

CONTROLLING HUMAN RISK IN UNCERTAINTY WORK ENVIRONMENT WITH FOUNDATION CONCEPTS

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Abstract:

The productive resources of an organization include property (physical capital) and human resources (human capital). This discussion is to assessing exposures related to the organization's human assets-lossess that occur when individual die, become injured or ill, reach an advanced age, or become unemployed for other reasons. Loss of human assets can have direct economics effects on an organization.

Risk and uncertain exist whenever the future in unknown. Efektive risk control reduces an organization's exposure to risk. More formally, risk control include techniques, strategies, and processes that seek to avoid, prevent, reduce, or otherwise control the frequency and/or magnitude of lots and other undesirable effect of risk. Risk control also includes methods that seek to improve understanding or awareness within an organization of activities affecting exposure to risk.

Key words: Risk, Exposure, Certainty and Uncertainty

INTRODUCTION

Humankind has struggled through the ages to cope with and address risks and uncertainties, as well as the consequences of risks and uncertainties, and has achieved a modest level of success in doing so. Risk is potential variation in outcomes. "When risk is present, outcomes cannot be forecasted with certainty (Imlan 2002; William 1998). As a result, risk gives rise to uncertainty.

Human asset exposures is that, possible financial losses resulting from the death, poor health, retirement, or unemployment of an organization's employees. Although the direct effects of these losses fall on employees and then families, organizations have an indirect interest in assessing and managing these exposures.

FOUNDATION CONCEPTS: CERTAINTY, UNCERTAINTY, AND RISK

Certainty is lack of doubt. In Webster's New Collegiate Dictionary, one meaning of the term "Certainty" is "a state of being free from doubt," a definition well suited to the study of risk management. The antonym of certainty is uncertainty, which is "doubt about our ability

to predict the future outcome of current actions.” Clearly, the term “uncertainty” describes a state of mind. Uncertainty arises when an individual perceives that outcomes cannot be known with certainty.

Heinrich (2007) stated that “The meaning of the term “risk” can depend on the context. For example, one may hear the term used to describe a set of circumstances: “the weather and the icy roads present a risk to drivers.” At other times, the term may refer to a person or to a type of behaviour, as when a reckless driver is deemed to be “a risk to himself and others.” At yet other time, the exposure to a potential is called a risk: “that warehouse is your organization’s greatest risk.”

According to (Brealey 2006; McDonald 1999), “Risk is an objective concept, meaning it is measurable. Exposure to risk is created whenever an act or circumstance gives rise to possible gain or loss that cannot be predicted with certainty”.

RISK AND HUMAN ASSETS

Assessing exposures related to the organization’s human assets-losses that occur when individuals die, become injured or ill, reach an advanced age, or become unemployed for other reason. Individual employees and their families bear the direct consequences of these losses. Further, loss of human assets can have direct economic effects on an organization. Hence, risk managers have valid reason for being interested in human resource exposures. Risk managers often become concerned with the management of risks faced by employees’ households, including death and poor health.

The employer’s concern with human asset loss exposures often springs from self interest. Employees’ concerns about adverse effects possibly resulting from death or disability may affect levels of their productivity. Removal or lessening of these concerns frees energy of employees that can be harnessed to the benefit of the organization. However, the transfer of responsibility from individual employees to the organization is not necessary an improvement unless the organization is more cost-efficient in the management of these exposures than the individual employees acting on their own. Programs providing benefits for death, poor health, or retirement are just one form of compensation to employees. The argument for the organization’s involvement in these areas rests on this form of compensation being more cost-efficient than wages or salaries.

A. Sense of Employer Responsibility

Employers may be interested in the welfare of their employees because they feel responsible for their well-being. The employer may take pride in an insurance and retirement program that is the best in the industry or may simply believe that offering a good program is its duty.

B. Compliance with Government Regulation

Imlan (2002) stated that "Failure to comply with these requirements may cause the employer to lose some tax advantages or to incur certain fines and other penalties. For example: The federal government and state governments have enacted several important laws, such as the Employee Retirement Income and Security act of 1974, which impose certain requirements on employers with employee benefit plans".

C. Employer-Sponsored Programs: Substitutes for Welfare or Social Insurance

In the most industrialized countries today, much of the burden of risk related to loss of human assets has been reallocated from individuals and families, who otherwise would bear these risks, to employers and government. Programs sponsored by employers can serve as substitutes for government programs. Political pressure for enactment of government sponsored welfare and social insurance may grow in the absence of employer-sponsored programs, and a government-sponsored program may be more expensive than a similar program managed by employers.

D. Assessing Exposures of Employees: Loss Frequency

Households face human asset risk exposures due to four causes: (1) death, (2) poor health, (3) old age, and (4) other types of unemployment. The resulting losses to employees and their dependents fall into two categories: (1) loss of earnings and (2) additional expenses (Brealy 2006; Imlan 2002; Sedwick 2005)

THE COST OF ACCIDENTS

Another area of major concern to risk managers is the cost of accidents. Many people fail to realize how much accidents really cost. In fact, many expenses are not always obvious.

Therefore, attention to loss control can also improve your department's financial performance and enhance your company's overall success. Let's consider the question of

“where does the money come from to pay for the results of accidents?” Some people believe that organizations have money set aside to pay for accident costs. However, the supervisors know that the money comes from profits. Thus, a series of costly accidents can reduce profits radically. According to Pfeffer (2007) stated that “Accidents have obvious direct costs, such as medical, hospital, and rehabilitation expenses; Workers compensation payments; and higher insurance premiums or even loss of insurability”.

“People often try to minimize the costs of accidents by saying that they are covered by insurance. But insurance covers only a portion of the total accident cost. Moreover, as accident losses increase, so will a company’s insurance premiums. It is clear that directly or indirectly, accidents reduce profitability. So, the answer to our original question, “Who is responsible for safety?” is that we all are (Accident Prev.Manual 2002)

Imlan (2002) described the Cost of Accident:

Direct cost

- Medical
- Compensation

Indirect Cost (Hidden Cost)

- -Time loss from work by injured
- -Loss in earning power
- -Economic loss to injured family
- -Loss time by fellow workers
- -Loss of efficiency due to break-up of crew
- -Lost time by supervisor
- -Cost of bargaining in new worker
- -Time damaged equipment is out of service
- -Spoiled work
- -Loss of production
- -Loss of production
- -Spoilage fire, water, chemical, explosive, etc
- -Failure to fill orders

- -Overhead cost (while work was disrupted)
- -Miscellaneous—there are at least 100 other terms of cost that appear one or more times with every accident.

An effective approach to safety includes several features (Goskay 2004; Gilster 1999; Ahean 2007):

- a. Conduct safety inspections as regular part of your day-to-day routine and take immediate steps to correct any problems.
- b. Train your employees thoroughly in safe work procedures
- c. Conduct job safety analyses or assign them to others
- d. Make sure employees and visitors wear safety gears
- e. Ask your boss or the safety director for help in addressing your safety problems

Accident is an unplanned, undesired event that may result in harm to people, damage to property or loss to process. Accidents are clearly unplanned events. When they occur, they are not only upset your schedule but demand all of your attention. You must stop what you are doing and handle the many problems associated with accident. A “near accident or “near miss” is an example of an incident resulting in neither an injury nor property damage. However, a near accident has the potential to inflict injury or property damage if its cause is not corrected. About 75 percent of industrial injuries are forecast by near accidents or near misses. It’s in a supervisor’s best interest to find and eliminate their causes to keep near misses from recurring or becoming serious accidents. For example an employee feels the tingle of a slight electric shock while using a defective portable drill. This is near accident because no injury or property damage results. If the defective drill is removed from service, a potential injury or fatality is prevented.

Hazard is any existing or potential condition in the workplace that, by itself or by interacting with other variables, can result in death, injuries, property damage, and other losses. Keep two factors of this definition in mind. First, potentially hazardous conditions, as well as those that exist at the moment, must be considered. Second, hazards may result not from independent failure of workplace components but from one workplace component acting upon or influencing another.

Hazard Control involves developing a program to recognize, evaluate, and eliminate (or at least reduce) the destructive effects of hazards arising from human errors and from conditions in the workplace. As necessary part of the management process, hazard control is made up of safety audits and evaluations; sound operating and design procedures; operator training, inspection and testing programs; and effective communication regarding hazards and their control. A hazard control program coordinates shared responsibility among departments and underscores the interrelationships among workers, their equipment, and the work environment.

Loss Control is accident prevention, achieved through a complete safety and health hazard control program. Loss control involves preventing employee injuries, occupational illnesses, and accidental damage to the company's property. It also includes preventing injuries, illnesses, and property damage that may involve visitors and the public.

The bottom line of all safety program is accident prevention, more often called "loss control." Primary responsibility for safety and accident prevention rests with top management and through them, with the first line supervisors. Your manager should hold you accountable for accident prevention, because he or she is also held accountable, and so on up the line. Unfortunately, there are still some supervisors and managers who do not consider accident prevention an important part of their jobs until after an accident occurs, causing a serious injury or illness. The concerned manager or supervisor then investigates to determine how and why the accident occurred. This approach is not accident prevention, it is accident reaction. Certainly, if an accident occurs, we must identify the causes and eliminate them to prevent a recurrence. As supervisors, our job is to prevent accidents and control the hazards that produce them.

Safety management will help you understand your safety responsibilities, take positive actions to prevent accidents, and give you a way of measuring how well you perform your safety duties. By taking this approach, you will perform the safety portion of your supervisory job in the most efficient manner. And by doing it well, you will have more time for the other important parts of your job.

Many supervisors mistakenly believe that accidents are only those incidents that result in serious injuries. If a minor injury or property damage results in an accident, some supervisors shrug off the incident and return to their routine work. They let the results of an accident determine their level of interest in investigating its causes and preventing a recurrence. But we know that the results of an accident (the degree of loss resulting from it) are a matter of

chance. It would be better to try to control the hazards that lead to accident than try to minimize the damage done once an accident occurs.

AREAS OF RESPONSIBILITY

There are four areas that supervisors must control:

1. Production
2. Quality
3. Cost
4. Accident/illness

Survey shows that supervisors willingly accept responsibility for the first three areas, but ignore or procrastinate about the fourth. This is because they may have assume that the responsibility for accident loss control belongs to a safety director or someone in the human relations department. This assumption is incorrect. Loss control is the job of the supervisor. If line managers and supervisors do not assume responsibility for safety, no company program, no matter how good, will work.

Loss control through accidents prevention must be accomplished at all times. For instance you ask yourself this question: "When should supervisors perform safety inspections?" If your answer is "once a week" or "once a month," you do not understand your responsibility. You should conduct an informal safety inspection every time you walk though your department, even if your primary purpose is only to check attendance or to determine whether supplies adequate. During your inspection, be alert for anything that may cause an accident, such as tripping hazards, fire hazards, poorly stacked materials, poor house keeping, safeguards are missing from machines, and/or unsafe worker practices. Safety responsibilities cannot be separated from the other parts of your work. In fact, the best way to describe your job is to say that you are responsible for safe production. With this in mind, you will soon handle your accident prevention responsibilities almost automatically.

Safety Responsibility as Performance Measure

Many progressive companies include the supervisor's performance or safety responsibilities as part of the performance evaluation. Production, quality, cost, and loss control are of equal importance in measuring job performance and cannot really be separated. When you accept a supervisory job, you also assume responsibility for the safety of your people.

Whether you supervise a group of machinists, assembles, a construction crew, or an office staff. Every supervisor in any company is responsible for the safety of his or her workers.

The top manager cannot handle all of the details of every job, so he or she delegates accident prevention responsibilities, along with commensurate authority, to various middle manager. In turn, the middle manager such as your boss, will delegate responsibility for safety and accident prevention to someone like you, the front line supervisor. Thus, you are accountable to your manager for accident prevention, just as he or she is accountable to the top accountable to your manager for accident prevention, just as he or she is accountable to the top manager.

Let's define the principal terms we are using:

1. Responsibility is having to answer to higher management for activities and results
2. Authority is the right to correct, command, and determine the courses of action
3. Delegation is sharing authority and responsibility with others. Even though we delegate responsibility, we cannot be completely relieved of it.
4. Accountability is an active measurement taken by management to ensure compliance with standards.

So, the answer to our original question, "Who is responsible for safety?" is that we all are. Just as there are many hidden costs due to accidents, there are hidden savings in accident prevention. For this reason, the phrase "loss control" is often used in safety management. Every accident you prevent saves direct and indirect accident costs – money that remains in profits.

Other benefits of accident prevention efforts include:

1. Workers will not be injured or killed
2. Property and materials will not be destroyed
3. Production will flow more smoothly
4. You will have more time for the other management duties of your job.

THE OLD APPROACH TO SAFETY PERFORMANCE

Let's take a closer look at the way many supervisors have measured their safety performances in the past. The measurement was made according to the number of lost time accidents. As long as no one was injured seriously, supervisors felt they were doing a good job.

Many times minor injuries, property damage, or near miss accidents were brushed aside or ignored.

In 1931, H.W. Heinrich conducted a now famous accident study. He showed that for every accident resulting a serious injury, there are approximately 29 resulting in only minor injuries and 300 producing no injuries. If you react only to major-injury accidents, you are ignoring 99,7 percent of the accidents that occur in your operation. Heinrich stressed the fact that the same factors causing a near miss at one time can cause a major injury the next time. If you look only at the major injuries in your department, you will miss many opportunities to find and eliminate the causes of near-accident and property damage accidents. Effective hazard or loss control requires being aware of the possibilities for all types of accidents and knowing how to prevent them from occurring.

THE NEW APPROACH TO SAFETY PERFORMANCE

Include loss control as a regular part of your job and expect to have this part of your performance measured. For example, you are expected to perform periodic safety inspections of the areas for which you are responsible. Your manager can verify that you conduct these inspections, check on their quality, and determine how well you follow up on the items needing attention. Although safety and house keeping inspections and the problems you discover are important, what you do about them is more important; if a problem can be corrected by your people, assign the appropriate tasks as soon as possible. If, on the other hand, service or maintenance personnel must be involved, issue a work order request immediately. Be sure to follow up to see that the job is done. It may be necessary to have your manager help expedite the work by getting assistance from other departments.

1. Job Safety Instruction

You are responsible for training the workers in your area, and it's up to you to monitor their work habits. One of the most effective ways to avoid accidents is to make sure that employees are following the safe work procedures in which they have been trained. Some points to consider are:

- a. What is the quality level of the job safety instruction training?
- b. How many people in the department are responsible for the training?
- c. Are all new employees trained?
- d. Are transferred employees trained?

2. Job Safety Analysis

You are also the one who looks for ways to improve operating procedures in your area while maintaining safe and healthy working conditions. Occasionally, you will conduct job safety analysis or assign them to others. Points to consider include:

- a. Are the assigned numbers of job safety analysis being performed?
- b. Is the quality improving?
- c. Are job safety analysis reviewed as operations are revised?
- d. How well are they being used?

3. Other Measures

Another positive measure of safety management is to have your people use the appropriate personal protective equipment (PPE). When new employees are trained, they should be informed about the need for personal protective equipment. Some PPE like those for eye protection, should be fitted, other, like some respiratory protective equipment, should be demonstrated so that the workers know how to use them properly. You should emphasize that people will be expected to wear and use safety equipment on the jobs. Likewise, anyone visiting your area must also comply with the requirements for wearing the proper equipment. Make sure all visitors put on the appropriate gear before they enter the work area.

As the number of accidents in your department declines, departments will run more smoothly. You can devote more time to other parts of your jobs, such as production planning, quality improvements, and other cost controls.

4. Help with Your Loss Control Work

Where can first line supervisor turn for help and guidance with their safety activities? First, look to your manager for help. He or she should be most concerned with your control of losses. This is part of your manager's job performance measurement, as well as your own. Your efforts in this area can play an important part in helping both of you successfully carry out employment safety performance on the job.

The safety director or manager in your company can be another source of help and can serve as a catalyst for your program. His or her job is to work with company management to plan the overall loss (hazard) control program and to assist supervisors in carrying it out. It is wise for you to cooperate completely with the safety director's program for your area of responsibility.

SUMMARY AND CONCLUSIONS

The responsibility to prevent accidents through a hazard (loss) control program is a line function. The company's top manager delegates the responsibility to your boss, who in turn delegates responsibility to you. Indirect and direct accident costs are higher than most people realize. Direct costs represent only a small portion of the total. Indirect costs, such as worker downtime, accident investigation and reporting, and equipment replacement or repair add significantly to the total accident costs.

Hazard or loss control is as important part of your job as your production, cost, and quality control responsibilities. Your objective is safe production. As a result, you must establish effective job safety training programs for your workers and see that safety rules and policies are observed.

An effective approach to safety includes several features (Goskay 2004; Gilster 1999; Ahean 2007):

- f. Conduct safety inspections as regular part of your day-to-day routine and take immediate steps to correct any problems.
- g. Train your employees thoroughly in safe work procedures
- h. Conduct job safety analyses or assign them to others
- i. Make sure employees and visitors wear safety gears
- j. Ask your boss or the safety director for help in addressing your safety problems

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