

Taming the training expense monster

Part 1 of the Stealth Quality Series

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Introduction

“People are our most important asset.” This is probably the most popular of mystery slogans. I call it a mystery slogan because the term *asset* implies we have made a planned investment, and we expect a very particular outcome for making it. We expect *value*, both in ways we can measure with numbers, and in ways we can just feel good about. But measuring value in employee investments can be very confusing! And the costs are becoming monstrous. They must be tamed so we can remain competitive, especially in a hot labor market. We must tame this beast if we are to thrive, not just survive in business.

Name your beast

How do we know if our human resource investments are bringing value to the organization?

Would it be more profitable to try to hire people who are already trained to do what we need and hope they are loyal, or to promote employees we believe in and train them for the new tasks?

Do we really understand how much of our expenses go toward our workers?

If we want to help our employees perform better, how will we decide which strategy to pursue?

When will we know if the strategy is working—at what point will we be sure if the cost has been worth it?

If we don't ask these questions while making strategic plans, we are not considering the most important aspect of human resource initiatives: **results**. But what do results mean in human resources?

Human performance: After we hire employees to help us, we need to make sure they know what we want, and how to do it. We want as few mistakes as possible, and we want our employees to be “up to speed” as soon as possible so we can get back to our own work. This is measured with *qualitative* methods, meaning whether or not we think the results are good in a customer-oriented way. Qualitative methods measure goodness for both **outside customers**, (those who pay for our goods and services, our suppliers, the community and even the government) and **inside customers** (the people in the workplace that have any effect on our own performance).

Dollars and sense: Knowing just how much it costs to train our employees and what is our return for that investment can help us decide when to offer more training, which kind, and when.

Quantitative methods are those dealing with numbers of all kinds: things measured in line item

expenses and bottom line profits, counts (and their costs) of accidents and errors, time to perform tasks (and its cost) and how much time is lost due to problems...again, and its cost.

Figure out what you are spending before deciding what must be changed. It is easy to add up material costs for training, but costs for the trainer's and trainees' efforts are a bit more complicated. It can be done, however, and it doesn't take very long to pinpoint and track costs once you design what efficiency experts call a *model*: a tool for capturing, calculating and showing results of data. This doesn't require a mathematics degree, high-priced consultants or fancy software. If you can use spreadsheets to do simple math and make graphs, you can make the model, use it as long as you need it, and change it yourself as your needs change.

Human resource specialists have developed formulas to calculate costs for time spent to perform tasks. The formulas can be used for hourly workers, supervisors and management alike. Spreadsheets can be designed to quickly type in a few numbers and show costs for time spent by all personnel. Here's how:

1. Begin with identifying the benefits ratio, the relative cost of benefits to wages and salaries. The formula is:

(Averaged benefits + "perks" + bonuses) divided by (Averaged hourly wages for one year)

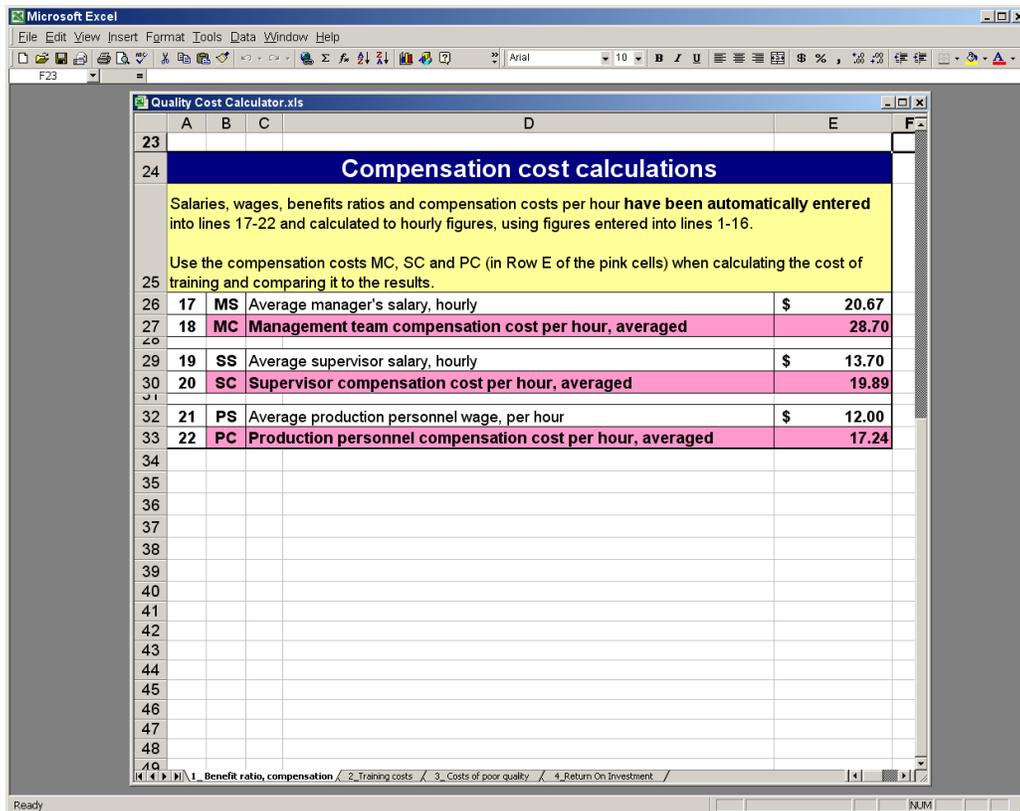
The spreadsheet can calculate the benefits ratio for hourly employees, supervisors and management personnel separately. Calculating the costs separately helps us to be accurate in evaluating costs, which we want because some people's time is much more expensive than for others. The following example, which you can duplicate in your own spreadsheet, separates benefit ratios in three groups.

Line	Code	Description	Amount
Benefit to compensation ratio calculations			
As an essential building block of the compensation formula, benefits ratios will differ among management, supervisors/staff and hourly wage employees. The basic formula for all three is: (Averaged benefits + "perks" + bonuses) divided by (averaged hourly wages for one year)			
Use the "BR" benefit ratio in Line 16 for worksheets computing absenteeism, employee turnover and productivity costs. Hypothetical numbers were used to demonstrate this worksheet. Left-click on the white cells in the far-right column and enter your own numbers to find your organization's compensation/benefits costs. The green-colored results cells will automatically calculate and display the ratios.			
4	1 MS	Average manager's salary, annual	\$ 43,000.00
5	2	Insurance costs: Life, medical, dental, disability per year	\$ 7,400.00
6	3	Bonuses, stock options, other incentives value per year	\$ 2,800.00
7	4	Retirement plan: maintenance and contributions costs per year	\$ 3,200.00
8	5 MB	Management benefits ratio	31%
10	6 SS	Average staff/supervisor salary, per year	\$ 28,500.00
11	7	Insurance costs: Life, medical, dental, disability per year	\$ 7,200.00
12	8	Bonuses, stock options, other incentives value per year	\$ 1,800.00
13	9	Retirement plan: maintenance and contributions costs	\$ 1,700.00
14	10 SB	Staff/supervisor benefits ratio	38%
16	11 PS	Average production personnel wage, per hour	\$ 12.00
17	12	Insurance costs: Life, medical, dental, disability per year	\$ 6,900.00
18	13	Bonuses, stock options, other incentives value per year	\$ 900.00
19	14	Retirement plan: maintenance and contributions costs	\$ 1,200.00
20	15 PB	Production personnel benefits ratio	36%
22	16 BR	Benefit ratio, averaged organization-wide	35%

Use this table to enter formulas into Column E on worksheet 1:

Cell	Description	Formula
E8	Finds the average management trainee's benefit ratio (MB)	=SUM(E5:E7)/E4
E14	Finds the average staff/supervisor trainee's benefit ratio (SB)	=SUM(E11:E13)/E10
E20	Finds the average hourly wage trainee's benefit ratio (PB)	=SUM(E11:E13)/E10
E22	Finds the organization's average benefit ratio (BR)	=SUM(E8,E14,E20)/3

- After determining the benefits ratio, identifying compensation costs per hour is easy. We use compensation costs per hour to discover just how much training costs in employee time. Continue the spreadsheet by duplicating the example below:



Use the following table for entering the remaining formulas in worksheet 1:

Cell	Description	Formula
E27	References the MB benefits ratio already calculated and adds 7.65% contribution to FICA tax	=E26+(E26*0.0765)+(E26*E8)
E30	References the SB benefits ratio already calculated and adds 7.65% contribution to FICA tax	=E29+(E29*0.0765)+(E29*E14)
E33	References the PB benefits ratio already calculated and adds 7.65% contribution to FICA tax	=E32+(E32*0.0765)+(E32*E20)

Decide your objective—what do you want your monster to turn into?

If your reason for training is for more than bringing in a new employee, you probably have some idea of what you expect out of him or her in a certain length of time. Objectives with quantitative measures can be assigned a dollar value, even if every dime is not accounted for—a consistent method for measuring employee progress is better than burdensome accounting that won’t be kept up. Qualitative objectives may not be counted in dollars, but a point value can be assigned to the quality of life and customer happiness that a well-trained employee is helping achieve. This, too, is return on investment, commonly called ROI.

The objectives may be mixed. If you are using a quantitative measure and want to just do better than breaking even, the underlying qualitative objective may be in whether you want to avoid repeating the decision to train, or to change the kind of training delivered. Avoiding costly missteps is also profitable! Decide the objective and write it down now.

Planning with facts keeps the monster’s ugly head down

The more involved the training is, the longer the list of expenses can be. You may decide on bringing in a contract trainer, or to use your own experienced personnel. Whichever, be sure to list and calculate costs well before you make any arrangements. If you are planning to contract training, call the contract trainer and ask what all of his or her expenses will be and consider comparing them with classes run by a local community college or consultant. Typical costs of “outside” training (not performed by the organization’s own experts) may include:

Local, employee travel	Local, consultant visits	Out of area, employee(s) travel
Tuition and fees	Consultant fees	Tuition and fees
Materials, if not included in tuition fees	Materials, if not included in consultant’s fees	Materials, if not included in tuition fees
Mileage to campus	Mileage	Plane or other travel tickets
Parking stickers	Hotel stay, including meals (usually contracted together)	Hotel stay
Employee time	Rented facilities	Meals: 3 per day
	Food: catered or reimbursed	Transportation to training site (car rental, shuttle, etc.)
	Employee time	Parking (personal vehicle at airport or depot)
		Employee time

Begin your training planning worksheet by naming your objective. You can duplicate the following spreadsheet and change it as you need to:

Training costs					
Line 1	Training objective:				
General information					
Line	General information	Employee	Supervisor	Management	Total
2	Number of trainees	-	-	-	-
3	Number of days (for contracted or in-house local training)	-	-	-	-
4	Number of hours of training (total per trainee, by group)	-	-	-	-
5	Compensation (from worksheet 1: EC, SC or MC)	\$ -	\$ -	\$ -	\$ -
6	Plane or other transportation, per trainee round trip	\$ -	\$ -	\$ -	\$ -
7	Lodging costs per employee, per day	\$ -	\$ -	\$ -	\$ -
8	Food costs per day, per trainee	\$ -	\$ -	\$ -	\$ -
9	Parking fees, daily (airport/depot/private lot)	\$ -	\$ -	\$ -	\$ -
10	Transportation per day (rental car, shuttle, etc)	\$ -	\$ -	\$ -	\$ -
11	Parking decals, for entire course (college lots, etc)	\$ -	\$ -	\$ -	\$ -
In-house training costs					
Line	Specific details	Employee	Supervisor	Management	Total
12	Number of hours for trainer's preparation and delivery	-	-	-	-
13	Trainer's hourly comp. (from worksheet 1: EC, SC or MC)	\$ -	\$ -	\$ -	\$ -
14	Materials for each person, in each group	\$ -	\$ -	\$ -	\$ -
15	Equipment (purchased specifically for training)	\$ -			
16	Facility rental costs per day	\$ -			
Contracted training costs					
Line	Specific details	Employee	Supervisor	Management	Total
17	Tuition: community college/other institution, per trainee	\$ -	\$ -	\$ -	\$ -
18	Commercial (contractor's) training fees, for entire course	\$ -			
Total training costs					
Line		Employee	Supervisor	Management	Total
19	Total time costs for trainees (by group)	\$ -	\$ -	\$ -	\$ -
20	Total contracted training costs, including time	\$ -	\$ -	\$ -	\$ -
21	Total internal training costs, including time	\$ -	\$ -	\$ -	\$ -

- The white cells will be used to enter details, such as how many trainees, how many hours, how many days, and so on. These cells do not have formulas in them. Their data will be changed whenever a new training cycle takes place.
- Transfer the compensation figures from Worksheet 1 (lines 18, 20 and 22) into the pink cells. These cells do not have formulas in them either.
- Do not enter any data in the dark cells. They have no function in this worksheet.
- Use the yellow-colored cells for computing the costs based on the details you entered in the white cells. Once you enter the formulas, these cells will automatically show totaled costs from the white and pink cells. **These cells should not be changed when you are recording new training courses.** Once their formulas are saved, they will automatically reflect every change made to any white and/or pink cell.
- If you accidentally delete any of these cells in the future, you can simply refer to this instruction and re-enter the formula(s).

Use this table for entering formulas in worksheet 2:

Cell	Description	Formula
F17	Hours for personnel to prepare, deliver and assess training	=SUM(C17:E17)
F18	Total compensation for trainer(s)	=(C18*C17)+(D18*D17)+(E18*E17)
F19	Total of materials for the training course	=(C19*C5)+(D19*D5)+(E19*E5)
F24	Cost for a (college etc.) class per trainee	=(C5*C24)+(D5*D24)+(E5*E24)
C28	Total cost of time for hourly wage trainees	=C5*C7*C8
D28	Total cost of time for staff/supervisor trainee group	=D5*D7*D8
E28	Total cost of time for management trainees	=E5*E7*E8
F28	Total compensation cost of the course	=SUM(C28:E28)
C29	Total cost of contracted training for hourly wage trainee group	=C28+(C5*C9)+(C5*C6)*SUM(C10:C13)+C5*(C14+C19+C24)
D29	Total cost of contracted training for staff/supervisor trainee group	=D28+(D5*D9)+(D5*D6)*SUM(D10:D13)+D5*(D14+D19+D24)
E29	Total cost of contracted training for management trainee group	=E28+(E5*E9)+(E5*E6)*SUM(E10:E13)+E5*(E14+E19+E24)
F29	Total cost of contract training course	=SUM(C29:E29)+F19+C20+SUM(C6:E6)/3*C21+C25
C30	Total internal training cost for hourly group	=C28+(C5*C6)*SUM(C11:C13)+C5*(C14+C19)
D30	Total internal training cost: staff/ supervisor group	=D28+(D5*D6)*SUM(D11:D13)+D5*(D14+D19)
E30	Total internal training cost for management group	=E28+(E5*E6)*SUM(E11:E13)+E5*(E14+E19)
F30	Total cost of internal training course	=SUM(C30:E30)+F18+F19+C20+SUM(C6:E6)/3*C21

Down, Fido! Obedience in the beast

What do we do with all of this math? Why in the world would we want to go into the effort and not just trust our instincts?

Knowledge is power. Planning with verifiable facts is *the essential step* in not being caught by surprise with training costs. Knowing what to expect in advance can help you steer into a preferable plan before regret sets in!

Use the spreadsheet for reliable answers to questions such as:

- ✓ Would it be more worthwhile to hold a class internally, or contract an outside source?
- ✓ Which would cost more money and effort: recruiting a fully trained employee that is not familiar with our operations, or promoting a selected employee and hiring (and maybe training) a replacement?
- ✓ How long will it take to recoup the expense of this training—how much product or service will I need to sell before breaking even?

There is more!

Now that you know the actual costs of compensating your employees by groups, you can begin to think about other productivity strategies. You can think about solving problems like absenteeism, “presenteeism” (where employees work at less than their best because of illness or problems) and the costs of poor quality (when things must be fixed because of errors).

Feel free to experiment with the spreadsheet in your computer to track these costs over time and compare them with the costs of fixing the productivity problems.

Begin to use this trend to understand how much of your profit is being lost—or gained—by solvable problems and the changes you make to ensure your organization runs more smoothly.

Identify, record, track and solve problems in customer satisfaction before your customers defect to a competitor.

Make connections between these efforts and employee turnover, another expensive trick the monster would like to play on us. You can use your new power to add the costs of advertisements to the time you spend in reviewing applications, as well as the more elusive costs in interviewing, orienting and getting new hires up to full speed.

Use your new power of knowledge to understand just how much your bottom line could jump if you could lower your employee turnover expense by 10 percent a year, and plan your strategy to boost profits by improving employee loyalty. What would you rather do with that money?

Oh, the places you'll go...

Resources

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