FAST SE canvas

FAST SYSTEMS ENGINEERING 2026 · Frame · Analyse · Stress-test · Take it forward

One canvas, four steps. If it is not on the canvas, it does not exist.

Team _____ **Table** _____

Assignment _____

Post-its

- **Colour 1** own work in Frame and Analyse
- **Colour 2** SE-SWOT by the reviewing team
- **Colour 3** response and revision by the own team

F Frame — What problem are we solving, for whom, and within which boundaries?

Problem statement

[stakeholder] needs [what] in [context], so that [goal], within [constraints]. Solution-free.

Stakeholders

Name at least one conflict between stakeholders.

Stakeholder	Key need	Influence

Conflict:

Context diagram

External parties around the system, flows across the boundary. Name every interface, including uncertain ones.

SYSTEM

Top-level requirements

Five or six, each traceable to a stakeholder. Type: R = requirement, C = constraint.

ID	Requirement	Source	Measurable criterion	R / C
R1				
R2				
R3				
R4				
R5				
R6				

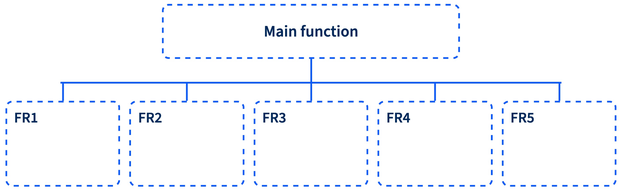
Assumptions

What do we assume without knowing for sure? Write it down: after lunch, another team will read this.

A Analyse — From problem to functions, alternatives and a chosen direction.

Functional structure

Verb plus noun, solution-free. Every function traces to a requirement.



Design matrix

Cross: this design parameter affects this functional requirement.

FR \ DP	DP1	DP2	DP3	DP4
FR1				
FR2				
FR3				
FR4				

Classification: ☐ uncoupled ☐ decoupled ☐ coupled

Alternative 1

Sketch and key choices.

Alternative 2

Fundamentally different, not a variant of the first.

Chosen concept

Which one and why? Refer to requirements or stakeholders.

Coupling risks

Every coupled cell in the matrix, with its consequence.

Handover note

Three key decisions · open questions · what the next team must know.

S Stress-test — SE-SWOT by a team from another company, then your response.

Reviewing team: no more than three post-its per quadrant, each pointing to a specific place on this canvas.

Own team: respond to each point: adopted, rejected with a reason, or open.

Strengths

Which decisions are well founded and traceable?

Critique · colour 2 | Response · colour 3

Weaknesses

Where is the reasoning weak? Hidden solutions, untraceable requirements, hidden coupling?

Critique · colour 2 | Response · colour 3

Opportunities

Which alternative or simplification was missed? Phrase it as a question.

Critique · colour 2 | Response · colour 3

Threats

Which assumption or interface is likely to fail in integration or verification? Phrase it as a question.

Critique · colour 2 | Response · colour 3

T Take it forward — Together with the other team on this assignment.

Point of divergence

Where did the two teams diverge, and why?

☐ framing ☐ assumption ☐ trade-off ☐ solution

Key decision

Or the decision the company needs to make.

Rejected alternative

And on what grounds.

Remaining uncertainty

What do we not yet know?

Next verification step

What does the company take away?

Write on post-its: that way, what changed under pressure stays visible.