APSC 101 Study Notes
Intro to Engineering II

Contents

1. Professional Skills

1.1. Tuckerman's Stage of Development

4 Stages: Forming, Storming, Norming, Performing

Tuckman's Stages of Team Development

1.1.1. Important Notes

- relationships within members get BETTER over time
  - ‣ this includes storming, as team members are more willing to speak their minds
- conflict occurs at all stages

1.1.2. Good vs Bad Norming

- Good norming is healthy
- Bad norming –> team dysfunction
  - ‣ e.g. one team member routinely misses meetings and team does nothing

1.2. Conflict Management

Conflict Management Styles

Avoiding: Good when tensions high.
Accommodating: Good when the issue matters more to the other party.
Competing: Good when issue is self-critical and immediate.

Compromising: Good if time is short and relationships/problem must be balanced.
Collaborating: When you have time to work towards finding the ideal solution for everyone.

Good teams change their style as situation demands.

2. Risk Management

$$\text{Risk} = \text{Severity} \times \text{Likelihood}$$

$$\text{Risk} \neq \text{Hazard}$$

Risk: *Possibility* of harm, consequences, or damage.
Hazard: *Capacity* of equipment, material, or processes to cause

harm.

2.1. Risk Sources

Preventable: Controllable.
   General time management issues included, such as not anticipating delays.
Strategic: Taken for possibility of greater reward.
   For example, rushing through decision making stages for earlier project completion, this
   is a strategic risk, not preventable.
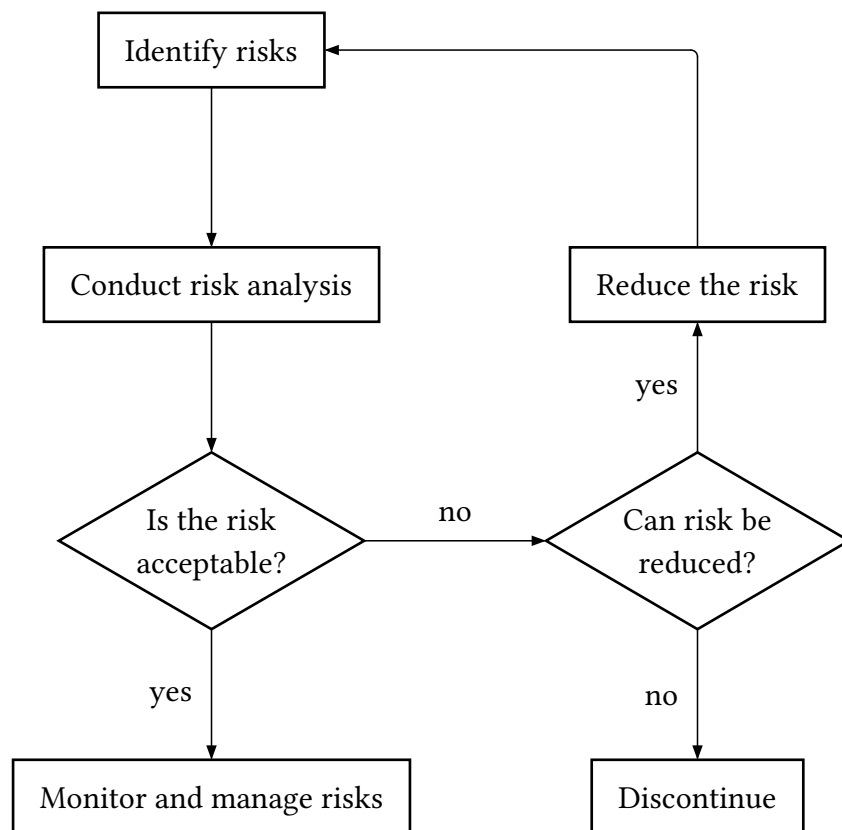**External**: Outside of control.

2.2. Risk Tools

Figure 1: Risk Management Process

		RISK SOURCE		
		Preventable	Strategic	External
Risk Category	Safety			none
	Technical			
	Project Management			
	Operational			

Table 1: Risk Classification Table

A risk classification table is a tool used to identify and classify risks based on their severity and likelihood.

Figure 2: Risk Matrix