Abstract

The Product Creation Process is described in its context. A phased model for Product Creation is shown. Many organizations use a phased model as blueprint for the way of working. The operational organization of the product creation process is discussed, especially the role of the operational leader.
The Product Creation Process in Business Context

Customer

Policy and Planning Process

Product Creation Process

Customer Oriented Process

Product Requirements and feedback

Order

Product

Spatial Information

Product Related processes

Requirements and Feedback

Technical Product Documentation

Budgets

People Technology Process

People and Technology Management Process

Customer Roadmap

Business Drivers

Budget, plan

Product roadmap

Technology, Process and People roadmaps

version: 2.2
September 9, 2018
PCPcontext
Phasing of the PCP at Business Level

0. feasibility
1. definition
2. system design
3. engineering
4. integration & test
5. field monitoring

sales
logistics
production
service
development & engineering: marketing, project management, design
Phasing the Design Control Process

The Product Creation Process

Legend:
- ■ core information in draft
- □ 50%
- □ most information available in concept
- □ information is stable enough to use heavier change control

0. feasibility
1. definition
2. system design
3. engineering
4. integration & test
5. field monitoring

needs
specification
design
verification
engineering

full under development
preparing or updating work
Advantages and Disadvantages of a Phased Process

**benefits**
- blueprint: how to work
- reuse of experience
- employees know *what* and *when*
- reference for management

**disadvantages**
- following blueprint blindly
- too bureaucratic
- transitions treated black and white
Characteristics of a Phase Model

0. feasibility
1. definition
2. system design
3. engineering
4. integration & test
5. field monitoring

- large impact decisions
- phase transitions
- concurrency
- iteration
- needs
- specification
- design
- verification
- engineering

- order long-lead items
- order high-cost items
- order product announcement

Check points

version: 2.2
September 9, 2018
PCP characteristics
Define a minimal set of *large-impact* decisions.

Define the mandatory and supporting information required for the decision.

Schedule a decision after the appropriate phase transition.

Decide explicitly.

Communicate the decision clearly and widely.
Evolutionary PCP model

- Test and evaluate
- Requirements specification
- Design
- Build
- 2% of budget (EVO)
- 2 weeks (XP)
- Up to 2 months per cycle

The Product Creation Process
8 Gerrit Muller

version: 2.2
September 9, 2018
PCPspiral
Operational Organization of the PCP

The Product Creation Process

version: 2.2
September 9, 2018

PCPOperationalOrganization
Prime Responsibilities of the Operational Leader

Specification

Quality

Resources

Time
The Rules of the Operational Game

- define project
- update project
- assess risks
- determine feasibility
- accept or reject
- execute project within normal quality rules

business management

project leader
Operational Teams

- Operational Leader (project leader)
- Operational Support (project manager)
- Marketing or Product Manager
- Application Manager
- Test Engineer
- Requirements Analyst
- Quality Assurance
- Architect
- Subsystem Architects
- Development support
- Technology-Specific Architects
- Subsystem Operational Leaders
- Manufacturing
- Logistics
- Service
- Sales Manager