

Are Your Safety Projects Getting Funded?

By Edward R. Bulakites



When I am working with a client's safety staff one of the most frequent frustrations, they tell me about is the battle of the budget. They tell me it is a constant battle to get the money needed to do many of the things needing to be done. I can understand their frustration. After all, the projects they are trying to get done will save lives, they will prevent injuries, they will prevent debilitating illnesses. Some of the safety professionals I talk with even question

whether or not the leadership of their company cares about the employees. It seems the mantra, all too often, is; all they care about is profit.

It is understandable for a company's leadership to be focused on profit, the bottom line. Making a profit is why the company exists. So, a safety professional needs to be mindful of this when asking for money for projects. Safety professionals need to find a way to contribute to the goal of making a profit and explain how in the same language the rest of the organization uses. This doesn't sound all that hard to do. So why do safety professionals fail to do this so often? It is really a matter of perspective. In the world of the safety professional what is important is preventing injuries, sending people home in the same or better condition than they came to work in. This is a noble objective, but how does it relate to the overarching goal of the company – making a profit?

Often times, the way it is presented, a safety expenditure doesn't appear to have any relationship to the company's primary objective. In fact, safety expenditures often look like investments without an ROI or even a measurable cause and effect. Allow me to give you an example of what I am talking about. I am sure we have all had a conversation similar to one I am about to relate at least a couple of times in our careers.

The safety manager goes into the plant senior staff weekly meeting ready to present the case and get an important back injury prevention project going. And so, the presentation begins.



“After researching several alternatives, I have determined we can reduce our back injuries by 20% if we start using the ACME electric pallet jack to move all pallets weighing more than 300 pounds. So, based on that level of results I am recommending that we move forward and implement this recommendation.” We are thinking this is great, I hit a home run. In 3 months’ time this will be a done deal. The operations managers, however, have somewhat different thoughts running through their minds and their questions indicate they are not receptive to your ideas. The plant manager speaks for the others. “Last year you were in here and told us if we bought 2 vacuum lifts, we would reduce our shoulder injuries from 20 to 16. This should have saved us \$100,000 and it seems it only saved us about \$31,000. What happened? How do I know we couldn’t have saved the same amount of money by doing nothing?” This is a valid question. Right now, the safety manager is not in a good position to defend his recommendation.

This type of situation arises because of the way safety professionals look at the world and the way that world view leads them to justify doing the things they know need doing. This traditional method of justifying safety expenses relies upon; motherhood and apple pie (doing the right thing), avoiding injuries, perceived workers’ compensation savings and the notion it is good business. When we stop and think about it, how can doing things that under perform their financial projections be good business? The problem is, the monetary savings are being expressed in “soft costs”. Soft costs are difficult if not impossible to measure. The rest of the organization deals in “hard costs”. Hard costs are easily measured. Because of the difficulty measuring soft costs the company’s operations people are probably also asking themselves could we have realized a similar savings if we had chosen to do nothing?

How did we end up in this situation? We went into this meeting intending to do good and now they are questioning our credibility. Here is how it happened. This traditional approach, used by the safety profession to justify expenditures, set you up to fail. It relies on “soft costs” that at best can only be measured subjectively. It doesn’t adequately address what happens in the real world. The following table illustrates how this approach leads to failure and worse, credibility issues.

EXPECTED SAVINGS	\$ 100,000
Medical Inflation (9%)*	\$ 9,000
Medical Complications	\$ 30,000
Attorney Involvement	\$ 30,000
Actual Savings	\$ 31,000

*Aon Hewett, Jan 2015



Clearly, the traditional cost justification model used for years by the safety profession does not account for several critical factors that are difficult to predict. Combined with the problems of measurement inherent with the use of soft costs its no wonder it is difficult to secure funding for safety projects even in good economic times.

So, what does a safety professional do? The simple answer is avoid relying on injury avoidance and the related soft costs. This is easier said then done. How do you avoid relying upon these factors when the purpose of the project is injury avoidance? You create a new paradigm. Not for the organization but for yourself. This new way of looking at things focuses on the process itself rather than on the hazards.

- Injuries / Environmental issues related to a particular process or task signal an inefficient or flawed process or task.
- The solution is found in developing an understanding of the process or task and making a fundamental change in the process or task.
- Traditional approach masks the problem and often adds to the inefficiency.

The other part of this new paradigm is justifying your recommendations using hard costs. No more using injury avoidance and lowered workers compensation costs as the primary justification factors. Instead rely upon:

- Reductions in quality turn backs
- Reductions in materials costs
- Reductions in cycle times
- Reductions in waste generated
- Similar improvements in critical measures of success

As you can see, these are easily measured factors and there is generally ample historical data to use for before and after comparisons to prove the savings. If there are no process improvements as a result of the course of action chosen, you chose the wrong hazard mitigation strategy. So, the bottom line on this new way of looking at things is you consider hazards to be symptoms of a bigger problem and not as the problem in and of themselves. In other words, fix the problem with the process rather than simply deal with the symptom.

To summarize the new approach, Profitability Through Safety[®], requires the safety professional to change the way they look at things by adopting a new way of solving problems. The critical success factors for this new approach are; focus on making the process, as a whole, better, understand how the work is really done, understand the importance of each step in the process, understand where the hazards are in the process, change the process. Here's the proof Safety Through Profitability[®] works.



Case Study: A manufacturing client contacted me to request help in resolving a machine guarding problem. They had a 4-spindle drill press and because of the size of the part processed on it and the close proximity of each of the spindles they were having difficulty finding a workable guarding solution.

I worked with several of their people to come up with a solution. After we went through the process step by step and developed a common understanding of why each step was performed the way it was performed and what it contributed to the end product and the customer's expectations of that part we arrived at some surprising conclusions. Several of the steps were done the way they were because they had always been done that way. The

method of completing the step did not contribute to the quality or utility of the product. Also, there were a couple of tasks that really served no discernable purpose. Apparently, over the years they simply found their way into the process because of the way a particular operator preferred to do things. Finally, we realized that other steps were outdated. They had not kept up with the available technology. So, armed with these conclusions we moved forward. What we ended up with was surprising. When we started the project, the process required the part, weighing approximately 8 pounds, to be moved in sequence from on spindle to another. At each spindle the part was manipulated to perform 4 operations. This meant manipulating the part 4 times at each of the 4 spindle locations. When we finished, all 4 operations could be done at a single spindle. So, 3 relocations of the part a total of 12 additional manipulations of the part were eliminated. The part was now fixtured resulting in the quality engineer predicting an 80% reduction in quality turn backs. The process engineer and finance performed an analysis that resulted in a 60% downward revision in the per part labor cost. How was this accomplished, the tool was redesigned so one tool would perform all 4 operations simultaneously and the part was fixtured rather than held by hand as it had previously been. This is impressive, but how does it protect the employee from the point of operation and the rotating drill press spindle? This is the good part.

The part was now fixtured and a slot was cut in the drill press table for purposes of positioning the fixture correctly. An interlock was installed to prevent the drill press from operating unless the fixture, which was sized to be large enough to protect the employee from the point of operation, was in place. Additionally, a microswitch was installed to prevent the spindle from rotating until it was lowered safely behind the fixture. A collapsible sleeve prevented contact with the portion of the spindle above the fixture while it was rotating. The machine guarding issue was solved. Funding was the only thing standing in the way of implementation.



Working with finance, tooling and maintenance the manufacturing engineer came up with the following cost, per station, to implement the solution.

Engineering:	\$5,300.00
Tooling:	\$5,100.00
Machine Equip.:	\$4,800.00
Operator Training:	\$ 50.00
Total:	\$15,250.00

The project team was faced with asking for slightly more than \$15,000 per station to provide guarding that would be workable and therefore used for each work station. Yes, it was a lot of money but well justified as you will see below.

	BEFORE	AFTER	+/-
Labor	\$2.25	\$0.50	-\$1.75
Material – Added	\$4.98	\$2.31*	-\$2.67
Total	\$7.23	\$2.81	-\$4.42
	ANNUAL SAVINGS		\$33,026.00

*Components were resourced and eliminated as part of this project for additional savings

This number is impressive, but more importantly, operational leadership had confidence in it. It was calculated by the finance department based on input from the manufacturing engineer responsible for the process. This is the way they are accustomed to seeing things done. Equally important the justification for this safety project was presented in language they were familiar with. The icing on the cake was the finance department calculated a payback period of only 5.5 months and a 217% ROI. By the way injury avoidance and workers’ compensation savings were never mentioned. A key difference here is who came developed the financial justification. Using the traditional approach to justifying safety projects the financial justification was typically prepared by the safety department. Using the Profitability Through Safety® approach the financial justification is developed jointly by operations and finance. By the way, this team was proposing an expenditure that would pay for itself in under 6 months and return an annual savings of slightly more than double the expenditure for years to come. This savings could be used to improve the bottom line and improve competitiveness through lower prices. BINGO! The safety department just contributed to the company’s overarching goal, its reason for existing, making a profit.



In summary, these results were realized after adopting a new approach to justify the project being proposed because:

- The focus was changed
 - The process vs. the problem (symptom)
 - The presence of a safety or environmental hazard in a process indicates a flawed or inefficient process.
- The criteria for justification was changed.
 - Injury prevention, environmental protection is a benefit but not the primary reason for making the expenditure.
 - The savings must be capable of being passed along to the customer and/or the bottom line.
 - Must follow the same financial guidelines as non-EHS projects.

Adopting this change in perspective will enable you to talk the same language as the rest of the organization when seeking funding. You will be offering options for the company to improve profits and still keep its employees safe. In many cases, even safer than traditional “fixes” will keep them. Just as importantly, you will be establishing yourself as a valued business partner and earning a seat at the table with full participation.

Edward R. Bulakites is President of OSG Consulting. He is an accomplished Safety Professional and Business Advisor with more than 25 years of success across the aviation & aerospace, consumer services, manufacturing, and construction industries. His broad areas of expertise include vertical transportation, EHS Management Systems, global operations, strategic planning, risk assessment, change management, auditing, process improvement and culture development. Ed can be reached at edbulakites@yoursafetyadvisors.com or 717.623.6066.