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Organizing a Cost-Reduction **Program**

The Bottom Line

You need a multidisciplinary team to attain significant cost reduction. Support from the top helps greatly. You will encounter resistance to the cost-reduction effort and there are risks associated with cost-reduction activities, but these issues can be overcome. The team needs to prioritize cost-reduction opportunities, assess the necessity of all costs, quantify projected savings, identify implementation costs and risks for each proposed action, meet at least once a week and maintain an action plan to create and sustain cost-reduction momentum.

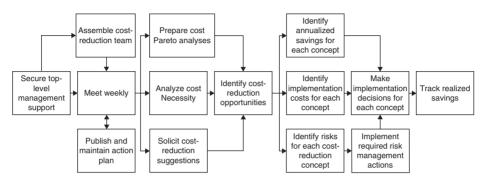
Key Questions

Do we have a cost-reduction effort in place?

Do we have cost-reduction targets?

How do we identify and eliminate unnecessary costs?

What obstacles will we encounter, and how will we get around them?



The Cost-Reduction Program Road Map

Figure 1.1 The cost-reduction road map.

Teamwork

If you want to reduce costs in your company, you can't do it by yourself. There are cost-reduction opportunities in every department. Identifying and implementing these cost reductions requires the enthusiastic cooperation of people in sales, finance, engineering, manufacturing, quality assurance, purchasing, facilities, and human resources. Even if you wish to limit cost reductions to a single area, you'll still need help from the people in that area and probably the finance organization. You can't mandate cost reduction. You have to have help from the people who will make it happen.

Senior management support will help to make the cost-reduction effort successful. If your interest in cost reduction is the result of a directive from the organization's chief executive, you already have the senior-level support you need. If your effort is self-initiated, support from the person at the top is a great asset. You need support from other cost-reduction team members, but if the chief executive is on board, others will be more enthusiastic about supporting the effort.

The best way to identify and implement cost reductions is to build a team with one or two people from each area who believe in the mission. This team should be made up of people who are already in the company. You don't need to hire more people for this (in fact, a recurring theme throughout this book will be to keep the headcount as low as possible).

Resistance to Change

Most people are naturally resistant to change, and cost reduction will involve change (sometimes big change). Department managers and others may resist cost-reduction–related changes for any of several reasons:

- The idea was not theirs.
- The idea will involve effort on their part.
- They did not think of the idea first, and perhaps that is a source of embarrassment.
- The idea has implementation and operational risks.
- There may be turf issues, where the team is recommending eliminating or modifying a pet project, or the affected managers don't like the idea of someone else suggesting how their departments should operate.

All of these resistance-to-change factors are likely to be encountered as the cost-reduction effort proceeds. All of these arguments must be overcome if the cost-reduction effort is to succeed. It's a lot easier for people to accept change if the general manager or company president is visibly and consistently behind it. That's not the only requirement for overcoming resistance to change, but without top-level support, it will be harder to overcome.

The Cost-Reduction Team

If the chief executive asks you to head up a cost-reduction effort, you are in a good position. The most important thing you should ask for is that you get good people on the cost-reduction team. You don't necessarily want the head of each functional area, and you certainly don't want people who are less-valuable employees within their departments. You want people who:

- Are bright, curious, and "out of the box" thinkers.
- Have a high energy level.
- Make things happen.
- Meet their schedule commitments.

If you can assemble a team with people meeting these criteria, you are going to have a lot of fun and your company will realize great savings.

In the first meeting, the first assignments should be *identifying and ranking the organization's current costs*, and assessing the necessity of each cost. You won't be able to do all of this in the first meeting, but the team members should be able to have gathered this information by the next meeting. This will require support from the finance department (as will many cost-reduction activities, which is why it makes sense to have a finance person on the team).

The cost reduction team should meet weekly at a minimum, because if you meet less frequently the effort will lose momentum. Here's a suggested approach for how the cost-reduction meetings should be run:

- You (or someone else who writes well and is good at capturing details) should take notes and publish meeting minutes no later than one day after each meeting. The meeting minutes should be sent to the chief executive, the team members, and the heads of each department. Doing this keeps others in the loop, and it keeps the effort alive.
- The meeting minutes should include a "living" task list. We'll present a
 suggested format and say more about this in a bit. Team members should
 provide input regarding the status of each task in the meeting, and the person preparing the meeting minutes should update the task list to show
 current status.
- The team members should discuss cost-reduction ideas in a free-flowing manner. The ideas may come from the team members or from others in the company. All of the ideas should be captured on paper. After discussing all of the ideas, the team should decide if each idea should be pursued. If the team thinks an idea has merit, in most cases it will go to the affected department manager. We'll talk more about this later.

Cost Pareto Analysis

Identifying and ranking all of the organization's current costs is best presented on a department-by-department basis, and by overhead cost categories for the entire company. We recommend presenting this in a Pareto¹ format. It's important to do this for each department and by overheard cost category to identify where the greatest opportunities exist. Within the manufacturing area, for example, labor and material costs are probably higher than other costs, and based on that, they probably have greater cost-reduction opportunities. Smaller cost categories will also offer opportunities (and there may be low-hanging fruit that the team wants to grab), but in general the larger cost categories offer greater opportunities when seeking cost reductions.

Let's assume the manufacturing department reviews its monthly operating costs when they receive them from the finance department, and they find the following:

^{1.} Vilfredo Pareto (1848–1923) was an Italian economist who is credited with originating the 80-20 rule when he observed that 80 percent of Italy's wealth was concentrated in 20 percent of the population. This led to the creation of the 80-20 concept and Pareto charts, which show most-frequently-occurring to least-frequently-occurring items, or most costly to least costly expenses. The idea is that efforts should be focused on the most significant areas.

With this information in an Excel spreadsheet, it is a simple matter to sort the data (it's already been sorted in Table 1.1) and prepare the Pareto chart shown in Figure 1.2).

Table 1.1	July Ma	nufacturing	Department	Costs
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Cost Category	Cost
TB Steel	\$227,950
Labor	\$188,160
Paint	\$66,560
Supervision	\$54,000
Overtime	\$50,400
Maintenance	\$18,992
Tooling	\$14,777
Electricity	\$13,562
Weld gas	\$7,285
Supervisor car leases	\$7,012
Fuel	\$6,783
Weld Rod	\$5,934
Travel	\$4,254
Coffee	\$3,760
Training	\$3,250

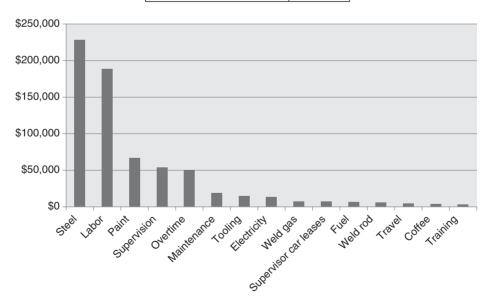


Figure 1.2 July manufacturing costs Pareto chart.

Based on the information presented in Figure 1.2, it is obvious that material and labor are the largest cost categories. Logic dictates that seeking cost-reduction opportunities in these areas offers the best potential. In addition to steel and labor costs, overtime (a frequently abused area) pops out as a relatively large cost, so it should also become a cost-reduction target.

Once the analysis has been completed for each department and for the company's overhead costs, the team can then brainstorm reduction activities in these areas. The team can also apply the techniques to be reviewed in detail throughout this book.

As mentioned earlier, the team's activities should not be limited to just the largest cost categories. We're only suggesting that because of their size, these "big hitters" probably contain greater cost-reduction opportunities. There will be opportunities in the lower cost areas that come from other people's suggestions as well as the cost-reduction team members. The team should consider these as well.

Assessing Necessity

The next action is identifying the magnitude and evaluating the necessity of each cost item. This is best done on a department-by-department² basis and for overhead costs. Table 1.2 shows this for the manufacturing area.

The idea here is to identify each cost as necessary, unnecessary, or nice-to-have. The team may wish to use different necessity descriptors, but the concept is to identify unnecessary costs and nice-to-have items as potential candidates for elimination. Necessary items should not be eliminated, but they may be candidates for further analysis using the techniques described in the rest of this book.

The first part of this task is relatively easy (identifying the cost items). The second part (evaluating the necessity of each) is much more subjective. Resistance to cost reductions in some of these areas will almost certainly emerge. Sometimes when costs are presented this way, the frivolity of the unnecessary costs becomes obvious and no resistance occurs.

Table 1.2 shows a recommended approach for accomplishing this.

^{2.} One can argue that the department managers and supervisors should be making these assessments as an ongoing part of their jobs. Although this is true, it frequently does not occur. The exercise described here lends rigor to the effort.

Table 1.2 Cost Necessity Assessment

Cost Driver	Annualized Cost	Classification	Risks	Decision
Steel	\$2,358,992	Necessary	None	Keep, but reduce cost
Labor	\$2,257,920	Necessary	None	Keep, but reduce cost
Paint	\$851,400	Necessary	None	Keep, but reduce cost
Supervision	\$648,000	Necessary	None	Keep
Overtime	\$645,000	Necessary	Morale impact	Keep, but reduce cost
Maintenance	\$265,888	Necessary	None	Keep, but explore outsourcing
Tooling	\$192,101	Necessary	None	Keep, but reduce cost
Electricity	\$135,620	Necessary	None	Keep, but reduce cost
Weld gas	\$88,149	Necessary	None	Keep
Supervisor car leases	\$84,144	Nice to have	Morale impact	Evaluate other options
Fuel	\$81,396	Necessary	None	Keep, but reduce cost
Weld rod	\$77,142	Necessary	None	Keep
Travel	\$55,302	Necessary	None	Keep
Coffee	\$45,120	Unnecessary	Morale impact	Eliminate
Training	\$32,500	Nice to have	None	Keep, but reduce cost
Department party	\$6,300	Unnecessary	Morale impact	Keep
Supervisor golf club memberships	\$5,000	Unnecessary	Morale impact	Eliminate

Cost-Reduction Action Plans

Maintaining and updating an action item list is critical. It assures that each cost-reduction concept is captured on paper and retained until it has been objectively evaluated, and either discarded or implemented. It's also important because it identifies who needs to do what, by when they need to do it, and current status.

Table 1.3 Recommended Cost-Reduction Team Task Action Plan Format

Concept Number	Concept	Required Actions	Assignee	Required Completion Date	Implementation Cost	Estimated Annualized Savings	Risks	Status
1	Reduce steel costs	Determine if steel drop-off can be reduced	Smith	15 Sep	000′8\$	\$225,000	None	In work
		Introduce supplier competition	Gonzales	30 Oct	\$4,000	\$50,000	Offending current supplier	Not started yet
7	Reduce labor costs	Develop and implement labor standards	Nguyen	30 Nov	\$20,000	\$125,000	None	In work
		Develop and implement efficiency measurement system	Nguyen	30 Dec	\$5,000	\$125,000	Morale; inaccurate standards	Not started yet
		Flowchart production process to identify cost-reduction opportunities	Jackson	15 Aug	\$1,000	TBD	None	Complete
8	Reduce paint costs	Develop and implement paint application methods training	Aker	10 Aug	TBD, considered to be low	\$160,000	None	In work; behind schedule
		Consult paint suppliers to identify paint usage-reduction techniques	Aker	30 Aug	\$10,000.	\$100,000	None	Complete

Complete	Not started yet	Not started yet	Complete	Implemented	Not done yet; behind schedule	See above	In work	Not started yet	Not started yet
None	Morale; making sure work is complete	Department manager's acceptance	See below	Morale	None	Morale, industry perceptions	None	None	Existing maintenance staff morale
See below	\$15,000	\$8,000	See below	\$45,120	See below	\$5,000	TBD	TBD	TBD
\$1,000			32		32				
\$1,0	\$0	\$0	0\$	0\$	0\$	0\$	\$500	\$500	\$500
15 Sep	20 Sep	20 Sep	15 Aug	15 Aug	15 Aug	30 Aug	30 Sep	30 Sep	30 Sep
Thomson	Dept Heads	Thomson	Spitler	Dept Heads	Jones	Dept Heads	Balicki	Balicki	Balicki
Identify overtime causes	Develop and implement overtime budget	Develop and implement overtime request form	Secure approval from chief executive	Notify all personnel and implement	Discuss issue with chief executive and department heads	If decision is to proceed, notify supervisors	Identify dominant maintenance cost Balicki contributors	Determine if more preventive maintenance would lower costs	Explore outsourcing maintenance function and make
Reduce overtime			Eliminate free coffee		Eliminate golf club member- ships		Reduce mainte- nance	costs	
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Notes: Gray-shaded row indicates action complete. Red-shaded row indicates action behind schedule.

The action item list becomes the cost-reduction plan, and maintaining and circulating it lets everyone know how the team is doing.

Table 1.3 shows a format that works well. As the table indicates, completed actions are shaded in gray and actions that are behind schedule are shaded in red. This gives the team and everyone who reviews the plan a quick look at how things are progressing. Nearly every assigned action will require the efforts of more than one person, but it's always a good idea to list only one name for each action in the plan. The chances of the action being completed on schedule are higher if it has a single owner.

Table 1.3 shows the plan for only one area in the organization, and the example shown here is not intended to be complete. The action plan needs to address all areas.

Quantifying Estimated Savings and Implementation Costs

The actions the team identifies in its plan are all intended to produce a cost savings, but before making any changes, the team should objectively estimate what the savings will be. Great care in maintaining objectivity is required here. It is very easy to overestimate planned savings.

Most cost-reduction concepts require implementation actions, and there is usually a cost associated with these actions. Sometimes there are no costs (for example, if an unnecessary step is eliminated), but most of the time there are costs associated with changes. For example:

- Engineers may need to redesign products.
- Manufacturing engineers may need to redesign processes.
- The purchasing department may need to obtain prices from alternative suppliers.
- New production equipment may be required.
- Facilities engineers may need to modify the building.
- New designs may require testing to confirm requirements compliance.
- There may be disruptions as the change is implemented.

These actions all involve cost, and it is important to accurately predict what these costs will be. The obvious reason for doing this is that it makes no sense to implement a cost-reduction change if the implementation cost exceeds the savings.

Our experience indicates that it is best to quantify the savings on an annualized basis, and to consider the implementation costs in the first year. Sometimes

in job-shop production environments with production runs lasting less than a year it is best to quantify savings on a contract basis. This is another area where the finance department can help.

Who Should Do This Work

The cost-reduction team can't do everything. In fact, by itself the team won't be able to evaluate or implement most of the ideas. The team is a catalyst. It has to work with others in the organization to gain support, evaluate ideas, and where appropriate, implement cost-reduction actions.

Risks

Risk has to be a key part of the decision process when evaluating every costreduction concept. In assessing risk, there are three questions to consider:

- Have we done this before?
- What can go wrong if we do this?
- What are the things we need to do to prevent bad things from happening?

If the concept being considered has been implemented elsewhere, or if it consists of smaller actions that have been done before, the risk is probably minimal. If neither condition exists, the organization needs to aggressively and objectively identify all potential consequences (not just the planned savings) and take steps to manage the risks. Risks may include customer reaction, product performance, supplier reliability, morale, process yield, safety, and other factors. Specific risks in different areas are identified in each chapter throughout the rest of this book. The important thing to recognize is that cost reduction involves change, change carries associated risk, and prudent people identify and manage risk.

References

W.J. Stevenson, Production/Operations Management, New York, McGraw-Hill, 2000. R.W. Bradford, Simplified Strategic Planning: The No-Nonsense Guide for Busy People Who Want Results Fast, Worcester, Chandler House Press, 2000.