

Project Management

Phase

Objective

Main Tasks

Tools

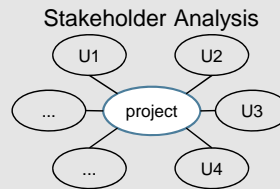
Results



Plan

- Define innovation project

- Describe current situation
- Determine innovation target
- Define project



Action	Date	Project Plan
PLAN		
IDENTIFY		
DESIGN		
OPTIMIZE		
VALIDATE		

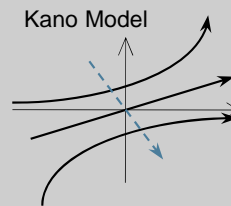
- Clearly defined innovation target
- Project assignment



Identify

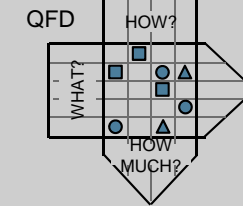
- Define requirements on product / process

- Determine and analyse customer requirements (external and internal)



Paired Comparison

Criteria	C ₁	C ₂	C ₃	Σ
C ₁		2	0	2
C ₂	0		0	0
C ₃	2	2		4



- Clearly defined requirements on product / process



Design

- Develop product / process concept

- Make enquires about possible solutions
- Design product / process models
- Evaluate product / process models and select concept

Enquiry about solutions



Creativity techniques



FMEA

S	O	D	RPN	Action
9	8	3	216	Name/KWx
9	2	2	(36)	Name/KWx

- Concept of product / process

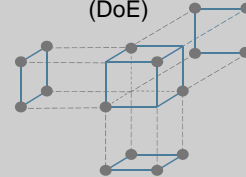


Optimize

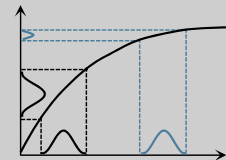
- Optimise product / process

- Detail concept of product / process
- Optimise solution for product / process

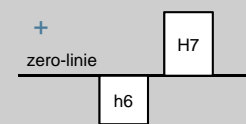
Design of Experiments (DoE)



Robust Design



Tolerance Analysis



- Optimised product specification
- Optimised process specification



Validate

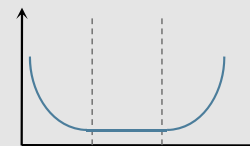
- Validate optimised solution

- Test product / process
- Concentrate solutions and findings and make them available
- Close projects

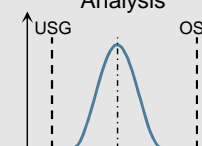
Design Verification Plan & Report (DVP&R)

function	plan	result
FU 1	Test 01	✓
FU 2	Test 02	✓

Reliability Analysis



Process Capability Analysis



- Tried and proved product
- Proven process capability
- Formal project closure