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# Cents of Mission

Using Cost Management and Control to Accomplish Your Goal

Dale R. Geiger





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First published in 2015 by Business Expert Press, LLC 222 East 46th Street, New York, NY 10017 www.businessexpertpress.com

ISBN-13: 978-1-63157-138-1 (paperback) ISBN-13: 978-1-63157-139-8 (e-book)

Business Expert Press Managerial Accounting Collection

Collection ISSN: 2152-7113 (print) Collection ISSN: 2152-7121 (electronic)

Cover and interior design by Exeter Premedia Services Private Ltd., Chennai, India

First edition: 2015

10987654321

Printed in the United States of America.

Conner: proof of nature's skill in continuous improvement

#### Abstract

Written as a novel, *Cents of Mission* follows Luis as he struggles with the problems that many people and organizations face today: the lack of fiscal resources. Watch him as he seeks advice and learns how to attack these problems with practical, military style command and control. See how learning, cost informed decision making, creativity, and continuous improvement become powerful forces for improving cost effectiveness and achieving life and professional goals.

#### Keywords

activity based costing, budget management, command and control, continuous improvement, cost after action review, cost allocation, cost benefit analysis, cost management and control, cost variance, mission statement, performance metrics

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## Cast of Characters (in order of appearance)

Conner: baby boy of Luis and Emily, grandson of Al and Jackie

**Al:** retired Army Colonel, father-in-law of Luis, father of Emily, husband of Jackie, grandfather of Conner

**Luis:** Director of Research and Development, father of Conner, husband of Emily, son-in-law of Al and Jackie

Jackie: wife of Al, mother-in-law of Luis, mother of Emily, grandmother of Conner

Emily: wife of Luis, daughter of Al and Jackie, mother of Conner

Melanie Nelson: President of the company
Marty Hodges: Luis's Administrative Assistant

Mac McDonnell: Research and Development Division Manager reporting to Luis

Pete Peterson: Research and Development Division Manager reporting to Luis

Robert Stewart: Chairman of the Board of Directors of the company, Major General

in U.S. Army Reserves

Megan Streicher: Maintenance Division Manager Jack Floyd: Chief Financial Officer of the Company Jim Wilson: Marketing Department Director

Jim Huff: Union Representative

### Introduction

Al and his son-in-law Luis watched baby Conner playing happily with his Thomas the Train set while grandma and mother were out of the house for a rare mother—daughter lunch. Conner didn't have a care in the world and it didn't seem to matter that the engine he was pushing back and forth wasn't even on the track.

"Conner sure seems to be growing fast. It's hard to believe how much he has changed in the last year and a half. He will be grown in no time. How is your work going? I sure hope making a living doesn't keep you from the living part. Watching a son grow and helping him learn are two of the great joys and responsibilities of life."

"His growth is amazing. It wasn't that long ago that he could only cry and now he calls me DaDa. Unfortunately, the making a living seems to be getting more difficult. I'm feeling these days like I need to work harder and longer just to cover the bills. We never had to worry about money in the past, but lately, we just seem to be getting further behind on everything. Conner has certainly added to the pile of bills, but it seems like everything is costing more. And then, the car probably needs to be replaced, but it's worth less than the loan balance. On top of that, we can't avoid paying student loans any longer, so our credit card balances have been growing."

"Hmm, seems like you have a lot of stress, but you and Emily are smart, hardworking people."

"Evidently, that isn't enough these days. It was on the news last night that about a third of the families in the country don't have any savings and another third don't have the recommended savings level of six months' income to cover some major problem."

"Which category do you fall into?"

"I don't know what we would do if I lost my paycheck. Nobody starves in this country, but we should be saving for Conner's future and our retirement. Instead, we are struggling to pay for what we already have, or worse, for what we bought in the past." "Sounds pretty bad. What are you going to do about it?"

"I'm not sure, but I guess we need more income. I've told Emily she should be thinking about a second job, and I'm hoping my long hours pay off with a promotion. But these things would seem to take us away from that living-a-life goal you mentioned. How did you and Jackie manage to get through this maze?"

"Sounds like you're just turning up the speed on the treadmill. Have you ever thought that Ben Franklin was wrong when he said 'A penny saved is a penny earned'?"

The conversation was brought to a premature close by the arrival home of Jackie and Emily who were met at the door by a happily screeching Conner with his arms raised.

Picking him up, Jackie asked "Conner, did you miss us? Time to mix the margaritas Papa."

#### CHAPTER 1

## Luis Struggles with Personal Finances, Talks to Father-in-Law for Advice

We got back from the in-laws' after dark. Conner fell asleep in his car seat, but didn't wake as I carried him to his crib. Emily turned on the TV and sat down to watch a program she had recorded. I looked at the pile of bills on my desk that I needed to address, but couldn't bring myself to tackle that depressing job after such a nice day.

I resolved to pay the bills the next day and joined Emily on the couch. The program couldn't keep my attention. I kept thinking about the pile of bills, the need to do something about them, and my father-in-law's remark about Ben Franklin. I had a master's degree in mechanical engineering, an MBA, and a big job running the research and development laboratory for a major company. Why weren't we doing better financially?

Later, sleep came with difficulty as my mind puzzled on our need for more income and how a penny saved wasn't the same as a penny earned.

The stack of bills was waiting for me on Sunday morning. The mortgage was on top. That had to be paid. Car payments, for both cars, came next. They were priorities too.

Next came the student loan bills. Pursuing graduate degrees on a part time basis had allowed us to defer payment for years. Unfortunately, those degrees added to the amount owed. To pay or not to pay: that is the question. I remembered reading that even bankruptcy wouldn't relieve the payment and reluctantly wrote those checks.

The electric bill, the water bill, a car insurance bill, our portion of some medical bills for Conner, and four credit card bills remained. The checkbook balance was depressingly unequal to the task. How had we ended up with four credit cards each with a balance due greater than the checking account balance?

Paying the minimum due on the credit cards left just enough to cover the other bills. We would not have any more cash until the next paycheck, which meant we would be forced to use credit cards for groceries, gas, and everything else. We seemed be in a pattern of ever increasing debt.

My mind turned to my promotion possibilities at work. There was a chance of my job being upgraded to vice president of technology as I had done a pretty good job as R&D director. On the other hand, it looked like the company wasn't growing the way it used to.

Maybe the VP position wouldn't be created. Maybe the long hours I was working weren't worth as much as I had thought. Maybe it was time to get some advice.

Al and Jackie were great in-laws. They had never tried to interfere in our lives, but would certainly give us candid and well-meaning input. Al was a retired army officer currently teaching part time at the local college and managing his investments. Jackie was retired after starting and selling a successful small business and was now dedicated to helping with Conner's care during the week.

I picked up my cell phone and called. "Colonel, I've been puzzling all day about why you say Ben Franklin was wrong in his proverb. How can a penny saved not be a penny earned? What is the answer to the puzzle?"

"Well actually old Ben was perfectly correct in his day. Income tax didn't come to be until the Civil War and it is the tax on the penny earned that makes it worth less than a penny saved for anyone subject to income tax. You see, anything you earn is going to be taxed. Furthermore, it will be taxed at the rate that applies to your highest tax bracket, not your average tax rate. So if you earn another \$1,000 of income you will pay more federal income tax, more state income tax, more social security tax, and more Medicare tax. So you will be lucky to end up with \$600 left to spend."

"Wow, I've never thought of it that way."

"On the other hand, if you can figure a way to cut your cost \$1,000, the savings is all yours. It turns out that a penny saved is worth considerably more than a penny earned because you get to keep it. You will probably be better off looking at your spending and working on becoming more cost effective."

"But we are not living in great luxury. We are not wasting money. I think we are already managing as well as we can."

"If I've learned anything in the army, it is that the job of the leader is never to accept the status quo. I remember working for a Lieutenant Colonel Perry who was never satisfied no matter how well we performed. We would meet after every mission for the sole purpose of determining how we could do it better. He never tired of saying 'there is always a better way."

"I don't see how we can do any better."

"That is a common attitude. Your first step to success is to completely reject the idea that you are doing as well as you can. Did you know that there was once a Secretary of Commerce who had that thought? He proposed closing the Patent Office because 'all the good ideas had already been thought of.' And that was during the 1800s."

"So what's the starting point? Do you mean that we need to have a household budget like we do at work and operate like a business? We are not a company? We don't exist to make a profit."

"Budgets can be helpful, but it really depends on how you use them. Is your budget at work a dynamic plan to help you run the office or more like a grant or allowance that simply limits your spending?"

"Well the budget is our money. The boss has to fight for the budget every year and we spend a lot of time justifying the need for more money. We feel that we earned the 'grant' as you call it. Spending more than the budget is dealt with severely, so we never do that. But we never want to spend much less than the budget because that makes it harder to fight for more budget in the next cycle. I guess the goal is to spend 99.9 percent of the budget and we are pretty good at it."

"Well, I don't think you want to operate your personal operations that way. It sounds like a lot more effort goes into getting budget than spending it wisely. And simply spending all your budget is hardly a financial achievement. If you owned the company, and you certainly do own your household operation, you would be much better off with a mentality that does a lot more than just spend all that you have."

"What kind of mentality is that?"

"My background leads me to think about problems in military terms. First you define your mission, and then you command and control your scarce and precious resources in order to get the most mission effects possible. Think of the command and control process as an alternative to simply spending the budget."

"Wow, you have given me a lot to think about. Where do I start?"

"Obviously, you have to start with defining your mission. We call this 'establishing commander's intent.' A lot of companies call it creating the 'mission statement.' The idea is that you think about what you want to accomplish and state it clearly."

"OK, that's pretty easy. I wish we were out of debt, didn't worry about paying the bills, and had savings for Conner's college and our retirement."

"Yes, that is the easy part, and if I had a magic lamp, I'd be happy to grant your 'wish.' Actually 'wish' is an interesting word choice. Imagine General Schwarzkopf during Desert Storm having a mission statement that said 'We wish the Iraqis would surrender?' As you know, I'm fond of sayings. They convey a lot of time-proven wisdom. The one that comes to mind is that 'a goal without a plan is but merely a wish.' You need to rethink your mission statement to state your plan of attack."

"You use the word 'attack.' Why do you have to use such military language? We are not an army."

"Of course you aren't an army, but missions are rarely achieved with passive actions. The Iraqis were not going to defeat themselves and your cost isn't going to manage itself. Unless your strategy counts on winning the lottery, you will have to make your own success through taking action. Nobody is going to do it for you, but I think you can do this. Lt. Col. Perry used to say 'we are the army, we all have type A aggressive personalities.' I know you. You are a type A achiever. You just need to apply your skills and capabilities to attacking your cost issues in pursuit of your mission."

"I've always thought of cost as a given, not something to be attacked."

"Well yes, this probably will require some new thinking and that will take some time to sink in. Look, Jackie and I have to go over to one of our rentals to show the property. Why don't you think about what we've discussed and give me a call this afternoon?"

#### **CHAPTER 2**

## Luis Analyzes Tax Effects of a Raise, Meets with Emily, Defines Mission

The first thing I did after hanging up was to Google IRS tax brackets. We were currently in the 25 percent tax bracket, and it was easy to calculate that \$1,000 extra income on our last tax return would increase federal tax by \$250. A large raise might even bring us to the 33 percent bracket. The California withholding schedules demanded 9.3 percent, which calculated to another \$93 lost. California also took another tax deduction of 1 percent, called SDI, which, I learned, was for a disability insurance program.

My last paycheck also showed deductions for Social Security and Medicare. Another quick Google search revealed that deduction was 7.65 percent out of my paycheck and another 7.65 percent that the company had to pay. This meant that my receiving a \$1,000 raise actually cost the company more than \$1,000, and I wondered what else the company had to pay.

It was a little harder to find, but I soon learned that the company also had to pay unemployment and worker's compensation taxes on my salary, but those costs were based on only the first \$7,000 of income and would not apply to my theoretical raise.

	My numbers 25% federal bracket	My numbers 33% federal bracket
My raise	\$1,000.00	\$1,000.00
My fed tax	\$250.00	\$330.00
My Cal. tax	\$93.00	\$93.00

(Continued)

	My numbers 25% federal bracket	My numbers 33% federal bracket
My SS/med.	\$76.50	\$76.50
My Cal. SDI	\$10.00	\$10.00
My net pay	\$570.50	\$490.50
Net/my raise	57%	49%
Co SS/med.	\$76.50	\$76.50
Total co cost	\$1,076.50	\$1,076.50
My net/co cost	53%	46%

The bottom line indicated that I would only receive \$570.50 out of my hypothetical \$1,000 raise. If, and hopefully when, my income put us in the 33 percent federal tax bracket, the net pay take home would drop to \$490.50. But it was the percentages that really got my attention. The cash flow to me was only about half of the total amount of the raise!

It was pretty clear that getting a raise was less attractive than I had built up in my mind. It certainly proved the Colonel was right when he said that a penny saved wasn't a penny earned. It was crystal clear that taxes meant that a penny earned was considerably less attractive than a penny saved.

The obvious implication was that Emily and I would be better off working for ourselves by reducing our costs. Anything we could save would be ours to use however we wished, whereas anything extra earned would be significantly taxed.

My next step was to share the analysis with Emily. She was relieved that getting a second job was now significantly less attractive.

"I didn't know how I could work another job and still do a good job as a mother. I already feel guilty that I spend so much time away from the baby. But how can we do it? We need a new car. Conner is growing out of his clothes, and you and I need to have a life. We need a freezer and a new living room set. Ours is so old."

I was taken aback, and replied, "Well, maybe this isn't going to work. Getting all those things would seem to say you will need to get a second and a third job. Yet the numbers say that there is a real diminishing return from all that extra work."

"Maybe we don't really need all those things if getting them means taking a second and third job. We have a big problem" she said. "Where do we start?"

"Well, your mom and dad seem to be financially secure, and the Colonel said that stating our mission was a prerequisite to attacking our costs. What do you think our priorities are?"

"Conner is number one," she said.

"I agree, but what does that mean?

"Well, I suppose that first and foremost we must meet his needs and provide a secure and stable life. We should be saving for his college and providing for our retirement so that we are not a future burden on him," she added.

I said I agreed with all that, "But are you willing to give up other, less important, things in order to accomplish that mission?"

Her response was delayed as she thought over the implications. "Yes, clearly there will always be limits, and we have responsibilities to Conner that surpass everything else. Count me in 100 percent, but what do we do next? How do we attack cost? We are a family, not some business or army."

"I'm not sure either, but I am sure we can get some good ideas from your dad."

#### **CHAPTER 3**

## Luis Calls Colonel, Gets Explanation of Basic Command and Control

I called as soon as I was sure my father-in-law was home. He seemed pleasantly surprised and said, "I wasn't sure I'd hear back from you. You must be serious about making some changes. Did you give some thought to your mission?"

"Yes", I replied. "And Emily and I discussed the situation and agreed that providing a secure and stable future for Conner by attacking our costs is our mission and that all our other needs are secondary."

"It's great you two are working together, and I think you have a good mission. Recognizing that there are fiscal constraints that require management and control is a great first step. You know, I read a study once that asked people how much income they needed to be 'really well-off.' What do you think the answer was?"

"I don't know. Maybe \$300,000 per year?"

"No, the answer was three: three times the current income level. The answer really says that it is the nature of humans to 'need' more than they have. This is probably a good feature of the species in terms of evolution. It is probably a good thing to never be satisfied. The problem is that the credit culture these days makes it very easy to indulge in this self-satisfaction for now at the expense of the future. You and Emily have made a big step forward. Let us know how it goes."

"Hang on," I said. "We've got a mission, but we don't know how to achieve it. You said we needed to attack cost, and we have that in our mission statement. But how do we do that? We are not some corporation trying to make a profit."

"The power of cost management and control is not limited to making a profit. It is all about accomplishing the mission. Of course, the mission may be to make a profit, but in most cases it isn't. All I can tell you is that applying command and control principles has helped Jackie and me meet our personal mission objectives and brought us financial security. I'm sure you and Emily can achieve the same results by applying the same principles. Attacking cost or cost command and control is really about using limited resources effectively. You enjoy military movies, Luis. You can learn a lot about attacking cost by looking at your favorites and thinking about how generals go about the process of attacking their objectives."

"Come on. Generals aren't interested in cost. It is the last thing they think about."

"Not true. You just need to recognize that casualties are costs, and you will quickly see that generals are very interested in cost. It's the same concept. They have a mission to accomplish with limited resources, and they put a lot of thought and effort into accomplishing that mission with as little cost as possible."

"OK, I'm starting to see what you are talking about. Cost management and control is the same process as military command and control. It means spending resources wisely to accomplish a purpose: the mission as you call it. Can you give me the short course version of command and control?"

"The short list is leadership, intelligence, planning, and performance review. You've already recognized the importance of the leader in developing commander's intent. The leader defines the mission and drives the management processes necessary to achieve that mission. There are only three other major elements. The starting point to all command and control processes is gathering intelligence."

"How does gathering intelligence have anything to do with achieving my mission?"

"The intelligence input for your mission will be your cost accounting measurements."

"Hiring a CPA hardly seems like it is going to make us more cost effective."

"Yes, you are absolutely right. A Certified Public Accountant will not be necessary, although a CPA might not tell you so. A CPA's training and expertise concentrates on producing auditable financial statements for external use using generally accepted accounting principles. This is quite different from the accounting you need."

"I don't know. The very word 'accounting' makes me cringe."

"It shouldn't. In fact you make an external annual accounting report every year, don't you?"

"I don't think so."

"I bet that you do and that you usually complete it by April 15 every year."

"Hmm, I guess our tax return is an external accounting."

"Right, and that is very different from the kind of accounting you need for your mission. The kind of accounting you need is more like what you do when you balance your checkbook. Think about why you do each of these types of accounting. You do the tax return because the law requires that you comply with that reporting requirement. On the other hand, balancing your checkbook is not an external reporting requirement. Balancing the checkbook is something people do when and if they think it is helpful in accomplishing their missions."

"I know that some people don't balance their checkbook at all. How does that support their mission?

"Well, those people have made the determination that there is not enough value from the time expenditure to justify the effort. Their mission is better supported by using that time and energy elsewhere.

"Remember, too, that the external reporting must pass audit. You don't have to worry about that. I mean, why would you want to cheat on your checkbook? And who would care? If it makes you feel better, add a million bucks to your balance. You would only be fooling yourself."

"So my checkbook or other cost information need only meet my mission needs?"

"Precisely. The cost measurements to support your mission are your property. You don't have to report them to anyone else and you are free to change them whenever and however you want in support of your mission. Your major objective is to learn something that helps you, and you seek useful, credible, and affordable information."

"Ah yes, affordable. That's another reason why I shouldn't rush out to hire a CPA! But how do I get the credibility?"

"Credibility is important if you are going to make decisions on the basis of the information, or if you wish to establish accountability for results. You can't have measurements that you don't believe or that don't make sense. You are simply trying to understand the true reality of your financial activity."

"Do you mean that there are no generally accepted accounting principles to worry about?"

"Generally accepted accounting principles imply that there is one way to account for things. The reality of intelligence gathering is that there are many, many ways to generate useful, credible, affordable information. Think about all the different types of military intelligence gathering. There are scouts, spies, signals intelligence, radar, sonar, and many other ways to gather needed intelligence. They each exist solely because they provide useful, credible, and affordable information to the mission. If they didn't, they wouldn't exist. Can you imagine how poorly military intelligence would work if it were restricted to a single, generally accepted method? We in the army would have been in pretty bad shape if the navy convinced everybody that sonar was the only intelligence gathering platform for the Department of Defense!"

"Wow, this is all a little overwhelming."

"Not to worry. The intelligence input you need for your household is very simple. You should be able to easily find most of what you need in your checkbook. You will just need to organize it in a meaningful way so that you are not overwhelmed by the mass of data. Think of it as managerial costing information."

"OK, but where do I start?"

"Well, you might start by thinking about creating categories of cost that fit into your planning and review processes. You want to create an information format that makes it easy for you to understand your plan and actual spending and, most importantly, to facilitate the comparison of actual performance to plan. The intelligence gathering is simply about bringing numbers to that format."

"Do you mean a budget by cost category?"

"Given that 'budget' sometimes means an obligation or entitlement to spend, I'd recommend that you use the word 'plan' with the understanding that you always want to do better than 'plan.' A budget is not helpful if it is merely a grant or allowance that comes with incentives to spend so that you can get more in the future. Having a dynamic plan is actually an important part of the command and control process. For your purposes it might be better to think about generating a plan that moves you in the direction of your mission goal."

"But how does a plan get one closer to the mission goal?"

"I think it was Yogi Berra who said, 'If you don't have a plan then just about any direction will get you where you want to go.' Plans are powerful things. They force you to think about the things that will get you to your mission objective. They provide you an opportunity to avoid pitfalls and mistakes. They provide a front end to accountability in that you can compare progress to plan and take corrective action. Your plans are simply the pathway to achieving your mission. If you actually achieved your plan at every step you would achieve your mission, right?"

"OK, I need leadership, intel, and a plan. Tell me more about the fourth part of command and control?"

"Now you get to the most important part: the after action review. The reality of combat, and life in general, is that plans are seldom perfectly achieved. In most cases, actual performance misses the plan either by falling short or by exceeding expectations. The after action review compares what we actually accomplished with what we planned and highlights the variances where the plan was missed for better or worse."

"Variances?"

"Variances are just the differences to expectations. Those differences allow us to focus on the subset of activity that needs attention. Remember the goals of understanding and influencing progress to mission? Explaining the variances inevitably results in understanding and learning. This enables us to influence progress by improving future planning, improving future execution, and even improving our future measurement processes. The after action performance review process is absolutely critical in continuously improving our attack toward our mission objectives."

#### **CHAPTER 4**

## Luis Develops His Cost Intelligence and Attack Plan, Discusses with Emily

After hanging up the phone, I decided to give the planning phase a try. I reopened the last year's tax return and started looking at it critically. What did it tell me that would help in achieving my mission? Nothing!

The gross income wasn't mine to spend. I had never even received that amount as cash. The exemptions for Emily, Conner, and me were not related to any actual payment at all. Costs like food, gasoline, travel, and many others didn't even show up. Mortgage interest was found on Schedule A but didn't reflect my actual payments that included principal and home insurance. I concluded that the tax return was not useful to my mission even though it had taken me a large time investment to complete.

So I turned to our checkbook and started looking at it in this new light. It tracked all of the costs we had incurred. It soon became obvious that it contained a lot of very relevant and useful intelligence for my mission goal.

However, the data needed some manipulation. There were too many entries and some grouping seemed appropriate. Multiple payments for groceries needed to be added together to disclose the monthly cost. I started thinking about what other categories made sense when I got to a credit card payment. How should I treat this?

My first thought was that the payment didn't represent our cost unless we paid the balance each month and we didn't do this. But would not paying the bill mean we had no cost? Would paying the entire balance mean we had spent a lot? The answer to both questions was a clear no. The cost for the month shouldn't be inflated or deflated depending on

what we actually paid that month. The key was what we added to the bill. That was our cost for the month.

The differences were just related to the time of payment—with one exception. The balance and minimum due were irrelevant, but credit card interest was not. Interest on the card was certainly a cost of that month. Interest on the credit card was the financing cost for our lifestyle of living on credit, and a cost that we needed to eliminate if we were to achieve our mission.

Going through the credit card line by line, I found additional grocery store charges that went in the grocery category. Every item had to be placed in a cost category. In going through the bills, I also noticed charges for Starbucks and our favorite restaurant. Should these be counted as groceries or something else? I decided that groceries should record spending for food and other things at the grocery store. These were necessities. We really did need to feed ourselves! Going out to a restaurant seemed more discretionary, so I decided to think of nongrocery-store food and drink as "luxuries." Credit card interest was also added to the "luxuries" category.

I got to the checkbook entry for student loan repayment. Was that a cost for the month? It didn't seem so. These were dollars that Emily and I had spent a long time ago. I remembered enough about my MBA accounting class that this debt should be classified as a liability. I thought about trying to locate my old textbook and then just decided that I needed to plan on the monthly payment. It would be a cost that I added to an "all other" category.

The car payment caused another pause. Was a car an asset? By the traditional business school definition, yes, but not a very important one. It devalued so fast and the amount I owed on it offset most of its value. I decided to treat the entire car payment as a cost and created a category for "car and car related" to include the payment, gas, insurance, and maintenance.

I hit another pause when I saw a cash withdrawal of \$300. How much did I spend of it? What did I spend it on? The cost measurement task was looking more and more difficult. It had to be simplified. I decided to count cash as part of the "all other" and resolved to use less. Checks and credit card bills would give me an easier trail.

#### I ended up with the following categories of cost:

- 1. House and utilities
- 2. Groceries
- 3. Luxuries
- 4. Car and car related
- 5. All other

I applied this structure to the past several months and averaged them to create a column of "prior" spending. It revealed that "luxuries" and "all other" accounted for a lot more than I expected. I noted that I was learning some things already. Maybe breaking "all other" into two or three categories would give me better visibility. I decided to defer this thought. As the Colonel had said, this was my managerial costing process and I could change it whenever and however I wanted.

"House and utilities," "groceries," and "car and car related" costs seemed essential so I thought about using the "prior" as my "plan" for the next month. However, subtracting these costs from my take-home pay left only \$500. Learning about this reality was disappointing as I had hoped that we could start saving at least that much each month to pay down debt and eventually start building assets.

I decided to subtract \$100 from "prior" for each of these three categories although it wasn't clear how we'd do this. I cut "all other" to \$1,150. "Luxuries" I cut to \$150, which would require some real changes. I put my plans into a simple excel matrix. Achieving the "plan" would reduce spending by \$900 from "prior" but would still result in negative disposable income. As I printed a couple copies, I was somewhat discouraged.

	Prior (\$)	Plan (\$)
House and utilities	4,000	3,900
Groceries	600	500
Luxuries	600	150
Car and car related	800	700

(Continued)

	Prior (\$)	Plan (\$)
All other	1,300	1,150
Total spend	7,300	6,400
Take home	5,900	5,900
Disposable	-1,400	-500

How did we get to this situation? This proved to be a short and fruit-less probe as I realized it didn't make any difference. The mission required that we get out of the situation. Perhaps this was a good start. After all, I had improved disposable income from a negative \$1,400 to a negative \$500. That seemed pretty good until I realized that it was only a plan, and we had yet to achieve anything that helped the mission.

Yet maybe we had done something. The issues were now clearly put in black and white rather than a nagging unease in the back of the mind. We now had some facts—our military intelligence. We now had a plan—our plan of attack.

I saved the file and shut down the computer. Then I got dressed for my weekly dinner date alone with Emily. I put the copies in my jacket. Mission success was going to have to be a team effort and now was as good a time as any to start. We dropped Conner off at his grandparents and continued to our favorite restaurant.

I waited for our usual bottle of Cabernet to be uncorked and poured before plunging into my agenda. I knew it was essential to our success that we approach and work the problem together. Yet I was still somewhat nervous about broaching the topic.

"Emily, I've done some analysis on our spending and we are in worse shape than I imagined. Look at these numbers. It seems pretty clear that we are not as well-off financially as we should be."

"How bad is it?"

"We are not in danger of being homeless or anything like that. Well, I guess that's true as long as I keep my job, and in this economy, nothing is guaranteed. The problem is that at our age we shouldn't even have that possibility. We don't have the savings necessary to provide a cushion should a disaster occur. The rising credit card balances make it obvious

that we are spending more than we make. Credit card interest is ridiculously high and paying minimum amounts while increasing the balance each month is unsustainable."

"I'm not surprised," she said surprisingly. "I've been worried for some time. Taking extra classes just to delay the start of repaying student loans was the first signal. Then I noticed that our credit card balances started increasing after Conner was born. Maybe I should have gotten more involved in paying bills and managing, but I didn't. What are we going to do?"

"I've learned from your dad that we need to command and control our costs if we hope to achieve the mission we've agreed on. This means we need to start attacking our costs to gain control of our lives. The most important thing is to focus on our mission. Yesterday we defined our mission as building financial security in order to take good care of Conner, his college, and our retirement"

"Clearly, now that we are parents, our greatest priority is Conner's security and well-being. I suppose that means his going to the best schools that he can get into. It also means having the financial security to survive unexpected disasters."

"And don't forget the retirement part. We don't want to be a future burden, and it would be nice to be able to someday spoil his children, our grandchildren."

"OK," I said. "To accomplish that mission, we will need to change a lot of what we have been doing. Ultimately, we need to accumulate assets and investments. Right now we are borrowing at credit card interest rates just to support our present, or even past, consumption. We have got to get our spending under control, and it seems a smart first goal will be to pay off credit cards. Once we are free of credit card debts, we can start to build savings, if we don't relax our grip. What do you think?"

"I'm glad this has come out. It has been an unaddressed fear of mine for some time. I've never thought of us as big spenders with high maintenance needs. But it is just too easy to spend money, and easy credit comes with hidden, long-term dangers that are easy to ignore."

"Starting right now, then, we will need to seriously change our attitude toward spending. Agreed?"

"Of course," she said.

"Good, then let's have a toast to Team Conner."

After the toast, she kept her glass in the air and said, "Speaking of starting right now, let's start with this bottle of wine. What is it costing us?"

"It isn't an expensive bottle. I think it is around \$25."

"Well, with tip and taxes, let's say it comes to \$30. That's roughly \$1,500 a year if we continue our weekly dinner dates. It will be 15 years before Conner goes to college. How much is \$1,500 per year for 15 years?"

"That would be \$22,500," I said soberly. "Even a small thing really adds up over the long run. But you know it is much worse than that. Every dollar we spend is for all practical purposes being borrowed at a credit card interest rate of 20 percent."

"What does that interest cost over a 15-year period?"

"I'd need to set up an excel file to figure it out, but let's make a rough estimate. If the balance starts at zero and goes to \$22,500, its average would be half of the ending balance or \$11,250. Twenty percent interest on that average would be about \$2.5K per year and 15 times that for the 15-year period—about \$37.5K. Wow! \$22.5K for wine and \$37.5K for financing it. That's \$60,000! Can that be right?"

"No it can't. You forgot one thing. The interest gets added each month and compounds. I bet the total is much greater."

"You're right. It will be a lot more. I'll see if I can figure it out when we get home, but it's clear that making this one change would be a great start on Conner's college fund."

"Yes dear. As this will be our last bottle of wine for some time, I think we should have a toast 'to the first day of the rest of our financial lives."

"To the first day," I repeated feeling hope instead of dread for the first time in a long time. "Let's go over the details of the spending plan that I worked up."

After picking up Conner and getting home, I went to my computer and opened a new excel file. I wanted to know the real cost of our weekly wine bottle habit.

Determining monthly compounding would require a matrix with 780 lines: one for each week over the next 15 years. I used a 20 percent annual interest, which worked out to 0.3846 percent each week. The interest on the first week's \$30 bottle of wine rounded up to only \$0.12 making the ending balance due \$30.12. This certainly seemed minuscule.

Copying the formula to 780 lines was easy, but I had to double check my work when I saw the results. The total balance due after 15 years was a staggering \$149K. Interest alone was running at \$570 per week for the \$30 bottle of wine!

I stared at the following matrix for some time before convincing myself of its validity. Initially, it seemed impossible until I could see the effect of interest on interest year after year. The compounding had more than doubled my back of the napkin estimate. There was over \$120K of interest cost to finance our weekly bottle of wine. It was clear that financing this lifestyle perk on credit cards was a very expensive undertaking.

Week	Begin balance (\$)	Spend (\$)	Total (\$)	Interest (\$)	End balance (\$)
1	0	30	30	0.12	30
2	30	30	60	0.23	60
3	60	30	90	0.35	91
4	91	30	121	0.46	121
	•	•		•	
	•	•		•	
	•			•	
777	146,155	30	146,185	562.25	146,747
778	146,747	30	146,777	564.53	147,341
779	147,341	30	147,371	566.81	147,938
780	147,938	30	147,968	569.11	148,537

It was like I had found a fantastic investment opportunity with a great annual, compounding rate of return. In reality I guess I had. I was investing in our mission. I then remembered Ben Franklin and the previous analysis I had done looking at take-home pay. This was much, much better than taxable investment income. These savings were all tax free. The \$149K cost savings were equivalent to almost \$300K of taxable take-home pay. It was like we had just made a small fortune by changing one element of discretionary spending. Maybe this wasn't going to be as hard as I thought.

#### 22 CENTS OF MISSION

Before turning in, I sent a quick e-mail to my father-in-law.

Colonel: just wanted to let you know that Emily and I are in complete agreement about the need to take control of our finances and that we declared the war on cost and made our attack plan for spending!!

## President Nelson Holds Budget Review

Before heading to work the next morning, I saw two e-mails. The one from my father-in-law was short and to the point.

Congratulations on a good start. However, you should recognize that winning a war is harder than declaring one and that achieving a plan is harder than making one. Best Wishes, Al.

The second e-mail was from my boss, the president of the company, summoning me and my peers to a morning meeting. Surprisingly, the subject was not disclosed, but the level of importance was marked as urgent.

Stopping for gas on the way to work, I filled up at my normal station. While pumping, I thought about our mission plan. I had planned on spending \$100 dollars less each month for the car, but had not given any thought as to how I would do this. Was it really a plan if I didn't have a clue as to how to achieve it?

Maybe I shouldn't fill the tank. That could cut my spending this morning by half. Or would it? Unless miles driven, miles per gallon, or dollars per gallon changed, it would only mean that I would be spending more time going to the gas station.

I stopped to look at the price per gallon I was pumping and was again surprised. Looking across the intersection, I saw another station's sign that offered \$0.03 per gallon lower price. I stopped the pump. Three cents per gallon wasn't much, but I had to start somewhere. Why not here? Why not now?

I pulled into work feeling good about this decision and mentally shifted to thinking about my job and its demands for the forthcoming

week. I barely had time to go through my inbox before leaving for the mystery meeting my boss had called.

As the director of R&D, I reported to President and Chief Operating Officer Melanie Nelson. She had an accounting background and had risen through the ranks to chief financial officer before making the step to president. Speculation was that her promotion reflected an increased emphasis on the numbers. Corporate profitability had been hit hard in the last recession and had not yet regained prerecession levels.

She got right to the point in our meeting. "This meeting is going to be short and sweet. Profitability is unacceptable, and I've been tasked by the board of directors to improve it. I want each of you to pull together your spending plans for the rest of the year by month and present cost reduction suggestions for review. I need to have something for the chairman of the board within a week so we need to have this review right away. Does anybody have a conflict at 8:00 tomorrow morning?"

Nobody voiced a concern, but the silence continued until it became uncomfortable. Then Jim Wilson, the marketing director, and ever the friendly salesman said, "Sure pres, no problem. How bad is the situation? How much are you looking for in cost reductions?"

"I'm hoping that we can cut costs at least 10 percent. If there are not any other questions, I'd suggest you get to work."

Walking back to my office, I thought about how my plans for the week had just been wrecked. I had several major project reviews scheduled that were too important to delay. We'd just have to work around our already filled agendas to address this new problem. Maybe this would be just a "fire drill" to satisfy the higher ups that we were making an effort.

After all, R&D was the future of the company. It wouldn't make any sense to kill the future. My biggest problems were hiring enough technical staff and finding adequate workspace for them. Maybe cutbacks in the other departments would free up the space I needed. This could be a good thing. However, I did need to comply with the boss's directive and pull together the numbers and some ideas about cost reduction.

Back in the office, I called in my administrator, Marty Hodges, and spent most of the next two hours going through the budgets. Salaries and wages were by far the biggest cost—accounting for about 65 percent of our total. Facilities was the next largest cost element representing about

15 percent of the total. This wasn't even a cost we could change, as it was allocated or charged to us based on our headcount. Well, we could have changed it, but only by reducing staff in our department. That would not help us accomplish the R&D mission. Altogether, then, the staffing level drove about 80 percent of our cost with relatively small amounts for travel, training, procurement, supplies, and so on.

We went through each month, and I directed that Marty put together a PowerPoint presentation that had each month on a separate page with notes and explanations to the right of the column of numbers.

The presentation was on my desk when I arrived at 7:30 the next morning. I don't know how late she worked, but I felt well-armed for the 8:00 a.m. meeting.

My turn to present, however, didn't occur until almost 10:30 a.m. Each of my peers had built similar presentations with numerous pages each full of numbers and details. It was somehow boring and overwhelming at the same time to see so much data.

My presentation followed the same dull routine that my peers had gone through. I'd explain each slide and then answer questions about it. For example, President Nelson questioned the travel expense I planned for the next month. I patiently explained the importance of the trip in learning how customers' valued various attributes of our products. Furthermore, I briefed that there would have been great value in sending the whole five person team, but that we had cost-consciously cut down the number of travelers to the project lead and her deputy.

Going through the spending plans page by page, number by number was excruciatingly frustrating. Nobody showed any number that they couldn't defend. Nelson had no way to value the need for my travel plans that she had questioned or any of the other issues she raised. All she learned was that I valued it and had considered the cost of it. It was very easy to defend. What was she looking for? An addition error?

My stomach was growling as the last presenter finished well into lunchtime. Nelson voiced the conclusions of everybody in the room, "This was a useless exercise. I had hoped that there would be some obvious cost reduction opportunities, but what we have learned is far short of our goal. I doubt that these small savings will satisfy the chairman, but I'll try. Be prepared for more guidance tomorrow."

It didn't take even that long to get the guidance. Within an hour, I had an e-mail that tersely announced a hiring freeze effective immediately, a 10 percent cost reduction across the board, and a meeting on Saturday morning for each of us to explain how we were going to achieve the cuts. The onus had changed. The burden of proof was now on us to defend cuts rather than defend the status quo.

The e-mail also stated,

I need not mention that we must avoid concern in the workforce, so limit the number of people you involve in your preparation. That's also the reason we are meeting Saturday.

I got to the cafeteria just as it was ready to close and grabbed my typical sandwich, soft drink, and chips. As I was handing over the \$10 bill, I felt like I was struck by lightning. Here was another opportunity. Bringing a lunch from home would save \$50 a week, less than the cost of groceries. If cutting \$30 per week for wine spending was worth \$300K in increased income over the next 15 years, brown bagging had to be worth a cool half million dollars. These two changes alone would seem to finance the best college for Conner.

"Cha Ching," I said aloud as I took my meal back to my office where I usually ate anyway.

# Luis Calls Staff Meeting to Find Cost Reductions

Getting my staff together the next day was relatively easy as we had a regularly scheduled staff meeting every Wednesday at 10:00 a.m.

"Good morning everyone. Let's get started. I've got an important topic to add to our list, so let's get through our old business issues as quickly as we can."

Mac McDonnell, the most senior of my research division managers spoke first as was his usual preference. "Good news, boss. We've conducted all the scheduled interviews for new research staff, and my people and I have come to consensus on the three people we want to hire. They are really outstanding and will be great additions to the team. Paperwork is completed and the packages will go to Human Resources today. Each candidate seems excited about our projects and two of them were recently laid off so they are motivated. Our biggest problem will be finding them a place to sit."

Before I could announce the hiring freeze, Pete Peterson, my other division manager, joined the space availability theme: "I've got my two latest hires sharing a desk and computer. That's not very smart. It just doesn't make sense to hire well-paid talent and then not give them what they need to be really productive. Have we made any progress in addressing our space limitations?"

That question was addressed to Marty Hodges, the administrative assistant. "The whole site is suffering the same problem. Every director is complaining and needing more space. There isn't a single square foot available anywhere. On the positive side, the other administrators and I have submitted architectural plans and a contract request for a building addition. President Nelson has approved. Do you think the board of directors will approve it?"

"Frankly, I don't," I said. "And that leads me to the topic I need to bring up. It appears that we are going into cost reduction mode, so there is at least a temporary hiring freeze. Maybe cutting back staff will ease the space problem!"

"More space would be great boss," said Mac. "But will R&D be losing personnel in these cutbacks? We need to be hiring. We've spent money and a lot of time and effort finding the right people."

"It's impossible to say what will happen to us. I know we need new talent, but if things are really bad, it is probably better to not hire new people and have to let them, or worse let our experienced people, go."

"That wouldn't be very smart," agreed Pete.

"Smart or not, President Nelson tasked us to come up with our own plans and recommendations to meet a 10 percent cost reduction. I need to involve you, and you only, in coming up with something by end of the week. What are your thoughts on how we can meet this requirement?"

"Doesn't sound so serious to me," said Mac. "We go through these exercises periodically. Top management just needs some evidence that we are cost conscious and working cost reductions. We just need to comply with the requirement."

"The other thing I've seen work is to propose stopping a project like Apollo. There is nobody who would want to see that project canceled," offered Pete.

"I don't know," I said. "I think she wants something more substantive, but maybe that proposal could work. I can't see how they would really want us to cut back on any of the work we are doing. Let me have recommendations from both of you by close of business today, and Marty and I will pull together our brief."

Close of business came faster than usual and I took a look at the suggestions from Mac, Pete, and Marty for my cost reduction brief. As previously indicated, Mac had provided the predicted list of sound bites: cut travel 50 percent, cut training 50 percent, cut out the janitorial service and have employees carry out their own trash and clean the restrooms, and remove every other light bulb to save electricity. I had to question the logic of some of these cuts but admitted that they made it sound like we had really scrubbed our costs. Paying engineering salaries

for people to carry trash especially grated me, but it would certainly look like we were making a sacrifice in the name of achieving the cost reductions.

Pete's approach looked at cutting projects and the Apollo project was at the top of the list. He knew that nobody would ever want to see it canceled. I liked the fact that this approach would emphasize the importance of our work to the future products of the company. Maybe we could escape having to take the cuts that Mac had suggested.

Marty's added some suggestions dealing mainly with making cuts in other departments. For example, she suggested reducing staff in the Human Resources department: an area with which she was constantly fighting. I didn't think that suggesting cuts in other areas of responsibility was even a remote possibility to satisfy Nelson's directive, but I wasn't all that happy with Pete's or Mac's approach either.

Thoughts on how to handle the Saturday brief dominated my thoughts that night and started my day on Thursday morning. The recommended approaches didn't feel right. Mac's was essentially meeting the requirement by enumerating a list of actions that would show that we were complying, but not doing anything drastic. Sure training and travel cuts would hurt somewhat. We didn't travel or train much. Paying engineers \$50 per hour to haul trash sounded silly, but maybe they would generate less waste. Removing light bulbs would give visibility to the fact we were in cost cutting mode by, ironically, reducing visibility at the work stations. Yet, we could do these things without much trouble.

Still, Mac's approach would not result in cutting projects and reducing staff like Pete's proposal. Pete's approach seemed based on the hope that nobody would be stupid enough to actually kill the Apollo project that was recognized as the most R&D project in the company.

Both approaches were essentially different versions of cutting our capabilities. I didn't really want to cut our capabilities. How would that help us achieve our mission?

Our mission. Where did that thought come from? How did that play into the problem? Our big mission was researching and developing new products for the company. But my currently assigned mission was cutting cost and capabilities, which would be counterproductive to the bigger

mission. Perhaps my job was to work toward minimizing the damage that cutting cost would have on the bigger mission.

Needless to say, I didn't make much progress on putting together a coherent brief for the Saturday meeting. Friday morning was completely blocked off to work with Marty in finalizing the brief. I hoped we would sort things out then.

I didn't sleep well that night as my mind kept working on the issue and the alternatives. The thought of laying off good people really bothered me. Weren't they our most important asset? Was the company being shortsighted? How serious was the company about cutting cost?

I started the meeting with Marty by showing her the recommendations from Mac and Pete. "The first proposal comes from Mac who is proposing a fairly broad approach with specific reductions and hoping that the powers-that-be accept our compliance with their requirement. The second, from Pete, suggests canceling our most important project and hoping we'd escape because nobody would actually want us to do that. I don't think we would comply with the requirement by suggesting cuts in other departments as you recommended. Then there is another approach I've been mulling about. It would involve looking at our costs in kind of a military manner where we would reduce them in something of a continuous improvement mode."

"What cost would the military approach cut?" she asked sensibly.

"That's what's troubling me actually because it is an unknown. It is essentially hoping that good ideas emerge as we get into the process."

"Maybe you should call it a 'faith-based' approach and admit that you're hoping senior management allows you make it up as you go along," she said

"I think that understates the potential of the approach, but I admit I'm not that clear on how it works especially when you put it that way. The idea stems from some conversations I've been having with my father-in-law, a retired army colonel, who believes that the command and control process is a powerful and proven approach to achieving the mission."

"I think that you would be nuts to go in with a proposal you don't understand. You would never be able to sell it. If you want to consider it maybe we should call the Colonel?"

That was easy enough to do and within minutes we had him on the speaker phone. I explained the situation and our need to brief the president of the company on our recommendations the next morning. I closed this preamble by asking whether our previous discussions had any applicability to the corporate problem.

"Of course they do," was the immediate response. "If you had been attacking cost all along, you wouldn't be on the defensive now where you are trying to react to demands. The best defense is always a good offense."

"How do you attack cost and when has the military ever been interested in cost reduction?" interjected Marty, never one to be shy.

"Well, it is pretty clear that conflicts have always occurred throughout the history of the world and the winners are those commanders who use their resources most efficiently. Our military has studied this extensively and come up with a well-defined management process that we call 'command and control.'

"Our soldiers, sailors, airmen, and their weapon systems are our critical resources, and any commander worth his or her salt considers the loss of those resources to be a very important consideration. We know that there will be casualties inherent in the missions we are given, but we work very hard to minimize the costs of accomplishing those missions."

"OK, that makes sense, but it doesn't seem like efficiency," continued Marty. "Where has the military been efficient?"

"The U.S. military has long had an interest in efficiency," Jim responded. "Have you ever read about a fellow named Von Steuben?"

"I have," I said not wanting to be left out the conversation. "He was the German who taught the Continental Army to march wasn't he?"

"Prussian, actually, but yes. And you need to understand that it was much more than just parade ground marching. In those days, march drill was very important to transition a column of men marching to the battle-field into a perpendicular line abreast of men positioned to fight the battle. Before Von Steuben, the untrained American soldiers were very disorganized in the movement from road march to fighting position, and this placed them at great disadvantage to the professional British and Hessian troops. General Washington tasked Von Steuben with the unpopular and arduous task of teaching the army efficient movement during the dark days of winter at Valley Forge. You might find it interesting that Steuben

reported a big difference in dealing with American soldiers. He found that they must be told why they were doing certain elements of drill, and therefore the drill excluded any element without a practical, battlefield value."

"Battlefield value is great, but I have a hard time believing that military command and control ever worked off the battlefield?" questioned Marty.

"It may seem questionable these days since the country has provided so many resources to the Defense Department in recent years. We have a saying that 'free goods have infinite demand' and there were so few limitations on resources that a lot of people may have learned a lot of bad lessons. But before I give you a relevant answer to your question, let me test your knowledge a little. What war in our history caused the most American losses?"

"I don't know," replied Marty.

As military history was somewhat of a hobby of mine, I thought I should know the answer, but I hedged. "It has to be either the Civil War or World War II."

"It was the Civil War by far. Of course, the toll was greatly impacted by the fact that Americans were fighting each other. Now since you seem to know some history, what caused the greatest number of casualties?"

I visualized the massed ranks of soldiers standing shoulder to shoulder firing volleys at similar formations at close range. Then I also remembered the dawn of artillery and the effect of cannon firing grapeshot at such formations. I went with "artillery."

"No, the greatest source of deaths by far was the influenzas and other sicknesses that spread through camps of soldiers on both sides who were exposed to germs they had not previously encountered and an environment where sanitation and medical protocols where minimal."

"Really, that's amazing," said Marty. "I would never have thought of that. It's not that way today."

"No it is not. This was the asymmetric threat of the 19th century. Asymmetric threats are those that one does not prepare for in the normal course of military thinking. Improvised explosive devices (IEDs) are the most recent example. Military medicine and hygiene had to be, and have, continuously improved ever since. The military may not be the fastest

responder, but they are certainly dedicated to their missions and work hard to achieve them."

"OK, I get it," Marty conceded. "Now tell me more about how to attack cost."

"OK, let's start with some fundamental concepts. It's important that you understand the basics. Once you do, you can fill in the gaps and apply to your specific challenges. First and foremost, command and control is not only about attacking things in a military sense. It is a much broader, universal concept about getting things done: what we military types call accomplishing the mission.

"The military has a pretty good reputation. I believe it is consistently rated very highly in opinion polling. The reason for this is that military discipline is respected for being effective. Command and control processes are the foundation of that effectiveness. These processes almost always deal with constraints of some sort and the process provides a fundamental philosophy of overcoming difficulties in order to accomplish the mission.

"The command and control process doesn't guarantee success. The problem may be too great or resources too limited. It does, however, give you a 'fighting chance' of success because it focuses on the mission and provides a disciplined template for addressing the inevitable problems. The center of the process is the leader and the leader's definition of mission success.

"The process recognizes that making mistakes is inevitable and acceptable as long as we systematically learn from them and work to fix them. We like to say that fixing problems is much more important than fixing blame. Even Napoleon recognized that 'He that makes war without many mistakes has not made war very long.' The process therefore must not create a defensive, political atmosphere where facts are hidden and problems are swept under the rug. It must provide an environment where everyone shares the goal of identifying problems because every problem represents an opportunity to get better, to become more mission effective. Creating this environment is one of the leader's greatest responsibilities."

This made sense to me so I added, "I saw some of that political, defensive atmosphere in our last meeting on the subject. Everyone presented their budgets and everyone was very good at defending their numbers. It was impossible for President Nelson to find many savings even though

we, the supposed experts and leaders, spent hours together addressing her requirements."

"Is it really surprising that people act in their perceived self-interest? The meeting you describe was not well led and individuals on the team substituted their private missions for the leader's mission. Imagine a football team where half the linemen decide they will protect the fullback instead of the quarterback on pass plays. That team won't win many games when playing against teams with a unified command purpose."

"How do you get that unified purpose?" Marty asked.

"That's another of the leader's responsibilities. We call this establishing 'commander's intent.' This statement serves a useful purpose besides establishing the organization's mission. It also provides useful guidance for subordinates. It is impossible for the leader to make every decision, and it is inevitable that subordinates may need to make decisions themselves. Subordinates who understand the commander's intent are much more likely to make good decisions."

"Makes sense, what else?" Marty said.

"Well, there are planning, intelligence, and after action performance review dimensions to talk about. But commander's intent is the place to start thinking about your mission. The other dimensions support that goal. Why don't you give this some thought and we can talk later if you wish. I should be back from the golf course by dark."

"OK, thanks for the inputs and ideas. I'll probably be talking to you later," I said hanging up the call. "Marty, what do you think?"

"I don't know," she said. "Typically, people respond to President Nelson's type of request the way Mac and Pete responded. That's probably a safer approach. If the meeting's goal is to discuss options, maybe you could even present both of their plans and see what kind of reaction you get?"

"I like that," I said. "But if I'm going to present two approaches, I might as well present a third approach too. What should we call it?"

"Why don't you call it the 'Winning the Cost War' strategy?" she offered.

# Chairman Stewart Leads the Saturday Cost Reduction Meeting

I went to the Saturday meeting armed with the three approaches. The first, labeled Smart Cost Reduction Targets, listed Mac's suggested actions across the department. The second, labeled Project Cuts—Death Spiral, eliminated the programs and their staff enumerated in Pete's recommendations. The third, labeled, Winning the Cost War Approach, didn't offer specific reductions but promised to attack cost across the board. My plan was to show the first two and play it by ear on the third. I was hoping that "smart targets" would be more appealing than "death spiral." My guess was that we would end up with a compromise between the two approaches.

As things turned out, I didn't even get to make my presentation as the meeting turned out quite differently than expected. The first surprise was that Robert Stewart was sitting at the head of the conference room table when I arrived. Stewart was the chairman of the board of directors, and his presence was unprecedented.

Chairman Stewart also happened to be the largest stockholder and someone who had been successful in a variety of venues. Besides having built and sold progressively larger high tech companies, he found time to be an army reservist and was currently the commander of a logistical support division. As a two-star major general, he was obligated to spend two days per month in this role, but usually spent considerably more.

The importance of the meeting was clear when it was he, rather than President Nelson, who called the meeting to order. Stewart's opening remarks further confirmed the meeting's importance. "Ladies and gentlemen, we are here today to change the direction of this company. You are all aware that our financial performance has not been exactly stellar.

This fact alone should be sufficient reason for a significant cost reduction effort."

Pausing for effect, he then continued, "What you don't know is another reason. Our company has attracted the attention of a hostile suitor. Their attraction is most likely because our assets appear to be worth more if the company is liquidated. Suitors like this acquire companies and sell off the building, land, product rights, patents, and so on. You people need to know that the continued existence of this firm is in play. I hope you have some good ideas to show me today. Let's start."

The first speaker briefed a mix of spending actions and program cuts similar to Mac's and Pete's ideas in my presentation. We didn't get to the second presenter. In fact, we didn't get all the way through the first presentation. It was a bullet point proposing to "use both sides of the paper in copy machines and printers" that got Chairman Stewart's ire.

"You guys just don't get it! The time has come for this company to be more than a hobby. We must make a decent profit and doing so is important to our continued existence. If this presentation represents what everybody is going to show me, we might as well stop now and quit wasting time. Printing on two sides is hardly a strategy. It's common sense. The same goes for a lot of the other bullet points in the presentation. All they represent is token, lip service to the problem. And the program cuts you suggest are what I call the 'sacred cow' strategy. You suggest something you know doesn't make sense and hope that nobody would actually make you do it. That is distinctly unhelpful."

The silence in the room was deafening as we all stared down at the copies of our own briefs and reflected on what had just been said. President Nelson also didn't say a word. She seemed to realize that she was just a bystander as Chairman Stewart had effectively taken over the company in this moment of crisis.

Stewart broke the silence with "OK, I'm serious about not continuing this farce, but it's important that we move forward. I really do want some creative thinking here. Nobody here is in trouble. I love and respect you all. This is pretty much what I expected. But surely, somebody has something positive to contribute?"

Unbeknownst to me, I must have looked somehow positive because he then called on me to share my thoughts. "Well," I began slowly. "We have been thinking about an approach to attacking cost in general through a program of continuous improvement that we call 'Winning the Cost War."

"Do you have specifics?"

"Not many, sir. We are working through the concepts, though. The general idea is that we start by defining our mission and then use some of the command and control techniques that the military has proven."

"Do you have specific cost reduction savings to talk about?"

"No sir. I guess it's kind of like R&D. We and all our competitors do R&D because we know that there are always better ways to do things, and we invest in finding them. I can't tell you exactly what will come from our R&D projects, but I can tell you we will be developing the future products of the company. This approach to cost reduction is similar. In this case, we'd invest in discovering smarter ways to do our missions more cost effectively. We will assume that we can find better ways to operate and invest in finding them."

"I see. Does anyone else have a different approach or any other suggestions? Don, what do you think would help?"

Don Shaw, production department director, offered, "Benchmarking. We could study other companies in our industry and compare our performance with theirs. That would tell us where we are good and where we are not."

"Thank you, Don. Jack, what are your thoughts?

Jack Floyd, the chief financial officer, brought up his perennial pet project. "Sir, we really need a better accounting system. We are in the dark ages compared to the latest Internet-based, enterprisewide systems. Once we get better numbers, we should be able to really manage cost better."

"Thank you, Jack. Anybody else have something to contribute?"

After a painful two-minute pause that seemed like an hour, he said, "If not, I don't see anything more to accomplish in this meeting and given our problems, we don't need to be wasting anything—including your time. I will give this some thought and be outlining our action by Monday. Working this issue is my most important task over the next few months, and I am sure you will be seeing a lot more of me than you would probably like."

As the group began quietly shuffling out of the conference room, Nelson stopped me and asked me to stay. "Oh no," I thought. "I've really stepped in it now."

Chairman Stewart shut the conference room door after everyone, except President Nelson and I, had left. Probably more to relieve my tension than for any other reason, I said, "Sorry I didn't have a great program for you. Am I still your R&D director?"

"No you are not," came the reply and my heart sank. Unlike the proverbial review of life that comes during a near-death experience, my thoughts jumped to Emily, Conner, the mortgage, the credit cards, and a crushing feeling came over me.

"At least for a while," continued Chairman Stewart. "You are the only one here who had something useful to offer, and you will be on temporary assignment reporting directly to me until we get through this crisis. Your subordinates will have to carry on without you for the time being."

I could only look at him in stunned silence as he continued, "I understand that you don't have a defined program, but I believe your R&D instincts of discovery are exactly what we need. I'm also intrigued by your mention of command and control techniques, which are things I have certainly used in my army career. Were you in the service?"

"No sir. I had hoped to go to West Point and even obtained a nomination. However, my eyes disqualified me. I have read a lot of military history, and I do have a father-in-law who is a retired colonel."

This was probably more information than he wanted to hear, and he didn't say anything more for a while. Finally, he said, "OK, no matter, we will work through it together. What's the worst that can happen? We are staring disaster in the face, and doing nothing is not going to change a thing. I'd much rather go down swinging. Any questions?"

"What about Don's benchmarking suggestion? That might give us some great insights. And what about Jack's feeling that we need to get better accounting systems as a prerequisite?"

"Look, Luis. Accounting measurements can always be improved, and no decent accountant would ever be satisfied, no matter how much we spent on accounting. Hell, we could hire an accountant to follow each worker around full time to record everything he or she did and then some would claim we need to hire accountants to measure the work of accountants. That's a nonstarter.

"Don's benchmarking recommendation doesn't fit our need either. First, it would take a long time to do a benchmarking study. That's time where we could be actually working on issues rather than just studying them. Second, in my experience, unfavorable comparisons with other companies can usually be explained, or at least defended against, by noting differences in workload, environment, or measurement practices. Furthermore, we need 100 percent of this organization engaged in cost reduction, not just the bottom 20 percent as defined by a benchmarking study. That dog don't hunt!"

"OK, what's next?"

"I want a more fleshed out proposal from you Monday."

"Monday is pretty fast. I don't think there is any way to figure out a comprehensive program so quickly. And it might not be a good idea to start off on the wrong track."

"Look," Chairman Stewart said somewhat more sternly than I would have hoped. "We don't have a lot of time to waste. One of my favorite quotes from Old Blood and Guts George Patton is that 'A good plan violently executed today is better than a perfect plan tomorrow.' Time is our enemy. We need a real sense of urgency here. As they use to say in *Mission Impossible* it is 'your mission should you choose to accept it.' Do you want this mission?"

"Yes I do," was an almost reflexive reply. What else was I going to do? There was really no choice.

"Anything else?"

"Will I have any help? Can I take some of my staff with me to this assignment?"

Chairman Stewart turned to President Nelson. "Can you spare one of his people?"

"Of course, one, but not the admin chief."

Things were looking increasingly hopeless, so I thought I had little to lose by pushing back a little. "Sir, Monday is the day after tomorrow, and it sounds like you will want aggressive deadlines as we continue. If I can only have one support person, I have to have my admin chief, if we stand a chance of success."

#### 40 CENTS OF MISSION

"OK," he replied without deferring to President Nelson. "But you have got to understand that the goal here is to reduce cost. Putting your salary and your admin chief's salary into the program means we are increasing cost, not reducing cost. I hope you understand that we cannot put a lot of money into the effort when our goal is to reduce cost."

"Yes sir. I understand. What time will we meet Monday?"

## Al Educates Luis and Marty on How Command and Control Drives Mission Success

Before leaving the parking lot, I made two calls. Marty answered on the first ring. I told her that a crisis had come up, that we had a Monday deadline to meet and that I needed her to work the weekend. She responded, "I wasn't doing anything. When and where?"

I asked if she could come to the house at noon and then dialed the Colonel. All I got was the answering machine, so I left a message saying that a crisis had come up at work and that I really needed to talk and, hopefully, to meet with him today.

The Colonel's car was in my driveway when I pulled in. As I entered the house, Conner came running squeaking "hi, hi" and promptly tripped over a toy for his effort. Fortunately, he didn't get hurt or cry. He just picked himself up and continued to my outstretched arms. It caused me to marvel on the learning process involved in walking. We have all gone through it, falling hundreds of times. Yet we gradually get so good at it that we take it for granted. I hoped that we would learn faster in dealing with the financial issues that now dominated my thoughts.

Turning to my father-in-law I said, "Colonel, I'm glad you are here. I'm just getting back from a meeting at the office to deal with a financial crisis and I'd like to continue the discussion we started."

"Hmm, it must be serious if you had a Saturday meeting? Is your job in danger?"

"Funny, you should ask that. In a sense, I lost my job this morning. Somehow I was appointed to leading the company's cost reduction effort by the chairman of the board."

"It sounds like we do need to talk, and congratulations on your new responsibilities. Why did you get the assignment?"

"I'm not sure. I expressed some thoughts about attacking cost that came from our discussions. The chairman seemed to want new ideas and approaches, and maybe he thought that someone with R&D background would be more open to new ways of doing things."

The doorbell rang, and Emily answered it and let Marty in. "Colonel, this is Marty Hodges. She is my administrative assistant and will be working with me on this new assignment. Marty, you know Emily and this is my father-in-law, Al. He is the Colonel we talked to on the phone the other day about cost management and control. We are going to need ideas. I just got back from the office where there was an emergency meeting to deal with the company's profitability. The chairman of the board, Robert Stewart, ran the meeting. The meeting was a complete disaster. After the meeting, he tasked me with the responsibility of working out a corporatewide response."

With a puzzled, but concerned, look on her face, Emily said, "Welcome to the party Marty. It sounds like you all have a lot to do, so I'll take Conner, and we will go out for our walk."

Five minutes later the Colonel, Marty, and I were seated around the dining room table. After recounting the events of the morning, I turned to the Colonel and said, "The problem seems so overwhelming to me. I've never done anything like this before. Where do we start?"

"Look, I don't know a thing about your business, so I hope you don't think I have all the answers. Maybe I can help you address the right questions. I do have a lot of experience in dealing with chaos and uncertainty in trying to complete a mission. That is what the military is all about. So perhaps I can give you some ideas to help frame your thinking.

"Our phone call dealt with continuous improvement of tactical operations. At the risk of over simplification, let me expand the field a little because in the military we tend to think of two broad, but often, overlapping processes: the strategic and the tactical. Strategy deals with the big issues and policies. We do a lot of thinking, planning, and questioning in this phase. We develop alternative courses of action and evaluate them before making the big decisions that end up defining an array of tactical missions. Tactics, on the other hand, deals with the details of execution by the people who are actually carrying out missions."

"Wait a minute," said Marty. "Didn't you say that defining the mission was the place to start when we talked the other day?"

"Of course it is. It sounds like the chairman has made a strategic decision and given you the task of defining, organizing, and executing the wide array of supporting missions to support his commander's intent.

"Missions have many aspects. The ultimate strategic mission to defeat the enemy has many components. Developing the right kind of tank is a strategic decision that involves a choice between a number of different solutions or designs. Another strategic decision would be deciding on how many tanks versus other types of equipment should be in a tank battalion. Another would be the high-level battle planning that would decide whether to attack the right or the left flank.

"On the other hand, the performance of a specific tank to attack a specific point on the left flank now gets to be a tactical issue. We rely on tank commanders, drivers, gunners, and loaders to proficiently do their job in executing the attack. Furthermore, we want that unit to be well trained and continuously improving their mission effectiveness. Does that help?"

"Maybe, but how does that translate to our world?" Marty interjected.

I felt compelled to try to bridge the gap. "Let me see if I can merge some of that with basic business concepts. While our overall mission is to be profitable, accomplishing that mission has many components. It sounds like the Colonel is saying that developing business strategy involves big, nonrecurring decisions, while the tactical works throughout the organization on the frequently recurring operations and processes. I'd guess that tank unit doing the attack has done it scores, if not hundreds, of times before in training or previous battles and has come down the learning curve."

"Learning curve?"

"A learning curve is basic MBA stuff. It expresses the downward trend of cost per unit as experience, and therefore learning, increases. Over time, it is learning that leads to better and smarter processes so that cost per unit goes down. It is a very important concept."

"OK, so what does it mean in terms of our problem?"

"I think it means that there are two approaches to cost management and control. One supports nonrecurring strategic decisions and the other supports continuously repeating tactical operations. Something like cost benefit analysis would fit the bill for those large, nonrecurring decisions. CBA is simply a decision support tool. Tactical operations, on the other hand, are ongoing and require more of the continuous command and control process we've been talking about. Its improvement must come from a continuous improvement process."

"Tell us more about how the military drives continuous improvement," Marty requested of the Colonel.

"Well, that's the command and control process we've touched on before. The key is the after action review of performance. It is here that we ask three questions. They are:

Number one: What was expected? Number two: What happened?

Number three: Why was there a difference?"

"What do you mean? How are these questions helpful? Looks like you are just trying to pin the blame on a scapegoat," quipped the ever cynical Marty, even though I was thinking the same thing.

"Here's where skill in leadership is important. Finding blame is more of a political process and we don't want that and all the defensiveness and spinning that comes with it. We want a team of people who accept the mission to honestly critique their own performance and constructively determine how to do it better. The attitude in a good after action review is that the way we performed was the best we knew at the time. Then we focus on what we experienced or learned in the latest battle or the training event and ask how we can do it better next time."

"OK—I remember you saying the process is about fixing problems, not fixing blame," I injected not wanting to be left out of the conversation.

"Precisely. I think you've got it, but it is easier said than done. It has to be well led. If the review is not well led, it will degenerate into a blame session that puts everybody on the defensive. When everybody is defending themselves, it is impossible to attack the real problem."

"I get it," said Marty. "The goal is to get everyone acting like a football team to improve its play execution as it practices and plays."

"That's right, improving execution is the goal, but we can also change our plan too. It may be that we expected a 200 pound guard to block a 300 pound pass-rushing tackle and that unrealistic expectation led to the quarterback being sacked. In the after action review, we might recognize that we expected too much and assign the halfback to aid in blocking the next time we run that play."

"OK," I said. "I think we have the fundamental concepts. How do we operationalize concepts for the plan Chairman Stewart wants Monday?"

"Sorry, not much I can help you with there. You know your business. I don't. But the concepts are powerful. You should be able to figure it out. And I've got a tee time in 20 minutes and you have already 'cost' me time at the driving range!"

"Thanks, Colonel. And I guess you should talk faster the next time we meet, or you should plan on my delaying you the next time you visit!"

"Touche and good bye."

## Luis and Marty Work up Brief for Chairman Stewart

Marty and I met at the office at 8:00 Sunday morning and immediately got down to the task of preparing the presentation for Chairman Stewart. It was clear that there would be two components. The first would emphasize the use of cost benefit analysis (CBA) for major nonrecurring decisions and the second would address developing a cost management command and control process for ongoing operations.

CBA seemed like a pretty simple concept. Everyone could understand that costs and benefits should be considered in making a decision. It was pretty clear that everything we do in life that is not an emotional or reactive response involves some sort of implicit weighing of costs and benefits.

It wouldn't be enough, however, to just tell everyone to do this. We would have to have something a little more formal. We would also have to have some sort of validation process on the numbers. I had seen too many presentations where an advocate overstated benefits and ignored or understated cost. In fact, in some cases, the cost would show up in other departments. We had to have a process that would provide unbiased numbers if management was to get value from the effort.

We started on laying out a logical sequence of components and three hours later, we had documented an eight-step process. From previous experience, we knew there was a tendency when doing analysis to move too quickly to the number crunching—often biased by preconceived conclusions. We therefore decided the CBA should start by clearly defining issues, assumptions, and alternative courses of action.

Cost and benefit estimates would then follow. We recognized that some of these estimates would be soft numbers. That is to say that some estimates, particularly of benefits, might be highly subjective. While this was somewhat disconcerting, it appeared unavoidable. We concluded that

a CBA was not a mechanical process that determined the single "right" answer. We began to see CBA as essentially a decision support tool that would ensure that major, strategic decisions were cost informed, not cost dominated.

Finally, we felt there should be some method of scoring or ranking the alternative courses of action. These were evaluated by what we called "selection criteria." Once a CBA had defined these, the final steps would be the comparison of alternatives and conclusions.

We debated the order of these steps for some time as it appeared likely that new alternatives might come to mind as the CBA was developed. We decided that this was a good thing and that the steps should not be rigidly sequential. They should be considered more like a guideline with great flexibility to move from downstream steps back to beginning steps as new facts and thoughts occurred. In fact, we concluded that such movement was a good thing as it represented learning and creative thinking.

Our Eight Step CBA Process had the following components:

- 1. Define the problem or opportunity
- 2. Define the scope; formulate facts and assumptions
- 3. Define alternative courses of action
- 4. Develop cost estimates for each alternative
- 5. Identify quantifiable and nonquantifiable benefits
- 6. Define selection criteria
- 7. Compare alternatives
- 8. Report results and recommendations

We then switched gears to developing our continuous improvement program and decided it would rely on the organization chart of the company. Each department had a number of divisions. Divisions had branches and branches had a number of cost centers in most cases. We, therefore, had a hierarchy that looked something like any other organization chart.

Each node in the org chart would be a logical place for an after action cost review. The corporate level review would be with department managers. Large departments could have previously had reviews with their divisions, divisions with branches, and branches with cost centers. Four levels of review would cover the entire company. Each manager would

have a meeting presenting to his or her boss and all managers except those at the bottom of the hierarchy would also be leading a review with their subordinates. This did not seem too burdensome, and we decided to recommend monthly cycles to start the program.

The Monday morning meeting in the president's office was attended by President Nelson, Chairman Stewart, Marty, and I. I laid out the strategic Eight Step CBA Process and the tactical Continuous Improvement Program in general terms. Neither Stewart nor Nelson made any comments or asked any questions during the 10 minutes or so it took me to outline my recommendations.

After I concluded, Stewart turned to Nelson and asked, "Melanie, what do you think?"

"Who could be opposed to cost benefit analysis and continuous improvement? Our accounting consultants just completed a major contract that built activity based cost models of all manufacturing operations so maybe that would be a good place to start. Activity based costing breaks down the costs of operations into discrete work activities, and according to the accounting journals this has proven very helpful to many companies."

"OK, we should be able to start that quickly in manufacturing. What can we do in the nonmanufacturing areas?"

"We can have those areas develop performance metrics and report them."

"Great, I'd immediately like all manufacturing areas to implement activity based costing and all nonmanufacturing areas to report performance metrics. Luis, when can we start?"

My mind was struggling to grasp how the strategic and tactical programs I outlined would work with activity based costing and performance metrics. My proposal was theory and policy. Stewart was pushing for rapid operationalization. Nelson was introducing accounting techniques that I really didn't understand. However, she was the accounting expert having based her career in that area, and consultants and accounting journals surely knew what they were talking about.

I had clearly lost control of the meeting and decided to try to back away, "Sir, we are moving out of my area of expertise. Perhaps that question and this program should go to the CFO or to President Nelson or someone better qualified than I?"

"No Luis, this is your baby. I picked you because we need to make new ideas work and that's what you R&D types do."

I again wondered how I had found myself in this position. I knew science and engineering, not accounting. Now I was on the spot to implement something outside my comfort zone. Relying on what I knew I said, "Well, if this were a new manufacturing process we developed or a new product we invented, we would test it first. Perhaps we could try out this approach first with a couple pilots. One would be in manufacturing and one outside of manufacturing. This would allow us to work the bugs out and improve the technique before we bet the company on it."

"I knew there was a reason I wanted you to head this project! So, Luis, let me rephrase my question. When can we start the pilots?"

"Let us take a quick look at the data available and shoot for a meeting next week."

"I want to see the pilots this week. Let me save you a little time so that we can move out faster. I'll pick the two areas so you won't have to spend time trying to find the best ones. Let's look at the Maintenance Shop in Manufacturing and the Marketing Department. That should be the end of this meeting."

As no further discussion seemed possible, Marty and I packed up and left the office. "What do you think, Marty?"

"At this rate, it looks like we will be working days, nights, and weekends."

"We will worry about the weekend when we get there. We certainly have a lot of homework to do today and probably tonight. Have you ever worked with activity based costing or performance metrics?"

"Can't say that I've had that pleasure."

## Researching Activity Based Costing and Performance Metrics

I assigned Marty to research the use of performance metrics and to work with Jim Wilson, the marketing director, on a draft of his metrics. I tentatively scheduled an informal meeting with him and Marty for Wednesday. I then started to learn about activity based costing or ABC, as it is known to practitioners.

As usual, I started with *Wikipedia*, the free online encyclopedia. It offered the following:

Activity-based costing (ABC) is a costing methodology that identifies activities in an organization and assigns the cost of each activity with resources to all products and services according to the actual consumption by each. This model assigns more indirect costs (overhead) into direct costs compared to conventional costing.

CIMA (Chartered Institute of Management Accountants) defines ABC as an approach to the costing and monitoring of activities which involves tracing resource consumption and costing final outputs. Resources are assigned to activity, and activities to cost objects based on consumption estimates. The latter utilize cost drivers to attach activity costs to outputs.<sup>1</sup>

I started to get a headache. This was really more than I wanted to know. I called Megan Streicher, the maintenance division supervisor, and

<sup>&</sup>lt;sup>1</sup>"Activity-Based Costing," *Wikipedia*, last modified May 9, 2015, http://en.wikipedia.org/wiki/Activity-based\_costing

asked her to come to my office to help me understand her ABC numbers. She agreed to drop everything and come immediately. I wondered what she knew about the company's problems.

Ten minutes later, I was looking at a notebook with about a 100 pages of numbers. I was impressed with the detail. Every number was calculated to the penny! It looked like an amazing amount of work had gone into this effort.

I explained that the company needed to increase its cost effectiveness and that the chairman of the board had chosen her department to demonstrate how ABC could help in that effort.

The response was a blank look and a statement of "I was hoping that you could tell me how to use this stuff."

I was surprised but opened the notebook to a page titled "Lathe Preventive Maintenance." "What does this page tell you?"

"Well, the bottom line there tells me the cost of performing preventive maintenance for lathes last year and the numbers above are last year's costs of all the activities involved."

"Isn't that a good thing to know? Doesn't it help you run the department? Look at all the detail, and it's calculated to the penny." I shot off in rapid succession.

"When I first saw that number and a lot of the others, I said, 'gee whiz, that's interesting.' But that's about all I've been able to do with it."

"It looks like a lot of work went into the costing effort. It has to tell you something?"

"These numbers are from last year. I can't remember last quarter's problems, much less last year's. I didn't even move to the department until the second quarter, so I had no knowledge at all about what happened in the first quarter anyway. What am I supposed to do with this?"

"There is a lot of detail here. Look at this number here. It says 'facilities cost'. Do you know where that number comes from?"

"It comes from the computer so it must be right. But I don't understand it, and I really don't believe it. My preventive maintenance people don't even have offices or work spaces as they spend their day moving from machine to machine on the factory floor. And I don't know what I could to do with it anyway. I don't have a clue whether it is good or bad."

"OK," I said not knowing what to say next. I picked up the phone and called the cost accounting supervisor to find out who worked with the Maintenance Division ABC. It developed that they didn't assign staff to work on specific departments. I pushed the button for the speaker phone and said, "Maybe you can help me then. Megan Streicher and I are looking at the ABC report for the Maintenance Division and trying to figure out how it works. Do you know where these numbers come from?"

"The general ledger is the source of all cost inputs."

"How good is the general ledger?"

"Our ledger passed all audits, so I'd say it is pretty good."

"Oh, and how does the general ledger determine the facilities cost for the Maintenance Division, for example."

"The general ledger doesn't do that. It tracks all the transactions involving expenses across the company. The accounting code on transactions allows us to identify those associated with the Facilities Department. The ABC model then allocates Facilities Department cost to Maintenance."

"What do you mean by allocation? Is that a charge?"

"Technically, no. There is no general ledger transaction. Allocation is an internal proportioning or tracing of facilities cost to those who consume it. The idea is that the full cost of the Maintenance Division includes a portion of the cost incurred in the Facilities Department. Allocation is just the mechanism to make that cost visible to the maintenance manager."

"OK, sounds like a charge to me but at least we are now starting to get somewhere. I understand that ABC looks at consumption of resources, and Megan and I are trying to figure out her consumption of Facilities. How did the ABC model come up with this allocation for last year?"

"Give me a minute to look it up. It looks like the Facilities Department allocates on the basis of labor hours."

"Let me see if I understand what you are saying in terms of the mechanics. I think you are saying that the Maintenance Division labor hours as a percentage of total labor hours determines their share of the cost incurred in the Facilities Department. So if Maintenance accounts for 15 percent of total labor hours, for example, they would be allocated 15 percent of the Facilities Department cost. Is that correct?"

"Well, sort of. The Facilities Department cost has to be adjusted first since it is charged cost allocations from other departments too. In fact, it even allocates to itself."

"Come on, you're kidding. I can't believe that generally accepted accounting principles are so convoluted. How did we pass the audits?"

"GAAP doesn't apply to this sort of thing," the cost accounting supervisor retorted somewhat indignantly. "This allocation technique is called 'reciprocal' allocation, and it is built into the ABC model. After all, Facilities Department occupies space too, doesn't it?"

"I suppose it does," I conceded. "But how can the Maintenance Division supervisor understand and control her portion of Facilities Department cost? Some of her people don't even have work spaces, and they are still being charged Facilities Department allocations."

"They report labor hours, don't they? That's how."

"That sounds wrong. Why are we allocating Facilities on labor hours?"

"Look, you are getting above my pay grade. All I can tell you is that we have very good, very accurate labor reporting through our time and attendance system. It is a very accurate methodology in my opinion, and we use labor hours to allocate a lot of our overhead and support functions. It's never been a problem in the past."

"OK, I understand, and I'm sorry if it sounds like I'm questioning your work. I'm just trying to understand where the cost is coming from and how we can use the information to reduce cost. It appears that the only way to reduce the allocation charge in Maintenance Division is to cut back on labor hours. That would make it pretty hard to get the job done, and it is not clear how that would really reduce the cost of the Facilities Department."

"No problem. I have trouble understanding some of these decisions too. They are really assumptions about consumption. President Nelson, herself, made these allocation assumptions when she was CFO. Who am I to question her? She knows a lot more about accounting than I do, and she was the boss at the time."

I hung up the phone, looked for aspirin for my now pounding headache, and turned to the maintenance supervisor. "Megan, I'm starting to understand some of your frustration. Let me give this matter some thought, and I'll get back to you."

As she left, I thought what I had just learned in comparison to the Colonel's requirements of usefulness, credibility, and affordability for good intelligence. I wrote down conclusions on my notepad.

- 1. Annual data *not useful* for continuous improvement process
- 2. Not possible to hold people accountable for data that is *not credible* to them
- 3. Probably a very expensive and time consuming measurement process and therefore *not affordable* in our time of crisis

My initial impressions of ABC as salvation had been changed. I thought of the tools in my garage. Some work for certain problems and some for others, but no tool worked for all situations. ABC could probably be modified for our needs, but it looked like that would be a major effort beyond the scope of my mandate. And it would take time and resources that we apparently did not have.

I picked up the phone and called Marty. "How is your work with performance metrics going?"

"Not too well, I'm afraid. According to the *Wikipedia* website, developing performance metrics follows a process of (1) Establishing critical processes/customer requirements, (2) Identifying specific, quantifiable outputs of work, and (3) Establishing targets against which results can be scored.<sup>2</sup>

"Jim Wilson says the critical processes in Marketing would be things like supporting the Sales Force and managing product pricing and profitability, but we don't know how to measure specific, quantifiable work output or how to establish meaningful, scored targets. Sure corporate sales and profit are measureable and quantifiable, but they are impacted by so many things outside of the Marketing Department that it is hard to measure Marketing's contribution to these metrics for good or bad."

"Hmm. A metric is not very useful if there is no real accountability." I put a checkmark next to my earlier note of *not useful*.

<sup>&</sup>lt;sup>2</sup>"Performance Metric," *Wikipedia*, last modified February 28, 2015, http://en.wikipedia.org/wiki/Performance\_metric

"Jim and I also discussed other kinds of work measures like number of sales call visits and minutes of phone contact. More of these things are generally good, but they don't necessarily correlate to more sales and profit. In fact, they might increase if we had a big decline in sales or a major quality problem that required customer visits and phone time. And we are not clear on how we would measure even these simple things. Do people self-report? If so, how do we know the reporting is accurate."

"Credibility of the metric would be very suspect." I put a checkmark next to the *not credible* in my notes.

"We could set up some kind of system or procedure to capture the data and bring in the accounting department to audit the metric reports."

"That would be expensive," I concluded as I added a final checkmark next to the *not affordable* note.

"We ended up with eight or so measures we could report. We also concluded that Jim would put a green, red, or yellow star next to each to indicate whether he felt the metrics showed good, bad, or OK performance. You know, it might be simpler if we just asked Jim how he thought he was doing because that is essentially what we would be getting."

"Sure, and what do you think Jim would say?" I underlined my *not useful*, *not credible*, and *not affordable* notes and said, "Marty, I'm not comfortable with where the activity based costing is going either. It looks like we really have problems in defining the right measurements needed to support the goal of accomplishing our cost reduction mission. My brain is literally hurting, and I need more time to think this issue through. Let's meet first thing in the morning."

I locked my office and left intending to stop at my favorite liquor store for a nice single malt on the way to the Colonel's house. Halfway there I remembered my own personal Cost War and diverted to Costco for a discounted blend.

# Luis Talks with Colonel About Intelligence Gathering

The Colonel welcomed me at the door with a jaunty "How goes the battle?"

"Not very well I'm afraid. It looks like there can be casualties in a Cost War and that I may be one of the first."

"Can't be that bad. Come on in, and we will open that bottle and try to figure out a battle plan."

Ten minutes later, we were comfortably sitting on the patio and I began to explain my frustration. "I made my recommendations for strategic use of cost benefit analysis and tactical implementation of a continuous improvement process. I'm not sure the president or chairman really got it because the focus immediately shifted to accounting options. It was as if cost accounting alone would solve the problem. President Nelson comes from an accounting and finance background, and she pushed the discussion into activity based cost accounting for manufacturing areas and performance metric reporting for nonmanufacturing."

"I see. I know of no battle in history that was won by merely doing the reconnaissance, no matter how good. Accounting is simply the reconnaissance input to fighting the battle. Bad recon, on the other hand, is responsible for many lost battles."

"What do you think about activity based cost accounting and performance metric reporting?"

"I don't know much about activity based accounting, but I've read it has helped many companies. Metrics are kind of a sore spot with me due to my recent experience at the Veterans Administration Hospital. I've been having a hard time getting appointments and lo and behold it turns out that schedulers were manipulating appointments in order to look good on their metrics and perhaps even to get their bonuses.

"It's now coming out that VA management had put in a metric goal of 14-day wait time for appointments. This would have been a good thing if the organization had been led to constructively attack the constraints. However, it was a lot easier for many people to manipulate the scheduling process to report metrics that made them look good than it would have been to fix the problem. It illustrates the law of unintended consequences."

"Wow. It is hard to believe that people would do that when their mission is helping veterans."

"Don't be naïve. Each person has his or her own personal mission, as do you. This is why leadership is so important. Look, if any employee at your company wanted to help corporate profitability, he or she could request a pay cut tomorrow. Not likely! Why? Because we all have personal as well as organizational missions."

"So employees and human nature are the problem?"

"Not necessarily. Human nature is a given, just as certain as any terrain feature on the battlefield. Both must be understood by leaders and factored into the battle plan. Ignoring reality is one of the worst things a military leader can do. Battles are not won by wishful thinking. I believe that the failure at the VA is a failure of leadership. You should not have gotten me started on this subject. That is probably more than you wanted to hear."

"No not at all. I had an uncomfortable feeling about metrics and you have confirmed my intuition. The idea of metrics sounds good, and I'm sure that there are examples of good use. But it seems clear that a great metric is a rare thing."

"Perhaps it would be more correct to say that merely reporting a metric does not guarantee a victory. The 14-day metric at the VA could have been a very useful measure if the numbers were useful for accountability, a credible reflection of reality, and affordable to measure and report. A metric with these features could be a good intelligence input to leaders in the command and control process."

"That's fair, I guess. But how do you insure that the numbers are accurate? A metric is not useful for accountability unless it is credible enough for accountability to be given and accepted."

"Insuring accuracy in the VA scheduling metric probably could have been done, but it wouldn't have been cheap. Recognize that the reported numbers were probably accurately pulled from the scheduling systems. The credibility review would have had to test their underlying ability to reflect the reality of patient wait times. Verifying credibility could have been done through some sort of test and audit process, but that would have been expensive."

"Ah yes, affordability," I said opening my notebook. "I wrote down the problems I had with the activity based cost accounting that I was shown. Looks to me like usefulness, credibility, and affordability are all required. Having one or two isn't enough. We would need them all."

"Usefulness, credibility, and affordability are the critical aspects of any intelligence input to a battlefield command and control process. There are an infinite number of intelligence inputs that could be sought. Some are very useful, most are not. Inaccurate or misleading intelligence can be very dangerous. And no commander can afford to put unlimited resources into intelligence gathering. By the way, that is why giving the enemy bad information is important. It even has a name: disinformation."

"It is beginning to sound like the intelligence officer is the key to winning or losing a battle."

"No doubt, intel is very important. But it is a supporting arm, the fight is carried out by the operators. The commanding officers in the chain of command bear the ultimate responsibility for everything, including the intelligence gathering. In fact, we train up-and-coming leaders early in their careers in their responsibilities for intel gathering. Specifically, they are taught IPB—intelligence preparation of the battlefield.

"Moreover, they are taught that it is their responsibility to determine the EEI—the essential elements of information. Otherwise, they would want all information about everything, instantly and at all times. Too much data, besides being unaffordable as you put it, is also very hard to use. Imagine trying to drive a car with a one to one scale road map that showed all the detail you can see. It would be overwhelming."

After a short break to refill the glasses, I summarized my feelings: "I'm more and more confident that activity based accounting and metric reporting are not what the company needs at this time, and we must

come up with a different approach. I'm less clear on what that approach might be. Any thoughts?"

"I can't do the IPB or EEI for you. You and your boss know the fight you face better than I do. I can only suggest falling back on the battlefield command and control doctrine we have talked about. It seems to me that the only way to improve performance is to create a learning organization that is unified around the mission as defined by the leader: that Statement of Commander's Intent. I'd start there and then clarify the accountability issues: what we call the chain of command. Then it is a matter of providing good enough intel sufficient for the after action review processes in order to create the conditions for success."

"Conditions?"

"Yes, before the battle, you can only create the right conditions for success. You still have to fight and win the battle you know."

"Makes sense."

"Enough business. Tell me about Conner. I heard he has a bump on his forehead after running into a table edge?"

"Oh yes he does. He's amazing. He has just learned to walk and he is already trying to run. I guess he will learn some things the hard way."

"We all do. When Emily was a baby she had a bruise in the same place on her forehead for months because she kept bumping the same place. But you know, I've noticed that it's no longer there. That's part of human nature too: the good part. We learn from our experiences. I think there is a quote somewhere that avoiding mistakes comes from the good judgment we only get from the experience gained in making mistakes!"

#### **CHAPTER 12**

# Luis Reengages Chairman Stewart on Cost Accounting and Metrics Issues

"Sir, activity based accounting and performance metrics will not achieve your intent. We are not going to report our way to profitability. It looks to me that the only way to improve performance will be through changing the way we operate for the better. We need to create a learning culture, and you need to lead the transformation process or it is not going to happen."

This was my somewhat bold opening statement in the one-on-one meeting I initiated with Chairman Stewart the next morning. I had clearly caught him off guard with my carefully prepared opening that was calculated to confront the issues head on.

"What do you mean? I thought we had a plan and a timetable to execute it?"

"No sir. All we did when we last met was to force fit a couple measurement tools. Marty and I have been exploring those tools, and we are convinced that all we will get is compliance with new reporting requirements. Activity based cost accounting and performance metrics are simply measurement tools and by themselves they will not get us to cost reductions and improved profitability. They will not be measuring the right things to drive the accountability you seek. If we do a thorough IPB. Sorry, I meant to say if we do a ...."

"Wait a minute. IPB? I know something about IPB. What do you know about IPB, and how do you know it?"

"IPB, intelligence preparation of the battlefield, is the leader's responsibility in determining the essential elements of information

necessary to accomplish the mission at hand. My father-in-law is a former colonel, and he has been educating me on how the military gets missions done."

"I've spent a lot of time in uniform and am actually still a part-time soldier. So I am very familiar with IPB, but tell me what it has to do with our situation."

"According to the Colonel, the fundamental concepts of command and control apply to the achievement of the mission: any mission whether military or otherwise. He's convinced me that the problem of getting something done in the face of constraints is a very common problem. He tells me that components of command and control are well documented and that intelligence gathering is simply one of the requirements."

"I can't disagree with that. I've just never thought of it that way. OK, you have my attention. First tell me the problems you have with activity based costing and performance metrics and then you can tell me what you think we need to do."

"I met with the maintenance supervisor and tried to visualize what she would show at the Friday meeting you wanted. Unfortunately, the activity based costing she showed me was annual data from last year. The data is page after page of details and covers too big a time period, too long ago to be useful intelligence for a continuous improvement process."

"How long a period do you think the data should cover?"

"Well, that is really your call if you are doing the IPB. I'd recommend we start with monthly reviews in most areas."

"OK, why don't we just run the ABC system monthly?"

"Monthly data would improve usefulness, and we certainly could do that, although my understanding is that inputting all the data is a burdensome and therefore expensive task. But even if you decide to make that investment, there are still significant credibility problems with the data."

"Credibility?"

"Our activity based costing processes use reciprocal allocation. This is supposedly the most accurate method, but it makes it difficult for the recipient of an allocation charge to understand it. Anything that clouds understanding diminishes acceptance of the number. I doubt anyone would accept accountability for numbers they don't understand or believe. To make matters worse, the allocation of cost may be based on

parameters that don't reflect consumption of resources, which would also preclude action and reduce accountability."

"Now you have lost me."

"I have two concerns. First, reciprocal allocation tries to consider all support consumption by all organizations, including other support functions and even the organization itself. While this may be a noble goal, it makes the numbers very difficult to track. Second, the basis of allocation is the parameter or driver used to assign cost to departments. In the example of the Maintenance Division, the division's share of direct labor hours determines its share of Facilities Department cost no matter how much or how little space the Maintenance Division actually occupies."

"That just doesn't seem right. It sounds like managers have no idea of the real cost of their own space and no way to reduce it. I suspect that may be the reason we are so tight on space in this company. Take a note that we need to attack the facilities cost issue directly in addition to whatever we decide here. So what do we use for cost information for Friday's meeting?"

"Attack is the right word, sir. I'd suggest that if you want to hold the maintenance division supervisor accountable for her facilities then the cost should be causally related to the space she holds. This would provide usefulness and credibility. Affordability constraints mean we can't develop an elaborate and expensive system to get this information. I'd guess the answer lies somewhere in the Accounting Department, but I'm not sure exactly where."

"I think you know your next task then, don't you? Figure it out and give me a recommendation for IPB. That's the job of the intel officer. Now what's the problem with performance metrics? Wouldn't it be useful for a manufacturing organization to report jobs completed and things like that?"

"It might be, but cutting batch size in half would also increase the number of jobs completed, while the greater number of setups would increase cost. That's not your intent, is it? It probably wouldn't hurt to show some operational metrics, but it will change the focus of the meeting somewhat, and every bit of added intelligence you specify will have a cost itself. I'd suspect anyway that operational measures will often be used by accountable managers in explaining their cost numbers. What we

absolutely don't want are metrics used the way they were at the Veterans Administration where people manipulated reporting to look good on the metric."

"Ouch, I'm familiar with that story. But there is no evidence that the metric hurt performance in spite of conjecture that some veterans may have died because appointments were delayed."

"Perhaps. But it is pretty clear the metric didn't improve performance and that's the mission, isn't it? What happens when you, the chairman of the board, become critical of a subordinate's metric? You hope he or she fixes the problem. But what appears to have happened at the VA is that it was much easier to 'fix' the report. There is no easy way to stop this unless you want to add a staff of 'metrics auditors.'"

"No. I agree that we don't need a Metrics Police Department. OK, here's my IPB. Number one priority is to use cost measurements with clear cost accountability. Start with the org chart and measure the cost in each organization. Number two priority is to start simple. We can always evolve into greater complexity, when and if we need it. I don't want to delay our cost attack with a long intelligence gathering or system building cycle. Keep me informed. In fact, we should probably meet before the Friday meeting."

"Yes sir."

"What else?"

"Well, there are two things actually. First, I wanted to brief you on cost benefit analysis. Second, it would be really helpful to me and to all of your subordinates if you could define our Mission Statement or your Statement of Commander's Intent if you prefer the military term."

"Yes, I understand how to do the Statement, and I recognize its importance. I've done that many times, but it's not something done without some thought and staff input. Get me a draft, and I'll add my touch and issue it. We already have the standard, politically correct Corporate Mission Statement about serving customers, valuing employees, and being a responsible community citizen. What I need here is a Mission Statement dealing with the need to increase our profitability."

"Speaking of political correctness, it might be better to emphasize cost effectiveness rather than profit improvement."

"OK. They are the same thing. Send me a proposed statement today. Now what do you want to tell me about cost benefit analysis? How is it different from what we just discussed?"

"CBA is certainly similar. What we've been thinking about, though, is a more formal process for major, nonrecurring decisions. The Cost Review is a good tactical process to manage the thousands or millions of day-to-day decisions that are occurring throughout the company, but big, strategic decisions need something more."

"If CBA makes sense, why not do it for all decisions, no matter what level of the organization?"

"A formal CBA takes time and costs something. The costs of doing CBAs for all decisions would probably greatly exceed the benefits of doing CBAs on all decisions. The effort and cost of a formal CBA is only justified for infrequent, strategic level, large decisions."

"OK, I think that would fit into our periodic reviews for capital spending. We are not doing much of that these days, but maybe CBA would be a good way to approach the 'Building Expansion Project' we are starting. Anything else?"

"Well there is one more thing. The ABC and performance metrics were President Nelson's idea. You said I was to report to you, so I have not run this past her yet, and I don't want to offend her while doing the tasks you just assigned to me."

He stabbed the phone and President Nelson picked up on the first ring. "Melanie, I've been thinking about changing the direction and methodology of the Friday Cost Review. I want something more focused and simple. Do you have any problem with that? Good. I'll tell Luis what I consider the essential elements of information. Expect Luis to come to you for help in meeting my needs."

#### **CHAPTER 13**

# Struggling to Specify the Right Intelligence, Writing the Mission Statement

I went to Marty's office before returning to my own. "New directions," I announced. Don't worry about the ABC or metrics approach. We have a directive to find simple, accountable costs of organizations. Get with Cost Accounting and see what's available."

"Good, will do. What are you up to?"

"I need to work up a draft Mission Statement for our efforts. I'll be in my office working on it. Come in as soon as you get back from Cost Accounting."

I continued to my office, closed the door, and began thinking of what I would propose for the Statement of Commander's Intent as if I were the person in charge. I knew the statement would have a major impact on the success or failure of the effort. I wrote down some of the outcomes that I thought would be beneficial.

Cost reduction was the goal, but we wanted constructive, creative approaches to working smarter. This required a proactive approach that would take some time and thought rather than a reactive response to higher level edicts or perfunctory compliance with policy or rules. It also seemed to me that we were looking for two things: learning and application of learning.

Two hours later, I e-mailed my thoughts to Chairman Stewart just as Marty came into my office after her meeting with Cost Accounting.

"It appears," she said, "that it is not too difficult to capture purchase-type transaction expenses by organization, time period, and account. They have a lot more accounts than we need, but it is not a problem to aggregate them. Payroll costs are a little more difficult, but again the data exists in the system, and we can structure a report query. We can dump the output into a spreadsheet file with a page for each organization."

"OK. What cost categories should we report for each cost center?"

"Well salaries, for sure, with benefits in a separate line. A lot of people don't recognize how expensive benefits can be, and it will be easier for cost center managers to identify the salary cost. Travel and training would be good lines to report. Office supplies would apply to many organizations. It's amazing how many other categories exist in the general ledger."

"Five categories of cost. That doesn't sound like too many."

"Well we should add another called 'all other.' If it becomes a large number we should consider adding additional categories."

"Ok, six. Any more?"

"Cost Accounting wanted to know if we wanted to include depreciation."

"My initial inclination is to answer no. Depreciation does reflect the cost of assets as they are used up but it is more of a financial statement requirement. Besides, the number doesn't change much or often. It is not really going to be relevant to our cost reduction mission. Let's start simple. We can always add it later."

"Cost Accounting also wanted to know if we wanted to include overhead and labor variances to standard. Cost centers in the manufacturing area often have standards, and the manufacturing labor system calculates three different labor variances and three different overhead variances."

"What do the variances tell you?"

"They tried to explain it, but it wasn't clear. It appears there are precise definitions and calculations, but I didn't get much out of it."

"In that case, we won't include any of that now. The meaning of the crawl, walk, run sequence makes a lot more sense now that I have a tod-dler. Maybe we will evolve in sophistication later, but it just seems to be too much now when we are in the crawl stage."

Just then, I noticed that I had received an e-mail from Chairman Stewart and I opened it. It was a broadcast message to all senior management and marked with the highest priority, as if a message from the chairman of the board wasn't high enough. I printed two copies and handed one to Marty. The text read:

As you know, we need to significantly improve the financial performance of this company. Our future survival depends on it. This means that starting today, we will have to do things better.

This is not a matter of working harder. I can see that you all are working hard, and I sincerely appreciate your efforts. Our challenge is to work smarter. If I could summarize my intentions in one sentence, it would be as follows:

As the experts in what we do, we will understand the costs for which we are accountable, and we will aggressively, constructively, and continuously question everything we do today in order to do it a little better tomorrow.

Please forward this message to the people reporting to you with your acknowledgment and endorsement and instruct them to do the same for their subordinates. This is going to be the future culture of the company, and I surely hope that each and every one of you will be a vibrant part of that future.

Regards, Robert J. Stewart, Chairman of the Board

"Wow," said Marty. "It looks like he is serious. Does that last sentence mean what I think it does?"

"It seems pretty clear that it means that the future of the company may not include those who don't get with the program. Did you know the chairman is an army general? I think he expects orders to be followed and is not afraid of wielding his power."

"That message comes across loud and clear. This is going to get interesting."

#### **CHAPTER 14**

## Meeting with Chairman Stewart to Prep for Pilot Reviews

"What did you think of my Commander's Intent e-mail?" started the meeting with Chairman Stewart to preview Friday's first cost review meeting.

"I think it will certainly get everyone's attention. I'm sure there will be a lot of watching and thinking going on at the start of this process. People will be trying to determine how serious you are about this effort."

"I'm sure they will be, so let's take that into consideration as we plan for Friday's meeting with Maintenance and Marketing. How do the numbers look?"

"Here are the numbers for Marketing," I said as I turned my laptop so that he could see the following matrix.

Marketing dept				
	Prior month	Current month	Delta	
Salary	\$50,793.69	\$49,522.12	-\$1,271.57	
Benefits	\$17,777.79	\$17,332.74	-\$445.05	
Travel	\$16,422.45	\$18,953.20	\$2,530.75	
Training	\$0.00	\$0.00	\$0.00	
Supplies	\$3,740.23	\$3,512.74	-\$227.49	
Other	\$1,650.44	\$8,634.81	\$6,984.37	
Total	\$90,384.60	\$97,955.61	\$7,571.01	

"Hmm. This is supposed to be intelligence for me, right? All I get from this is confusion. Sometimes, I think reports like this are designed to discourage understanding."

"Really? We thought limiting the number of cost categories would simplify the report and make it easier to understand."

"I'm sure it did, but let's see what we can do to make this easier to absorb. Look at the first number of \$50,793.69. What possible intel value am I supposed to get from the \$0.69? It doesn't tell me anything. There are far too many digits to absorb and most of them are just detracting from understanding. And why put all those dollar signs in there? It should be obvious that we are talking about money. The left justification doesn't help either. As a general rule, your job as my intel officer is to show me what I need to know in the best format to convey information. Get rid of the clutter."

"Would it be better to post that \$50,793.69 number as 51, 50, or 50.8 from your perspective?"

"Let's go with the 50.8. Two digits should generally be enough, but some of the rows will have three as in this case."

A handful of keystrokes later, the report was transformed to the following format. I was surprised. "Wow, that really makes a difference. It's now crystal clear that 'supplies' and 'other' are an order of magnitude smaller than 'salaries.' Showing six or seven digits made that less obvious."

Marketing dept				
\$K	Prior month	Current month Delta		
Salary	50.8	49.5	-1.3	
Benefits	17.8	17.3	-0.4	
Travel	16.4	19.0	2.5	
Training	0.0	0.0	0.0	
Supplies	3.7	3.5	-0.2	
Other	1.7	8.6	7.0	
Total	90.4	98.0	7.6	

"Yes, much better as an intelligence input. Now tell me about the minus 1.3. Why are we showing a negative number there? It looks like cost has gone down. Wouldn't that be a good thing, not a negative thing?"

"Yes, it is a good thing. All the report did was subtract current month from prior month to show the algebraic difference. We could change the logic of the equation to show the current month less prior month."

"OK, that would make the salary delta a positive number because it went down. But that approach would be very confusing if sales or profit went down month to month. That would not be a positive thing, but the format would still show a negative number."

"I can see that we need to give some special handling to the delta column. We are trying to show the variance to expectation and that variance needs to instantly convey whether the number is good or bad news. Variances are often said to be favorable or unfavorable, and the same algebraic difference will not properly convey that information for all variances."

"I'd also like the unfavorable variances to be much more distinguishable. The minus sign is too easy to overlook."

Marty spoke up for the first time saying, "I've seen some reports that show unfavorable information in brackets. Would that make the unfavorable variances obvious?"

"Perfect. Show me what that would look like."

Again, it took only a few keystrokes to reformat the report. I had to admit that the brackets really highlighted unfavorable performance and its components in a way that was hidden in our starting format.

Marketing dept				
\$K	Prior month	Current month Delta		
Salary	50.8	49.5	1.3	
Benefits	17.8	17.3	0.4	
Travel	16.4	19.0	(2.5)	
Training	0.0	0.0	0.0	
Supplies	3.7	3.5	0.2	
Other	1.7	8.6	(7.0)	
Total	90.4	98.0	(7.6)	

"OK, I like this. It shows a spending increase in Marketing for this month and immediately directs my attention to the travel and other. Those will be questions I will expect Jimmy to address in the Friday meeting. Now tell me why we are looking at month to month comparison."

"As I understand the after action review process, the actual results need to be compared to expected results in order to focus discussion on why the changes occurred. It would be better if we had a plan of spending for the month that we could compare to, but we don't have that at this time."

"OK, we should be able to do planning in this format in the future, but I agree. This is a good simple approach for now, and I did tell you to start simple. How does Maintenance look in this format?"

Maintenance division				
\$K	Prior month	Current month Delt		
Salary	37.3	45.6	(8.3)	
Benefits	13.1	16.0	(2.9)	
Travel	0.0	0.0	0.0	
Training	0.0	0.0	0.0	
Supplies	11.8	11.7	0.1	
Other	2.3	2.5	(0.2)	
Total	64.5	75.8	(11.3)	

Chairman Stewart said. "This format shows a clear picture of spending increases in salary and benefits. I wonder what could have caused the change. I could speculate on several possible causes, but I expect the maintenance supervisor to know the answer. More importantly, I expect her to be fixing the problem if, in fact, there is a problem. This should be an interesting meeting. Be sure to invite everyone on the senior staff."

As we walked from the chairman's office, I mulled over what to do next. Before reaching my office, I had decided and didn't enter. I continued to Jim Wilson's office. After waiting a few minutes outside the marketing manager's office for him to finish a phone call, I was waved in.

"Jim, I was just in a meeting with Chairman Stewart looking at the numbers you will be addressing in the meeting tomorrow. He had questions about travel and something that popped up in the other category. I didn't want you to be surprised and thought that maybe I could help you figure this out before the meeting."

"Good idea. I'm not aware of any travel expense problem and don't recall any other unusual expense. It would make a very poor impression if that is all that I could say in tomorrow's meeting. How can we proceed?"

"Here is the report that you will be briefing. You can see that the prior month had \$16.4K of travel and that increased to \$19.0K for last month for an unfavorable variance of \$2.5K."

"Look, I'm not an accountant or an engineer, but even I can see that the difference between 19 and 16.4 is 2.6, not 2.5."

"Focus, Jim. Either the 19 was rounded up or the 16.4 was rounded down or both. The point is that it doesn't matter. The goal here is to explain why travel cost went up month to month. That's what the chairman is going to expect from you."

"OK, got it," said Jim and he pulled out some reports. "Looks like we did send a couple more people out last month on customer visits. What's wrong with that?"

"Nothing is wrong with that. You are the expert in what is right and what is wrong. I'm just trying to help you identify an issue that will be coming up for discussion. Cost is up month to month. That is a fact. I think the chairman just wants you to explain it. However, that doesn't mean he won't give you some guidance."

"All right. I'll look into the comparison of the two months and be prepared to discuss travel in general. What is this about other?"

"Other is just a catch-all account for everything else. We will have to look at your expense detail for the month to figure out what happened. The delta was pretty large, so chances are that there is something unusual."

Sure enough, a 10-minute call to Cost Accounting identified that there was an \$8K bill paid to a national industry group for being a 'diamond' level sponsor of the annual industry conference.

"Well that explains it," said Jim. "I'm guessing that now I'll have to defend it."

"You should certainly be prepared to defend it, but the primary purpose of the Cost Review is to ensure that you understand your costs and that you are continuously looking for ways to reduce them. This is not supposed to be just another reporting requirement that you comply with. This should be intelligence that you use to attack your costs and improve the cost effectiveness of your operations."

"OK, I did get that memo, and I very much appreciate the heads up. I'll talk to my team this afternoon and be prepared."

#### 76 CENTS OF MISSION

"You are welcome," I said as I was going out the door on my way to Maintenance. Here, I similarly showed the report to Megan Streicher highlighting the spending change in salary and benefits. She also thanked me for the early warning, said she would be doing her research, and promised to be prepared for the meeting.

#### **CHAPTER 15**

# The Pilot Cost After Action Review with Maintenance and Marketing

"Ladies and gentlemen," said the chairman in opening the meeting. "Welcome to the first of what I think will be many Cost After Action Reviews. Let's spend a few minutes to discuss why we are here and what we need to accomplish in these reviews.

"We are here to attack our costs. We are not here to attack the presenter. We will assume that the prior performance was the best possible effort we could have made at the time. We will also assume that we can always do it better, faster, smarter, and more cost effectively.

"I'm looking for two things from the presenters at this and future meetings. First, I expect you to understand your costs and to be able to explain them. Second, I expect you to use your knowledge to discover continuous improvement initiatives that will allow us to accomplish our missions more cost effectively.

"I appreciate that we have all the senior managers here. I suspect some of you want to see what you are in for when we expand this meeting to include all departments. That's good, but I also want you to consider yourself part of this team looking for better ways to operate. We are all here with the common goal of improving corporate profitability. I also want to give you a good example of what you should be doing as you conduct Cost After Action Reviews with your own teams.

"Who is up first?"

Megan Streicher, the maintenance supervisor, was first on my agenda slide, so I launched the presentation slide with her numbers. She stood up, addressed the chairman and said, "Sir, here is my presentation. Are there any questions?"

I was a little shocked given that I had prebriefed her on what the chairman was likely to be concerned with: the increase in salary and benefits.

Chairman Stewart did not express any surprise. Instead, he calmly said, "Look at that increase for last month in your 'salary' and 'benefits' cost. We need to understand why that occurred. This doesn't mean there was anything wrong, simply that we need to understand what's going on. Now can you give us a little of the story behind the numbers?"

"Yes sir," began Streicher, with a nod toward me. "Of the total unfavorable salary cost, half, or about \$4.4K, is explained by having two more work days in this month compared to last month. Of the \$3.9K remaining, increased overtime explains \$3.5K of it. Increased overtime was caused by needing to get preventive maintenance done on two machines that needed to run on first shift. We had to keep our crew over to start the work after the shift ended. This went on for a whole week."

"OK, is this a chronic problem?" asked the chairman.

"It occurs once a quarter."

"Have you been thinking about how to avoid the overtime?"

"We never recognized the problem until we started researching this variance. We have talked about this and think we could schedule some of my crew to work on the second shift and avoid overtime, but this would add a shift differential premium to our cost."

"How much would that cost?"

"Can I make a suggestion?" interrupted the facilities manager. "We keep a couple people on the second shift as potential emergency responders. They usually don't have much to do, and they should be skilled enough to do some preventive maintenance. They would certainly have time to do some of this work if it wasn't time critical."

"Looks like we have our first continuous improvement initiative," beamed Chairman Stewart. "This is exactly what I'm looking for."

"But the Union will never go along with something like this. It will never work," injected the Human Resources Manager.

"I wouldn't take that as an absolute certainty and solving problems like this is why we pay you the big bucks," responded the chairman looking straight at the HR Manager. "We won't know if we can do it unless we try. I encourage the three of you to think this through, get with the union representative, and see what you can do." Turning back to the presenter

he continued, "What would you estimate as an annual savings if this idea works?"

"Well, we would save four times the \$3.5K in overtime. I think that \$14K would be the minimum savings."

"Great, now here's the best part about continuous improvement. Sure we have corporate profitability goals to meet, but I believe there must be some incentive in this for you. Is there anything currently not in your budget plan that could use, let's say, half the savings: \$7K?"

"Really? I've been trying for some time to get us some new tool sets. Ours are quite worn in some cases, and it seems we are always missing the socket or crescent wrench we need. This would really help us and would actually generate additional efficiencies."

"OK, prove the concept, satisfy the Union, and implement the change. Once you do this, you just earned those new tools sets. Mr. Wilson, are you ready to tell us about Marketing?"

Jim Wilson showed his cost and variance report and began, "'Salary' was a little favorable because of the resignation of one of our staff. We haven't yet been able to identify a replacement and are wondering how long the hiring freeze will be in effect."

"It is quite possible," said Chairman Stewart, "that our cost reduction efforts will free up some people. Those people will not be let go. They will be candidates for openings like yours. What about the unfavorable variance in 'travel?'"

"We just did a lot of travel last month due to the industry conference and the teams we sent to visit customers."

"Teams? Why do we send teams?"

"Two heads are better than one and three are better than two."

"Of course they are. There is obviously a benefit, but we need to weigh the cost with the benefit. Cost benefit analysis is another topic that we will be injecting into our major capital and product rationalization decision making, but it also applies to everything we do. I'm not going to micromanage your department, but I will be paying more attention to your decision-making processes. Let me tell you a story.

"Back in East Texas, we were very fond of the history of our Texas Rangers. They often had similar situations where they needed to dispatch Rangers to handle situations, and, unlike yours, those situations were often life threatening. The stated philosophy of the Texas Rangers was 'one riot, one Ranger.' Maybe we could move in that direction in many cases?"

"I'm not sure that I can do that. My people are used to ..."

"Jimmy," the chairman interrupted. "We need to change the way we've been thinking about cost. The staff in the Marketing Department will need to change their thinking too, and as I put in my e-mail, I sure hope you are the person who is going to lead that effort."

This thinly veiled threat reminded everyone of the Commander's Intent e-mail they had received. The chairman gave everyone the opportunity to register his seriousness on the issue by letting silence pervade for what seemed an eternity, but was probably less than a minute and then said, "Jim, I have every confidence in you. You are a great marketer and a valuable and loyal member of this team. It's just a matter of changing your approach a little."

"Yes sir, I'm sure we can rethink the number of people we send in some cases. I'd bet some of the bar tabs would go down too! But I'd like to mention that we did have the budget to cover this travel in our annual plan."

"So what? Couldn't you use resources better elsewhere? I know I could use some of the savings for our corporate survival program if you don't have a good way to use the resources. Now tell me about the 'other' category? What caused the \$7K hit there?"

"This one is a little bit of a puzzler. We agreed to be a diamond level supporter of the national conference, but I thought there were several departments that were going to share in funding this decision. I haven't gotten to the bottom of it yet."

"OK, Jim, this is our first time at this, and I'm sure we will get better over time. I'm looking for our presenters at this meeting to have done that research and come to this meeting prepared with actions to deal with it. Do you have any theories on what happened or does anyone else around the table have anything to add?"

The Engineering and Sales Department managers said that they had agreed to share in funding the diamond benefactor level, but hadn't checked their numbers to see what, if any, charge had been posted. Jim Wilson welcomed their jumping in to confirm his statement, and he didn't feel any need to add anything else.

"OK, I'm not going to second guess the decision to be a diamond level sponsor. That would be micromanagement. However, you should know that I am questioning your collective judgment a little," Chairman Stewart said.

After letting that statement hang in the air for a while, he continued, "I think we have had a very good pilot at what will be a long line of Cost After Action Reviews. I like the fact that we are discovering important things about our costs that we may not have addressed in any other forum. I think this will be a valuable meeting for our mission to improve corporate profitability. I'd like all department managers to adopt the format you have seen today, and we will schedule the Cost Review for next Wednesday. Marketing can present their completed story then. Maintenance, you have already done a great presentation, but I'd be interested in hearing more about your continuous improvement initiative then.

"Before we adjourn, I'd like your thoughts on this meeting itself. This meeting like everything else we do can be done better. What can we do better in this meeting?"

The silence was broken by the maintenance division supervisor, clearly the hero of the day. "Chairman Stewart, it looks to me like the report's line for training cost isn't really telling us much. I don't think we are doing much these days in anybody's department. Maybe we don't need that category."

"Go on."

"On the other hand, I have a real problem with my Facilities Department cost allocation. It's not right and it's not fair for me to subsidize other departments. I know everybody has facilities cost and maybe reporting it instead of training would be useful."

"I agree. Good suggestion. I've certainly picked up the fact that facility space here is extremely tight and a major problem. Luis, figure out how to do this. Also, I'd like you to prepare the reports for the other departments just the way you did here today. I'd also like you to make up an agenda and timetable for next week's Cost After Action Review. I'd guess 10 minutes per department should be enough time. Until we meet again, ladies and gentlemen," said the chairman in closing the meeting.

The chairman and I remained seated as the conference room emptied. When the last person left, he turned to me and asked for my thoughts.

"Well sir, I think it is obvious that you have led after action reviews before. It seemed that you used a relatively short meeting to do a lot of signaling and provide a lot of guidance. I think everyone got the message loud and clear that there is a new sheriff in town. Or should I say Ranger?"

"Good," he smiled. "Mission accomplished then, at least as far as this meeting goes. I am very comfortable leading reviews like this and I did think it very important to set the right tone in the first one. After all, we are trying to change direction, and there is no substitute to hearing it from the boss. What did you think of the performance of our two presenters?"

"Marketing seemed a little unprepared. I think he wanted to talk more about the small favorable in 'salary' and his need to add good people. I don't think he wanted to talk about the unfavorable variances and was therefore less prepared to do so."

"Well, that's somewhat typical of Marketing. They by nature always emphasize the positive and minimize the negative. We will have to give Wilson extra time and attention to make him more successful in general management. What about Maintenance?"

"Maintenance clearly knew what she was talking about, and I liked the suggestion about facilities cost, although I'm not sure how to meet the request. Facilities is a department in its own right and reports at the same level as every other department. Yet they are a support function supporting every other department too."

"It appears you don't have any time to waste. Keep me informed, and let me know if you need any help. Also, I'd like to be prebriefed before Wednesday's meeting just like you did for this meeting."

#### **CHAPTER 16**

# Figuring out Facilities Cost Allocation

There were two department managers at my office door when I returned to my office and e-mails from most of the others. I was a little surprised at my sudden popularity. All wanted their numbers and a chance to talk about them as soon as possible. I told them each that Marty and I would be working up the reports as fast as we could and that we were committed to helping them understand their numbers as well as the chairman's expectations.

I called Marty into my office, compared notes about the meeting, and found that the ever-efficient grapevine had already spread most of the news. She had already started preparing the Cost and Variance Report for each department. We discussed the Facilities challenge and agreed that Cost Accounting and their ABC work was a good starting point. Within the hour, I was meeting with the cost accounting supervisor and saying, "Thanks, for fitting me into your schedule."

"No problem, I heard you all had quite a meeting this morning and I expected to hear from you soon. It is a great time to be a coster!"

"No doubt. You and I will both be in demand as the emphasis on cost grows. Did you hear about the need to show facilities cost in the cost summaries of the other departments?"

"I did hear about that, and it is probably a good thing. Facilities is a very significant cost element and will be even more significant if we build the additional building that everyone wants."

"I wouldn't count on any new construction in this fiscal environment. Besides, I think Chairman Stewart wants us to free up space by managing the facilities cost more aggressively."

"Why bother freeing up space? What are we going to do? Let space sit empty? It is a fixed cost."

"Well, we will see. The current thinking is that continuous improvement is always possible everywhere, and I'd guess that thinking even applies to supposedly fixed cost. At any rate, our mission here today is intelligence gathering. The starting point in managing and controlling the cost of facilities is determining its cost by department. I know that you have lots of details since I saw the ABC report for the preventive maintenance shop in the Maintenance Division."

"Let me pull the report from the ABC model. Do you just want to see facilities cost by department?"

"Yes, let's start there. But I'm not sure if we want the reciprocal allocation that you told me about last time we talked. Can you explain that to me again?"

"Changing that would be a big deal. Perhaps we should involve Jack. Let's see if we can move into the CFO's office. I think this is going to get complicated."

Surprisingly, we reconvened in Jack Floyd's office in 10 minutes. He had attended the morning meeting and didn't need any introduction to my task. I started the discussion with, "I've seen a little about how the ABC model allocates cost from the Facilities Department, and I'm having a hard time understanding the reciprocal allocation."

"It's really an issue about making sure we capture all the interactions between support functions so that we properly state the cost of the Facilities Department in the first step of allocating cost. The people in that department use the Human Resources Department and they buy things that require the Contracts Department, for example. Human Resources, Contracts, and even Facilities itself occupy space. The beauty of reciprocal allocation is that it captures all these interactions simultaneously."

"That all sounds good in theory, but it seems very complicated. It must be very difficult to do all the arithmetic."

"It is not a problem for us. The software we purchased does all of that work and gives us the final answers like you saw in the Maintenance Department."

"I see, but how do you explain what's in the allocations, given the complexity of considering all these interactions? From talking to Megan Streicher in Maintenance, it seems that she doesn't have a clue what she is paying for."

"We can't. We don't even try. In fact, we call the ABC model 'the black box."

"Well then, why do we use it?"

"Reciprocal allocation is considered the best, and by that I mean the most accurate and complete technique for measuring consumption of support resources."

"Well, if managing cost is the goal and understanding cost is the starting point, it would seem we have a contradiction. What is the value of all that theoretical accuracy if managers don't understand it, you can't explain it, and nobody uses it? How can there be any accountability?"

"Well," Jack said somewhat defensively. "Our job is accounting, and we are pretty good at it given our clean audit opinions."

"Look, Jack, it's clear you're the expert in accounting, and I'm sure you wouldn't be CFO if you weren't great at it. Maybe what the chairman is looking for here is a little different. I think he is looking for numbers that support his mission of cost effectiveness. This clearly requires a managerial view of cost, which is very different mission from that of getting clean audit opinions. Let's call the chairman's new mission 'managerial costing.' Managerial costing needs useful, credible, and affordable views of cost that are simple and straightforward enough to drive the accountability you saw in today's meeting. Isn't there a simpler way to look at Facilities Department cost allocation?"

"Yes, the final part of the reciprocal allocation process allocates to Maintenance on the basis of labor hours. We could just take the incurred cost in Facilities and simply allocate it directly to cost objects like Maintenance on that basis. Would that somehow be better from your perspective?"

"Wait a minute, it is not my perspective that counts. Personally, I don't care. It is Chairman Stewart that we both are working for here. He is the leader driving the management process. His IPB, I mean measurement goal, is that accountable managers have actionable cost measurements, and yes, your suggestion of a simple, direct allocation sounds like what he is looking for. But why do we allocate in proportion to labor hours? Labor hours probably doesn't have anything to do with consumption of Facilities cost?"

"Hmm. Most of our allocations use labor hours as the driver to allocate overhead in our financial statements. We've always used labor hours,

and we have always passed our audits with flying colors. Furthermore, it is easy to get, and our time and attendance system measures labor hours very accurately."

"Yes, but some people occupy more space than others who work the same eight hours, and I know of at least one division that doesn't have any space at all. OK, I'm beginning to understand enough here to be dangerous. My conclusion from what you have said is that we use reciprocal allocation methodology that can't be explained or clearly understood because it is theoretically the most accurate, and we use allocation drivers that don't correlate to cost consumption because they are easy to measure precisely."

"I've never thought of it that way, and the auditors have never brought it up."

"Well it is increasingly clear that our 'managerial costing' mission is very different from the traditional external reporting mission. And it is the chairman, not the auditors we are trying to satisfy. His goal is to give managers information to help them understand and control their costs. This means no 'black box' approach and no allocation drivers that don't reflect consumption, too. The goal is to provide actionable, understandable cost to accountable managers. Will you have a problem with that?"

"No. It really should not cause any problem with our auditors. In their language this would be an 'immaterial' internal redistribution. They are more interested in assuring that we have all cost accounted for in total. How do you think Facilities cost should be allocated?"

"I think it should be simple and transparent and driven by whatever reflects actual consumption."

"How will you determine that?"

"It's not really my call. I see my role as a facilitator for the chairman's goals. My next stop is the Facilities Department. They are the experts, and I'll try to capture their knowledge and recommend it for the allocation process."

It took until the following morning to get in to see the Facilities Department manager. He too was at the previous day's meeting and knew my mission. I told him of the conversations with the CFO and the cost accounting supervisor and the allocation issues I was wrestling with. He said, "I've never understood allocation. I've asked questions about how it works, but it never made sense to me."

"The basic concept seems pretty simple. It's really just a cost distribution process. Cost is occurred in one place and split to the people consuming it. It's kind of like evenly splitting a dinner check. You put a bunch of cost on one bill, and you mechanically allocate each person a proportion of the total based on how many dinners they are paying for. If everyone is paying, then the check is split by the number of diners."

"That's pretty simple. Why didn't they explain it like that?"

"I don't know. Maybe it is a matter of job security," I joked. "More likely, they are more focused on the external reporting and haven't really been asked to add the management support mission. I know that Chairman Stewart wants us to understand our cost and that means determining real consumption of resources like facilities."

"It sure sounded like he was serious about that."

"OK. Well in that dinner check allocation example, have you ever ordered a low-cost meal and then had to pay a lot more because others consumed a huge, expensive meal and then suggested splitting the check?"

"Hasn't everyone?"

"Probably so. Did you like it?"

"Hell no."

"I believe that is called cross-subsidization. And more importantly, it has effect on behavior. If you were going to dinner tonight with the same people and the same allocation process, would you order the low-cost dinner salad?"

"I see where you are going with this. No, I wouldn't order the salad. I'd order the lobster and maybe a second one to take home for my wife. The rest of the table would be financing the majority of my meal!"

"I think you've got it. Allocation appears to have some dangerous incentives if not done right."

"What does that mean for the dinner check?"

"Probably suggests that separate checks would be better. But we don't have that option when we have to think about the consumption of your Facilities Department's cost. It would take an enormous effort to give everyone a separate check, and we don't need that expense when we are trying to reduce cost. We need an allocation process that reasonably reflects consumption of your department in a way that your customers can easily understand."

"OK, I'm with you. How do we do that?"

"We need to think of something that does correlate with consumption. The first thing that comes to my mind would be square footage occupied. Then if someone occupied 10 percent of the space, they would get charged, or allocated, 10 percent of the Facilities Department cost."

"But how would we handle spaces like hallways and bathrooms?"

"Hmm, I guess we would ignore the common areas and only consider work spaces."

"That makes sense, but all space isn't identical. It might cost more to provide certain spaces than others?"

"That's why the allocation process needs your expertise. You know these things better than I do and better than the Accounting Department does, for that matter. What kinds of space do we have that would have different costs?"

"Well, I'd like to give that some thought. Warehouse space might be different. I need to talk to my people and maybe do a little study."

"Fair enough. Let me give you a few suggestions. First, it doesn't have to be perfect. It just needs to be reasonable. One of the reasons why we are using labor hours is that it apparently can be measured precisely. It is wrong from a consumption perspective, but it is precise."

"Precisely wrong, I'd say."

"Well, I'm in agreement with you on that. Second, we don't want to incur a lot of cost in this matter. In fact, we don't want to incur any cost. This means we can't add electric power meters to every department or things like that."

"OK."

"Third, the allocation driver needs be understandable by your customers, the managers that occupy space, and hopefully lead them to use your resource better. And fourth, it doesn't have to be perfect to start. We can start simple and add complexity when we need it."

"You said 'it doesn't need to be perfect' twice."

"I know."

"Got it. Reasonable, low measurement cost, easy to understand, simple. We can give this some thought, but if you want to start simple, here is a report of the net square feet occupied by each of the production departments. It is very straightforward and updated any time we make a move, which isn't very often. Do you think this is good enough?"

"What about the space occupied by the other support departments? Do you have that?

"It would take a little more work. It changes more frequently and we update it only once a quarter. Besides, don't you ultimately want to get the cost allocated to products? Anything we allocate to other support areas would just have to be reallocated to production departments."

"I haven't even begun to think about product costs yet. Right now I'm focused on the cost of organizations and the support role complicates things. I'm not sure if we should include Facilities Department cost in the Human Resources Department, for example. Do you have any thoughts on this?"

"Not a clue."

"The CFO seems to think that the truly accurate approach is to consider all support cost consumed by all organizations, but I'm not so sure."

"What are you going to do?"

"I'm going to take your report of square footage by production departments and have a discussion with Chairman Stewart. He is the decision maker here. My job is to provide him with an understanding of the issues. Let me get back to you tomorrow."

By the time I got back to my office, I noticed that it was early evening and most people had left the building. I saw that the door to the chairman's office was open and the lights on, so I knocked on the wall and was waved in.

"Luis, how goes your mission?"

"Well, I'm learning a lot. But I'm at a point where I need some guidance since the cost measurement must meet your needs if you are the leader doing the intelligence preparation of the battlefield."

"True. What have you learned?"

"Cost is a lot more complicated than I ever imagined. There are so many ways to look at it. There seem to be at least three levels of intelligence you might need and many questions for each of them. The simplest level is organization cost, and this is the area you have directed us to start with. All organizations have internal cost that they control. This would

include things like people and purchases. That is pretty easy to get out of our accounting ledgers and that is what we used in the pilot review we did with Maintenance and Marketing."

"So what's the problem?"

"There is no problem there. This is very basic cost tracking and our systems seem to do it well. It is your directive to include Facilities Department cost in the reports for Maintenance, Marketing, and the other departments that opens up a second level of costing issues. This requirement revolves around how to best measure and charge or allocate costs of the support role organizations like Facilities."

"I see. And what is the third level?"

"The third level would be looking at the cost of our outputs: the products and services we sell. I haven't even begun to look at that dimension yet, but it is beginning to appear that we might need three management processes supported by three different measurement processes."

"That really doesn't surprise me. On the battlefield, we often had to fight on many different fronts at the same time. We also needed one set of intelligence for the air battle, another for land operations, and another for naval. It is pretty obvious that each has its unique intel requirements. It wouldn't work very well if we said everyone had to use the same intel. Can you imagine telling the Air Boss his only intelligence input would be sonar? Ha! That would be interesting."

This took me aback. Hadn't the Colonel also used the "sonar" analogy? After a few seconds, I responded, "I was coming to the same conclusion that there are many possible and useful ways to measure cost. It seems inescapable that we will ultimately use several, but my current dilemma revolves around the task of allocating Facilities cost."

"That doesn't seem too difficult. Enlighten me."

"OK, there are two issues and the first is how to allocate or distribute the cost from support organization to consuming organization. The question involves the choice of allocation driver. The driver is the measurement upon which the allocation is based. Cost allocation is proportional to the driver. If Maintenance, for example, has 10 percent of the driver, it would be allocated 10 percent of Facilities. Cost Accounting and the CFO favor a driver that they can measure accurately: labor hours. However, the Facilities manager feels, and I agree, that something like square

footage occupied presents a much more accurate picture of consumption. Which do you want?"

"Seems like a no brainer to me. Using labor hours just because we can measure it accurately doesn't make sense to me. You know we pay people based on performance not based on height or weight. Measuring performance is difficult and subjective, while measuring height or weight would be a lot more accurate. Use square footage occupied to allocate Facilities. Next issue."

"The next issue is pretty complicated and requires thought as to 'what is the consuming organization?' This has implications for what's included in Facilities cost and who receives the output of the allocation from Facilities. The current practice is called reciprocal allocation. Facilities is charged cost allocations from Human Resources and every other support function including Facilities itself. Facilities then simultaneously allocates to everybody including itself. This is purportedly very accurate approach but my concerns are that it is hard to follow. Evidently, it is so complicated that numbers can't be explained. Accounting even calls their system the 'black box.'"

"I can't hold managers accountable for cost they can't understand."

"I know. Yet you said you wanted facilities included in every organization's Cost After Action Review. This raises two questions. First, do you want to allocate Facilities cost to all organizations, including other support functions too?"

"Hmm. Well, the reason I wanted facilities cost included in everyone's review was so that everyone would begin managing it. It's a big cost, and I want everybody accountable for it. It would be a big win if we were able to avoid that new building being proposed. I'd also worry about the result of only allocating Facilities to Production Departments. I'd hate to see Production reducing the space it uses because they are managing their space needs better and then have other support organizations move into that space because they are not being charged. The effect on morale and our cost-effectiveness mission would be very bad."

"OK, so we want to allocate Facilities to every organization. I'm not sure how exactly to do that. Second question, do you feel the same way about allocating other support functions like the Human Resources and Accounting Departments?"

"What I said was that I wanted everybody accountable for facilities cost. The juice is probably not worth the squeeze when it comes to the other support costs. It is probably not important to allocate those and most other support functions. It's not like you as the R&D manager can do anything about your accounting support, but you can and should be managing your space. Can we just allocate Facilities and not the other support functions?"

"I don't know. That's where I'm getting hung up."

Chairman Stewart picked up his phone and moments later President Nelson could be heard through its speaker. "Melanie, can we allocate Facilities to all organizations and not bother allocating the other support functions this way?"

"Certainly, it's called step down allocation. It is a sequential approach. First, one function is allocated to everybody else. Then the second function is allocated to everybody else except the organization on the first step. This continues down the ladder so to speak."

"Do you have to go all the way down the ladder or can you stop at some point?" I asked.

"I suppose you can stop at any point you wish. The auditors really don't care how we do this. But why would you want to? We are capable of reciprocal allocation which is much more accurate and complete."

Chairman Stewart answered with "We want to focus everyone on facilities cost but don't want everyone worrying about their share of Accounting, for example"

"Oh no. I wouldn't want that either."

"Thank you, Melanie. Good night."

"Well, there you have it. Step down allocation seems like the ticket."

"Makes sense to me."

"When can we look at Facilities Department cost allocations?"

"We will have them in Wednesday's review, and I'll prebrief you Tuesday."

"Have a good weekend Luis."

#### **CHAPTER 17**

# Luis Revisits Personal Finance Problems over the Weekend

I woke up on Saturday with some eagerness to focus on my own Cost War. Since I didn't have a cost accounting organization, my first task was to pull together the numbers on what we actually spent this month. This required going through the checkbook and credit card statements and putting costs into the categories. Then I'd be able to compare to my plan.

An hour later, I was able to look at the following report.

	Prior month actual (\$)	Plan for current month (\$)	Current month actual (\$)	Current delta plan (\$)	
House and utilities	4,000	3,900	4,000	(100)	Mortgage, electric, garbage
Groceries	600	500	700	(200)	
Luxuries	600	150	300	(150)	Restaurants, coffee, etc.
Car and car related	800	700	800	(100)	Payment, gas, maintenance
Other	1,300	1,150	1,300	(150)	Interest, all other
Total spend	7,300	6,400	7,100	(700)	
Take home	5,900	5,900	5,900	0	
Disposable	-1,400	-500	-1,200	700	

My eye immediately went to the delta column and noted all the bracketed, unfavorable variances. We were \$700 unfavorable on total spending. But why was disposable income \$700 favorable? In both cases, I had subtracted current cell from plan cell. The arithmetic was correct but the logic was not. This was the same problem with algebra that Chairman Stewart anticipated. Spending going up was certainly unfavorable, but disposable income going down should also be unfavorable. Clearly, I had to change the logic of the cell calculating disposable variance. When the change was done, the report made more sense.

	Prior month actual (\$)	Plan for current month (\$)	Current month actual (\$)	Current delta plan (\$)	
House and utilities	4,000	3,900	4,000	(100)	Mortgage, electric, garbage
Groceries	600	500	700	(200)	
Luxuries	600	150	300	(150)	Restaurants, coffee, etc.
Car and car related	800	700	800	(100)	Payment, gas, mainte- nance
Other	1,300	1,150	1,300	(150)	Interest, all other
Total spend	7,300	6,400	7,100	(700)	
Take home	5,900	5,900	5,900	0	
Disposable	-1,400	-500	-1,200	(700)	

It was obvious, unfortunately, that just doing the report didn't answer questions or accomplish anything. I had invested time in preparing it and had created my cost intelligence. The value of this report was that it raised questions and started me thinking. Answering the questions was the prerequisite to taking action.

Answering and action taking had to wait until Conner's naptime so that Emily and I could work undisturbed. "Emily, here are the results from our first month's efforts. We need to look at the right column. It compares what we expected to happen, which was our plan, to what actually happened. We need to figure out why there was a difference. If we had made a good plan and then executed as expected there should have been no difference. Once we understand the difference, we need to think about what we are going to do about it."

"Makes sense. Let's start at the top. 'House and utilities' would seem to be a cost that would not change much. Why did it?"

Looking at the check register showed that we had paid two electric bills this month. Emily recalled, "There wasn't enough cash in the checking account when I paid bills last month, so I didn't catch up until this month."

"OK, that's a good thing," I said. "What have we learned? We spent more than planned, but there is a good explanation. No harm, no foul. Execution was good and the plan doesn't need to change. The house and utilities category is still the biggest on the list. Any ideas on how to do better?"

"One of my friends said they had refinanced their mortgage so they could buy a boat. I think they got a lower rate besides being able to get some of their home equity to spend. Could that work for us?"

"It might, but I don't think buying a boat will help our mission," I joked.

"No silly. The lower rate would lower the mortgage bill wouldn't it?"

"Sure it would. And if we got some equity from the house and used it to pay off credit cards it would be even better. Mortgage interest is a lot lower than credit card interest. Could you talk to your friend and a couple banks and analyze if this would work for us?"

"Sure. I want to contribute to this mission too. How do I do the analysis?"

"We've been working on something called a cost benefit analysis at work for just this kind of problem. Refinancing is a major decision, and it is a not a recurring one. Here is some thinking on what a cost benefit analysis might look like," I said as I handed her a copy of the eight step template.

"Great. Next line is 'groceries,' and you generate all the spending here. How did we spend \$200 more than planned?"

"I've been trying to economize, but we didn't start this until the month was half over. That probably explains some of the difference. The other thing is that I usually shop on Mondays and there were five Mondays this month instead of the usual four."

"OK, that pretty much explains the month's variance. Should we adjust the plan?"

"Not for next month. I think I can meet the \$600 plan."

"Do you see anything else we can do here?"

"Coupons are a possibility, but a lot of them are so small they hardly seem worth it. Maybe we should stock up on some things when they are on sale. I haven't done that in the past because I didn't think we could afford the spending."

"They do say that it takes money to make money. I think we should take more advantage of sales and stock up as long as we don't end up eating more. Let's look at luxuries. It was \$150 unfavorable, but still it was significantly improved from the prior level. That variance is completely explained by the fact we had this new approach to spending for only half the month."

"Agreed," she said. "Not bad. We could do better by eliminating our weekly dinner out, couldn't we?"

"Certainly, but I think there are important benefits to our marriage from that cost, so I'd like to continue if possible. You know we could cut out a lot of cost if we lived in a tent too, but that would be going too far."

"I agree. What happened with car cost?"

"Car costs didn't go down. I did start getting gas at the discount station, but it didn't seem to help much. I'm not sure what we can do here. Any ideas?"

"Let me do a little research. Just like there are advantages to stocking up on sales items it might be better to pay our insurance once or twice per year rather than monthly."

"OK, you have the ball. Other spending didn't go down either. My new brown bag lunch program should cut this in the future."

"While raising my grocery bill," Emily interjected.

"True, can you handle it?"

"I believe it will be OK."

"Good. Then we are done with the review. It's clear that this program of cost management is not a onetime thing. It's going to take a while to really see the effects."

"Honey, we are really talking about a change in lifestyle, and it should be obvious that it will take a while."

"I think you are right. All in all, I think we have made significant progress in the last couple weeks, and we have set the stage for continued progress. I feel pretty good about it, don't you?"

"I do. I hear Conner waking. Let's go tell him the good news!"

The following evening at our regular restaurant we did not order our usual bottle of wine to the great surprise of our waiter. We thought about ordering soft drinks, but quickly discarded that idea in favor of free water. If a \$25 wine cost us a small fortune, then two \$6.50 soft drinks would be half a small fortune. Somehow they didn't seem worth it.

As we waited for our order, Emily smiled and pulled a folder from her purse. Inside were several printed pages with the title page announcing: Refinancing Cost Benefit Analysis.

"What's this?" I said. "It looks like a term paper."

"You know, it is kind of like a term paper. I've written plenty of them. None were as important as this one."

"When did you have time to put this together?"

"Well, you know Conner took a nap today. It didn't take that long. I wanted to show that I am a capable member of this team too, and you would be amazed at what is available on the Internet these days."

Eight pages followed.

Page 1 defined the problem as seeking lower interest cost.

Page 2 defined the scope, facts, and assumptions. This section bounded the analysis to our home refinancing. Facts included our current interest rate and principle balance. Assumptions stated that we would not be moving for the next 10 years and assumed that market value had not changed from when we purchased.

Page 3 *defined alternatives* to three options that Emily had researched from the Internet and her circle of friends. Of course, not refinancing was also shown as an alternative.

Page 4 *developed cost estimates* for each alternative. The estimates listed the onetime costs as well as the monthly payments for each alternative.

Page 5 *identified quantifiable and nonquantifiable benefits* for each alternative. These didn't vary much in this situation although some differences in loan term were noted.

Page 6 *defined selection criteria* under which the alternatives would be evaluated. She had defined these as out of pocket cash needed, interest cost savings, and risk.

Page 7 *compared the alternatives* along the criteria defined on the previous page.

Page 8 reported the results and recommendations. Interestingly, the lowest cost alternative was not her recommendation, even though it had the lowest interest rate and attractive refinancing charges.

"Why did you not like the low interest rate alternative?"

"At first I did think that would be the best, but that alternative locks in the attractive rate for only three years. Thinking about it forced me to go back to assumptions, and I thought that we would not be moving for at least 10 years. That meant we'd be paying some unknown rate based on the future prime rate. That made me go back and think about selection criteria and cause me to add risk. My conclusion was that the lower cost initially was not worth the risk. I've heard too many stories on the news about people losing their houses when rates went up and mortgages like this turned sour. Do you agree with my thinking?"

"Yes, I do. What was your logic on the best alternative?"

"Well the best option had a lower interest rate than we have currently, but offered zero out-of-pocket refinancing cost. It looks like we can reduce monthly payments about \$300 without risk and without any fees."

"Nice. I really like that the refinancing shows us getting equity back. We can then pay off credit card debt. That means we will be paying low mortgage rate interest instead of high credit card interest. I bet that will save us three or four thousand per year!"

"Don't forget, too, that the credit card interest is not tax deductible, while mortgage interest usually is."

"Sweet. What do you think are the chances of a market value increase that would get us more cash in the refinancing?"

"It is possible, but the amount probably wouldn't be too great in this market. What are you thinking of doing with it? Ordering a bottle of wine?"

"No thanks, I've learned that lesson. But if we are going to build assets, we must make some investments. Any investment with a rate of return greater than the mortgage rate will be attractive. It creates a whole

new set of things we will need to be thinking about. I'm glad you came with brains as well as beauty, my dear. You are certainly a valued member of Team Conner."

"Let's celebrate by opening a box of wine when we get home. We won't have to worry about driving!"

#### **CHAPTER 18**

## Prebrief to Chairman Stewart Before First Full Cost Review Including Facilities

Marty and I started our prebrief session with Chairman Stewart promptly at 9:00 a.m. on Tuesday. I brought her because she was going to be working closely with some of the directors since there was no way I could meet with all before the Wednesday meeting.

The report format made issues fairly obvious. Variances highlighted the areas where explanations should be expected. We discussed possible reasons for some of the variances briefly. We didn't have the depth of understanding to answer the questions. That would be done by the department managers in their briefs.

Facilities cost was included per instructions in this review. Some of the allocations were surprising. We had done an analysis of the five major production departments comparing allocation by square footage to allocation by the previously used direct labor hours.

\$M	Dept 1	Dept 2	Dept 3	Dept 4	Dept 5	Total
Allocation by labor hours	2.3	5.1	2.4	3.8	3.7	17.3
Allocation by square feet	0.0	4.0	4.6	4.1	4.6	17.3
Delta	2.3	1.1	(2.2)	(0.3)	(0.9)	0.0

These results were quite surprising. The splitting of \$17.3M in annual Facilities cost changed drastically when the cost driver changed from

labor hours to square footage. Department 1 showed no allocation under the logic of square footage because they were located elsewhere. They were charged an allocation when labor hours were used as the basis of distribution because the labor reporting system was common to all departments. This result clearly justified our concern that the labor hours had no correlation to facilities cost.

It was quite obvious that department 1 should not be charged an allocation of our facility cost. The explanation for the difference between departments 2 and 3 was less obvious.

"Luis, can this be correct?"

"The mechanics are very simple, but we will double check for typos in the report or in the data input. It is shocking that department 3 should have 27 percent of our square footage for only 14 percent of our direct labor hours."

"If the numbers are correct what could explain them?"

"One explanation could be that department 3 has machines or processes or storage areas or something that requires extra space."

"I don't believe that is the case, but we will see what they say at the Cost Review. If I'm reading this chart correctly, it seems to say that department 3 has the most space and the fewest people. Is that how you see it?"

"I agree. I know that department 3 was adversely affected by changing customer requirements. Could it be that they no longer need the space, but have held on to it?"

"That would not surprise me a bit. Why should they vacate space if it appears to be free? Free goods have infinite demand."

"Is that smart when we are so tight on space and considering new construction and while we are looking at serious cost reduction needs?"

"Luis, you can't really blame them for holding on to space that is in short supply if they are hoping they will need it back someday. They were doing what they think best for their department's mission. We will see what they have to say now that they are being allocated cost on the basis of the space they hold. What else do I need to know before the Cost Review meeting?"

"I have one thing you need to know and one thing I'd like to discuss. You need to know that the meeting between Maintenance supervisor and the union representative about the cross-training went badly."

"How badly?"

"Very badly. I heard it was a public shouting match."

Chairman Stewart held up his hand for a pause and asked his assistant to see if the union representative could spare a few minutes to come talk. "OK, what is it that we need to discuss?"

"It looks like the cost review is going to provide a lot of good cost reductions. However, letting people keep even some of those savings is going to mean that we will not reach the 10 percent goal we have talked about."

"I know that it looks attractive to 'harvest' all the savings, but trust me, we will get a lot more good savings ideas if we reward the savers. Who would work on cost reduction if the savings are taxed at 100 percent? Nobody. Would you take a second job that was taxed at 100 percent? No. Besides, there is nothing to say that we can't give lower spending targets in the future where they are appropriate."

"Why not just give the idea originator a check for 10 percent. That would give us more cost savings at corporate level than a policy of sharing savings with the organization, wouldn't it?"

"Idea awards sound good, but in my opinion they rarely work. I've seen situations where they create ill will and can increase cost themselves as engineers must be assigned to test the idea and verify its originality. Then the accountants get involved to subtract implementation cost and value the net savings. This whole process takes time and can become adversarial. Besides, I want this to be a team campaign and not an individual game. We need to create a culture where finding efficiencies is part of the team's expectation as the group addresses the team's missions."

"I guess it makes sense that a team working together for improvement is more powerful."

"And it creates less resentment toward the individual who may get a cash award. Besides, just because we are looking for cost reductions doesn't mean that we can't invest in new ideas and approaches. Sharing the savings with the organization ensures than we are continuing to invest in good ideas with future cost effectiveness payoffs."

The chairman's assistant knocked on the door and ushered in Jim Huff, the Union Representative. We made room for him at the conference table. When everyone was settled, the chairman said, "Jim, I hear there

was some excitement over a discussion with the Maintenance Department supervisor?"

"Oh there was a little. Work rules are important to membership, and we have to look like we are standing up for the rank and file."

"Look like?"

"Yea, that's my mission. Frankly though, those of us who have been here a while marvel at a lot of the crazy ways you managers spend money. Present company excluded, of course."

"You mean you are not going to fight us on the preventive maintenance idea or on the cost reduction program?"

"Look, we hear the rumors, and we know that the future of the company may be in doubt. Frankly, I'm glad that you are trying to get more competitive. Your cost reduction program is a lot more attractive than other alternatives. Continuous improvement goals of three, four, or even five percent are far below our normal attrition rates. What that means to me is that even if all your cost reductions came from job eliminations there would be no layoffs or drama."

"Jim, these are the statements I thought I would be making."

"Look Stewart, this doesn't mean we are going to be golf buddies. It's just that we share an interest in the future continuation of this company. An unemployed member is not a happy member."

"Or a dues payer, I bet. OK, so our program is better than the alternative. Got it. What can we do for you besides protecting the future of the company?"

"Keep us in the loop, and don't fight us when things turn around and there is a need for more people."

"OK. Can I offer you a seat at the table in our cost reviews?"

"Not necessary. I have my sources and probably know more about what's going on than you do."

"OK then," said Chairman Stewart as Jim Huff stood up, readjusted his face to a scowl, and left the room. "That could have gone a lot worse."

"Yes sir, it could have. But you know we may still need layoffs. I was starting to say that the cost review process is not going to give us the immediate 10 percent savings that I thought you wanted."

"True, continuous improvement takes time. Thoughts?"

"Yes, we have some big decisions pending with the Building Expansion Project and the Warehouse Modernization Program. These are good candidates for the cost benefit analysis we've discussed."

"What's involved?"

"We've outlined a logical eight step approach. If we require it and have Cost Accounting verify the truthfulness of cost calculations we should get better decisions."

"I don't just want the lowest cost."

"Of course not. My recent personal experience with Cost Benefit Analysis shows we should get learning about cost and benefits and creative thinking about alternatives. Ultimately, the best decision should be cost informed, not cost dominated."

"OK, make it happen. But I don't think that a few CBAs will get us the 10 percent either."

"No. CBAs only appear useful for those nonrecurring, major decisions. But maybe CBA could also be applied to a onetime reduction in force."

"How so?"

"Maybe directors could start with a base cost level—say 80 to 90 percent of current. Then they would have to develop and provide a rationale for spending packages above that level. Each package would have a CBA showing costs to be added to the base and benefit that would result."

"I don't know."

"Maybe one package could be specified as 'Keeping Lowest 5 percent Performers.' This would stimulate thinking about employee contribution. Another could be labeled 'Retain Least Important Program, Process, or Function' that would do likewise for an across the board reduction. A third might be 'Relax Spending Cuts' that would fund things that we have cut in training and travel. To provide the stimulus you mentioned earlier, maybe a fourth required package could be 'Add New Employees, Processes, Functions, or Spending.'"

"You have started me thinking. Give me some time to think it through. I hope that we don't need to do something so drastic. The Cost After Action Review process looks like it will generate sustained improvement. Even a modest three to five percent per year improvement will make a huge difference over the next 10 years."

#### **CHAPTER 19**

## The First Companywide Cost After Action Review

The first, full Cost Review meeting filled our largest conference room. Department manager attendance was required, and many had brought key subordinates. The chairman gave his first lesson of the day in command and control when the first presenter, the Quality Control Department manager, tried to redirect a question from the chairman to one of his subordinates.

"Now, now," he said. "My expectation is that you should be able to answer that question."

"But Robert, I am not micromanaging all the details. I've got great people, and I want them to run their areas."

"Of course, so do I. But when there is a variance of this size, that's a signal that you need to get involved. This isn't micromanagement, it's management by exception. It's also an opportunity for you, as the senior manager in your area of responsibility, to teach fiscal responsibility to your subordinates. Note bene: This is what I'm doing right now."

"Ah, I don't know what to say."

"Look, you are a great QC manager: probably the best we have ever had and I love you. Just say that you will be prepared tomorrow when Luis reschedules your Cost Review."

"I will be," he said as he sat down. Nobody else made that mistake although it seemed there were at least a few notes passed back and forth between directors and their staffers. All subsequent speakers had explanations for their cost variances. Some of these could have invited more in-depth probing from the chairman, but he seemed to recognize that his expectations had already been adequately conveyed.

The meeting was notable for three other things. First was the number and quality of the continuous improvement initiatives proposed.

A number of presenters showed ideas for process changes to eliminate or modify practices that had been in place for a long time. Our previous culture had never challenged managers to think creatively. Interestingly, everyone who had an initiative also showed how he or she could spend part of the savings. This had clearly stimulated thinking and provided a bigger motivation than I had expected.

The Facilities manager had an idea to colocate his site monitoring staff that allowed the elimination of three positions—one on each shift. One of his branch managers was looking for a low cost method to dispose of a large pile of asphalt scrapings and found that the pile was worth \$200,000.

The second thing of note was the quality of the proposals for spending a share of the savings. The Facilities manager, for example, recommended funding some basic safety items that surprisingly had not been funded.

One department manager proposed not backfilling a supervisory position so that she could increase the job grade on a number of her employees. Her logic was that the current grade encouraged people to transfer to other jobs as soon as they were trained by the supervisor. She argued that she could better accomplish her mission by not having a supervisor continuously training what proved to be temporary employees. Chairman Stewart made a point of asking that she brief Union Representative Huff on this one.

The third thing of note happened when we got to the big production departments: the ones that had the bulk of the Facilities cost allocation. Showing the matrix comparing allocation by square footage versus allocation by labor hours got a lot of discussion.

Curiously, the production departments allocated less cost under the square footage basis were mostly silent. Not so with those departments whose cost increased. They were quite vocal and posed a number of arguments. One demanded calculations "to the penny" that justified his charge. Another suggested that Facilities was a fixed cost and there was no legitimate reason to be allocating it at all. The fact that some footage cost more or less than others was also argued. The whole concept of allocation was attacked. A number of these arguments were thrown in my direction, as if the facts were somehow my fault.

My discomfort was increasing until the chairman stood up and said, "Enough, there is no perfect measurement, but this is good enough. The bottom line is that we need to use our resources better. I am convinced we are spending too much here and want to see if we can free up space to save janitorial and utilities cost and to avoid building more that will just be used as inefficiently as our current space."

"There are only two ways to address this," he continued. "One is the Soviet method, where I make all the decisions. If you wish, I will be happy to get a bucket of red paint and paint Xs on the areas I want vacated. And you will vacate by end of the day tomorrow. The alternative is to use free market economics, where we tell you what space costs with reasonable accuracy and rely on you and your people to make the right decisions. Which do you want?" he thundered.

Nobody wanted a painting chairman of the board turned loose on the factory floor that night, and the proposed allocation methodology was accepted.

After the last presenter was finished, the chairman offered some concluding remarks. "This has been a good review, not very good, but good for a first pass. I think it is obvious that you learned some things here about your costs, and I'm impressed with both the planned reductions and the suggested increases. I think we are on the right track and look forward to an even better meeting next month. Luis, any closing comments?"

I hadn't expected to be called upon, but spoke my mind. "I too am very impressed with the creativity of the ideas that came out today. It is interesting that not one of these ideas came out during our previous Saturday morning cost reduction meeting just a couple weeks ago. Frankly, I'd like to hear more about these ideas, and I'd like to hear from the person or team responsible."

"I second that proposal," said the chairman. "I'd like each department to nominate their best idea of the month and have the originator come talk to us. I'd like to personally thank them and have the ideas written up for the site newsletter."

This closed the meeting with a table of nodding heads.

#### CHAPTER 20

# Three Months Later: The First Good Ideas Meeting

The next three months saw considerable personal and professional change. Emily and I had refinanced the mortgage and eliminated all credit card interest on the highest interest cards. We were generating a surplus in disposable income of \$500 per month and projected paying off the remaining cards shortly. We were already projecting the payoff schedule for car loans as the monthly disposable income number continued to increase.

The company had its first Good Ideas Meeting (GIM) three months after the first Cost Review. We had been through three cycles of Cost Reviews: each with a steady increase in the number of continuous improvement initiatives. The reviews themselves took progressively less time than they had initially. Presenters needed less to explain their numbers as they got more comfortable with the format and knowledgeable about the financial aspects of their operations. They also seemed better able to anticipate Chairman Stewart's questions before he had to ask them.

The meeting itself was evolving and continuously improving. It was also clear that some of the smaller departments had so little variation that a quarterly review made more sense than monthly. Moving the presentation of improvement initiatives to a separate meeting also reduced the time requirement for the Cost Review.

The cost reductions net of new spending totaled about 4.3 percent of annual spending after three months' work. Undoubtedly, some of this was low hanging fruit making the improvement rate unsustainable, but a 10 percent cut in spend rate by the end of the first year looked very likely.

The single biggest contributor so far proved to be in the Facilities Department. Thousands of square feet had been turned back to the department as managers in production and support functions found they didn't really need all the space they occupied. Not only did this reduce

heating, cooling, and janitorial cost, but it also completely killed the need for the Building Expansion Project.

The GIM (pronounced gem) had two or three short presentations from people representing each major department. These presentations were only two or three minutes each, and the whole meeting took less than 90 minutes.

Chairman Stewart certainly understood the importance of the leader's participation, and he made an effort to interact with every briefer. To some he would ask, "How did you think of that?" or "Where did you get that idea?" He thanked every presenter for their contributions.

It was also obvious that the presenters valued the opportunity to show their contributions to the chairman and the company's senior staff. They were proud of the ideas they came up with. I guess it should not have been surprising since they are the world's foremost experts in their jobs. The chairman and senior staff would never be able to generate the ideas they did.

It was really enlightening to see, for example, one of the janitors, who probably never made it through high school, briefing a group of much more highly paid managers with years and years of college and graduate school education. He got our attention when he demonstrated how putting a bar magnet on the front of his vacuum prevented paper clips and staples from getting stuck in his machine!

We were simply amazed. And humbled.

At the end of the meeting, Chairman Stewart, President Nelson, and I took a quick vote on the best of the best. This was a difficult task, and we ended up with several winners who were invited back for a photo op with the chairman and an interview for the site newspaper.

The meeting did not focus much on the dollars of savings attributed to the ideas. Those figures were generally significantly inflated anyway. We would have solved our cost reduction needs in the first meeting had they been real. Frankly, it didn't matter, and most of the reported savings were reclassified as cost avoidances. It was only a share of the hard dollar, reprogrammable savings that were used to fund new spending in the departments.

As we left the conference room, the chairman indicated that President Nelson and I should follow him to his office. As I closed the door, he was already leaning back in the chair behind his desk. He asked, "What do you think Luis?"

"It is somewhat different. R&D is trying to make breakthroughs, not continuous improvements. The people who briefed us today were talking about small changes. These ideas are really evolutionary while R&D is looking for the revolutionary changes. Don't misunderstand though. A couple hundred small improvement ideas make a very big impact. It was a good meeting, I agree, but my question was really addressed to your thoughts on the last three months?"

"Simply amazing still fits. It is hard to believe how much we have changed in, what, 13 or 14 weeks. We haven't identified the complete 10 percent cost reduction goal, but we are almost half way there and it feels like we have begun to institutionalize a culture than can continue to progress. All in all, it will be somewhat sad to move back to the R&D Department."

"Do you think you are ready to move back?"

"Well, you said this was a temporary assignment, and I think we agree that it has gone well."

"That is agreed, but you won't be going back to R&D."

"What? Why?"

"As they say, I've got good news, and I've got bad news. The bad news is that the company has been sold, and you will no longer be working for me."

"What? That's not right. We have significantly improved the profit situation in a short time, with more improvements very likely as the command and control process continues to mature."

"The improvement is obvious and exactly what I hoped for from the beginning of my recent tenure here. In fact, the improvement was so obvious that the bidders I've been talking to for the last year have upped the purchase price by \$100 million. The increased profits and the promise of future increases generated this increased value of the company's stock."

"So the company is not going to be liquidated?"

"No. That was a potential threat perhaps, but not now. Now it is a very attractive investment for the new owners."

"I see. I guess that's the good news."

"Yes, it is good news for everyone and not the least, for me as a major stockholder. You see, I decided some time ago to make a run for the U.S Senate. It takes big money to make that happen and my share of the \$100 million increased valuation should fund the campaign nicely."

"I see. Well, you can count on my vote, but what's happening to my R&D Department?"

"It's not your R&D Department. It was mine and the other share-holders' and now it is someone else's. I doubt anything is going to happen to the department, but it is fairly certain that you won't be going back to it, and that is the really good news in my bad news, good news opening."

"Not going back?"

"No. I'm taking Melanie with me to be the campaign finance director, and we needed to find someone to run this place. She wouldn't have been the right person anyway, and you were always on the short list. That list became even shorter when we had our first meeting raising the possibility of takeover and the need for cost reduction. You were the one who had the proactive, aggressive thinking, and you became the logical successor as company president after the cost turnaround over the last three months."

"Really," was the most brilliant and articulate thing I could think of at the moment followed by the equally thoughtful, "I don't know what to say."

"There isn't anything necessary to say except that you will accept the new position and continue to drive the goodness and light that we have started here."

"Of course, I accept. I've really enjoyed seeing the changes we've made. I don't know how we operated before these changes."

"Terrific, I will forward that good news to the new owners, and you can expect a call from the head of the Compensation Committee tonight. Don't let them get you too cheaply. Strong leadership is absolutely critical to the success of this company, and you have what it takes."

"Thank you sir. I will do my best."

"I'm sure you will, and they are counting on it. By the way, I have a little more good news for you in the form of this check. It is Melanie's and my last act as officers of the former company and recognizes your contribution."

As I went out the door, my first thought was to call Emily to tell her to ask her parents to sit with Conner so we could go out to dinner tonight. My second thought was that we would be ordering wine. My third qualified the wine purchase as tonight only.

#### **CHAPTER 21**

## Epilogue: Five Years Later

Neighbors came and left over the years. Some left because they were foreclosed in the recession, but more because they got promotions and felt the need to spend their higher incomes. We didn't follow this compulsion as Emily and I remained focused on accomplishing our financial security and Team Conner missions. We hadn't returned to credit card debt and had built up a nice little portfolio of three rental houses that Emily managed. We had no car debt and enough cash on hand and securities to never again require a car loan. I had maxed out contributions to company 401(k) plans and that was also growing nicely.

The company also continued to meet its missions. The new owners were very pleased with our profitability and had increased investment in our R&D. Cost reviews were an institutionalized fact now—a regular part of the routine. Continuous improvement ideas flowed freely and the quarterly GIM meetings never failed to impress me with the creativity of our workforce.

Product developments I had started when I was in R&D were now becoming market successes. The technology in the products was very good, but they were also a great buy for our customers as our continuously improving cost effectiveness allowed us to reduce prices.

Improved understanding of costs had another, unanticipated impact on product pricing. It turned out that our old views of cost had subsidized some products at the expense of others. For example, the heavy reliance on labor as a basis of cost allocation like in the Maintenance Division had penalized products with higher labor content and undercosted products that were highly automated.

Perceived cost inevitably had influenced pricing and pricing had influenced orders. We had been losing good business on the labor intensive products because we had overpriced them without even knowing it. On the other hand, we discovered that we were actually losing money

on some high automation content products that we had priced too low. Not surprisingly, the low prices on these products had brought in a lot of orders. Unfortunately, the joke about "losing money on every sale, but making it up on volume" was on us.

Changing the allocation processes erroneously based on labor also had a great impact on our workforce and even on Union relations. The previous trend of dropping supposedly unprofitable, labor intensive products had been stopped and even reversed in some cases. We had not had to lay off anybody and had actually increased employee levels. We were now actually dusting off the building expansion plans we had shelved five years earlier. The difference was that now we actually needed more space because we had more work and more employees, not because departments were incentivized to hoard space. I guess that even the Union's mission was being met.

Higher profits had resulted in higher pay levels, and we were now able to attract skills we needed. My compensation, perks, and bonuses had increased nicely also. Emily and I were certainly feeling secure enough to order wine with dinner, but only did so on special occasions and then usually a glass rather than a bottle. Given Team Conner's mission focus it just no longer seemed to make sense. Or should I say cents. The dollars had proven able to take care of themselves as we improved our ability to take care of the pennies.

. . . . . . . . . . . . . . .

"Papa, I need to get a new bike, and I don't have enough dollars. Mom and dad don't give me enough allowance. Will you talk to them and tell them I need more?"

"Conner, have you ever heard about Ben Franklin? He was a very wise man who said that a penny saved is a penny earned. Let me tell you more ...

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