

Software Risk Management

Chapter Five: Control Outline



- What Is communication?
- Characteristics of communication?
- Enablers to communication
- Barriers to communication
- Guidelines and Tips

S1:What is communication

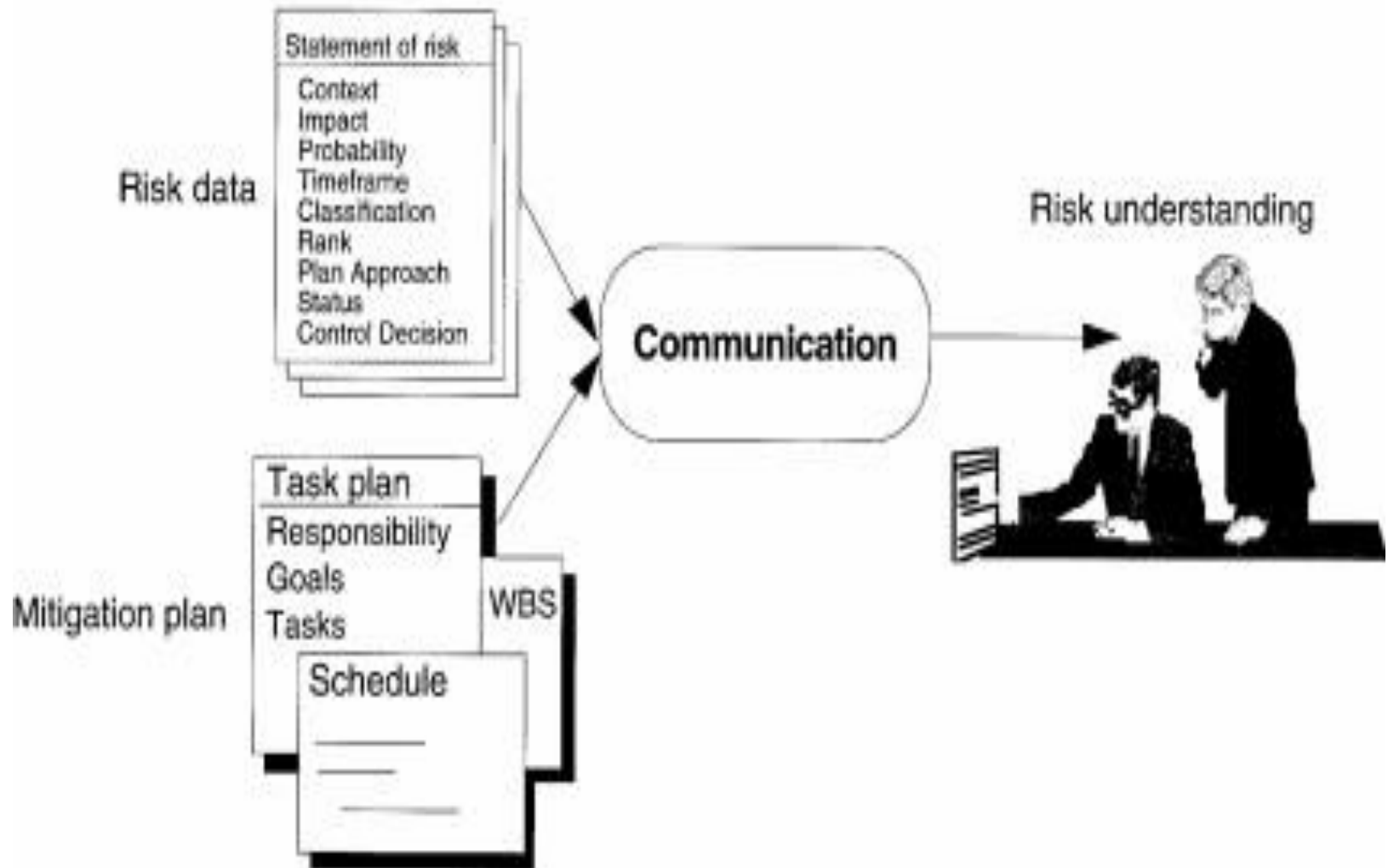
- ❖ Communication of risk information is often **difficult** because the concept of risk deals with **two subjects** that people don't normally communicate well: probability and negative consequences.
- ❖ Communication is **present in all of the other functions** of the SEI risk management paradigm and is essential for the management of risks within an organization.
- ❖ It must **both fit** within an organization's culture as well as expose the risks which are present in an organization's projects.

Example: The interview activity used in the **Identify** function communicates risk information by determining what the project's risks are and then documenting the risk statements and their contexts.





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- ❖ The **objectives** of communication are for project personnel to
- ❖ understand the project's **risks and mitigation** alternatives.
- ❖ understand the risk data and make **informed choices** within the constraints of the project.
- ❖ **eliminate** the barriers to effective communication.

Input and output of communication



Types of Communication

Types of communication	description
<p>General</p> 	<p>General communication applies to both internal and external risk communication. It includes peer-to-peer, intra-group, and internal organizational communication. Example: Two software engineers informally discuss the interface between their software modules.</p>
<p>Management</p> 	<p>Management communication is for internal project communication among all levels of the project staff. Example: An individual reports risks to his/her supervisor.</p>
<p>Team</p> 	<p>Team communication covers communication within small teams. They can be internal project teams, improvement teams, or integrated product teams. Example: An integrated product team is assigned the responsibility to design and develop a communication satellite operating system.</p>
<p>External</p> 	<p>External communication deals with the formal and informal communication between the project and its external customer(s), supplier(s), and senior organization manager(s).</p>

S2:Characterstics of Communication

- ❖ The core principle of the seven principles of Continuous Risk Management is open communication. Risk management communication requires
 - a free flow of information **within and between all** project levels.
 - formal, informal, and impromptu communication.
 - **non-attribution and trusted use** of data.
 - processes that value the **individual voice**.
 - **consensus-based** processes for teams.
- ❖ The power of effective communication can most readily be seen when **multiple viewpoints** come together to form a common understanding.

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- ❖ Note: The formation of a common understanding **does not necessarily require agreement among all parties.**
- ❖ People can still disagree on issues, but they can also **understand other points of view with respect** to those issues.
- ❖ **Successful risk** communication raises the level of understanding of relevant issues or actions on a project.
- ❖ As a result, project personnel feel that they are **adequately informed** about project issues.

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- ❖ When good communication is encouraged within an organization, it provides **a solid foundation** for the communication of risks within the organization's projects.
- ❖ For risk communication to be considered "good," **it must**
 - be balanced and honest.
 - focus on specific issues.
 - focus on what the audience already knows.
 - be tailored to the **specific** needs of the audience.
 - place risks in their **appropriate** contexts.
- ❖
 - contain **enough specific information** to describe and potentially resolve the problems facing the members of the audience.
 - be hierarchically organized so that people who only want a summary can find it quickly and people who want details can find them as well.
 - be **respectful** in tone and recognize that people have legitimate feelings and thoughts.
 - be forthright about **any limitations** (e.g., data limitations).
 - deal with issues of **trust and reliability** (e.g., data reliability).

S3:Enablers to Communication

- ❖ Management plays a **significant role** in creating and sustaining an environment and culture that enhances communication, particularly risk communication.
 1. Defining **clear** project roles and responsibilities .
 2. Making **risk actions** and decisions visible.
 3. Being a role model.
 4. Establishing an **internal champion**.
 5. Rewarding **positive behavior**.

S4:Barriers to Communication

- ❖ While management plays a significant role in creating and sustaining an environment that enhances communication, it also plays a significant role in removing barriers to risk communication.

Ready-fire-aim :People provide solutions to a problem before they have assembled and understood the underlying facts and context of the problem.

Don't tell me your problem: People often require a solution before they even discuss an issue. **Example:** A manager says, "Don't bring me problems, bring me solutions."

Shoot the messenger: A project member who intends to inform others or who is seeking help can suffer negative consequences because he/she is communicating unpleasant information .

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Liar's poker: Project personnel identify risks, but fail to communicate them to others..

Mistrust: Individuals do not trust each other for a variety of reasons (e.g., past history, preconceived biases, personal biases, political factors, etc.).

Value differences: Individuals have their own personal value systems. They measure and compare messages and information based on their individual values.

Hidden agendas: Situations create individual preferences for results. Individuals or groups may promote facts or arguments based on their goals rather than for the common good.

Differential knowledge: Each individual has a differing understanding of an issue.

Placing blame: Risk information is abused because it is used to place blame on project personnel.

Inactive listening: The audience is distracted and not listening. Effective communication requires that the audience be focused and not distracted.

The principles applicable during the **Communicate** function

- ❖ Risk communication is often difficult because it deals with probability and negative consequences.
- ❖ it relies upon open communication to be effective and must encourage a free flow of information within and between all project levels.
- ❖ Communication must value the individual voice as well as promote teamwork to support the effectiveness of the other functions.

S5: Guidelines and Tips

General: Successful risk communication does not necessarily result in agreement about controversial issues or in uniform personal behavior. Risk management decisions will benefit some people in an organization, but not likely everyone.

Management: Internal communication is necessary to provide an efficient transfer of information between all levels of an organization.

Team: Effective teams have good interactive skills and frequently work together to solve problems. Good discussion skills are essential for successful team meetings, and meetings are an important part of teamwork.

External: Credibility and trust take a long time to develop, but they can be eliminated in a single instant. It is important to develop trust and credibility and, once they are established, to work hard to protect them.

NB: All of the previous guidelines for general, team, and management communications also apply to all external communications.

Summary



- ❖ Provide information and feedback internal and external to the project on the risk activities, current risks, and emerging risks.
- ❖ Communication occurs formally as well as informally.
- ❖ Communication is a key function in the Continuous Risk Management model that links to all the other functions.
- ❖ Therefore, each method identified previously is a vehicle for communication of risk.