Segment C

Assignment 7
Risk Management

Assignment 8
Loss Exposures

Assignment 9
Insurance Policies

Direct Your Learning

7

Risk Management

Educational Objectives

After learning the content of this assignment, you should be able to:

- Describe the basic purpose and scope of risk management in terms of the following:
  - How risk management is practiced by individuals and organizations
  - The basic distinction between traditional risk management and enterprise-wide risk management
- Explain how to identify and analyze loss exposures.
- Describe the risk management techniques for risk control and risk financing.
- Explain how to select the appropriate risk management techniques, implement the selected techniques, and monitor a risk management program.
- Explain how risk management benefits businesses, individuals, families, society, and insurers.
- Applying the risk management process, recommend appropriate risk management techniques for handling loss exposures of an individual, a family, or a business.

Outline

Risk Management

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BASIC PURPOSE AND SCOPE OF RISK MANAGEMENT

Risk management involves the efforts of individuals or organizations to efficiently and effectively assess, control, and finance risk in order to minimize the adverse effects of losses or missed opportunities.

Individuals practice risk management to protect their limited assets from losses and to help meet personal goals. For an organization, sound risk management adds value and helps to ensure that losses or missed opportunities do not prevent it from meeting its goals. While many organizations have traditionally focused their risk management efforts on **pure risk**, the emerging discipline of enterprise-wide risk management is focused on managing all of an organization's pure and **speculative risks**.

Pure risk

A chance of loss or no loss, but no chance of gain.

Speculative risk

A chance of loss, no loss, or gain.

Risk Management for Individuals and Organizations

In its simplest form, risk management includes any effort to economically deal with uncertainty of outcomes (risk). For individuals, risk management is usually an informal series of efforts, not a formalized process. Individual or personal risk management may be viewed as part of the financial planning process that encompasses broader matters such as capital accumulation, retirement planning, and estate planning.

Individuals and families often practice risk management informally without explicitly following a risk management process. For example, individuals purchase insurance policies to cover accidental or unexpected losses, or they contribute to savings plans so that they have money available to cover unforeseen events.

In smaller organizations, risk management is not usually a dedicated function, but one of many tasks carried out by the owner or senior manager. In many larger organizations, the risk management function is conducted as part of a formalized risk management program. A risk management program is a system for planning, organizing, leading, and controlling the resources and activities that an organization needs to protect itself from the adverse effects of accidental losses.

Most risk management programs are built around the risk management process. The risk management process is the method of making, implementing, and monitoring decisions that minimize the adverse effects of risk on an organization. Although the exact steps in an organization's risk management process may differ from the process discussed in this section, all risk management processes are designed to assess, control, and finance risk.

Traditional Risk Management and Enterprise-Wide Risk Management

Traditionally, the risk management professional's role has been associated with loss exposures related mainly to pure, as opposed to speculative, risks. This view excludes from the scope of risk management all loss exposures that arise from speculative risk, also referred to as business risk. Therefore, organizational risk management has focused on managing safety, purchasing insurance, and controlling financial recovery from losses generated by hazard risk.

Enterprise-wide risk management (ERM) is the term commonly used to describe the broader view of risk management that encompasses all types of risk. ERM is an approach to managing all of an organization's key risks and opportunities with the intent of maximizing the organization's value.

An ERM approach allows an organization to integrate all of its risk management activities so that the risk management process occurs at the enterprise level, rather than at the departmental or business unit level. How ERM is implemented in practice varies significantly among organizations, depending on their size, nature, and complexity.

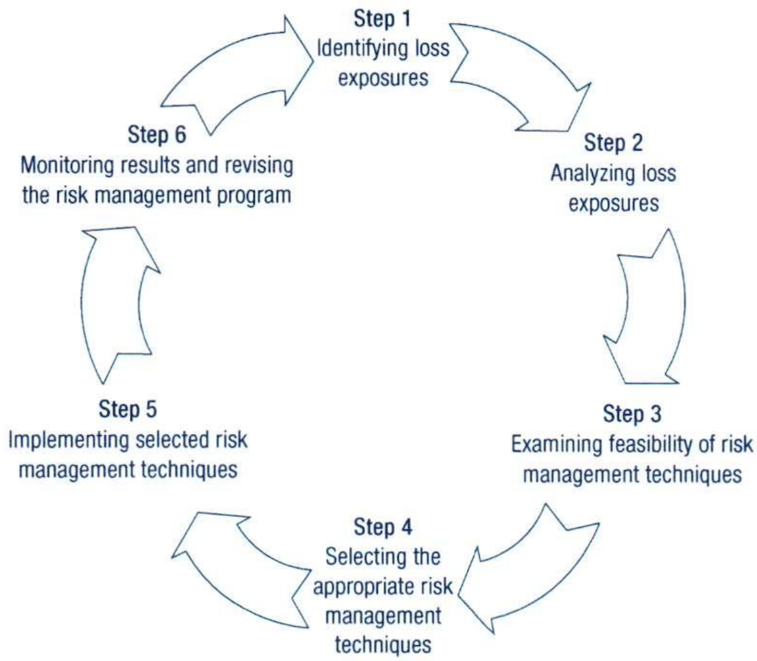
IDENTIFYING AND ANALYZING LOSS EXPOSURES

The risk management process, which enables businesses and individuals to effectively manage the risk of accidental loss, begins with an examination of loss exposures.

To help ensure the success of a business or a household, a risk manager must analyze any loss exposures. The risk management process helps risk managers deal with loss exposures efficiently and effectively. As used in this discussion, the term "risk manager" refers to anyone who is responsible for risk management within an organization or a family.

Insurance professionals benefit from understanding the risk management process because it provides a framework for understanding why individuals and entities purchase insurance products. It also enables insurance professionals to help prospective policyholders identify risks that can be effectively managed using insurance products. The risk management process has six steps. The first two steps in the process are identifying loss exposures and analyzing loss exposures. See the exhibit "Risk Management Process."

Risk Management Process



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Identifying Loss Exposures

Identifying loss exposures involves developing a thorough list of accidental losses that could affect a particular household or organization. To identify loss exposures, the risk manager must understand how the household or organization operates. A physical inspection of the premises is a starting point, and then the risk manager can use other techniques, such as financial statement analysis, flowcharts, and interviews. The more common techniques, in addition to physical inspection, are loss exposure surveys and loss history analysis. See the exhibit "Step 1: Risk Management Process."

Physical Inspection

A risk manager generally cannot gain a clear picture of possible loss exposures by sitting at a desk away from the source of risk. The most straightforward method of identifying loss exposures is to physically inspect all locations, operations, maintenance routines, safety practices, work processes, and other

Step 1: Risk Management Process

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activities in which his or her household or organization is involved. For example, a risk manager for an industrial operation may observe that the safety guards have been removed from machines or that boxes of parts are stacked high on a storage shelf, creating an exposure for injury should the parts fall. Physical inspection alone may not be enough, however, because the risk manager may not have sufficient knowledge of the household or operations to identify all exposures or to ask the right questions to uncover all loss exposures.

Loss Exposure Surveys

Loss exposure surveys, or checklists, are documents listing potential loss exposures that a household or an organization may face. Such surveys are often designed to be comprehensive enough to apply to almost any household or organization, even though a given household or organization is unlikely to face all of the loss exposures detailed.

A sample of questions frequently asked on loss exposure surveys for organizations demonstrates the scope of questions that would be appropriate. Such surveys usually group similar exposures together, such as exposures from manufacturing operations, from the sale of products, from the use of vehicles, and so forth. Similar but less extensive surveys are available from insurers to help individual households identify the loss exposures they face. See the exhibit "Sample of Questions Frequently Asked on Loss Exposure Surveys."

The risk manager usually discusses the items on the business survey with managers, supervisors, and other employees who are familiar with an organization's exposures. In some cases, the survey can also help familiarize the risk manager with the organization's operations. Because surveys may omit an important exposure, especially if the organization has unique operations not included on a standard survey form, risk managers cannot depend solely on them. Rather, risk managers should use the survey as a guide in developing a comprehensive picture of the organization's operations and loss exposures.

Sample of Questions Frequently Asked on Loss Exposure Surveys

Yes	No	
❑	❑	1. Do you have a brochure or other written material that describes your business operations or products?
❑	❑	2. Is your business confined to one industry?
❑	❑	3. Is your business confined to one product?
❑	❑	4. Do you own buildings?
❑	❑	5. Do you lease buildings from others?
❑	❑	6. Do you lease buildings to others?
❑	❑	7. Do you plan any new construction?
❑	❑	8. Are your fixed asset values established by certified property appraisers?
❑	❑	9. Do you own any vacant land?
❑	❑	10. Are any properties located in potential riot or civil disturbance areas?
❑	❑	11. Are any properties located in potential flood or earthquake areas?
❑	❑	12. Do your properties have security alarm systems? (Fire-sprinkler discharge, burglary, smoke detection, and so forth)
❑	❑	13. Are there any unusual fire or explosion hazards in your business operation? (Welding, painting, woodworking, steam boilers or pressurized machinery, and so forth)
❑	❑	14. Do you take a physical count of inventory at least once a year?
❑	❑	15. Do you lease machinery or equipment other than automotive?
❑	❑	16. Do you stockpile inventory, either raw or finished?
❑	❑	17. Could you conveniently report inventory values on a monthly basis?
❑	❑	18. Do you buy, sell, or have custody of goods or equipment of extremely high value? (Radium, gold, and so forth)
❑	❑	19. Do you use any raw stock, inventory, or equipment that requires substantial lead time to reproduce?
❑	❑	20. Do you export or import?

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Loss History Analysis

Loss history analyses deal with an organization's past losses and can assist a risk manager in identifying that organization's exposures to future accidental losses. A high-quality loss history is complete, organized, consistent, and relevant. Past events or conditions that were not recorded, were inaccurately recorded, or were made irrelevant by changing environments have little, if any, value for forecasting future events. For example, data quality is reduced when a loss is omitted, any item of information normally collected about losses (such as where or when they occur) is omitted, the conditions under which an organization operates change or those operations themselves change in some fundamental way, or a new cause of loss emerges.

Analyzing Loss Exposures

Analyzing a loss exposure requires estimating how large a possible loss could be and how often it might occur. Such an analysis helps to determine how losses may interfere with the activities and objectives of the household or organization and what their financial effect may be. An analysis of the probable frequency and severity of the possible losses enables the risk manager to give priority to the most significant loss exposures. See the exhibit "Step 2: Risk Management Process."

Step 2: Risk Management Process

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Loss Frequency

Loss frequency indicates the number of losses that occur within a specified period. Examples of frequent losses include employees' abrasions and minor lacerations at a manufacturing plant, minor accidents involving autos from an organization's fleet, and spoilage of produce at a supermarket. Other losses, such as those caused by earthquakes, tornadoes, and hurricanes, occur much less frequently.

Accurate measurement of loss frequency is important because the proper treatment of the loss exposure often depends on how frequently the loss is expected to occur. If a particular type of loss occurs frequently, or if its frequency has been increasing in recent years, the risk manager may decide that procedures for controlling the risk are necessary. Alternatively, if the loss occurs rarely or its frequency has dropped in recent years, corrective procedures may not be cost-effective.

Loss Severity

Loss severity is the amount of loss, typically measured monetarily, for a loss that has occurred. It is much easier to gauge the potential severity of property losses than of liability losses. Most property losses have a finite value. Whether the property is partially or completely destroyed, the severity of the loss is usually calculable. Conversely, the severity of liability exposures can be almost impossible to calculate. For example, if a paint manufacturer sells paint that produces toxic fumes when applied, the severity of this potential liability loss is almost unlimited.

As another example, the severity of the property loss from an airplane crash may equal several million dollars, but it is still a calculable amount. However, if a commercial passenger aircraft crashed in a densely populated metropolitan area, the potential severity of the liability loss would be difficult, if not impossible, to estimate accurately.

Properly estimating loss severity is essential in treating the loss exposure, as the potential severity of losses is a major consideration in determining whether the household or organization should insure a particular exposure or retain all or part of the financial consequences of the loss.

EXAMINING THE FEASIBILITY OF RISK MANAGEMENT TECHNIQUES

Understanding the various techniques for managing risk is essential for any individual, family, or organization that uses the risk management process.

Once loss exposures have been identified and analyzed, the next step in the risk management process is to examine all possible techniques for handling the exposures. These techniques are grouped into two broad categories—risk control and risk financing. An overview of some of the more common risk management techniques will help insurance professionals understand options to control and finance risk. See the exhibit "Step 3: Risk Management Process."

Step 3: Risk Management Process

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Risk Control

Risk control is a risk management technique that attempts to decrease the frequency and/or severity of losses or make them more predictable. These are some common risk control techniques:

- Avoidance
- Loss prevention
- Loss reduction
- Separation
- Duplication

Avoidance

Avoidance

A risk control technique that involves ceasing or never undertaking an activity so that the possibility of a future loss occurring from that activity is eliminated.

Avoidance eliminates a loss exposure and reduces the chance of loss to zero. For example, a manufacturer of sports equipment may decide not to sell football helmets to avoid the possibility of large lawsuits from head injuries. Likewise, a family may decide not to purchase a motor boat to avoid the potential property and liability exposures that accompany boat ownership.

The advantage of avoidance as a risk control technique is that the probability of loss equals zero—there is no doubt or uncertainty about the loss exposure because a loss is not possible. Avoidance has the disadvantage of sometimes being impractical and is often difficult, if not impossible, to accomplish.

For example, suppose Priya is contemplating the purchase of her first automobile, but she is worried about the exposures inherent in automobile ownership. She may believe the chance of damage to the car is too great. Further, Priya may be unwilling to assume the chance of liability imposed by law, or perhaps she cannot afford automobile insurance.

In Priya's case, however, avoidance of these exposures may pose additional problems for Priya. Does she need a car for commuting to work or for other activities? If so, she will have to exchange the exposures of automobile ownership for the exposures inherent in some other type of transportation. Renting or leasing a car may be more expensive than auto ownership, and Priya would still be liable for any accidents she may cause. Forgoing a car would mean traveling by public transportation, by bicycle, by motorcycle, or on foot; any of these alternatives could prove more hazardous to Priya than riding in her own car. Priya may decide that avoidance is not a feasible technique and would thus choose to purchase a car and buy automobile insurance to cover her automobile loss exposures.

Loss Prevention

Loss prevention seeks to lower the frequency of losses from a particular loss exposure. Some common examples of loss prevention are keeping doors and windows locked to prevent burglaries, and maintaining a regular program of vehicle maintenance to prevent accidents caused by faulty equipment.

Loss Reduction

Loss reduction seeks to lower the severity of losses from a particular loss exposure. Some common loss reduction measures include installing a sprinkler system, which does not usually prevent fires, but can limit damage should a fire occur, and installing a restrictive money safe that a store clerk cannot open.

Many insurers have a risk control department that includes risk management professionals who attempt to reduce an insured's frequency and severity of losses. Insureds often use risk control measures because the insurer has recommended them. Insurers direct much risk control effort to commercial insurance accounts. The risk control programs recommended by insurers are generally based on inspection reports prepared by the insurers' risk control representatives. An inspection report is one of the best sources of underwriting information and it supplements the application.

When an underwriter receives an application for a commercial account, one of the underwriter's first tasks is often to request an inspection report from the insurer's risk control department. A risk control engineer or representative visits the applicant's location or locations to inspect the premises and operations and submits an inspection report.

An inspection report usually has these two main objectives:

- To provide a thorough description of the applicant's operation so that the underwriter can make an accurate assessment when deciding whether to accept the application for insurance
- To provide an evaluation of the applicant's current risk control measures and recommend improvements in risk control efforts. The underwriter may require that the applicant implement the risk control recommendations for the application to be accepted

Separation

Separation is a risk control technique that isolates loss exposures from one another to minimize the adverse effect of a single loss. For example, an organization may store inventory in several warehouses for valid business reasons, as well as for risk control. Another example of separation is using several suppliers for raw material purchases, which might also provide competitive pricing.

Duplication

Duplication is a risk control technique that uses backups, spares, or copies of critical property, information, or capabilities and keeps them in reserve. For example, an organization may store copies of key documents or information at another location and may maintain an inventory of spare parts for critical equipment. Risk control techniques are rarely used alone and are most often effective when used in conjunction with risk financing techniques.

Risk Financing

Risk financing is an effective risk management technique that includes steps to pay for or transfer the cost of losses. The most common risk financing techniques include retention and transfer (noninsurance risk transfer and insurance).

Retention

Retention

A risk financing technique by which losses are retained by generating funds within the organization to pay for the losses.

The financial consequences of any loss exposure that has not been avoided or transferred are retained. **Retention** involves acceptance of the costs associated with all or part of a particular loss exposure. Retention can be intentional or unintentional. After thoroughly analyzing the alternatives, a risk manager may decide that retention is the best way to handle a given exposure, perhaps because insurance is not available or is too expensive. For example, a risk manager may decide that purchasing collision coverage on a fleet of older vehicles is not worth the premium and may thus decide to retain the organization's exposure by paying for any collision losses from the company's operating funds.

Unintentional retention may result from inadequate exposure identification and analysis or from incomplete evaluation of risk management techniques. For example, a restaurant may not identify its liability exposure for serving too much alcohol to a customer and therefore may fail to purchase liquor liability insurance to cover this exposure.

Retention can be partial or total. For example, a $10,000 per building deductible on a commercial property insurance policy is a partial retention. An example of total retention would be a husband and wife choosing not to purchase flood insurance on their lakeside home because they believe it is too expensive—they are effectively retaining their entire exposure to flood losses.

In the long run, retention is less expensive than insurance. While retention involves absorbing the cost of losses, insurance premiums are used to cover losses plus the insurer's overhead, taxes, expenses, and other costs of policy and claim handling. In the short run, however, many people and organizations do not have the financial means to retain more than a small amount of their losses.

Retention is usually used in combination with other risk management techniques, particularly risk control and insurance. A deductible in a business auto policy is an example of the combination of retention and insurance. If the risk manager also implements a driver safety program to lower the frequency of corporate auto accidents, the combination of risk control, retention, and insurance can handle the exposure economically.

Transfer

Businesses often treat loss exposures by noninsurance risk transfer, a risk financing technique in which one party transfers the potential financial consequences of a particular loss exposure to another party that is not an insurer. For example, the landlord of a commercial building may wish to transfer the financial consequences of a liability exposure arising out of activities of a tenant. The landlord accomplishes this transfer by having the tenant sign a hold-harmless agreement. The agreement can be a separate contract, but it is usually a provision included in the lease. In this case, the hold-harmless agreement might state that the tenant agrees to indemnify the landlord for any damages the landlord becomes legally obligated to pay because of injury or damage occurring on the premises occupied by the tenant.

In addition to other techniques for handling loss exposures, households and small businesses depend heavily on insurance—another transfer technique—which transfers the potential financial consequences of certain specified loss exposures from the insured to the insurer. Most medium-sized and large businesses also rely on insurance as a major component of their risk management programs, but they may be less dependent on insurance and employ other risk management techniques more systematically than households and small businesses.

Even large businesses face loss exposures that they can handle most economically by purchasing insurance. No viable alternative exists for highly unpredictable loss exposures that could result in catastrophic financial consequences. Such businesses may use large retention amounts (deductibles or self-insurance) and purchase insurance policies to provide coverage above these amounts to protect them against large losses.

By working closely with the organization's insurance producer, a risk manager can develop an insurance program tailored to the company's needs and coordinate an insurance program with risk control and other risk financing to develop a complete risk management program. See the exhibit "Risk Management Techniques."

Apply Your Knowledge

Dorian has followed the auto manufacturers' scheduled maintenance recommendations on her new Kia and five-year-old Honda to avoid any accidents caused by mechanical malfunctions. Her sixteen-year-old son, Marvin, has just received his driver's license. Dorian decides that Marvin will drive the Honda, which has dual front and side airbags installed. Dorian adds Marvin to her auto insurance policy and asks her insurer to increase the comprehensive and collision deductibles for the Honda to $1,000 to reduce the cost of the insurance coverage. At Dorian's insistence, Marvin completed a safe-driver education program, which included thirty hours of driving time with a certified driver education instructor, before obtaining his driver's license.

Identify the risk management techniques that Dorian has used to manage her auto loss exposures.

Risk Management Techniques

Risk Control Techniques

Technique	What the Technique Does	Example
Avoidance	Eliminates the chance of a particular type of loss by either disposing of an existing loss exposure or by not assuming a new exposure.	A family decides not to purchase a boat and therefore avoids the loss exposures associated with boat ownership.
Loss prevention	Lowers loss frequency (number of losses).	A business installs bars on windows and door deadbolts to prevent burglaries.
Loss reduction	Lowers loss severity (dollar amount of losses).	A business installs a sprinkler system to reduce the amount of fire damage from potential fires.
Separation	Lowers loss severity.	A business buys multiple small warehouses to contain the effects of a single loss.
Duplication	Lowers loss frequency.	A taxi firm maintains a few spare vehicles to keep all drivers on the road even if one vehicle needs repair.

Risk Financing Techniques

Retention	Retains all or part of a loss exposure (intentionally or unintentionally), which means that losses must be paid for with available funds or other assets.	A business decides not to purchase collision coverage for its fleet of vehicles and sets aside its own funds to pay for possible collision losses.
Noninsurance transfer	Transfers potential financial consequences of a loss exposure from one party to another party that is not an insurer.	In a lease, a landlord transfers the liability exposures of a rented building to the tenant.
Insurance	Transfers financial consequences of specified losses from one party (the insured) to another party (the insurer) in exchange for a specified fee (premium).	A family purchases homeowners and personal auto policies from an insurer.

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Feedback: Dorian used these techniques to manage her auto loss exposures:

- Dorian's auto maintenance practice is a loss prevention technique.
- Dorian's decision for Marvin to drive the older auto with dual airbags is a loss reduction technique because the value of the older Honda is less than that of the newer Kia, and the airbags could minimize or prevent injury to Marvin and his passenger in an accident.
- Adding Marvin to her insurance policy is an insurance risk transfer technique.

- Increasing the auto deductibles on the Honda is a retention technique.
- The safe-driver education program that Marvin completed is both a loss reduction technique and a loss prevention technique because Marvin's knowledge of safe-driving practices can help prevent accidents (losses) and his knowledge of how to react in an accident might help him reduce the amount of damage incurred if he has an accident.

SELECTING, IMPLEMENTING, AND MONITORING RISK MANAGEMENT TECHNIQUES

After identifying and analyzing loss exposures and considering the feasibility of the available risk management techniques, the risk manager must complete steps 4, 5, and 6 of the risk management process. The last three steps in the risk management process guide businesses and individuals in selecting appropriate risk management techniques, implementing the selected techniques, and monitoring results of the techniques selected and revising their risk management programs.

The fourth step in the risk management process is to select the most appropriate risk management technique(s) based on financial criteria and guidelines. The fifth step is implementation of the selected techniques. The final step involves monitoring the results and revising the program as needed. An understanding of these steps helps insurance professionals guide customers through the risk management process and provides a deeper understanding of the issues a customer might face in developing and implementing a risk management program.

Selecting the Appropriate Risk Management Techniques

Organizations and households select risk management techniques based on financial criteria or informal guidelines. For example, organizations that are accustomed to reaching decisions based on expected profits or other financial criteria will probably use these same financial standards to select the most promising risk management techniques. In contrast, organizations that are less financially oriented are more likely to apply informal guidelines in choosing risk management techniques. See the exhibit "Step 4: Risk Management Process."

Step 4: Risk Management Process

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Selection Based on Financial Criteria

Financial management decisions are typically made with the objective of increasing profits and/or operating efficiency. Selection of risk management techniques can be based on the same objectives. When an organization undertakes an activity to achieve profit goals or other objectives, it also assumes the exposures to accidental loss that are inherent in that activity. How the organization deals with those loss exposures affects the profits or output from the activity. By forecasting how selection of a particular risk management technique will affect profits or output, an organization can choose the risk management technique that is likely to be the most financially beneficial.

For example, a corporation may analyze its financial position and decide that it does not want any retained loss exposures to affect annual corporate earnings by more than five cents per share of stock. If the corporation has 100 million shares outstanding, the risk management department can retain up to $5 million for all exposures in a fiscal year. The risk management department makes its retention decisions for the coming year based on this strategy of protecting corporate earnings.

Selection Based on Informal Guidelines

Most households and small organizations follow informal guidelines in selecting risk management techniques. Four guidelines might be used to select techniques.

The first guideline is do not retain more than you can afford to lose. Setting an upper limit on the proper retention level is an important guideline. The amount that a household or an organization can afford to lose depends on its financial situation. For example, if a family has only $500 in its savings account and has little remaining from each paycheck after paying expenses, it may not be feasible for the family to carry a $1,000 deductible on either its homeowners or personal automobile policies. Unless the family has resources to borrow money to bear the portion of a loss attributed to a high deductible, the family may choose to carry whichever minimum deductibles the insurer offers, despite the fact that the family could save premium dollars by choosing a higher deductible.

The second guideline is do not retain large exposures to save a little premium. A risk manager should not retain a loss exposure with high potential severity, such as auto liability, to save a small amount of insurance premium. Depending on market conditions, certain types of liability insurance coverage, such as some umbrella policies (designed to cover large liability losses), can cost relatively little because the potential frequency of large liability losses is low. However, such coverage can be priced much higher given different market conditions.

Exposures with the potential of low frequency but high severity should generally be insured because they are highly unpredictable. For example, the probability of a building's suffering a total fire loss is low because total fire losses happen infrequently; however, if a family's residence does burn to the ground, the severity of the loss would be great. One such loss would cost the family many times an annual insurance premium, so the family should fully insure the residence but use an appropriate deductible to decrease the policy premium.

The third guideline is do not spend a lot of money for a little protection. Risk managers should spend insurance dollars where they will do the most good. If the exposure is almost certain to lead to a loss during the policy period, the insurer must charge a premium close to the expected cost of the loss plus a portion of the insurer's overhead, premium taxes, and profit. It is better to retain exposures of this type because the household or organization could absorb the cost of a loss almost as easily as the cost of the insurance. For loss exposures with high frequency and low severity, retention and risk control are usually the best alternatives. For example, a family may choose a higher deductible on auto physical damage coverage and use that savings to buy umbrella insurance to provide coverage for the infrequent but severe liability losses exceeding their homeowners or auto policy liability limits.

The fourth guideline is do not consider insurance a substitute for risk control. A company's risk manager may evaluate a particular exposure, such as automobile collisions, and discover that the frequency of accidents has been increasing in recent years. If the company has a $1,000 collision deductible for each accident, the risk manager may consider reducing the company's total annual retention for auto accidents. However, lowering the deductible to $500 so that the company retains less of the loss exposure on each accident would not solve the real problem, which is the increase in loss frequency. The insurance cost increases with the lower deductible, and the loss frequency is likely to remain high. In this case, the risk manager would be using the purchase of insurance in lieu of risk control.

A better option would be for the company to implement a risk control program to prevent accidents from occurring. This program could include more careful screening of company drivers, periodically reviewing drivers' motor vehicle records, training employees in safe driving practices, ensuring vehicle safety through regular vehicle maintenance, and implementing other risk control activities to reduce the frequency of collisions. If the program works and fewer accidents occur, the company's overall retention from absorbing deductibles decreases, although the cost of the risk control program must also be considered. Future insurance premiums may be lower as well, because the insurer may offer a lower premium for the improved accident record.

When insurance takes the place of risk control, the insured simply passes the cost of absorbing additional losses to the insurer. It may be more economical to spend dollars on a risk control program that will prevent and reduce losses and lower the long-term cost of insurance and the risk management program.

Reality Check

Construction Company Reduces Workers Compensation Claims Through Risk Management Techniques

CF Jordan LP, a construction general contractor, implemented a risk control program that included construction superintendents' use of a device to report safety concerns on job sites and increase safety on all of its jobs. After implementation of its risk management program, CF Jordan reported a direct cost savings of $2.5 million for workers compensation over a four-year period and an 85 percent drop in severity of its workers compensation claims. The contractor based its selection of risk management techniques on a cost/benefit analysis comparing the cost of workers compensation claims with the cost to administer the safety process.[1]

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Implementing the Selected Risk Management Techniques

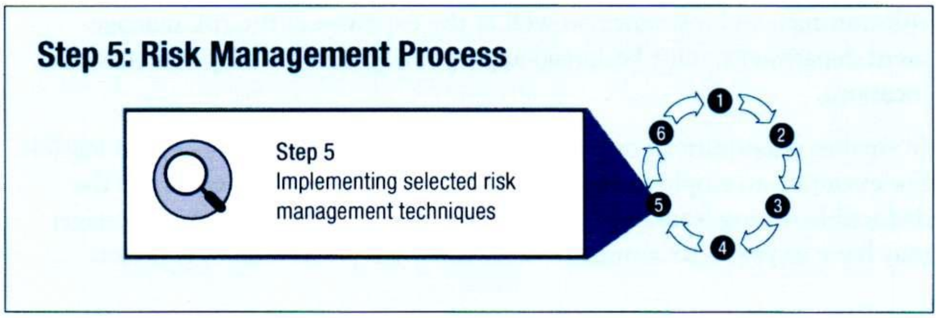
Implementing the risk management techniques that an organization has selected requires the risk manager to make these decisions:

- What should be done
- Who should be responsible
- How to communicate the risk management information
- How to allocate the costs of the risk management program

Once these decisions have been made, the risk management program will be effectively implemented. See the exhibit "Step 5: Risk Management Process."

Deciding What Should Be Done

Once the risk manager has decided which risk management techniques to use, he or she must implement them. For example, Helen, the risk manager of a supermarket, has decided that the store needs a sprinkler system. She must now decide how much the supermarket can afford to spend on the system,



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what kind of system should be installed, and which contractor should install it. She might also need to check on the local water supply and building permits and decide what is necessary to comply with local ordinances. Because the store executives will want to minimize customer disruption, Helen must decide how to accomplish this objective. She must also consult with the store's insurance agent to make sure that appropriate property and liability coverages are in place during and after the installation and that the insurer gives an insurance credit for the sprinkler system. Helen must take into account these considerations and many others before deciding exactly how to implement the risk control technique she has selected.

Deciding Who Should Be Responsible

The risk manager usually does not have complete authority to implement risk management techniques and must depend on others to implement the program based on the risk manager's advice. Larger organizations may have a written risk management statement and a risk management manual outlining guidelines, procedures, and authority for implementing risk management techniques. In smaller organizations and in households, the person making risk management decisions is often the person implementing the program because that person is the organization's owner or the household's primary wage earner.

Communicating Risk Management Information

A risk management program must include a communications plan. Risk management departments of large organizations generally rely on a manual to inform others of how to identify new exposures, which risk management techniques are currently in place, how to report insurance claims, and other important information. Management and other employees must communicate information to the risk manager so that the program can be modified for new exposures and evaluated for effectiveness.

Allocating Costs of the Risk Management Program

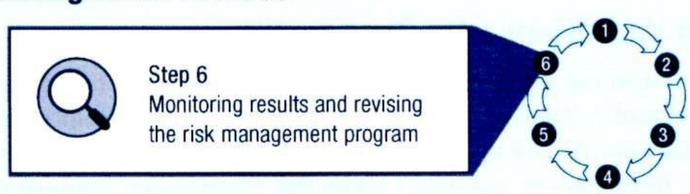
Allocating the costs of the risk management program also requires consideration. In large organizations, the costs of risk control, retention, noninsurance risk transfers, and insurance, as well as the expenses of the risk management department, must be spread appropriately across all departments and locations.

In smaller organizations or within households, allocating costs is also feasible. For example, an employee of a small business may be required to pay the deductible arising from damage she caused to a company car, or a teenager may have to pay to fix a neighbor's window that he accidentally broke.

Monitoring Results and Revising the Risk Management Program

Monitoring the results of the risk management program is an ongoing activity that a risk manager must carefully perform. Because the needs of all households and organizations change over time, a risk management program should not be allowed to become outdated. Monitoring the program ranges from handling routine matters, such as updating fleets of vehicles by replacing those less roadworthy, to making complex decisions concerning new activities to initiate or avoid. See the exhibit "Risk Management Process."

Risk Management Process



[DA07143]

A household or an organization should review its insurance program with its agent or broker each year. Because decisions regarding insurance are usually associated with other risk management techniques, any change in insurance will affect the other areas.

The last step in the risk management process is actually a return to the first. To monitor and modify the risk management program, the risk manager must periodically identify and analyze new and existing loss exposures and then reexamine, select, and implement appropriate risk management techniques. Thus, the process of monitoring and modifying the risk management program begins the risk management process once again.

Reality Check

Construction Company Uses Electronic Tracking Equipment to Recover Stolen Property

Zachry Construction earned an award for Innovative Construction Project Planning Process at an International Risk Management Institute, Inc., conference.[2] Zachry implemented use of a global tracking system as part of its risk management program and later found that it met that need even more completely than it originally expected. Mike Monnot, a director for Zachry, commented, "Even though our main purpose was to increase equipment productivity and streamline our maintenance program...we were pleased to learn first hand about its security features."[3] When an unauthorized move of a thirty-ton crane was noted, Zachry's equipment superintendent was able to quickly confirm that the crane, a truck, and a trailer were all missing; he used a tracking device to pinpoint the geographic location of the equipment. He notified police, who recovered the unit and released it back to Zachry. Zachry noted cost benefits of using the tracking device in this manner. The company avoided filing an insurance claim, losing time and paying rental fees to temporarily replace the equipment, and paying storage and retrieval fees to the police department because the police could immediately and definitively confirm that the equipment belonged to the construction firm.

[DA07679]

BENEFITS OF RISK MANAGEMENT

A sound risk management program benefits businesses, individuals, and families, enabling them to better manage their loss exposures. Additionally, risk management can benefit society and insurers.

Risk management's benefits to businesses, individuals, and families can include peace-of-mind, improved access to affordable insurance, cost-effective achievement of goals, and the ability to take on more risk and explore greater opportunities. Society and insurers also benefit when businesses and individuals practice risk management.

Benefits of Risk Management to Businesses

Making insurance part of an overall risk management program rather than relying solely on insurance improves access to affordable coverage. Insurers are more receptive to organizations that practice good risk management than those that rely solely on insurance for protection against the financial consequences of accidental losses. An insured that combines insurance with the risk management techniques of avoidance, risk control, retention, and noninsurance risk transfer usually has fewer and smaller losses than do other insureds. Therefore, insurers are likely to generate better loss ratios and underwriting results by insuring policyholders having sound risk management programs.

Consequently, such insureds are often able to obtain broader coverage at lower premiums than insureds who do not practice risk management.

By diminishing uncertainty of future losses from new business activities, risk management increases opportunities for the insured. The possibility of future losses tends to make many business owners and executives reluctant to undertake activities they consider to be risky. This reluctance deprives the business of the benefits that undertaking such activities could bring. A business that has an effective risk management program is better prepared to seek opportunities that could increase its profits. For example, if a business is confident it has appropriately managed its present property and liability loss exposures, it may consider proposals to manufacture a new product or expand its present sales territory that it otherwise would not.

Risk management also leads to achievement of business goals through better management of large loss exposures, and it helps organizations achieve their business and financial goals in a cost-effective manner. Risk management techniques help minimize the chance that a business would face a disruption or would have to absorb a large loss caused by a loss exposure. As a result, profits could be increased because of the reduced expenses. For example, a firm may reduce its insurance costs because the risk manager chooses to retain a loss exposure instead of insuring it.

Benefits of Risk Management to Individuals and Families

Like businesses, individuals and families benefit from effective risk management.

Risk management helps individuals and families cope more effectively with financial disasters that may otherwise cause a greatly reduced standard of living, personal bankruptcy, or family discord. Additionally, it helps them continue their activities following an accident or other loss, reducing inconvenience.

Risk management provides individuals and families greater peace of mind because they know that their loss exposures are under control. It also reduces expenses by handling loss exposures in the most economical fashion.

Risk management enables individuals and families to take more chances and make more aggressive decisions on ventures with the potential for profit, such as investing in the stock market, changing careers, or starting a part-time business. Though this may seem inconsistent with the purpose of risk management, such decisions can have long-term value when made with a full knowledge of costs and potential benefits.

Benefits of Risk Management to Society

By helping themselves through effective risk management, businesses, individuals, and families also benefit society.

Risk management can help reduce the number of persons dependent on society for support, because businesses and families plan for financial crises. For example, families who buy flood insurance need less help from charitable agencies or the government for federal flood relief after a flood event.

Risk management also results in fewer disruptions in the economic and social environment. Organizations and families that practice risk management are not subject to the big and sudden expense of bearing the cost of a loss.

In addition, economic growth can be stimulated by effective risk management. Because fewer and less costly losses result, funds are available for other uses, such as investment.

Reality Check

City Fire Department Benefits From Risk Management

Individuals, households, and all types of organizations, including city fire departments, benefit from risk management. Kansas City Fire Chief Smokey Dyer acknowledges the danger of the fire fighting profession, as well as the responsibility of the department to work diligently to protect its staff. According to Dyer, his department has made considerable improvements in safety, equipment, and training their professionals. Dyer cites these benefits that the department has gained through improved risk management as "an increase in fixed fire protection in buildings, better training methods, better procedures to follow and a cultural shift to worry more about our own lives."

Goforth, Alan, "Danger? These People Don't Mind it at Work," Kansas City Star, April 4, 2011, www.kansascity.com/2011/04/04/2776332/danger-these-people-dont-mind.html (accessed on May 17, 2011). [DA07695]

Benefits of Risk Management to Insurers

From an insurer's point of view, risk management is beneficial in many ways. Risk management creates a positive effect on an insurer's underwriting results, loss ratio, and overall profitability because insureds who practice sound risk management tend to experience fewer or less severe insured losses than those who do not.

Consumers of insurance who practice risk management are generally more knowledgeable about handling loss exposures than consumers who don't practice risk management. They are likely to combine insurance with other techniques for handling loss exposures, and therefore may incur and submit fewer claims.

Risk management also stimulates insurers to create innovative insurance products and maintain competitive prices and services. Professional risk managers seek to get the most for their insurance dollars and are often willing to pay higher premiums in exchange for greater insurance value. As a result, these risk managers may encourage insurers to be more innovative and competitive in the products and services they provide.

APPLYING THE RISK MANAGEMENT PROCESS

By applying the risk management process, insurance professionals can recommend the most appropriate risk management techniques for their customers to use.

Risk management programs for organizations can be quite sophisticated. These programs become more complex as organizations increase in size and their loss exposures become more extensive and complicated. However, even typical households face many loss exposures, such as various property and liability exposures from home and automobile ownership. A family scenario, including the loss exposures to be treated, facilitates an uncomplicated application of the risk management process.

Tony and Maria

Tony and Maria both work outside their home, and they have three school-aged children. They own two automobiles and a home with a pool, have a modest savings account, and have invested in the stock market. After attending a seminar at his company on risk management, Tony decided that the family should initiate a risk management program of its own. To do so, Tony knew that the family must follow these steps in the risk management process:

- Identify the family's loss exposures
- Analyze the loss exposures
- Examine the feasibility of risk management techniques
- Select risk management techniques that are appropriate for the family
- Implement the selected techniques
- Monitor and revise the family's risk management program

Identifying and Analyzing Loss Exposures

Tony and Maria identified loss exposures by listing the exposures they could think of and then inspecting their home, looking for other exposures they had not yet considered. For example, when Tony spotted his son's hockey stick, he realized that they have a liability exposure arising from the children's various athletic activities. His daughter's saxophone in her bedroom reminded Tony that the saxophone was not specifically insured and that they did not have the funds readily available to replace it if it were stolen or damaged. As Tony viewed their swimming pool full of neighborhood children, he realized that they needed higher liability limits than their current homeowners policy provided.

After physically inspecting their home and property, Maria called their insurance agent and obtained a household inventory form that they used to inventory their household contents and other possessions to determine their property loss exposures. The agent also sent them a survey to complete, which they used to list potential liability exposures for the family.

Maria and Tony then analyzed all the loss exposures they had identified and attempted to determine which ones could cause the most frequent or most severe losses.

Examining, Selecting, and Implementing Risk Management Techniques

After identifying and analyzing their property and liability exposures, Tony and Maria's third step was to examine risk management techniques. Tony knew from the seminar that the possible techniques include avoidance, risk control, noninsurance risk transfer, and retention, as well as insurance.

In an attempt to practice sound risk control, Tony and Maria installed deadbolt locks on all their doors and locks on all their windows. They also installed smoke detectors in several places in their home, and they are contemplating installing a burglar alarm system if they can find one that is both effective and affordable.

Tony and Maria explored noninsurance risk transfer by considering leasing a car, but they found that they would still be responsible for all liability connected with the use of the auto and would therefore still have to purchase insurance. They decided noninsurance risk transfer was not a good risk management technique.

Because Tony and Maria do not have much disposable income after they pay their mortgage, car payments, and other household bills each month, they know that they must rely heavily on insurance to cover their loss exposures. Although they cannot afford to retain a large amount of their loss exposure, they did raise the deductibles on both their homeowners and personal auto policies from $250 to $500, thereby reducing their premiums.

They decided not to specifically insure their daughter's saxophone because their homeowners policy already covered it for fire, theft, lightning, and other causes of loss. They also decided to apply the retention technique if their daughter simply lost or damaged the saxophone; in other words, they would replace the saxophone from their personal funds, make their daughter earn money to replace it, or choose not to buy a new one.

Furthermore, they decided to purchase an umbrella policy to cover large liability losses such as those that might arise from use of autos, the children's sporting activities, or the pool exposure. The increased deductibles and retention of the property loss exposures for the saxophone were about all the retention Tony and Maria thought they could handle. Thus, as in most households, insurance will play a dominant role in treating loss exposures for the Garcia family.

By installing locks and smoke detectors, purchasing umbrella insurance, and deciding to retain some loss exposures, the Garcias effectively completed the fourth and fifth steps in the risk management process: selecting and implementing their risk management techniques.

Monitoring Results and Revising the Risk Management Program

The last step in Tony and Maria's risk management process is to periodically monitor and modify their program. For a family, an annual review of the program is probably sufficient unless the family's circumstances change significantly.

An ideal time for Tony and Maria to do another physical inspection and inventory would be at the renewal of their homeowners policy or if either Tony or Maria changes jobs, receives a large bonus, receives a salary increase, or purchases any type of high-value property.

When Tony first began to monitor their risk management program, he realized that they had neglected to consider their net income loss exposures, such as death, illness, injury, or unemployment. Tony and Maria immediately took steps to modify their risk management program to include their net income loss exposures and thus began the risk management process with exposure identification and analysis all over again.

Apply Your Knowledge

Six months after implementing their risk management program, Tony and Maria considered building a new house in a neighborhood that is next to a river. Maria's elderly mother lives in that neighborhood, and moving there would allow them to help her more readily should an emergency or another need arise. However, Tony and Maria are concerned because this new neighborhood has a history of flooding in the spring and late summer.

Evaluate each of these risk management techniques, and explain how each technique could apply to Tony and Maria's potential flood loss exposure:

- Avoidance
- Loss prevention or loss reduction
- Insurance
- Retention

Feedback: These answers provide examples of how these techniques could apply, but other answers may be acceptable as well:

Avoidance—Tony and Maria could decide not to build a house in that location. Instead, they might build in a neighborhood that is not subject to flooding but is still reasonably near Maria's mother's home.

Loss prevention or reduction—Tony and Maria might consider building the house on a built-up lot or building it according to a plan with an elevated first floor and no basement to prevent or reduce flood damage.

Insurance—Tony and Maria could buy federal flood insurance and accept the possibility that their property may flood, knowing that the insurance would pay most of their loss.

Retention—Choosing to retain the entire flood risk would be a poor risk management decision, as Tony and Maria could lose the entire value of their home and personal property. However, Tony and Maria could buy flood insurance subject to a larger deductible (compared with their deductible for other perils) to enable them to save money on the cost of insurance. To improve their risk management program, Tony and Maria could create a special savings account and have money deducted from their paychecks until they have sufficient savings to fund the uninsured portion of their flood loss exposure.

SUMMARY

Risk management can differ markedly for individuals, small organizations, and large organizations. At whatever level it is practiced, risk management is aimed at dealing economically with risk, whether through an individual's informal efforts or through an organizations's formalized risk management program. Traditionally, risk management has been concerned almost exclusively with pure risk. A new approach, called enterprise-wide risk management, is concerned with all risks, pure and speculative, that an organization faces.

The risk management process can be used to help organizations and families deal with loss exposures efficiently and effectively. Physical inspections, loss exposure surveys, and loss history analyses can be used to identify loss exposures, the first step in the risk management process. To analyze loss exposures, the second step in the process, an organization or a family must determine the probable frequency and severity of the losses and the effect on the activities, objectives, and finances of the organization or household.

The third step in the risk management process is examining the feasibility of risk management techniques. These techniques are categorized as risk control and risk financing. Risk control includes avoidance, loss prevention, loss reduction, separation, and duplication. Risk financing includes retention and transfer (both insurance and noninsurance).

The fourth step in the risk management process is to select the most appropriate risk management technique(s) based on financial criteria and guidelines. The fifth step is implementation of the selected techniques and includes the decisions to be made and by whom, communication of the information, and cost allocation of the program. The final step involves monitoring the results and revising the program as needed by restarting the entire process.

Risk management's numerous benefits to businesses, individuals, and families include peace-of-mind, improved access to affordable insurance, cost-effective achievement of goals, and the ability to take more risk and explore greater opportunities. When individuals, families, and organizations practice risk management, society benefits from the reduced need for social services after losses, improved social/economic environment, and encouragement of economic growth. Insurers benefit from improved profitability, more knowledgeable insurance consumers, and being stimulated to innovate and create competitive products and services.

Although businesses are the primary users of formal risk management programs, individuals and families can also benefit from applying risk management to their loss exposures. A risk management program for a large business can be complex, but one for a family can be simple and is well worth the time and effort to implement.

ASSIGNMENT NOTES

1. CF Jordan LP, "Integrating Technology to Improve and Measure Risk Management Initiatives and Track Leading Indicators to Prevent Incidents, Improve Quality and Overall Employee Health," IRMI.com, 2007, www.irmi.com/conferences/crc/awards/handouts/gebha2007winnersubmission.pdf (accessed May 16, 2011).
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3. Qualcomm, "Zachry Construction Wrenches Crane from the Grasp of Thieves," Qualcomm Solutions, December 2004, www.qualcomm.com/common/documents/case_studies/QUALCOMM-Zachry-Testimonial.pdf (accessed May 16, 2011).