



# Safety: Your Business Improvement Tool

A Guide



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### INTRODUCTION

Safety programs, efforts and activities don't just satisfy the law; they can save your company money and help it run more efficiently. Frequently, an effective safety process can help management discover inefficiencies of which they were previously unaware.

This 12-page document is intended as a brief for you to consider ideas regarding how safety can align, integrate and contribute to your organization's efficiency, productivity, and profitability, regardless of the type of operation. We at Boretti, Inc. offer these ideas that have worked well with our clients in a wide variety of industries including manufacturing, construction, agricultural, entertainment and government, whether for profit or non-profit.

We actively work with our clients to integrate their safety efforts. We work with organizations that have minimal or no internal safety resources and organizations that have full safety departments. The goal is simple: we empower our clients.

Contact Boretti, Inc. for more information.

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### PURPOSE OF SAFETY

Over the years, safety has become associated with OSHA compliance. Much is made about the fines and penalties that a company could face if “caught” out of compliance by OSHA. This is a dangerous game to play. In this game, we take unnecessary chances with the idea that compliance is something to achieve when it is convenient, not to sustain or surpass.

But what if there were another way, something that would benefit the organization in more than achieving and being in compliance? Compliance with safety regulations is a *minimum* standard to achieve; it is a floor, not a ceiling. This is a message that even OSHA continually promotes.

It seems that we’ve forgotten the primary goal of safety: the preservation of human resources and company assets. The purpose of the OSH Act is to “assure so far as possible every working man and woman in the Nation safe and healthful working conditions, and to **preserve human resources**.” In passing this act, congress found that personal injuries and illnesses arising out of work situations impose a substantial burden upon, and are a hindrance to, interstate commerce in terms of lost production, wage loss, medical expenses, and disability compensation payments. What this means is that there is not only a human, moral concern, it is also an economic concern.

Profitable companies have become and remain that way because they manage safety as part of their process. Safety is not an adjunct; it contributes to continuous process improvement. If you would like to reduce the costs and risks associated with workplace injuries and illnesses, you need to address safety and health right along with operations. Safety should be managed like any other organizational function. Just as you plan, organize and control your production process, you should plan, organize and control your safety process.

### SAFETY & ORGANIZATIONAL SUCCESS

Can safety contribute to an organization's success? This is a question often asked, especially when an organization embarks on developing a safety process for the first time.

Before we explore this idea, let's establish an understanding of a couple of common terms that will be discussed in this document: "organization" refers to the company, business, non-profit, institute or agency for whom you work and/or own; and, "safety process" refers to the continuous effort you and/or your organization make to minimize exposures and maximize assets such as human resources.

Why would safety's contribution to the organization be important and why should I consider this? The answers are simple: avoidance is not a good motivator and safety many times is viewed as an expense. So, the challenge is, how do we change this?

#### ***Safety Process Facets***

There are several facets to a safety process, with each playing a role in how safety can be a successful, integral part of an organization. These include:

- Reasons – other than OSHA, why would an organization develop a safety process?
- Costs – what are the expense and return on investment of a safety process?
- Integration – how can safety be integrated seamlessly into an organization's operations?
- Measures – how can you measure safety as contributing to injury reduction while simultaneously contributing to an organization's efficiency and profitability?
- Competitiveness – how can you enhance your safety process to give you a competitive edge?
- Barriers – how do you overcome the obstacles and people who block success of the safety process?
- What's In It for Me – how can safety contribute to MY success?

To understand how safety can contribute to the success of an organization, we must first understand that safety is a process, a system that is integral in the organization's operations. To be successful, safety has to be part of the organization's culture; the way things are done. That is easy to say, but hard to accomplish.

## **MOTIVATION FOR SAFETY**

### ***Organizational Motivation***

There are many reasons why organizations develop a safety process, such as complying with OSHA regulations, minimizing the impact of insurance rates, reducing injuries, or minimizing risk exposures. On the surface, it appears that most organizations pay attention to safety to avoid something: recurrence of a serious injury that recently occurred; OSHA penalties; occupational injuries and absenteeism; high insurance rates. While all of these are good reasons, these actions are *re*-actions: in each case safety isn't planned for until something happens. The thought of safety contributing to an organization's success is far removed from avoidance.

Motivation can be a powerful force in getting things done. The key is to determine what motivations are strong, then tapping into these motivations to achieve a positive common goal. For safety, determining motivations includes understanding the decision-making audience. In a recent study, the top five (5) reasons why organizations invest in safety include:

1. Maintaining Profitability
2. Concern for the Well Being of Employees
3. Insurance Company Pressure / High Ex-Mod
4. OSHA Regulations
5. Company Reputation

The results indicate that profitability, concern for well-being, and cost controls are all factors that motivate senior managers and executives, more than regulatory compliance. Each of the top three are viewed and measured as contributing to the organization's success. Benefits of this motivation permeate the organization. Safe, satisfied employees are more likely to stay in their jobs, generate better work and be more productive. The result is decreased costs associated with production and increased business value.

Numerous studies show that organizations with people-oriented cultures, active safety leadership and proactive return-to-work programs can be as much as three times (3x) more efficient and productive than organizations lacking these characteristics. In fact, a study released late in 2007 identified and determined that companies who incorporated Workplace Health & Safety measures into their business strategies financially outperformed those that did not: how's that for maintaining profitability?

### **Personal Motivation**

Like the organizational motivations of concern for the well-being of others and company reputation, personal motivation, as it turns out, can have a profound effect on the success of safety processes. How? The answer is as varied as the items that motivate us in our jobs. Motivation studies conducted over the years have revealed that job motivating factors tend to be ranked in order of importance as follows:

- (a) interesting work
- (b) good wages
- (c) full appreciation of work done
- (d) job security
- (e) good working conditions
- (f) promotions and growth in the organization
- (g) feeling of being “in on things”
- (h) personal loyalty to employees
- (i) tactful discipline
- (j) sympathetic help with personal problems

You might be surprised to see that good wages do not rank first; after all, it is wages that attract us to the job in the first place, right? Think about it: not quite.

So, what does this have to do with safety and the success of the safety process? Well, the number one injury type is back strain / sprain and, not so coincidentally, it is also the most expensive type of injury. And that leads to a study that was conducted to identify the drivers of loss, resulting in the following factors being present:

- (a) Increasing work pressure (doing more with less, performance punishment), (b) surges in workload, (c) lack of job diversity, (d) limited decision-making opportunities, (e) uncertainty of job future, (f) fear of being replaced by computers, (g) poor supervisor and co-worker support.

The study reported that when one or more of these factors are present in a work environment, workers are 2 ½ times more likely to file a claim for a back injury. Interesting, yes? When comparing motivators with loss drivers, you find great similarity, especially with regard to factors such as interesting work, full appreciation for work done, and feeling “in on things.”

As much as we would like to believe that costs and regulations are the factors that drive successful safety processes, it turns out that when a safety process is interesting and appreciates the efforts people make, the process has a greater probability of being successful. The **results** are lower costs and compliance.

There is one more factor to consider with regard to personal motivation to safety: if it benefits me and makes me look good, then it is a good thing, and I will champion the cause.

## **BUSINESS OF SAFETY – IMPACT**

Up to this point, we've discussed how safety can be a successful, integral part of an organization and why organizations develop safety processes.

But what does safety cost, and what is the return for the investment? Research shows the following:

- OSHA's Office of Regulatory Analysis has stated: "...our evidence suggests that companies that implement effective safety and health programs can expect reductions of 20% or greater in their injury and illness rates and a return of \$4 to \$6 for every \$1 invested."
- Liberty Mutual survey shows 61 percent of executives say \$3 or more is saved for each \$1 invested in workplace safety.
- A coal mining company has attained a competitive advantage through investment in SH&E programs. The company claims its workers' compensation rate is \$1.28 per \$100 in payroll as opposed to its competitor's rate of \$13.78.
- Fall protection program implementation reduced one employer's accident costs by 96 percent - from \$4.25 to \$ 0.18 per person-hour.

No matter what the situation is, it boils down to this: injuries are a waste of time, they cost unnecessary money, and they deprive organizations of a needed resource: their people. There is no greater investment or expense to an organization than its people, and safety helps to maximize the return on investment.

### ***Safety Return on Investment***

So, how do we calculate "return on investment," or ROI? Here is only one of several methods that can be used to determine ROI: recover the cost of a safety investment by using a time on task study. Time on task can reveal productivity improvement information from the efficiency gained by investing in a safety solution. Here are the factors used in calculating return:

- Salary (\$)
- Benefits Burden (%)
- Employee Cost per hour (salary x (1 + benefits burden))/2000)
- Time on Task Gain from the Safety Solution (minutes / day)
- Annual productivity increase (time on task gain/day) x (5 days/week) x (50 weeks/year) x (hourly rate)/ (60 min./hour)
- Payback (solution cost / productivity increase)

If done correctly, the answer will reveal how many months it will take for the return. Here is an example: suppose you discover a process isn't reaching the goal of 5 ½ minutes to produce a product; instead, each person produces a product every 7 minutes. Also, there are a total of 12 people performing this job and you observe cumulative trauma exposures, the type that lead to those frustrating "back" injuries. You determine the best course of action is to reduce the cumulative trauma exposure using a piece of equipment that would cost \$258.00 each person, and it would help the department to reach the goal of 5 ½ minutes to produce the product. The salary

per person averages \$30,000 per year and their benefits burden is 20%. The expected increase from investing into the equipment is 2 minutes per hour. Assuming an 8-hour workday and using the calculation noted above, it would take 2.58 months to pay off the equipment investment.

***True Cost of Injury***

Typically, organizations look at lost costs as the amount of medical and compensation expenses spent for occupational injuries and illnesses. These costs are paid through the insurance policy and closely monitored in an effort to hold down insurance premiums. However, the greater cost to the organization is the hidden cost. Below are some of the hidden cost factors to consider.

1. Time lost by other employees who stop work (# of employees x hours x pay rate)
2. Time lost by supervisors & management:
  - Assisting injured employee
  - Investigating accident cause
  - Seeking medical assistance
  - Selecting and training replacement
  - Preparing all accident reports
3. Time spent by in-house first aid responder
4. Damage to machine, tools, or other property, or material spoilage.
5. Failure to fill order penalties, payment of forfeits, and other similar costs.
6. Wages paid for lost time (injured employee)
7. Lost production time (production idle time)
8. Penalties and fines

Of course, nothing can replace the pain felt by the person who was injured.

***Units Sold & Safety***

Another indicator regarding the impact of injuries is to calculate the number of units or service hours that need to be sold to make up for the costs experienced from an injury, damage or liability loss.

Loss costs per sales can provide you with an impact of loss dollars on sales. In other words, what is the dollar amount of sales that needs to be generated to replace, say, the cost of injuries? The calculation is as follows:

$$\frac{\$ \text{ Claims}}{\text{Profit Margin}} = \$ \text{ sales needed to replace claims cost.}$$

Calculating loss cost per unit sales indicates the number of unit sales needed to make up for the cost of claims, based on a period of time (months, quarters, years). The calculation is as follows:

$$\frac{\$ \text{ Claims}}{\text{Time Period}} = \text{Average Claims Costs per Time Period}$$

Then:



*Average Claims Costs per Time Period*  
*\$ Profit per Unit*

*= # of unit sales needed to be sold to make up for claims costs over time period.*

The result can be very revealing. As an example, a restaurant chain experienced a total of \$407,611.00 in hidden claims costs over a 65-month period. Average monthly sales equal \$200,500.00 for 20,050 meals sold. The profit margin for each meal is \$0.50. The company discovered that they needed to sell over 12,500 meals a month to make up for the cost of claims each month. As you can see, this can be a very powerful financial motivator for safety.

## **ORGANIZING YOUR SAFETY PROGRAM**

Your safety program should be designed as an integral part of your company's operation. The program should be **active**. Having an active program will;

- Increase safety awareness in your organization (*i.e., are accidents caused by carelessness?*)
- Affect behavior (*i.e., want to create safe, efficient working habits?*)
- Create positive attitudes (*i.e., by showing management concern*).

These are the basic components that make a safety program **effective (live)**.

**Safety Programs / Manuals** - when developing the written safety program, we are trying to tell a story. In short, the story tells us why, what we are trying to achieve, how we achieve it, when specific actions are to take place and how often, who is responsible for completing these actions, and the program provides the resources needed. Below is how that translates into an organizing outline:

	<u>Story Line</u>	<u>Written Program Structure</u>
I.	Why?	Purpose (law, morality)
II.	What are we trying to achieve?	Objective (prevention of)
III.	How do we achieve it?	Procedures.
IV.	When actions take place?	Tools to be used and at the key points in the operation.
V.	Who?	Is responsible for getting it done
VI.	Resources	Appendices (definitions, forms, etc.)

The final key is "measures = actions." In other words, if your goal is to obtain certain desired actions, then measure the completion rate and quality of the desired actions. "What gets measured, gets done."

## **GETTING THE MOST FROM YOUR SAFETY PROCESS**

To continue to run a profitable, efficient company in today's competitive environment, the work system requires continuous investment. Company owners are constantly looking for ways to become more efficient to gain a competitive edge. Safety programs that are active and part of the operation result in less time spent in preparation and work interruptions. Competitiveness requires continual evaluation of the work process and time/cost factors. Making safety part of your work system is a method of making the time invested into your company efficient.

Here is a construction scenario to illustrate the point:

- By not preparing for fall exposures in advance, what amount of money is lost down the road in;
  - a) Arguing with the project owner resulting in construction delays and charge-backs,
  - b) Not using the correct system resulting in less efficient work process,
  - c) Increasing the risk of operating in a hazardous environment causing people to work more slowly for concern over their safety,
  - d) More time spent in re-work because employees were not in ideal positions to complete their tasks properly,
  - e) More time spent paying bills and looking over your shoulder to prevent compliance inspections resulting in penalties and insurance company loss control visits from increasing your rates.

In contrast, making the small investment in preparing how to deal with and providing the right equipment for fall exposures could have solved these problems:

- a) Taking 15 minutes to identify the exposure, when to anticipate it in the project, and determining the best method to address it so it can be properly bid,
- b) Taking 5 minutes to set up the fall protection method into the construction schedule when you are awarded the contract,
- c) Taking 30 minutes to set-up the equipment and have the safety tailgate meeting, and
- d) Completing the job *at least* 2 hours more quickly because of good organization and safe execution (this is the *true* savings).

The question is, **can you afford NOT to have safety integrated into your work system?**

### IN CLOSING

Developing an effective safety process requires an investment of time and it should be used for continuous evaluation of the work system. Here are some key elements to consider when developing a safety process:

- Make people responsible and accountable for safety;
- Communicate and reinforce the importance of doing the job right, safely the first time;
- Continuously evaluate your work system for inefficient, hazardous situations;
- Take action with your safety process, making it an integral part of the operation;
- Monitor the program for trends and activities that need to be addressed.

We recognize that when asked, everyone states that safety is most important; however, when pressed, safety actually takes a back seat to production or service delivery. This means risk-taking is encouraged, and the organization accepts these inefficiencies. We hope that you've enjoyed this unique view of safety and learned something.

As we end this document, we have a simple question to leave you with and a test. Here is the question: can someone on the "front line" stop work due to a safety problem without being punished? At one Fortune 500 company, frontline employees can do so, have done so, and here was the reaction: the CEO of the company called to ask why production was halted. When he was told it was for a safety reason, the CEO replied, "Good job."

Now, here's the test: use it to benchmark where your organization is regarding the handling of safety problems:

- Stage 1: Uncertainty – "Problems" are fought as they occur. There is inadequate definition of the problem and no resolution: lots of "finger pointing;" accusations.
- Stage 2: Awakening – Teams are set up to attack major problems. Long-range solutions are NOT solicited.
- Stage 3: Enlightenment – Corrective action communication has been established. Problems are faced openly and resolved in an orderly way.
- Stage 4: Wisdom – Problems are identified early in their development. All functions are open to suggestion and improvement.
- Stage 5: Certainty – Except in the most unusual cases, problems are prevented.

So, what stage is your organization at? Remember, contact us; we can help you achieve your safety goals regardless of the safety resources you have.

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