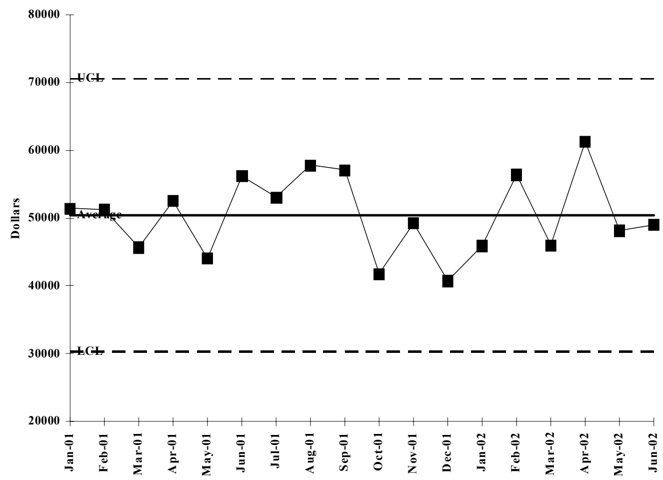
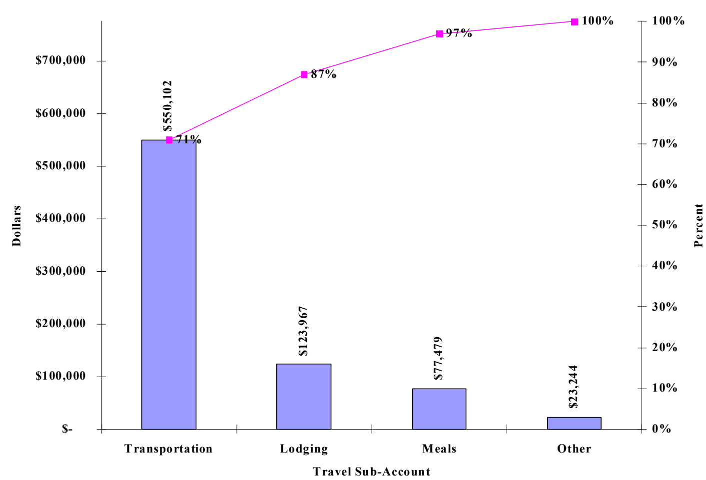


Figure 5: Breakdown of Travel Sub-Account



Only by tunneling down to this level can the team really be able to begin to examine the reasons for T&E expenses. To do this, the team uses the following critical questions. These questions are designed to force the team to ask the tough questions. The critical questions are:

1. Why do we have this specific cost?
2. Is this cost required in order to provide value to internal and external customers?
3. Does this cost support busywork—reports never read, data never analyzed, or muda of any sort?
4. Why is the process carried out as it is currently carried out? Are there better and less costly ways to accomplish the same goal?
5. Can the price/cost of this item be reduced in some way? For example, have we recently bid this product or service? Have we looked at the processes involved to ensure that all are

justified? Have we looked at combining operations in this area to become more efficient? If not, why not?

6. Do we know what our competitors do in regard to this cost? Do they even have it? Do they spend more or less in this area? Why?

Not all questions will apply for each sub-account examined. The team went through these questions for the airlines. It was the answers to questions 4 and 5 that led the tem to significant savings. The team found a dramatic range of fares - from $236.00 to $1830.00 for the exact same flight - all made roughly the same time prior to flight departure. The team also found problems with frequent flier programs. Some employees would always book flights with the same one or two airlines to build frequent flier miles. Sometimes the cost of the ticket was more. Some airlines were offering upgrades to first class, but only for higher fare tickets. Some employees were using these higher fares. Still others were scheduling vacation trips around their business travel – often resulting in higher price tickets.

Step 4: Change the Process, Document the Potential Savings, Monitor the Process, and Implement Controls: This led the team to a review and revision of the travel policy. This sub-team of the CHEC Team met six times over a two-month period and conducted individual research between the meetings on their various action items.

After ensuring that none of the Ten Laws for cost busting were being violated and that controls (reviews) were implemented, the sub-team presented their results to the entire CHEC Team. Their anticipated savings from the policy changes amounted to $67,000 per year. Policy changes were approved and implemented. To ensure that the savings did occurred and that the controls would stay in place, the CHEC team monitored the airline expenses monthly.

Figure 6: Airline Expenditures Time Series Chart

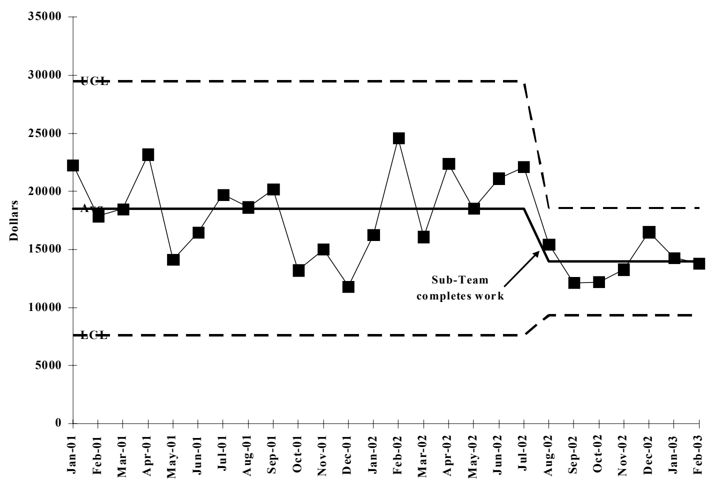


Figure 6 shows the results through February 2003. The control limits have been recalculated based on data from August 2002 forward. If the limits had not been recalculated, the time series chart would have shown a run below the average. The new policy has had the desired impact on airline expenses. Prior to August 2002, the airline expenditures had been average $18,337 per month. From August 2002 on, the expenditures were average $13,950. This represents an annual savings of $52,644 – straight to the bottom line. Note that this was a little less than the anticipated savings above.

One key to ensuring that the gains are maintained is to continue the measurement at the sub-account level as a time series chart. This makes it easy to see any trends that are developing. As part of its on-going work, the CHEC team examines the time series charts for completed projects to ensure that the gains are maintained The CHEC team process described above is repeated all the accounts. Quite often, the CHEC team will not know the solution. In this case, the CHEC team will form a project team to find the answer. This project team could be led by Six Sigma Black Belt. The Six Sigma methodology provides an excellent process for solving problems.

CONCLUSIONS

Making drastic personnel and facility cuts in response to market conditions is a defensive rather than offensive strategy. It is repair rather than maintenance. It is trying to fix a problem rather than prevent the problem. Organizations need to re-think this strategy and adopt a process that stresses the need for ongoing efficiency and increasing competitiveness as a condition of operating. This is where quality professionals can keep their value to the organization.

To avoid crisis reactions and continuously become more competitive and more value laden, organizations need to think “proactive, not reactive.” They need to think preventive action rather than correction action, prevention, not cure. This is the way quality professionals have been trained to think. The CHEC team process is designed to avert the types of sweeping and often irreversibly damaging “cost cutting” actions taken by so many companies over the past ten years. It is designed to avoid layoffs of a company’s employees, designed to avoid plant shutdowns, designed to keep a customer focus, and designed to ensure competitiveness of product and service. And it works.

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