
Issues in Task Design

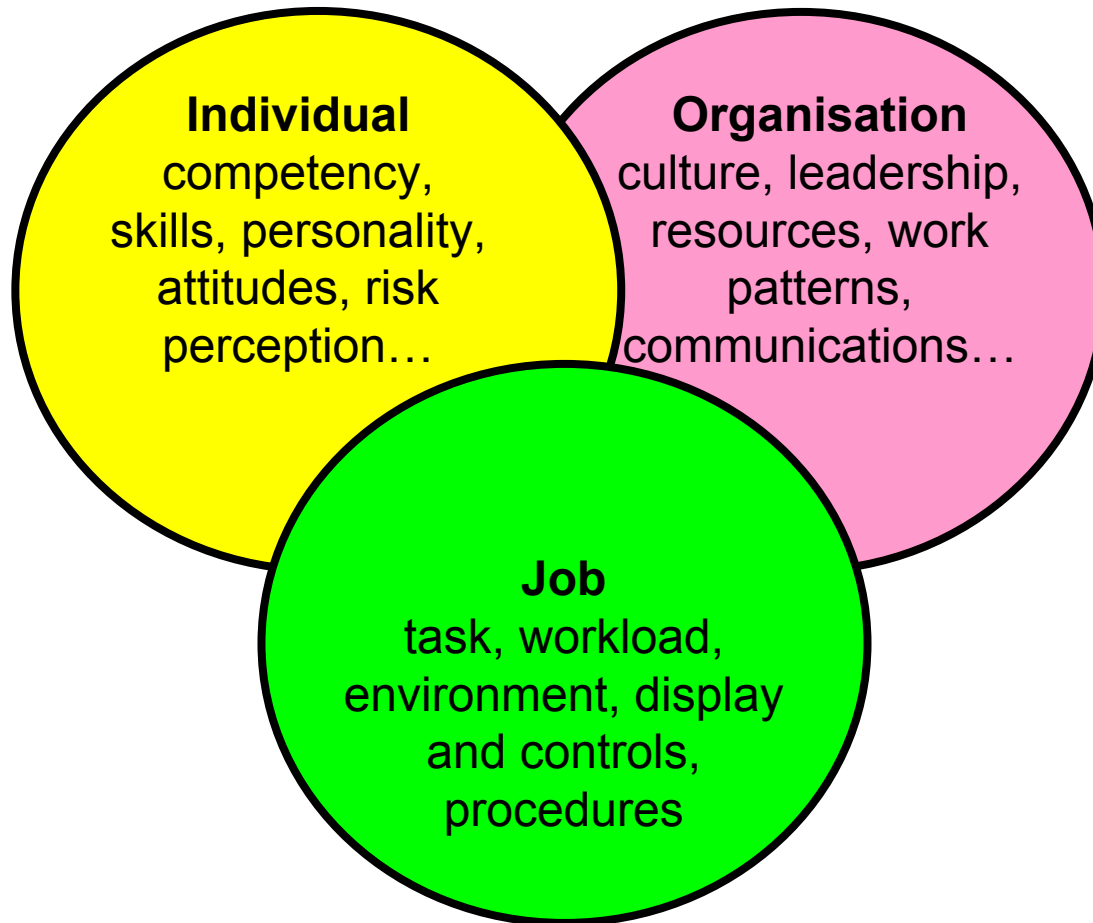
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Introduction

- The objective of the presentation is to highlight some of the key issues in task design
- My experience of this issue
- Elements of task design and performance shaping factors
- Benefit is to make tasks less error prone, provide better motivation etc

HSE Framework

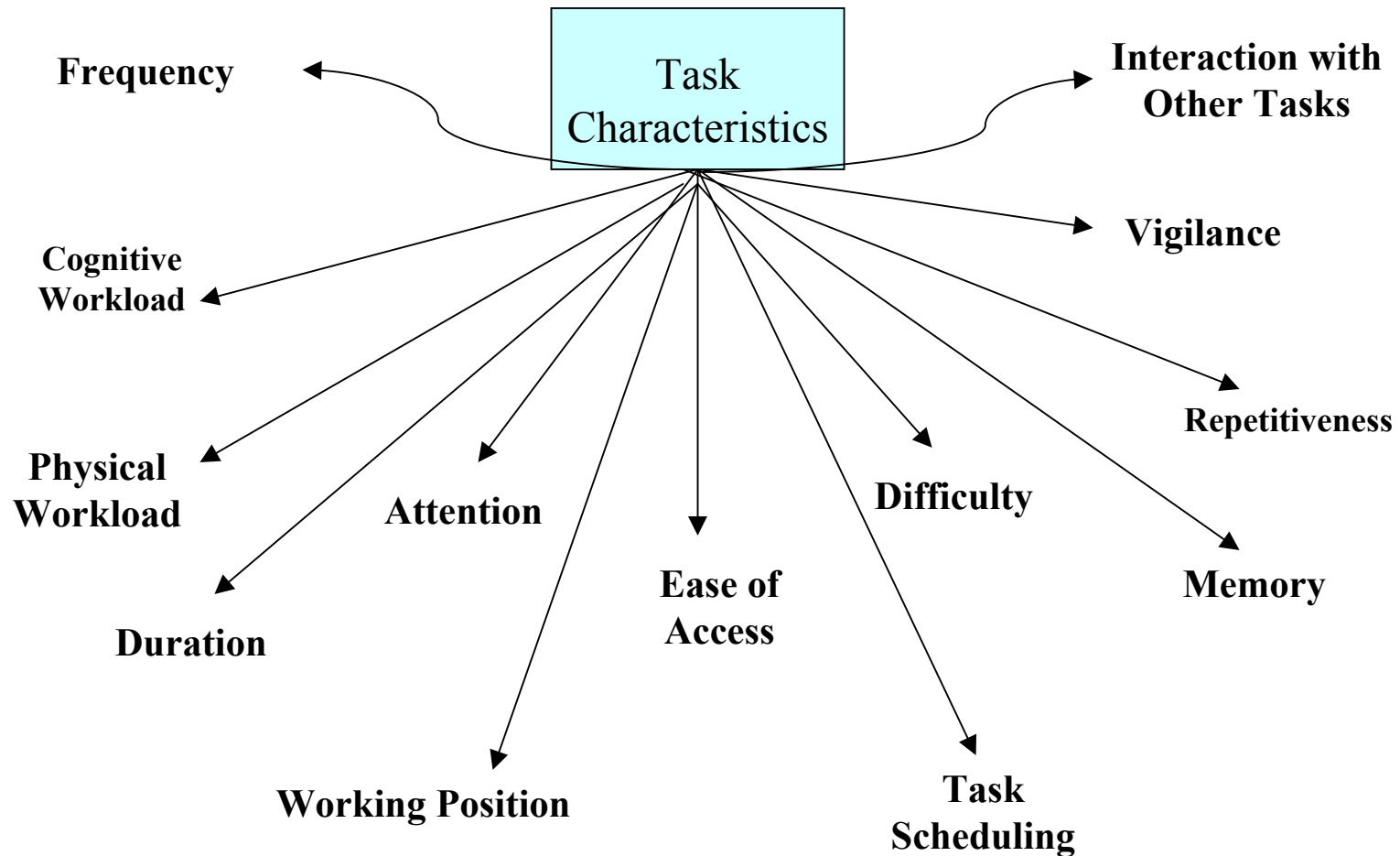


Common Causes of Accidents

Job Factors

- illogical design of equipment & instruments
- **constant disruptions and interruptions**
- missing or unclear instructions
- poorly maintained equipment
- **high workload**
- **noisy and unpleasant working conditions**

Performance Shaping Factors - Task



Work Environment



Lighting



Noise



Heat



Humidity



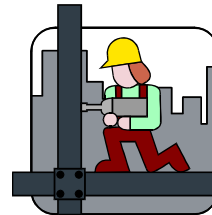
Cold



Vibration



Confined Spaces



Working at Height



Chemicals



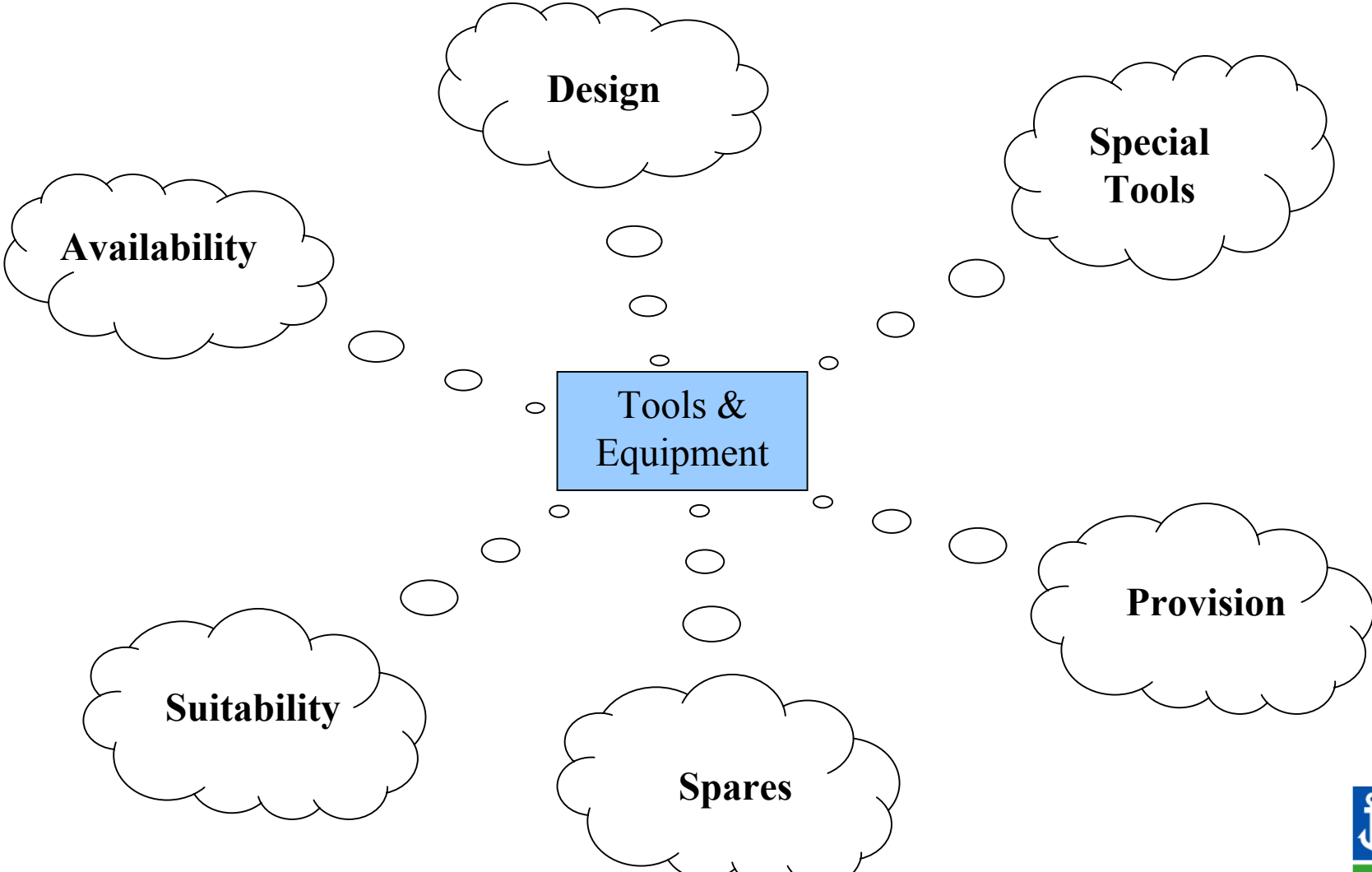
Smoking?

Personal Protective Equipment (PPE)

- Effective protection against hazards
- Compatible with work environment
- Compatible with work tasks
- Correct fit for everyone
- Worn correctly
- Regularly checked and replaced when necessary
- Final resort - better to reduce the risk where possible



Performance Shaping Factors - Tools



Real Life - Examples

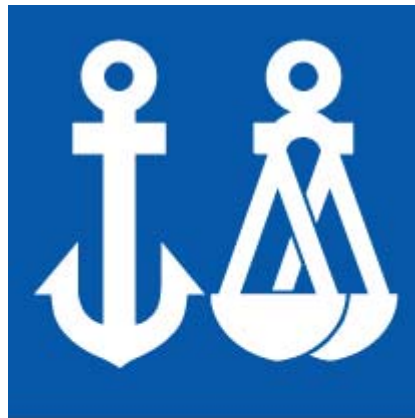
- Answering telephones - helicopter maintenance calls put through to the hanger outside office hours. Disrupted many tasks.
- Process company - visors steam up after continual use making it very difficult to see, therefore were put up by the operators.
- Process company - demanning exercise meant that there was no-one to respond to an alarm in the appropriate location.
- Process company - difficulty in covering critical situations during work breaks etc.

Violations

- Routine
- Situational
- Exceptional
- Optimising
- Speeding?
- Plant specific, related to task and environmental conditions
- Rare, problem solving in novel situations
- Make job more interesting

What This Means

- A lack of consideration of these factors leads to poor performance in all aspects of business including safety.



DIN V