Abstract

The role of feedback in the Product Creation Process is described, especially for the System Architecting.
Deviation with and without Feedback

The Importance of Feedback for Architecture

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FBdeviationWithoutFeedback
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Gerrit Muller

FBschoolsOfArchitecturesPresence
Theoretical vs Practical work per phase

<table>
<thead>
<tr>
<th>Theoretical</th>
<th>Practical</th>
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<tbody>
<tr>
<td>Policy and Planning</td>
<td>0. feasibility</td>
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<td>1. definition</td>
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<td>2. system design</td>
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<td>3. engineering</td>
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<td>4. integration &amp; test</td>
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<td>5. field monitoring</td>
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FBphasesTheoreticalVsPractice
Feedback per phase

Policy and Planning

0. feasibility
   product outlines

1. definition

2. system design
   specification
   technology
   effort
   skills

3. engineering
   functionality
   performance
   interfaces

4. integration & test
   usability
   manufacturability
   installability
   serviceability
   saleability

5. field monitoring

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FBperPhase
Development Models

V-Model

- needs
- specification
- system design
- subsystem design
- component design
- component test
- component realization
- validation
- verification
- system test
- subsystem test
- test and evaluate
- requirements specification
- build
- design

Incremental or Evolutionary

- cycle time
  - 2% of budget (EVO)
  - 2 weeks (XP)
  - up to 2 months
- alternative models
  - RUP (Rational Unified Process)
  - Open Source
  - SCRUM

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FBdevelopmentModels
1. For the education of system architects it is essential that they participate in the entire feedback loop.

2. The education of system architects is never finished.

3. System architects must participate in the entire product creation lifecycle for most of their career.

4. The value of system architects in the policy and planning process stems from the practical feedback during the product creation process.

5. Feedback can never come too early.

6. System architects can have fantastic dreams, feedback is required to prevent that dreams turn into a nightmares.