Lean Systems Engineering
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To what extent can the Customer Requirement Specification process for infrastructure projects be enhanced in order to prevent waste and if so, in what way?

1. Systems Thinking
2. It's all about customer needs
3. Optimization throughout the life cycle
4. From abstract to concrete
5. Working explicitly

Requirement Monitor

1. Specify value
2. Identify and map the value streams
3. Make value flow by eliminating waste
4. Respond to customer pull
5. Pursue perfection

Lean principles

Stakeholder Salience model

- Identifying stakeholders
- Stakeholder mapping
- Determining strategies
- Managing stakeholders
- Dynamic

Project Startup

- Structured start of the project
- Coordinated activities
- Creating a team
- Clear agreements about the decision-making process
- Creating commitment

Plan that delineates how requirements will be drawn out

- Define how, when, and by whom requirements will be drawn out
- Define how to involve stakeholders
- Agreement about level of SMARTness

Requirement check

- Upscale this to SMARTness
- No match required SMARTness
- Path to requirements draw-out
- Relevant to current design context
- Relevant to current project

Lean Planning

- Daily meetings
- Weekly meetings/stands

Scope check

- Identifying stakeholders
- Stakeholder mapping
- Determining strategies
- Managing stakeholders
- Dynamic