



Aalto University
School of Science

Continuous Release Planning in a Large-Scale Scrum Development Organization at Ericsson

Ville T. Heikkilä¹

Maria Paasivaara¹

Casper Lassenius¹

Christian Engblom²

¹Aalto University, Helsinki, Finland

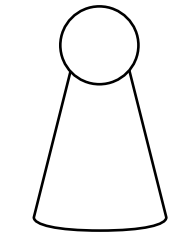
²Oy Ericsson Ab, Kirkkonummi, Finland

How Release Planning is Conducted in Large Agile Organizations?

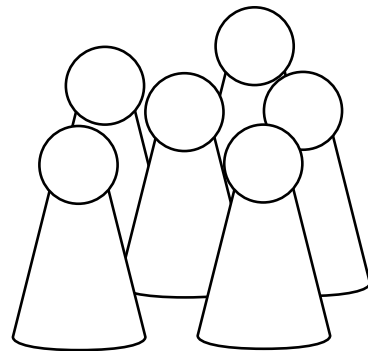
1. RQ: What was the release planning process?
2. RQ: What were the challenges related to the release planning process?
3. RQ: What were the benefits of the continuous release planning process?

Quick Introduction to Scaling Agile

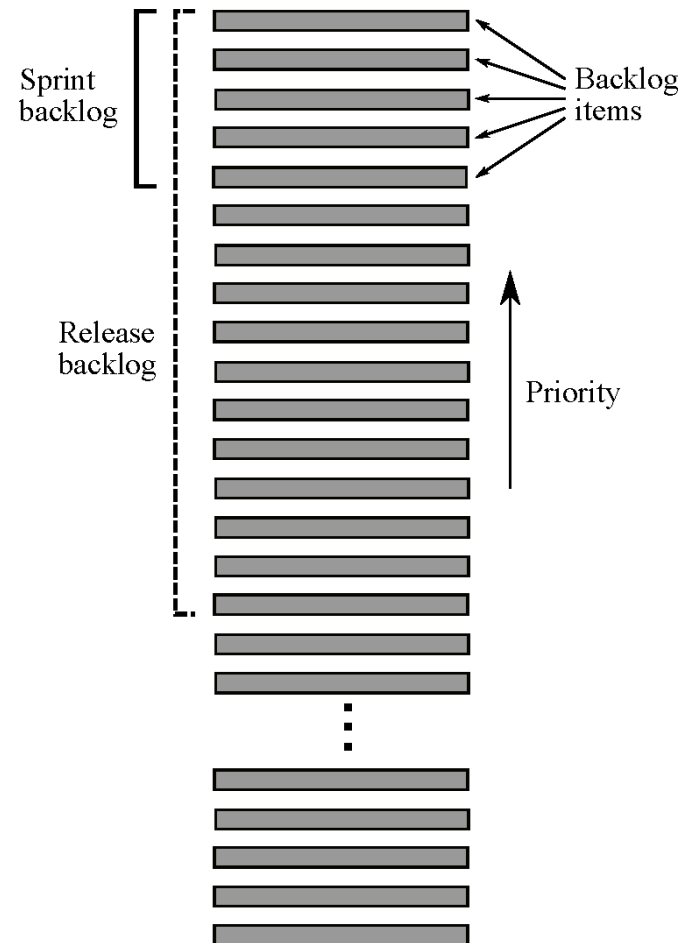
The Scrum Software Development Process for Small Teams



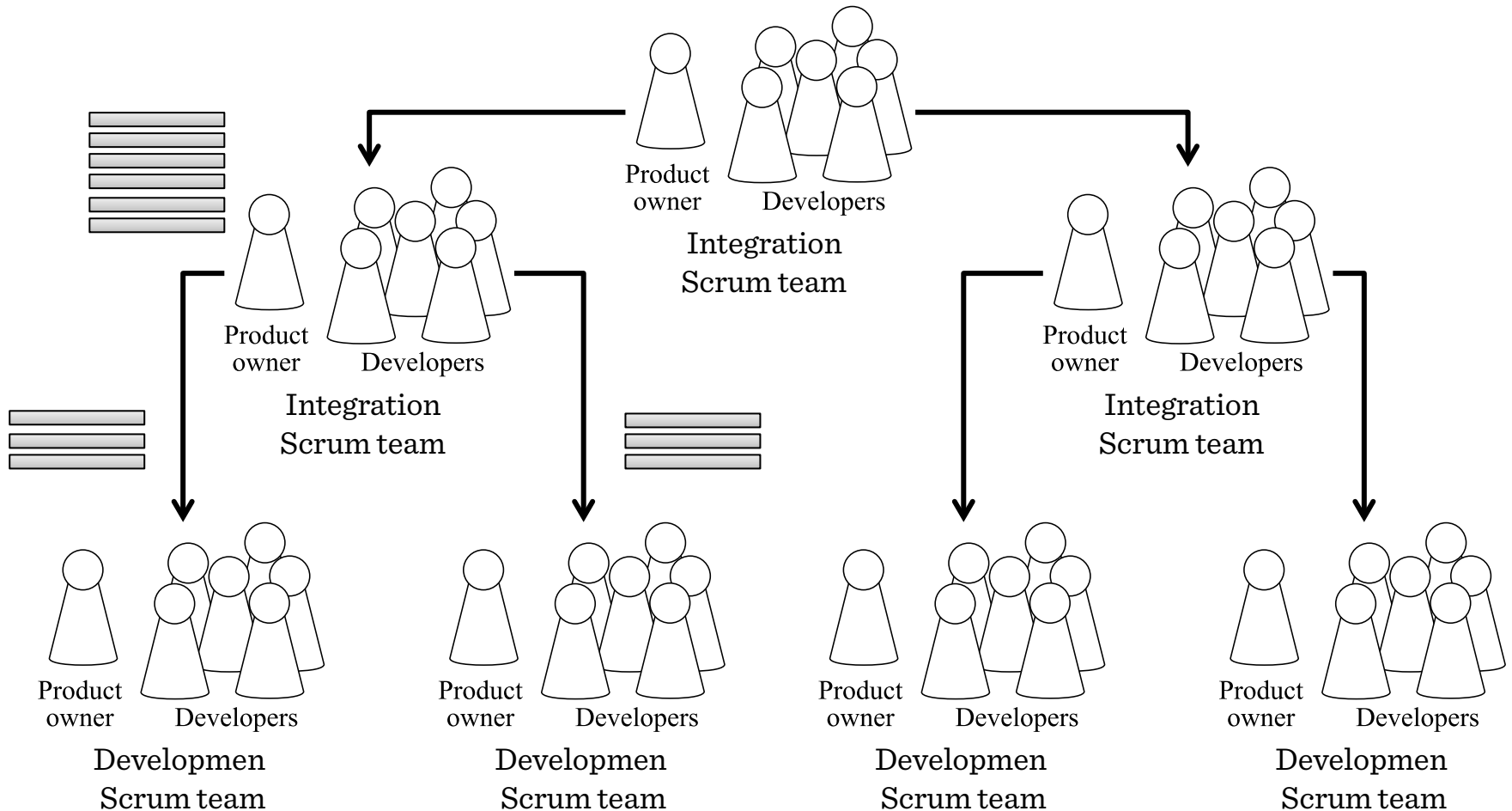
Product owner



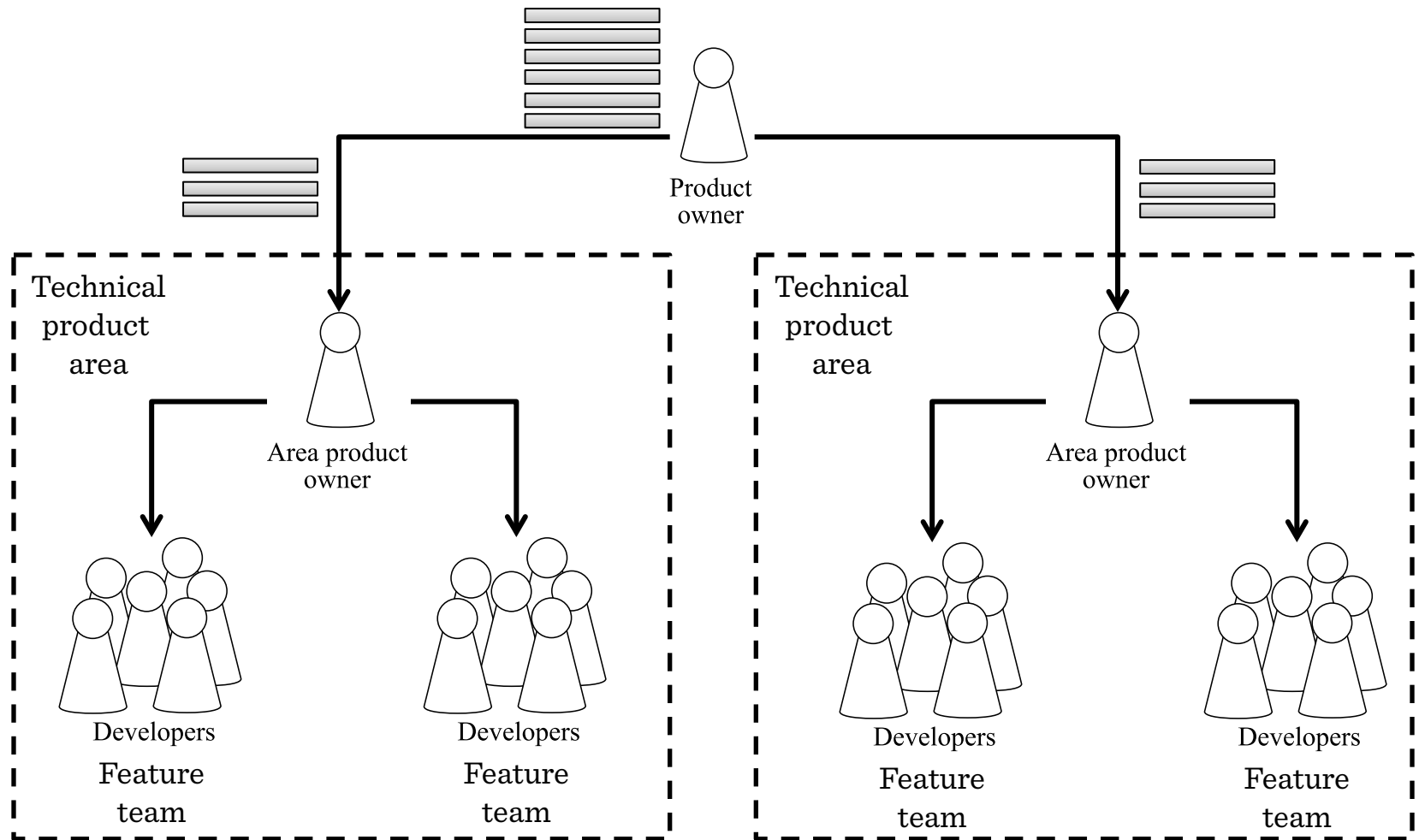
Developers



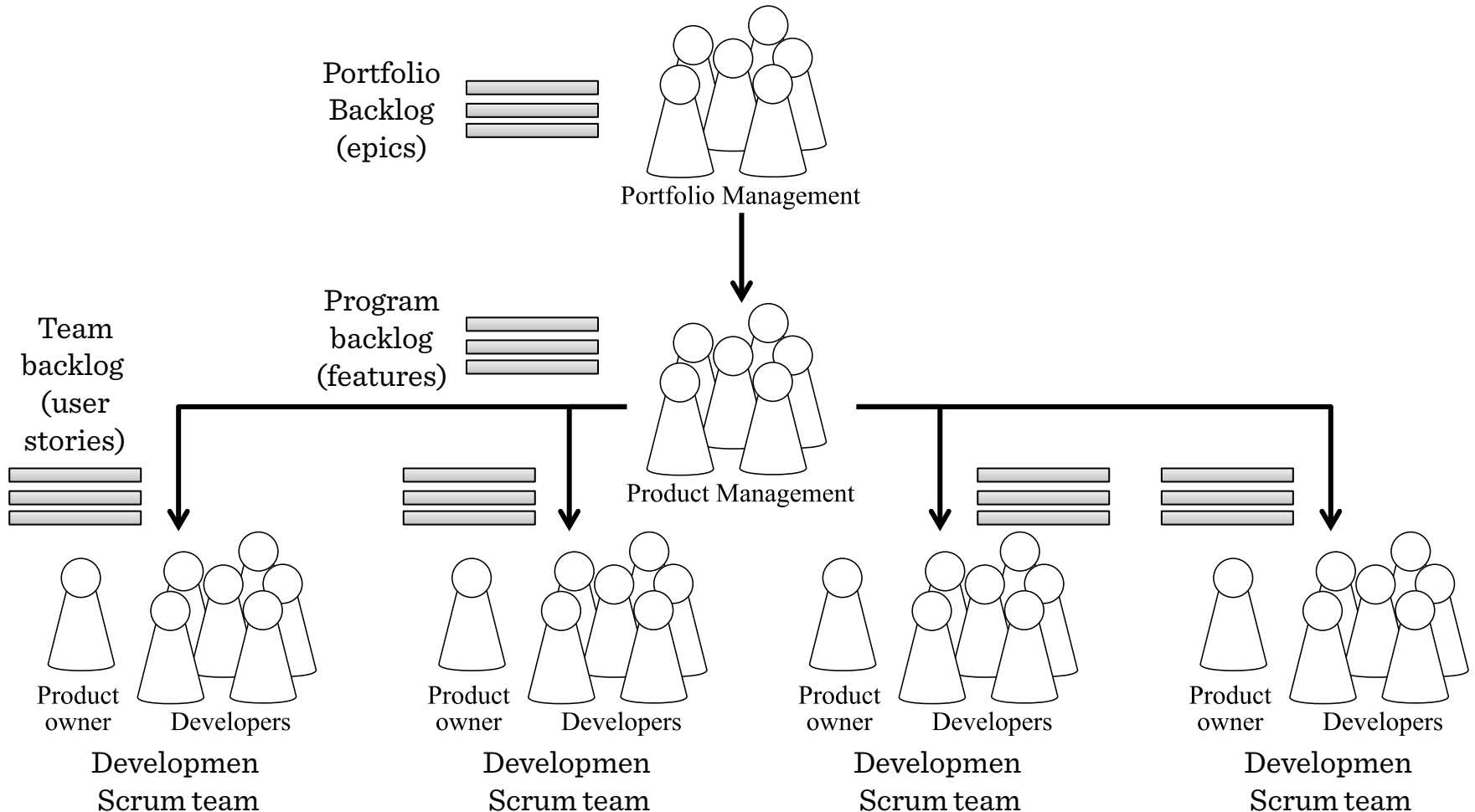
Scaling Agile: Schwaber 2007



Scaling Agile: Larman & Vodde 2008



Scaling Agile: Leffingwell 2011

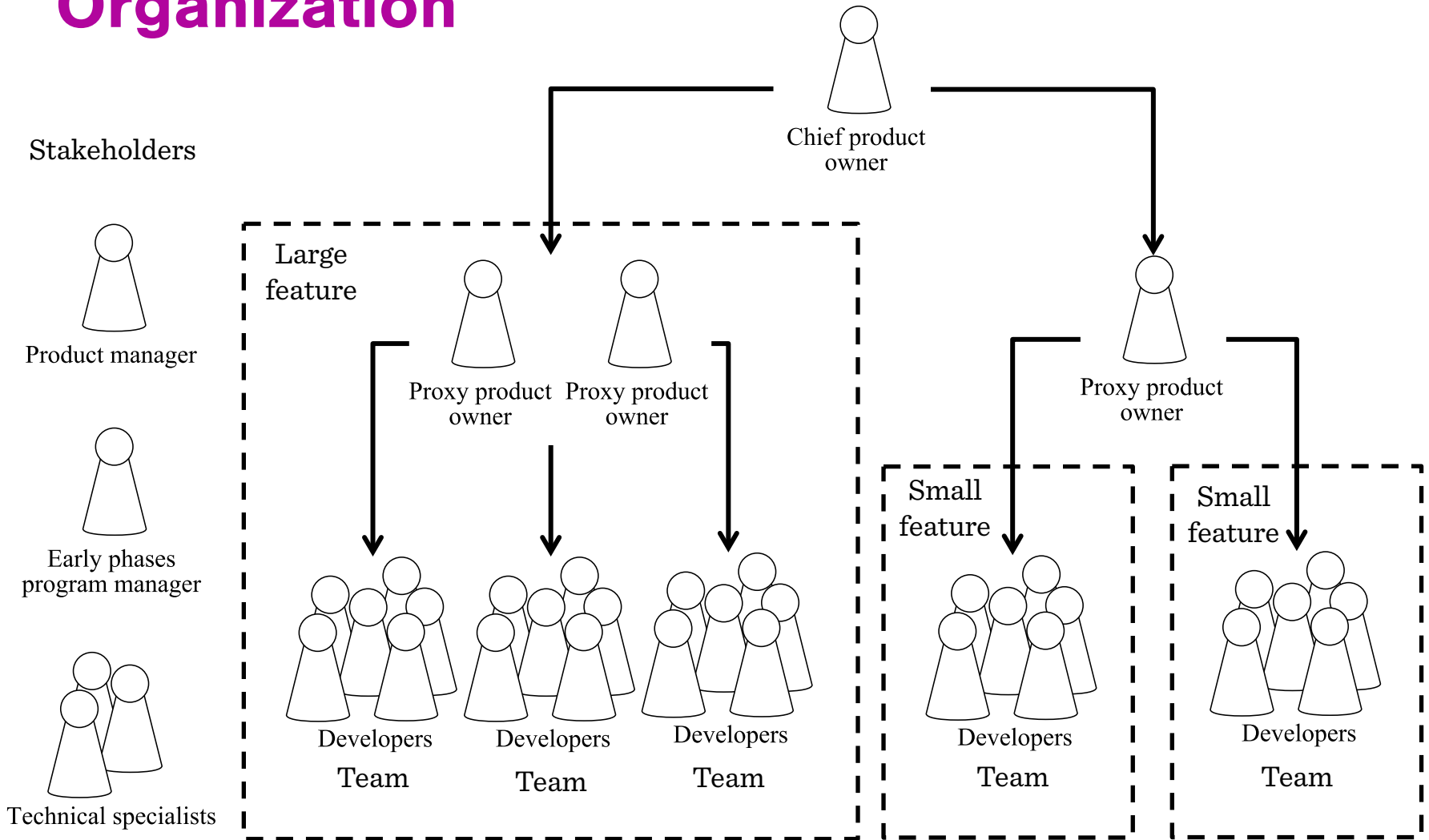


The Case Organization

Background

- Ericsson node development organization
- Large telecommunications node
- 10 year old software
- Agile "journey" begun in 2009, goals:
 - Decrease development lead time
 - Improve flexibility
 - Increase developer motivation
 - Increase QA efficiency
- Scrum chosen as the method
- In 2011, 20 development teams on 2 sites

Organization



Research methods

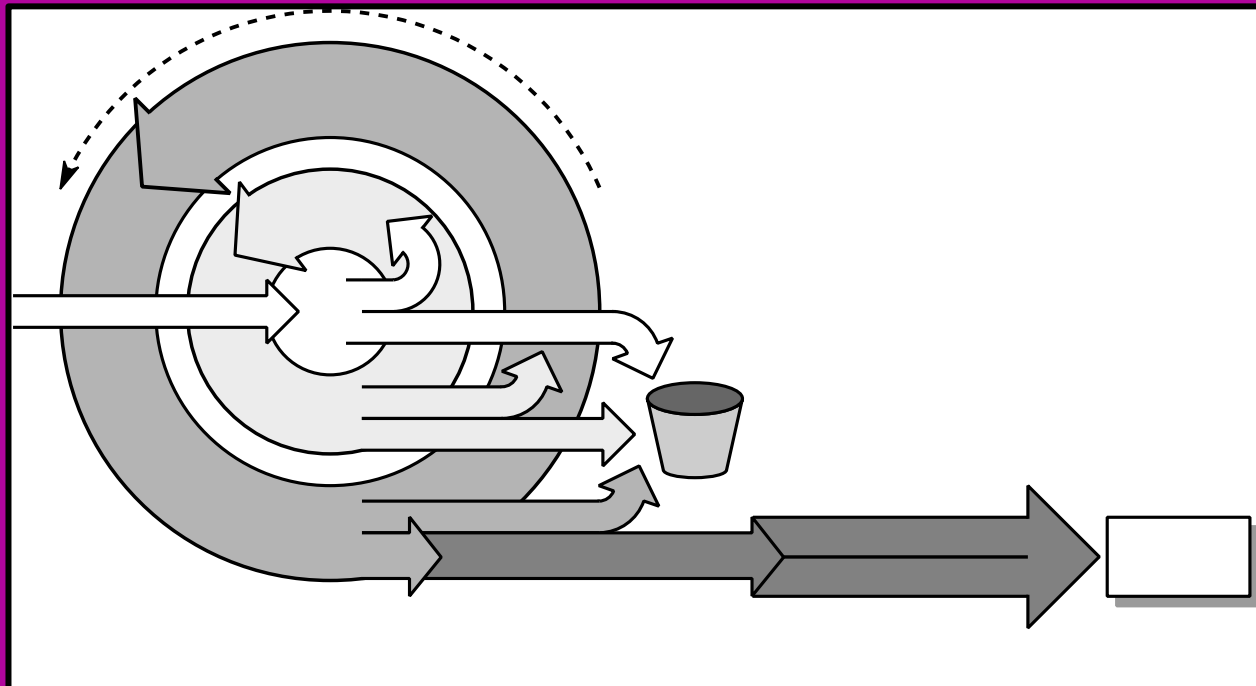
Data collection

- 39 semi-structured interviews
 - 28 in Finland
 - 11 in Hungary
- 1-3h per interviews
- Voice recorded
- Transcribed by Tutkimustie
- Imported into Atlas.ti
- ✓ 6 middle/upper managers
- ✓ 1 agile coach
- ✓ 6 Scrum masters
- ✓ 13 developers
- ✓ 3 line managers
- ✓ 7 product owners
- ✓ 5 technical specialists / architects

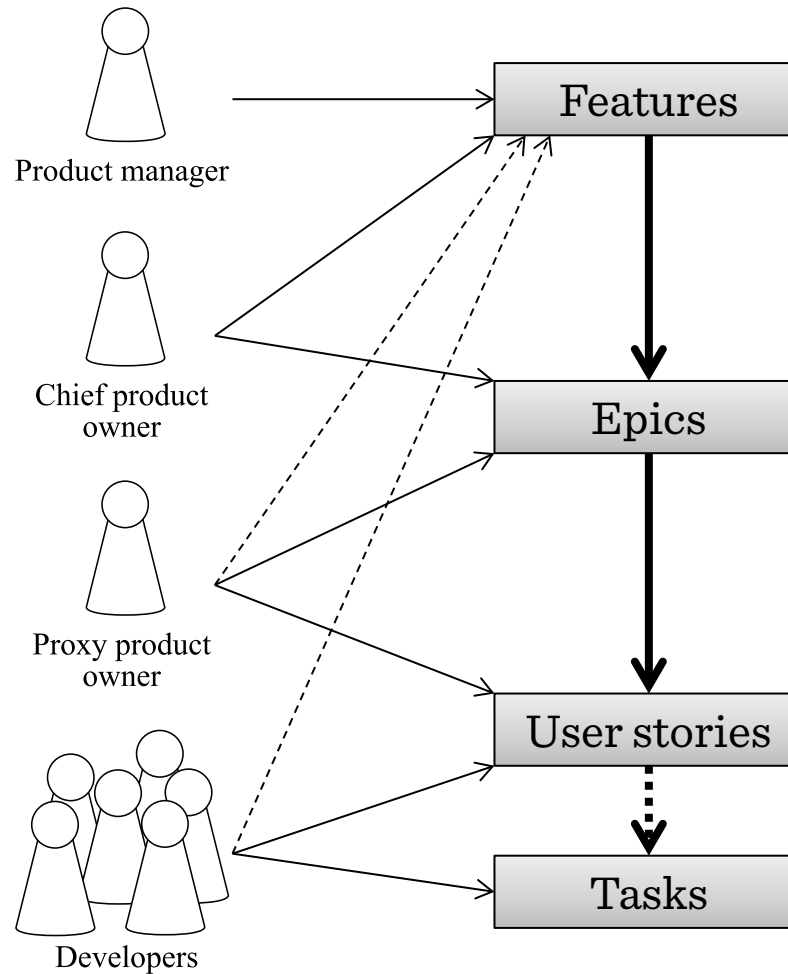
Analysis

- Grounded-theory inspired coding process
 - Initial concept list from RP and PM literature
 - Constant comparison
 - Combining concepts and forming categories
 - Total 625 coded passages
- Extracted passages
 - Related to organization or release planning
 - Re-read all passages
 - Constructed results

Results

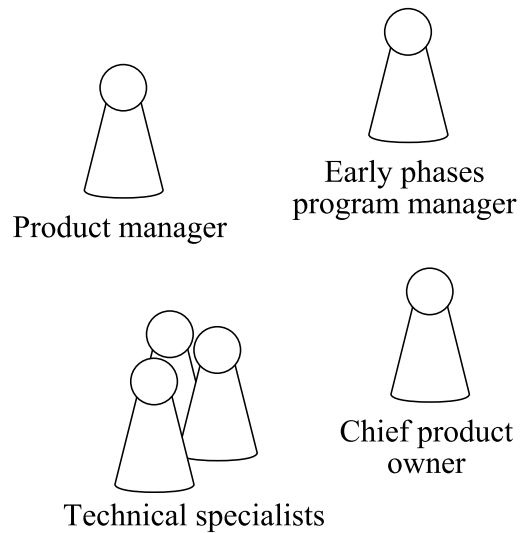


Work Items

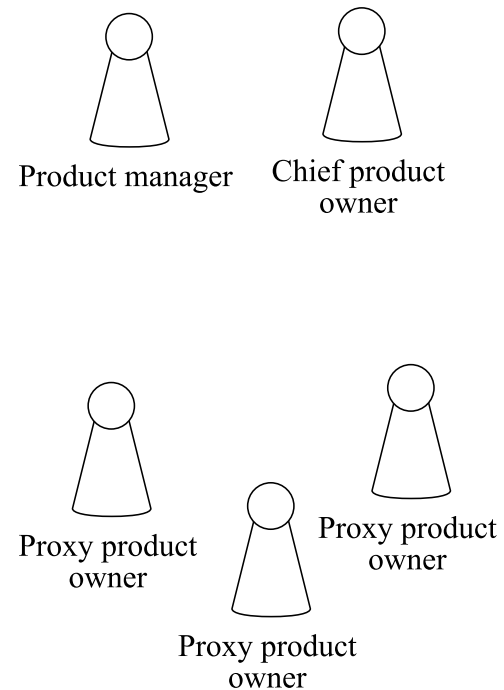


Steering Groups

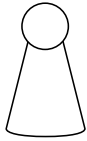
The Portfolio Steering Group



The Development Steering Group



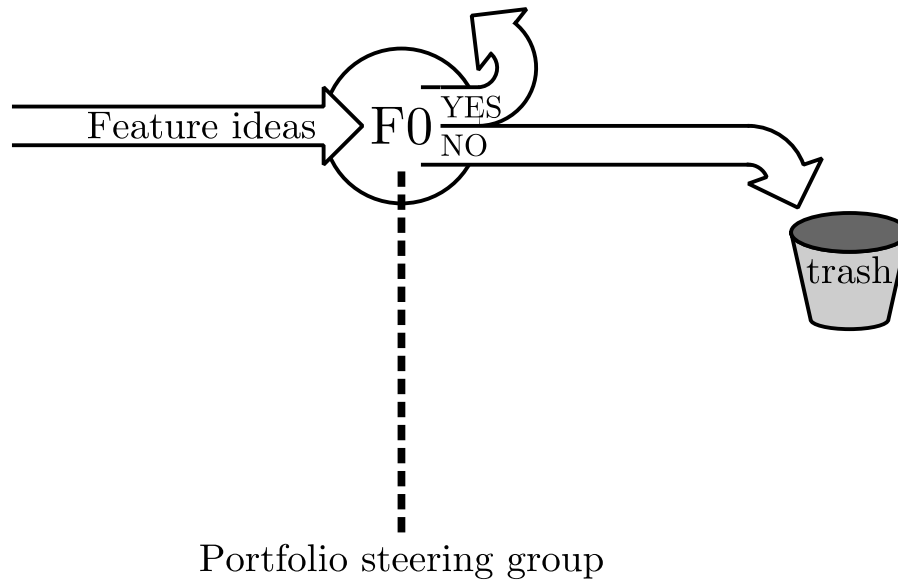
The Planning Process: Feature Ideas



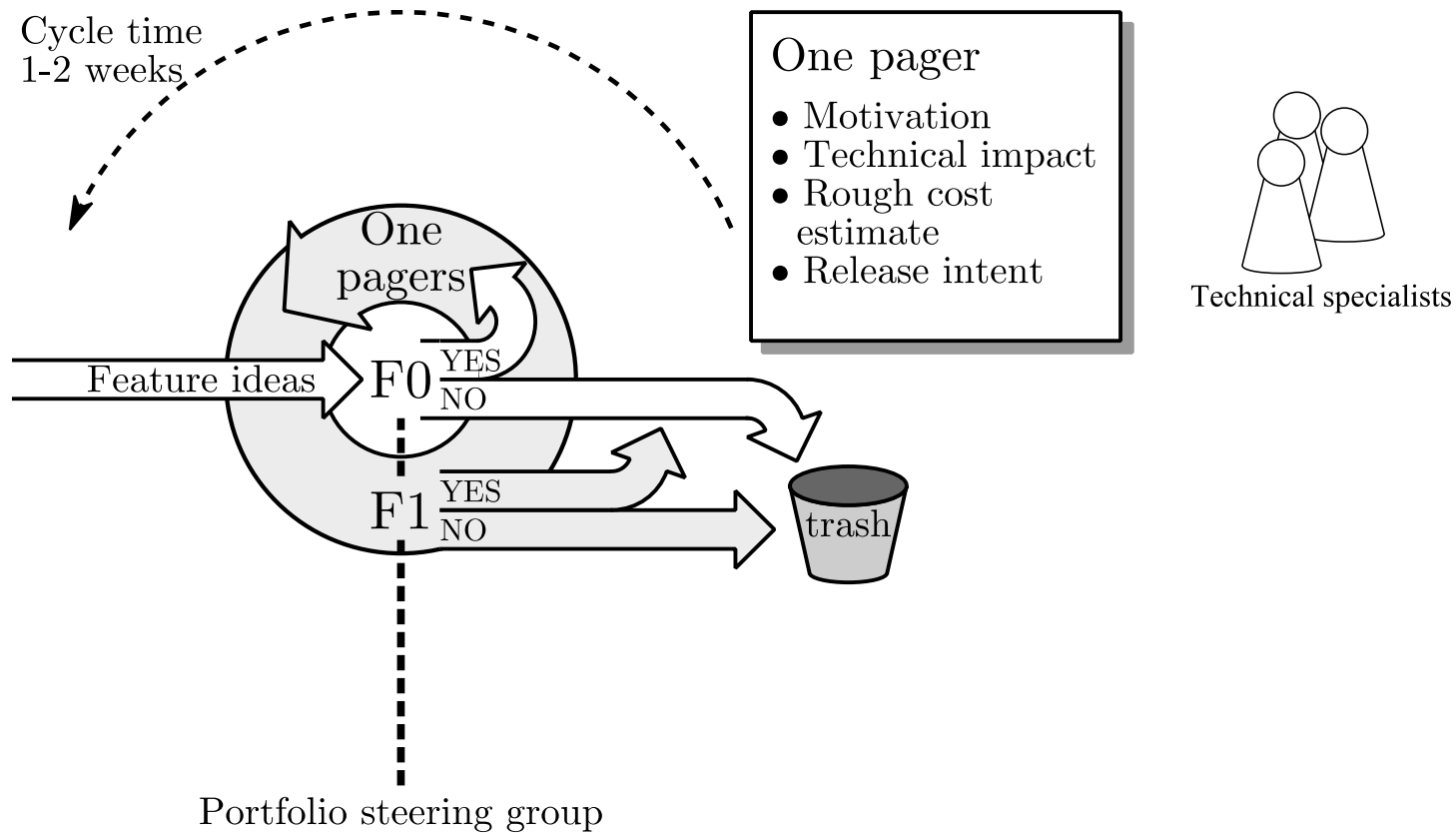
Product manager



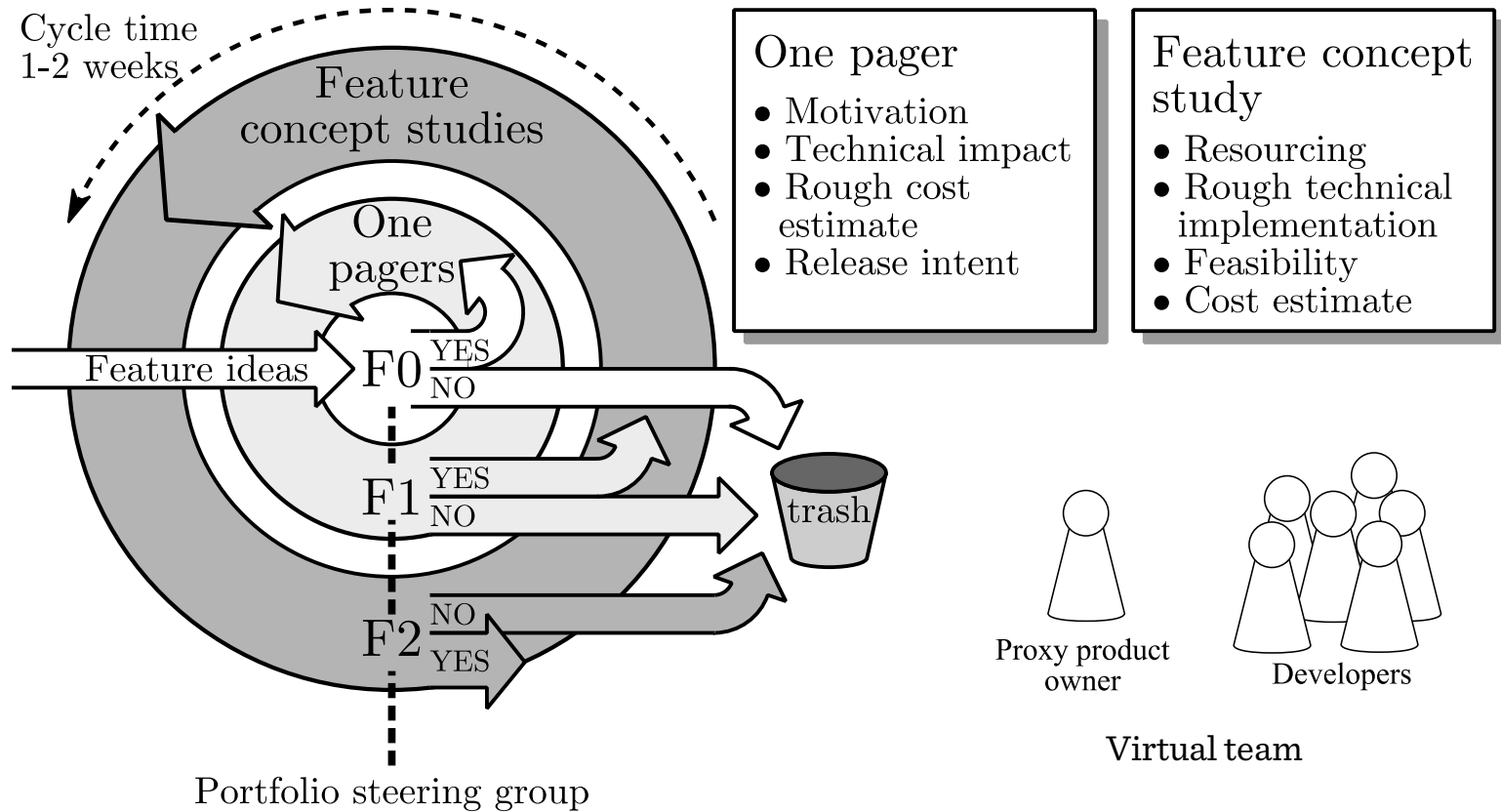
The Planning Process: F0 (early phases)



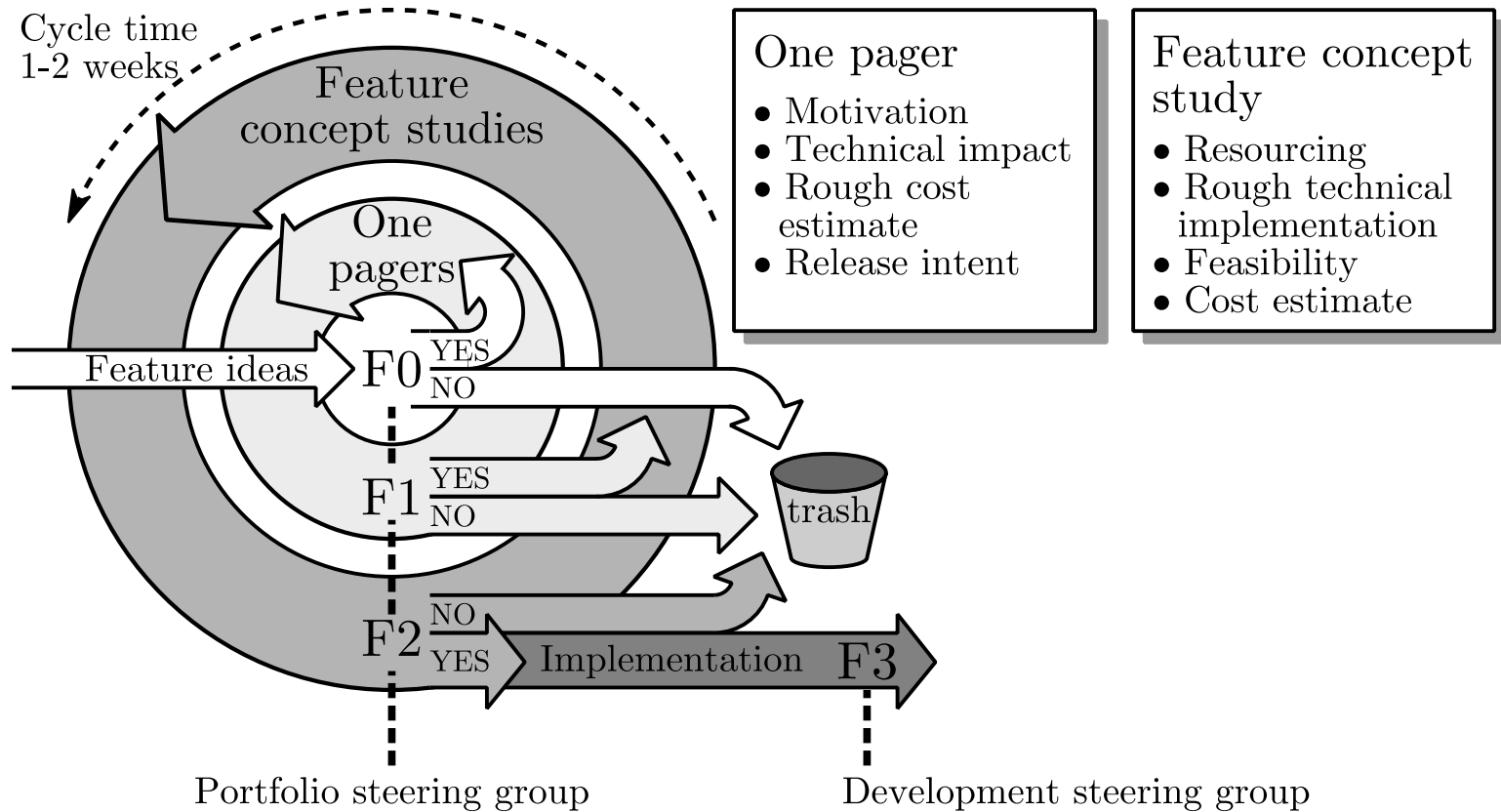
The Planning Process: F1 (early phases)



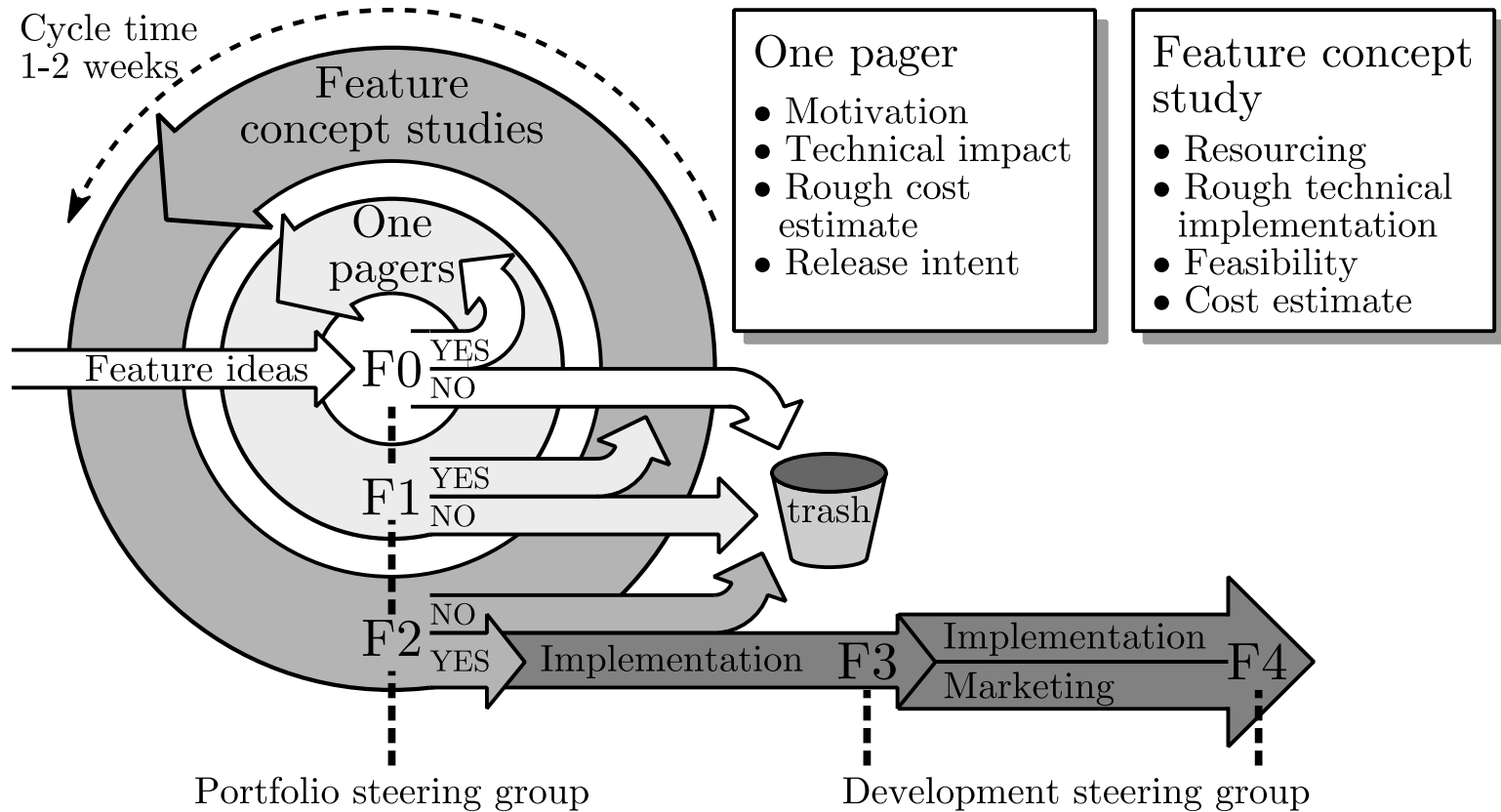
The Planning Process: F2 (early phases)



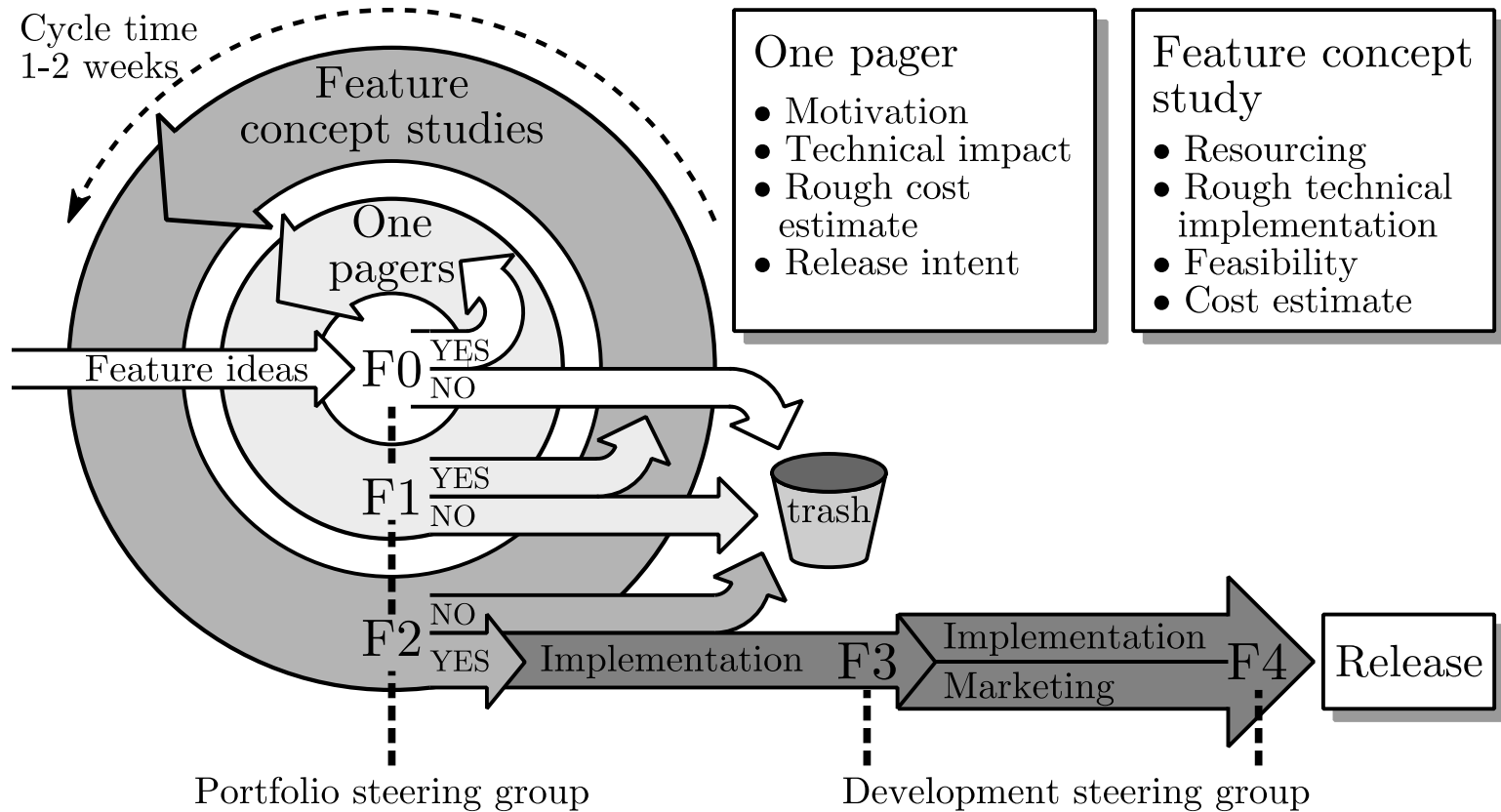
The Planning Process: F3



The Planning Process: F4



The Planning Process: Release



Release planning reiterated

- Tentative release plan for each feature in the One Pager
- Marketing of a feature can begin after F3
- Feature can be included in a release after F4
- Content of a release is based on *what is completed in time*

Challenges and Benefits

Challenges

- Overcommitment caused by external pressure
 - PM still in the "old world way"
 - Overcommitment near the release date
- Managing non-feature specific work
 - Things "falling between the cracks"
 - No guidance from Scrum
- Balancing between development efficiency and building generalist teams.
 - Complex system that often required specific skills
 - How much specialization?

Benefits

- Increased flexibility and decreased development lead time
 - PM could change release contents very quickly
 - Previously lead time was up to 3 years
- Eliminating waste in the planning process
 - Sunk costs very small during the early phases
 - Feature could be cut at any time if it was not profitable
- Increased developer motivation
 - Developers had visibility to the early phases