

The top half of the cover features a background of financial data. It includes several large, 3D-style orange arrows pointing downwards and to the right. Behind these arrows are various line and bar charts in a lighter orange hue. Some numerical values are visible on the charts, such as '100M', '200M', '300M', '1.734', '1.745', and '1.654'.

WILEY ADVISOR

COST REDUCTION ANALYSIS

Tools and Strategies

STEVEN M. BRAGG

Cost Reduction Analysis

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Accounting Control Best Practices
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Advanced Accounting Systems
Billing and Collections Best Practices
Business Ratios and Formulas
The Controller's Function
Controller's Guide to Costing
Controller's Guide to Planning and Controlling Operations
Controller's Guide: Roles and Responsibilities for the New Controller
Controllershship
Cost Accounting
Cost Reduction Analysis
Essentials of Payroll
Fast Close
Financial Analysis
GAAP Guide
GAAP Policies and Procedures Manual
GAAS Guide
Inventory Accounting
Inventory Best Practices

Investor Relations
Just-in-Time Accounting
Management Accounting Best Practices
Managing Explosive Corporate Growth
Mergers and Acquisitions
The New CFO Financial Leadership Manual
Outsourcing
Payroll Accounting
Payroll Best Practices
Revenue Recognition
Run the Rockies
Running a Public Company
Sales and Operations for Your Small Business
Throughput Accounting
Treasury Management
The Ultimate Accountants' Reference

Free Online Resources by Steven Bragg

The author issues a free accounting best practices podcast. You can sign up for it at www.accountingtools.com or access it through iTunes.

Preface

A central concern of any company is how to reduce its costs, since any cost reduction flows straight into profits. However, cost reduction must be accomplished without impacting customer loyalty or reducing the ability of the organization to achieve its long-term goals. Thus, the real issue is how to carefully pare away unnecessary costs while maintaining a robust organization. *Cost Reduction Analysis* shows how to do this. It describes a variety of cost reduction tools and the issues associated with using them, and then goes on to describe various forms of cost reduction in key expense areas, such as sales and marketing, production, payroll, and benefits.

The book is divided into four sections. In Part I, we address the primary areas of cost reduction. This begins with a discussion of the need for cost reduction, a multitude of cost reduction tools, and process analysis. It continues with specific cost reduction opportunities in the areas of sales and marketing, product design, production, payroll, and benefits.

In Part II, we cover the major cost reduction area of procurement. Coverage begins with a number of methods for improving the procurement process to reduce operational costs and then continues with discussions of spend management and the more specialized area of maintenance, repair, and operations spending.

Part III addresses asset reduction, which indirectly impacts cost reduction. The first chapter describes a broad array of techniques for reducing a company's investment in inventory while the next chapter delves into the best forms of analysis to follow when deciding whether to invest in a fixed asset.

Finally, Part IV describes two special topics that are extremely important in the realm of cost reduction. The first topic is throughput analysis, where a company centers its activities on its use of the bottleneck operation that drives its overall level of profitability. All cost reduction decisions should be based on how they impact the productivity of this bottleneck.

The second topic is how to reduce costs in an acquired company by maximizing and successfully implementing cost-related synergies.

These chapters are liberally sprinkled with examples to clarify concepts and also include a variety of metrics that are specifically designed to monitor cost reduction progress.

The book answers a multitude of questions involving cost reduction, such as:

- How do I calculate the productivity of a salesperson?
- How do I design a product to minimize its cost?
- When should I eliminate a product?
- Can cellular manufacturing reduce my production costs?
- How do I decide whom to lay off?
- How do I avoid institutionalized pay increases?
- What alternatives do I have for maximizing the cost effectiveness of my benefits package?
- How does an evaluated receipts system streamline my process flow?
- How do I use a spend database to reduce costs?
- How do I restructure my capital spending process so that I buy only the fixed assets that I really need?
- How can I manage my bottleneck operation to maximize my profitability?

In short, *Cost Reduction Analysis* is the ideal sourcebook for how to maximize profits using a successful system of cost reduction.

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Cost Reduction Analysis

PART |

Primary Areas of Cost Reduction

The Cost Reduction Process

Introduction

The reason for having an active cost reduction program is quite simple. A company can work extremely hard to obtain one extra incremental dollar of revenue, which will yield a net profit of perhaps 5 percent. Gaining that extra revenue dollar will be uncertain, and it may be difficult to attain the targeted profit. Alternatively, and using the same profit percentage, a cost reduction of one dollar would have required 20 dollars of revenue to generate. Further, a cost reduction is entirely within the control of a company, whereas a revenue increase is not.

The calculation for the equivalent amount of revenue needed rather than saving one dollar of cost is:

$$1/\text{profit margin} = \text{Equivalent amount of sales}$$

The next table shows the equivalent sales that would be needed at various profit margins in order to equal one dollar of cost savings:

Net Profit	Equivalent Revenue
1%	\$100
2%	50
5%	20
10%	10
15%	7
20%	5
25%	4

Thus, even a spectacularly profitable company having 25 percent profitability would have the choice of either creating four dollars of revenue or reducing costs by one dollar.

Also, assume that a cost reduction is not a one-time event but rather is a continuing cost reduction that otherwise would have been incurred in every future year. By eliminating this type of cost on an ongoing basis, a company can achieve compounded gains that keep piling up in the future.

Given the obvious economics of cost reduction, why do companies not practice it more often? They typically ignore it until they get into financial difficulties and then impose a sudden across-the-board cost reduction. The better approach is a long-term, ongoing analysis of every part of a company, with an emphasis on maintaining full funding of the overall strategic direction and a careful paring of other costs with surgical precision. This chapter describes the advantages, disadvantages, tools, and process flow of a successful cost reduction program.

Need for Cost Reduction

An ongoing program of cost reduction is not really an option for a company that wants to remain competitive over the long term, since it is subject to many issues that can negatively impact its profits, as the next subsections reveal.

Revenue Declines

The need for cost reduction starts with revenue: If a company's products and services are subject to significant price declines, then costs have to also drop to keep pace. It is useful to stress test the sales forecast with a variety of worst-case scenarios to see what would happen to profitability in the event of a major price decline. Another option is to watch the results of other companies located in the same industry or tangential ones to determine the extent of price elasticity.

Rapid price declines are a particular problem when there are low barriers to entry, so that new competitors can easily enter the market and drive down prices. Price declines can also occur when fixed costs are a large part of the product cost structure, so companies have an incentive to fill their available capacity by driving down prices (see the next subsection). On a more short-term basis, prices also drop when there is a great deal of unsold inventory flooding the market.

In all of these cases, revenue declines can be so severe that a company that was initially awash in profits may very suddenly find itself in a significant loss position.

Fixed Cost Base

A company may have an exceptionally large fixed cost base, perhaps due to a fixation on high levels of automation, or simply because the market

requires a great deal of equipment in order to compete. A high fixed cost base means that a company has to operate at a relatively high percentage of capacity in order to turn a profit. This is a major problem in industries where everyone has a large fixed cost base, since an industry slowdown means that prices will drop dramatically as everyone tries to keep their capacity levels high.

A determined and ongoing cost reduction campaign is an excellent way to avoid this trap. With a lower fixed cost base than competitors, a company is much more capable of riding out an industry downturn and may even be able to snap up any competitors that have not had the pre-science to similarly engage in an active cost reduction campaign.

Creeping Costs

If there is no active campaign to reduce costs, then by default costs will increase; they will not hold steady. The next factors all work in parallel to increase costs:

- *Complexity.* Processes always become more complex over time, as they expand to encompass new products, services, and situations. Complexity increases a variety of expenses, but in particular requires more staffing. See the next subsection for an extended discussion of this topic.
- *Entitlements.* Benefits increase over time—they rarely decrease. Once a benefit is granted, it is very difficult to reduce it but quite easy to add to it.
- *Inflation.* Costs will naturally increase with the rate of inflation, but this is not acceptable if a company's revenue increases are not keeping pace with inflation.
- *Tradition and inertia.* In general, if an expense has always been incurred, then a company will continue it. There is rarely a discussion of reducing an expense, only of adding to it.

For these reasons, cost creep is an insidious and ongoing issue that slowly reduces a company's profitability at a pace that is barely recognizable over the short term. Since it is not a sudden event, management is not motivated to take action for a long time, at which point a great deal of effort will be needed to revert to the earlier level of profitability.

Complexity

One of the chief causes of excess costs is the presence of too many layers of management. Each manager requires a separate set of reports to monitor his or her area of responsibility (which takes time to create) and tends to

acquire support staff. It is better to flatten the management structure of an organization, so that fewer managers supervise the activities of quite a large number of employees. Not only does this approach eliminate the complexity that comes with too many layers of management, but it also brings top management closer to a company's operational levels.

An excessive quantity of reports also contributes to complexity. Each one requires some data collection as well as aggregation into a report. Even if a report is automatically generated and distributed from a computer database, it may still waste the time of the reader, who no longer needs it. Further, an automated report may draw on information that was originally added to the database specifically to create the report, and which is now still being collected.

A report may originally have been created as a one-time report and morphed into an ongoing one. Or it may be associated with a process that is no longer used. Alternatively, it may have been created for someone who is no longer with the company, and it was inherited by her successor. All of these reasons can explain the presence of reports that are no longer needed but that continue to plague employees.

Quite a serious form of complexity is customized systems. A company will find that it can acquire commercial, off-the-shelf (COTS) software that is perfectly acceptable for most of its operations. However, these systems will not exactly match the company's underlying process flows, so there will be pressure from employees either to modify these packages or to create entirely new ones in-house. These customized systems are difficult to maintain and are much more expensive than COTS systems, so they introduce a significant amount of costs that are probably not necessary.

These examples show that complexity can arise in a variety of places in an organization—in its organizational structure, reports, systems, and so forth. Each type of complexity brings with it an increase in costs that can only be reduced through a considerable and ongoing change effort.

Acquisitions

The cost of complexity arises in particular when a company starts acquiring other businesses. An acquiree rarely serves precisely the same markets or has the same corporate structure or offers the same products. Consequently, an acquirer must somehow create an overall corporate structure that integrates two disparate businesses, which generally results in a combined entity that is less optimal than the original business. If these issues are expanded to a large number of acquisitions, then the cost of complexity becomes even more widespread.

However, there is one case where an acquisition strategy can *lower* costs. This is when an acquirer specifically searches for target companies

that have lower costs than the acquirer and buys them specifically to spread that low-cost knowledge throughout the rest of the organization. This requires an excellent ability to force change throughout an organization.

Partnerships

A company may have a variety of partnerships, such as for research and development, or for production distribution, or for independent sales-people. Each of these partnerships requires some time by management to monitor and so increases costs to some extent. These partnerships may have been in existence for a long time and so may be continued more because of tradition than due to their profitability.

Because of their associated costs, all partnership agreements should be reviewed regularly to ensure that a company is earning a reasonable return. A major warning flag for these reviews should be any partnership that is characterized as “strategic,” especially if it has not generated a return since its inception. Strategic partnerships typically have the support of a senior-level manager and so are not easily discarded, but their ongoing cost should be noted.

Advantages of Cost Reduction

Cost reduction is the easiest and most certain way to increase profits in the short term. It can also be a major driver of long-term growth, if handled properly. Why is it easy? Because cost reduction is entirely within the control of the company. Simply determine an area for cost reduction and implement it. It is completely unlike the uncertainty of trying to increase revenue, where one must be concerned about pricing, margins, the actions of competitors, and governmental regulation. Cost reduction is the simplest road to increased profitability and enhanced cash flow.

Cost reduction also works well for long-term profits, so long as the process becomes a core belief of the entire company and is constantly readdressed. The selection of cost reduction targets is key, since cost reduction over the long term cannot undercut a company’s profit-making capabilities. Instead, the focus should be on constantly paring away unnecessary expenses, increasing efficiencies, and streamlining processes. In addition, it helps to continually reinvest some portion or all of the cost reduction savings back into the company’s people, processes, and technology.

A company that publicizes its continual efforts to reduce costs is effectively signaling to potential market entrants that they will have a very difficult time competing on price, since the company can likely weather any such attacks with ease. Conversely, a low-cost company has a powerful

tool available for undercutting companies in new markets and so can aggressively pursue its more bloated competitors.

Disadvantages of Cost Reduction

Cost reduction sometimes can earn a bad reputation if it is handled incorrectly. The worst form of cost reduction is the blanket percentage cost reduction that is imposed throughout a company. This arises when senior management suddenly realizes that the organization will not achieve its targeted numbers and decides that everyone will share equally in the pain of a cost reduction.

The blanket cost reduction has three bad effects.

1. Any department that has already voluntarily reduced its costs substantially must now find a way to cut expenses farther, probably to the point where it cannot complete its assigned tasks.
2. Managers who have experienced multiple rounds of these imposed cost reductions then realize that their best hope of survival is to pad their budgets with *extra* expenditures, so that they will have enough fat to cut from their budgets the next time a cost reduction mandate arrives.
3. A blanket cost reduction tends to result in the elimination of “soft” expenses that are needed for long-term growth, such as employee training or new investments in business development, additional salespeople, and fixed assets. If these expenses are trimmed, then a blanket reduction tends to harm a company’s long-term growth prospects.

The effects noted here can be eliminated through the use of a more targeted cost reduction program, as noted later in the “Process Analysis” section. Even a well-run cost reduction program will face additional difficulties, as noted next in the “Cost Reduction Politics” section.

Cost Reduction Politics

There can be considerable dissension within a company if cost reductions have a particular impact on lower-paid employees; unless they see a comparable level of cost reductions on other employees in other pay grades, their morale will decline, and both employee turnover and work stoppages may not be too far behind. For this reason, it is best to apply cost reductions throughout an organization at the same time, so that everyone feels they are sharing the pain of the reductions.

In particular, the management team should share a greater proportion of the cost reductions than anyone else, so everyone can see that they are being equitable. For example, if the management team takes a 20 percent pay reduction, they will meet with a much higher level of acceptance if they then ask everyone else to take a 10 percent pay reduction.

Another issue that can engender political maneuvering is the “sacred cow.” From the perspective of cost reduction, this can be any expenditure that is clearly not needed for forwarding a company’s strategy but that receives strong internal support. There may be a lengthy historical basis for continuing the expenditure, or perhaps it is supported by an especially powerful manager. In such cases, it may not be possible to eliminate the expense immediately. However, one should at least bring it to management’s attention on a regular basis and be sure to charge the expense against the budget of the person who supports it.

Cost Reduction Priorities

When deciding on a course of action for cost reductions, the first step is to decide on the most strategically important part of the business that is needed for future growth and channel all cost reductions *around* it. If anything, some portion of the cost reductions from other areas should be shifted *into* this area.

The second cost reduction step occurs at the highest possible level and is the decision to retain or eliminate entire businesses or product lines. If there appears to be no hope of continuing profitability in such areas, and the company has no plans to invest aggressively in them, then management should make the decision to eliminate them. By doing so, the remaining parts of a company can focus clearly on cost reduction in other areas rather than having their efforts watered down in businesses that the company no longer wants. This is a particularly appealing approach if a company is essentially a conglomerate, with no discernible incremental profitability gains occurring because subsidiaries are part of a larger entity. In such an environment, all the costs related to aggregating financial information and “managing” subsidiaries introduces a level of complexity that merely increases costs with no offsetting benefit.

The third cost reduction step is to conduct a throughput analysis of the remaining parts of the business. Throughput is sales minus total variable expenses, and tells management where a business is (and is not) making money. Throughput analysis also involves finding out where a company’s bottleneck operation (also called its constrained resource) is located and how to maximize throughput by focusing closely on the operations of that bottleneck. Throughput is an important concept for cost

reduction, so Chapter 12, “Throughput Analysis,” is devoted to it. For the purposes of this list, throughput tells management where they can safely reduce expenses and assets, and (more important) where they *cannot* do so (namely, in functions that support the bottleneck operation).

The fourth step is to see what costs can be reduced through outsourcing. This step is needed early in the cost reduction process, because management needs to decide if it should allocate significant cost reduction resources to an activity or simply hand it off in exchange for immediate cost savings. This step should follow the throughput analysis, since management needs to know how an outsourcing decision will impact a company’s total throughput.

The fifth cost reduction priority is to clean up the company’s financial reporting systems, so that management can clearly see where costs are being incurred and which functions are losing money. These items should be implemented:

- *Corporate overhead allocation.* No corporate overhead should be allocated anywhere. Corporate overhead is a discrete cost that is incurred by the corporate headquarters and should be examined for cost reduction purposes as part of that entity. Allocating overhead anywhere merely makes it less clear where costs truly are being incurred.
- *Service center allocations.* A company may elect to spread the cost of its service centers, such as the mail room, maintenance department, and power plant, to other departments. All of these allocations should be eliminated and shifted right back to the service centers, for two reasons.
 1. Allocations may not be on a usage basis—instead, they may depend on the negotiating ability of each department head, which makes them useless for cost analysis purposes.
 2. A cost reduction team can simply review the costs of each service center; it does not care about where costs are subsequently allocated, only where they originate.
- *Profit center reporting.* Whenever possible and reasonable, revenue should be assigned to a cost center, so that profitability can be determined. This information is useful for cost reduction triage—deciding which areas are in the most desperate need of cost reduction assistance.
- *Transfer pricing.* Transfer pricing should be at market rates only. When goods or services are transferred between company divisions, their cost should reflect what a subsidiary would have had to buy them for on the open market. Any other internally negotiated price merely reflects the ability of a company manager to negotiate a good rate and obscures costs.

At this point, a company has considered cost reduction issues at the business unit level and created enough throughput and financial reporting systems to know where there may be cost reduction opportunities. It is now time actually to reduce costs. There are a number of tools available for targeting possible areas of cost reduction, which are discussed in the next section, “Cost Reduction Tools.” However, there are several issues to consider before using any specific cost reduction tool.

One such issue is to reduce costs in an area as remote as possible from customers. If a company scrimps on anything that a customer will experience, this can negatively impact customer purchases as well as increase customer turnover. For example, shifting customer service to a country where people speak with a strong accent is not going to improve the customer experience. Conversely, if a cost reduction program begins in the maintenance or accounting departments, management can make a number of mistakes and customers will never notice the difference. However, some prime cost reduction opportunities will certainly be in areas that are very noticeable to customers and cannot be ignored—in these cases, it is best to first test a cost reduction methodology elsewhere to gain experience with it and then roll it out in the areas noticeable to customers.

It is also necessary to select a cost reduction area where someone is clearly responsible for results. A cost reduction that is tied directly back to a specific manager is much more likely not only to be implemented but also to be maintained. Conversely, one should avoid a cost reduction project in an area where there is no clear responsibility for the expense, as is the case in a team or matrix environment. In such situations, it is best to recommend that management assign specific responsibility, and wait for this to happen before proceeding with a cost reduction project.

Finally, a company may find that the real underlying reason why its costs are increasing is that it is growing too fast for its internal systems to keep up with the growth. This could be due to exceptional organic growth, or perhaps a large number of acquisitions. Whatever the reason, it is entirely possible that there is no way to reduce costs at a pace fast enough to keep up with rampant growth. If this is the case, the solution may be to deliberately slow down or even halt the rate of growth. This gives a company time to install more robust systems, train its staff, and hire more people who are sufficiently qualified to handle high transactional volumes. In this case, slower growth may be the only way to quickly rein in expenses.

Cost Reduction Tools

There are a large number of cost reduction tools available, the most useful of which are described in this section. They are mostly based on various

types of financial and operational analysis but also include such simple concepts as idea generation and a variation on the standard budgeting system. Companies have used all of them with considerable success.

5S Analysis

The 5S system is about organizing the workplace in order to eliminate waste. From a cost reduction perspective, it promotes workplace efficiency. As the name of this tool implies, there are five steps, and their names all begin with the letter S. They are:

1. *Sort*. Review all of the items within a work area, retain those needed for daily operations, and dispose of all other items (possibly involving a trip back to the supplies cabinet and/or the Dumpster).
2. *Straighten*. Reposition furniture and equipment to best serve the process flow, and move all other items out of the way.
3. *Scrub*. Clean the area completely.
4. *Systematize*. Establish schedules for repetitively cleaning the area.
5. *Standardize*. Incorporate the 5S system into standard company operations, so that it is performed on an ongoing basis. This should include a formal system for monitoring the results of the program.

A company should not embark on a 5S clean sweep of an entire company at the same time—that would create a great deal of disruption! Instead, this is a methodical process that is used to gradually address all locations, after which it starts over again in a continual cycle.

Benchmarking

Benchmarking is useful for deciding where to begin cost reduction activities. It provides information about the cost levels of other businesses, of other divisions of the same company, or simply of the company for earlier periods. Then match benchmark costs against current results and target unusually high variances for further analysis.

Internal benchmarking against other divisions is particularly useful. Every division is bound to have some best practice area for which clearly identifiable improvements can be copied to other divisions. Further, the corporate headquarters staff can order divisions to assist each other (which is not the case with external benchmarking, where the other company is providing information solely as a favor).

Differences in costs that are highlighted by a benchmarking review can result from a broad range of factors, such as plant layout, automation, employee training, management practices, and cultural issues. Even after a