

Product Family Business Analysis And Definition

by *Gerrit Muller* University of South-Eastern Norway-NISE

e-mail: gaudisite@gmail.com

www.gaudisite.nl

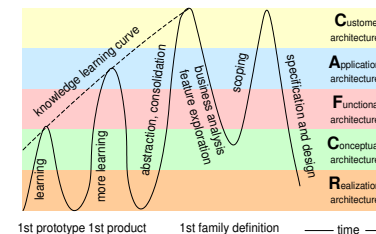
Abstract

The creation and evolution of a product family is based on a business analysis. Such a business analysis is used for the definition of the family: Which products are members of the family, what distribution of features, which performance range? This article is to be used in the “Family Engineering Handbook”, a collective effort of Philips Research employees to consolidate their experiences in family engineering.

Distribution

This article or presentation is written as part of the Gaudí project. The Gaudí project philosophy is to improve by obtaining frequent feedback. Frequent feedback is pursued by an open creation process. This document is published as intermediate or nearly mature version to get feedback. Further distribution is allowed as long as the document remains complete and unchanged.

September 9, 2018
status: preliminary
draft
version: 2.1



Roadmapping

Reference Architecture

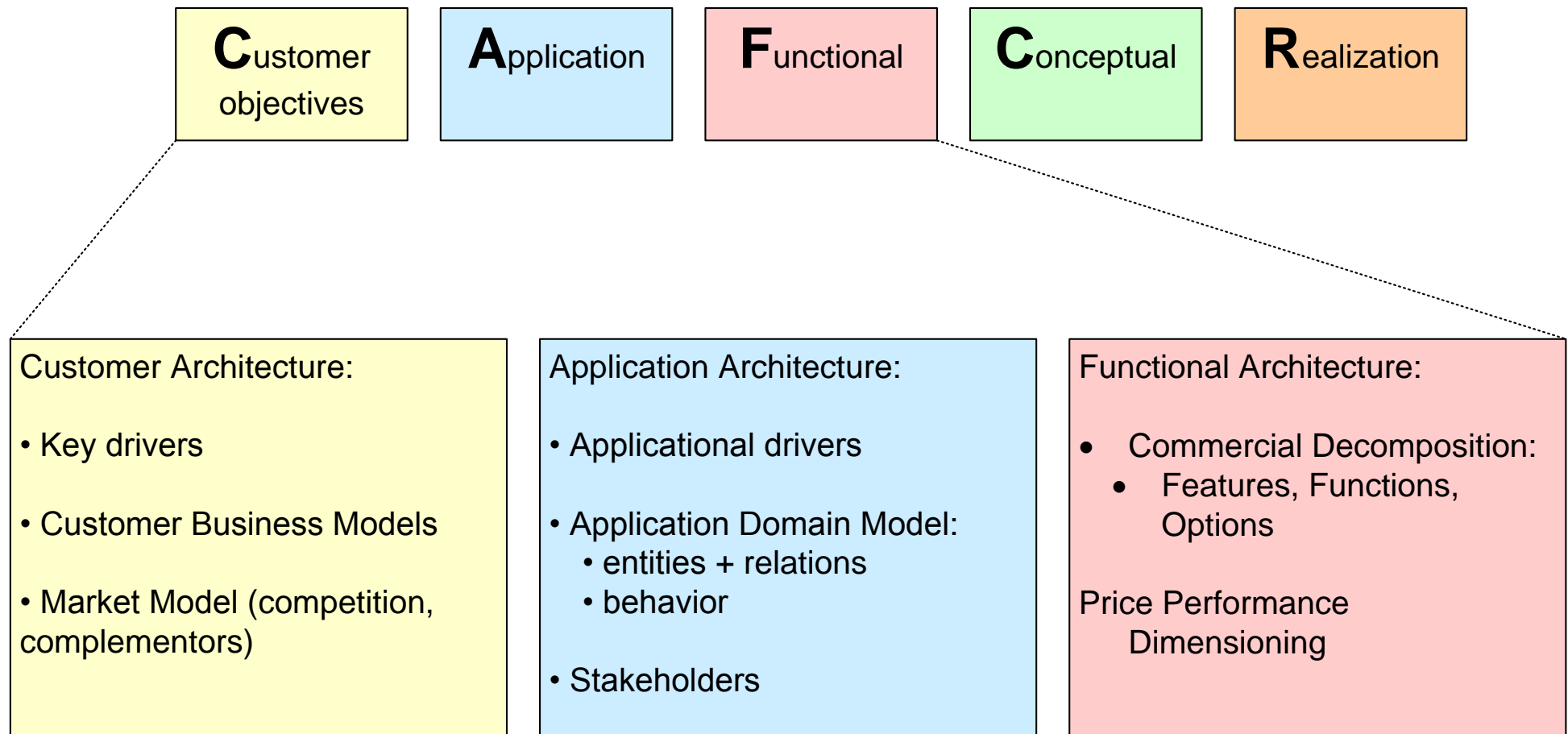
Requirements Capturing

Feature Space Exploration

Value Engineering

Scope Determination

Reference Architecture

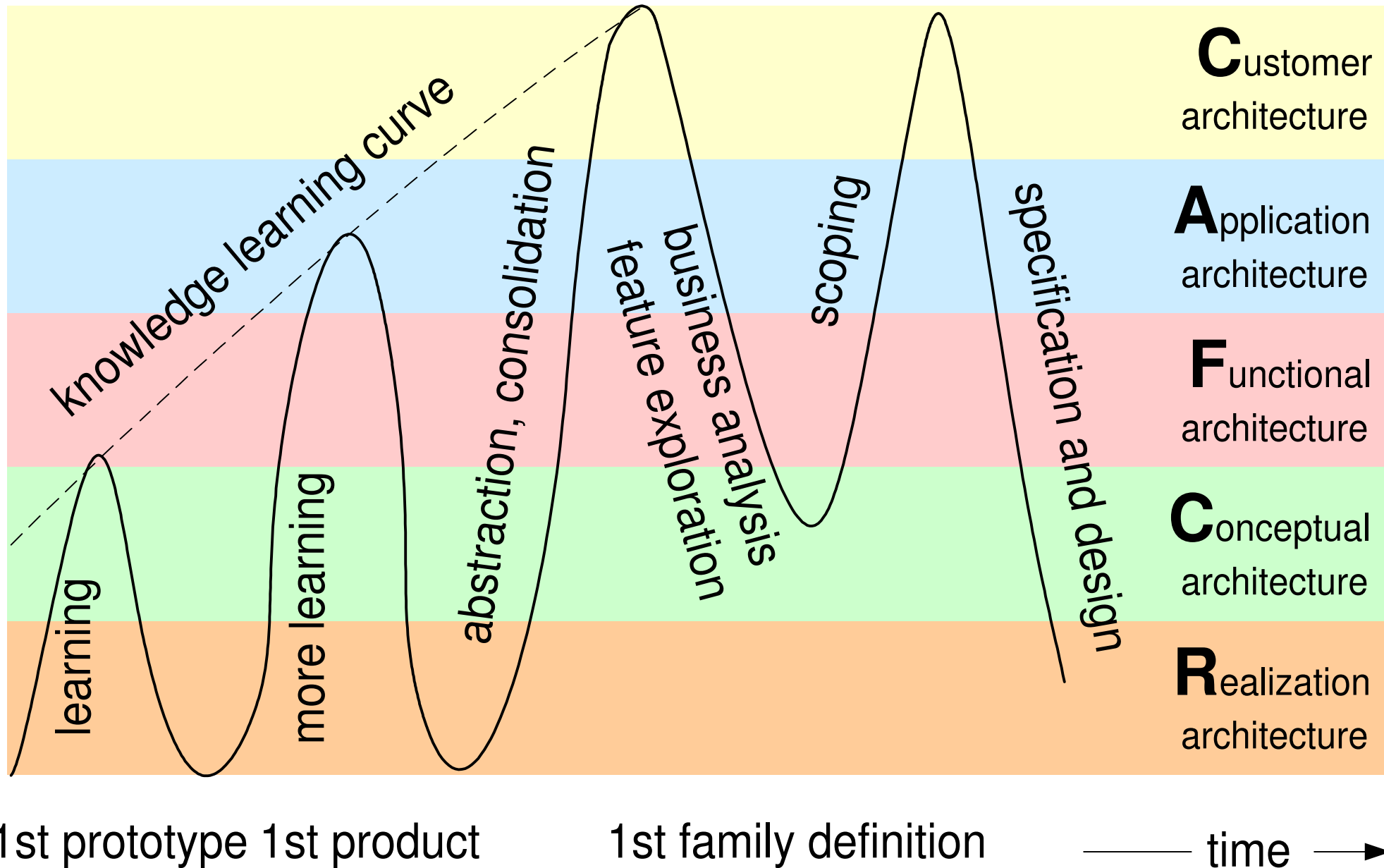


Who appreciates what?

Who pays when for what?

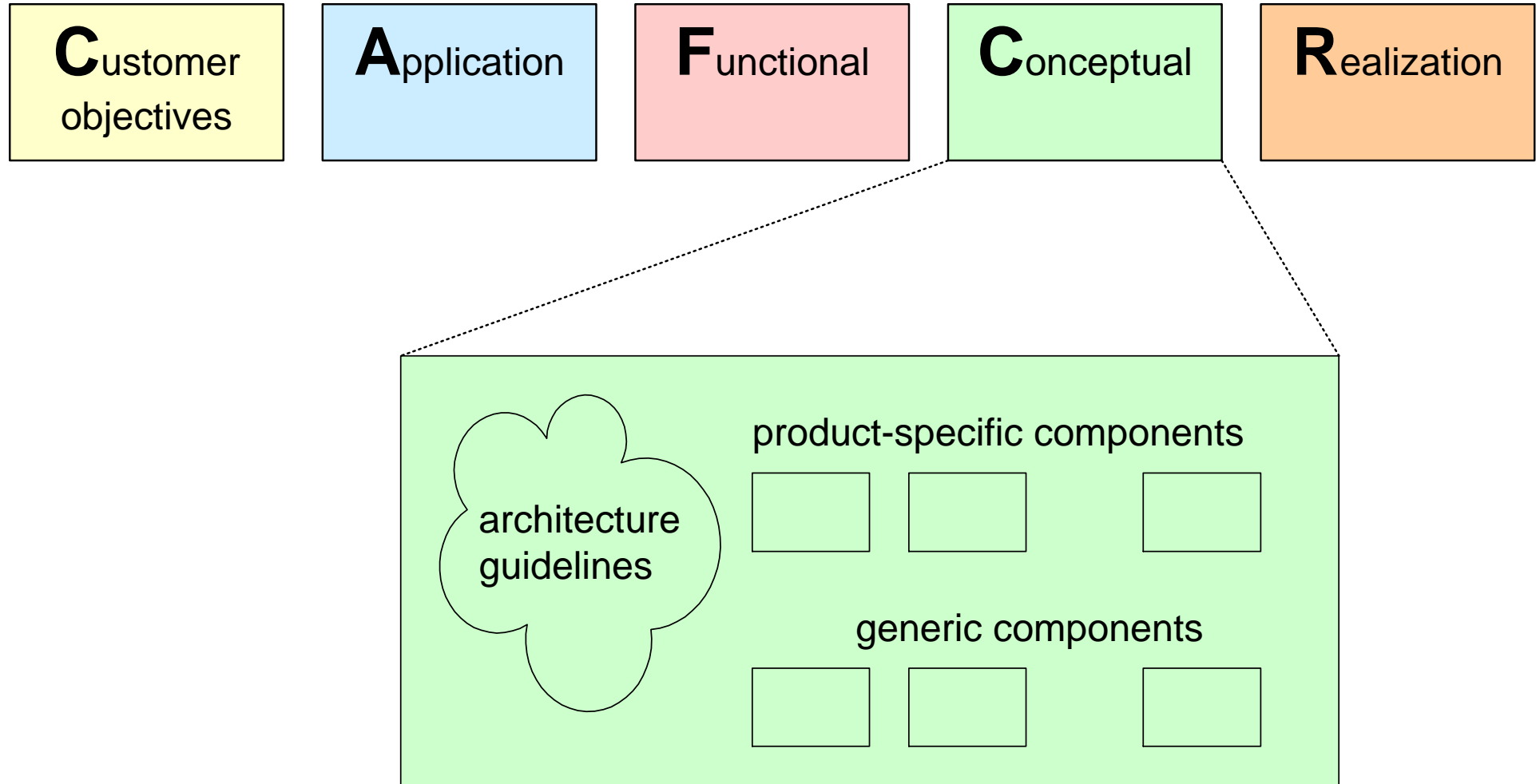
Who takes decisions?

Yoyo over Views



Which part of the market do we want to serve?

Component-Based Conceptual Architecture



Attention Points for Life Cycle Requirements

Installation

Configuration

Customization

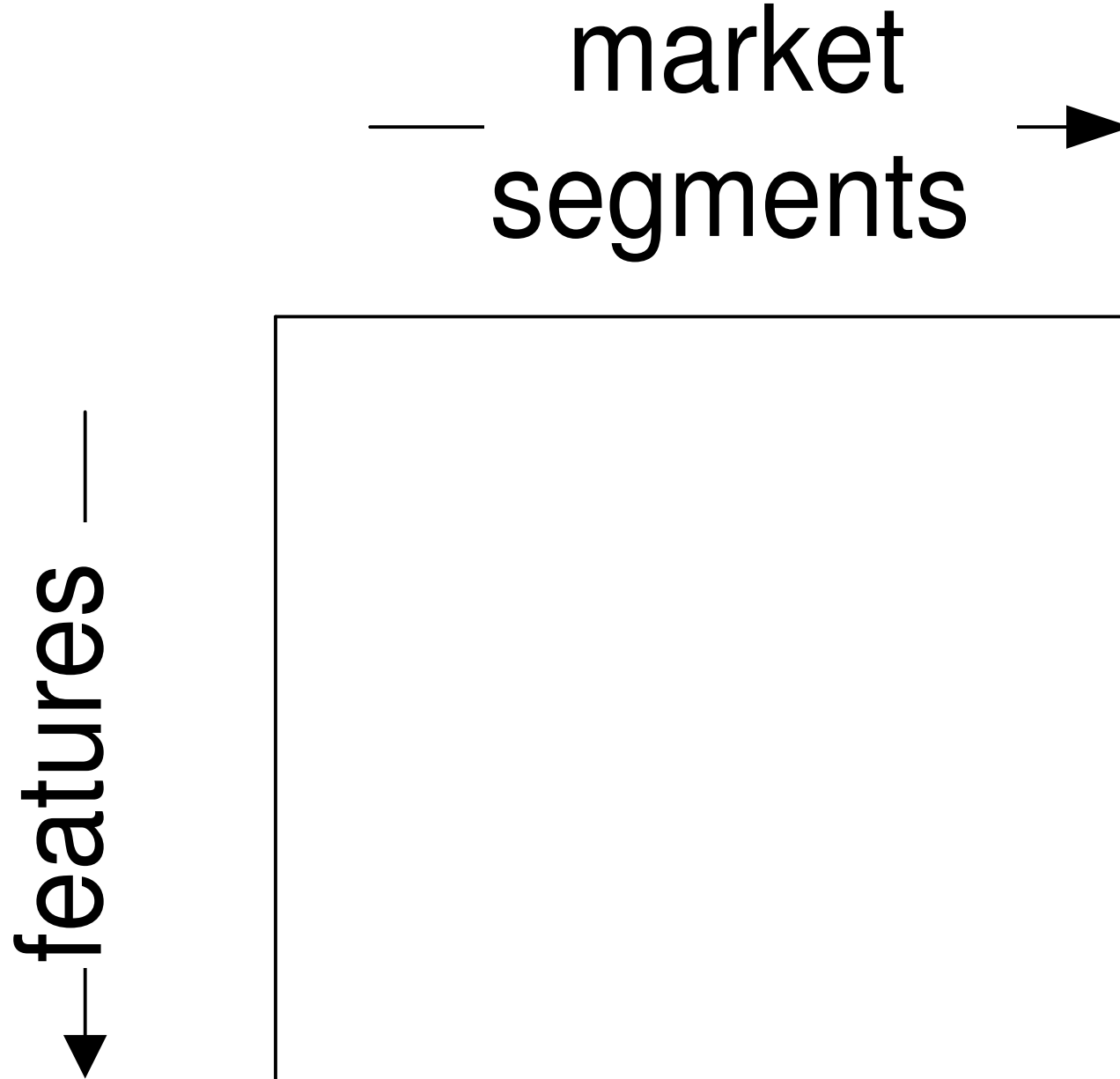
Life-cycle management (amongst others upgrading)

Configuration Management

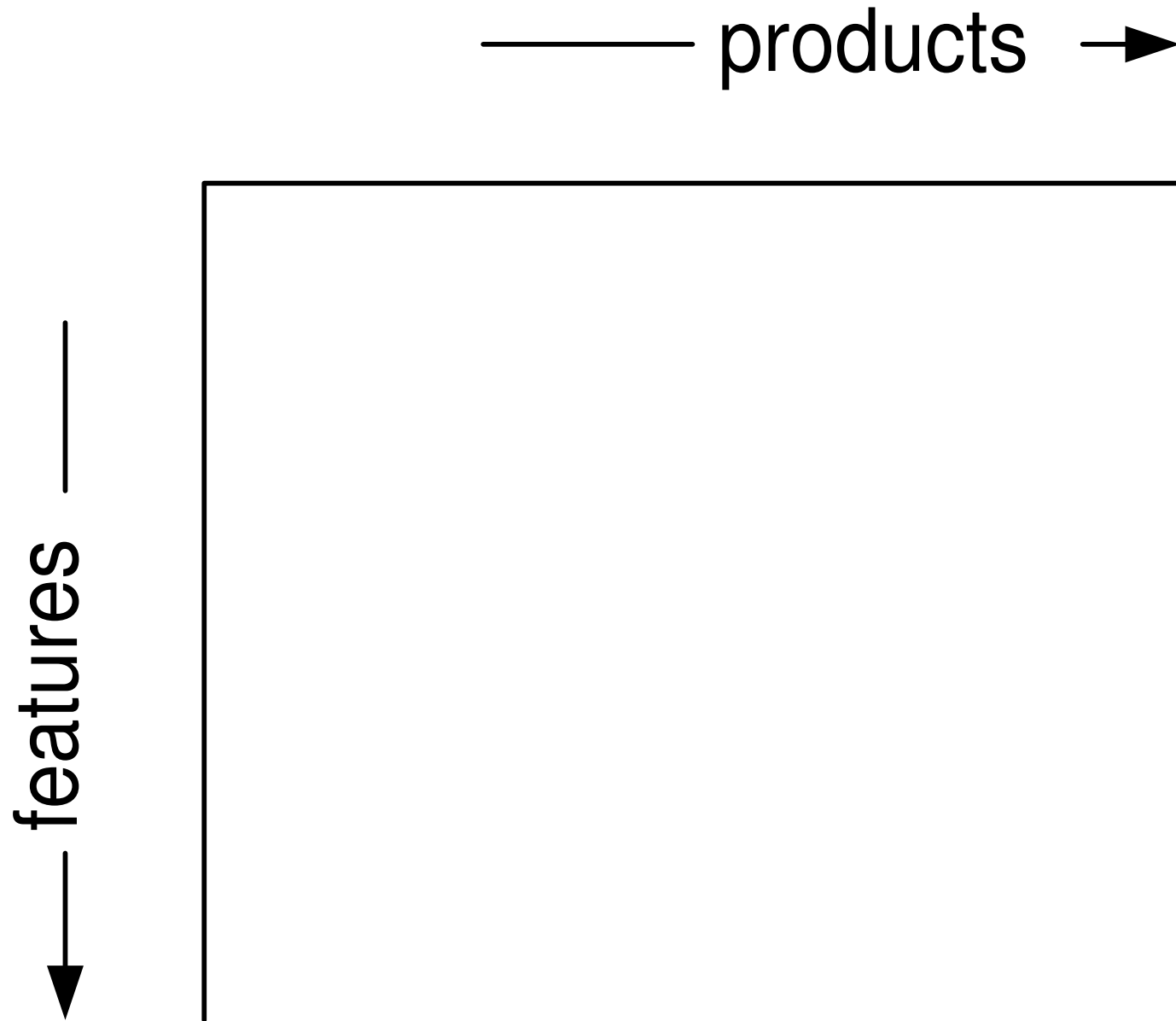
Licensing strategy

1. Make an inventory of features
2. Map features on market segments
3. Determine products
4. Map features on products
5. Determine valuation criteria
6. Valuate features per product

Market Feature Map



Product Feature Map



Examples of Valuation Criteria

- Value for the customer
- (dis)satisfaction level for the customer
- Selling value (How much is the customer willing to pay?)
- Level of differentiation w.r.t. the competition
- Impact on the market share
- Impact on the profit margin

Use relative scale, e.g. 1..5 1=low value, 5 -high value

Ask several knowledgeable people to score

Discussion provides insight (don't fall in spreadsheet trap)

Product Feature Map with Substituted Numbers

— products →

← features

		P1800			P1900			P2200		
		satisfaction customer	sales price	market share	satisfaction customer	sales price	market share	satisfaction customer	sales price	market share
feeder		1	5	4	3	4	4	4	5	5
hf feeder										
buffer		4	3	4	5	3	4	4	3	4
sunpower		2	2	1	2	2	1	2	2	4

What feature will be realized when for what product?