

Team-Ressource-Management

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Team-Ressource Management

▼ 28.12.1978

► Geburtsstunde
des TRM

Date: December 28, 1978 Type: DC-8-61 Registration: N8082U Operator: United Airlines, Inc. Where: Portland, Oregon Report No. NTSB-AAR-79-7 Report Date: June 7, 1979 Pages: 62

About 1815 Pacific standard time on December 28, 1978, United Airlines, Inc., Flight 173 crashed into a wooded, populated area of suburban Portland, Oregon, during an approach to the Portland International Airport. The aircraft had delayed southeast of the airport at a low altitude for about 1 hour while the flightcrew coped with a landing gear malfunction and prepared the passengers for the possibility of a landing gear failure upon landing. The plane crashed about 6 nmi southeast of the airport. The aircraft was destroyed; there was no fire. Of the 181 passengers and **8 crewmembers** aboard, **8 passengers**, the **flight engineer**, and a **flight attendant were killed** and **21 passengers** and **2 crewmembers were injured seriously**.

The National Transportation Safety Board determined that the probable cause of the accident was the **failure of the captain to monitor properly the aircraft's fuel state and to properly respond to the low fuel state and the crewmember's advisories regarding fuel state**. This resulted in fuel exhaustion to all engines. His inattention resulted from preoccupation with a landing gear malfunction and preparations for a possible landing emergency.

Contributing to the accident was the failure of the other two flight crewmembers either to fully comprehend the criticality of the fuel state or to successfully communicate their concern to the captain.



Team-Ressource Management

▼ Übersicht

- ▶ **Faktor Mensch – „to err is human“**
- ▶ **Bausteine des „Crew-Ressource-Management“**
 - Kooperation
 - Kommunikation
 - Situative Aufmerksamkeit
 - Entscheidungsfindung
- ▶ **Fehlermanagement**

Team-Ressource Management

▼ Kooperation

▶ Kapazitäten- modell

nach Richter



Team-Ressource Management

▼ Stress

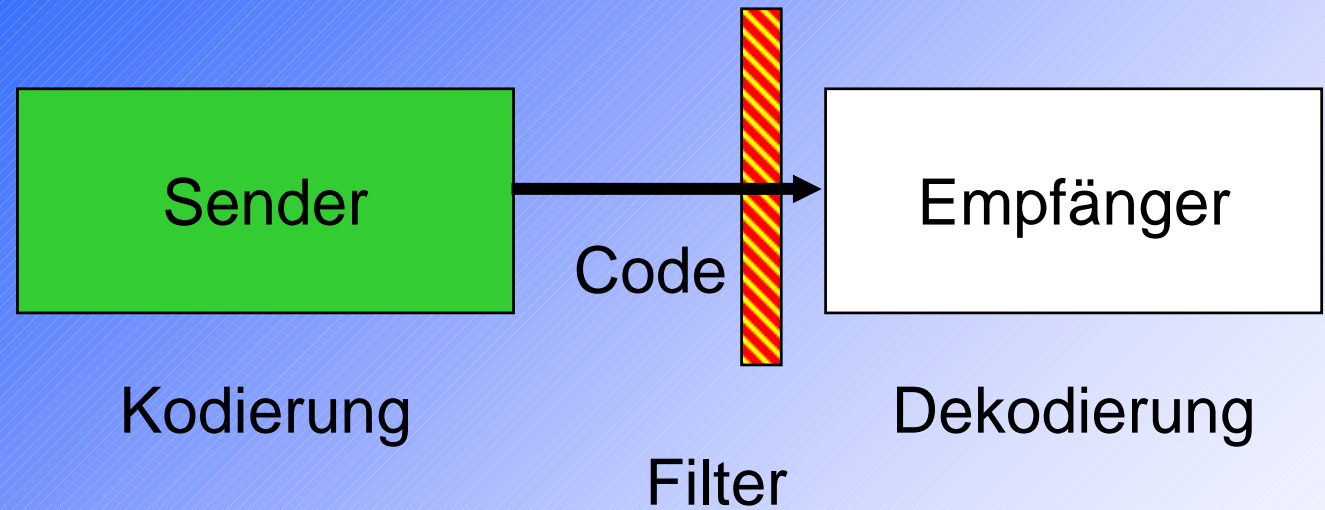
- ▶ Stunden der Langeweile
–
Momente des Terrors

- ▶ Routineabläufe werden unterbrochen von plötzlich einsetzender
 - Dynamik
 - Zeitdruck
 - Komplexität
 - Entscheidungsdruck
- ▶ mit geringer Fehlertoleranz

Team-Ressource Management

▼ Kommunikation

▶ Sender- Empfänger- Modell

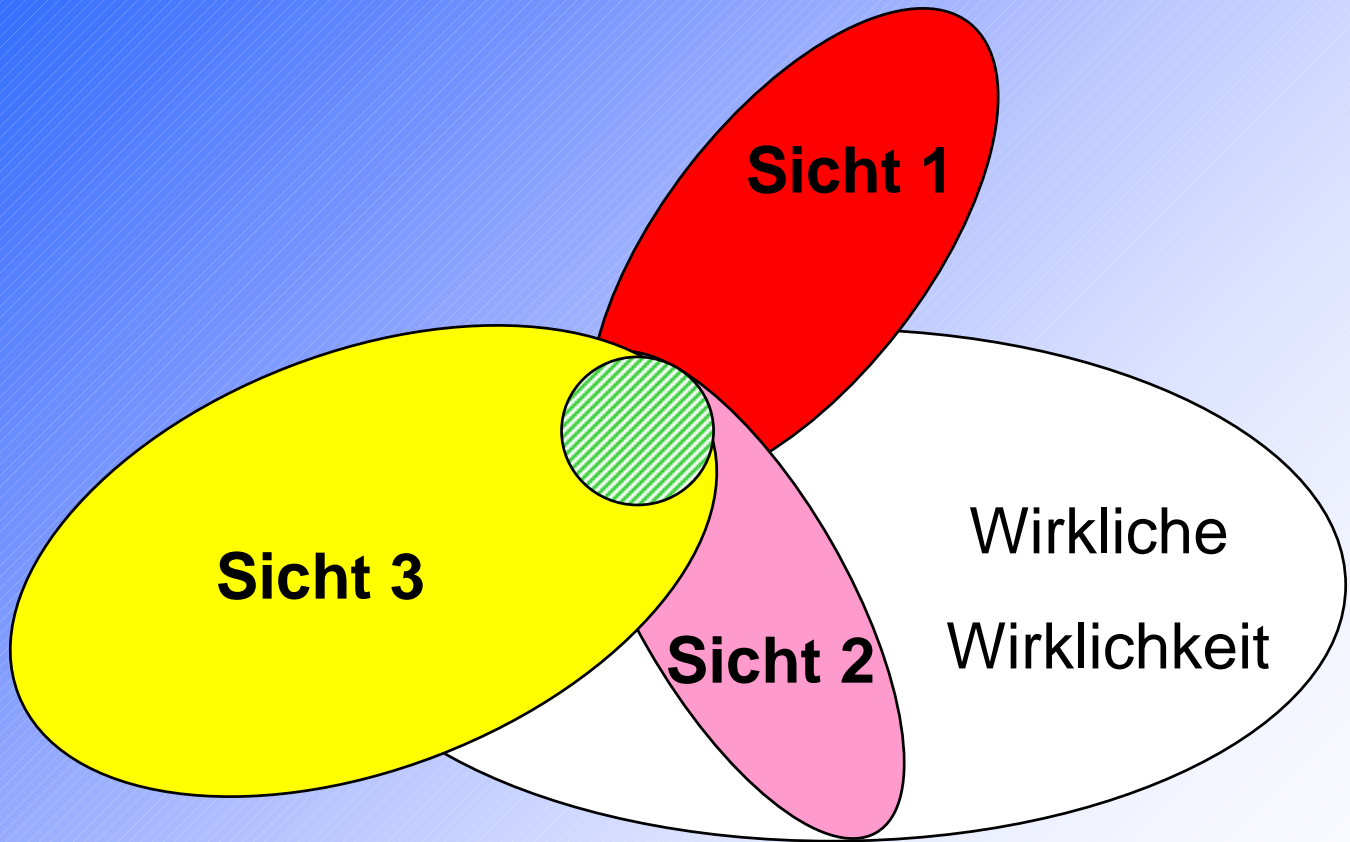


▶ Ursachen für „Missverständnisse“

Team-Ressource Management

▼ **Situative
Aufmerksamkeit**

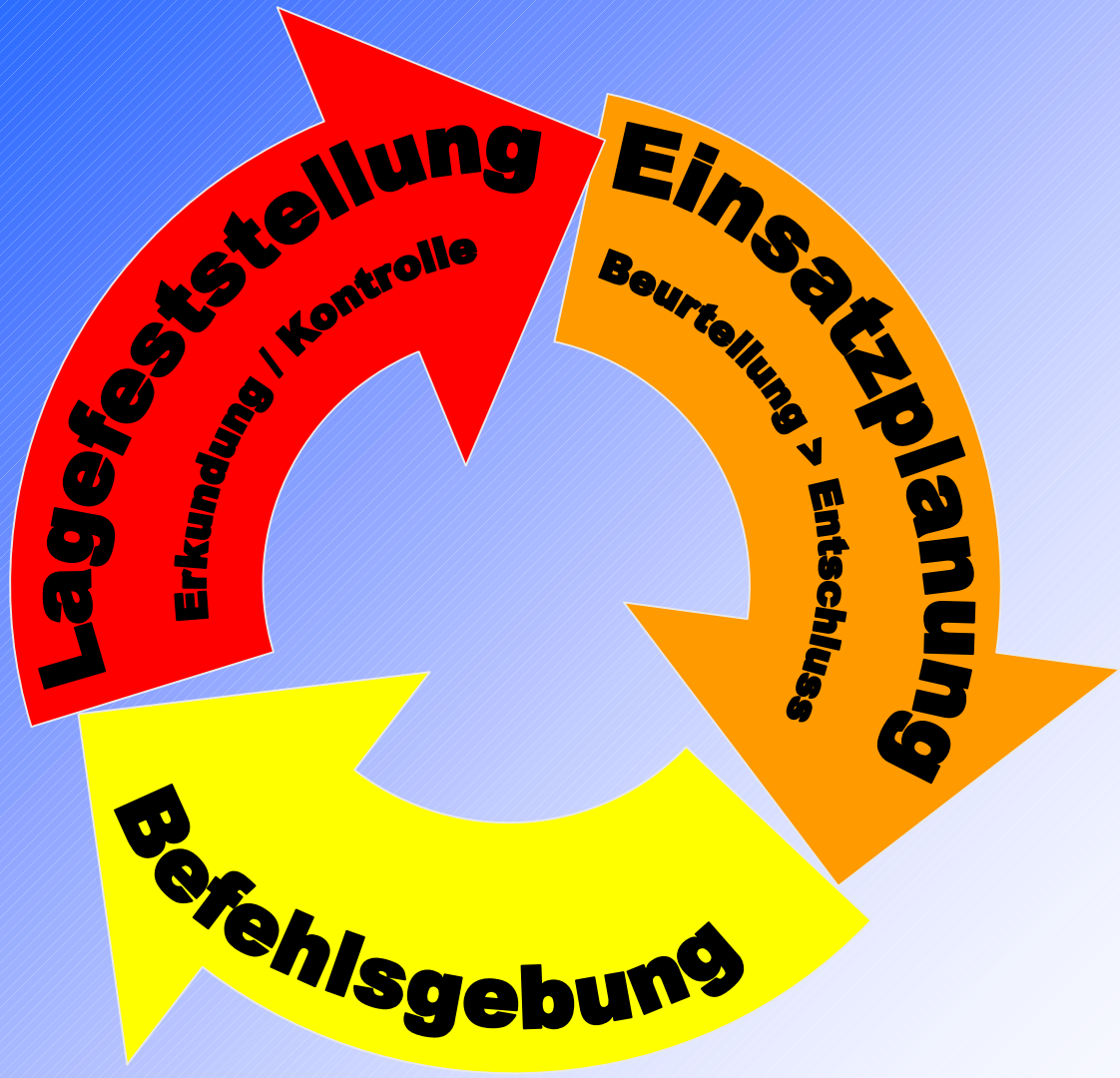
▶ **Wahrnehmung**



Team-Ressource Management

▼ Entscheidungs-
findung

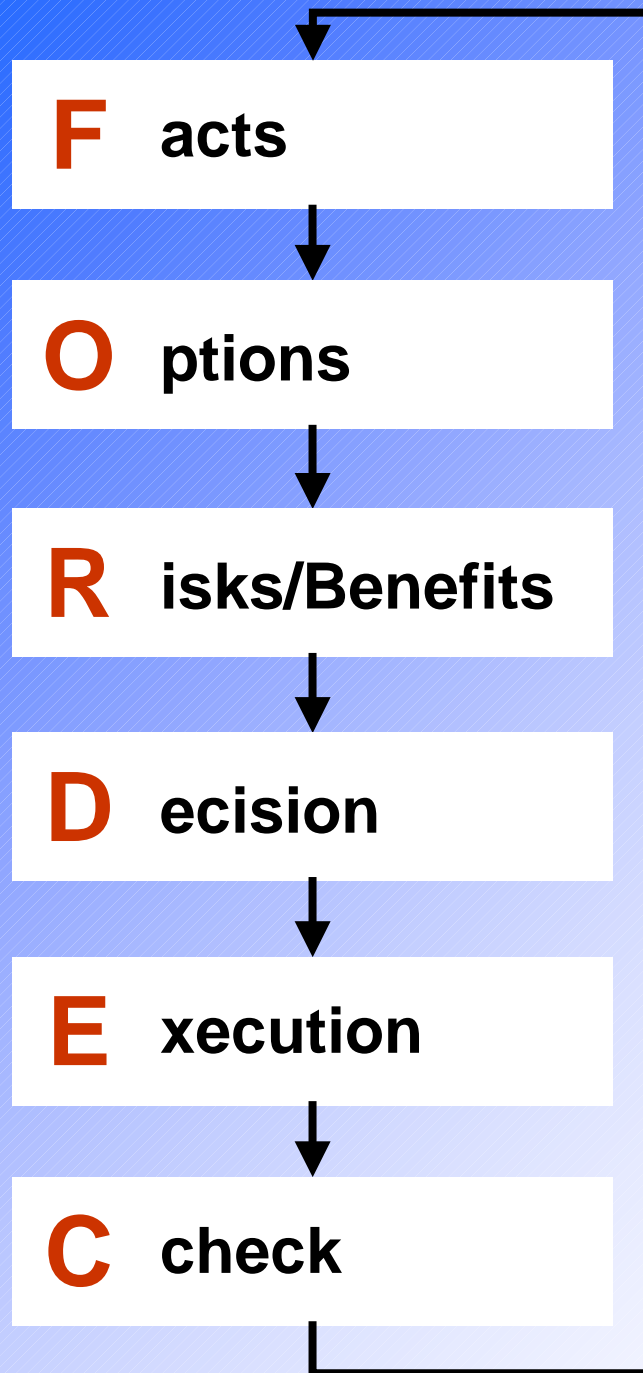
▶ Führungskreis



Team-Ressource Management

▼ Entscheidungs-
findung

▶ FORDEC-
Modell

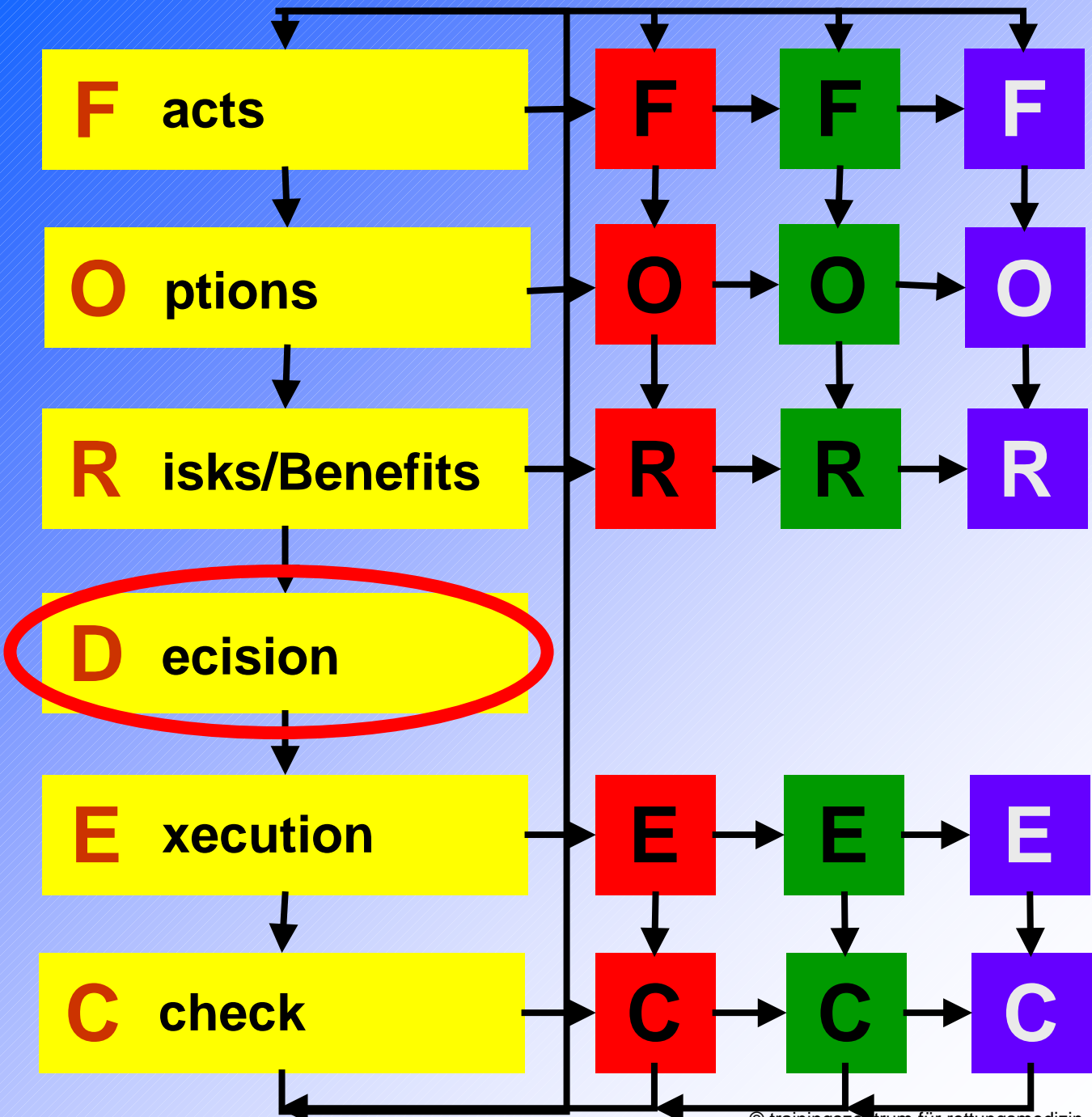


Team-Ressource Management

▼ Entscheidungsfindung

► FORDEC-Modell

Vorteil



Team-Ressource Management

▼ Fehlerkette

- ▶ Fehlerpräventions- und -vermeidungsstrategien



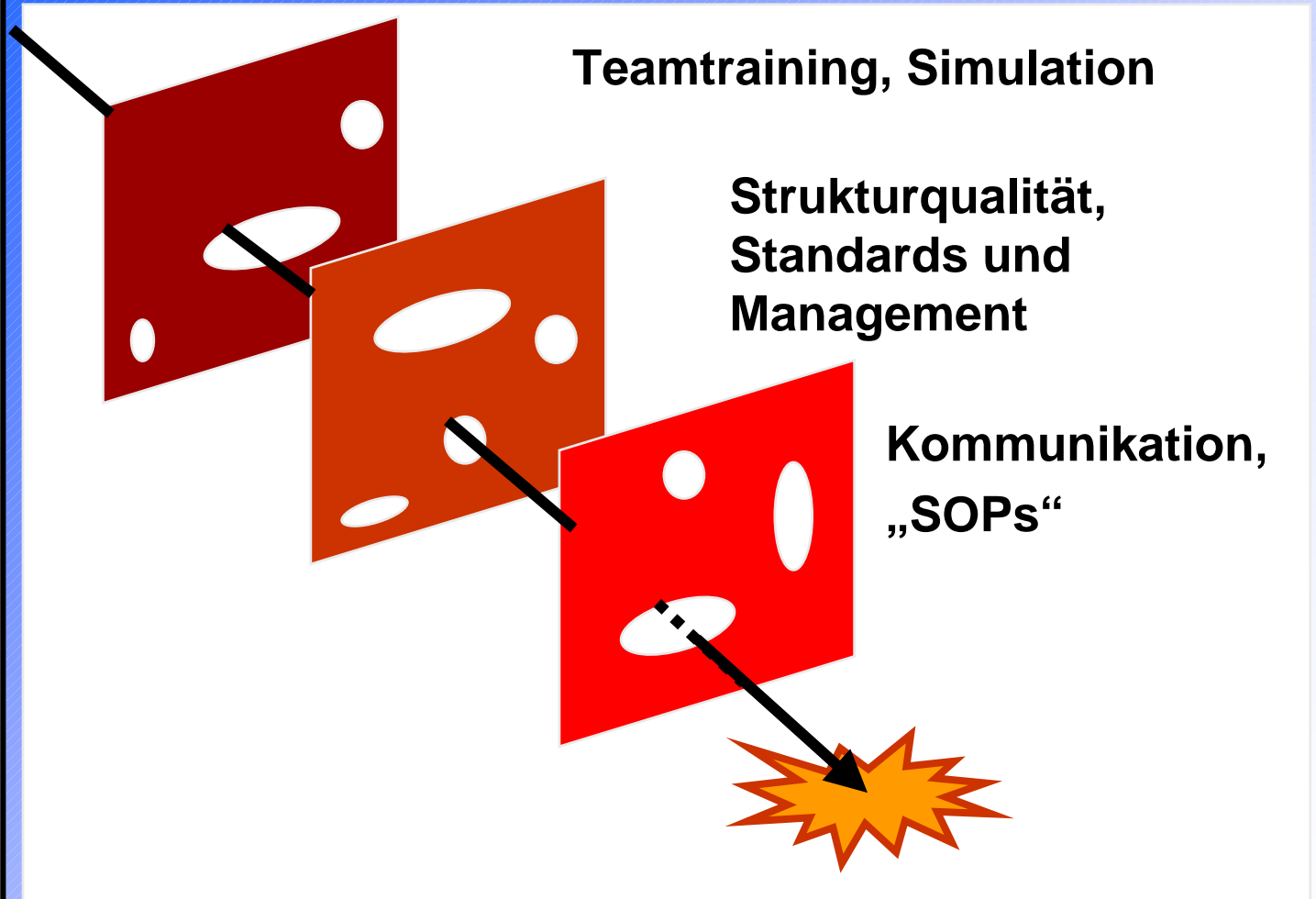
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Team-Ressource Management

▼ Fehlerkette

- ▶ Konkrete Ausbildungsmaßnahmen bzw. -inhalte



Team-Ressource Management

▼ Zusammenfassung

- ▶ **Sensibilisierung auf Thema „TRM“**
- ▶ **Sensibilisierung auf die Trainings-
schwerpunkte:**
 - Kooperation
 - Kommunikation
 - Situative Aufmerksamkeit
 - Entscheidungsfindung
- ▶ **Fehlermanagement „neue Fehlerkultur“**
 - Einsatznachbesprechungen
 - Einführung und Einhalten von Standards

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