

# CRM | PRINCIPLES OF RISK MANAGEMENT

L E A R N I N G   G U I D E



**RISK & INSURANCE**  
EDUCATION ALLIANCE





# Principles of Risk Management

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## THE CERTIFIED RISK MANAGER PROGRAM

Analysis of Risk

Control of Risk

Financing of Risk

Practice of Risk Management

Principles of Risk Management

Risk & Insurance Education Alliance

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## A Letter from William J. Hold, President/CEO

We know that choosing the right professional development programs to strengthen your career can be challenging. There are many options for you to choose from; so how can you be sure that your time, efforts, and money are being invested and not wasted?

By partnering with Risk & Insurance Education Alliance, you can rest assured that you are also making the best educational choice for your career—no matter what step of your learning path you are on.

For the last 50 years, our designations have been regarded throughout the industry as symbols of quality and trust. Our practical insurance and risk management courses are taught by active insurance practitioners, include policies and forms currently used in the field, and guide you through real-world scenarios to give you a deeper understanding of what your clients are facing today. The knowledge and skills you develop in any one of our courses (or designation programs) can be put to use immediately.

You will build long-lasting relationships with your clients and stay ahead of industry trends, emerging risks, and products that are constantly evolving in our dynamic market. You will have access to the industry's latest learning materials and be the first to hear about new courses. With a learning path customized to fit your needs, you will be better equipped to protect your clients.

Have no doubt that your success is our priority. Whether you are new to your career or a seasoned professional, you are about to embark on a wonderful professional development journey. Thank you for choosing Risk & Insurance Education Alliance as your guide toward a thriving career.

Let's take the first step.

A handwritten signature in black ink, appearing to read 'W. J. Hold', with a stylized flourish at the end.

William J. Hold, M.B.A., CRM, CISR

President/CEO

## To the Participant

Welcome to Principles of Risk Management, part of the Certified Risk Manager designation program. This program will provide you with the core knowledge and tools you need to support your clients with analysis of their business risks and forecasting future losses. A Certified Risk Manager (CRM) is recognized as someone capable of analyzing risks, policies, forms, and claims data and communicating that understanding clearly to clients, carriers, and colleagues.

As a participant in Risk & Insurance Education Alliance (RIEA) program of study, it is expected that you will not only gain knowledge that will give you greater success in your work, but that you will be challenged to make Risk & Insurance Education Alliance's core values of integrity, innovation, inspiration, and imagination part of your daily practice. As experts in their fields, RIEA faculty, consultants, and academic directors—each with a commitment to assisting you in your efforts to achieve standards of excellence—have contributed to the content of this course. In this course, you can expect:

- engagement in the learning process
- clear learning objectives supported by essential content
- activities designed to strengthen understanding
- exposure to real-world examples and contexts

As representatives of Risk & Insurance Education Alliance (RIEA), we take great pleasure in welcoming you to this program and to our organization. We are committed to helping you become a successful Certified Risk Manager.

# Program Overview

This program overview provides an at-a-glance view of the contents of this Learning Guide. Here you will find section goals as well as specific learning objectives for every section.

## Section 1: Introduction to Risk Management

### Section Goal:

In this section, you are introduced to terminology commonly used in discussions of risk management. In addition to becoming familiar with critical terms and fundamental concepts, you will analyze the five steps of the risk management process and how those steps merge to build a comprehensive risk management program.

### Learning Objectives:

- 1.1 *Define risk and other key risk management terms, including the distinction between pure and speculative risk.*
- 1.2 *Define risk management and explain the five steps of the risk management process.*
- 1.3 *Explain the impacts of an effective risk management program.*
- 1.4 *Describe the components and uses of the total cost of risk (TCOR).*
- 1.5 *Explain the concept of emerging risks, including the common elements and basic types.*

## Section 2: Risk Management and the Organization

### Section Goal:

The goals of this section are to demonstrate how the risk management program fits within a typical organization and how it supports the organization's strategic goals and objectives. Furthermore, you will explore the importance of developing company cultures and how risk management fits into that development. The general classes of risk, as risk identification tools, will also be introduced to you.



## Learning Objectives:

- 2.1 *Describe the characteristics and uses of the following governing documents of a risk management program:*
- 2.2 *Describe how an organizational risk culture is formed and maintained.*
- 2.3 *Identify the general classes of risk and be able to apply them to common scenarios.*
- 2.4 *Define risk appetite and risk-taking ability and their importance to an effective risk management program.*
  - *mission statement*
  - *policy statement*
  - *risk management manual*

### Section 3: Introduction to Risk Identification

## Section Goal:

The goals of this section are to familiarize you with risk identification, including the four logical classifications of exposures, loss exposures, the concept of negligence, and the requirements of an enforceable contract as well as remedies for breach of contract.

## Learning Objectives:

- 3.1 *Explain why risk identification is the most important step in the risk management process.*
- 3.2 *Identify the four logical classifications of exposures, perils, hazards, and/or losses, and give examples of the loss exposures related to each.*
- 3.3 *Define the term negligence and explain the four elements that comprise it.*
- 3.4 *List the four requirements of an enforceable contract and describe the remedies for breach of contract.*

### Section 4: Risk Identification Methods – Self-Administered Tools

## Section Goal:

The goals of this section are for you to learn about various self-administered risk identification methods, their characteristics, and when they are most useful. This begins with a focus on how to classify exposures, perils, and hazards, followed by an examination of the strengths and weaknesses of each identification method.

## Learning Objectives:

- 4.1 *Differentiate between the different classifications that exist for exposures, perils, and hazards.*
- 4.2 *Understand the different self-administered methods used to identify the wide variety of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each.*

### Section 5: Analytic Risk Identification Methods

#### Section Goal:

The goals of this section are for you to learn about various analytic risk identification methods, their characteristics, and when they are the most useful, as well as the strengths and weaknesses of each.

#### Learning Objective

- 5.1 *Understand the various analytic risk identification methods used to identify the wide range of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each method.*

### Section 6: Financial Statement Analysis

#### Section Goal:

This section will provide you with an overview of financial concepts and accounting methods. You will be introduced to three types of financial statements that a risk manager should be familiar with and will explore how they are used by risk managers in exposure identification.

## Learning Objectives:

- 6.1 *Understand the difference between accounting and finance and the various types of accounting systems a risk manager might encounter.*
- 6.2 *Distinguish among the different property valuations that appear on financial statements.*
- 6.3 *Describe the purpose and components of:*
  - *the income statement,*
  - *the balance sheet, and*
  - *the statement of cash flow.*
- 6.4 *Understand the purpose of financial ratios, including the formulas and common calculations.*
- 6.5 *Explain how financial statement analysis is used as a risk management tool.*
  - *the income statement,*
  - *the balance sheet, and*
  - *the statement of cash flow.*

## Section 7: Introduction to Enterprise Risk Management

### Section Goal:

In this section, you will learn about enterprise risk management (ERM) and how it differs from traditional risk management. The requirements for ERM implementation and the benefits of implementing ERM are also discussed.

## Learning Objectives:

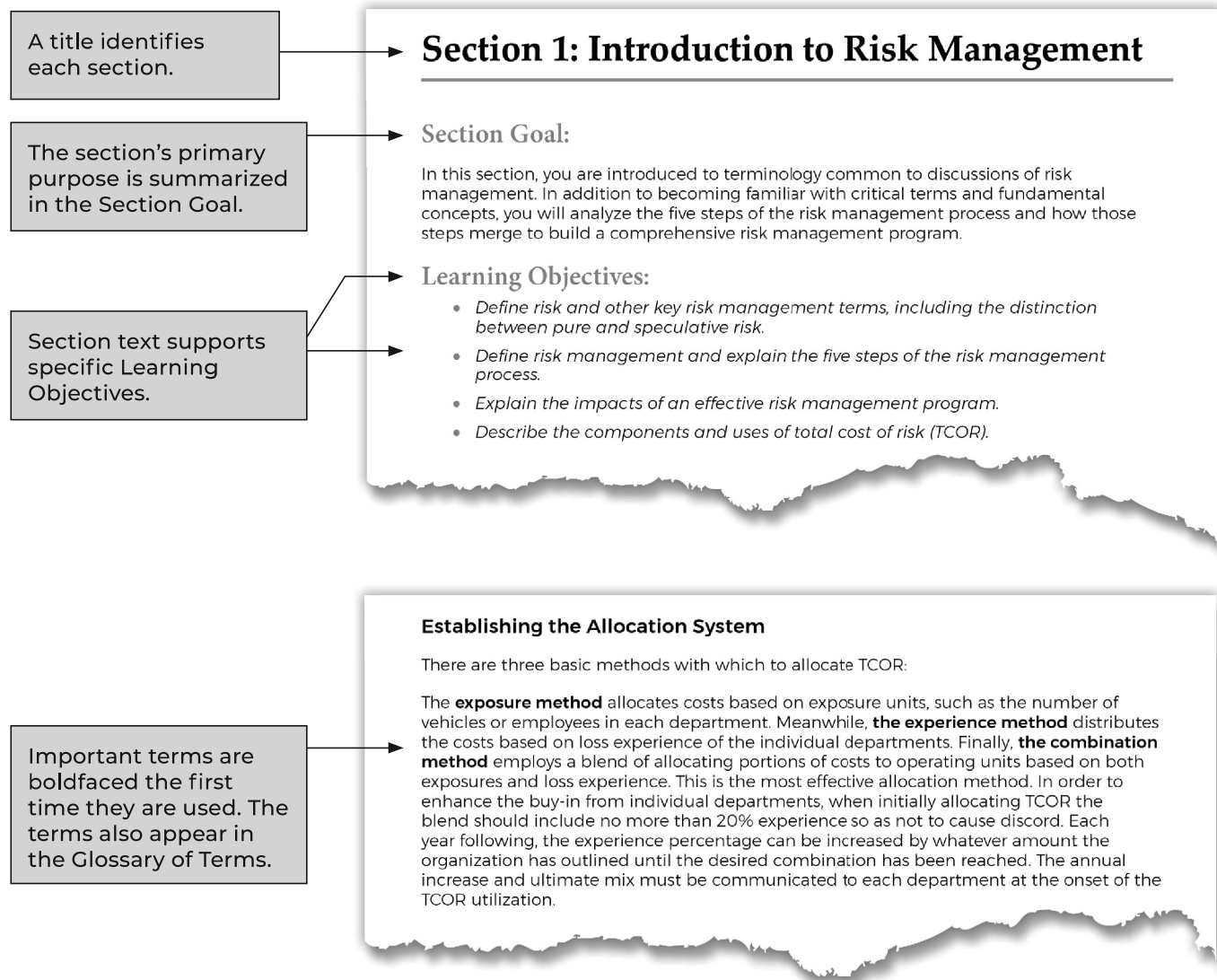
- 7.1 *Understand the definitions of enterprise risk management (ERM) and traditional risk management (TRM), including the differences in their approaches.*
- 7.2 *Identify the ERM broad categories of risk, including examples for each.*
- 7.3 *Explain the impacts of an effective ERM program on an organization.*
- 7.4 *Explain the requirements of the ERM implementation process, including the obstacles to ERM implementation.*



# How to Use This Learning Guide

The Learning Guide you are using in this course is like all the learning materials published by Risk & Insurance Education Alliance; it has been written and authenticated by industry experts.

Each section in this learning guide shares the same features.

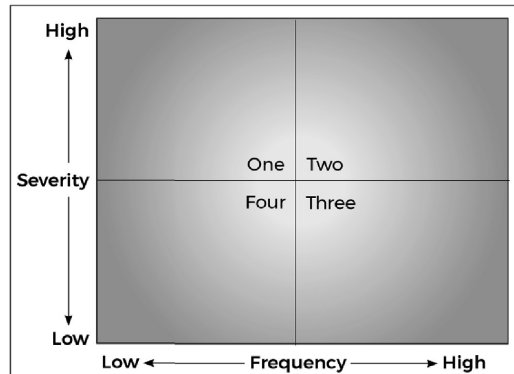


Visuals such as diagrams, graphs, and tables support the text.



A **risk map** allows the risk manager to plot exposures by frequency and severity to

determine which would have the greatest impact on the organization. Risk are divided into four quadrants representing their blend of severity and frequency. With this visual tool, a risk manager can analyze which risks will have the greatest impact on the organization should they occur, without performing any financial analysis.



An earthquake in California would be placed in quadrant 2: high frequency and high severity.

Each section concludes with a summary.

## Summary

The concept and understanding of risk differs for many individuals and is typically dependent on their line of work and job responsibilities. Risk includes an element of uncertainty, and for our purposes, that uncertainty refers to potential outcomes from a given situation. Pure risk deals with situations where there is either a loss or no loss. Speculative risk includes the potential for gain. Risk managers use a specific set of terms in their work. Many of these terms have differing meanings to agents, brokers, and underwriters. Those terms include: **exposure**, **loss**, and **peril**.

Risk management is managing and minimizing the uncertainty of exposures that can adversely affect an organization's assets, financial statements, and objectives. The risk management process involves five steps, each presenting potential benefit for clients: risk identification, analysis of risk, control of risk, financing of risk, and risk administration.

Examples describe real-world-style scenarios to enhance your understanding of the concepts presented.



Fossil fuel companies have been forced to invest in clean alternatives (BP has pledged to be carbon neutral by 2050) while socially conscious organizations (such as Bombas®, which manufactures



socks and donates a pair to those in need for every pair purchased) are gaining more market share and positive public attention. Bombas® mission and how it conducts itself greatly impact the public's perception more today than ever before due to social media, 24-hour news cycles, and changing cultural attitudes and expectations.

Check-Ins and Knowledge Checks help you test your understanding before moving forward.

## Check-In



**Directions:** Imagine that one of your clients owns a company that manufactures and sells a variety of granola breakfast and snack products. Identify three examples of pure and speculative risk associated with your client's business.



Pure Risks	Speculative Risks
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____



## Knowledge Check

Richard is a welder in an equipment manufacturing facility. One day, he sees the CEO walking on the work floor without a hard hat or safety glasses. Richard promptly turns off and puts down his torch and walks over to the CEO and reminds him that he must follow the safety rules which are established for all employees.



Which element of the ORC allows Richard to be comfortable approaching and correcting a member of senior management? Explain why.

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Each section closes with a quiz to help you assess your learning.

## Section 1 Self-Quiz

**Directions:** Indicate whether the statement is True or False.

1. One example of an industry that is basically immune to risk is the restaurant industry

True

False

2. In the risk management arena (including the insurance world), definitions of risk are usually dependent upon the particular job function or area of expertise of the source

True

False

3. Jeremy owns shares of Disney stock. The risk that would be associa\*

A Glossary of Terms puts the Learning Guide's special vocabulary in one, easy-to-use location.

## Glossary of Terms

**auditor's opinion letter** an external opinion of the fairness and accuracy of the information contained in the financial statements and the conformity to stated accounting standards

**accident** an unexpected and unintentional event, definite as to time and place, that results in injury or damage to a person or property

**accounting** a process of recording and classifying business and financial transactions and reporting them on an organization's financial statements

**actual cash value** the replacement cost less an allowance for depreciation or obsolescence

**amortization** an accounting technique used to periodically lower the book value of a loan or an intangible asset over a set period of time.



# Section 1: Introduction to Risk Management

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## Section Goal:

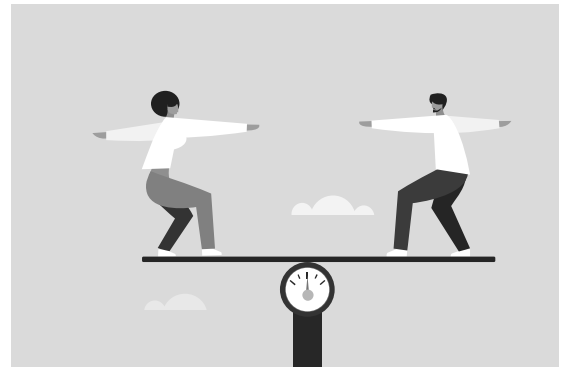
In this section, you are introduced to terminology commonly used in discussions of risk management. In addition to becoming familiar with critical terms and fundamental concepts, you will analyze the five steps of the risk management process and how those steps merge to build a comprehensive risk management program.

## Learning Objectives:

- 1.1 *Define risk and other key risk management terms, including the distinction between pure and speculative risk.*
- 1.2 *Define risk management and explain the five steps of the risk management process.*
- 1.3 *Explain the impacts of an effective risk management program.*
- 1.4 *Describe the components and uses of the total cost of risk (TCOR).*
- 1.5 *Explain the concept of emerging risks, including the common elements and basic types.*

## Introduction

Risk is inherent in our very existence. It is present in every activity we engage in, every decision we make, and is continually evolving in the world around us. Risk can never be completely eliminated. As such, you and everyone you know are already risk managers. Professionally, for your family and in your everyday life, engaging in the risk management process is instinctual. Perhaps you're weighing the pros and cons of moving to another state or country for a job opportunity or deciding how to best save for your newborn's eventual college tuition. Perhaps you're pondering when to move to a single-story house or apartment before you are unable to climb the stairs in your present home, or whether it is financially sound to buy an expensive electric car based on the rising cost of gasoline. In all these instances, you are considering the circumstances surrounding the decision or activity, and are then identifying, analyzing, and seeking to control the risks involved in order to feel comfortable moving forward.



Similarly, in business, the risk management function exists to support an organization's decisions to move forward with particular strategies, projects, activities, and the like. This is through a systematic process targeted at mitigating those exposures that might otherwise

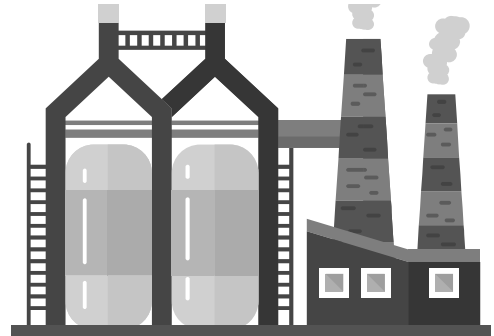
## Section 1: Introduction to Risk Management

impede, delay, or prevent their achievements. Traditionally, risk management focused only on the downside of risk, with the primary protective tool being insurance, while modern risk management builds thereon by addressing (1) uninsurable risk exposures such as a decrease in positive public reputation, (2) emerging risks such as the streaming-of-entertainment model was to video rental brick-and-mortars, and (3) the upside of risk by seeking to exploit opportunities.



Let's consider the following example:

Wilson Widgets (WW) manufacturer suspects that the cost of commodity X (X), the primary material it uses in manufacturing, will increase significantly due to political troubles in the country from which the material is primarily sourced. WW may choose to stockpile large amounts of X to avoid having to purchase it later at the higher price. While doing so might protect WW from the increase, it also creates a new set of risks. Not only does WW face the chance that the price will not increase significantly, but it would then also need to pay the overhead costs associated with the holding and protecting of X, such as the warehouse space in which it is stored, and would then also be exposed to the loss of X should the warehouse burn down, flood, etc. Additionally, the bulk cash outlay required to obtain X might cause cash flow problems or other financial stress to WW while waiting for the price of X to soar. However, if the price does increase, WW can then choose to either keep the customer cost of widgets stable, drawing new customers while the competition is forced to raise prices to keep up with the increased materials cost, or WW can raise prices with the rest of the market and enjoy increased profit margins.



Risk management is both a science and an art. While as much data as possible must be collected and analyzed to make the most informed decision, the practical application of the data—what project to accept, what decision to make—will be radically different from one organization to the next. No two organizations are the same, but even if two theoretically similar operations were exposed to the same risks, their management of them would vary greatly. Context, including previous experience and current objectives, is just one of the many key factors contributing to this divergence. WW may choose to stockpile X while the rest of the competition may not. Instead, competing widget manufacturers B, C, and D (WMB, WMC, WMD) may respond, where B may prefer to do nothing, C may wish to stockpile but lacks the financial ability to do so, and D has the financial ability but lacks the expertise to protect the stockpile or does not have a supplier who can provide X in bulk. Likewise, some parents will opt to give their child a later curfew, others might decide they're just not comfortable with it, and still more might only do so with additional controls in place, such as having the child call to check in every night after a certain time.

Risk management is the best way to internally control costs to increase profits, shareholder value, or the ability to infuse more working capital into a non-profit mission. It should be employed by organizations of all shapes and sizes operating in all stages of life across all

## Section 1: Introduction to Risk Management

industries. Risk & Insurance Education Alliance's Certified Risk Manager (CRM) designation program is designed to provide you with the tools to apply this vital process to any type of organization.

### Check-In

True or false? In Bryce's sailboat business, a risk management function would exist to support Bryce's organization with a particular strategy. And in doing so, he would need to employ a systematic process targeted at mitigating exposures that might delay his plans.



True

False

### Learning Objective:

- 1.1 Define risk and other key risk management terms, including the distinction between pure and speculative risk.

There is no business in existence that is immune to risk. Attempting to avoid all risk would be akin to not starting the business at all. Consider, for example, the potential losses associated with fire, theft, and natural disasters, or the losses attached to the resignation, disability, or death of an essential employee(s). While these examples might negatively impact the organization in question, the insurance industry provides products and services to help mitigate and respond to much of this uncertainty, allowing the business to focus on its daily operations. Additionally, there are pre- and post-claim strategies that can be implemented to reduce both the need to use the insurance policy as well as the value of the claims ultimately paid.



While large businesses may have the financial resources required to employ risk management experts to transfer risk and to retain both planned and unplanned losses, small businesses and non-profits often do not. Surveys indicate that more than 40% of small business owners in the United States have never purchased insurance at all, let alone implemented a risk management program, making them vulnerable to significant losses and even bankruptcy.

While insurance is a vital step in protecting an organization from significant loss, not all risks are insurable, such as an unsuccessful new product launch or the loss of an organization's positive brand identity. Insurance, therefore, is not a substitute for risk management, but is instead a critical piece of a comprehensive risk management program, and today's insurance professionals play a critical role in ensuring an organization's financial health and stability in acquiring the best risk transfer strategy available.

# What is Risk?

Various definitions of risk appear in the *American Heritage Dictionary*: (1) the possibility of suffering harm or loss; danger; a factor, thing, element, or course involving uncertain danger; (2) a hazard: “*the usual risks of the desert: rattlesnakes, the heat, and lack of water*” (Frank Clancy); (3a) the danger or probability of loss to an insurer, or (3b) the amount that an insurance company stands to lose; (4a) the variability of returns from an investment, or (4b) the chance of nonpayment of a debt; and (5) one considered with respect to the possibility of loss: *a poor risk*.

In the risk management arena (including the insurance world), we find another set of definitions of risk, usually dependent upon the particular job function or area of expertise of the source. To an underwriter, the risk is the subject of the insurance—the person or entity being insured. To some agents or brokers, the risk may be the insured or the exposure, such as a building or a vehicle. To others, the risk may be the peril, such as wind or fire; or the hazard, such as poor housekeeping. Some of these terms have very specific meanings and will be explained in detail later. To the CEO or CFO of an organization, the risk may be the uncertainty or possibility of the occurrence of an event.

In risk management, four definitions are used, each for a specific purpose. Risk is (1) a chance or probability of loss; (2) uncertainty concerning a loss; (3) a possibility of a variation of outcomes from a given set of circumstances; and (4) the difference between expected losses and actual losses. While definitions (3) and (4) appear to be very similar, they are, in fact, importantly different. Each of these situations involves uncertainty concerning an outcome.

Risk, as defined for the purposes of the courses in the CRM program, is *the possibility of a positive or negative outcome arising from a given set of circumstances*.

Although agents and brokers may identify a risk differently from underwriters and insurance companies, they generally view risk simply as something that can go wrong. In business, there are two types of risk: *pure* and *speculative*. Let’s consider pure risk first.

## Pure Risk

A pure risk involves a situation or incident in which the only possible outcome is either a loss or no loss. There is no opportunity for gain. Pure risks include threats to property and people, as well as liability for injuries to others. The result of a pure risk is some measure of loss, either full or partial. Pure risks pose the chance of loss or the chance of no loss, and insurance usually addresses pure risk.

Examples of pure risk include:

- the possibility of Peter having an auto accident on the way to work: either Peter will be in an accident, or he won’t.
- the possibility of lightning striking a building during a thunderstorm, causing a fire loss.

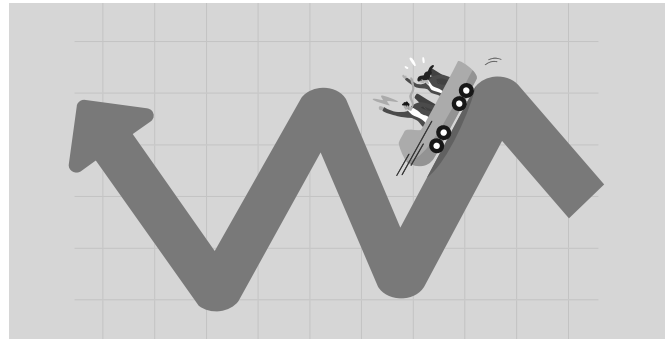


## Section 1: Introduction to Risk Management

### Speculative Risk

Like pure risk, speculative risk presents the possibility of loss or no loss. However, it *also* presents the chance of a gain, even when there is no loss. This combination of both positive and negative uncertainty reflects the full definition of risk.

Speculative risk is usually associated with business or financial risk. For example, speculative risk includes positive and negative changes in the value of a company's stock and positive and negative changes in a market that affect the demand for a company's manufactured goods. Speculative risk is also considered when determining if an organization should develop a new product or service, utilize or create new technology, alter its strategic direction, adjust its supply chain, and any other decision that creates, enhances, and/or supports its competitive advantage.



Examples of speculative risk include:

- launching a new formulation of an existing product in the hope that it will draw greater market share
- locking in a mortgage rate with the hope that rates won't go lower

### Check-In



**Directions:** Imagine that one of your clients owns a company that manufactures and sells a variety of granola breakfast and snack products. Identify three examples of pure and speculative risk associated with your client's business.



Pure Risks	Speculative Risks
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

# A Common Vocabulary

Individuals within every industry or profession share special vocabulary, or jargon. A clear understanding of this vocabulary enables effective communication. Many of these terms are used by different individuals in the insurance industry, but their definitions may be different depending on the individual's role. Professionals rely on a common understanding of essential terms to discuss and solve problems, make informed decisions, provide advice, and address clients' questions and needs.



There are 13 critical terms common to the insurance and risk management industry. Developing a solid understanding of these terms provides insurance professionals the foundation they need to work effectively with clients and insurance companies. A key skill employed by successful risk managers is the ability to communicate effectively within the organization while also translating these concepts into practical terms that can be easily understood by the client. Let's examine those terms.

## Exposure

An exposure is a situation, practice, or condition that may lead to an insured's susceptibility to adverse financial consequences or loss. Activities, resources, and assets are also considered exposures. Let's use property as an example: A building is an asset that presents various exposures for the its owner, including fire and windstorm damage.

## Loss

A loss is a reduction in the value of assets. Losses include business interruption, physical property damage, and injuries to employees or customers.

## Peril

A peril is a cause of loss or any action or event that causes a loss. Perils include fire, lightning, riots, vehicular accidents, smoke, theft, heavy snow and ice, hurricanes, tornadoes, and volcanic eruptions. Additional examples of perils include cyberattacks, employee injury or retirement, and breach of contract.

## Hazard

A hazard is a factor that increases the likelihood of a loss will occur or the severity of a loss that does occur. Think, for example, of a spill in a supermarket aisle. The spill is a hazard that increases the likelihood of someone falling as shoppers walk across the floor. Hazards fall into three categories: physical, moral, and morale.

## Incident

An incident is an event that disrupts or interrupts normal activities and may result in a loss.

## Section 1: Introduction to Risk Management

### Accident

An accident is an unexpected and unintentional event, definite in terms of time and place, that results in injury or damage to a person or property. Examples are auto accidents and injuries to workers from working with faulty equipment.

### Occurrence

An occurrence goes beyond an immediate and observable accident. Instead, it is an ongoing situation leading to damages—such as injuries—that occur over a period of time. For example, employees may engage in heavy lifting or constant typing in their daily work, causing repetitive stress injuries.

### Claim

A claim is a demand for payment or a company's moral or ethical obligation to pay damages as a result of a loss or occurrence.

### Frequency

Frequency is the number of losses that occur or that are expected to occur within a given period.

### Severity

Severity is the dollar amount of a given loss or the aggregate dollar amount of all losses for a given period, usually the policy period.

### Expected losses

Expected losses are the projection of the frequency or severity of losses based on loss history, probability distributions, and statistics.

### Risk Appetite

Risk appetite is the organization's willingness to accept or tolerate risk.

### Risk-Taking Ability

Risk-taking ability is the organization's financial capacity for assuming risk.

## ▶▶ Knowledge Check

**Directions:** Respond to the following scenarios.



1. Phillips Company owns an old office building in Memphis, TN. The risk manager has been lobbying to retrofit the building to withstand potential perils. He explains that the building sits on the New Madrid fault line. Identify the peril and hazard that the risk manager is concerned about, and be prepared to explain your thinking.

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2. Peter steps off the escalator and stumbles. He is not injured and heads home. The next morning, he wakes up in pain. Which risk management term applies here? Explain your thinking.

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Now that you have a clear understanding of what risk is, along with a common vocabulary to describe it and its effects, we will look at risk management. As previously stated, everyone is a risk manager to some degree. We want to avoid accidents and injuries and to preserve our assets. Similarly, businesses take proactive steps to mitigate their potential losses through a various risk management efforts.



# The Steps of the Risk Management Process

## Learning Objective:

1.2 Define risk management and explain the five steps of the risk management process.

Risk management involves identifying, assessing, and mitigating the uncertainties associated with exposures that could adversely impact an organization's assets, financial statements, and objectives. The risk management process involves five steps, each presenting a potential benefit for clients.



## 1. Risk Identification



The first and most important step in the risk management process is risk identification, during which a risk manager identifies and examines all of an organization's exposures, perils, and hazards. The identification process involves understanding and developing the climate in which the organization operates, its current standing within it, its strategic objectives, and the organization's internal governing principles, such as risk appetite, risk-taking ability, and its desired perception and reputation.

A failure to not only identify these exposures but to understand how they exist in context may subject organizations to negative financial consequences. For example, failure to

## Section 1: Introduction to Risk Management

identify the dangers inherent in operating a piece of heavy machinery could result in not having insurance for an accident or injury that may occur to someone as a result of operating that piece of machinery. The organization would then have to pay the claim from its own financial resources. Likewise, the failure to identify a cyber exposure could lead to the loss of data, crippling of operations, and creating immense costs in both dollars and time.

The most dangerous type of loss to an organization is one that is unplanned, as it must still be paid in the form of retention, ultimately at the expense of the budget. Identification, therefore, is the most important step in the risk management process, because if a risk is not identified, it cannot be analyzed, controlled, financed, or monitored accordingly.

### 2. Risk Analysis

The second step in the process, risk analysis, relies on the exposures identified in Step 1 to assess the potential impact of those exposures on the organization. It is used for myriad purposes such as prioritizing risk factors, verification and classification of loss data, prediction of losses and ranges of losses, cost-benefit decision making, financial analyses, and insurance program structure creation.

The true cost of loss to an organization extends beyond the more obvious “hard” or quantitative costs. As such, risk analysis takes two forms: *quantitative* and *qualitative*. A risk manager undertaking quantitative analysis uses numerical values to predict the likelihood and severity of risk upon a client’s finances. These calculations ultimately help clients and risk managers answer the question, “Can we do this?” Quantitative analysis is significantly more straight forward and easier to compute and interpret than qualitative analysis. The internal rate of return or the value of a building or product, for examples, easily lend themselves to a concrete dollar figure.



A time value of money (TVOM) calculation helps a risk manager determine the value of money over a given amount of time, considering a given amount of interest. If you want to accumulate \$20,000 at the end of ten years, and you assume that you can earn eight percent interest, how much money must you put aside today? Using a time value of money calculation, you can determine the amount you need now to generate \$20,000 in ten years’ time. Risk managers do the same thing, typically with much larger sums of money, to ensure that their clients are well informed about how the time value of money will affect their assets, investments, pricing, and other financial considerations.

## Section 1: Introduction to Risk Management

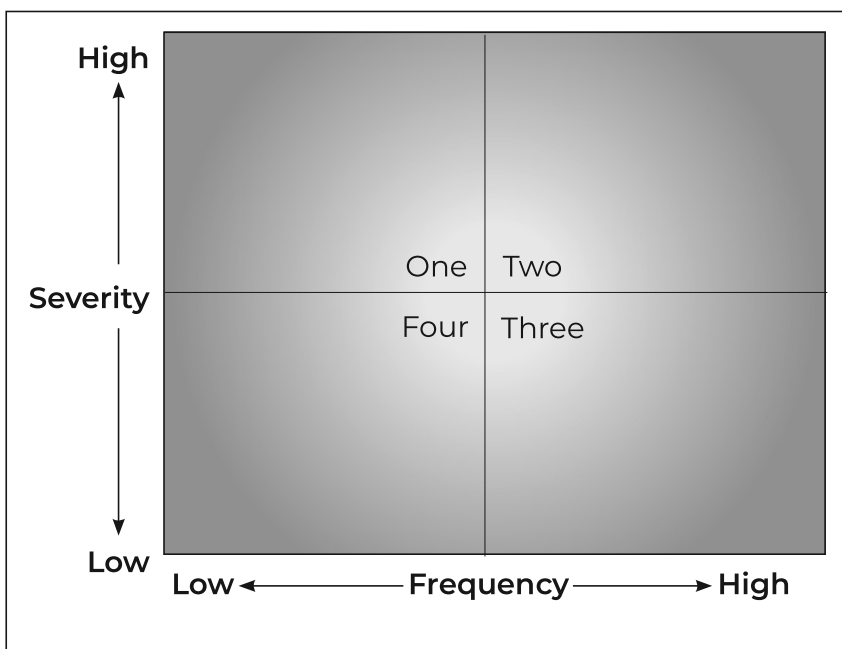
Still, some information does not lend itself as easily to mathematical measurements. Indirect costs such as loss of productivity, decrease in employee morale, or a loss of positive public perception, can far exceed corresponding direct losses but are also difficult to accurately quantify. Furthermore, how would a risk manager accurately determine the potential emerging threats in the marketplace, the costs associated with social responsibility, or the value of its brand? These qualitative type exposures can lead to significantly higher losses than their quantitative counterparts, including those that may ultimately put the organization out of business.

Risk managers, therefore, rely on a variety of qualitative analysis methods to find the answers to such questions. Information may come from sources such as case studies, carefully constructed interviews, historical analyses, and examination of cultural customs. This information, when combined with quantitative measurements, helps clients and risk managers answer the question, “Should we do this?” Risk analysis ultimately helps the risk manager triage the identified exposures to determine the appropriate allocation of resources in controlling each one.



A **risk map** allows the risk manager to plot exposures by frequency and severity to determine which would have the greatest impact on the organization. Risk are divided into four quadrants representing their blend of severity and frequency. With this visual tool, a risk manager can analyze which risks will have the greatest impact on the organization should they occur, without performing any financial analysis.

An earthquake in California would be placed in quadrant 2: high frequency and high severity.



### 3. Risk Control



This third step in the risk management process includes any conscious action or inaction to minimize, at the optimal cost, the probability, frequency, severity, or unpredictability of loss. Risk control is a people process and individuals must be involved in all aspects of an effective risk control program, while the administration thereof requires prioritization, implementation, coordination, follow-up, and communication through the organization.

## General Theories on How Losses are Caused

When it comes to theories on how losses are caused, there are three approaches that we will focus on: human, engineering, and systems.

**The Human Approach:** This theory states that accidents occur because of the negligent or deliberate acts of a person. The risk manager asks, “What can I do to change employee behavior?”

**The Engineering Approach:** This theory is based on the concept that objects and stored energy cause accidents. For example, an employee is working with a machine punch and the equipment breaks, causing injury to the employee. The risk manager asks, “What can I do to improve the safety of the equipment we use?”

**The Systems Approach:** This last theory considers internal system failures or weaknesses that cause accidents. Failure to monitor or implement correct policies and procedures, as well as negligent supervision, leads to accidents under this approach. In this situation, the risk manager asks, “What can I do to change the internal processes and procedures to reduce accidents?”

## Five Techniques of Risk Control

Techniques are actions that a risk manager may take. A risk manager has a variety of risk control techniques available, and often, more than one may be used to address a particular category of loss.

- **Avoidance**

Avoidance eliminates the chance of a loss by completely eliminating an activity and/or exposure. This technique can be challenging to employ as it may be in conflict with goals and profit motives of the organization, or the activity may be inherent to the organization’s identity or mission.

- **Prevention**

Prevention attempts to reduce the frequency of types of claims that cannot be eliminated. It allows entities to conduct operations that might otherwise be avoided. Personal protective equipment and machine guarding are examples of prevention methods.

- **Reduction**

Reduction attempts to reduce the severity or financial impact from losses that are not prevented. Claims management and a fire suppression system are both examples of reduction methods.

- **Segregation/separation/duplication**

The three techniques of segregation, separation, and duplication are all geared toward the mitigation of severity. Segregation isolates the exposure from other exposures, perils, or hazards, while separation spreads the exposures or activities over several locations, and duplication utilizes back-ups for critical systems or operations.

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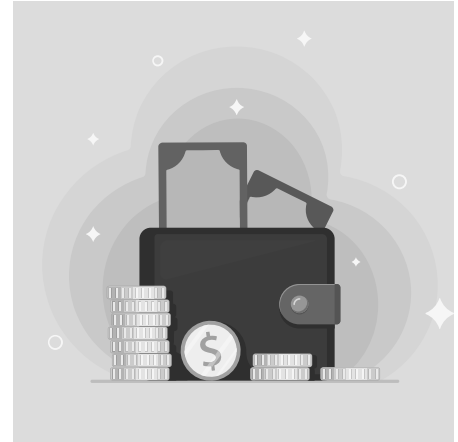
- **Transfer**

Transfer attempts to reduce risk to the organization by transferring some or all of it to another party. Transfer mechanisms include contractual and physical.

The focus of risk control should be on solutions that will prevent or reduce actual harm or the cost of loss, not providing for funds to be paid in compensation, which is addressed in the following Step 4 – financing of risk.

### 4. Risk Financing

There is no such thing as an uninsured loss as it will either be paid for internally by the organization or from an external source such as an insurance carrier. Risk financing is the acquisition of external funds and the allocation of internal funds, at the most favorable respective costs, to pay losses. The use of internal funds to pay losses is called **retention**. This financing solution can be active (planned) or passive (unplanned.) In an active retention, as in the case of a deductible, a company decides it is willing to accept a specific financial amount of risk for each loss, knowing that if a loss occurs, payment will be made from the company's cash on hand or other internal financial resources. For example, the company may be willing to retain losses for up to \$10,000 in the event of a fire.



When organizations rely on insurance to reimburse claims, they pay premiums in exchange for promises of compensation for specified losses. They also pay for the ability to know exactly what the insurance outlay will be, hence the “guaranteed cost.” This is the least volatile, most expensive, risk transfer option. The larger the retention amount, the more volatile yet potentially more cost effective the option becomes, with effective loss control being the critical factor in realizing these benefits. The stronger the loss control program and the more predictable the losses are, the better advantage a company can take of a higher retention plan.

Organizations may also enter into a non-insurance contractual transfer of financial responsibility for an exposure. In this situation, any losses are paid using external funds. However, if the contracted party cannot ultimately pay for the losses due to a lack of available insurance limits, for example, the financial responsibility still reverts back to the organization who transferred it in the first place.

### 5. Risk Administration



The fifth and final step in the risk management process is risk administration—the ongoing implementation and monitoring of risk management programs, policies, and procedures. Implementation requires support from senior management, cooperation from all employees across all levels of staff, and consistent, clear communication throughout the process. Meanwhile, monitoring requires the establishment of concrete, measurable data points,

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consistency in the collection of the data, and uniformly applied accountabilities and responsibilities for all levels of staff. The most effective risk management programs are extremely flexible and are therefore able to adapt to the ever-changing operational landscape, whether it be new regulations, technology, environmental and/or social viewpoints, market forces, or any combination thereof.

### ▶▶ Knowledge Check

**Directions:** Identify the step in the risk management process that is being executed.



Nancy is the risk manager at Risk and Insurance University and is conducting her annual review of the risk management program throughout the day.

1. Nancy's first meeting of the day includes the University's insurance broker and chief financial officer, during which various insurance policies and retention options are reviewed.

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2. Before lunch, Nancy tours the campus along with building managers, maintenance professionals, and grounds keepers to ensure various safety protocols are being followed and all safety mechanisms are functioning properly.

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## The Impacts of an Effective Risk Management Program

### Learning Objective:

- 1.3 Explain the impacts of an effective risk management program.

An effective risk management program will have several positive impacts on the organization implementing the program. A successful risk management program helps an organization consider the full range of risks it faces. It also examines the relationship between risks and their potential impact on an organization's strategic goals. It allows the organization to select appropriate risk control and risk



financing methods. As the program progresses, it can have several impacts on an organization.

### Increase in Profitability

An effective risk management program helps to increase profitability. This is done primarily through cost reduction, as well as maintaining and even increasing revenues. Effective risk management programs accomplish this through reduced claims experience (lowering insurance premiums, deductibles, and other retention costs while increasing risk transfer opportunities) and managing non-insurable risks/opportunities including reputation, process improvements, new technology development and/or implementation, supply chain synergies, and any other avenue to create or support a competitive advantage. In the most advanced risk management programs, emerging risks are also anticipated and prepared for.



### Identify Exposures, Opportunities, and Associated Risks



An effective risk management program helps the organization identify exposures and opportunities, as well as the associated risks. Once these are identified, the organization can allocate the appropriate resources to support the success of the opportunities, while also attempting to prevent and reduce the costs associated with losses, thereby spreading the financial risk of each across the organization. More specifically, costs are reduced by minimizing claims and legal expenses through increased loss control, enhanced internal expertise and awareness regarding risk origination and identification, and greater understanding and acceptance of risk management

policies and procedures throughout the organization. Cost reduction is also achieved through improved planning and budgeting, including more accurate loss projections, reduced frequency and severity of incidents, accidents, losses, and claims, and increased awareness of the existence of indirect losses and their origins.

### Protect Cash Flow and Assets

Effective risk management programs protect cash flow and assets. Ultimately, any losses that are prevented increase the bottom line and prevent cash flow disruptions that may occur if cash must otherwise be diverted to loss payments, which can have immediate and long-lasting negative implications.



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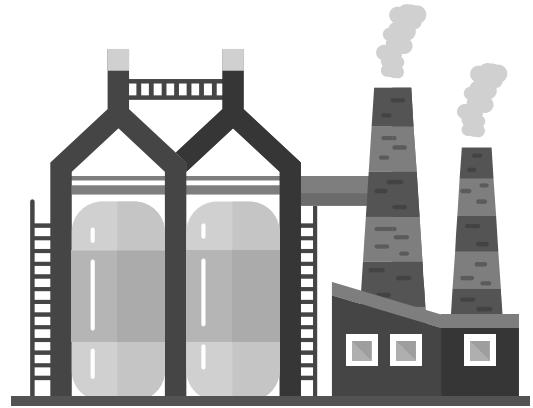
Wilson Widgets (WW) is preparing to launch a new, highly anticipated product—the Widget 1—to compete with its fierce rival, Widget Manufacturer B (WMB), who has already released its version to the market. WW's production requires a significant cash outlay, and these funds have been reserved during the previous fiscal year to support the new venture.

A hacker takes control of WW's entire system, freezing the organization out and demanding a ransom to release it. WW does not have the proper insurance coverage in place, so they must pay the ransom and have no choice but to use the Widget 1 production reserves to do so.

Outcomes: the product launch is delayed for each day the system is locked, replacement funds must be found for the launch, and WMB gains market share with its new product.

An effective risk management program would have identified and addressed the cyber exposure both in terms of prevention, such as better protection from hackers, as well as reduction, such as off-site backing-up of the system and the securing of the appropriate insurance policy to mitigate the impact of such an event.

The less an organization can afford to absorb a mistake, the more critical an effective risk management program becomes.



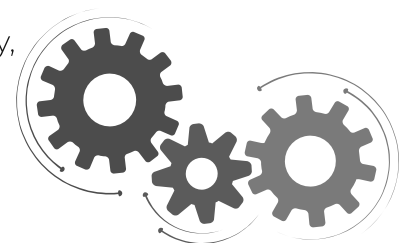
### Improve Workforce Morale and Productivity



Effective risk management programs improve workforce morale and productivity by reducing injuries, improving return-to-work programs, and enhancing management's communication. With better communication comes a greater responsiveness to the needs of the workforce, which in turn fosters lower employee turnover. Maintaining skilled and motivated employees is always more productive and cost-effective than continually searching for and onboarding new employees. Ultimately, increased output manifests in increased revenues as long as the demand persists.

### Improve Quality, Processes, and Technology

Effective risk management programs focus on improving quality, processes, and technology, which enhance supply chain efficiency and create or support a competitive advantage. The efficiencies will decrease costs while revenues increase as more units are produced, locations are opened, consumers are reached, and products are developed.





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Henry Ford's creation of the assembly line revolutionized manufacturing as production costs were slashed while the number of available units skyrocketed, establishing an entirely new market as automobiles were no longer strictly for the uber-rich. More modern examples include the utilization of information technology systems and data analytics, automation and robotics, vertical integration and just-in-time manufacturing, and the use of foreign labor.

### Safeguard Brand and Reputation



Effective risk management programs safeguard the organization's brand and reputation. This is one of the most challenging tasks for any organization to accomplish, as once a reputation is tarnished, it is extremely difficult to completely repair since it remains in the public's collective memory. If the nature of the event and/or the results are severe

enough, it can forever remove the brand from the market. For example, if someone is discovered to be involved in controversy or scandal, they may have a difficult time finding work in the future.

Marketing and public relations are two of the key pieces of an organization in direct communication with the public. However, the public's perception of the organization begins with the development of its own identity. Why does the organization exist? What is most important to the organization? Who or what is the organization most responsible to? How will it conduct itself? The current climate will dictate how these are received by the public.



Fossil fuel companies have been forced to invest in clean alternatives (BP has pledged to be carbon neutral by 2050) while socially conscious organizations (such as Bombas®, which manufactures

socks and donates a pair to those in need for every pair purchased) are gaining more market share and positive public attention. Bombas®' mission and how it conducts itself greatly impact the public's perception more today than ever before due to social media, 24-hour news cycles, and changing cultural attitudes and expectations.



### CASE STUDY

#### REPUTATION MANAGEMENT

Johnson & Johnson (J&J) faced a dire situation in the early 1980's which could have led to the demise of the Tylenol brand (and more importantly, to more human fatalities) had it been handled less skillfully. In the fall of 1982, seven people in the Chicago area died after taking cyanide-laced capsules of Extra-Strength Tylenol, the drug maker's best-selling product. Although it was determined that the capsules were being tampered with after they arrived on the drugstore shelves, rather than at J&J's manufacturing facility, J&J notified the public and recalled 31 million bottles while offering a replacement product in a safer tablet form free of charge. J&J still experienced a staggering drop in market share from 37% to 7%, and the so-called experts at the time predicted that the Tylenol brand would never recover. Not two months later, however, Tylenol was back on the market with a new tamper-proof package (designed by J&J), reinforced by a widespread media campaign, and one year later, had climbed its way back to 30% market share. J&J was successful in restoring the Tylenol brand image because it made its customers' safety the top priority, revolutionized the packaging of medicines to address the initial problem, and most importantly, communicated honestly, clearly, and consistently with the public throughout the process, from the initial warning notification of the incidents in Chicago to the marketing campaign supporting the re-launch of the newly packaged product.



As you can see, an effective risk management program does more than reduce accidents, injuries, and losses; it has a positive impact on the organization. From preserving its reputation to driving dollars to the bottom line, an effective risk management program benefits all levels of the organization.

### ▶▶ Knowledge Check



Provide an example from current events where a miscalculation or inaction on the part of an organization resulted in damage to its reputation, from which the organization might or might not have recovered.



# Total Cost of Risk (TCOR)

## Learning Objective:

1.4 Describe the components and uses of the total cost of risk (TCOR).

The risk manager is often tasked with showing the financial return on the investment in risk management programs and initiatives. One way this is done is by calculating the total cost of risk and then comparing results from period to period.

Total cost of risk (TCOR) is a risk management tool that is used to direct risk management decisions, track progress in loss reduction, and establish accountability in the workplace. In representing the financial impact of the TCOR, organizations can incorporate it into product and/or service pricing, passing along the TCOR, rather than the cost of insurance premiums.

Where non-profits are not charging a fee for their services, they should consider this element to effectively prevent dollars that otherwise would be directed towards the organization's mission from being absorbed by the cost of risk.

When implemented correctly, TCOR helps to change an organization's risk culture for the better, while sharpening its risk forecasting and budgeting results. This is especially important for small businesses and non-profit organizations that lack the financial capacity to absorb mistakes or passive retentions in the same way that large corporations such as Walmart or the New York Yankees might.

## Basic TCOR Calculation

Traditionally, organizations have computed and tracked only insurance premiums and deductibles. TCOR is the calculation of all measured costs and expenses connected with the risk management function of an organization:

1.	Insurance costs
2.	+ Retained losses
3.	+ Risk management departmental costs
4.	+ Outside services costs
5.	+ Indirect costs
<hr/>	
= TCOR	

While the TCOR formula itself is straightforward, the development and implementation of the metric are as much an art as it is a science, as there is no definitive method for determining which costs are measured within each of the above categories. This is due to the extreme diversity among organizations. Therefore, regarding benchmarking, TCOR is best used as an internal metric, as each organization's method of development will differ significantly from one to the next.

## TCOR Development: Defining the Costs

To manage the risk management process effectively, the risk manager must know the TCOR of the organization. The TCOR comprises all costs related to an organization's risk management program, including those that fund losses or support the implementation and monitoring of the risk management process. When calculating the TCOR, it is essential to include the same type of costs from one period to the next. Otherwise, you will not be comparing "apples to apples." For example, if travel related to risk management training is included in the TCOR in year X1, it should either be included in Year X2's report or a note should be made to explain it has been excluded.

Here is a breakdown of each component of TCOR:

INSURANCE COSTS

premiums, letters of credit, security deposits, etc.

+

**Insurance costs** are the most concrete and include premiums, premium taxes, letters of credit, deposits, collateral, and interest on financed premiums.

RETAINED LOSSES

deductibles, SIRs, ALAEs, etc.

+

**Retained losses** include deductibles or self-insured retentions (SIR), self-funding costs such as accruals, bonds, and surety costs, funded reserves, and

allocated loss adjustment expenses (ALAE)—costs associated with handling retained losses or claims, including legal expenses, medical case management fees, third-party claims administrator fees, etc. Passive retention can also be taken into account here. It is quite challenging to accurately measure and account for this component, and even the most prepared and risk-savvy organizations will still experience unexpected retention losses. Mitigating this factor is critical.

RM DEPARTMENTAL COSTS

salaries, RMIS, training, travel, overhead, etc.

+

**Risk management departmental costs** include payroll and related costs, risk management information systems expenses, and administrative costs (which vary significantly among organizations). For example, some organizations may prefer to account for training under the HR function rather than the risk

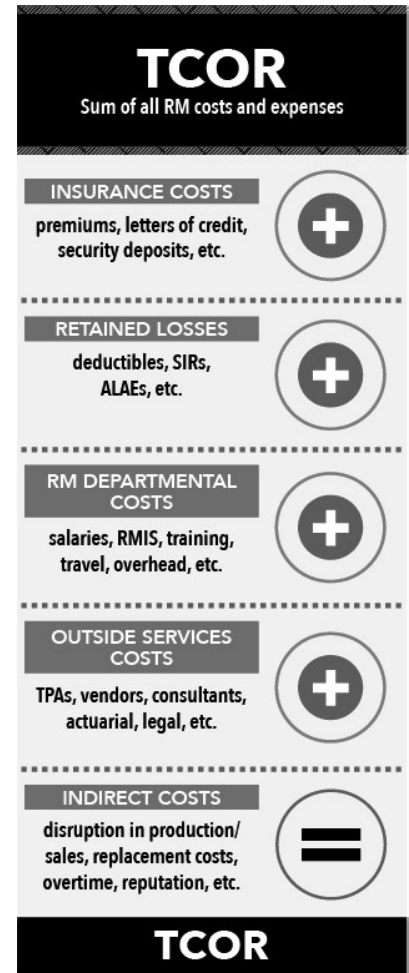
management department. Other examples of risk management department costs include travel, education, conferences, loss control equipment or processes, and procedures expenses, as well as any other costs the organization deems appropriate to charge to the risk management department.

OUTSIDE SERVICES COSTS

TPAs, vendors, consultants, actuarial, legal, etc.

+

**Outside services costs** include fees for agents and brokers, actuaries, legal advice or representation, outside loss control services, environmental services, outside risk management consultants, external auditors, property valuation and



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inspection services, and any other outside expertise the organization deems necessary to mitigate risk.

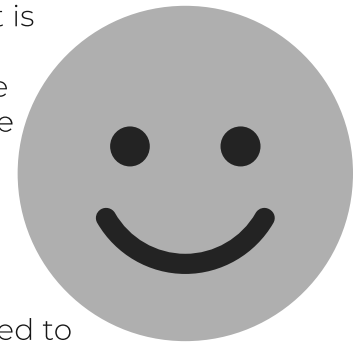


A quantified portion of **indirect costs** is the most difficult element to measure accurately, and it will vary the most among organizations. For every \$1 of direct losses, an organization will absorb an additional \$4–\$7 of indirect losses. As such, it is essential to identify and quantify as many indirect

costs as possible, both for tracking purposes and to focus loss control efforts. Some examples include training for new employees, overtime costs, lost opportunity costs, social costs (including loss of positive reputation or public image), non-risk management department managers spending time on risk management, the increasing of claims values due to late reporting (which can be as high as 2%–3% per day the claim is not reported), and loss of productivity, which includes things such as the learning curve for new employees, downtime because of an accident, the workforce being stretched thin because employees are injured, and sick leave in excess of the amount of time sanctioned by the organization.

### Benefits of Allocating TCOR

TCOR utilization can yield the positive outcomes outlined above if it is implemented strictly as a universal organization metric. However, allocating TCOR to individual departments or locations will produce optimal results. The benefits of allocating TCOR are vast and include more effectively identifying elements influencing the TCOR by determining where the costs originate. TCOR implementation also enhances responsibility and accountability as each department, location, division, and so on, is responsible for its own cost of risk.



Bonuses, salary increases, and performance evaluations can be linked to the outcomes of the allocation. As a result, employees become more aware of the costs related to losses and exposures, as well as other TCOR elements. Additionally, areas that require the most risk management consideration from all levels of staff are highlighted. Ultimately, TCOR modifies behaviors, as all employees become risk owners. Additionally, TCOR augments loss control by encouraging employees to concentrate on mitigating the frequency and severity of losses, incorporating risk control into projects, services, and organizational decisions, providing managers with detailed loss and exposure material, and demonstrating the cost-effectiveness of investments in safety, loss prevention, and risk control equipment.

### TCOR Implementation Considerations



Several key items are essential to the successful implementation of TCOR, including senior management's input, approval, and support. Additionally, allocating costs must be consistent and equitable across the organization, and the manner in which the allocation method impacts other aspects of the organization, such as culture and politics, must be considered. Meanwhile, communication is key to successful implementation as the allocation must be understood and accepted by all departments. Potential negative consequences resulting from poorly communicated TCOR allocation implementation include

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pushback from middle management, avoiding accident reporting procedures, late reporting/non-reporting, poor morale, and biased goals and objectives, all of which can harm the team approach to risk management that TCOR is intended to foster. Goals and objectives must be clearly outlined, including what is to be accomplished by allocating the costs as well as how progress will be measured. Finally, the most successful TCOR implementations rely on integration or compatibility between interdepartmental systems.

### Establishing the Allocation System

There are three basic methods for allocating TCOR:

The **exposure method** allocates costs based on exposure units, such as the number of vehicles or employees in each department. Meanwhile, **the experience method** distributes the costs based on the loss experience of the individual departments. Finally, **the combination method** employs a blend of allocating portions of costs to operating units based on both exposures and loss experience. This is the most effective allocation method. To enhance the buy-in from individual departments when initially allocating TCOR, the blend should include no more than 20% experience to avoid discord. Each year following, the experience percentage can be increased by whatever amount the organization has outlined until the desired combination is reached. The annual increase and ultimate mix must be communicated to each department at the onset of the TCOR utilization.

Regardless of whether the organization includes the TCOR in the pricing of its products or services, any loss that is prevented or reduced improves the organization's financial results.

### ▶▶ Knowledge Check



Nancy is the risk manager for Pinnacle Products. She is reviewing a TCOR report prepared by the risk management intern. Nancy is concerned that the intern may not have a good understanding of the elements of TCOR. Which of the items in the report below supports Nancy's concern? (Check any/all that don't fall within the elements of TCOR.)

- ☐ \$300,000 – insurance premiums for all lines of coverages
- ☐ \$20,000 – repair of office equipment damaged by an employee's negligence
- ☐ \$55,000 – settlement of a general liability claim paid by the insurer and billed back to the insured
- ☐ \$10,000 – safety consultant hired to perform physical inspections at each of the locations
- ☐ \$4,000 – the recovery of damage to a company-owned vehicle from a negligent driver's insurer
- ☐ \$65,000 – salary of the Director of Marketing, including her benefits
- ☐ \$15,000 – overtime paid to an employee filling in for another employee who was out of work recovering from a work-related accident

# Emerging Risks

## Learning Objective:

- 1.5 Explain the concept of emerging risks, including the common elements and basic types.

Emerging risks are extremely difficult to manage, as they are, by nature, not yet fully realized or understood. They manifest in one of two ways, including as a *new exposure(s)* to loss for which a risk treatment has not yet been implemented, or as an *existing exposure(s)* to loss that is evolving, difficult to quantify, and which may have a major financial impact on the organization.

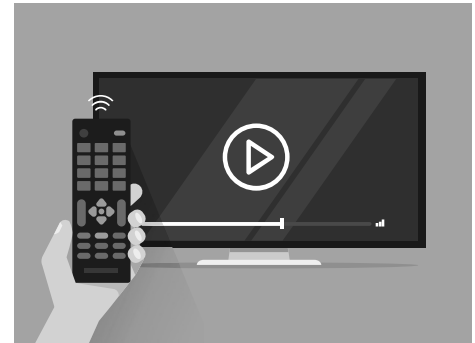


Some examples include:

- advancements in technology,
- climate change,
- political shifts,
- public health (COVID-19, potential for future pandemics, increased life expectancy),
- overpopulation/decreasing water supply,
- and changes/threats to the industry in which the organization is operating.



Blockbuster failed to identify and adapt to the threat of Netflix's mail-subscription model. Meanwhile, once Netflix had disrupted the brick-and-mortar DVD rental model, it was then able to identify that streaming technology was the future and lead the way there. Netflix continues to identify threats and opportunities and evolves to defend against and achieve them, respectively (now producing its own content), while Blockbuster no longer exists.

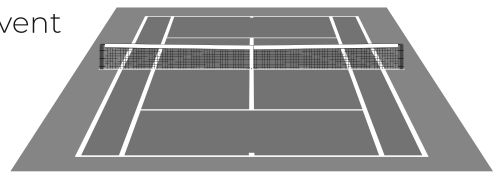


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Wimbledon was the only major sporting event or league worldwide that held pandemic insurance when COVID-19 hit.

Organizations must maintain these high levels of vigilance with respect to emerging risk identification and response in order to effectively manage them as these risks are forever evolving.



Emerging risks can have a profound impact on the continued success or eventual failure of an organization, as they often directly impact non-insurable elements of the organization's risk profile such as how the industry itself operates (i.e., Napster and the music industry or changes in regulation with respect to medical marijuana), the demand (i.e., Zoom usage due to COVID-19), and competitive advantage drivers (i.e., warmer climate reducing snow fall for a ski resort or new technology allowing Uber to disrupt the traditional taxi model). These underscore the importance of identification and the harsh reality that often, once an emerging risk has been truly identified, its influence is already underway.

### Common Elements of Emerging Risks

Emerging risks share several common elements that increase their complexity in identification and management. The first element is **high uncertainty**, which is borne from the absence of reliable information. As such, frequency and severity of the exposure is hard to predict and quantify. Furthermore, risk transfer and conventional financing techniques may not be suitable for these types of exposures. There is also a difficulty in communicating the existence of emerging risks, and in this potential miscommunication runs the danger of turning areas of concern into phantom risks that may not materialize. Another common element is that there is no **standard approach** across organizations to handle emerging risk. Finally, there is **regulatory involvement**, which can both limit or enhance an organization's ability to operate. The absence of industry response often leads to regulatory involvement.

The speed of emergence varies widely and can be influenced by numerous factors, including technological and scientific advancements, such as the discovery of new threats, evidence of cause-and-effect relationships, and enhanced methods for measuring and detecting risks. Speed of emergence is also influenced by economic circumstances including higher concentration of values, stability of local and global economics, and lack of risk financing or transfer options, as well as by social aspects including enhanced awareness, wealth redistribution attitudes, loyalty of employee versus employer, public trust, and collapse of social insurance mechanisms (i.e., pension systems).

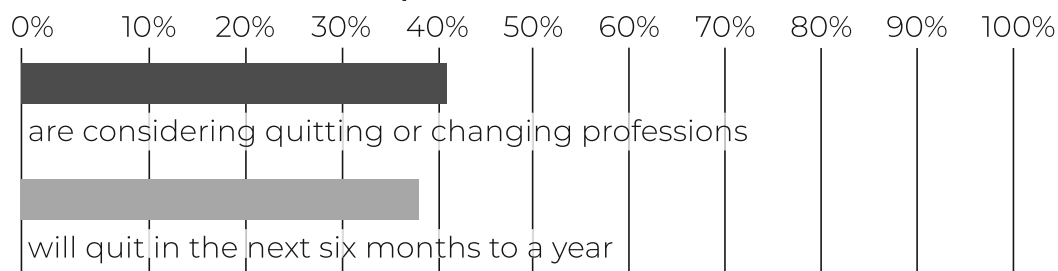


## Emerging Risk Types

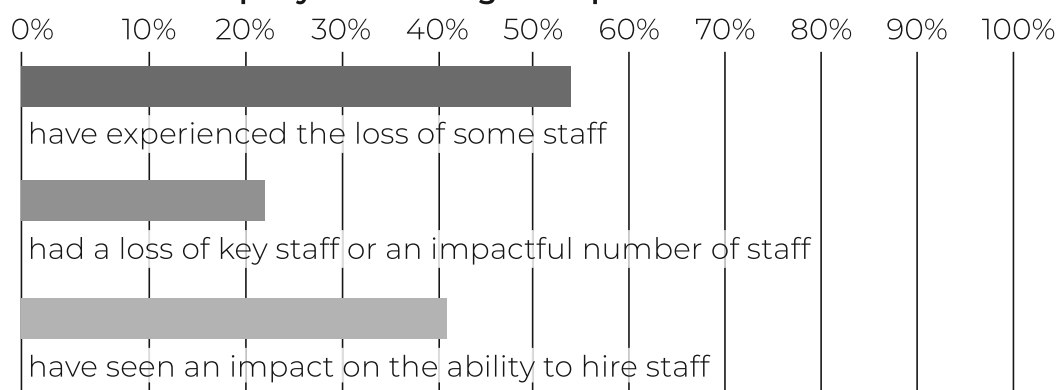


Findings from a 2021 survey sponsored by the Canadian Institute of Actuaries, the Casualty Actuarial Society, and the Society of Actuaries showed that climate risk was identified most often as the top emerging risk, followed by cyber and network risks. The remainder of the top five emerging risks include pandemic and infectious disease, disruptive technology, and financial volatility. Also of concern is the impact of the “Great Resignation,” the trend in which large numbers of workers left their jobs, primarily in the United States, beginning in early 2021. Possible causes include wage stagnation amid rising living costs and safety concerns related to the COVID-19 pandemic. A Microsoft survey of more than 30,000 global workers showed that 41% of workers were considering quitting or changing professions in 2021, and a study from HR software company, Personio, of workers in the UK and Ireland showed that 38% of those surveyed planned to quit in the next six months to a year. In the US alone, April 2021 saw more than four million people quit their jobs, according to a summary from the Department of Labor—the biggest spike on record. Meanwhile, 54% of insurance company risk managers surveyed said they have experienced the loss of some staff, 22% reported the loss of key staff or an impactful number of staff, and 41% have seen an impact on the ability to hire staff.

### 30,000 Global Workers Reported in 2021



### Insurance Company Risk Managers Reported



### Six Basic Types of Emerging Risks

#### 1. Economic

Includes weak international economies affecting currency values, purchasing power and trade, currency devaluation, embargo/trade, and credit insurance for emerging markets

#### 2. Environmental

Includes natural disasters (earthquakes, wildfires, severe floods, and hurricanes) and climate change, along with the threat of increasingly volatile weather conditions, the financial impact on markets, resources, personnel, and organizational preparedness, increasing legal or regulatory pressures, and mounting public and shareholder activism

#### 3. Technological

Includes cyberattacks (website defacements, cyber extortion, ransomware, denial of service), breaches of privacy (theft or manipulation of private or sensitive information or trade secrets), speed of communications (defamatory blogging and tweeting affect operations and reputation), unauthorized access to or disclosure of client financial and/or personal identifying information, and e-commerce and dependence on technology (network outages, system failures exposure to cybercrime)

#### 4. Societal

Includes pandemic illnesses, such as COVID-19 and its variants, and their impact on the economy, employment and working conditions, educational institutions and learning environments, and supply chain delays, including restricted travel. Also included are increased life expectancy, overpopulation, rising medical costs, food and water supply shortages, and the phenomenon known as the “Great Resignation.”

#### 5. Geopolitical

Includes threats to safety and security impacting domestic and international financial markets, and changes to regulations

#### 6. Uninsurable Operational/Strategic

Includes supply chain issues such as insolvency of partners or suppliers and/or single source dependency, high employee turnover, increased competition, changes in demand, and threats to the industry as a whole (new technology)

## ▶▶ Knowledge Check



The “Great Resignation” has created wide-spread impact on employment markets. In the US alone, April 2021 saw more than four million people quit their jobs, according to a summary from the Department of Labor. The US Bureau of Labor Statistics has reported that in 2021, 12.1 million young people between the ages of 20 to 34 quit their jobs between June and August. Explain how or why the Great Resignation reflects the common elements of emerging risks.

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## Summary

The concept and understanding of risk differ for many individuals and are typically dependent on their line of work and job responsibilities. Risk includes an element of uncertainty, and for our purposes, this uncertainty refers to potential outcomes that may arise from a given situation. Pure risk deals with situations where there is either a loss or no loss. Speculative risk includes the potential for gain. Risk managers use a specific set of terms in their work. Many of these terms have differing meanings to agents, brokers, and underwriters. Those terms include: **exposure, loss, and peril.**

Risk management involves identifying, assessing, and mitigating the uncertainties associated with exposures that could adversely affect an organization's assets, financial statements, and objectives. The risk management process involves five steps, each presenting potential benefits for clients: risk identification, risk analysis, risk control, risk financing, and risk administration.

To manage the risk management process effectively, the risk manager must know the total cost of risk (TCOR) of the organization. The TCOR comprises all costs related to an organization's risk management program, including those that fund losses or support the implementation and monitoring of the risk management process.

Emerging risks share several common elements that increase their difficulty in identifying and managing: **high uncertainty** due to the absence of reliable information; **a lack of a common approach across organizations** to handle emerging risks; and **regulatory involvement**, which can both limit and enhance an organization's ability to operate.

In the next section, you will learn about risk management within an organization, which includes how the risk management program fits within a typical organization and how it supports the strategic goals and objectives. Additionally, you will examine the importance of developing company culture and how risk management fits into that development.

## Review of Learning Objectives

- 1.1 *Define risk and other key risk management terms, including the distinction between pure and speculative risk.*
- 1.2 *Define risk management and explain the five steps of the risk management process.*
- 1.3 *Explain the impacts of an effective risk management program.*
- 1.4 *Describe the components and uses of the total cost of risk (TCOR).*
- 1.5 *Explain the concept of emerging risks, including the common elements and basic types.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](http://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

#### Video Clips

View some video clips about important concepts related to learning objectives in this section.



Speaking From Experience: Introduction to Risk Management with Alex Gold, MSRMI, CPCU, ARM-E, CRM, CIC, CRIS, CSRM, President, Gold Standard Risk Management, LLC



Speaking From Experience: Total Cost of Risk with Priscilla Oehlert, CIC, CRM, ARM, Director Insurance & Risk Management Center, University of Houston, Downtown

## Section 1 Self-Quiz

**Directions:** Indicate whether the statement is True or False.

1. One example of an industry that is basically immune to risk is the restaurant industry.

True

False

2. In the risk management arena (including the insurance world), definitions of risk are usually dependent upon the particular job function or area of expertise of the source.

True

False

3. Jeremy owns shares of Disney stock. The risk that would be associated with changes in the value of Disney's stock is known as speculative risk.

True

False

4. Pure risk involves a situation or incident with multiple outcomes, not simply loss or no loss.

True

False

**Directions:** Select the correct letter to match each term with the appropriate definition.

A. Peril	_____ a reduction in the value of assets
B. Risk appetite	_____ a situation, practice, or condition that may lead to an insured's susceptibility to adverse finance consequences or loss
C. Loss	_____ an event that disrupts or interrupts normal activities and may become a loss
D. Exposure	_____ a cause of loss, or any action or event that causes a loss
E. Claim	_____ a demand for payment or a company's moral or ethical obligation to pay damages as a result of a loss or occurrence
F. Incident	_____ the organization's willingness to accept or tolerate risk

## Section 1: Introduction to Risk Management

**Directions:** Select the correct answer for each question from the options given.

1. A factor increasing the likelihood that a loss will occur or the severity of a loss that occurs is known as a(n) \_\_\_\_\_.
  - ☐ accident
  - ☐ hazard
  - ☐ occurrence
  - ☐ expected Loss
2. \_\_\_\_\_ is the dollar amount of a given loss or the aggregate dollar amount of all losses for a given period, usually the policy period.
  - ☐ Accident
  - ☐ Expected loss
  - ☐ Severity
  - ☐ Frequency
3. Identify which one of the following is **NOT** a step in the risk management process.
  - ☐ Risk control
  - ☐ Risk administration
  - ☐ Risk analysis
  - ☐ Risk accumulation
4. The step in the risk management process that includes any conscious action or inaction to minimize (at optimal cost) the probability, frequency, severity, or unpredictability of a loss is the \_\_\_\_\_ step.
  - ☐ risk control
  - ☐ risk administration
  - ☐ risk analysis
  - ☐ risk financing
5. The step in the risk management process that may be used for verification and classification of loss data, including predicting and range of losses, would be \_\_\_\_\_.
  - ☐ risk control
  - ☐ risk analysis
  - ☐ risk administration
  - ☐ risk financing

## Section 1: Introduction to Risk Management

6. Which one of the following is **NOT** an impact of an effective risk management program?
- ☐ Improved quality, processes, and technology
  - ☐ Improved workforce morale and productivity
  - ☐ Protected cash flow and assets
  - ☐ Increased sales and market share
7. When implemented correctly, TCOR helps to change an organization's \_\_\_\_\_ for the better.
- ☐ employees
  - ☐ productivity
  - ☐ risk culture
  - ☐ reputation
8. In the TCOR formula, which one of the following examples would be an **indirect cost**?
- ☐ Reputation
  - ☐ Deductibles
  - ☐ Premiums
  - ☐ Training
9. In the TCOR formula, which one of the following examples would be a **retained loss**?
- ☐ Replacement cost
  - ☐ Deductibles
  - ☐ Letter of credit
  - ☐ Overtime
10. Emerging risks share several common elements which increase their difficulty in identifying and managing. What is an example of one of those common elements?
- ☐ High uncertainty
  - ☐ Predictability and thus well planned for
  - ☐ Cost prohibitive impacts to organizations
  - ☐ May be eliminated through regulatory intervention



# Section 2: Risk Management and the Organization

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## Section Goal:

The goals of this section are to demonstrate how the risk management program fits within a typical organization and how it supports the organization's strategic goals and objectives. Furthermore, you will explore the importance of developing company cultures and how risk management fits into that development. The general classes of risk, as risk identification tools, will also be introduced to you.

## Learning Objectives:

- 2.1 *Describe the characteristics and uses of the following governing documents of a risk management program:*
  - mission statement
  - policy statement
  - risk management manual
- 2.2 *Describe how an organizational risk culture is formed and maintained.*
- 2.3 *Identify the general classes of risk and be able to apply them to common scenarios.*
- 2.4 *Define risk appetite and risk-taking ability and their importance to an effective risk management program.*

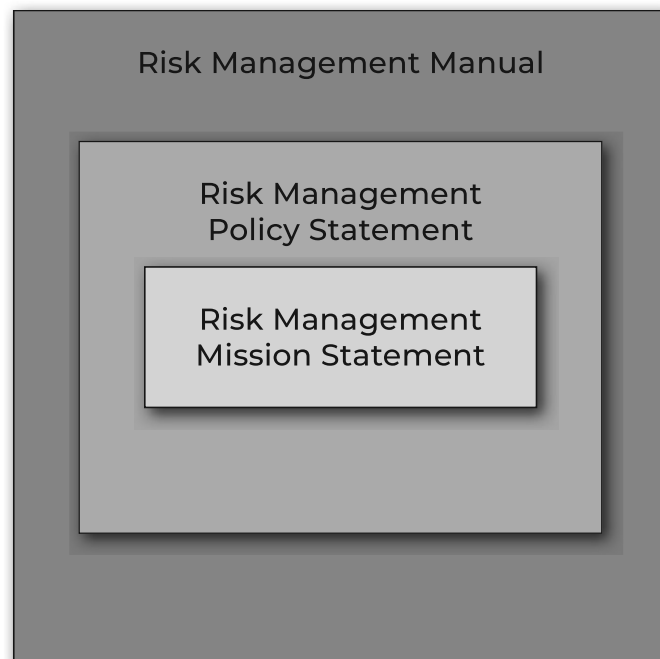
## Governing Documents

All organizations, regardless of their industry, should have governing documents. The governing documents outline the goals, objectives, and values of the organization, as well as guide its conduct and operations, including those of its employees. Governing documents reflect strategic goals and serve as valuable tools for informed decision-making. When it comes to such documents, most organizations will have a mission statement, a policy statement, and a policy and procedures (operating) manual.



Just as the organization has governing documents, the risk management department should have its own governing documents that provide guidance and direction for risk management actions. The risk management department's governing documents should be aligned with those of the organization and support its overall goals and objectives.

The risk management governing documents can be viewed as a pyramid. The risk management mission statement parallels the organization's mission statement but focuses on the three key elements—target audience, service, and its distinctive place in the organization—in risk management activities. The risk management mission statement serves as the foundation for the expanded risk management policy statement, a broader statement that connects the risk management mission statement to the organization's strategic plans, goals, and objectives. The risk management policy statement is further expanded upon in the risk management manual, which outlines the details of how the policy statement and mission statement will be implemented. It serves as the “how-to” manual for the risk management department and all other departments within the organization.



# The Governing Documents of a Risk Management Program

## Learning Objective:

2.1 Describe the characteristics and uses of the following governing documents of a risk management program:

- mission statement
- policy statement
- risk management manual

## The Risk Management Mission Statement

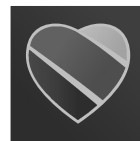


In general, a corporate mission statement is concise, providing a brief explanation of why the organization exists, its overall goal, the objectives of its operations, the products or services it offers to its primary market or customers, and its geographical area of operation. The mission statement may also include a brief description of the organization's philosophies, its competitive advantages, and its vision.

## Section 2: Risk Management and the Organization



“Dedication to the highest quality of customer service delivered with a sense of warmth, friendliness, individual pride, and company spirit. We are committed to providing our employees a stable work environment with equal opportunity for learning and personal growth.”



—Southwest Airlines' Mission Statement

The ideal mission statement has three elements:

- the target audience,
- the product or service,
- and the distinction from competitors.

Unfortunately, many mission statements consist of platitudes that might be meaningless to the general population. Therefore, they can be widely regarded with contempt or can appear as lofty and unrealistic.

Without a proper mission statement, which may include the organization's vision, management may end up someplace other than where they intended or desired.

The risk management department should align its mission statement with the goals outlined in the organizational mission statement. Generally, most risk management mission statements are a few short paragraphs, whereas the risk management policy statement may expand to a full page or two. The real workhorse, the risk management manual, may comprise multiple volumes and contain tens of thousands of detailed instructions, guidelines, and procedures for the largest and most complex organizations.

### Purpose, Characteristics, and Content

The risk management mission statement states the overall goal of the risk management program. It guides the actions and decision-making of the risk manager. The keyword in that statement is “guides” rather than detailing specific actions such as how to file a claim, how to select a retention, or how to balance internal and external funds in the risk financing program. Thus, the risk management mission statement is short, clear, and concise. The risk management mission statement must be aligned with the organization's mission statement; otherwise there will be pushback from other operating units. Due to its concise nature, the risk management mission statement can be easily applied with all activities related to risk management. Included in the content of the risk management mission statement are the priorities of the risk management program.

### Sample Risk Management Mission Statement

The mission of the risk management department is to treat risk in the most beneficial, economical, feasible, and practical manner for the safety, security, and integrity of the company, its assets, employees, owners, customers, and service providers.

## The Risk Management Policy Statement

The risk management policy statement addresses the various areas of risk management in more detail. It defines the organization's policy for managing risks and its relevance to the overall strategic plan, goals, and objectives, including its risk management philosophy considerations of ethical implications.

Developing a written risk management policy statement also forces the organization's senior management to think about the subject of risk management, a process that facilitates the development of new ideas and increases management's appreciation for risk management as a business tool.



Preparing the policy statement begins with the development of the risk management mission statement. Insurance policies, contracts, and leases should be reviewed to ensure that all contractual duties and responsibilities of the organization are included in the risk management policy. As is true in all phases of risk management, the approval and support of senior management are vital. Once approved, the policy statement should be distributed along with the risk management mission statement to all employees, bearing the signature of the CEO or president, as part of the risk management program.

## Purpose, Characteristics, and Content

The purpose of the risk management policy statement is to define the organization's policy for managing risks and its relevance to the overall strategic plan, goals, and objectives, including its risk management philosophy and ethical considerations.

The risk management policy statement should be in writing and be one to two pages in length. It should refer to the risk management mission statement and clarify the risk management goals and direction, outline fundamental guidelines, focusing on fundamentals, and addressing ideas that might not otherwise be expressed.

The policy statement reflects the organization's risk tolerance and how decisions regarding risk are made. A key aspect of the content is that the risk management policy statement clearly specifies responsibility, accountability, and authority, thereby minimizing duplication of efforts among various operating units within the organization.



### Sample Risk Management Policy Statement

*(Name of Organization) is subject to certain risks that affect our ability to operate, serve our clients, and protect assets. These include risks to employees and volunteers, liability to others, and risks to property.*

*Controlling these risks through a formal program is essential for the well-being of the organization and its members. The jobs and services the organization provides, the safety of the workplace, and other benefits all depend to an extent on our ability to control risks.*

*Management has the ultimate responsibility to control risks. Control includes making decisions regarding which risks are acceptable and how to address those that are not. Those decisions can be made only with the participation of the entire workforce because each of us understands the risks associated with our own tasks better than anyone else in the organization. Each is responsible for reporting any unsafe conditions they see. Also, each is encouraged to suggest ways in which we can operate more safely. We are committed to carefully considering everyone's suggestions and taking appropriate action to address identified risks.*

*Accidents and other situations involving loss or near-loss will be investigated as part of the effort to manage risks.*

*Every employee's and volunteer's performance will be evaluated, in part, based on their compliance with this policy.*

## The Risk Management Manual

The risk management manual (also known as the Risk Management Policy and Procedures Manual) is a “how-to” guide for implementing the risk management policy statement. As such, it describes the procedures for implementing the policies.

There are four key purposes of the risk management manual:

- 1) It demonstrates and communicates senior management's support for the risk management program to all employees;
- 2) It establishes expected levels of performance and cooperation;
- 3) It familiarizes ALL personnel with procedures to effectively manage risks and exposures; and
- 4) It provides a convenient reference or “how-to” guide for activities such as job safety, electronic messaging, and reporting procedures for incidents and accidents in accordance with insurance policy terms and risk management department requirements.



### Purpose, Characteristics, and Content

The risk management manual is a lengthy document that can be from several pages to several thousand or more pages. The risk management manual outlines the functions of the risk management department, explaining how those functions interact with one another and with other functional areas within the organization. It includes the risk financing program elements of philosophy and process, the insurance placement process, how third-party service providers, including insurance providers, are selected, and insurance requirements such as minimum financial ratings, geographic areas served, and licensing.

The risk management manual must be well organized so that all users, i.e., all personnel, can quickly find the appropriate action related to a given situation. The longer the document, the more important a comprehensive indexing system becomes. While no one (outside the risk management department, that is) is expected to know and understand the entire content, diverse users must be able to quickly identify the section that is pertinent to the situation they are facing. And, of course, the risk management manual must be aligned with the risk management mission statement and the risk management policy statement. As such, it will be aligned with the organization's mission statement.

One critical content element is a signed letter of support from the chairman, CEO, president (or other highest-ranking individual in the organization), stressing how important the risk management function is to the organization. The risk management procedures are the nuts and bolts of the risk management plan, and include the business continuity plan, crisis management plan, safety and loss control procedures, and claims management procedures—including investigation and incident and accident reporting guidelines, a return-to-work program, litigation management, and OSHA Accident and Illness Reporting or reporting for other regulatory agencies (including state and local entities).

The same guidelines that apply to writing any standard operating procedures manual apply to the risk management manual. The risk manager should familiarize themselves with the audience by conducting interviews with key personnel within the organization and gathering input from brokers and consultants. The manual should be written in a user-friendly style, avoiding insurance and risk management jargon, and it should be as clear and concise as possible. It should use a clean and consistent format and include a glossary of terms. Most importantly, it should be distributed to all personnel and updated regularly to ensure accuracy and relevance.

### ▶▶ Knowledge Check



Eleanor is the newly hired risk manager for First Main Bank. During her first week on the job, she has determined that there are no governing documents for the risk management department. She has begun working on putting them in place. She starts with the bank's mission statement:

*"The mission of First Main Bank Corporation is to be a profitable, progressive company of the highest quality, offering financial services to communities in Michigan. The FMB team is to be diligent in seeking out the needs and expectations of our customers. Our unwavering commitment is to provide customers with superior service in a caring, responsive way."*

Eleanor drafts the risk management mission statement.

"The mission of risk management services is to consistently inform management of risk issues facing the company, its assets, and its employees; to treat risk in the methods most beneficial, economical, feasible, and sensible for the safety, security, and integrity of the company and its partners—our employees, directors, shareholders, customers, service providers, and the communities we serve."

Has she succeeded? Why or why not?

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## Organizational Risk Culture (ORC)

### Learning Objective:

2.2 Describe how an organizational risk culture is formed and maintained.

Governing documents provide a framework upon which an organization is built and operates. Key to that process is the development of the organization's culture. The culture of an organization reflects the attitudes, values, and goals of its leadership. Culture is a term that encompasses the social behaviors and norms present in human societies, including the collective knowledge, beliefs, laws, mores, customs, capabilities, arts, and habits of the individuals within a social grouping.

Any organization, whether a corporation, partnership, limited liability company, association, or any other group of individuals conducting business activities, is a social grouping that reflects the culture, social behaviors, and norms of its individual members. Within a business organization, whether private or public, this encompassing term is referred to as organizational culture.

A culture also develops within the risk management department and is known as the organizational risk culture. Next, we will explore how an organizational risk culture is formed and maintained.

### How an Organizational Culture Is Formed

Organizational culture is the collection of values, expectations, and practices that guide and inform the actions of all individuals in the organization. It is the collection of traits that make the organization what it is and how it is perceived by others.

An organizational culture does not simply pop up like wildflowers in a garden bed. First, the seed must be planted, and the seedling nourished. After a while, the seedling flourishes and bears a flower that eventually releases its seeds to create a bed of beautiful wildflowers.



The seeds of an organization's culture are carried by the individuals comprising the organization, particularly its leaders. As the social behaviors begin to emerge, some behaviors are encouraged and some discouraged. The preferred behaviors are nurtured by group members and ultimately become the norm. As this process is repeated, the set of desired behaviors creates a culture.

The organizational culture is formed when:

- the attitudes of leadership are expressed through their behaviors;
- the desired behaviors are motivated/incentivized; and
- the repetition of desired behaviors creates a culture.

Keep in mind that organizational culture is created through consistent and authentic behaviors, not by press releases or policy documents. The true test of an organization's organizational culture becomes apparent when you see how leadership responds to a crisis. Consider the examples below:



BP CEO Tony Hayward, on the front lines of his company's battle to contain the massive Gulf of Mexico oil spill, said he "...would like my life back." Despite BP's efforts to mitigate the effects of the oil spill, this simple statement seemed callous and unfeeling towards the thousands of lives that were impacted by the oil spill. Many businesses closed, and the environmental impact was disastrous.





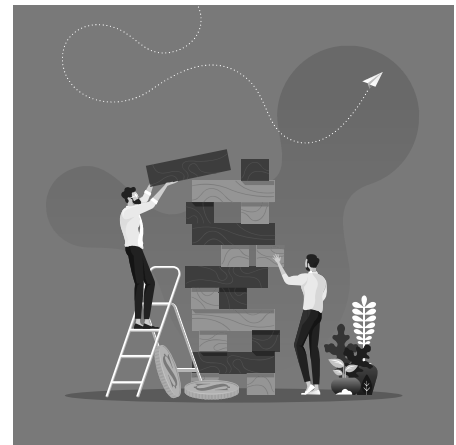
In 1982, an unknown person knowingly contaminated Johnson & Johnson's Tylenol capsules with cyanide. Johnson & Johnson Chairman James Burke responded to this crisis by forming a strategy team to answer two simple questions: "How do we protect the people?" and "How do we save the product?" The rest of the company's responses demonstrated the company's commitment to public safety. Their press releases were measured, and as more information was received, it was released to the public, with corporate responses reflecting consistent and authentic behavior, rather than just platitudes and empty phrases. As a result, Johnson & Johnson was perceived as being the victim of a terrible crime.



### Definition of Organizational Risk Culture (ORC)

Organizational risk culture is the collection of values, expectations, and practices that guide and inform the actions of all members of the risk management team. In an organization that fully utilizes the concept, every person is regarded as a "risk manager," not necessarily by title, but by their involvement in managing risk within the organization to the extent that they have control over some aspect of risk.

- Attitudes are chosen behaviors toward risk adopted by an individual or a group influenced by their perception of risk.
- Behaviors are observable actions or conduct related to risk.



### Importance of Understanding the ORC

Understanding what organizational risk culture is is extremely important, but so too is understanding the importance of ORC in any organization. We'll examine three areas that illustrate this point: compliance, operational performance, and risk management effectiveness.

#### Compliance

Corporate compliance is supported by a workplace culture—the ORC—that values integrity and ethical conduct. Compliance is about managing risk. It is the process of ensuring that the organization and its employees comply with all laws, regulations, standards, and ethical practices that apply to the organization and its industry.



## Section 2: Risk Management and the Organization

Not only do federal and state laws apply, but international risk management standards establish that the directors and officers of an organization must ensure a proper alignment between risk management policies and the ORC implemented. Management decisions must guide the organization towards risk management improvements and reinforcement of the positive aspects of the ORC.

Following the financial collapse of Enron, Worldcom, and Tyco, Congress passed the Corporate Responsibility Act of 2002, more commonly known as Sarbanes-Oxley. One of the provisions of the Act requires management to make inquiries into risk management areas. This focuses attention on the risk of financial misstatement due to lack of controls affecting the insurance program structure, risk management function, cost allocation process, and vendor relationships. These risk areas must be assessed to ensure information is complete and accurate and that the judgments made are appropriate. Further, representations of service providers with respect to financial reporting items are also subject to control, such as increased documentation on how loss reserve estimates are calculated and verified.

### Operational Performance

By creating clear and transparent communication and setting expectations, the ORC establishes individual and organizational goals for the workplace, where all employees share a common purpose.

- Optimum performance depends on the behaviors of employees and the embedded ORC.
- The ORC should establish a continuum that continually enhances the organization's performance.

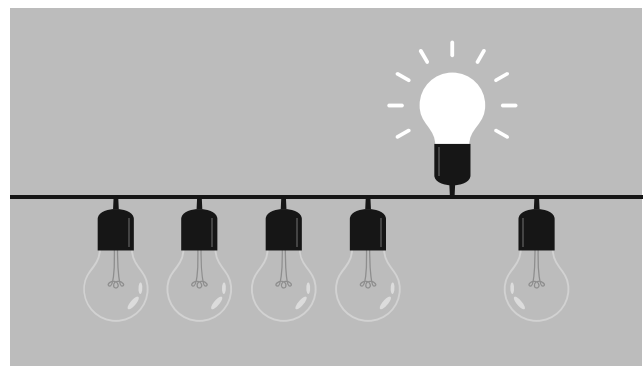
### Risk Management Effectiveness

When an organization has an effective ORC, every person in the organization is viewed as a “risk manager” and is involved in and accountable for managing risk within the organization.

- The ORC affects behaviors relative to risk.
- The ORC affects risk appetite and tolerance, but does not determine appetite and tolerance.
- The ORC affects people's perception of the acceptability of certain behaviors.
- The ORC directly affects the risk retention policies.

### Characteristics of an Effective ORC

For an ORC to be effective, it must be adopted by the entire workforce. There are four characteristics of an effective ORC outlined below.



### 1. Tone at the Top

Leadership provides clarity of direction and expectations and demonstrates a positive corporate attitude towards risk. Leaders convey their commitment to risk management initiatives and programs and clearly explain the expectations that all will support them.

### 2. Corporate Governance

This is the structure of rules, practices, and processes used to direct and manage a company. Through corporate governance, the individual responsibility and accountability for risk management is established throughout the organization. The expectation for transparency and timeliness of risk information is another element.

### 3. Effective Decision-Making

The ORC supports effective decision-making. Decisions that are made about risk taking are well informed and support the overall goals and strategic objectives of the organization. The responsibility for good risk management decisions becomes an element of individual performance evaluations.

### 4. Authority and Accountability

The ORC formalizes risk management abilities and responsibilities by embedding them within the organization. Every individual becomes accountable for supporting the ORC.



To be effective, the risk manager must understand the organization's culture and objectives and be able to address the issues that could affect the organization. An organization with a strong ORC operates more effectively and productively, as all

## Section 2: Risk Management and the Organization

employees share a common goal and are empowered to work within a robust risk management framework.

### ▶▶ Knowledge Check



Richard is a welder in an equipment manufacturing facility. One day, he sees the CEO walking on the work floor without a hard hat or safety glasses. Richard promptly turns off and puts down his torch, then walks over to the CEO and reminds him that he must follow the safety rules established for all employees.

Which element of the ORC enables Richard to approach and correct a member of senior management with confidence? Explain why.

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## General Classes of Risk

### Learning Objective:

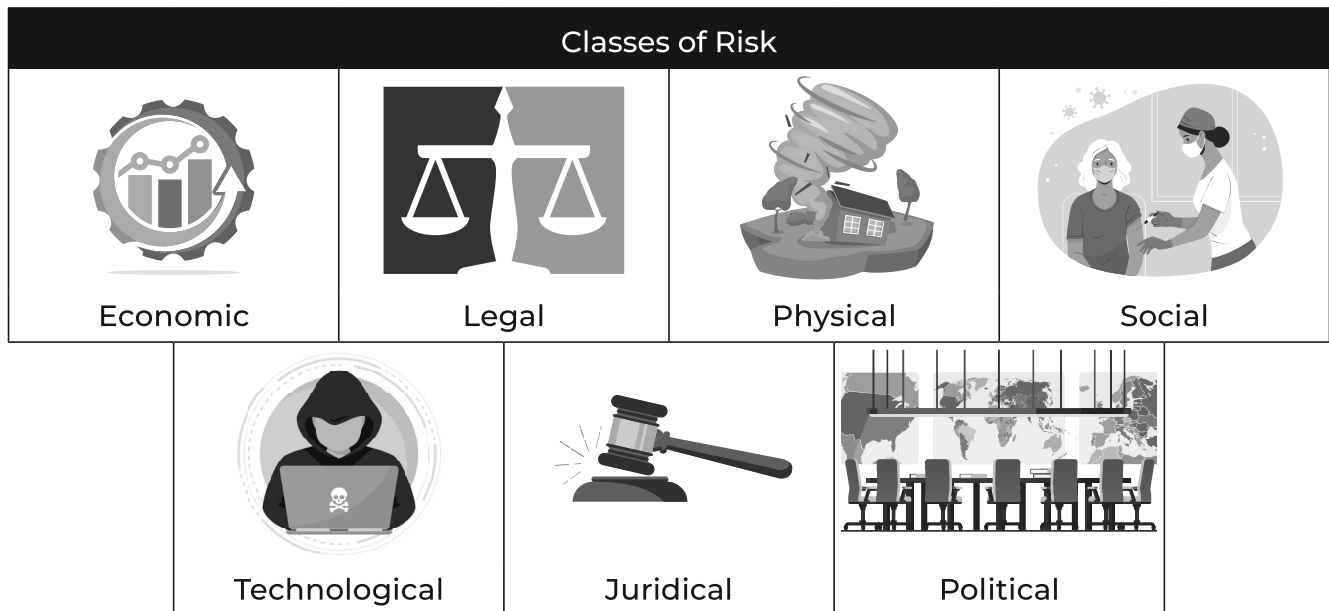
*2.3 Identify the general classes of risk and apply them to common scenarios.*

At the most general level, risk management involves separating exposures and risks into categories or classes of risk. These classes of risk affect every organization, regardless of its size or nature of operations, and they provide an important framework for risk identification. By grouping them together, it is easier to determine proper risk control and risk financing practices and options. For example, once the physical property exposures are identified, a decision can be made about how to properly insure them.



It is important to distinguish between the two types of risk—pure and speculative—when applying the general classes of risk to exposures.

## Classes of Risk



Continue reading to explore more in-depth descriptions and examples of each class of risk.

**Economic risks** arise from operations or economic, financial marketplace, or entrepreneurial activities. These include fiscal and liquidity issues, failure of financial institutions, chronic unemployment, and failure of infrastructures upon which economies depend.



Antonio owns a small bakery. He has budgeted \$1,000 per week for gas for the fleet of five delivery trucks. Inflationary pressures in the marketplace have caused an upward trend in gasoline prices. Per-gallon prices have doubled since Antonio created the original budget. Possible causes of the upward trend could include an increased demand for crude oil, a decline in the value of the dollar, and commodities trader activity in the futures markets. All of these potential causes represent economic risks.

**Legal risks** are inherent in compliance or arise from common law and statutory liability. Compliance with government regulations is of critical importance to risk managers.



The Occupational Safety and Health Administration (OSHA) requires employers to provide safe workplaces for their employees. They also establish air quality and environmental standards for industry-specific workplaces. Failure to comply with these requirements can result in significant fines and penalties at the federal level.

## Section 2: Risk Management and the Organization

**Physical risks** arise from property, people, or information. These include damage from natural disasters, such as earthquakes and hurricanes, as well as man-made risks including nuclear accidents and arson. The physical class of risk also includes far less impactful events that may damage people or property. Identifying physical risks is often easier than identifying those in some of the other classes because companies possess specific and tangible physical property.



During a storm, lightning strikes a building and causes an electrical surge which destroys all of the electrical equipment inside the facility.

**Social risks** arise from public relations, loss of reputation, damage to brand, cultural issues, social direction, or social media. This class of risk also includes risks related to social stability, such as income disparity, food or water shortages, crumbling infrastructure, and risks related to public health, e.g., pandemics, obesity, and chronic diseases.



Several customers became ill after eating at a popular restaurant. Subsequently, they posted descriptions of their experiences on Facebook and Instagram and alleged they were fed substandard meat. The rapid spread and sharing of this information creates a reputational/social risk. It may also create an economic risk if sales are impacted.

**Technological risks** arise from our growing dependence upon and use of technology, as well as those created by emerging technologies. The more valuable the data that organizations store, and the more critical it is to daily operations, the more susceptible they are to hacking and cyberattacks.



A single proprietor's identity is stolen because they commingle their personal information with that of the business on one computer.



A hacker creates a denial-of-service event targeting an online retailer who loses several weeks of sales and revenue while restoring the system.

## Section 2: Risk Management and the Organization

**Juridical risks** arise from a jury or judge's decision, or the attitudes of a court or jury. The nature of a particular jurisdiction may be very litigious and known for its large verdict awards.



In an auto accident lawsuit brought by the injured owner of a private passenger auto struck by an 18-wheeler, the jury may perceive the injured plaintiff as “the little guy” and the trucking firm as having deep pockets. They may award significant damages to the plaintiff, which would exceed a typical verdict in cases of this nature.

**Political risks** arise from changes in the law, re-interpretations or changes in governmental policy, politics, and diplomacy, conflict, and global governance. These also include war, terrorism, conflicts over resources, and illicit trade.



In recent years, car manufacturers who regularly import critical parts from China have faced increased costs due to tariffs imposed by the United States government. Those manufacturers have been faced with difficult choices in terms of finding alternative sources, often at higher prices, and/or whether to pass on increased costs to the consumer.

While risks are typically separated into general classes, most risks can be classified into more than one category. Consider, for example, the size and complexity of a national box store's customer database. Then imagine that unauthorized persons access the database, compromising customers' personal information. Such a risk can be classified as social because it impacts the store's reputation, technological due to its dependence on technology, economic due to a loss of revenues, or even legal in terms of federal laws, which require notification to the affected parties and possibly even credit monitoring.

## ▶▶ Knowledge Check



Kidz Stuff manufactures children's clothing and accessories. The company licensed rights to a variety of popular movie characters for use on their clothing and shoes. The movie company's employment practices have recently come under scrutiny by state employment authorities, and a number of civil lawsuits are underway. Explain how the risks associated with these circumstances could be classified.



## Risk Appetite and Risk-Taking Ability

### Learning Objective:

2.4 Define risk appetite and risk-taking ability and their importance to an effective risk management program.

**Risk appetite** is the organization's willingness to accept or tolerate risk. This term is frequently associated with risk management to express the organization's personality in the risk arena. On an organizational level, risk appetite is the amount of risk exposure the organization is willing to accept or retain. For organizations whose risk exposures exceed their risk appetite, implementing risk management controls and treatments, as well as risk financing options, supports operations within acceptable appetite levels.



In addition to the organizational personality, the appetite for risk can be influenced by the organization's position in its life cycle or its development. A start-up organization may be more willing to assume risk, if it hasn't already, because it has little to lose, whereas a mature or stable organization may be concerned about conserving its assets and position. However, the start-up organization may not have the financial resources to assume much risk, particularly when it needs those resources for expansion and solidification of its position.



## Section 2: Risk Management and the Organization

**Risk-taking ability** is the organization's financial capacity for assuming risk.

Risk-taking ability or capacity does not describe an organization's level of risk appetite, but its ability—or inability—to assume financial responsibility for losses, or a portion thereof. This can be done via a deductible, a self-insured retention, or self-insurance. An organization that cannot afford to assume some level of financial responsibility for losses purchases an insurance policy.



Let's consider a simple example of appetite versus ability that may make this concept clearer.



Ms. Holmes is going shopping for a new outfit and her budget is \$100. That \$100 is her starting financial “appetite.”

When Ms. Holmes arrives at the store, she is delighted to learn that the store is having an extraordinary sale. Before she knows it, Ms. Holmes has five outfits in her hands. Altogether, the cost comes to a total of \$375. Despite her early intentions, Ms. Holmes wants to purchase them all. Consequently, she exceeds her original budget by \$275.



Unfortunately, Ms. Holmes does not have that much money in her bank account. Even if she puts the purchase on her credit card, making the payments will cause her financial hardship. Ms. Holmes' appetite has exceeded her financial “ability.”

## Factors that Influence Risk Appetite and Risk-Taking Ability

### Internal Factors

**Past experience with risk-taking:** Does the organization have a history of risk-taking, and have they been successful? Have they been able to create an “upside” situation? A good experience may increase risk appetite. Conversely, negative experiences with risk-taking, such as miscalculating a proper retention level that results in financial losses, may decrease the organization's future risk appetite.



**What are the organizational objectives?** Is the organization consistently pursuing greater profits? Do they highly value their reputation and goodwill above profit-making? Are they seeking a greater market share, or are they satisfied with their current position? Some organizations would rather be a big fish in a small pond. What degree of risk appetite do stakeholders have? Are they willing to take on additional risks and exposures?

## Section 2: Risk Management and the Organization

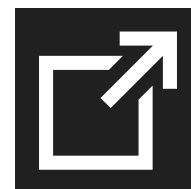
**Stage in the organizational life cycle:** Where is the organization in its life cycle? Is it positioning for sale? Are the owners ready for retirement? Is it in a growth mode, expanding and introducing new products and services to the market? These are factors that can impact risk-taking decisions.

**Financial status:** Is the company a long-established enterprise? Does it have significant assets and resources to meet unexpected outcomes of risk-taking decisions? Can it afford issues like failed products or product recalls? If the organization is new and just starting out, it may have very limited assets and will likely have a different risk appetite and risk-taking ability compared to an established company.

**Predictability of losses including frequency and severity:** When the frequency and severity of losses are predictable, self-insurance is often the most cost-effective manner of handling exposures, resulting in significant reductions in the total cost of risk. The more predictable the losses, the greater the opportunity to self-insure some portion and budget accordingly. Identifying, controlling, and managing risks internally is much more cost-effective both in the short and long term. In this situation, the risk inherent in self-insurance may be a manageable one and well advised.

### External factors

**Market position:** What is the organization's market position? Do they have a majority share? Are they a big fish in a small pond? Is the organization focused on gaining market share and willing to take risks to attain that goal?



**Competition and the need to take business risk:** Is the competition eroding market share? Are they undercutting prices? Have they expanded their product offerings or territory? Are they continually offering “improved” formulations? How will the organization adapt and respond to these issues? A market with minimal competition has minimal risk.

**Public image:** How important is public image or public perception? How does the company want to be perceived? Is their good reputation paramount? Is their reputation part of their brand? A good example is Bombas® socks and their commitment to charitable giving, “the greatest sock never sold.”

**Stakeholders' perceptions of risk:** How do the owners, creditors, and regulatory bodies respond to risk-taking activity? Most stakeholders are risk-averse and may not be willing to approve loans or offer favorable loan terms for investments they consider too risky. Owners may not support internal requests to develop new products or processes that entail risks.

**Availability of risk transfer alternatives:** For organizations willing to retain a portion of their losses, the ability to obtain insurance products that allow for self-insurance or higher deductibles may not be easily found. Will the organization consider a captive? Does it have the financial resources to do so?

### Areas Where Risk Appetite and Risk-Taking Ability are Considered

When developing policies and procedures, the organization must determine the level of risk, if any, it wishes to assume. Such examples would include risk management, human resources, and safety and security policies. Think about whether the organization is willing to maintain an unlighted parking lot for employees when it knows any injuries occurring in the lot will qualify for workers compensation benefits under the state statute.



Risk appetite should be considered when reviewing and selecting the elements of insurance programs, in particular, the limits, retentions, deductibles, and aggregates. It should also be considered when selecting or declining coverages offered by the agent or broker.

Before starting a new venture or introducing a new product or service, thorough due diligence is required to identify costs, potential outcomes, and associated risks, enabling informed decisions to be made. The risk appetite and risk-taking ability of the organization will play an important role in making those decisions.

When a restructuring is contemplated, risk managers will examine potential classes of risk, particularly social class, to assess the impact a change would have on the company's reputation and the desirability of its products and services. Will a change in executives or decentralizing managerial authority have an adverse impact on the overall goodwill and well-being of the organization? Is there an "upside" to implementing the change? Will market share be impacted?

An organization that desires to expand may consider doing so through acquisition. Two questions they should consider are "Can we afford to do this?" and "Should we do this?" In terms of risk-taking ability, the organization needs to examine all the costs associated with the acquisition, not just the purchase price. There will be legal costs. From an appetite perspective, they should consider the impact on the industry and whether public opinion will be an issue, particularly if a significant number of employees are affected. Perhaps they don't have the appetite for dealing with any backlash from the decision.

There are numerous factors, both internal and external, that influence an organization's risk appetite and its ability to take risks. Because each company is unique, factors considered by one company may not apply for another, even within the same industry. Every organization will review and evaluate risk appetite and risk-taking ability at some point in its life cycle, depending on the nature of its operations and corporate goals and objectives.

## ▶▶ Knowledge Check



Marcia is the risk manager for a technology consortium. The company is considering acquiring a mid-sized competitor to gain greater market share and access to their intellectual property. Marcia is part of the due diligence team and feels that a risk appetite and risk-taking ability analysis should be the first step in the due diligence process. Why would this analysis be important?

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## Summary

Organizations and individuals must strike a balance of willingness to take risks and the financial capacity to do so. As you saw in the earlier example of Ms. Holmes' shopping spree, this balance is also essential on a personal level. Effective risk management programs strive for this balance. The risk manager will counsel their leadership that the willingness to assume risk without the matching financial ability to do so can lead to foreclosure and/or bankruptcy. Conversely, the financial capacity to assume risk without the willingness to do so is an underutilization of the organization's capacity, which can lead to missed business opportunities. In the next section, you will learn about risk identification and its importance in the risk management process.

## Review of Learning Objectives

- 2.1 *Describe the characteristics and uses of the following governing documents of a risk management program:*
  - mission statement
  - policy statement
  - risk management manual
- 2.2 *Describe how an organizational risk culture is formed and maintained.*
- 2.3 *Identify the general classes of risk and be able to apply them to common scenarios.*
- 2.4 *Define risk appetite and risk-taking ability and their importance to an effective risk management program.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](https://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

## Section 2 Self-Quiz

**Directions:** Select the class of risk applicable in each of the following scenarios.

1. Manufacturers fear tort attorneys will find a favorable venue to try class action lawsuits in the hope that juries will be responsive to their arguments.
  - ☐ Juridical
  - ☐ Technological
  - ☐ Social
  - ☐ Economic
2. A recycling plant is required to install expensive safety equipment because of the Occupational Safety and Health Administration (OSHA) requirements.
  - ☐ Social
  - ☐ Legal
  - ☐ Economic
  - ☐ Technological
3. Interest rate fluctuations in emerging markets are creating concern for international investors.
  - ☐ Physical
  - ☐ Technological
  - ☐ Social
  - ☐ Economic
4. A large retail box store's customer database is accessed by unauthorized persons, and the personal information is compromised.
  - ☐ Technological, possibly social and/or economic
  - ☐ Physical, possibly social and/or economic
  - ☐ Social and legal
  - ☐ Physical and legal

## Section 2: Risk Management and the Organization

**Directions:** Indicate whether the statement is True or False.

1. The risk management mission statement, risk management policy statement, and risk management manual are the governing documents of a risk management program.

**True**

**False**

2. Demonstrating and communicating to all employees senior management's support for the risk management program is one of the four key purposes of the risk management manual.

**True**

**False**

3. To determine an organization's strategy for managing risks and its relevance to the overall strategic plan, goals, and objectives, consult the risk management mission statement.

**True**

**False**

4. The risk management mission statement may include a brief description of the organization's philosophies, its competitive advantages, and its vision.

**True**

**False**

5. Organizational risk culture is the collection of values, expectations, and practices that guide and inform the actions of all members of the risk management team.

**True**

**False**

6. Risks arising from a jury or judge's decision are examples of political risk.

**True**

**False**



# Section 3: Introduction to Risk Identification

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## Section Goal:

The goals of this section are to familiarize you with risk identification, including the four logical classifications of exposures, loss exposures, the concept of negligence, and the requirements of an enforceable contract as well as remedies for breach of contract.

## Learning Objectives:

- 3.1 *Explain why risk identification is the most important step in the risk management process.*
- 3.2 *Identify the four logical classifications of exposures, perils, hazards, and/or losses, and give examples of the loss exposures related to each.*
- 3.3 *Define the term negligence and explain the four elements that comprise it.*
- 3.4 *List the four requirements of an enforceable contract and describe the remedies for breach of contract.*

## The Importance of Risk Identification

### Learning Objective:

- 3.1 *Explain why risk identification is the most important step in the risk management process.*

Exposures, perils, and/or hazards producing losses may interfere with the achievement of the organization's objectives, resulting in an adverse financial impact. It is imperative that these exposures be effectively identified by using a comprehensive and systematic approach to minimize the possibility that an exposure could be overlooked. An exposure overlooked is an exposure left untreated.

Consider what may happen if a risk is overlooked. Perhaps the most obvious answer is there that is an increased likelihood of financial loss. Financial loss can occur through a variety of means. For example, an overlooked risk could lead to damage to a company's reputation, a decline in customer satisfaction, or uninsured losses, which become the financial responsibility of the organization.

An overlooked risk could also lead to product or project failure, as well as missed opportunities for growth. No matter the cause, the result is the same. An organization or business that fails to identify potential risks stands to suffer financial loss and perhaps complete failure.



### Section 3: Introduction to Risk Identification

Consider the example below:



Joe owns a local family diner. They store vats of old grease in a tank on the edge of the property, which are emptied from time to time. There is an all-season creek that flows behind the diner. During a very bad storm, the tank ruptures, spilling grease into the creek and creating an environmental hazard. Joe reports the loss to his agent, who unfortunately must advise him that there is no pollution liability coverage for a loss of this type. Neither Joe nor his agent identified this potential exposure. Now the responsibility for clean-up and payment falls on Joe—and on his agent's errors and omissions carrier.



It's difficult to create a convincing argument or justification for action without first gathering and examining facts. Risk managers conduct thorough examinations of all potential risks that could impact their clients and organizations. This includes identifying risks that could have negative impacts on an organization, as well as those that can present opportunities. Only then can they provide client counsel or construct sound solutions.

Understandably, risk identification is the most important step in the risk management process, as an exposure must be identified before it can be effectively analyzed, controlled, transferred, or financed.

#### Check-In



What happens if an exposure is not identified? Choose the correct answer from the choices below.

- ☐ There is an increased likelihood of financial loss which the company or individual must bear.
- ☐ It will be identified eventually from the loss runs.
- ☐ The agent will be held responsible.

# Logical Classifications

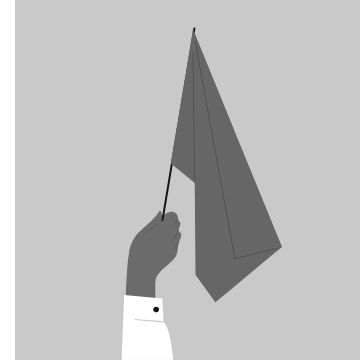
## Learning Objective:

3.2 Identify the four logical classifications of exposures, perils, hazards, and/or losses, and give examples of the loss exposures related to each.

The use of logical classifications is a systematic way of classifying and categorizing exposures, perils, hazards, and/or losses, so they can be analyzed, controlled, transferred, and financed.

There are four logical classifications of exposures:

1. property
2. liability
3. human resources
4. net income



While the four logical classifications are indeed separate categories, they are not necessarily mutually exclusive. A property exposure, peril, hazard, or loss may likely involve a net income exposure or loss. Furthermore, human resources and liability exposure to loss may arise from that same property loss. Similarly, net income losses may develop from a human resource loss or a liability loss. Although these logical classifications may seem confusing, the structure provides a starting point for analyzing exposures, perils, hazards, and losses.

## Property



Property can be tangible or intangible. Tangible property can be seen or touched and includes real property, such as buildings, and personal property, such as equipment. Intangible property, such as patents and intellectual property, has value but no physical form. For example, the value of a trade secret can be priceless, as can the value of intellectual property such as a bestselling author's copyright on a book. Neither of these is tangible property that can be seen or touched. Although a


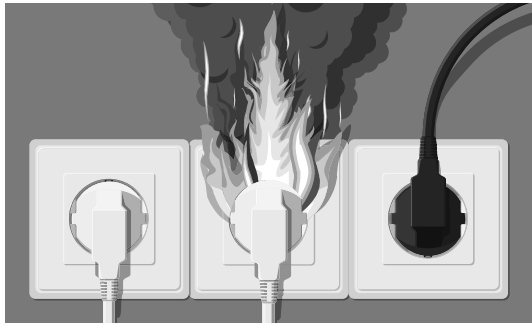
copyright symbol may be seen in a book, a copyright does not exist as a physical object and is, therefore, intangible property. The risk manager will first need an inventory of the organization's property to identify what exposures, perils, and hazards it presents.

### Section 3: Introduction to Risk Identification



#### Examples of Real Property

- Office buildings, warehouses, manufacturing plants, other types of buildings
- Storage silos or bins, other structures
- Concrete mixing plants
- Tenant improvements and betterments (owner's interest)
- Retaining walls, piers, docks
- Golf courses, business parks and campuses
- Landscaping (trees, shrubs, paths)

Perils	Hazards
	
<ul style="list-style-type: none"><li>• Windstorm, fire, flood</li><li>• Theft</li><li>• Infringement of intellectual property rights</li></ul>	<ul style="list-style-type: none"><li>• Faulty wiring</li><li>• Nature of operations</li><li>• Poor housekeeping and maintenance</li></ul>



#### Examples of Personal Property / Business Personal Property

- Cash and securities
- Records and documents
- Inventory
- Mobile equipment
- Equipment, furnishings, and supplies
- Computer systems, hardware, software, databases



#### Examples of Intellectual Property

- Copyrights and patents
- Trademarks, service marks, and trade names
- Trade secrets (formulas, recipes)
- Licenses and franchises
- Leases and leasehold interests

### Section 3: Introduction to Risk Identification

Types of Intellectual Property
<b>Patent:</b> used for an invention; the grant of a property right to the inventor, issued by the US Patent and Trademark Office
<b>Copyright:</b> a form of protection provided to the authors of “original works of authorship,” including literary, dramatic, musical, artistic, and certain other intellectual works, both published and unpublished (e.g., music)
<b>Trademark:</b> an unregistered mark (a symbol, word, or words) used to represent a company or product; a trademark is used to represent goods
<b>Service mark:</b> a legally registered name or designation used in the manner of a trademark to distinguish an organization’s services from those of its competitors (for example, NBC for both the peacock logo and the tri-tone sound)
<b>Registered mark:</b> The registered trademark symbol (®) is a symbol that provides notice that the preceding word or symbol is a trademark or service mark that has been registered with a national trademark office (e.g., Coca-Cola®). Often, the registered mark will be used in combination with a TM or SM symbol. The TM and SM symbols are used with unregistered marks: TM for trademarks or marks that represent goods and SM for service marks or marks that represent services. The federal registration symbol, or ®, is reserved for marks registered in the US Patent and Trademark Office.
<b>Trade Secret:</b> any confidential business information that provides a competitive edge. Trade secrets include manufacturing or industrial secrets and commercial secrets, like KFC’s original recipe
<b>License:</b> the process of leasing a legally protected (trademarked or copyrighted) entity—a name, likeness, logo, trademark, graphic design, slogan, signature, character, etc. The entity, known as property or intellectual property, is then used in conjunction with a product; for example, Nike licenses clothing manufacturers to use their logo.
<b>Franchise:</b> the right or license granted to an individual or group to have access to a business’s proprietary knowledge, processes, and trademarks to market the company’s goods or services in a particular area. Well-known examples are McDonald’s and Dunkin’ Donuts.
<b>Leases and leasehold interests:</b> the legal right to use certain property for a limited period of time

Once exposures are identified, appropriate measures can be taken.



Moxley’s Convenience Store has many boxes of merchandise stacked next to the furnace in the utility room. The exposure is the store and its contents, the peril is fire, and the hazard is placing boxes next to a heat source.

If the boxes are relocated, the hazard will be removed, and the likelihood of the peril—fire—occurring is reduced.



## Liability

The classification of liability exposures is broad. Exposure areas are premises, operations, advertising, communications, products, and statutory compliance.

Perils include things such as on-premises slips and falls, libel, slander, false imprisonment, product malfunctions, and the unknowing transmission of computer viruses.



### Examples of Hazards

- Poor housekeeping
- Poor quality control
- Failure to enforce, or inadequacy of policies and procedures



**Poor housekeeping** – neglect, such as failing to keep walkways clear of debris, creates a tripping hazard.

**Poor quality control** – involves selling defective products. Such products, which should have been detected during the manufacturing process, may cause injuries to the consumers who use them.

**The failure to enforce or inadequacy of policies and procedures** – primarily refers to anti-harassment or discrimination policies. In brief, this encompasses policies, procedures, and practices that may cause employees and customers to harassment or discrimination.



Fred, an office supply delivery person, tends to make inappropriate remarks and advances to the receptionist at your office when delivering supplies. This behavior could create a harassment claim brought by the employee.

You might be surprised to learn that employers are responsible for protecting employees from this type of harassment in the workplace—even when the harassment is committed by a non-employee.

In this situation, the exposure is the employee, the peril is harassment, and the hazard is the failure to establish proper policies and procedures for vendors.



## Human Resources

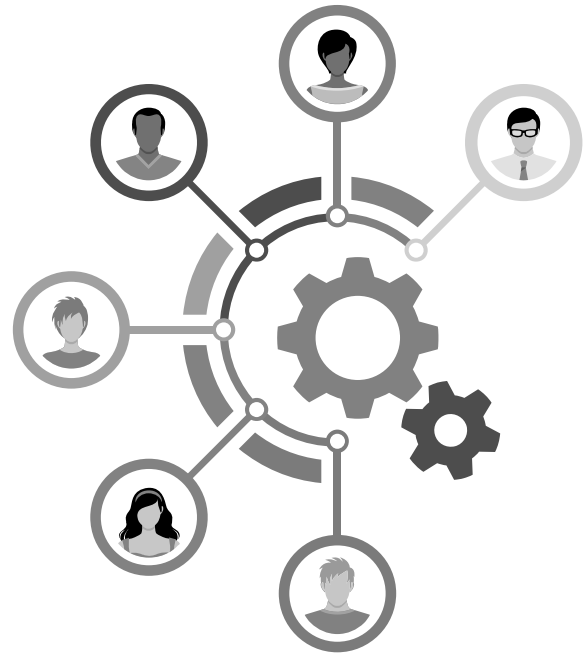
The scope of human resources is very broad and cross-functional. Human resources is an organization's internal people exposure. These risks must be identified to ensure the continued survivability of the organization. Unlike other risks, the majority of these exposures can be controlled by internal policies and procedures.



### Examples of Human Resources Exposures

These consist of relationships between the organization and its:

- owners,
- officers and senior management,
- employees,
- clients and customers,
- independent contractors,
- suppliers and vendors, and
- leased, temporary, and borrowed employees.



There are several perils that could cause significant losses in the area of human resources. Perils such as death, disability, illness, injury, resignation, termination, and retirement can all have a negative impact.

Consider an injury, disability, or illness, whether job-related or not. Depending on the nature of operations, an absent employee can have a variety of impacts. In a manufacturing facility, production and productivity may be reduced, making it difficult to fill orders. The employer may have to pay overtime to coworkers to maintain production and meet demand. If an employee does not return due to death, termination, or disability, the employer faces the additional issues of talent acquisition and training.

Consider the 20-year employee who retires. A significant amount of institutional knowledge may be lost when she is no longer available to shed light on why or how processes were changed or decisions were made.

Additionally, exposures may arise from international employment, where the laws, customs, and expected benefit structures differ from those in the United States. New policies and practices may be required, and advice from local experts may be needed.



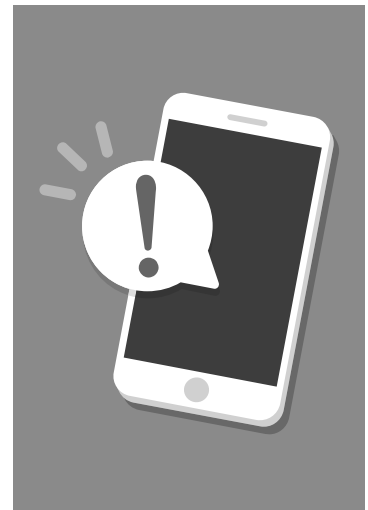
### Examples of Hazards Existing in Human Resources

- Nonadherence to safety practices increases the likelihood of accidents and injuries.
- Poor morale and poor performance can affect the timeliness and quality of the work product.
- The natural aging process may affect employees' flexibility, strength, and dexterity, making them more susceptible to accidents and injuries, particularly in roles with high physical demands.
- Workplace violence is also an area of concern.

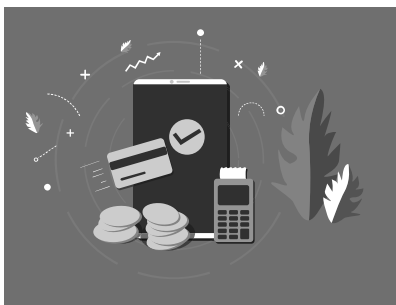
Keep in mind that a risk manager may not have authority over human resources but will likely have an opportunity to voice concerns and potential exposures. Let's look at an example.



Susan is the risk manager in a financial services firm. Alex, an employee, comes to her to report that a coworker, Chris, has posted an inappropriate photo of an officemate, Taylor. The posted photo has resulted in inappropriate comments that are visible online. Susan reports this to the human resources director, who says it was all in good fun but who also orders the offensive photo to be removed. The next day, Susan learns of an even more offensive photo and comments that are posted. She again reports this to the HR director, citing that it is likely to be considered a hostile working environment, which could expose the organization to liability. Since Chris, the offending employee, does not directly report to Susan, she is powerless to initiate any discipline and can only explain the potential harm to the HR director.



## Net Income



Whether an organization is for-profit or not-for-profit, positive income is needed for survival. Risks in the net income classification have a direct impact on profitability; these risks are more closely aligned with the speculative side of risk.

The cause of a net income exposure can come from an organization's (internal) problem or someone else's (external) problem, but in either case, the result is the organization's problem.



### Section 3: Introduction to Risk Identification

The company's internal problems may be related to:

- property (destruction of owned or leased property),
- human resources (personnel losses),
- liability exposures (imposition of legal liability), or
- speculative causes such as market risk, operational risk, business risk, and fluctuations in financial markets.

While a net income loss may be the result of a property, liability, or human resource loss, many net income losses are the result of factors and forces that do not fall within those classifications.

Typical external causes of net income losses are:

- related to the organization's primary supplier or primary customer,
- environmental in nature,
- related to local government, enticement businesses, or the economy.



For example, factors that can affect the economic loss caused by a plant shutdown are length of shutdown, severity of shutdown/loss (e.g., the production line, a warehouse, the entire plant, the administrative offices, etc.), the frequency of shutdown/loss, and the timing of a shutdown/loss (busy season).

The effect of a net income loss would be decreased revenues and/or increased expenses. Decreased revenues would include business interruption, narrowing of a profit margin, weakening sales, or reduction of investment income. Increased expenses would include the cost to repair or replace, expediting costs, incremental cost of normal operations, and/or other expenses related to minimizing revenue reduction or expense increases.

Consider a sharp decrease in the stock market or the economy moving toward a recession. This movement will negatively impact individuals and company supply chains, resulting in a decrease in net income. It is not a property, liability, or human resource loss that leads to net income loss, but a condition outside an individual's or company's operations.

## Logical Classifications—summarized

### 1. Property—Owned, Rented, Controlled

- A. Exposures (real, personal property, intellectual property, intangible property, legal interest for property)
- B. Perils (windstorm, theft by employees or outsiders, infringement of intellectual property, loss of reputation, obsolescence)
- C. Hazards (faulty wiring, lack of security, neglect in protection, poor public relations practices)
- D. Losses (accidents and occurrences)

### 2. Liability

- A. Exposures
  - 1) Types (premises and operations, personal injury, products, statutory)
  - 2) Basis (tort law, contract law, statutory law)
  - 3) Perils (slip and fall on premises, product malfunction, work-related injury to employees)
- B. Hazards (poor housekeeping, poor quality control, lack of safety training and equipment)
- C. Losses (legal damages, statutory damages)

### 3. Human Resources

- A. Exposures
  - 1) Owners, partners, shareholders
  - 2) Board members and officers
  - 3) Employees—management and staff
  - 4) Outside employees (leased, temporary and non-management borrowed employees and volunteers)
  - 5) Independent contractors
  - 6) Primary clients, suppliers, vendors
- B. Perils
  - 1) Employment practices
  - 2) Death
  - 3) Disability, on and off job
  - 4) Illness, on and off job
  - 5) Resignation, termination, retirement
  - 6) Strikes and labor unrest
- C. Hazards
  - 1) Unclear personnel practices
  - 2) Non-adherence to safety practices
  - 3) Poor morale, poor performance
  - 4) Terrorist acts or natural aging process
  - 5) Management attitudes
- D. Losses
  - 1) Damages awarded to employees
  - 2) Cost to replace deceased key employees
  - 3) Cost to replace retired employees
  - 4) Loss of productivity

### 4. Net Income (including speculative risks)

- A. Exposures (loss of use of property, loss of productivity, reduction of income/assets, speculative risk)
- B. Perils (property, human resources, liability, loss of primary supplier/customer, weather, market, fluctuations in financial markets, governmental action, fluctuations in economy)
- C. Hazards (poor product positioning, overextension of credit or excessive borrowing, inadequate investment in research and development)

## ▶▶ Knowledge Check



An oil rig in the Gulf of Mexico explodes, injuring employees and spilling millions of gallons of oil. Indicate which of the logical classifications apply; be sure to explain your reasoning.



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## Negligence

### Learning Objective:

*3.3 Define the term negligence and explain the four elements that comprise it.*

Negligence is used in tort law to characterize behavior that creates unreasonable risks of harm to persons and property. Negligence is just one aspect of tort law.

Briefly stated, a tort is a private or civil wrong, other than a breach of contract, for which the courts will provide a remedy in the form of an action (lawsuit) for damages. Torts are part of civil law, which governs interactions between individuals and entities.



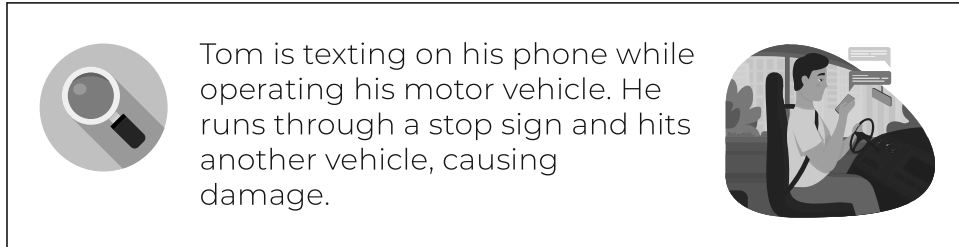
Most torts are those associated with negligence, which is defined as *the failure to exercise a degree of care that a reasonably prudent person would exercise under similar circumstances*. When it comes to negligence, it is a failure to act—an omission that is not a deliberate action.

## Section 3: Introduction to Risk Identification

Negligence is expressed in terms of these four elements:

1. A duty owed
2. A breach of duty
3. Causation
4. Damages

Let's examine these elements using a situation involving Tom.



### A Duty Owed

A duty must exist on the part of the defendant (usually the insured or an individual) to the party claiming negligence. Such duties are found in our everyday interactions as part of societal expectations and in case law precedents. For example, we all have the duty to control our vehicles when we drive.

*What is Tom's duty? To comply with traffic laws and keep control of his vehicle.*

### Breach of Duty

There must be a breach of duty on the part of the defendant. The breach is a failure to act as expected or required by the laws of society and legal precedents. For example, failure to maintain control of a vehicle due to distractions is a breach of duty.

*Did Tom breach his duty of maintaining control of his vehicle? Yes.*

### Causation

The breach of duty must be the proximate cause of the injury/damages, or, in other words, there is an unbroken chain of events between the breach and the injury/damages.

*Is Tom's breach of his duty the cause of damages to the other vehicle? Yes.*

### Damages

Actual damages or injury must be the result of the breach. The party alleging negligence must show that damages were sustained.

*Are there damages to the other vehicle as a result of Tom's breach of his duty? Yes.*

### Section 3: Introduction to Risk Identification



Please keep in mind that all four elements must be proven for a claim of negligence to be actionable.



At a Lake Tahoe resort, a maintenance staff member forgot to clean the snow and ice from a parking lot. As a result, two guests slipped on the ice.

Their incident reports are as follows:

1. Guest number 1 suffered a broken leg when she fell after stepping on the ice. Her medical bills are \$4,000, and her lost wages are \$1,000. Is the Lake Tahoe resort negligent, and if so, what are the damages?

**Yes, the resort is negligent.** All four elements of negligence are present. They had a duty to keep the parking lot free of ice and snow. They failed in that duty, and damages resulted due to their breach of duty. The guest's economic damages are \$5000. She may also make a claim for non-economic damages due to pain and suffering she sustained because of the injury.



2. Guest number 2 landed in a snowbank after slipping on the ice. He brushed off his ski clothes and continued to the chair lifts. Is the resort negligent, and if so, what are the damages?

**No, the resort is not negligent.** All four elements of negligence are not met. The guest did not sustain injuries as a result of the resort's breach of their duty to keep the parking lot free of ice and snow.



Remedies for successful proof of negligence include compensatory damages, punitive or exemplary damages, and injunctive relief. Compensatory damages are those intended to pay for the damages proved, such as the cost to pay the medical bills and lost wages of an injured party. Punitive or exemplary damages are those meant to punish the offender and to prevent future activities (or omissions) of the same nature.

## ▶▶ Knowledge Check



The risk manager for a retail grocery store was asked to explain to the store's management team what could cause the store to be legally responsible for damages. The risk manager explained that liability could arise from torts.

How would you explain torts to the management team to make this clear, as well as how negligence comes into play?

1. What is a tort?

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2. Define negligence and list its four elements.

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## Requirements of Enforceable Contracts

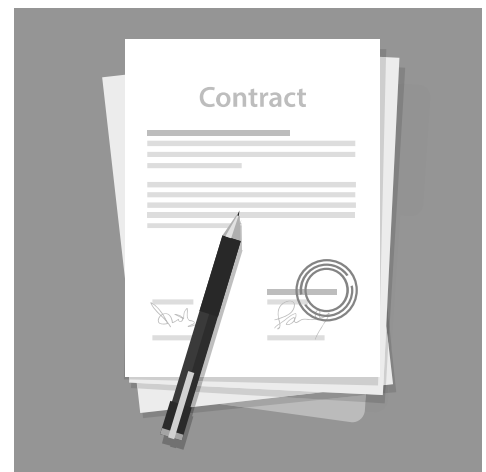
### Learning Objective:

- 3.4 List the four requirements of an enforceable contract and describe the remedies for breach of contract.

The law of contracts controls the performance of promises made between two or more parties. Contracts fail for various reasons, including unenforceability, failure to meet contractual terms, and confusion or miscommunication about what is expected or intended by the parties.

There are four characteristics of an enforceable contract:

1. competent parties (usually refers to being of legal age and sound mind);
2. genuine agreement or assent (for example, a willing buyer and a willing seller);
3. an exchange of legal consideration (money or services); and
4. a legal purpose.



## Competent Parties

For a contract to be enforceable, the parties entering into the contract must be competent. The parties must be mentally competent (sane and/or not under the influence of drugs or alcohol) and must be of legal age. A thirteen-year-old, for example, cannot enter into a contract such as a lease of an apartment.

## Agreement or Assent

In order for a contract to be enforceable, there must be genuine agreement or assent, sometimes called “a meeting of the minds,” without undue duress or pressure on behalf of either party.



Lisa is selling her bicycle; she has listed the price as \$35. Richard offers to buy the bike for the asking price. Both are in agreement about the transaction. Both parties to the contract agree to its terms and willingly accept being bound by them.

## Legal Consideration

For a contract to be enforceable, there must be an exchange of some legal consideration, such as money or other valuable property or valuable service(s). An example is the insurance policy. In exchange for the payment of a premium—the consideration—the insurance company agrees to indemnify the insured in the case of a covered loss.

## Legal Purpose

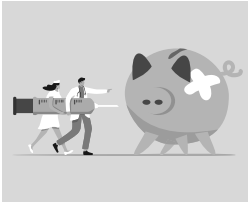
The contract must have a legal purpose, or the activities contemplated must be legal. For example, a gambling debt is not enforceable in jurisdictions where gambling is illegal. A contract to “hit” someone or commit arson is also an illegal contract.

## Remedies for Breach of Contract

Now that you understand more about the four characteristics of enforceable contracts, it is important to explore remedies for breach of contract.

### Section 3: Introduction to Risk Identification

The four remedies for breach of contract or failure to perform are as follows:



1. **Damages (money)** – There are three types of damages in contract situations: compensatory, punitive, and liquidated.
  - Compensatory damages are those intended to pay for the damages as proved, such as the cost to repair property damaged by a contractor or to pay the medical bills of an injured party. The concept is to make that individual or entity whole.
  - Punitive or exemplary damages are those meant to punish the offender to preclude and prevent future activities of the same nature. They are often awarded when the defendant has acted willfully, maliciously, or fraudulently and are used to make an example.
  - Liquidated damages are those damages whose value is stipulated in the contract as the amount to be paid regardless of any provable damages if the contract is breached.



2. **Reformation of the contract** is a legal concept that attempts to correct any error or mistake in the contract so that it accurately reflects the real agreement between the parties; in essence, the contract is re-written. Requests for reformation are often sought in disagreements over insurance contracts, such as inadvertently having a typographical error in the description of a location or of the named insured. It is used to correct the contract to reflect the intent of the parties.



3. **An injunction** is a court order which enjoins or stops a party from continuing in a course of conduct—such as breaching the contract.



4. **Performance** is the fulfillment or accomplishment of a contract according to its terms. It requires that the contract terms be followed and upheld by both parties.



## ▶▶ Knowledge Check



Goode Winery has a long-term contract with USA Fine Dining Restaurants to provide 25 cases of wine each month. Yesterday, USA Fine Dining notified the winery that it will not accept any further deliveries and refuses to meet with Goode Winery to discuss the matter. This creates a significant problem for Goode as it will now be stuck with excess inventory since USA Fine Dining was its largest customer.

If Goode decides to sue and the court rules in Goode's favor, it can impose remedies for a breach of contract. Explain two possible remedies the court could impose and be sure to explain your thinking.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

## Summary

Risk identification is the first and most critical step in the risk management process. Risks can be sorted using two classification frameworks—the general classes of risk and the four logical classifications of exposures. These classification frameworks, which focus on where risks arise, provide risk managers with information that can lead to effective risk management.

As a risk manager identifies exposures and groups them by logical classification, they are also considering the theories of liability that injured parties or entities may use when presenting claims. What defenses or responses can the organization provide to these claims? A risk manager is actually preparing for the second step of the risk management process—risk analysis—determining the impact of the identified exposures.

In the next section, you will learn about several risk identification methods.

## Review of Learning Objectives

- 3.1 *Explain why risk identification is the most important step in the risk management process.*
- 3.2 *Identify the four logical classifications of exposures, perils, hazards, and/or losses, and give examples of the loss exposures related to each.*
- 3.3 *Define the term negligence and explain the four elements that comprise it.*
- 3.4 *List the four requirements of an enforceable contract and describe the remedies for breach of contract.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](http://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

#### Video Clip

View a video clip about an important concept related to a learning objective in this section.



Speaking From Experience: Introduction to Risk Identification with Jeff Williams, Senior Claims Advisor, U.S.I. Insurance Services

## Section 3 Self-Quiz

**Directions:** Indicate whether each statement is True or False.

1. An increased likelihood of a financial loss occurs when a risk is overlooked.

**True**

**False**

2. Cash and securities are considered examples of intellectual property.

**True**

**False**

3. When it comes to human resources, the majority of these exposures can be controlled by external policies and procedures.

**True**

**False**

4. Property, liability, human resources, and net income are all examples of logical classifications of exposures, perils, hazards, and/or losses.

**True**

**False**

5. The definition of negligence does NOT include a failure to exercise a degree of care that a reasonably prudent person under similar circumstances would exercise.

**True**

**False**

6. Liquidated damages are those whose value is stipulated in the contract as the amount to be paid regardless of any provable damages if the contract is breached.

**True**

**False**

### Section 3: Introduction to Risk Identification

**Directions:** Select the correct answer.

1. Each of the following are examples of real property EXCEPT for:
  - ☐ retaining walls
  - ☐ office buildings
  - ☐ storage silos
  - ☐ furnishings
2. Each of the following are examples of personal/business property EXCEPT for:
  - ☐ inventory
  - ☐ hardware
  - ☐ licenses and franchises
  - ☐ records and documents
3. Select the answer that expresses two of the four elements of which negligence is comprised.
  - ☐ Duty of care and reasonable actions
  - ☐ Causation and damages
  - ☐ Breach of duty and deliberate action
  - ☐ Causation and criminal intent
4. A private or civil wrong, other than a breach of contract, for which the courts will allow an action (lawsuit) for damages is known as a \_\_\_\_\_.
  - ☐ service mark
  - ☐ tort
  - ☐ trade secret
  - ☐ peril
5. Each of the following are examples of the four requirements of an enforceable contract EXCEPT:
  - ☐ a legal purpose
  - ☐ genuine agreement or assent
  - ☐ competent parties
  - ☐ liquidated damages



## Section 4: Risk Identification Methods – Self-Administered Tools

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### Section Goal:

The goals of this section are for you to learn about various self-administered risk identification methods, their characteristics, and when they are most useful. This begins with a focus on how to classify exposures, perils, and hazards, followed by an examination of the strengths and weaknesses of each identification method.

### Learning Objectives:

- 4.1 *Differentiate between the different classifications that exist for exposures, perils, and hazards.*
- 4.2 *Understand the different self-administered methods used to identify the wide variety of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each.*

## A Systematic Approach to Risk Identification

Exposures, perils, and/or hazards that produce losses may interfere with the achievement of the organization's objectives, resulting in an adverse financial impact. It is imperative that these exposures be effectively identified using a comprehensive and systematic approach to minimize the possibility that an exposure could be overlooked. Always keep in mind: an exposure overlooked is an exposure left untreated. Therefore, risk identification is the most important step of the risk management process, as an exposure must be identified before it can be effectively analyzed, controlled, transferred, or financed.



## Classifying Exposures, Perils, and Hazards

### Learning Objective:

- 4.1 *Differentiate between the different classifications that exist for exposures, perils, and hazards.*

An organization of any size often has many exposures, and the larger and more complex the organization, the greater the number of exposures and their complexity. As you

## Section 4: Risk Identification Methods – Self-Administered Tools

previously learned, the four logical classifications of exposures provide a general idea of the types of exposures an organization has, including property, liability, human resources, and net income exposures. In addition to the known exposures the organization faces, there is always the possibility of previously unknown or emerging exposures that are evolving and changing.

Even with a method of categorizing exposures into the four logical classifications of exposures, the reality is that any one exposure may be considered to fall under more than one of these classifications. The various identification methods, used together when appropriate, aid in identifying all aspects of exposures, perils, and hazards.



Edifice Corporation owns a high-rise office building located in Gotham City. The building would logically be considered a property exposure, consisting of real property and land, as well as personal property and, possibly, legal interests. However, the existence of the building also creates liability exposures with respect to tenants and their employees, visitors, guests, and persons passing by. The building presents a net income exposure to the building owners, and there are likely to be human resources exposures of employees, independent contractors, tenant employees, and vendors as well.



Considering the example above, the exposures themselves are just the beginning. Every exposure has associated perils—the causes of adverse financial impacts, commonly referred to as losses. Perils affecting the property exposure of Edifice Corporation's building, such as fire or windstorm, may not be the same perils that affect the liability exposures of accidents and injuries to tenants and customers. The same is true of the human resource exposure and the net income exposure. A well-executed risk identification process will also consider the potential associated perils.

Associated with each of these perils are hazards that increase the likelihood of a loss occurring or the severity of a loss that does occur. Hazards must be associated with a given peril, so the hazard of improperly stored oily rags in a workshop, for example, may increase the likelihood of a fire loss occurring, but not an earthquake loss. Hazards that affect the property perils are not necessarily the same hazards that affect liability perils, human resources perils, or net income perils.

To properly identify exposures, perils, and hazards, the risk manager must have a variety of effective methods to identify the wide variety of exposures, perils, and hazards facing the organization. Once the exposures, perils, and hazards are identified, a systematic method of classifying them must be established.



## Section 4: Risk Identification Methods – Self-Administered Tools

As you learned in the previous section, one basic way of classifying the exposures is by using the four logical classifications of exposures structure:

1. Property
2. Liability
3. Human resources
4. Net income

Next you will explore the different classifications that exist for both perils and hazards.

### Perils

You will recall that a peril is the cause of a loss. For our purposes, perils are easily classified by their sources: *natural*, *human*, and *economic*. This classification aids in risk identifying risks and informing subsequent decisions about risk control methods.

#### Natural perils

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Natural perils arise out of nature, such as wind, lightning, flood, and earthquake.

#### Human perils

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Human perils arise out of human behaviors, whether intentional or accidental, such as fires, trips and falls, criminal acts, or negligence.

#### Economic perils

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Economic perils arise from being in business, such as actions by competitors, recessions, interest rate fluctuations, and similar events.

### Hazards

Hazards can easily be classified into *physical*, *moral*, and *morale* type hazards. It is important for risk managers to have a comprehensive set of tools that can be used to identify exposures, as well as the various perils and hazards affecting those perils.

#### Physical hazards

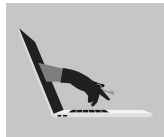
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Physical hazards arise from physical conditions that exist naturally or are caused by human negligence, such as the presence of dead trees near buildings or speeding on an expressway.

#### Moral hazards

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Moral hazards arise out of defects in human character, such as the intent to cause harm by stealing someone's identity or passwords.

#### Morale hazards

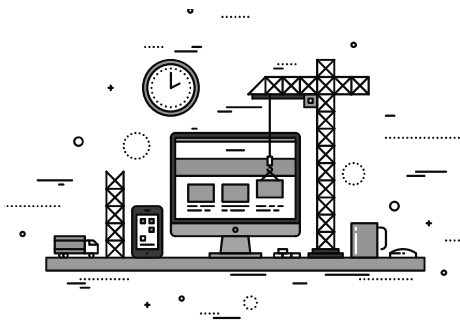
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Morale hazards arise out of indifference, such as not locking your car because you know it is insured and there is nothing valuable in it.

Now that you understand the importance of exposures and their associated perils and hazards, you will learn about the various methodologies that can be utilized for exposure identification, including the strengths and weaknesses of each.

## ▶▶ Knowledge Check



Build-it Construction is a new client of yours. Build-it's CEO is concerned about increased growth Built-in is seeing in their number of losses, so she decides to implement a risk management program. You advise your client that to do an effective job, you must first classify and define sources of risk faced by Build-it. List the four logical classifications of exposures faced by Build-it and provide an example of an exposure to loss that might exist in each of the classifications. Make sure you're able to explain your line of thinking.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_

# Self-administered Methodologies for Risk Identification

## Learning Objective:

- 4.2 Understand the different self-administered methods used to identify the wide variety of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each.

When it comes to identifying exposures, various methods can be utilized. As you already know, the choice depends on the type of exposures, perils, and hazards that the risk manager is trying to identify. Oftentimes, two or more methods are used to address the same type of exposure. We will begin by examining the strengths and weaknesses of using checklists to identify potential exposures.

## Checklists

A *checklist* helps the risk manager systematically search for and identify as many exposures, perils, and hazards as possible. The checklist can be as simple as a list of typical exposures to be answered with “yes,” “no,” or “n/a,” or as expansive as to include with each exposure item listed places to indicate certain perils and hazards. In short, a bewildering number of possible checklists have been created for identifying exposures, perils, and hazards; however, there is only one truly effective checklist: the one that works for the risk manager using it.



## General Uses

The checklist is the primary tool of risk identification, and at least one type of checklist is used in every identification process. This is known as the *preliminary information list*, a type of demographic list that assembles general information about the organization. Checklists have the broad benefit of being flexible, created and modified to apply to various assets, activities, perils, hazards, industries, and for use by insurance companies.

However, the reality of relying on the checklist method to identify exposures, perils, and hazards is that no single checklist is used universally. Instead, two or more separate checklists are completed and combined into a portfolio of information about the organization. Below are the strengths and weaknesses of using checklists.

## Strengths

- Although being flexible, the checklist can still be standardized. Once the desired results are obtained, the risk manager can use the same checklist over and over, adding and removing items as the organization changes and evolves.
- The checklist can be tailored to specific types of exposures. Thus, there is a checklist for assets, and a different checklist for activities, and so on.



## Section 4: Risk Identification Methods – Self-Administered Tools

- Related to the standardization aspect, the checklist provides a history. By retaining checklists completed over time, the risk manager can see how the organization's exposures, perils, and hazards have changed.
- Since the items on the checklist can easily be organized into a logical sequence, the information noted on the checklist can easily be classified and tabulated.
- The checklist can be used by non-risk management personnel with minimal required training.
- Lower-level management and supervisors can assist the risk manager by identifying exposures, perils, and hazards in their own areas.
- The checklist method results in a cohesive risk management team spread throughout the organization, not just in the risk management "department."
- It also supports the concept that risk management is a people process involving all levels in the organization, as well as others outside the organization.

### Weaknesses

- No matter how comprehensive the risk manager believes their checklist to be, it is virtually impossible that any checklist can cover all areas or operations.
- Dynamic organizations are in a constant state of flux, and the checklist must change, but it will always lag behind the organizational change.
- A checklist cannot identify new exposures and their associated perils and hazards because, unless the checklist creator has a crystal ball, the "new" exposure will not be on the checklist.
- The checklist is essentially a yes/no document that only identifies the presence of the listed item, not its importance or relevance to the organization.
  - The yes/no format does not consider the potential financial impact of any losses associated with the identified risks.
  - While the checklist could be expanded to include a valuation column, the sequential nature of the checklist does not readily connect two or more exposure items that, working together, can create a significant financial impact.



## Types of Information Checklists

### Preliminary Information Checklist

A *preliminary information checklist* is generally the first part of the checklist portfolio. This type of checklist is best suited for all organizations, as it provides the context for the results of the other identification methods. This type of checklist provides general information about the organization, covering its organizational structure, ownership, personnel, and a broad description of its activities.

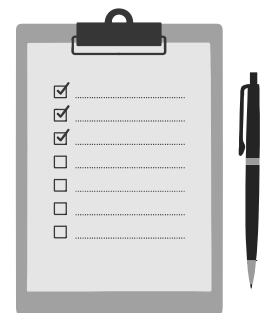
### Preliminary Information Checklist

1. Full legal name as legally registered or recorded
2. Listing of all names under which the organization has operated
3. Organizational chart and key management personnel roster
4. Complete listing of officers and board members
5. Copy of organizational charter and bylaws
6. Listing of locations at which the organization maintains an operation, office, warehouse, storage space, or permanently stationed personnel
7. Examples of common leases
8. Examples of sales contracts, shipping orders, or any other contract made part of a transaction with a customer, client, or vendor
9. Examples of any employment contract with any employee
10. Other listings as needed
  - a. personnel survey with demographic details
  - b. vehicles with radius of operation, garaging, gross vehicle weights (GVWs), etc.
11. Website review

### Asset Checklist

An *asset checklist* is a tool to identify assets, both tangible and intangible. The typical *tangible* asset checklist is very detailed, including many types of real and personal property, furniture and fixtures, fine arts, improvements and betterments, equipment and machinery, security and protection devices, goods of others, stock and inventory, signage, aircraft, motor vehicles, and watercraft.

The typical *intangible* asset checklist will include the legal properties of patents, copyrights, registered trademarks, registered service marks, and trade secrets. Other important intangible assets, such as branding and reputation, lack legal documentation but are nonetheless valuable assets.



### General Uses

The asset checklist is most effective for property exposures and net income exposures. While human resources are an organization's most valuable asset, the nature of the human resources exposures, perils, and hazards makes the use of an asset checklist problematic.

Organizations that have concentrations of physical assets, such as shopping centers, office buildings, banks, factories, and the like, are more likely to use an asset checklist.

### Activity/Situation Checklist



The typical *activity/situation checklist* is a “yes and no” listing of various activities or situations in which an organization is involved. The listed activities and situations tend to be grouped into sector-specific topics. For example, in the financial services sector, an activity/situation checklist might include an appraiser of real property, land surveyor, title abstractor, real estate agent or broker, investment advisor, financial planner, insurance agent or broker, registered representative for variable annuities, and

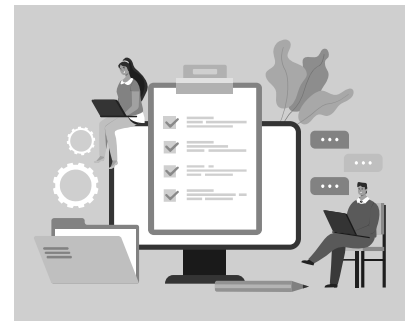
the like. An activity/situation checklist for a building contractor would obviously be quite different.

#### General Uses

The activity/situation checklist is very useful for identifying liability and human resources exposures, perils, and hazards, as well as for net income exposures, particularly in identifying perils and hazards associated with property. It is commonly used in businesses that provide services.

### Industry Checklists

*Industry checklists* are like activity/situation checklists in that they focus on specific operations or industries, providing a detailed listing of activities or situations commonly found in these operations or industries. The significant difference between the two types of checklists is that industry checklists are frequently generated and used by members of a trade or industry association, whereas more generic activity/situation checklists are often created by outsiders, such as insurance providers, sector experts, or consultants.



The industry checklist is likely to consist of several sub-checklists addressing one of the four logical classifications of exposures. As such, this checklist lends itself to a comprehensive identification of exposures, perils, and hazards, but only within a narrow focus of a specific industry.

An industry checklist, adapted from the transportation industry, might include the organization’s Department of Transportation rating, mileage reports, commodities carried, hazardous materials handled, trailer interchange agreements, team drivers, safety manuals, and accident procedures manuals.

#### General Uses

The industry checklist is very useful in identifying exposures and perils arising out of each of the four logical classifications for a specific industry.

### Perils Checklists

The *perils checklist* is a secondary and proactive checklist that identifies the original source or cause of loss once the exposure is identified and BEFORE a loss occurs. It is related to reactive tools used by the risk manager, safety personnel, or claims personnel to identify the root cause of loss and hazards associated with the loss AFTER the loss has occurred.

As you already learned, there are three broad types of perils that affect all four logical classifications of exposures: *human perils*, *economic perils*, and *natural perils*.



These are explained here again in a little more detail:

1. **Human perils** are those perils arising from the acts of an individual or individuals. The term “individual” can be a natural person or an artificial person created by law, such as a corporation. The acts may be unintentional or accidental, such as negligence, or they may be intentional. Examples are as diverse and varied as individuals, but would typically include acts such as causing an auto accident by failing to stop, hitting a person on a golf course with an errant drive, as well as nefarious acts such as arson, theft, or false arrest.
2. **Economic perils** refer to risks arising out of business, financial, or market conditions. Common examples include strikes or labor slowdowns, inflation, recession, or depression, as well as supply chain disruptions caused by shortages of raw materials.
3. **Natural perils** are the so-called “acts of God”—naturally occurring events such as hurricanes, tornadoes, lightning, floods, and the like.

### General Uses

Perils checklists are useful for organizations wishing to institute proactive risk control measures along with risk financing options. Risk control measures are those conscious actions or inactions intended to minimize, at the optimal cost, the probability, frequency, severity, or unpredictability of loss. They are divided into two types: *prevention of loss* and *reduction of the severity of the losses not prevented*. One basic tenet of risk management is that exposures should be addressed with at least one risk control measure and one risk financing technique.

The perils checklist is particularly useful in identifying perils that can impact net income when no other logical classification category is involved.

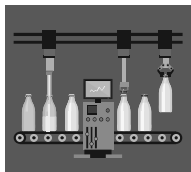




Businesses on Hilton Head Island can readily identify perils such as hurricanes and tidal surges that affect their locations, but a comprehensive perils checklist may also identify perils that impact the only access to their businesses, US Route 278. The businesses do not “own” the US Route 278 bridge connecting Hilton Head Island to the mainland and, therefore, might not consider it in their net income coverage. However, if the bridge is destroyed or seriously damaged, the only other access to their business is by small watercraft, an inefficient mode of transportation for large numbers of people.



### ▶▶ Knowledge Check



Gabriel, the risk manager for a bottling company, has been recruited by a competitor. He knows that the sooner he can come up to speed on his new employer’s operations, the faster he can make informed suggestions. Please describe two types of checklists Gabriel might use and why they would be helpful. What led you to this decision?



1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_

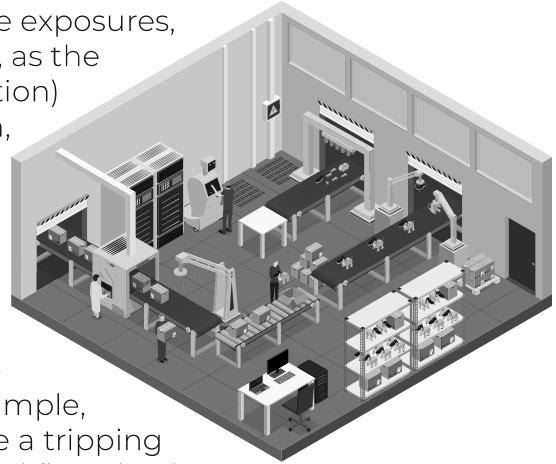
## Physical Inspections

In the early 1980s, “management by walking around” was the latest management style. This refers to a style of business management that involves managers wandering around in an unstructured manner to connect with employees and check on equipment or on the status of ongoing work. Little did those managers know that what they were doing was essentially a physical inspection. It wasn’t necessarily an exposure identification activity, but it served the same purpose: having eyes and ears in and on the workplace. This same style of wandering around can be used by anyone making a physical inspection to identify observable exposures.

### Physical Inspection Method

The *physical inspection method* is an informational visit to critical sites within and outside the organization to determine exposures, perils, and hazards. The flow of information is bilateral, as the risk manager (or other person conducting the inspection) receives information and can also provide information, reinforcing the importance of the risk management program and eliciting support for it.

Physical inspections are often conducted by internal personnel such as the risk manager, a safety professional, or other operating personnel. In fact, physical inspections are so ubiquitous that the inspection may not be perceived as occurring. For example, a manager walking through a department may notice a tripping hazard, such as the corner of a floor mat turned up, and flip it back down without consciously realizing they were conducting a physical inspection.



Physical inspections can also be conducted by external personnel. Consultants, such as risk management consultants, safety consultants, industrial hygienists, and ergonomics specialists, often begin their work with a physical inspection of the premises or work site. Insurance carriers provide similar services as part of the underwriting function, in keeping with the old insurance adage that loss control is the eyes and ears of underwriting. Various community services, such as fire departments, code inspectors, and emergency medical services, can conduct physical inspections. Additionally, regulatory agencies at the state and federal levels, including OSHA or EPA, can also conduct physical inspections.

### General Uses

Physical inspections are useful for organizations with exposures that fall within all four logical classifications. This method is commonly used in conjunction with checklists, including asset checklists and industry-specific checklists, and serves as a natural complement to the perils checklist for identifying hazards associated with the listed and identified perils.

Some examples of a physical inspection checklist would be:

- Monthly Safety Inspection Checklist
- Physical Inspection Report
- Floor Safety Evaluation Form
- Property Survey Report
- Swimming Pool Safety Checklist
- Office of Risk Management Survey
- Workers Compensation Program Analysis

### Strengths

- The process is personal, involving the inspector and other organizational personnel in their natural surroundings. As such, it provides a visualization of processes and locations that cannot be adequately captured by using a checklist or other document in the confines of an office.
- A physical inspection may be able to find unreported and unidentified exposures, perils, and hazards.
- While outside consultants can provide physical inspections for a fee, community services and regulatory agencies, as well as insurance companies, will conduct a physical inspections at no cost.



### Weaknesses

- Physical inspections are time-consuming and tend to be costly, as the internal inspector or inspectors may have to travel to locations and interact with local personnel, thereby reducing their productivity.
- Since situations can change frequently, inspections must be repeated periodically. Everyday situations giving rise to interim inspections include the acquisition of significant new properties or the commencement of new activities.
- Inspections are generally scheduled in advance (except for the “surprise” inspection by a community service or regulatory agency), so the area being visited may be cleaned, straightened, or otherwise prepared in anticipation for the visit, which may not accurately reflect the “true” working environment.
- Inspections can be subject to steering away from problem areas by local personnel.
- The “free” inspections by community services and regulators may attract unwanted attention or lead to mandatory corrective actions, fines, and penalties.



### Check-In

1. Chris, a risk manager, wants to identify new areas of risk exposure. Which identification method will be most helpful to Chris in this process?
  - ☐ A physical inspection
  - ☐ An asset checklist
  - ☐ A perils checklist
  - ☐ An examination of the logical classifications of exposures the organization faces
2. A checklist cannot identify new exposures and their perils and hazards because the “new” exposure will not be on the checklist.”

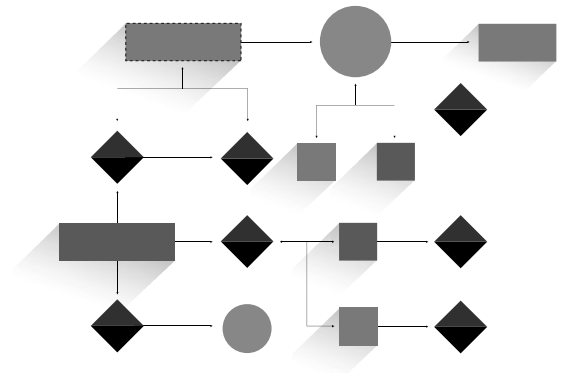


True

False

## Flowchart Method

The *flowchart method* is a graphic tool that sequentially depicts the activities of a particular operation or process. The flowchart method uses a variety of approaches, including product analysis, dependency analysis, site analysis, decision analysis, and critical path analysis.



**Product analysis** is a tool used in project management to assess the ability of the organization to produce deliverables on schedule by conducting systems analysis, product breakdown, system engineering, requirement analysis, value analysis, and value engineering.

**Dependency analysis** examines all materials and activities required to complete a process in the search for situations where one activity depends upon another being performed within a certain time frame or in a specific manner.

**Site analysis** is an analysis used in selecting sites for operations that involves examining physical, economic, geographic, and social characteristics. For example, if an organization wishes to build a new plant in Freedonia, the physical surroundings, the economic environment, the weather and soil conditions, and the social characteristics, such as laws, availability of labor supply, and skill sets of potential workers, must be considered.

**Decision analysis** is the use of various tools, many of which are quantitative, and research to examine relevant information related to the decision, including all possible options.

**Critical path analysis** is a type of dependency analysis that focuses on every key task necessary to complete a project, including the amount of time necessary to finish each activity.

### General Uses

This method is particularly useful for organizations that have a process or a sequence of activities that must be conducted in a specific order. However, the sequence does not have to be a strictly consecutive sequence, such as A followed by B followed by C, and so on, to arrive at the desired end. In some operations, the sequence might be A followed by B or C, with D being conducted while B or C is finished, then E. The method is process-driven and follows a logical flow.

By its nature, the flowchart method is particularly useful for net income and certain liability exposures, such as those involving products and completed operations. It lends itself to quality assurance, e.g., ensuring all parts are assembled and functioning, as well as

## Section 4: Risk Identification Methods – Self-Administered Tools

identifying dependencies and critical paths. Certain approaches within the broader scope of the flowchart method can be used for human resource exposures, particularly as part of an organization's succession plan. The flowchart method has limited use for property exposures (e.g., inventory levels) and most liability exposures.

### Strengths

- Process-driven and logical, which easily illustrates interdependencies within the organization
- Can identify pinch points or bottlenecks
- Can determine the critical path or activity
- Identifies dependencies upon other outside organizations or infrastructures

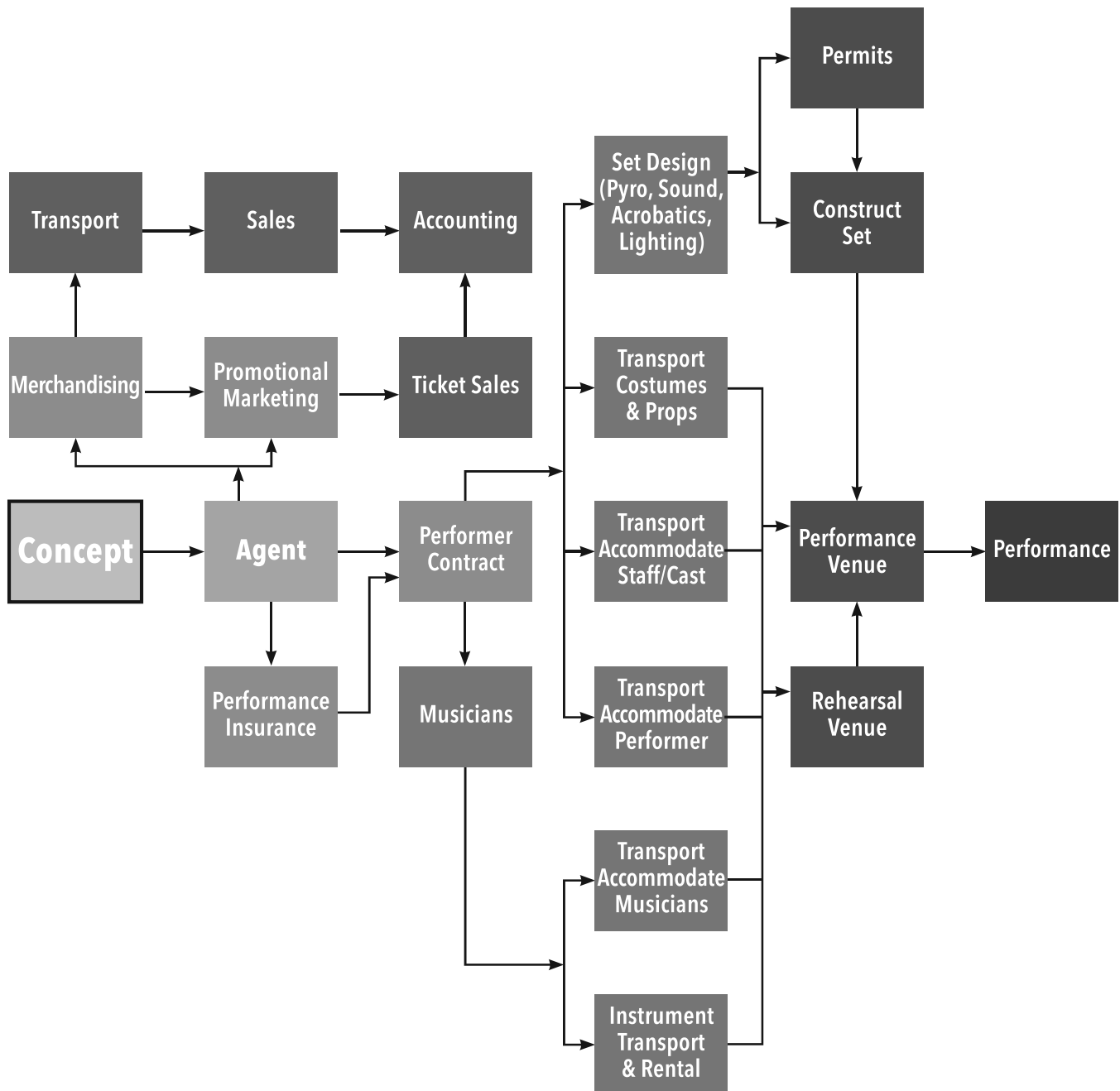


### Weaknesses

- Does not indicate frequency or severity of events
- Does not provide information about financial impacts
- Does not show minor processes that have significant loss potential
- Can become very process-oriented, causing management to have a very myopic view instead of seeing the big picture



Flowchart for a live concert



## Check-In



You are the producer of the concert performance diagrammed in the flowchart presented on the facing page. You are trying to identify potential exposures associated with this concert. What events or circumstance can cause a loss or disruption to property, human resources, liability, and/or net income in the production of this performance?

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## Summary

Risk identification is the most important step in the entire risk management process because a risk must be identified before it can be analyzed, controlled, transferred, or financed. To properly identify the exposures, perils, and hazards facing the organization, the risk manager will use a variety of effective self-administered risk identification methods. Those methods include:

- Checklists
- Physical inspections
- Flowchart method



## Review of Learning Objectives

- 4.1 *Differentiate between the different classifications that exist for exposures, perils, and hazards.*
- 4.2 *Understand the different self-administered methods used to identify the wide variety of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](http://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

#### Video Clip

View a video clip about an important concept related to a learning objective in this section.



Speaking From Experience: Self-Administered Tools with Stanley R. Smith, MBA, CIC, CRM, CSP, President, SGS Consulting

In addition, you’ll find a link to some sample checklists:

- Asset List
- Perils
- Industry-specific checklist
- Monthly Safety Inspection checklist

## Section 4 Self-Quiz

**Directions:** Indicate whether each statement is true or false.

1. A human peril is one arising from being in business, such as a recession.

**True**

**False**

2. A peril arising out of a natural disaster such as a damage from a hurricane would be an example of a natural peril.

**True**

**False**

3. Loss of income would be an example of a peril under the economic peril classification.

**True**

**False**

4. Hazards can be easily classified into the following three types: moral, morale, and associated.

**True**

**False**

5. The intent to cause harm, such as stealing someone's identity or passwords, would be an example of a morale hazard.

**True**

**False**

6. Morale hazards are those that arise out of indifference, such as not locking your car because you know it is insured and there is nothing valuable in it.

**True**

**False**

7. Physical hazards exist naturally or are those that are caused by human negligence, such as the presence of dead trees in near proximity to buildings, or speeding on an expressway.

**True**

**False**

8. It is not imperative for a hazard to be associated with a peril.

**True**

**False**

## Section 4: Risk Identification Methods – Self-Administered Tools

**Directions:** Select the correct answer.

1. A document to aid the risk manager in systematically searching and identifying as many exposures, perils, and hazards as possible—and one that can be simple or expansive—is known as a:
  - ☐ compliance review
  - ☐ flowchart
  - ☐ checklist
  - ☐ specialty resource method
2. All of the following are strengths to the flowchart method of exposure identification EXCEPT:
  - ☐ indicates frequency or severity of events
  - ☐ can identify punch points or bottlenecks
  - ☐ can determine the critical path or activity
  - ☐ identifies dependencies upon other outside organizations or infrastructures



# Section 5: Analytic Risk Identification Methods

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## Section Goal:

The goals of this section are for you to learn about various analytic risk identification methods, their characteristics, and when they are the most useful, as well as the strengths and weaknesses of each.

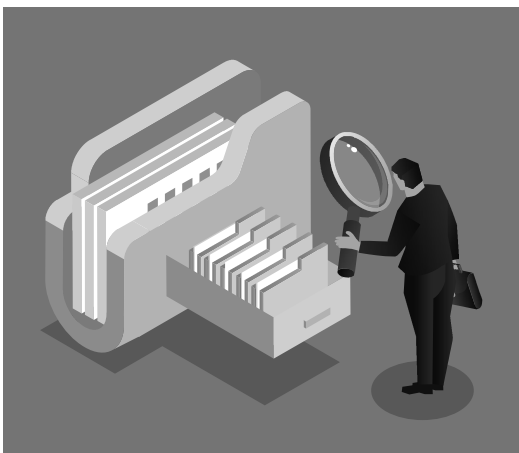
## Learning Objective

- 5.1 *Understand the various analytic risk identification methods used to identify the wide range of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each method.*

## Analytic Methodologies

In the previous section, we examined self-administered risk identification methods, which could be performed by a risk manager or individual and which did not require significant analytical tools or abilities. In this section, we will explore risk identification methods that involve analysis and may require specialized training or education. Some of these may be performed by a risk manager, while others may require the use of specialized service providers.

## Specialty Resource Method



The *specialty resource method* utilizes internal and external personnel with expertise in a special field of knowledge to identify exposures, perils, and hazards. The internal personnel may be staff, functional positions, or operational personnel. External personnel may be consultants or industry specialists.

### General Uses

The specialty resource method is used by any type of organization that believes it has an unusual situation that requires a deeper examination than that provided by other risk identification methods, such as checklists, physical inspections, and flowcharts.

## Section 5: Analytic Risk Identification Methods

### Strengths

- Provides a higher level of experience to focus on exposures, perils, and hazards
- More time-efficient for most organizations, particularly when outside specialty resources are used
- Provides an outside viewpoint free of internal politics or biases



### Weaknesses

- Depending upon the nature of the specialty, it may be difficult to find qualified persons in that area of specialty.
- External specialists can be very costly.



## Non-Insurance Contract Review Method



The *non-insurance contract review method* examines contracts other than insurance policies. These contracts include leases, purchase orders, sales contracts, bills of lading, warranties, advertising materials, mergers and acquisitions, joint ventures and alliances, employment contracts, and service contracts. The very narrow focus of this method is to identify sections of the contracts that contain hold harmless or indemnification agreements and insurance requirements. A careful review of contracts helps a risk manager determine an organization's obligations to others, as well as any obligations third parties may have to the organization. Once the obligations are clear, compliance with contractual requirements follows.

### General Uses

This type of review applies to all organizations, as no organization can operate in a litigious society without having contracts that spell out the rights and duties of the contracting parties. The non-insurance contract review is particularly useful for exposures that fall within the logical classifications of liability and human resources. It is also useful in identifying property exposure situations when another party assumes the responsibility for assets. Another particular use is to examine situations when insurance requirements and certificates of insurance must be provided by either party. Reliance on a second party who may not conform to contract provisions might also be identified.

### Strengths

- Helps identify gaps in the risk management plan, revealing exposures the risk manager must address
- May identify failures by either contracting party to meet contractual obligations
- May identify external sources of risk financing



### Weaknesses

- Since the risk management department is often not involved in the drafting and negotiation of most contracts, there may be no opportunity for the risk manager to provide input about the exposures revealed during the contract review.
- The involvement of a second party may prevent control of exposures, and sole reliance on the findings from this review may thwart risk management objectives, e.g., finding indemnification from a second party without ascertaining the ability or willingness of the other party to financially perform.



### Insurance Policy Review Method



The *insurance policy review method* is used to review an insurance contract and related documents to determine the exposures and perils that are and are not covered, either because the insurance agreement does not extend to the asset or activity, or because terms, conditions, restrictions, or exclusions are limiting. A common non-contractual document used in an insurance policy review is a document, generally created by an insurance company, that explains the features of that carrier's insurance contract, typically in ordinary language and rather than insurance-specific terminology.

### General Uses

Insurance policy review is beneficial for all organizations and applicable to all four logical classifications of exposures, but only to the extent that the exposures are insured. This review can be conducted internally by personnel from the risk management department or the legal department, or externally by consultants and legal advisors.

### Strengths

- Determines what exposures and perils are covered, as well as an indication of how the financial impact will be affected
- Exposures and perils are given precise definitions tested in the courts, so the organization knows specifically what is covered and what is not, as well as the extent of coverage.



### Weaknesses

- Does not identify unknown exposures and perils, but only how identified AND insured exposures and perils will be handled
- The review is dependent on the insurance policy the insurance market offers, not on what the organization requires.



## Section 5: Analytic Risk Identification Methods

- It is difficult to analyze exactly how an insurance policy will respond before the loss occurs, as case law may “change” the policy, or a judge or jury may disregard the insurance policy.
- Not all policies are standardized, particularly for very large exposures or unusual situations, and even the policies that are “standardized” are not the same between insurance carriers.
- The use of manuscript policies written by the organization or underwriter may contain language untested in the courts, so the interpretation of that language remains uncertain.

### Check-In



**Directions:** Select the term that best completes each statement.

1. Recognizing an organization’s \_\_\_\_\_ others is an important outcome of reviewing contracts.  

**obligations to****reliance on**
2. During contract reviews, a risk manager must be aware of the possibility of third-party \_\_\_\_\_.  

**noncompliance****exposures to statutes and regulations**

### Insurance Checklist Method



The *insurance checklist method* is related to the insurance policy review method and non-insurance contractual review method, except that the focus of this checklist is on a very narrow part of the insurance policy that addresses the feasibility of using contractual transfers as a risk financing mechanism.

This method is particularly well-suited for organizations with contracts that contain insurance and certificate of insurance requirements, as well as hold harmless or indemnification language. This type of review is generally most effective for liability exposures, but also has some application for property exposures.



### Strengths

- The checklist has a definitive list of available coverage and exclusions.
- Completing an insurance checklist includes a process of evaluating exposures.

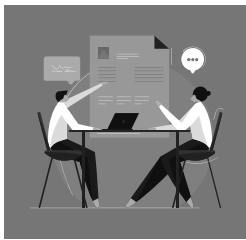


### Weaknesses

- By definition, it is geared toward exposures that are currently insured or which are conventionally insurable.
- Swings in the insurance market can cause the scope of insurable exposures to expand and contract, thus requiring attention to address these issues.



## Procedures and Policies Review Method



The *procedures and policies review method* uses internal, external, and specialty resource reviews to evaluate the organization's bylaws, board minutes, mission statements, organizational charts, employee manuals, codes of ethics, procedures manuals, and risk management policy manuals. Normally, the term "policies and procedures" is used; however, we have chosen the reverse to clearly differentiate that the policies being reviewed are operational and administrative, rather than insurance policies.

### General Uses

All organizations, regardless of size, should have established policies and procedures to govern their operations. These policies and procedures are especially useful in examining liability and human resource exposures. The method has limited, if any, applicability to property exposures and net income exposures arising out of property exposures.

### Strengths

- The review of the organization's policies and procedures may uncover exposures that others in the organization create without considering the impact on other functional areas.
- There is a distinction between identifying the exposures an organization has and the exposures the organization creates through its "smoking gun" paper trail.



### Weaknesses

- Besides its limited applicability to property and net income, the reality is that organizational politics may prevent effective treatment of exposures.



## Compliance Review Method



The purpose of a compliance review is to determine compliance with regulations and laws. Organizations operate within a regulatory environment that is subject to various types of compliance requirements and multiple layers of oversight. The areas of compliance can be either statutory (local, state, or federal) or professional (voluntary, involuntary, industry-specific, or governmental insurance programs).

In the *compliance review method*, key regulations and laws are identified, and operations are then examined to ascertain compliance with applicable laws, statutes, and regulations, regardless of the source.

### General Uses

Since virtually all large organizations are recognized by private and public law as “being borne out of statute,” the organization has certain rights and duties, and the compliance review method can be used to verify that the organization is operating legally. Such a review can be applied to various property exposures, many liability exposures, and most human resources exposures.

### Strengths

- Most compliance reviews are “free” (use of internal staff and regulators).
- External reviews will provide the organization with an outside opinion, whether you want it or not.



### Weaknesses

- Unfortunately, compliance reviews can carry their own problems, e.g., an insurance carrier declining or canceling coverage due to a discovered exposure, peril, or hazard.
- The organization has little to no control over the external review, whether it occurs or in its aftermath.
- The compliance review may focus unwanted attention to the organization and expose it to liability, fines, penalties, injunctions, and damage to its reputation and brand.



## Financial Statement Analysis Method



The *financial statement analysis method* is used to identify values that are subject to loss, the event that could cause the loss, and the financial impact after the loss. These types of reports analyze both growth in expenses and reduction in revenues. The person conducting the analysis must review the auditor's opinion letter and the notes to the financial statements, as well as the complete financial statements, including the balance sheet, income statement, statement of cash flows, and statement of indebtedness and loans. These types of

financial statements are commonly used in the accounting system known as Generally Accepted Accounting Principles, but most organizations utilize managerial accounting principles in the course of their ordinary business. There are significant differences between financial statements drawn up under these two systems. Additionally, there are other accounting systems suitable for certain organizations, including governmental or fund accounting, tax accounting, and statutory accounting. Care must be taken to determine exactly what types of accounting statements are being examined. We will explore the financial statement analysis method in greater detail later in the course.

### General Uses

All organizations can use this type of risk identification, and it is particularly useful for net income exposures, with lesser applicability to the other logical classifications of exposures.

### Strengths

- It can help predict financial losses resulting from a specific event.
- It can demonstrate how the loss would affect other areas within the organization.
- It can be the basis for initial insight in developing crisis contingency plans.



### Weaknesses

- Financial statement analysis usually does not take into account business risks, making it difficult to predict the impact on the organization of losses incurred by key suppliers or customers.
- There can be a tendency for the business to manipulate the financial records, debts, or other reports, particularly when scrutiny may disclose underlying problems (following the passage of legislation like the Sarbanes-Oxley Act, this problem has been reduced).
- This method, like accounting, is historical, focusing on what happened in the past
- This method does little to identify unknown exposures, perils, or hazards.



## Section 5: Analytic Risk Identification Methods

- There are various types of accounting principles, and the types of financial statements presented to outsiders may differ significantly from those available to the risk manager.
- Accounting valuations of assets are based on accounting principles, not insurance contract terms and conditions.

### Check-In

**Directions:** Match the identification method on the left with its description on the right.



A. Non-insurance contract review	_____ A risk manager conducts a review to determine which assets would be excluded from coverage for a particular peril.
B. Compliance review	_____ A risk manager reviews hold harmless clauses to determine obligations owed.
C. Insurance policy review	_____ A human resources director conducts a review to determine if employees' professional certifications and licenses are up to date according to state law.
D. Financial statement analysis	_____ A risk manager wishes to determine net income exposures that could impact the company.

## Loss Data Analysis Method

A *loss data analysis* can be performed on insurance company loss runs, internal loss runs or RMIS (risk management information system) reports, and accident or incident reports. In this method, loss data or loss history will be collected, organized, and analyzed.

### General Uses

All organizations can use this method, which applies to all four logical classifications of exposures.

### Strengths

- Information gathered through loss data analysis can be used for forecasting losses or predicting and preventing future incidents. This method is used to evaluate the effectiveness of the risk management program and for benchmarking the organization against others in its industry or itself over time.



### Weaknesses

- Since this information is historical (created following an accident or incident), the method is reactive rather than proactive.
- Data credibility may be an issue, as many organizations lack a sufficiently large number of losses to establish data credibility.
- Because this method is driven by losses that have occurred, it only works when losses have been reported.
- Uninsured losses will not appear on insurance company loss runs except as a “closed without payment” description and showing a value of zero.
- If the internal loss runs or RMIS reports have not captured the loss information, it will not be visible and will not be analyzed.
- Many organizations struggle to collect accident and incident reports that include “near-misses,” a valuable component in the analysis of loss data.
- This method limits the number of exposures that can be identified, as a loss that has not yet occurred does not reveal the exposure, peril, or hazard.
- History does not always repeat itself, and conversely, losses may not have occurred in the past.



### Characteristics of Credible Loss Data

One of the greatest concerns when performing a loss data analysis is the credibility of the data. There are four key characteristics of credibility to consider: completeness, consistency, integrity, and relevance.

**Completeness:** All events, whether covered by insurance or not, should be included. There should be enough data available to perform a meaningful analysis, typically five years of data with 30 data points (losses) per year. There needs to be adequate detail about each loss to make a valid comparison and analysis, including open reserves and paid amounts.

**Consistency:** The same types and categories of data need to be available for each loss. Losses should be valued for the same policy year, fiscal year, or calendar year in which they occurred. The recording methodology should be uniform between carriers or claims service organizations. If the coding or claim categories are different, they must be reconciled. For example, what one carrier managing workers compensation claims considers a first aid claim—and not reportable on the loss run—another carrier may consider a medical-only claim, which *is* reported on the loss run.

**Integrity:** The data must be reliable. The information input into the claims management system or RMIS must be accurate. It must also be updated in a timely fashion as information changes or develops. Accident descriptions should be correct, and reserves should be reflective thereof.

**Relevance:** Only data relevant to the analysis should be used. For example, when reviewing injuries to customers falling in a restaurant, a customer's eye color is irrelevant. Data should not be commingled, particularly in cases involving data from divested or discontinued operations, as well as exposures transferred to a third party via contract. Similarly, data from acquired operations should be carefully reviewed to determine the type of acquisition it

## Section 5: Analytic Risk Identification Methods

was—asset versus entity deal—and identify any liabilities that were acquired. Finally, if an organization has a variety of diverse operations, the data from one operation should not be commingled with the others for the purpose of analysis.

Risk managers should also be aware of what they are expecting to find in a loss run. If a particular loss doesn't "fit" or if it seems out of line with the other losses, further questioning or investigation may be indicated. The risk manager needs to look beyond the numbers in the loss run to see what is really happening.

### ▶▶ Knowledge Check



Lucas is a new risk manager for a Florida resort hotel. He is trying to understand the types of workers compensation losses that have been happening at the resort. His finance officer presents him with the loss run presented on the following page. Lucas does not feel that he can use the information to project future losses, as he feels the data is incomplete.

1. Please explain what Lucas means.

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2. Lucas is also concerned with the integrity of the data. Please provide some examples from the loss run which support Lucas' concerns.

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## Section 5: Analytic Risk Identification Methods

RESORT FACILITY WORKERS COMPENSATION LOSS RUN									
Date *	Claimant	Type †	Dept	Cause	Injury	Body Part	Reserves	Paid	Incurred
7/3/X2	Cherry, Farrah	LT	Admin	Carrying files to car	Strain	Neck	3,030	0	3,030
8/23/X2	De Pedro, Dayren	LT	Marketing	Carrying files, slipped, and fell	Contusion	Mult body	403	0	403
9/11/X2	Robinson, Mary	MO	Housekeeping	Hit by object	Laceration	Arm	75	0	75
9/24/X2	Meissler, Sharon	MO	Housekeeping	Slip/Fall	Bruise	Knuckles	0	0	0
10/19/X2	Ferreira, Carlos	MO	Maintenance	Drill bit jammed knee	Contusion	Knee	0	0	0
11/10/X2	Fontenot, John	MO	Hotel	Door	Contusion	Thumb	72	0	72
11/3/X2	Crawford, Debbie	MO	Golf	Auto accident	Contusion	Face	297	0	297
12/22/X2	Robinson, Mary	MO	Housekeeping	Fell in tub	Fracture	Collarbone	245	500	745
12/22/X2	Houston, Jeanine	MO	Hotel	Auto accident	Contusion	Mult body	387	0	387
12/23/X2	Rutecki, Jennifer	MO	Hotel	Hit by plastic bat	Contusion	Chest	0	0	0
12/23/X2	White, Diane	MO	Housekeeping	Slip/fall on bathroom floor	Strain	Back	103	0	103
1/1/X1	Howard, William	MO	Hotel	Lifting luggage	Strain	Back	163	0	163
2/20/X1	Clarke, Aminda	MO	Marketing	Auto accident	Contusion	Mult body	273	0	273
3/10/X1	Belma, Alicia	MO	Kitchen	Lighting pilot light	Burn	Face	91	0	91
3/3/X1	Martens, Judith	MO	Admin	Auto accident	Contusion	Chest	500	0	500
6/28/X1	Weidler, Davis	MO	Golf	Scratched by vegetation	Laceration	Arm	0	0	0
7/4/X1	Boyd, Alva	MO	Housekeeping	Caught by drawer	Contusion	Thumb	0	0	0
8/5/X1	Kelly, William	MO	Hotel	Slip/fall	Contusion	Neck, back	0	0	0
9/6/X1	Kemp, Deborah	MO	Housekeeping	Carrying	Sprain	Upper extremities	81	0	81
10/10/X1	Kelly, Marcus	MO	Ski	Slip/Fall	Sprain	Wrist	535	0	535
10/10/X1	Williams, Albert	MO	Hotel	Stepped on a nail	Puncture	Foot	60	0	60
11/19/X1	Seals, Pamela	MO	Kitchen	Lifting produce	Strain	Back	94	0	94
1/12/X0	Hays, Larry	MO	Casino	Hit by employee	Contusion	Eye	60	0	60
2/28/X0	Dormus, Cheri	MO	Hotel	Hugged by child, lost balance	Strain	Mult body	0	4,900	4,900
3/11/X0	Couch, Deborah	MO	Housekeeping	Hit by guest	Contusion	Arm	0	0	0
4/11/X0	Brown, Penny	MO	Admin	Pushed in chair, hit head	Contusion	Face	0	0	0
5/17/X0	Frazier, Patty	MO	Hotel	Auto accident	Fracture	Legs	750	2,000	2,750
6/13/X0	Gregory, Katherine	LT	Marketing	Golfing with client, fell	Fracture	Ankle	7,849	0	7,849
7/10/X0	Bottorf, Karen	MO	Hotel	Slammed drawer	Contusion	Thumb	0	0	0
7/27/X0	Goodman, Ena	LT	Housekeeping	Stepped on	Contusion	Foot	5,402	0	5,402
8/10/X0	Marcado, Maria	MO	Housekeeping	Exposure to scabies	Contagious disease	Mult body	0	0	0
8/29/X0	Washington, Johnnie	MO	Casino	Hit by guest	Bruise	Shoulder	171	0	171
9/10/X0	Fontenot, John	MO	Hotel	Slip/fall	Strain	Back	223	0	223
* X2 is the most recent year † LT = Lost time; MO = Medical only									

## Summary

Risk managers are responsible for identifying exposures, perils, and hazards that could impact the financial well-being of their organizations and then taking appropriate steps to manage and mitigate them. The identification step is the most important in the entire risk management process because a risk must be identified before it can be analyzed, controlled, transferred, or financed. To properly identify these exposures, perils, and hazards, the risk manager will employ a variety of effective analytical methods to identify the risks facing the organization. Those methods include:

- Specialty resource method
- Non-insurance contract review
- Insurance policy review and insurance policy checklist
- Procedures and policies review
- Compliance review
- Financial statement analysis
- Loss data analysis

No single risk identification method is superior to or better than the others. The methods used will vary based on the nature of the organization and its exposures. Many organizations use a combination of risk identification methods to gain a broader perspective on the exposures, perils, and hazards faced by their individual organizations or clients.

In the next section, you will learn about how financing fits into the risk management process.



## Review of Learning Objective

5.1 *Understand the different analytic risk identification methods used to identify the wide variety of exposures, perils, and hazards facing an organization, including the strengths and weaknesses of each method.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](http://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

## Section 5 Self-Quiz

**Directions:** Select the correct answer.

1. \_\_\_\_\_ are useful for organizations with exposures that fall within all four logical classifications. They can be conducted by internal or external personnel who observe organizational personnel in their natural surroundings.
  - ☐ Flowcharts
  - ☐ Checklists
  - ☐ Non-insurance contract reviews
  - ☐ Physical inspections
2. The insurance policy review method is used for:
  - ☐ reviewing an insurance contract and related documents to determine exposures and perils that are and are not covered.
  - ☐ reviewing contracts other than insurance policies.
  - ☐ internal and external personnel possessing expertise in a special field of knowledge to identify exposures, perils, and hazards.
  - ☐ identifying dependencies upon other outside organizations or infrastructures.
3. The procedures and policies review method can be used for:
  - ☐ determining compliance with regulation and laws.
  - ☐ identifying values that are subject to loss.
  - ☐ evaluating the organization's bylaws, board minutes, mission statements, org. charts, and employee manuals.
4. Which of the following is NOT a characteristic of credible loss data?
  - ☐ Integrity
  - ☐ Completeness
  - ☐ Consistency
  - ☐ Sufficiency
5. Indicate if the following are internal (I) or external (E) sources of data.
  - Insurance carrier loss runs \_\_\_\_\_
  - Accounting entries on financial statements \_\_\_\_\_
  - National Safety Council \_\_\_\_\_
  - First aid logs \_\_\_\_\_
  - Bureau of Transportation Statistics \_\_\_\_\_

## Section 5: Analytic Risk Identification Methods

6. Which of the following documents is NOT analyzed during the contract review method?
- ☐ Leases
  - ☐ Hold harmless and indemnification agreements
  - ☐ Insurance policies
  - ☐ Bills of lading
7. Which method is particularly helpful as the basis for initial insight in developing crisis contingency plans?
- ☐ Compliance review method
  - ☐ Financial statement analysis method
  - ☐ Procedures and policies review method
  - ☐ Non-insurance contract review method
8. Which one of the following is an example of a weakness in utilizing the loss data analysis method?
- ☐ Information gathered through loss data analysis can be used for forecasting losses or predicting and preventing future incidents.
  - ☐ This method is used to evaluate the effectiveness of the risk management program and to benchmark the organization against others in its industry or itself over time.
  - ☐ Besides its limited applicability to property and net income, the reality is that organizational politics may prevent effective treatment of exposures.
  - ☐ Because this method is driven by losses that have occurred, it only works when losses have been reported.



## Section 6: Financial Statement Analysis

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### Section Goal:

This section will provide you with an overview of financial concepts and accounting methods. You will be introduced to three types of financial statements that a risk manager should be familiar with and will explore how they are used by risk managers in exposure identification.

### Learning Objectives:

- 6.1 *Understand the difference between accounting and finance and the various types of accounting systems a risk manager might encounter.*
- 6.2 *Distinguish among the different property valuations that appear on financial statements.*
- 6.3 *Describe the purpose and components of:*
  - the income statement,
  - the balance sheet, and
  - the statement of cash flow.
- 6.4 *Understand the purpose of financial ratios, including the formulas and common calculations.*
- 6.5 *Explain how financial statement analysis is used as a risk management tool.*

## Accounting, Financing, and Risk Management

### Learning Objective:

- 6.1 *Understand the difference between accounting and finance and the various types of accounting systems a risk manager might encounter.*

Risk management is charged with managing and minimizing the uncertainty of exposures that can adversely affect an organization's assets and financial statements. Although it is not the intent of this section to make you a Certified Professional Accountant candidate, it is important for risk managers to understand financial statements—including where the numbers come from, and how to analyze the data—in order to identify opportunities as well as exposures that may need to be managed.

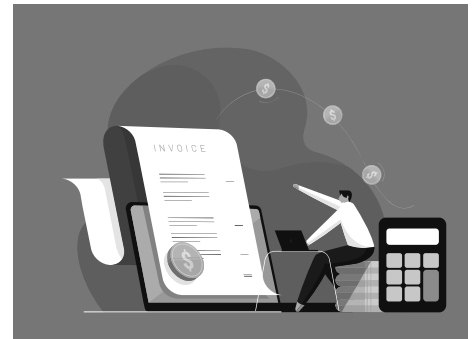


## Section 6: Financial Statement Analysis

In every organization, as well as in our personal lives, managing money and how it is spent, invested, or saved is a crucial aspect of effective and continued operations. Without having an idea of cash inflows and outflows, an organization cannot expect to function effectively—or to even remain viable. On a personal level, we face the same challenge. We are aware of our earnings and financial obligations, and we strive to ensure that our earnings exceed expenditures.

There are two aspects of the financial management process which work together to further the common good: they are accounting and finance. While most risk managers are not trained finance professionals, general knowledge of the distinction between accounting and finance and the role each plays within the organization is an important tool in reviewing various financial reports in support of the risk management program.

All organizations maintain financial statements, not just for internal use but for compliance, required reporting, and tax purposes. **Accounting** is the process of recording and classifying business and financial transactions and reporting them on an organization's financial statements. Similarly, accounting is like keeping a check register and balancing your checkbook.



**Finance** is the process of managing an organization's assets, liabilities, and cash flow to maximize shareholder (or stakeholder) wealth. When considering a new car purchase, an individual will weigh whether to take a loan to finance the purchase, pay outright from savings, or use a combination of both. Organizations do the same thing when major acquisitions of equipment and machinery are anticipated.

Decisions on investments, seeking loans to fund new ventures, and the payment terms for those loans are key elements of the finance function.

### Accounting Systems a Risk Manager May Encounter

Financial statements include information about assets, liabilities, shareholder (or stakeholder) equity, and cash flow. Financial statements also track the development of revenues and the expenses incurred to generate them.

Typically, an organization may utilize multiple sets of books, using different accounting systems for specific and legitimate purposes, such as financial reporting, regulatory compliance, tax, and internal management. The most used accounting systems are **GAAP, STAT, tax**



accounting, government or fund accounting, and managerial accounting. Each of these is described below.

### Financial Accounting Under Generally Accepted Accounting Principles (GAAP)



Most businesspeople are familiar with GAAP accounting, which is a set of rules that considers the details, complexities, and legalities of business accounting. The Financial Accounting Standards Board (FASB) uses GAAP as its foundation for comprehensive approved accounting methods and practices. US law requires businesses that release financial statements to the public and publicly traded companies to follow GAAP guidelines.

The purpose of GAAP accounting is to make the process of financial reporting transparent. It uses standardized assumptions, terminology, definitions, and methods. This allows for easy comparison of companies to outside parties, and the transparency of GAAP enables investors and shareholders to make realistic financial decisions.

Generally speaking, most companies file GAAP financial statements for their stakeholders. The Securities and Exchange Commission (SEC) requires publicly traded companies to file GAAP financials on a quarterly basis.

### Statutory Accounting Under Generally Accepted Statutory Accounting Principles (STAT or SAP, also sometimes referred to as RAP, Regulatory Accounting Principles)

Organizations such as insurance companies, banks, and financial services companies are subject to regulation by various governmental agencies. If the organization operates or participates in a captive insurance company, it is required to report its financial results using statutory accounting (STAT). Statutory accounting is a set of accounting regulations prescribed by the National Association of Insurance Commissioners (NAIC) for the preparation of the insurance company's financial statements. The primary goal of STAT accounting is to assist regulators in monitoring an insurance company's solvency. STAT was developed based on three pillars: conservatism, recognition, and consistency. By making it easier for regulators to consistently monitor solvency, consumers benefit from the transparency and accuracy of the regulatory oversight.



### **Tax Accounting Under Internal Revenue Service Rules and Guidelines**

All organizations are required to comply with the Internal Revenue Service's rules and guidelines. Even a risk manager for a "non-profit" organization—those exempt from paying taxes under Internal Revenue Code Section 501(c)—needs to be aware of the tax rules. The primary concern here is that rules and guidelines are consistently followed and that there are no abuses.

### **Governmental or Fund Accounting**

Governmental, or fund accounting, does not use a dual-entry system, using the customary debits and credits found in GAAP or STAT accounting. This is a simplified system similar to the "cash basis" accounting use by very small organizations and households. The purpose of these organizations is for the public good; public or private investment in these organizations does not occur, and their operations do not resemble those of typical business entities.

### **Managerial Accounting**

Managerial accounting is an internal accounting system that provides accurate and timely financial information to make short-term and day-to-day financial decisions. Such an accounting system is only used internally and is proprietary because it may reflect future development goals of an organization that are not for public knowledge.

The age-old saying "he's keeping a second set of books" doesn't have a nefarious connotation in the practical business world. Organizations maintain accounting records in various ways for multiple purposes and uses. Risk managers need to be aware of these accounting systems and become familiar with those used by their clients' organizations. This understanding will enable them to gather the necessary information for analyzing and recommending effective risk management initiatives.



## ▶▶ Knowledge Check



Mary is the founder of a new stationery printing company, “Mary’s Mark.” While Mary is not an accountant, she recognizes the importance of having proper accounting systems and procedures in place. As Mary’s risk manager, you want to assist her with her compliance obligations. Which accounting system(s) would you recommend and why?



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## Property Valuation Methods and Financial Statements

### Learning Objective:

6.2 Distinguish among the different property valuations that appear on financial statements.



As part of identifying property exposures, some degree of assessment and valuation is required to determine the financial amount at risk. An organization may use more than one valuation method for different purposes. For example, the valuation of a building for tax purposes differs from the valuation for insurance purposes. It is essential to understand what type of valuation being used when examining financial statements.

**Property Exposures** – valuations are *estimated before* the loss and *measured after* the loss to the extent of the financial consequences suffered.

## Section 6: Financial Statement Analysis

Property valuations are estimated and measured by the following standard methodologies:

1. **Historical cost** – the original purchase price of property



Example: the value of a building on the day of purchase as shown on the financial statement

2. **Book value** – the historical cost, less accumulated depreciation



Example: the value of the same building, less depreciation, as carried on subsequent financial statements



On financial statements, fixed assets (long-term, or those that will be used for more than one year) are initially recorded at their historical cost, which is then adjusted downward for accounting depreciation. The result is the book value.

3. **Market value** – the amount a willing buyer will give to a willing seller



Example: The highest estimated price that a buyer would pay and a seller would accept for the building in an open and competitive market

4. **Replacement cost** – the amount to replace a damaged or destroyed piece of property with new property of like kind and quality with no regard for depreciation



Example: The cost to repair the building damaged by a tornado, using the same quality of construction and operational utility

1. Historical cost
2. Book value
3. Market value
4. Replacement cost
5. Actual cash value
6. Economic value
7. Functional replacement cost

## Section 6: Financial Statement Analysis

5. **Actual cash value** – the replacement cost less an allowance for depreciation or obsolescence



Example: The amount, which includes a deduction for depreciation, paid by a carrier to replace a stolen truck

6. **Economic value** – a future stream of income assigned to the property



Example: leasehold value of rental property, future rental income.

7. **Functional replacement cost** – the cost to repair or replace damaged or destroyed property with materials that are functionally the equivalent of the property



Example 1: A 200-year-old bank building with the original vault and tellers' cages and stained-glass windows, now operates as a hotel. It is valued at its functional replacement value (hotel) because, if damaged, identical materials are no longer available or are cost prohibitive.



Example 2: A university has a collection of rare books that are not replaceable. The only possible valuation appropriate is market value, but that does not work if the university is not willing to sell or if no serious buyer is interested. Instead of attempting to choose a fixed dollar value in case a book is destroyed or damaged, a more appropriate value might be the cost of restoration and repair of damaged pages. This type of valuation wording would be a manuscript form since there is no standardized form reflecting this property valuation method.

In some unusual circumstances, none of the previous property valuation methods are suitable, and the risk manager may need to devise a basis that is acceptable to both the underwriter and the organization.

## Check-In



A Cancun resort suffered a windstorm loss to the hotel building from a recent tropical storm system and is preparing its insurance proof of loss. The risk management department and accounting department have prepared the following exhibit:



<b>Cost to build ten years ago</b>	<b>\$ 37,000,000</b>
<b>Current construction cost</b>	<b>\$ 52,000,000</b>
<b>Accumulated depreciation as per the accounting records</b>	<b>\$ 6,000,000</b>
<b>Current comparable value appraisal for refinancing effort</b> <i>(30% of value was land)</i>	<b>\$ 80,000,000</b>
<b>Net present value of future income for the next 40 years</b>	<b>\$ 75,000,000</b>
<b>The insurance adjustor's calculated depreciation</b>	<b>\$ 12,000,000</b>

The risk management department has also calculated the following property valuations:

<b>Market value</b> <i>Current appraisal minus the land</i> $80,000 - (0.30 \times 80,000) = 56,000$	<b>\$ 56,000,000</b>
<b>Book value</b> <i>Historical cost minus accumulated depreciation</i>	<b>\$ 31,000,000</b>
<b>Replacement cost</b> <i>Current construction cost</i>	<b>\$ 52,000,000</b>
<b>Actual cash value</b> <i>Replacement cost minus insurance depreciation of \$12,000,000</i>	<b>\$ 40,000,000</b>

You know that the historical cost is \_\_\_\_\_.

## ▶▶ Knowledge Check



Your client owns a restaurant that is housed in an 18th-century brick bank building, that she purchased five years ago. The original furnishings of the bank remain, including the vault. All of these furnishings have been incorporated into the restaurant operations. Which of the property valuation methods would you recommend your client use to insure the building and its original contents?

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## A Look into Financial Statements

### Learning Objective:

6.3 Describe the purpose and components of:

- the income statement,
- the balance sheet, and
- the statement of cash flow.

Financial information and analysis are crucial for evaluating an organization's financial health. It is very difficult for an organization to establish or meet its objectives and/or goals without it. There are many users of financial information, including creditors, investors, stakeholders, internal and external management teams, risk managers, and regulatory bodies such as the SEC, IRS, and state agencies.

Risk managers use financial information and analysis to identify exposures and sources of funds for retention plans, to quantify exposure valuations, to determine and allocate the total cost of risk, and for compliance purposes.

# Financial Statement Types

1. **Income statement** – a summary of the organization's financial performance for a *specific period of time*
2. **Balance sheet** – a summary of the organization's assets, liabilities, and owner's equity as of a *specific point in time*
3. **Statement of cash flow** – a summary of the effects of cash on the operating, investing, and financial activities of an organization for a *specific period of time*

Risk managers typically have access to managerial accounting or internal accounting statements available. These statements do not have an auditor's opinion and may not include notes. These statements reflect what is happening in the organization financially and are not affected by tax rules or Securities and Exchange Commission regulations.

"External" risk managers, such as agents, brokers, underwriters, and other service providers, will likely not have access to managerial accounting statements or internal accounting statements.

## The Income Statement

The income statement is a summary of the organization's financial performance for a specific period of time. It measures the revenues generated and the expenses incurred to generate those revenues. The income statement is important because it allows businesses to compare trends in income and expenses over time.

### Income Statement Components:

- Revenue or sales
- Expenses
- Cost of goods sold (COGS)
- Depreciation, depletion, amortization
- Interest expense
- Taxes



### Revenue or sales

**Operating revenues** include the sales of goods and services. Some organizations, such as manufacturers, sell only products. Others, such as contractors, sell only services. Still, others sell both products and services. Further, some organizations, such as social service agencies or governments, do not "sell" products or services in the usual sense of the word. Regardless of



## Section 6: Financial Statement Analysis

the situation, the risk manager must be familiar with how the organization generates revenues to identify potential risks and/or opportunities.

Other revenue sources are considered *non-operating*. Non-operating income is gains or losses from sources not related to the typical activities of the business or organization. Non-operating income can include interest income, gains or losses from investments, property or asset sales, currency exchange, and other gains or losses not related to the operations of the organization.

### Expenses

**Operating expenses** are the costs a business incurs in maintain its operations, such as staff wages and office supplies. Operating expenses do not include the cost of goods sold (materials, direct labor, manufacturing overhead) or capital expenditures (larger expenses such as buildings or machines). Other examples of operating expenses typically include rent, insurance, research and marketing, utilities, accounting and legal fees, and travel expenses.

The risk manager must also be aware of *non-operating* expenses. Non-operating expenses are costs not directly related to core business operations. Examples of typical non-operating expenses are: interest payments on debt, restructuring costs, inventory write-offs, and payments to settle lawsuits.

Another type of non-operating expense results from the sale of long-term assets at a loss. Typical examples are buildings, business equipment, and land. If the cash received for the sale of a long-term asset is less than the asset's book value, the difference is recorded as a loss.



### Cost of Goods Sold (COGS)



The **cost of goods sold** (COGS) refers to the direct costs of producing the goods or products sold by an organization. This amount includes the cost of the materials and labor directly used to create the goods. It excludes indirect expenses, such as distribution costs and sales and marketing costs.

The exact calculation of COGS depends upon the nature of the organization. If the organization is a manufacturer, the COGS would include the cost of raw materials, supplies used in the manufacturing process, labor, transportation, and shipping, as well as other costs directly associated with the manufacturing process. If the organization is strictly a wholesaler or retailer, the COGS would be the cost of the beginning inventory, plus the cost of purchases, less the cost of the ending inventory. An organization that only provides services does not have a true COGS, but it can calculate the cost of services provided, which would include the same direct expenses without the cost of raw materials, process supplies, or inventory.

## Section 6: Financial Statement Analysis

Understanding the calculation of the COGS is essential for the evaluation of business interruption exposures and potential claims. Knowing the cost of goods sold helps risk managers estimate the company's net income. If the COGS increases, net income will decrease. While this movement is beneficial for income tax purposes, the business will have less profit to distribute to its shareholders. Businesses thus try to keep their COGS low so that net profits will be higher.

### Depreciation, Depletion, and Amortization



**Depreciation** is the reduction in the value of an asset over time. Accounting depreciation is a tax-management concept that allows for the setting aside of funds to replace assets as they wear out, which provides an expense to reduce income. Depreciation lowers income and tax liability, thereby generating positive cash flow. For example, a business may depreciate its office furniture over a 10-year period. The IRS has very specific rules regarding how depreciation is calculated.

**Depletion** is a reduction in inventory and a charge against income to allocate the cost of extracting natural resources such as timber, minerals, and oil from the earth. Like depreciation, depletion is a non-cash expense that lowers the cost value of an asset incrementally through scheduled charges to income.

**Amortization** is an accounting technique used to periodically reduce the book value of a loan or an intangible asset over a specified period. Concerning a loan, amortization focuses on spreading out loan payments over time, like a mortgage. When applied to an asset, amortization is similar to depreciation.

### Interest Expense

This is the cost incurred by an entity for borrowed funds. **Interest expense** is a non-operating expense shown on the income statement. It represents interest payable on any borrowings—bonds, loans, convertible debt, or lines of credit.



### Taxes



**Taxes** are mandatory contributions levied by a local, regional, or national governmental entity on individuals or corporations.



## Section 6: Financial Statement Analysis

Sample of a Consolidated Income Statement		
For the years ended December 31, FYX1 and FYX0		
	FYX1	FYX0
Revenue	\$ 350,000,000	\$ 325,000,000
Less: Operating expenses*	312,000,000	285,000,000
Less: Depreciation expenses	15,000,000	15,000,000
Net operating income (EBIT)	\$ 22,500,000	\$ 25,000,000
Less: Interest expense	10,000,000	11,000,000
Earnings before taxes	\$ 12,500,000	\$ 14,000,000
Less: Income taxes	5,000,000	5,600,000
Net income (net profit after tax)	\$ 7,500,000	\$ 8,400,000
Less: Dividends to common shareholders	3,500,000	3,500,000
Addition to retained earnings	\$ 4,000,000	\$ 4,900,000
Earnings per share (5,000,000 shares outstanding)	\$1.50	\$1.68

\*NOTE: If the above organization were a manufacturer, the section titled Operating expenses might look like this:

Cost of goods sold	
Raw materials	\$ 100,000,000
Process supplies	20,000,000
Shipping and transportation	5,000,000
Labor	10,000,000
Other expenses	2,000,000
	\$ 235,000,000
Operating expenses	\$ 77,000,000



The specific period of time for the income statement is not necessarily a calendar year or other twelve-month period (fiscal period). Statements can also be drawn on a quarterly, monthly, or weekly basis.

## Check-In



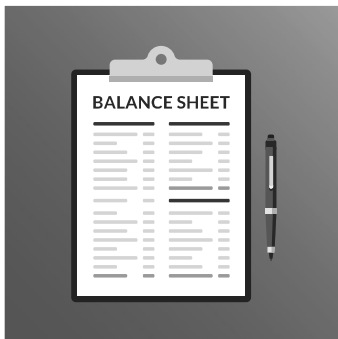
**Directions:** Select the term that best completes each statement.

1. Financial statement analysis may reveal understated or overstated \_\_\_\_\_ being carried on an organization's books.  

**financial capabilities****values**
2. \_\_\_\_\_ is the reduction in the value of an asset over time.  

**Depreciation****Amortization**

## The Balance Sheet



A balance sheet is a summary of the organization's assets, liabilities, and owner's equity as of a specific point in time. It reflects the liquidity of the organization, which is the organization's ability to pay off its short-term liabilities, such as accounts payable, that come due in less than a year. Often, banks and investors consider liquidity when deciding whether to lend or invest money in a business. Should the management team of an organization make business decisions primarily based on the income statement, it often will regret this practice. The balance sheet is equally important to the income statement.

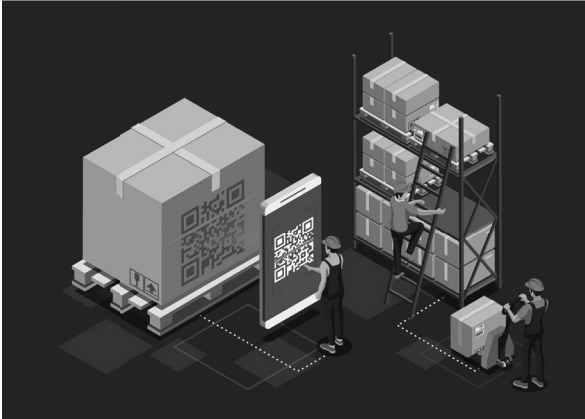
### Balance Sheet Components:

- Current assets
- Inventory
- Marketable securities
- Fixed assets
- Current liabilities
- Long-term liabilities
- Stockholders' equity

### Current Assets

Current assets are all the assets of an organization that are expected to be sold or used within the next year as a result of standard business operations. Current assets include cash, cash equivalents, accounts receivable, inventory, marketable securities, prepaid expenses, and other liquid assets.

### Inventory



Inventory refers to the raw materials used to produce goods as well as the goods that are available for sale. It is classified as a current asset on an organization's balance sheet. The three types of inventory are raw materials, work in progress (unfinished inventory), and finished goods.

### Marketable Securities

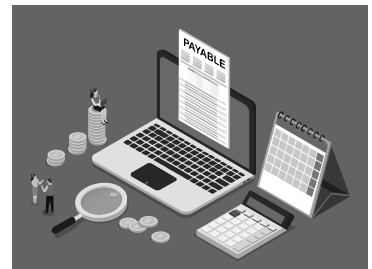
These are highly liquid securities such as publicly traded stocks and bonds. These are assets that can be easily converted into cash.

### Fixed Assets

Fixed assets are long-term tangible property or equipment an organization owns and uses in its operations to generate income. The general assumption about fixed assets is that they are expected to last, be consumed, or be converted into cash after at least one year. Examples of fixed assets are property, plant, equipment, investments, and intangible assets such as patents and goodwill.

### Current Liabilities

Current liabilities are a company's short-term financial obligations that are due within one year or a normal operating cycle. Current liabilities are typically settled using current assets, which are assets that are used up within one year. Examples of current liabilities include accounts payable, accruals (expenses that are recorded when a transaction occurs, rather than when payment is made), short-term notes payable, and the current portion (due within the next twelve months).



### Long-term Liabilities

Long-term liabilities, also referred to as long-term debts, are debts a company owes to third-party creditors that are payable more than 12 months after the date of the transaction. This distinguishes them from current liabilities, which a company must pay within 12 months. Examples of long-term liabilities include mortgages, deferred income tax liability, and long-term debt.

## Stockholders' Equity



Stockholders' equity (or business net worth) shows how much the owners of a company have invested in the business—either by investing money in it or by retaining earnings over time. On the balance sheet, stockholders' equity is broken down into four broad categories: common shares of stock, preferred shares of stock, additional paid-in capital, and retained earnings.

Common shares of stock, sometimes called capital stock, are the standard ownership share of a corporation. Preferred shares of stock are shares of a company's stock with dividends that are paid out to stockholders before common stock dividends are issued. Holders of common shares have voting rights; holders of preferred shares do not. If the company enters bankruptcy, preferred stockholders are entitled to be paid from company assets before common stockholders.

Additional paid-in capital is the value of a company's shares above the value at which they were originally issued. This can apply to both common and preferred shares. For example, a company may issue its shares for \$1 each. However, the initial selling price may be \$2 for a share with a face value of \$1.

Retained earnings are an accumulation of a company's net income and net losses over all the years the business has been in operation that have not have been distributed to owners. Retained earnings make up part of the stockholder's equity on the balance sheet.

### Check-In



**Directions:** Indicate whether these components are part of the balance sheet or the income statement.

- |  |   |
|--|---|
| <p>1. Operating revenue</p> <p><input type="checkbox"/> Balance sheet</p> <p><input type="checkbox"/> Income statement</p>   | <p>4. Fixed assets</p> <p><input type="checkbox"/> Balance sheet</p> <p><input type="checkbox"/> Income statement</p>         |
| <p>2. Current liabilities</p> <p><input type="checkbox"/> Balance sheet</p> <p><input type="checkbox"/> Income statement</p> | <p>5. Shareholders' equity</p> <p><input type="checkbox"/> Balance sheet</p> <p><input type="checkbox"/> Income statement</p> |
| <p>3. Cost of goods sold</p> <p><input type="checkbox"/> Balance sheet</p> <p><input type="checkbox"/> Income statement</p>  | <p>6. Depreciation</p> <p><input type="checkbox"/> Balance sheet</p> <p><input type="checkbox"/> Income statement</p>         |

## Section 6: Financial Statement Analysis

Sample of a Consolidated Balance Sheet		
For the years ended December 31, FYX1 and FYX0 (\$ in thousands)		
Assets	FYX1	FYX0
Current assets		
Cash	\$147,000	\$122,000
Inventories	26,000	32,000
Accounts receivable	13,000	15,000
Total current assets	\$186,000	\$169,000
Fixed assets		
Property	\$344,000	\$344,000
Less: Accumulated depreciation	67,000	52,000
Net fixed assets	\$277,000	\$292,000
<b>Total assets</b>	<b>\$463,000</b>	<b>\$461,000</b>
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	\$ 11,000	\$ 9,000
Notes payable	25,000	25,000
Other current liabilities	3,000	3,000
Total current liabilities	\$ 39,000	\$ 37,000
Long-term debt	289,000	293,000
Total liabilities	\$328,000	\$330,000
Stockholders' equity		
Common stock (5,000,000 shares outstanding at par of \$10)	50,000	50,000
Retained earnings	85,000	81,000
Total stockholder equity	\$135,000	\$131,000
<b>Total liabilities and equity</b>	<b>\$463,000</b>	<b>\$461,000</b>

## The Statement of Cash Flow



The statement of cash flows is a report that summarizes the effects of cash on an organization's operating, investing, and financing activities of for a specific period.

The statement of cash flow provides aggregate data regarding all cash inflows a company receives from its ongoing operations and external investment sources. It also includes all cash outflows that cover business activities and investments during a specified period.

### Statement of Cash Flow Components:

- Operating activities
- Investing activities
- Financing activities
- Adjustments for non-cash transactions

### Operating Activities

A cash flow statement categorizes business activities into operating, investing, and financing activities. As you are aware, operating activities encompass cash received from the sale of goods and services, interest revenue, dividend revenue, and any other sources that are not classified as investment or financing activities. Operating activities also involve cash payments for raw materials or inventory, salaries and wages, taxes, duties, fines or penalties, interest, and any other expenses that are not classified as investing or financing activities.

### Investing Activities

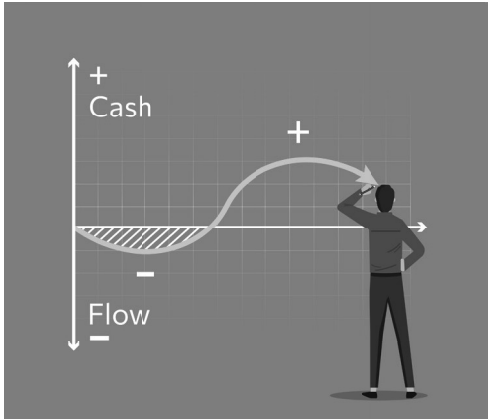
Cash received from investing activities includes collections and sales of loans, sales of equity investments, and returns on investments from those instruments. Also involved is cash from the sales of property, plant, and equipment. Cash payments received from investment activities include loans made and payments made to acquire debt, the purchase of equity investments in other entities, as well as purchase of property, plant, and equipment.



### Financing Activities

Cash flow statement financing activities are comprised of cash received from issuing equity investments and the sale of bonds, mortgages, and notes. On the other side, cash outflows from financing activities, shown on the cash flow statement, are typically comprised of cash dividends, purchase of treasury stock (treasury stock is formerly outstanding stock that has been repurchased and is being held by the issuing organization), and repayment of loans.

### Adjustments for Non-cash Transactions



To adjust the cash flow from an accrual basis to a basis that reflects the change in the cash position of the company, the cash flow statement compensates for the effect of all transactions that did not involve the use of cash during the period. This is what is known as a non-cash adjustment.

Deductions from revenue not requiring a cash outlay are added back to income on the statement of cash flow. Examples of these non-cash outlays include depreciation, depletion, amortization of intangible assets (such as patents and goodwill), amortization of discounts on bonds payable, and losses from disposal of

non-current assets.

On the other side, you will find non-cash revenues or credits that require a deduction from net income are gains from disposals of non-current assets, income from investments carried under the equity method, and amortization of premium on bonds payable.

A statement of cash flows provides insight into how the organization's revenues and expenses flow, how its assets are acquired or divested, and how its financing activities are conducted. This is particularly useful when the risk manager is considering a risk financing plan that involves increased use of the organization's own cash. The specific "period of time" for the statement is not necessarily a calendar year or other twelve-month period (fiscal period). Statements can also be drawn on a quarterly, monthly, or weekly basis.

## Section 6: Financial Statement Analysis

Sample of a Consolidated Statement of Cash Flow		
For the years ended 12/31/XX (\$ in thousands)		
	Inflows	Outflows
Cash inflows from operating activities <sup>1</sup>	\$ 32,500	
Cash outflows from operating activities		\$ 0
Cash inflows from investing activities	\$ 0	
Cash outflows from investing activities		\$ 0
Cash inflows from financing activities	\$ 0	
Cash outflows from financing activities <sup>2</sup>		\$ 7,500
Total inflows	\$ 32,500	
Total outflows		\$ 7,500
Net increase in cash	\$ 25,000	
Beginning cash	\$122,000	
Ending cash	\$147,000	
Net increase in cash	\$ 25,000	
Notes to the Statement of Cash Flow		
<sup>1</sup> Cash inflows from operating activities		
Net income		\$ 7,500
Change in accounts receivable		2,000
Change in inventory		6,000
Change in accounts payable		2,000
Change in depreciation		15,000
Total		\$ 32,500
<sup>2</sup> Cash outflows from financing activities		
Payment of dividends		\$ 3,500
Retirement of long-term debt		4,000
Total		\$ 7,500

*Note: It would be unusual to have no cash flow from investing activities.*

*The example is designed to provide a simple illustration of a Statement of Cash Flows, its information content, and its relationship to the Income Statement and Balance Sheet.*



## Check-In



Rita is reviewing the statement of cash flow for her organization. She is becoming concerned that outflows exceed inflows by a significant amount. While she knows the business is seasonal, she does not believe that the numbers can be correct. What is the first thing Rita should check before raising her concerns?

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## ▶▶ Knowledge Check



1. Mary, your risk management intern, is looking at the income statement of your company. She is confused by the difference between depreciation and amortization. Provide Mary with an example that illustrates each of these concepts.



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2. A balance sheet is a summary of the organization's assets, liabilities, and owner's equity as of a specific point in time. Why would the balance sheet be of interest to potential investors?

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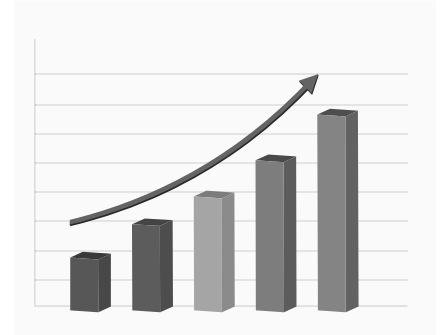
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# Financial Ratios

## Learning Objective:

6.4 Understand the purpose of financial ratios, including the formulas and common calculations.

Financial analysis supports informed financial decision-making, establishes effective credit policies, and measures operational efficiency and employee performance. It involves the selection, evaluation, and interpretation of financial data. Financial ratios are used by financial managers as indicators of financial performance and the financial health of an organization; ratios provide insight into the financial statements.



When using common financial ratios, it is important to remember two points:

1. There is no “perfect” or “ideal” ratio. The appropriate ratio or range of ratios depends largely upon the type of organization.



A railroad has numerous fixed assets and long-term liabilities. Their ratios will be significantly different from those of an organization with few fixed assets and long-term liabilities. Ratios are most useful for comparison with peers or over time.

2. The ratios are very dependent upon the type of financial system used to generate the numerator and denominator.

## Selected Financial ratios

*Liquidity ratios*, some examples of which are shown below, measure the organization’s ability to pay bills over the short term.

$$\frac{\text{current assets}}{\text{current liabilities}} = \text{current ratio}$$

$$\frac{\text{current assets} - \text{inventory}}{\text{current liabilities}} = \text{quick ratio}$$

$$\frac{\text{current assets} - \text{current liabilities}}{\text{net working capital}}$$

## Section 6: Financial Statement Analysis

*Debt ratios* measure an organization's ability to repay its creditors over the long term and assess its financial leverage.

$$\frac{\text{total debt}}{\text{total assets}} = \text{debt ratio}$$

$$\frac{\text{total debt}}{\text{stockholders' equity}} = \text{debt-to-equity ratio}$$

*Profitability ratios* measure returns in several ways.

$$\frac{\text{net income}}{\text{sales}} = \text{net profit margin}$$

$$\frac{\text{net income}}{\text{total assets}} = \text{return on assets (ROA)}$$

$$\frac{\text{net income}}{\text{stockholders' equity}} = \text{return on equity (ROE)}$$

$$\frac{\text{after-tax net income}}{\text{number of shares of outstanding common stock}} = \text{earnings per share (EPS)}$$

## Section 6: Financial Statement Analysis

Key Financial Ratio Summary	
Ratio	Benchmark Standard
<b>Liquidity</b>	
Current ratio = current assets ÷ current liabilities	1.50 and higher
Quick ratio = (current assets – inventory) ÷ current liabilities	1.00 and higher
Net working capital = current assets – current liabilities	
<b>Debt</b>	
Debt ratio = total debt ÷ total assets	.50 and lower
Debt to equity ratio = total debt ÷ stockholders' equity	1.00 and lower
<b>Profitability</b>	
Net profit margin = net income ÷ sales	Varies by industry
Return on assets (ROA) = net income ÷ total assets	Varies by industry
Return on equity (ROE) = net income ÷ equity	15%
Earnings per share (EPS) = after-tax net income ÷ number of common shares outstanding	



These “benchmark standards” are generic—not absolute. For example, a utility company will typically have a higher debt ratio, driven by long-term bonds, compared to a high-tech company with little debt.

## ▶▶ Knowledge Check



Mary Donner, a risk manager, is preparing a report on the state of the risk management department for Sarah Packer, the CFO. Mary knows that Sarah supports the use of financial statement ratio analysis in measuring the progress of the company over time.

Mary calculates the following financial ratios by using the most recent financial statements to measure the progress of the organization. She prepares a report to share with Sarah that discloses the following financial information.

What red flags, if any, can you identify from these numbers?

1. Current ratio = 4.77  
Current assets/Current liabilities                      186,000/39,000

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2. Debt ratio = 0.708  
Total debts/Total assets                                      328,000/463,000

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3. Net profit margin = 2.14%  
Net profit/Sales    7,500/350,000

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4. Return on equity = 5.5%  
Net income/Equity    7,500/135,000

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# Financial Statement Analysis and Risk Management

## Learning Objective:

6.5 Explain how financial statement analysis is used as a risk management tool.

Financial statement analysis is used to identify values (assets) that are subject to loss and the financial impact on the organization after a loss. Financial statements allow the risk manager to analyze both growth in expenses and reduction in revenues. The person conducting the analysis must review the complete financial statements, including the balance sheet, income statement, and statement of cash flow.

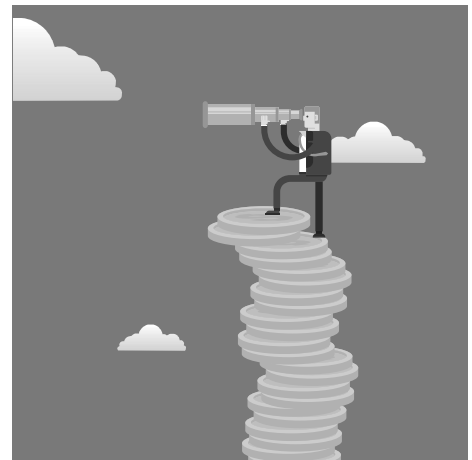


Financial statement analysis usually does not take into account business risks and makes it difficult to predict the effect on the organization of supply chain disruptions or loss of a key vendor or supplier.

## Uses of Financial Statement Analysis

### 1. Review Asset Valuation (Balance Sheet)

Certain assets are reflected in financial statements, which are useful for determining an organization's values exposed to loss, e.g., buildings, inventory, and accounts receivable. A risk manager can discover undervalued assets and unreported assets by reviewing financial statements. It is important to remember that financial statements are based on historical data, which may not be relevant in current circumstance. Also, some valuations are based upon tax management considerations, such as inventory valuation or depreciation.



### 2. Assess Net Income Loss Potential (Income Statement)

Net income losses reduce the available capital to meet organizational objectives and goals. Planned expansion may need to be deferred. The overall budget is affected, and less capital will be available for risk management initiatives and programs. Again, the cost of goods sold and depreciation are driven by tax management considerations.

The importance of a risk manager knowing the sources of income and expense cannot be overstated. Income can easily be driven by the financial strength of historical customers,

## Section 6: Financial Statement Analysis

by variability in the marketplace, and by economic swings far beyond the control of a risk manager.

Likewise, risk managers must be aware of the impact of a loss on the organization's profitability. The loss of a major supplier or customer, as well as storm damage, may well impact profits. When and where a loss occurs, such as during a low or high season, just before or after, or during a specific season, at a specific location, division, or branch, it will likely impact the organization's profitability as well. If the organization has international operations, the exposure is compounded.

Risk managers must also evaluate those expenses that will continue after a loss. Of those expenses, which will continue, and which are controllable? It is obvious how important expense control is when a loss occurs, particularly if it results in a loss of revenue.

### 3. Assess Liquidity and Financial Strength (Balance Sheet and Statement of Cash Flow)

Risk managers use the balance sheet to help identify hidden assets and liabilities, as well as undisclosed assets, leased assets, and off-balance sheet liabilities, of which they may be unaware. Organizational management may make financial decisions without communicating with or considering risk management. As a result, a risk manager may be unaware of financial transactions or decisions.



The balance sheet and statement of cash flows can also be used to evaluate expansion plans. If an organization is considering opening a new manufacturing location, does it have the financial capacity to obtain financing from an outside source, or does it have the capability to finance the new location from its current cash flow?

Risk managers should know the importance of liquidity to their organization. Liquidity refers to the amount of cash and other assets (such as accounts receivable) over and above what the organization owes on any current debt the organization may have. Liquidity is a key consideration for lending institutions when an organization seeks outside financing.

### 4. Assess Risk Tolerance Levels and Bonding Capacity

Risk managers are involved in understanding management's tolerance for risk. Risk tolerance is the maximum amount of risk an organization is willing to assume. An organization can have a higher or lower level of risk tolerance. Having a very low tolerance for risk is known as being risk-averse. If the accepted level of risk is too high, management runs the risk of ruin should a catastrophic event take place. If the accepted level of risk is too low, executives run the risk of missing business opportunities.

An organization can assume risk through contract leases and hold harmless agreements, for example. A useful source of this type of risk information is the financial statement notes. These same notes can also provide risk information on outstanding and previous litigation.

## Section 6: Financial Statement Analysis

If an organization performs construction, particularly for public entities (such as road and bridge construction or governmental building construction), surety bonds are a necessity. Qualifying for surety bonds revolves around the three Cs of surety: character, capacity, and capital. Character includes the organization's reputation in the marketplace, its integrity, and the general manner by which the organization conducts its business. Capacity refers to an organization's ability to profitably complete its projects, both organizationally and technically. Capital refers to the organization's financial capability to complete its projects. The surety company anticipates no losses; therefore, it looks to the organization's assets for reimbursement of any payments made.

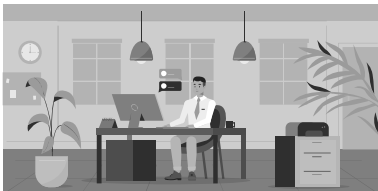
### 5. Assess Risk Using Financial Projections or Pro-forma Statements

Each of the organization's financial statements for a specific date or period of time can be used to create financial projections and/or pro forma statements. A pro forma financial statement is a future-looking document. It is a forecast of what an organization intends to do financially over a specified period. Generally, the pro forma can look at the next five years or more. It can identify risk exposures that would not be anticipated otherwise.

Ultimately, the financial projection, or pro forma bottom line, shows the anticipated organizational financial results. Some organizations periodically review the pro forma statement with actual results and then make appropriate changes or seek to understand why variances exist and what needs to be done to correct them.



### Knowledge Check



Allen is an intern in the risk management department. He wants to understand the impact of net income losses on the company and on the risk management department budget. As his boss, explain to Allen how he can derive information from the financial statements.

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## A Note on the Cost of Capital

The cost of capital refers the cost associated with various sources of financing for an organization and is used to determine which sources are cost-effective and should be pursued. In short, what are the terms and interest rates of obtaining capital from outside the organization to fund operations, expansion, and strategic goals? The risk manager must understand that there are monetary costs associated with each source of capital; however, additional risks must also be considered, such as investor control, compliance requirements, and the impact of other stakeholders.



### Common Sources of Capital:

1. **Long-term debt** – funds borrowed from external sources payable over time; long-term debt is the least expensive source of capital because there is low risk to the investor (typically a financial institution), and the interest paid is tax-deductible
2. **Sale of preferred stock** – a type of stock issued by a corporation that allows ownership privileges with respect to payment of dividends and distribution of assets greater than those of common stock owners but with no voting rights
3. **Sale of common stock** – a share or shares of ownership in a corporation with rights to vote on management and corporate policy, but not preferred over other classes of stock in regard to the payment of dividends or distribution of assets
4. **Retained earnings** – internal funds retained from net income and not distributed to holders of common stock

### Cost of Capital Calculation

The risk manager does not determine the cost of capital; instead, the chief financial officer determines the cost of capital and provides the desired rate of return on projects for the risk manager to use for analysis and decision-making.

## Summary

While many may consider reviewing financial statements as dry reading, current compliance requirements for financial reporting have expanded and enhanced the information that can be garnered from a company's financial statements. Risk managers must be aware of their client organizations' financial strength and position to make well-reasoned recommendations. Analysis of the financial statements aids in that process.

## Review of Learning Objectives

- 6.1 *Understand the difference between accounting and finance and the various types of accounting systems a risk manager might encounter.*
- 6.2 *Distinguish among the different property valuations that appear on financial statements.*
- 6.3 *Describe the purpose and components of:*
  - *the income statement,*
  - *the balance sheet, and*
  - *the statement of cash flow.*
- 6.4 *Understand the purpose of financial ratios, including the formulas and common calculations.*
- 6.5 *Explain how financial statement analysis is used as a risk management tool.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](http://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

#### Video Clip

View a video clip about an important concept related to a learning objective in this section.



Speaking From Experience: Financial Statement Analysis with Bill Toll, CIC,  
President, Bill Toll & Associates

## Section 6 Self-Quiz

**Directions:** Indicate whether each statement is True or False.

1. Finance is the process of recording and classifying business and financial transactions and reporting them on an organization's financial statements.

**True**

**False**

2. The process of managing an organization's assets, liabilities, and cash flow to maximize shareholder (or stakeholder) wealth is known as risk management.

**True**

**False**

3. US law requires businesses that release financial statements to the public and publicly traded companies to follow GAAP guidelines.

**True**

**False**

4. Managerial accounting is a set of accounting regulations prescribed by the NAIC for the preparation of the insurance company's financial statements.

**True**

**False**

5. Governmental, or fund accounting, is used in organizations whose purpose is for the public good. Public or private investment in these organizations does not occur and their operations do not compare to typical business entities.

**True**

**False**

## Section 6: Financial Statement Analysis

**Directions:** Select the correct letter to match each term with the appropriate definition.

A. Market value	_____ The historical cost, less accumulated depreciation
B. Economic value	_____ The amount a willing buyer will give to a willing seller
C. Historical cost	_____ The original purchase price of property
D. Functional replacement cost	_____ A future stream of income assigned to the property
E. Actual cash value	_____ The replacement cost, less an allowance for depreciation or obsolescence
F. Book value	_____ The cost to repair or replace damaged or destroyed property with materials that are essentially the equivalent of the property, when original materials are unavailable
G. Other property valuation bases	_____ In some unusual circumstances, none of the previous property valuation methods are suitable, and the risk manager may need to devise a basis that is acceptable to both the underwriter and the organization.

**Directions:** Select the correct answer.

- A summary of the organization's assets, liabilities, and owner's equity as of a specific point in time describes the:
  - ☐ income statement
  - ☐ balance sheet
  - ☐ statement of cash flow
- A summary of the effects of cash on the operating, investing, and financial activities of an organization for a specific period of time describes the:
  - ☐ balance sheet
  - ☐ statement of cash flow
  - ☐ income statement
- A summary of the organization's financial performance for a specific period of time describes the:
  - ☐ balance sheet
  - ☐ income statement
  - ☐ statement of cash flow

## Section 6: Financial Statement Analysis

4. When using common financial ratios, there are important points to remember. Identify what is NOT one of these points.
- ☐ The organization's ability to repay creditors over the long term does not impact the organization's financial leverage.
  - ☐ There is no "perfect" or "ideal" ratio. The appropriate ratio or range of ratios depends largely upon the type of organization.
  - ☐ The ratios are very dependent upon the type of financial system used to generate the numerator and denominator.
5. Profitability ratios measure returns in several ways. An example of this would be which one of the following formulas?
- ☐ Quick ratio =  $(\text{current assets} - \text{inventory}) \div \text{current liabilities}$
  - ☐ Debt ratio =  $\text{total debt} \div \text{total assets}$
  - ☐ Return on assets (ROA) =  $\text{net income} \div \text{total assets}$
6. Financial statement analysis is used to do all of the following EXCEPT:
- ☐ review asset valuation
  - ☐ assess liquidity and financial strength
  - ☐ benchmark financial capacity against competitors
  - ☐ assess risk tolerance levels and bonding capacity

# Section 7: Introduction to Enterprise Risk Management

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## Section Goal:

In this section, you will learn about enterprise risk management (ERM) and how it differs from traditional risk management. The requirements for ERM implementation and the benefits of implementing ERM are also discussed.

## Learning Objectives:

- 7.1 *Understand the definitions of enterprise risk management (ERM) and traditional risk management (TRM), including the differences in their approaches.*
- 7.2 *Identify the ERM broad categories of risk, including examples for each.*
- 7.3 *Explain the impacts of an effective ERM program on an organization.*
- 7.4 *Explain the requirements of the ERM implementation process, including the obstacles to ERM implementation.*

Traditional risk management (TRM) developed as a discipline separate from insurance in the mid-20th century, although its focus was initially solely on conventional insurance and loss control. TRM is considered a functional, siloed view of risks affecting one or more areas of the organization, addressing only pure risk—the chance of loss or no loss. This is often referred to as the identification of hazard risks, where the emphasis is to identify exposures subject to financial loss, the perils that cause the loss, and the hazards that increase the likelihood and/or severity of the loss; these risks are most often insurable.



With the increasing use of various financial instruments, such as derivatives, in the 1970s and 1980s to manage risks, the focus of risk management began to change. Since financial instruments have upside risks with the potential for profit and downside risks with the potential for loss, risk managers and other financial managers realized that they could handle more diverse risks than the traditional insurance market and traditional risk management discipline would allow. The term “**enterprise risk management**” was coined to distinguish this new approach to handling speculative risks, where there can be a gain, a loss, or a break-even point.

# What is Enterprise Risk Management?

## Learning Objective:

7.1 Understand the definitions of enterprise risk management (ERM) and traditional risk management (TRM), including the differences in their approaches.

Enterprise risk management (ERM) has evolved from traditional risk management, which heavily relied on insurance as a primary source of external financing for risk. ERM is tied to the strategic goals and objectives of the organization. All areas of the organization are involved, and everyone becomes a manager of risk, at least to the extent of the scope of their activities and functions.

Since organizations' strategic goals, objectives, and personnel are so diverse, there is no standard definition of "enterprise risk management." In fact, a simple internet search of ERM will yield many different versions of what the concept means, each endorsed by a user. For our purposes in the CRM Program, however, a generic definition is used:

*ERM is a cross-functional view of risks affecting all areas of the entire organization, thus embracing speculative risks.*



ERM is also known by other names, such as:

- enterprise risk management;
- holistic risk management;
- integrated risk management; and
- strategic risk management.

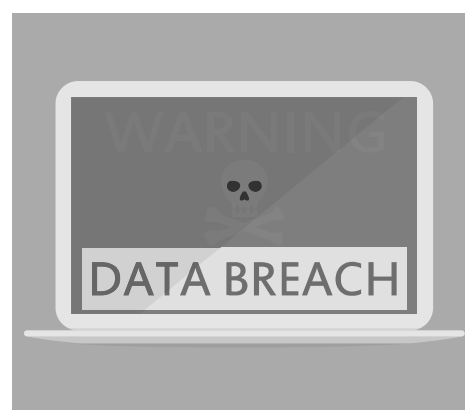
Consider the following example, which examines the difference between a TRM and an ERM approach to a common scenario.



**Scenario:** At Raina's Realty, there has been a targeted attack on the electronic database containing customer information. As a result, private client information has now been leaked.

**TRM approach:** This is an information technology (IT) problem, and the solution will be an IT solution such as additional firewalls, security protocols, and the like.

**ERM approach:** This event can harm the organization's reputation as a result of the breach disclosing private client information. The solution will involve all areas of the organization, not just the IT department. This may include marketing, advertising, press releases and newsletters, and various other activities in addition to the usual IT solutions.





## Section 7: Introduction to Enterprise Risk Management

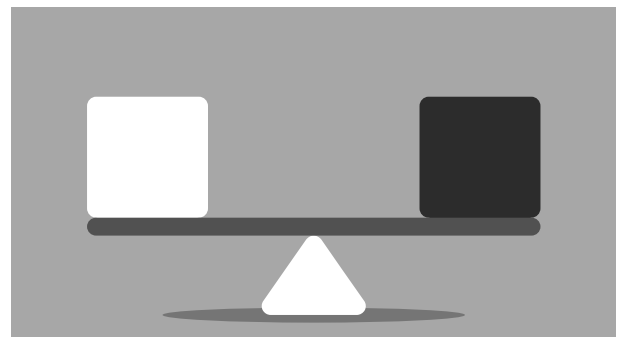
It is important to consider what ERM *is* and what it *is not*.

ERM is:	ERM is not:
<ul style="list-style-type: none"><li>• An ongoing process throughout an entire organization</li><li>• A strategic decision-making process</li><li>• Applied at every level of the organization</li><li>• Focused on an entity-wide view of risk</li><li>• Supportive of strategic objectives and goals</li></ul>	<ul style="list-style-type: none"><li>• A plan to eliminate all risks</li><li>• Solely focused on compliance and disclosure requirements</li><li>• A collage of disparate policies and approaches</li><li>• A replacement for internal controls</li><li>• Simply having a Chief Risk Officer</li></ul>

Now that you understand the inherent differences between TRM and ERM, we will further examine the distinct approaches of each.

### Comparison of TRM and ERM Approaches

ERM has a general framework similar to the TRM framework, but it addresses all types of risks, including both pure and speculative ones. ERM seeks to identify both the upside and downside risks, assess positive and negative impacts, and determine response strategies to minimize the negative impacts and maximize the positive ones. The approaches to managing risks vary greatly between the two disciplines.



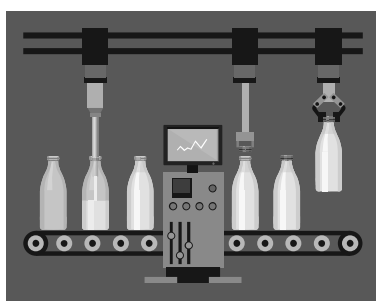
- ERM is cross-functional, a coordinated treatment of risk across all areas of the organization. Traditional risk management (TRM) is a singularly functional approach, focusing on a specific treatment of risk within an organizational area.
- ERM's perspective is that managing risk has both positive potential and a negative potential. TRM's perspective is that risk has only a downside or negative potential.
- ERM is linked to strategic objectives or key business objectives. TRM is linked to the cause of loss, which is prevented or reduced.
- ERM utilizes subject matter experts and risk committees to identify organizational risks and to distribute accountability to risk owners and stakeholders. TRM places risk identification and ownership with the risk manager.
- ERM is proactive and opportunistic; TRM is reactive and defensive.

## Section 7: Introduction to Enterprise Risk Management

Risk Management Approaches	
TRM	ERM
Manages downside risks	Risk has the potential to affect both upside and downside
Oriented to cause-of-loss; tied to minimizing risk impact	Tied to strategic objectives or key business objectives
A functional, siloed treatment of risk within an organizational area	A coordinated, cross-functional treatment of risk across all areas of the organization
Places risk identification and ownership with the risk manager or individual department manager	Uses subject-matter experts and risk committees to identify organizational risks  Spreads accountability to risk owners and trains all stakeholders to be responsible for managing risk
Most often reactive	Proactive and opportunistic

The concept of risk management has evolved over time from insurance purchasing to finding ways to minimize the potential for losses and controlling their impact. ERM embraces speculative risk and considers the upside of risk-taking to benefit the organization and its stakeholders.

### ▶▶ Knowledge Check



A beverage manufacturer with a strong market share is considering launching a new low-carb formulation of their beverage. Historically risk-averse, they are seeking to move from a TRM perspective to ERM. Several members of the board do not understand ERM and believe that it poses a dangerous risk, perceiving only the downside. You have been part of the due diligence team that researched this proposal and value the ERM approach. Please explain how ERM would consider the upside of taking this risk.



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# Broad Categories of Risk for ERM

## Learning Objective:

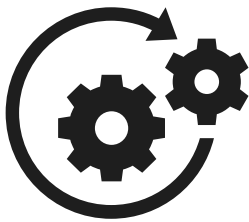
7.2 Identify the ERM broad categories of risk, including examples for each.

Since ERM focuses on *all* risks that impact the organization, it becomes challenging to discuss these risks without a simplifying approach. To aid in identification and analysis, the risks can be grouped into four broad categories: operational, financial, hazard, and strategic. ERM extends into each of these areas to include any activity that could threaten or enhance the achievement of the organization's goals and objectives. Enterprise risk management impacts several key management processes within the organization, including strategic planning, internal audit, capital management, asset allocation, risk financing, and merger and acquisition activities.

Broad Categories of Risk for ERM



## Operational Risks



Operational risks are those whose origins are centered in the principal operations of the organization—the day-to-day affairs. These risks are associated with regulations and the regulatory environment, community relationships, supply chain considerations, quality control issues, information systems, accounting controls, and talent management.



The ports of Los Angeles and Long Beach, California, have historically experienced shipping delays and backlogs of unloading container vessels. These backups affect the flow of—mostly Asian—goods and products to much of the US, creating supply chain issues for many organizations and retailers.

### Financial Risks

Financial risks are those risks that originate from the decisions made by the finance department of an organization. These are closely associated with interest rates, investments, credit, liquidity, asset market value, equity and commodity market risks, receivables, currency and foreign exchange, and cash flow.



A company's choice of investment vehicles—mutual funds, bonds, money market funds—creates a financial risk to the value of the investment. The vehicle chosen may not perform as expected, and returns could be unsatisfactory. Additionally, the market may be unstable, resulting in a portion of the initial investment being lost.

### Hazard Risks

Hazard risks are those commonly addressed in traditional risk management programs. Typically, these take the form of legal liability, property damage, and natural catastrophes, and arise from contracts, natural events, vendor and supplier relationships, litigation, public access and interaction, products and services, property, and employee activities.



The potential for property damage due to wildfires in California during a dry spell is a hazard risk. So is the potential for earthquakes in that same location.

### Strategic Risks

Strategic risks are those risks that originate from decisions made in the executive boardroom. These risks are associated with identifying customer demands, industry changes, competitive pressures, merger and acquisition integration, research and development, intellectual capital, marketing, and board composition.



A vanilla extract producer located in Mexico decides to expand its distribution channels into the United States. The distribution contracts are signed, and the stores are awaiting the product for their shelves. The entire operation is closed by the US Food and Drug Administration due to the alcohol content in the vanilla exceeding established standards.

## Check-In



Identify which of the ERM broad categories of risk apply to the following examples:

1. Despite widespread public commentary and media attention, a university decides it does not need to examine its diversity policies.  
  
\_\_\_\_\_
2. D.C. Power believes the demand for electricity will skyrocket following predictions for record temperature highs during the summer. They purchase “Congestion Contracts” to ensure delivery of power from remote locations in times of greatest demand.  
  
\_\_\_\_\_
3. A well-known producer of baked goods uses a single source for its flour.  
  
\_\_\_\_\_
4. An automobile manufacturer wishes to create an injury-free vehicle by 2030. The car of the future will be able to steer, brake, and learn about the road ahead from a vast array of electronic sensors located around the vehicle.  
  
\_\_\_\_\_

## Section 7: Introduction to Enterprise Risk Management

Examples of the ERM Broad Categories of Risk	
Operational	Financial
Board composition	Currency/foreign exchange
Regulatory environment	Interest rates
Community relations	Credit
Supply chain	Market risk (equities, commodities)
Quality control	Receivables
Information systems	Liquidity
Accounting controls	Cash flows
Talent management and acquisition	
Hazard	Strategic
Contracts	Customer demand
Natural events	Industry changes
Vendors and suppliers	Competitive pressures
Litigation	Merger and acquisition integration
Public access/interaction	Research and development
Products and services	Intellectual capital
Assets and property	Marketing
Employees	

## ▶▶ Knowledge Check



Betsy is the owner of a small delivery service. She is wondering if ERM is right for her company. Betsy just doesn't see how all of the broad categories of risk can apply to her. She understands how hazard applies, but the others are not as clear-cut. Using rising gasoline prices as an example, explain to Betsy how those prices fit within the financial and strategic categories.

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## The Impact of ERM on an Organization

### Learning Objective:

*7.3 Explain the impacts of an effective ERM program on an organization.*

When enterprise risk management programs are in place, several benefits accrue to the organization, in addition to enhancing shareholder or stakeholder value. As discussed in Section 2, an organizational risk culture forms where *all* become risk managers in support of the common good. Individual accountability is fostered and supported at all levels of the organization.



Because ERM provides a cross-functional view across the organization encompassing all risks, including speculative risks—the impact is much broader than what TRM offers, namely, returning the organization to nearly its pre-loss financial position. Listed below are the impacts of an effective ERM program on an organization:

- It protects the organization's reputation and brand.
- It increases profitability through a reduction in costs or an increase in revenues (or both). Claims management and legal costs are reduced. TCOR is optimized, finding the proper balance of its five components. Cash flow, assets, and financial statements are protected.

## Section 7: Introduction to Enterprise Risk Management

- It raises awareness of the importance of risk management in the organization. Because the cross-functional view encompasses all levels and all personnel, ERM promotes a comprehensive understanding and acceptance of risk management policies and procedures throughout the organization.
- It supports managerial objectives through improved planning and budgeting.
  - It reduces the frequency and severity of incidents, accidents, losses, and claims. ERM facilitates the prediction of future losses, thereby supporting measures to mitigate these losses.
  - It increases the awareness of the hidden or indirect losses.
- It improves morale and productivity among the workforce as all members understand their role and its importance in the organization.
- It improves quality, processes, and technology.



As you learned previously, ERM looks for the upside of taking a risk. How does that apply in terms of the insurance transaction? An organization can take a little risk by purchasing guaranteed cost insurance. If a peril strikes the insured exposure, the insurance company provides the funds to repair or replace it, with the organization paying only a small portion of the loss in the form of a deductible. In this situation the insurance company is bearing nearly all the risk. The only “upside” to this transaction is that, in the event of a loss, the organization will nearly break even.

However, if that organization is willing and able to assume a greater portion of the potential loss through a large deductible, the premium savings is the reward or return for assuming more risk. If there is no loss, the “upside” of the decision is not only premium savings but a reduced total cost of risk.



## Check-In



1. In his will, your great-uncle gave you \$10,000 with the condition that you must invest the money by purchasing \$10,000 in stock from Company A or \$10,000 in stock from Company B. After a little research, you determine an investment in Company A will be worthless at the end of the year, but there is a 40% chance the stock in Company B will be worthless, a 10% chance it will be worth \$10,000 and a 50% chance it will be worth \$20,000.

Which investment option is riskier?

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2. You pay \$5 for a gift card that has a potential value of \$100. To activate the gift card and claim the \$100, you must correctly call the toss of a coin. If your call is incorrect, the gift card has no value. There are no second chances—you get only one call of the coin toss.

Is there a risk in accepting this offer?

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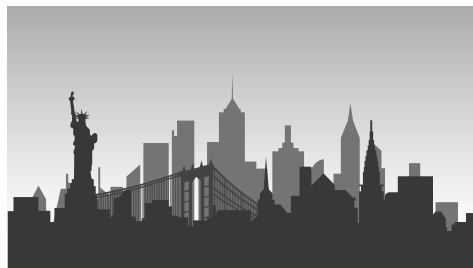
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## Classic Examples of TRM versus ERM



### September 11, 2001—a failure of TRM silos

The terrorist attacks of September 11, 2001, revealed that the US government's approach to managing intelligence was not adequate to address the threats. For decades, the risks associated with sensitive information had been managed on a “need to know” basis, which created information silos. Silos existed between law enforcement and intelligence, as well as between and within agencies.



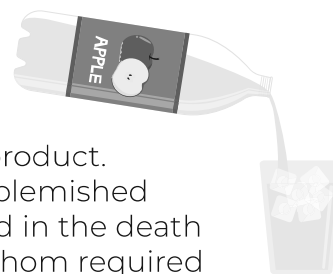
Prior to September 11th, different government agencies had relevant intelligence that could have helped prevent the attacks. However, due to siloed risk management practices, the opportunity to consolidate the information and identify potential attack vulnerabilities was lost. A congressional commission would later determine there were as many as 10 lost opportunities to discover and diffuse the attack plans.

On the local level, in the City of New York, the Fire Department, the Police Department, and the Port Authority Police all used different radio systems on different frequencies. They were unable to connect with each other, nor were the rescuers able to coordinate activities or provide warnings.



### Odwalla Apple Juice

In 1996, Odwalla introduced unpasteurized apple juice, a healthier option in the juice market, as pasteurization destroys many of the healthful benefits of fruit juice and negatively affects the color of the product. Unfortunately, one batch of apple juice was produced using blemished fruit that was contaminated with E. coli bacteria. This resulted in the death of one person and more than 60 people becoming ill, 25 of whom required hospitalization and 14 who suffered from long-term kidney damage. Prior to the incident, Odwalla had relied on chemical washes to remove harmful bacteria from the fruit.



Following the incident, Odwalla began using flash pasteurization, a process that utilizes a higher temperature but shorter time for pasteurization, thereby killing harmful bacteria without destroying many healthy enzymes or degrading the product's appearance. Odwalla quickly regained its lost market share, protecting the company's brand and reputation.

## ▶▶ Knowledge Check



Your CFO suggests that she understands TRM places risk identification and ownership with the risk manager, and that ERM utilizes subject-matter experts and risk committees to identify organizational risk. As risk manager, you want to help her distinguish between the two approaches. What else should she know?

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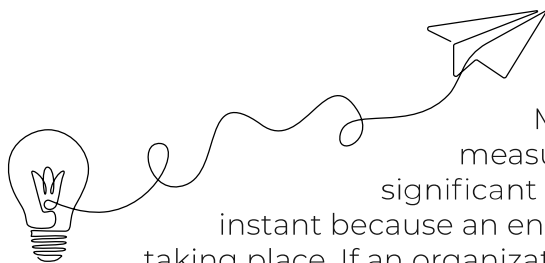


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## The ERM Implementation Process

### Learning Objective:

7.4 Explain the requirements of the ERM implementation process, including the obstacles to ERM implementation.



Creating and implementing an enterprise risk management approach is a challenging task.

Many organizations are pressured to quickly show measurable returns on investment, and ERM can show significant returns over time. The returns on investments are not instant because an entire cultural shift, accompanied by a new mindset, is taking place. If an organization successfully implements and adopts ERM, it can expect numerous benefits over the long term.

When the organization is considering ERM implementation, a few questions are in order:

1. Does the organization have the willingness to let ERM become established before demanding minimum returns?
2. Does senior management have the time to focus on the implementation? If not, are they willing to delegate this to an implementation leader or a Chief Risk Officer?
3. Will there be various risk management committees representing the various functional areas of the organization?

## Requirements of the ERM Implementation Process

### Support from the Senior Management Team



The support must be clear and consistent, and ensure that the organization's functional units and departments are committed to the process. The support must be unambiguous and communicated consistently throughout the organization's functional units and departments. Through that continued support, ERM becomes an integral part of the organization's culture.

### An Implementation Leader and Dedicated Cross-Functional Committees



To start the ERM process, an implementation leader is needed. The implementation leader will be the Chief Risk Officer (CRO) or someone in an equivalent board-level position, overseeing the ERM implementation process. Additionally, cross-functional committees will be necessary. These committees will have specific roles and responsibilities that are separate and distinct from those of the CRO. The committees must represent all the various areas of the organization and all stakeholders.

Requirements of ERM Implementation	
	Support of the senior management team
	An implementation leader and dedicated cross-functional committees
	An ERM risk assessment
	A common language regarding risk
	An established framework

### An ERM Risk Assessment



The organization must have a clear understanding of its risk appetite—the willingness to accept or tolerate risk; to that end, a risk assessment should be performed. The assessment should address those risks that the organization is unwilling to accept, such as environmental risks. It should also identify the risks that the organization will take on as it undertakes new initiatives, such as new product lines or locations. Other areas to consider include the risks the organization is willing to take in pursuit of competing objectives, such as gross profit versus market share, and the extent to which the organization is willing to risk to obtain the benefits of an opportunity.

The organization must also have a clear understanding of its risk-taking ability—the financial capacity for assuming risk. The key elements considered are financial resources, expertise, and human capital. Everyone in the organization must be willing to accept responsibility for controlling and mitigating risk.

### A Common Language Regarding Risk



The organization must have a common language to use throughout the risk management process. Specific terms and their meaning must be understood by all. Part of the agreed-upon language is the description or categorization of uncertainty facing the organization in terms that all within the organization can

understand. Another aspect of the common language is how to identify, assess, categorize, and prioritize the organization's critical risks, which are anything that could disrupt the achievement of its goals, objectives, mission, and other key objectives.

### An Established Framework



The implementation framework encompasses the internal and external contexts within which the organization operates. This includes the process by which the organization monitors and reviews progress, as well as the organization-wide communication plan. An ERM framework is comprised of the following:

- A risk management policy,
- Identification of key stakeholders,
- Roles, responsibilities, and accountabilities,
- Training and education of employees,
- An established timeframe and budget, and
- Monitoring and reviewing the progress of implementation, and making modifications as necessary.



### Knowledge Check



Will wants to convince his senior management team to consider adopting an ERM approach. He gives everyone a book about enterprise risk management, which focuses on using ERM principles to boost market share. Will feels secure in knowing that once his management team agrees, he will be ready to go. Will plans to give all employees a copy of the book and hold book club meetings. After those meetings, everything will be in place. What do you think of Will's plan?

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An organization can achieve strong benefits by implementing and adopting an ERM program. However, ERM is not a “one size fits all” endeavor. The nature and size of the organization, the products and services it produces, and whether it is publicly traded or a non-profit, can all influence the decision of whether to implement ERM.

### The Reality of ERM

According to the U. S. Office of Small Business Administration, there were about 32 million businesses operating in the United States in 2020. Of these, 99.9% are considered “small” businesses, with only 7+ million having one or more employees. There are approximately 6,000 publicly traded businesses listed on exchanges. In short, the number of businesses that might be in a position to use ERM is very small relative to the entire population of businesses.

While the benefits of ERM can be applied to virtually all business organizations, the obstacles are significant; consequently, ERM is practiced in only a relatively small number of organizations.

### The Obstacles

While the goals of enterprise risk management and the Chief Risk Officer function are valuable, there are very real challenges to implementing an enterprise risk management program or establishing a Chief Risk Officer function. Below are some of the obstacles to implementation:

- Lack of support from senior management
- The difficulty for many organizations to invest capital in the ERM program, as they do not perceive a return on investment
- Different leadership skills are required to implement ERM versus TRM successfully:
  - Leadership and facilitation skills
  - Creative approach to problem-solving
  - Cross-functional viewing
- Risk is often viewed negatively in many organizations, making it challenging to expand to include upside risks.
- There is a challenge in aligning the perception of risk with reality.
- Taking a risk is often seen as a matter of courage rather than a reasoned, quality decision.
- ERM has inherent limitations:
  - Human errors in judgment and decision-making
  - The cost/benefit of risk responses and control measures must be considered.
  - Controls can be circumvented or ignored.
  - Management may override decisions.



## Section 7: Introduction to Enterprise Risk Management

As the practice of risk management evolves, one fact has become increasingly clear: a fragmented risk treatment approach (one that treats each risk or exposure to loss separately) is less effective than a comprehensive risk treatment approach that does not create or tolerate redundancies in effort and expense. Enterprise risk management allows for the consideration of an upside when taking risks and for making strategic decisions such as expansion of locations and introducing new products or services.



### Knowledge Check



Laura is the Commercial Lines Service Manager in a mid-sized insurance agency. The owner, Daniel, has just returned from a CRM course and is interested in implementing an ERM program for the agency. Laura shares that she can't imagine there being an upside to the risks the agency faces. How should the owner respond to Laura's statement? Is Laura an obstacle to ERM implementation?

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# Summary

In TRM, the risk manager is concerned only with pure or downside risk, or the chance of loss and, at best, the chance that nothing bad happens. However, the opposite of pure or downside risk is speculative or upside risk, which is the chance that a gain also exists. ERM embraces this concept. Nearly all business activities are undertaken with the assumption that some level of speculative risk exists. For example, a business invests funds in developing a new product, hoping that consumers will purchase it, which in turn generates profit for the organization.

Since ERM focuses on all risks that impact the organization, it becomes challenging to discuss these risks without a simplifying approach. To aid in the identification and analysis processes, the risks can be grouped into four broad categories: operational, financial, hazard, and strategic. ERM extends into each of these areas to include any activity that could threaten or enhance the achievement of the organization's goals and objectives.

Implementing an ERM program brings several benefits to an organization, including increased profitability and enhanced achievement of managerial objectives and strategic goals. It also faces obstacles, such as the perception of risk-taking, which is often seen as a matter of courage rather than a reasoned, quality decision.

# Conclusion

In this course, we have focused on the principles of risk management, including the first and most important step in the risk management process—risk identification. During that step, a risk manager identifies and examines all of an organization's exposures, perils, and hazards. The general classes of risk and logical classifications of exposures frameworks help a risk manager categorize those exposures, perils, and hazards in order to apply risk control and risk financing strategies. As you learned, a risk manager has a variety of risk identification methods to draw upon.

As you continue your risk management educational journey with the Risk & Insurance Education Alliance, you will learn about the remaining steps in the risk management process: analysis of risk, control of risk, risk financing, and risk administration.



## Review of Learning Objectives

- 7.1 *Understand the definitions of enterprise risk management (ERM) and traditional risk management (TRM), including the differences in their approaches.*
- 7.2 *Identify the ERM broad categories of risk, including examples for each.*
- 7.3 *Explain the impacts of an effective ERM program on an organization.*
- 7.4 *Explain the requirements of the ERM implementation process, including the obstacles to ERM implementation.*

## Set Yourself Up for Success!

### Visit the “Resources” Webpage at [RiskEducation.org/RMEresources](http://RiskEducation.org/RMEresources)

For valuable reinforcement, be sure to visit the “Resources” webpage. This webpage contains a variety of materials that will help you absorb the course material *and* set you up for success on the final exam. You’ll find:

#### Study Guide

Download a copy of the Study Guide. It contains all the Check-In questions, Knowledge Checks, and Self-Quizzes contained in this Learning Guide in a format that makes it easy for you to practice and check your answers.

#### Video Clip

View a video clip about an important concept related to a learning objective in this section.



Speaking From Experience: Introduction to Enterprise Risk Management with Rich Rudolph, Ph.D., CPCU, ARM, APA, ARP, AIAF, AAM, Owner and Lead Reindeer, Famous Reindeer Education Enterprises, LLC

## Section 7 Self-Quiz

**Directions:** Select the correct answer.

1. \_\_\_\_\_ is/are a cross-functional view of risk affecting all areas of the entire organization.
  - ☐ Enterprise risk management (ERM)
  - ☐ Traditional risk management (TRM)
  - ☐ Cross-functional committees
2. ERM is all of the following EXCEPT:
  - ☐ applied at every level of the organization
  - ☐ supportive of strategic goals and objectives
  - ☐ a collage of disparate policies and approaches
3. Identify a characteristic that would fall under TRM.
  - ☐ It manages downside risks.
  - ☐ It is proactive and supportive.
  - ☐ It has the potential to affect both upside and downside.
4. \_\_\_\_\_ is/are considered to be a functional, siloed view of risks affecting one or more areas of the organization and only addresses pure risk.
  - ☐ Enterprise risk management (ERM)
  - ☐ Cross-functional committees
  - ☐ Traditional risk management (TRM)
5. From the list below, select the answer that is NOT an impact of ERM on the organization.
  - ☐ It protects the organization's reputation and brand.
  - ☐ It increases profitability through a reduction in costs or increase in revenue (or both).
  - ☐ It raises awareness of the importance of risk management in the organization.
  - ☐ It creates a competitive edge.
6. From the following, identify the example that is NOT a requirement of ERM implementation.
  - ☐ An ERM assessment
  - ☐ Documented and adequate cashflow
  - ☐ Support from the senior management team
  - ☐ An established framework

## Section 7: Introduction to Enterprise Risk Management

**Directions:** Select the correct letter to match each term with the appropriate definition.

<b>A.</b> Financial risks	_____ Risks that are closely associated with interest rates, investments, credit, liquidity, asset market value, equity and commodity market risks, receivables, currency and foreign exchange, and cash flow
<b>B.</b> Operational risks	_____ Risks that are commonly addressed in traditional risk management programs, for example, property damage
<b>C.</b> Hazard risks	_____ Risks whose origins are centered on the day-to-day affairs of an organization, for example, talent management
<b>D.</b> Strategic risks	_____ Risk that originates with the decisions coming out of the executive boardroom, for example, intellectual capital

## Appendix

# Appendix

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## Preparing for the Final Exam

For many learners, test preparation is stressful. Please keep in mind that the most important measure of your knowledge will be witnessed in your service to your organization. Think of a test as a tool. Use it to come to an understanding of what you know, how it affects your work, and what more you would like to know to have even greater success in the workplace.

The testing period for the Final Exam is 2 ½ hours long. The test itself is composed of 17–21 short-answer questions for a total of 200 possible points. Questions appear in the order of presentation of the topics.

Remain aware of the time as you take the test. Pace yourself and be aware that unanswered questions are considered incorrect.

## Study Techniques

There are some techniques you can use to help you prepare for the end-of-course test. Apply the same techniques to each chapter in your learning guide.

1. Review the Section Goal.
2. Review each Learning Objective.
3. Change each header and subhead into a question. Then answer the question. For example,  
Header: Components of a Formal Training Plan  
Question: What are the components of a formal training plan?
4. Review each diagram, graph, and table. Interpret what you see. Ask yourself how it relates to a specific Learning Objective.
5. Check your answers to each Check-In. Correct your original answers, if necessary.
6. Check your answers to each Knowledge Check. Consider ways to improve your original answers.
7. Re-read the summary at the end of each section.
8. Check your answers to each question in the Self-Quizzes at the end of each section. Correct your original answers, if necessary.

## Appendix

9. Review any comments, highlights, or notes you made in each section.
10. Rewrite important ideas in your own words. Find ways to connect those ideas to your own work experiences.
11. Make flash cards to help you review important vocabulary.

### Sample Test Questions

1. ABC Corporation's (ABC) board of directors is considering implementing an enterprise risk management (ERM) approach to managing risk. One of the board members has asked you, as the risk manager of ABC, to explain the concept of ERM. Please provide a definition of ERM for the board of directors.

#### Sample Answer:

A cross-functional view of risk affecting all levels of the organization

2. There are factors that influence an organization's risk-taking appetite; some factors are internal to the organization, and some are external. Provide two internal factors.

#### Sample Answers (any two):

- Organizational objectives (profitability, reputation, market share)
- Stage in the organization's life cycle OR startup, growth, maturity, decline
- Financial status (assets, income, and cash flow)
- Frequency and severity of losses
- Predictability of losses
- History/past experience of risk-taking

# Glossary of Terms

**auditor's opinion letter** an external opinion of the fairness and accuracy of the information contained in the financial statements and the conformity to stated accounting standards

**accident** an unexpected and unintentional event, definite as to time and place, that results in injury or damage to a person or property

**accounting** a process of recording and classifying business and financial transactions and reporting them on an organization's financial statements

**actual cash value** the replacement cost less an allowance for depreciation or obsolescence

**amortization** an accounting technique used to periodically lower the book value of a loan or an intangible asset over a set period of time.

**balance sheet** a summary of the organization's assets, liabilities, and owner's equity as of a specific point in time

**book value** the historical cost, less accumulated depreciation

**contract law** the body of law that governs the performance of a promise. An enforceable contract must have the following four characteristics: competent parties, agreement or assent, legal consideration (exchange of values), and legal purpose.

**civil law** the body of law that protects the interests of individuals and includes the following sources of legal liability: torts, contracts, and statutes

**claim** a demand for payment or a company's moral or ethical obligation to pay damages as a result of a loss or occurrence

**combination allocation method** employs a blend of allocating portions of costs to operating units based on both exposures and loss experience

**common law** the body of law consisting of prior precedents or rulings by judges and juries in situations involving tort or contract law

**common stock** a share or shares of ownership in a corporation with rights to vote on management and corporate policy but not preferred over other classes of stock in regard to the payment of dividends or distribution of assets

**copyright** a form of protection provided to the authors of "original works of authorship" including literary, dramatic, musical, artistic, and certain other intellectual works, both published and unpublished (e.g., music)

**cost of goods sold (COGS)** the direct costs of producing the goods or products sold by an organization

## Appendix

**culture** a set of understandings, knowledge, beliefs, values, and habits that characterize a human group (organization) in search of a common purpose

**debt ratios** a measure of the organization's ability to repay its creditors over the long term and assess the organization's financial leverage

**depletion** the reduction in inventory and a charge against income to allocate the cost of extracting natural resources

**depreciation** the reduction in the value of an asset over time

**economic perils** perils that arise from being in business, such as acts of competitors, recessions, interest rate changes, and the like

**economic risk** a general class of risk; risks arising from operations, the economy, financial marketplace, or entrepreneurial activities. These include fiscal and liquidity issues, failure of financial institutions, chronic unemployment and failure of infrastructure upon which economies depend.

**economic value** a future stream of income assigned to the property

**emerging risks** a new exposure(s) to loss for which a risk treatment has not yet been implemented, or an existing exposure(s) to loss that is evolving, difficult to quantify, and may have a major financial impact on the organization

**enterprise risk management (ERM)** a cross-functional view of risks affecting all areas of the entire organization; ERM embraces speculative risks

**expected losses** the projection of the frequency or severity of losses based on loss history, probability distributions, and statistics

**experience allocation method** distributes the TCOR costs based on loss experience of the individual departments or operating units

**exposure** a situation, practice, or condition that may lead to an insured's susceptibility to adverse financial consequences or loss

**exposure allocation method** allocates TCOR costs based on exposure units, such as the number of vehicles or employees in each department

**finance** a process of managing an organization's assets, liabilities, and cash flow to maximize shareholder (or stakeholder) wealth

**financial risk** risks related to financial activities (speculative risk)

**franchise** the right or license granted to an individual or group to have access to a business's proprietary knowledge, processes, and trademarks in order to market a company's good or services in a particular area

**frequency** the number of losses that occur or that are expected to occur within a given period



## Appendix

**functional replacement cost** the cost to repair or replace damaged or destroyed property with materials that are functionally the equivalent of the damaged or destroyed property

**hazard** a factor that increases the likelihood that a loss will occur or the severity of a loss that occurs

**hazard risk** risks typically covered by insurance (pure risk)

**historical cost** the original purchase price of property

**human perils** perils that arise out of human behaviors, whether intentional or accidental, such as fires, trips and falls, criminal acts, or negligence

**income statement** a report of the organization's financial performance for a stated time period

**injunction** a requirement to refrain from doing an act, an enforcement of performance, or an obligation stated in contract

**juridical risk** a general class of risk; risks arising from a jury or judge's decision or from court or jury attitudes

**leases and leasehold interests** the legal right to use certain property for a limited period of time

**legal risk** a general class of risk; risks inherent in compliance or arising from common law and statutory liability

**license** the process of leasing a legally protected (trademarked or copyrighted) entity, such as a name, likeness, logo, trademark, graphic design, slogan, signature, character, etc.

**liquidity ratios** a measure the organization's ability to pay bills over the short term

**long-term debt** funds borrowed from external sources payable over time

**loss** a reduction in the value of assets

**market value** the amount a willing buyer will give to a willing seller

**moral hazards** arise out of defects in human character, such as the intent to cause harm by stealing someone's identity or passwords

**morale hazards** arise out of indifference, such as not locking your car because you know it is insured and there is nothing valuable in it

**natural perils** perils that arise out of nature, such as wind, lightning, flood, and earthquake

**negligence** the failure to exercise the degree of care which a reasonably prudent person would exercise under similar circumstances. To prove negligence, the plaintiff must show that a duty existed, that duty was breached, and damages or injury resulted from the breach

## Appendix

**notes to the financial statement** an explanation of the contents of the financial statements, rules by which the financial statements are drawn, and non-financial information that impacts the numbers

**occurrence** goes beyond an immediate and observable accident; instead, it is an extended situation leading to damages or injury

**operational risk** risks related to processes and management activities (speculative)

**organizational risk culture** a set of understandings, knowledge, beliefs, values, and habits toward risk that characterize a human group (organization) in search of a common purpose

**patent** used for an invention; the grant of a property rights to the inventor, issued by the US Patent and Trademark Office

**performance** enforced compliance with contractual promises

**peril** a cause of loss or any action or event that causes a loss

**physical hazards** hazards arising from physical conditions that exist naturally or those that are caused by human negligence.

**physical risk** a general class of risk; risks arising from property, people or information. These include natural disasters, such as earthquakes and hurricanes as well as man-made risks including nuclear accidents and climate change.

**political risk** a general class of risk; risks arising from changes in the law, re-interpretations or changes in governmental policy, politics and diplomacy, conflict and global governance. These also include war, terrorism, conflicts over resources, and illicit trade.

**preferred stock** a type of stock issued by a corporation that allows ownership privileges with respect to payment of dividends and distribution of assets greater than those of common stock owners but with no voting rights

**profitability ratios** calculations that measure returns on investments or expenditures

**pure risk** a situation or incident in which the only outcome can either be loss or no loss

**reformation** changing the contract to reflect the true intentions

**register mark** a symbol (®) that provides notice that the preceding word or symbol is a trademark or service mark that has been registered with a national trademark office

**replacement cost** the amount to replace a damaged or destroyed piece of property with new property of like kind and quality with no regard for depreciation

**retained earnings** internal funds retained from net income and not distributed to holders of common stock

## Appendix

**risk** the possibility of a positive or negative outcome arising from a given set of circumstances

**risk appetite** the organization's willingness to accept or tolerate risk

**risk-taking ability** the organization's financial capacity for assuming risk

**service mark** a legally registered name or designation used in the manner of a trademark to distinguish an organization's services from those of its competitors

**severity** the dollar amount of a given loss or the aggregate dollar amount of all losses for a given period

**social risk** a general class of risk; risks arising from public relations, loss of reputation, damage to brand, cultural issues, social direction, or social media. These also include risks related to social stability such as income disparity, food shortages, crumbling inner cities and risks related to public health—pandemics, chronic disease.

**speculative risk** the possibility of loss or no loss; also presents the chance of a gain

**statement of cash flow** a summary of the effects of cash on the operating, investing, and financial activities of an organization for a specific period of time

**statutes** enactments of legislative and administrative bodies that impose responsibility for certain actions or omissions

**strategic risks** risks related to an organization's strategic plan and its mission

**technological risks** risks arising from our growing dependence upon and use of technology, as well as those created by emerging technologies—cyberattacks, infrastructure disruption/collapse, and loss of proprietary data

**tort** a private or civil wrong, other than a breach of contract, for which the courts will allow an action (lawsuit) for damages

**total cost of risk (TCOR)** the calculation of all measured costs and expenses connected with the risk management function of an organization

**trademark** an unregistered mark (a symbol, word, or words) used to represent a company or product; a trademark is used to represent goods

**trade secret** any confidential business information which provides a competitive edge. Trade secrets include manufacturing or industrial secrets and commercial secrets