

# Architecture; the building as a product

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## Abstract

Software and System Architects frequently use the building architecture as metaphor. The maturity and visibility of building architecture makes it an attractive vehicle for illustrations.

This presentation at the formal opening of the new IST (Information and Software Technology) building, identified by "WDC", shows the similarities between building architectures and product architectures. One of the main areas of research of the IST is architecture, ranging from Silicon architectures to Software architectures.

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# The product

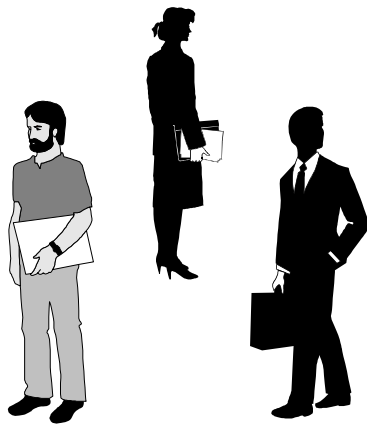


# What is Architecting?

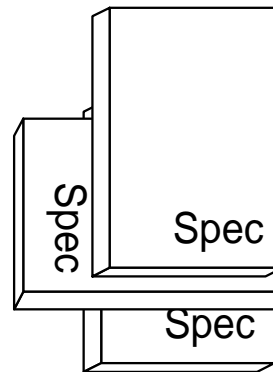


*Do the right things*

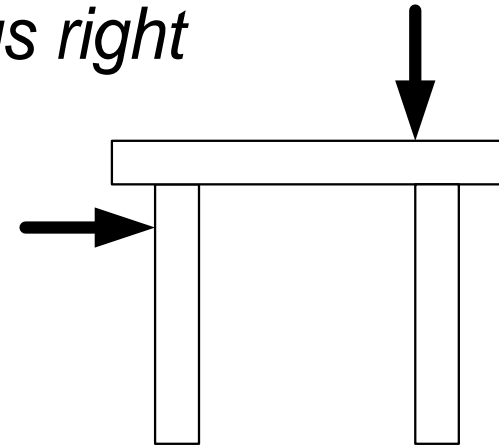
*Do the things right*



Stakeholders  
with Needs  
and Concerns



Requirements



Construction  
Constraints and  
Opportunities

# Philips management objectives w.r.t. Campus

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## Campus Doelstellingen

- \* Stimulerende werkomgeving voor synergie en innovatie
- \* Duurzame ontwikkeling van de organisatie
- \* Efficiënte huisvesting

## Sub-doelen :

- + Open relatie met omgeving
- + Innovatieve werkomgeving
- + Bevorderen van synergie d.m.v. gemeenschappelijke faciliteiten
- + Integratie van werken en privé
- + Blijvende positie van Philips onder de eerste elektronica concerns
- + Versnelling van innovatie-processen
- + Aantrekkingskracht toptalent
- + Opheffen versnippering
- + Versterken imago

# Objectives (English translation)

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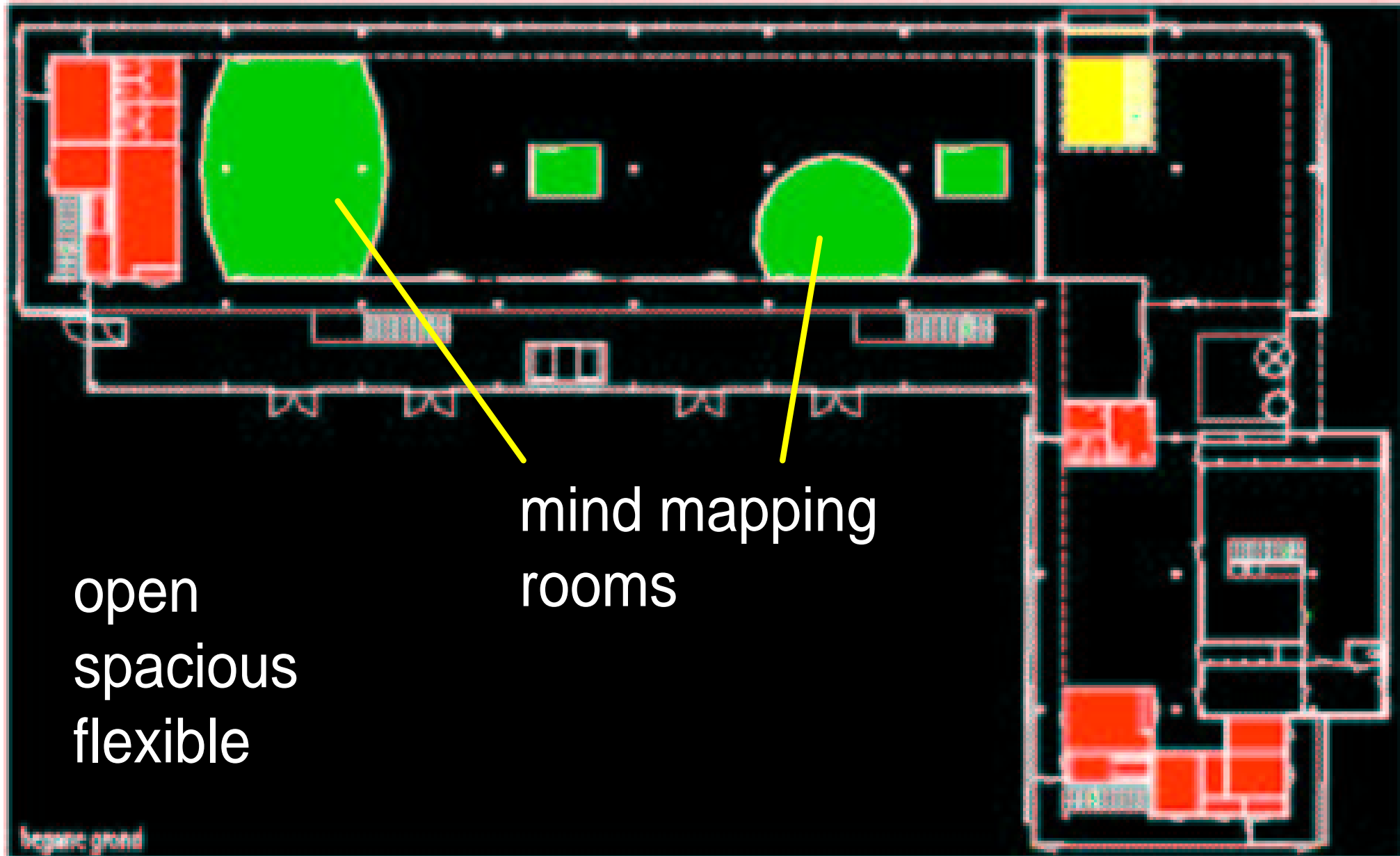
- Stimulating working environment for synergy and innovation
- Enduring development of the organization
- Efficient accomodation

# Subgoals (English translation)

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- Open relation with environment
- Innovative working environment
- Encouraging synergy by sharing facilities
- Integration of professional and private life
- Consolidation of position of Philips as one of the leading electronic companies
- Acceleration of innovative processes
- Remove fragmentation
- Improve image

# The architects vision



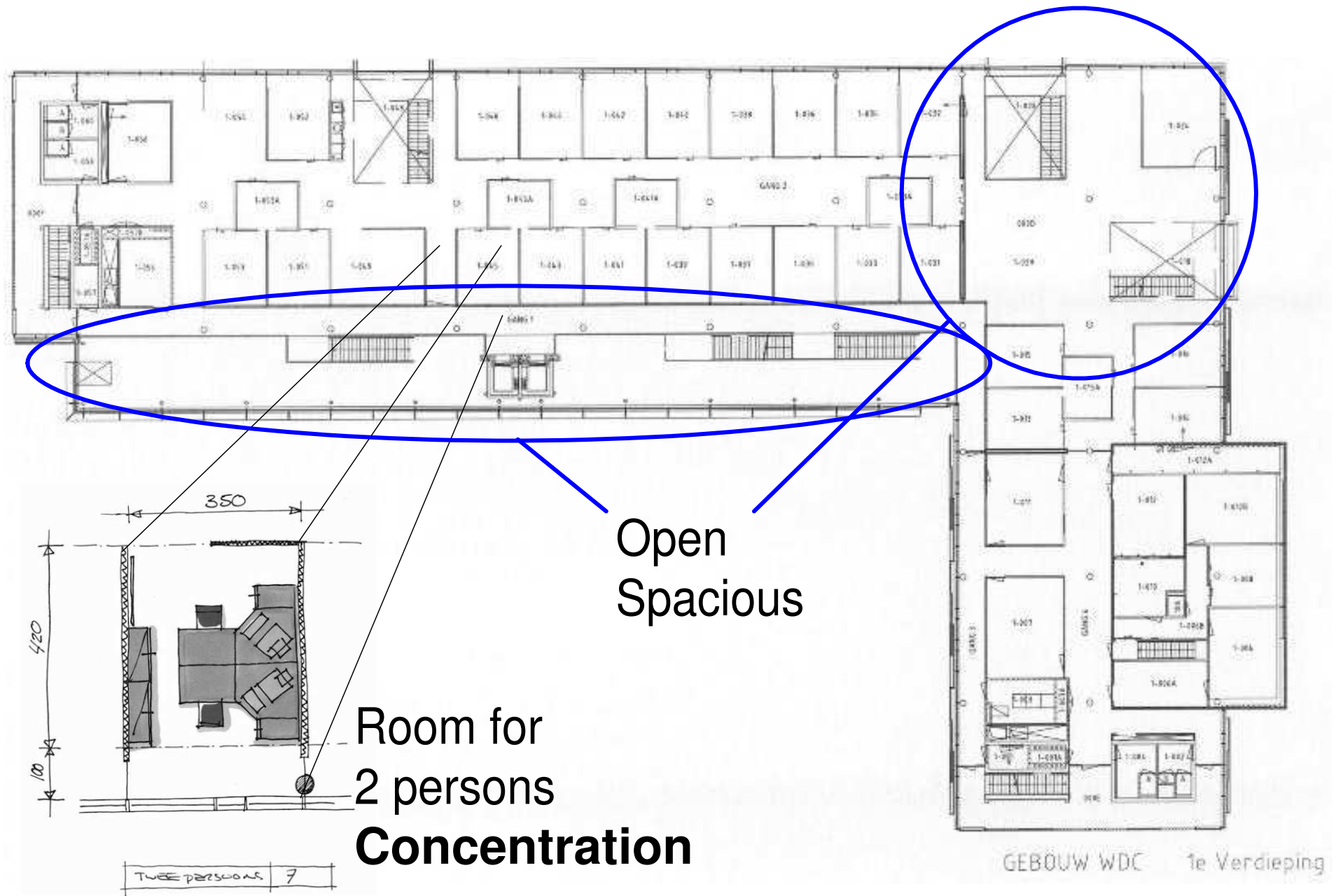
# Wishes and concerns of the inhabitants

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- Comfortable
- Concentration
- Communication
- Practical



# After user amendment



# Space impression



## infrastructure

- + power
- + telecom and  
computer network
- + climate control
- + light
- + fire detection  
and prevention

## facilities

- + sanitary
- + catering
- + meeting

## design aspects

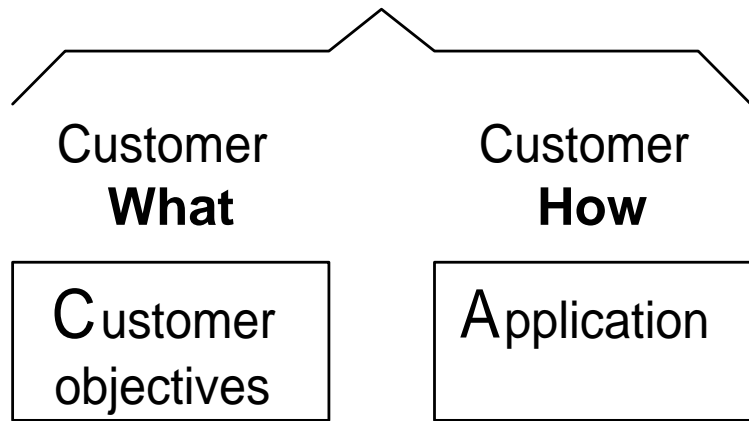
- + maintenance
- + safety
- + security
- + flexibility
- + campus style

## construction aspects

- + legislation
- + material properties
- + weight, size, strength
- + cost, effort
- + tools

# WDC architecting mapped on "CAFCR"

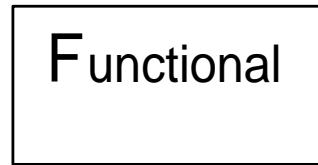
**What** does Customer need  
in Product and **Why?**



Philips  
Management  
objectives

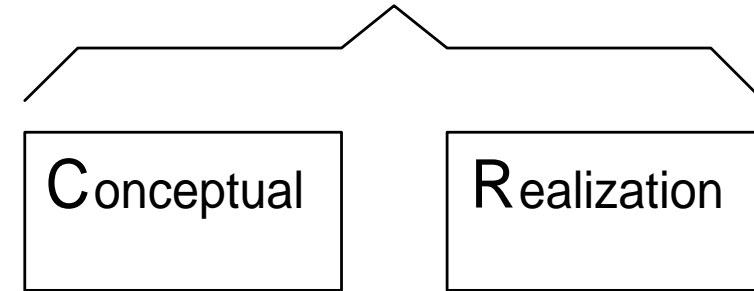
Philips  
Research  
way-of-working

Product  
**What**



Facilities  
Infrastructure  
Quality  
requirements

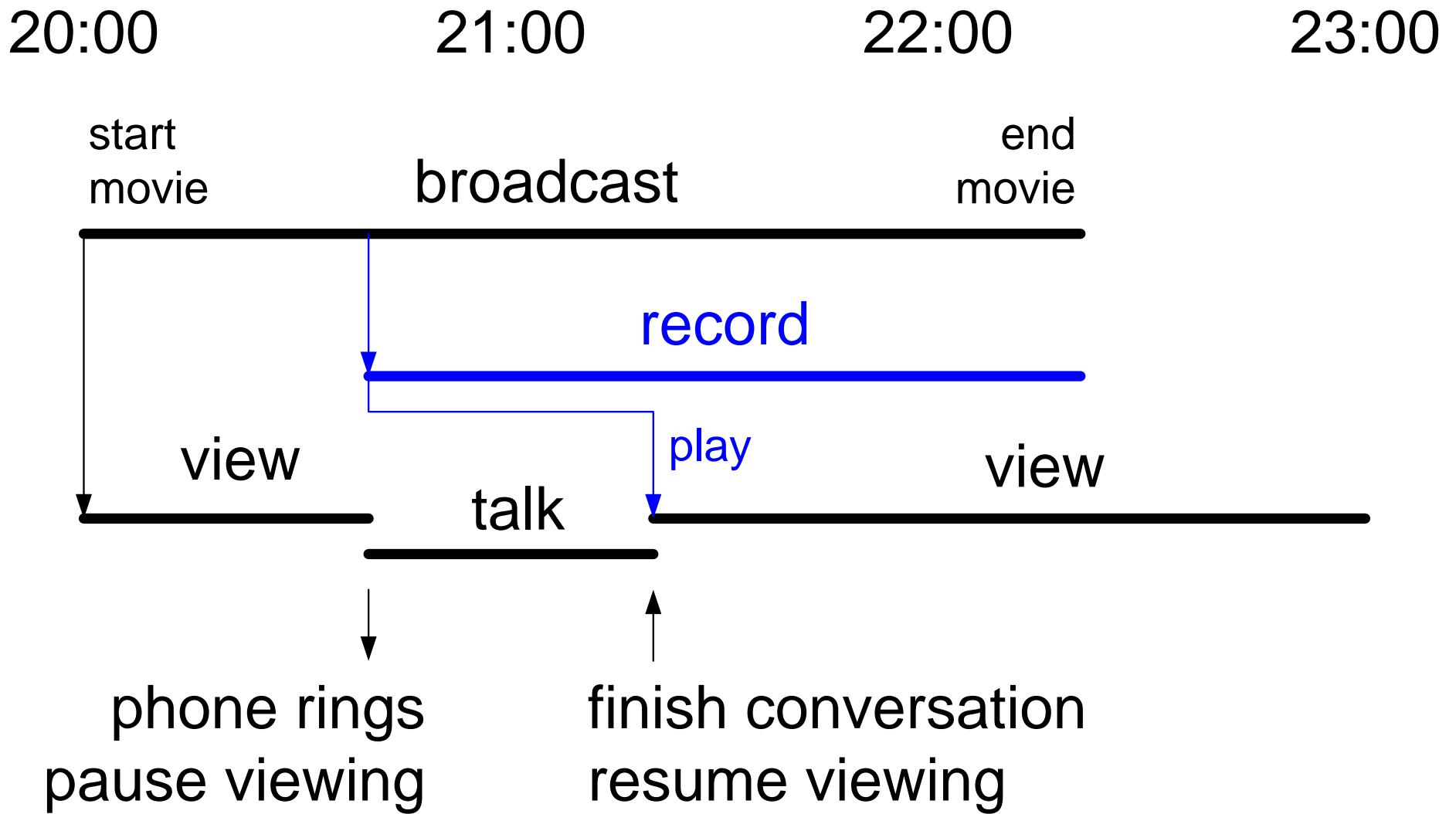
Product  
**How**



Design  
aspects

Construction  
aspects

# Example product: Digital Video Recorder



- **Time independent** entertainment and other video content
- Convenience, no hassle
- Fits in family environment

## features

- + recording
- + play
- + programming (EPG?)
- + navigation

## infrastructure

- + power
- + analog and  
digital network

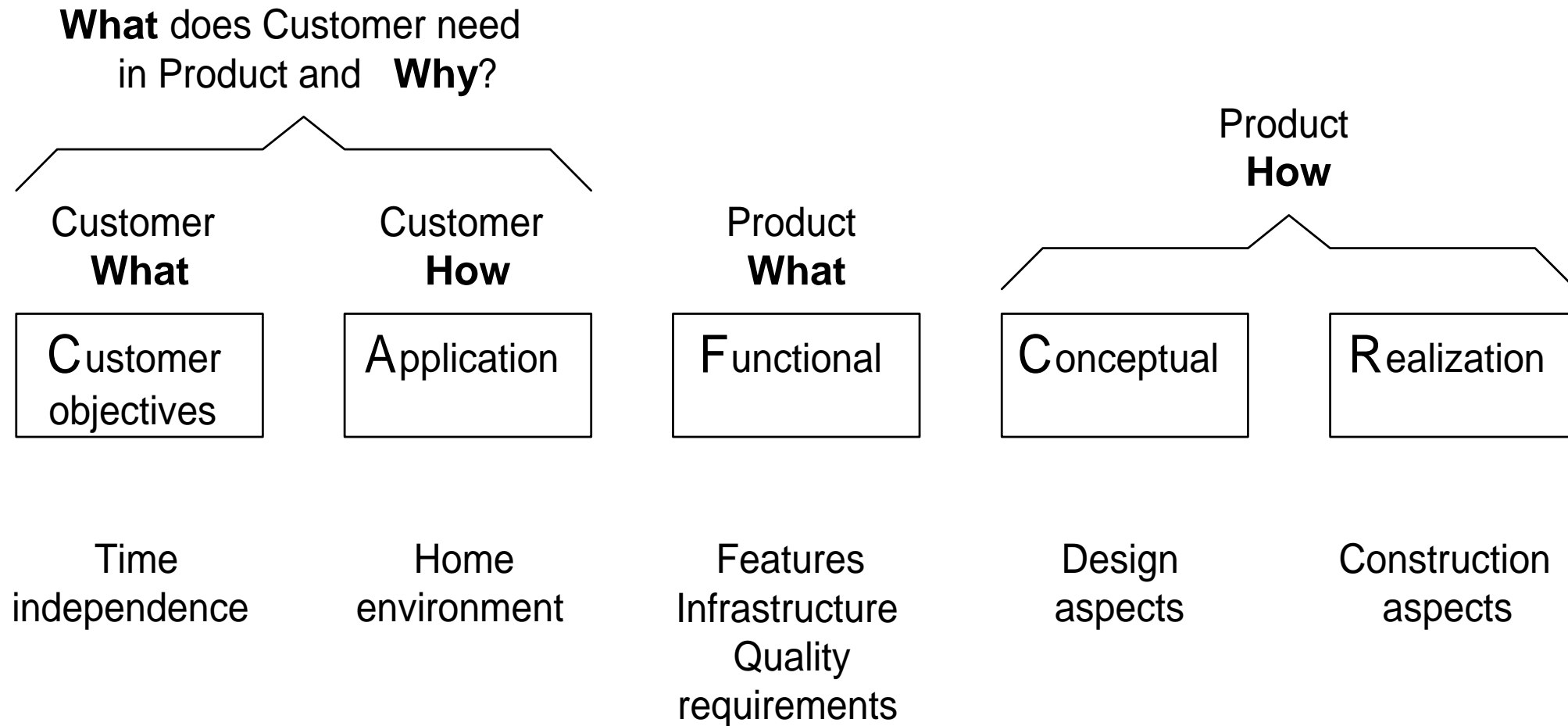
## design aspects

- + reliability
- + safety
- + security
- + content protection
- + brand style

## construction aspects

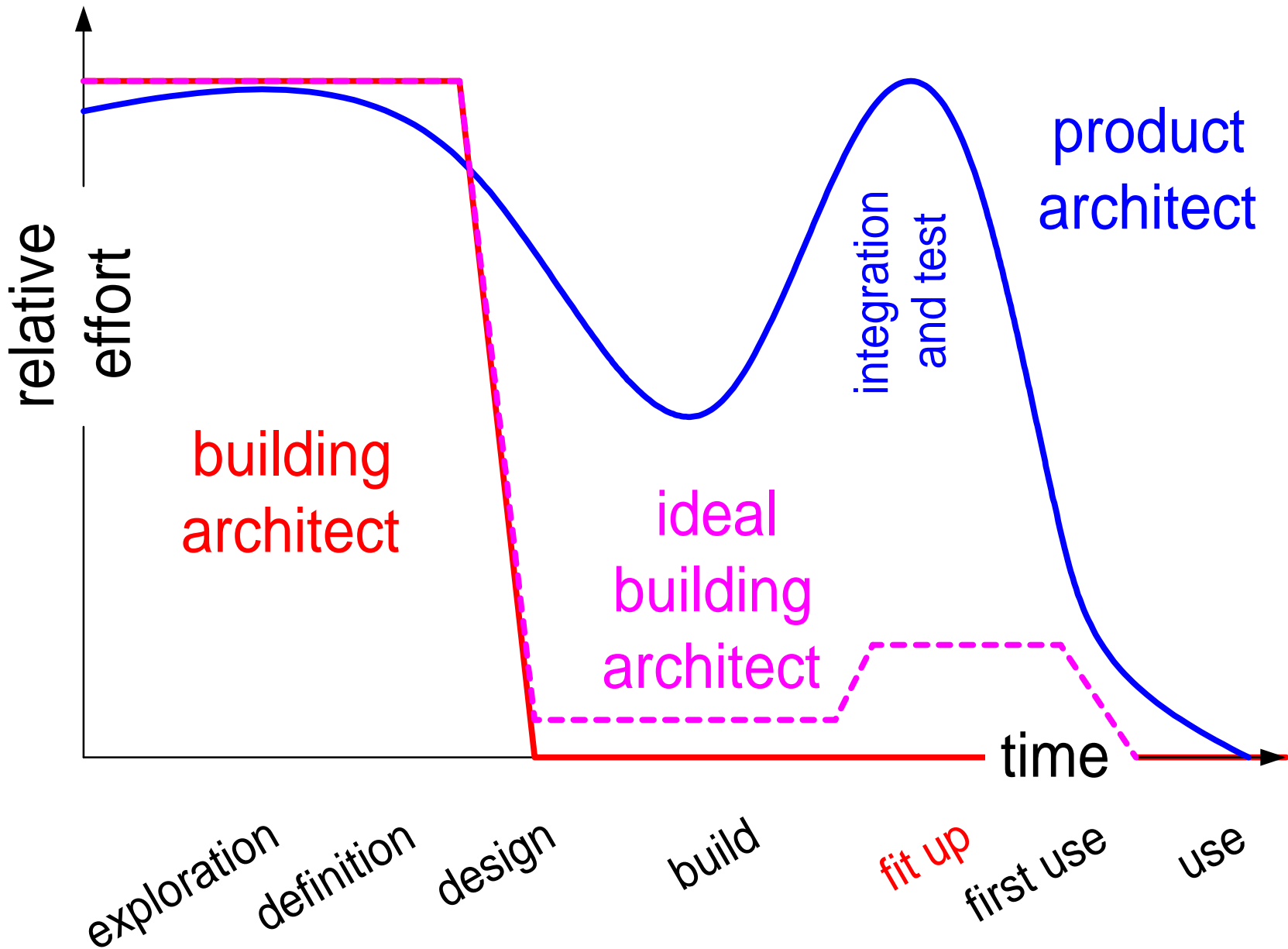
- + performance
- + physical properties
- + weight, size
- + cost, effort
- + tools

# Product architecting mapped on "CAFCR"

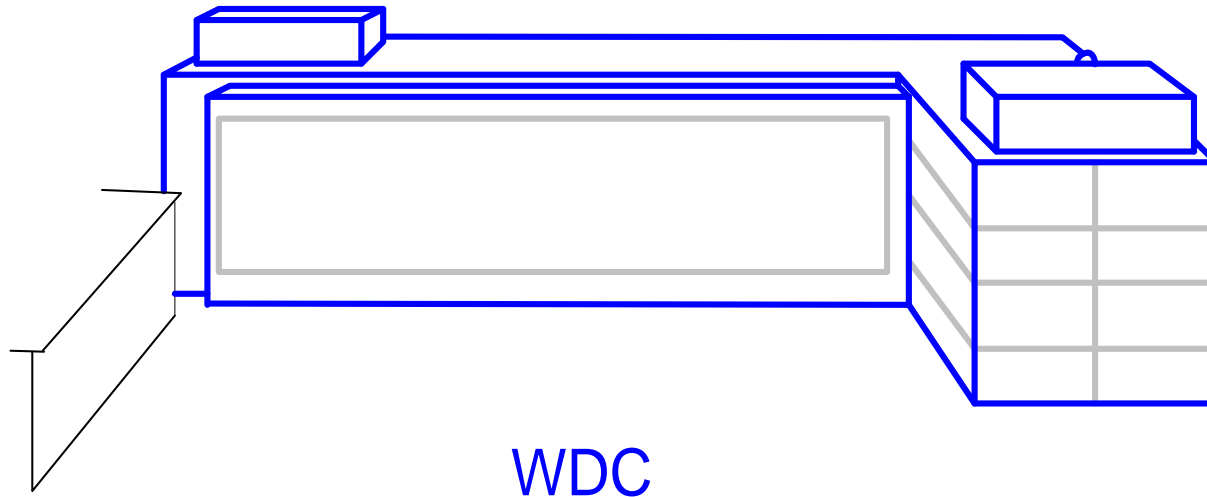




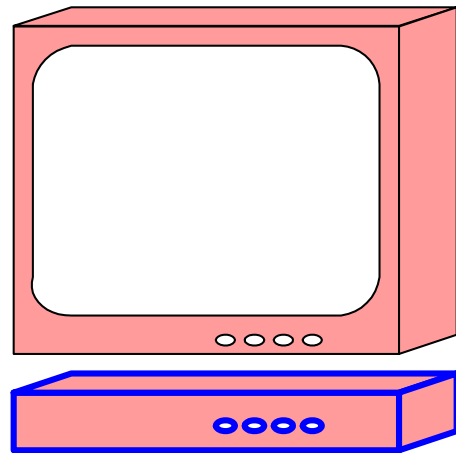
# Architecting dynamics



# Bridging 2 worlds



WDC



DVR

Stakeholders



Architect

Construction