

# Architecture; the building as a product

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

e-mail: `gaudisite@gmail.com`

`www.gaudisite.nl`

## 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.

### 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.

August 16, 2025  
status: finished  
version: 0.2



# The product

---

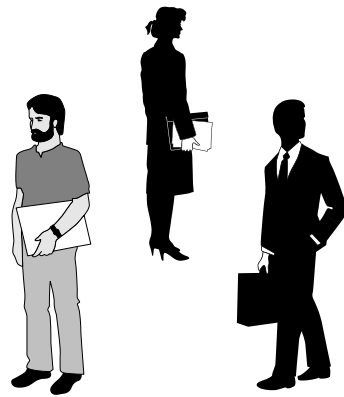


# What is Architecting?

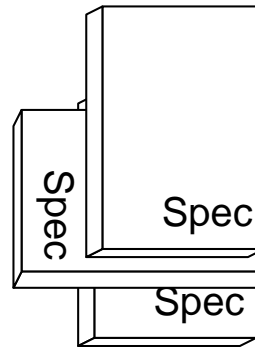


*Do the right things*

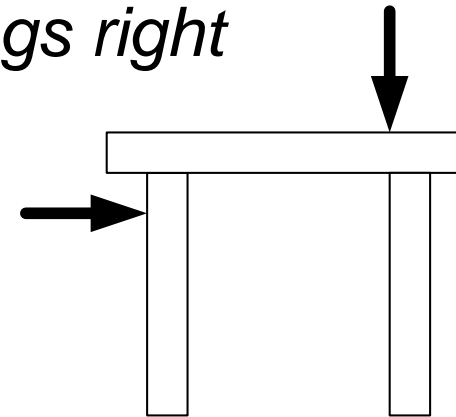
*Do the things right*



**Stakeholders**  
with **Needs**  
and **Concerns**



**Requirements**



**Construction**  
**Constraints** and  
**Opportunities**

# Philips management objectives w.r.t. Campus

---

## 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)

---

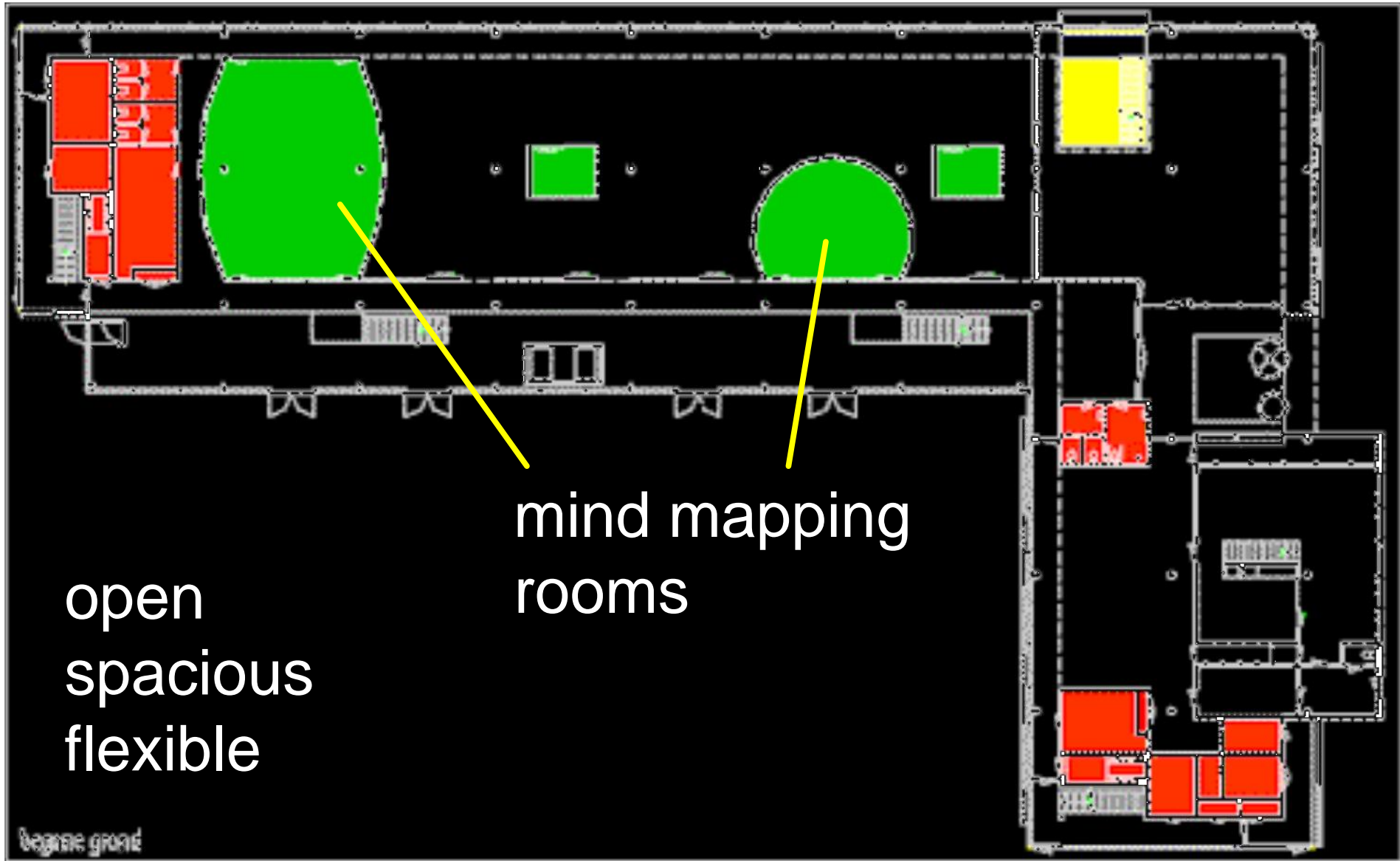
- Stimulating working environment for synergy and innovation
- Enduring development of the organization
- Efficient accomodation

# Subgoals (English translation)

---

- 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

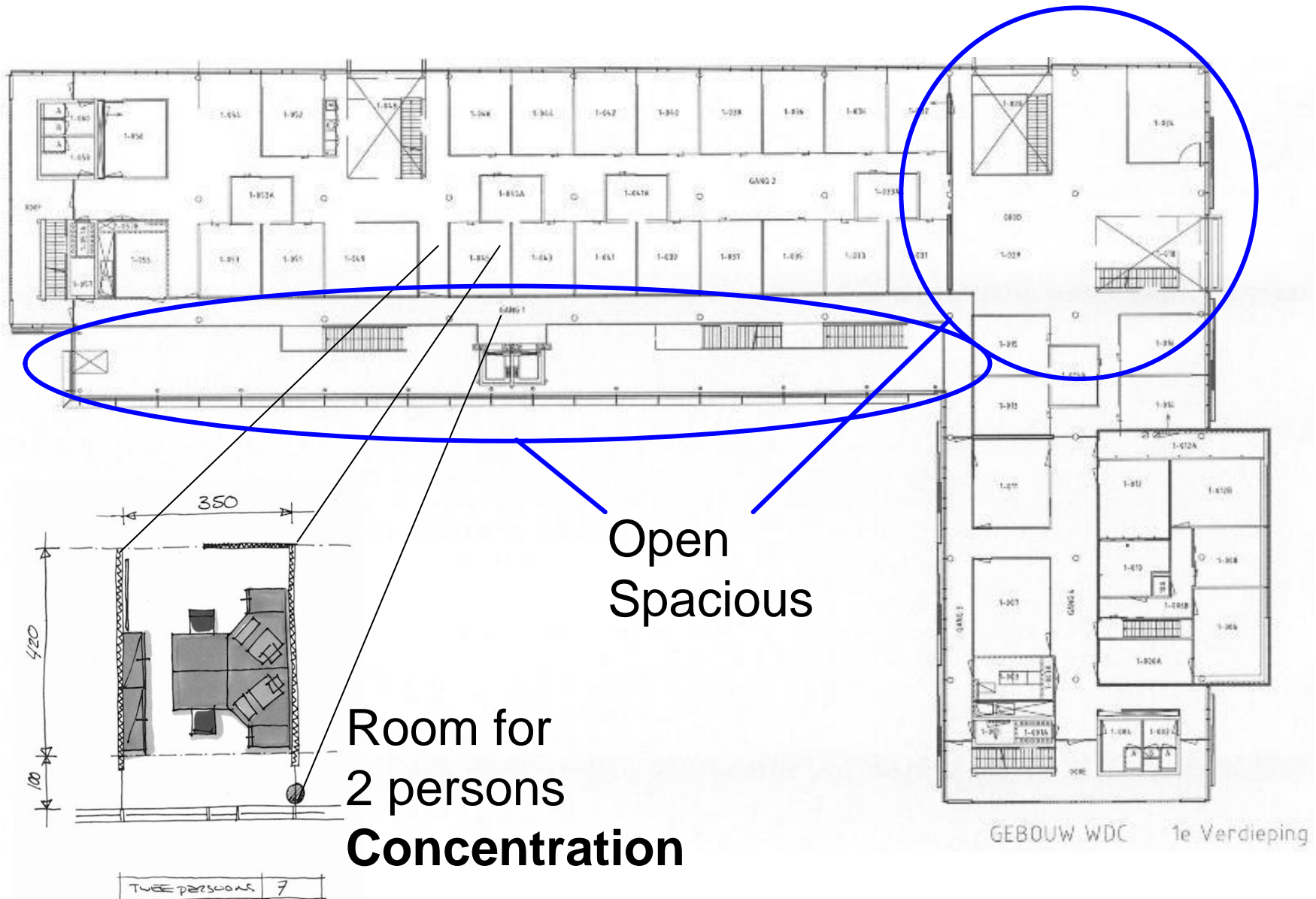


# Wishes and concerns of the inhabitants

---

- 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

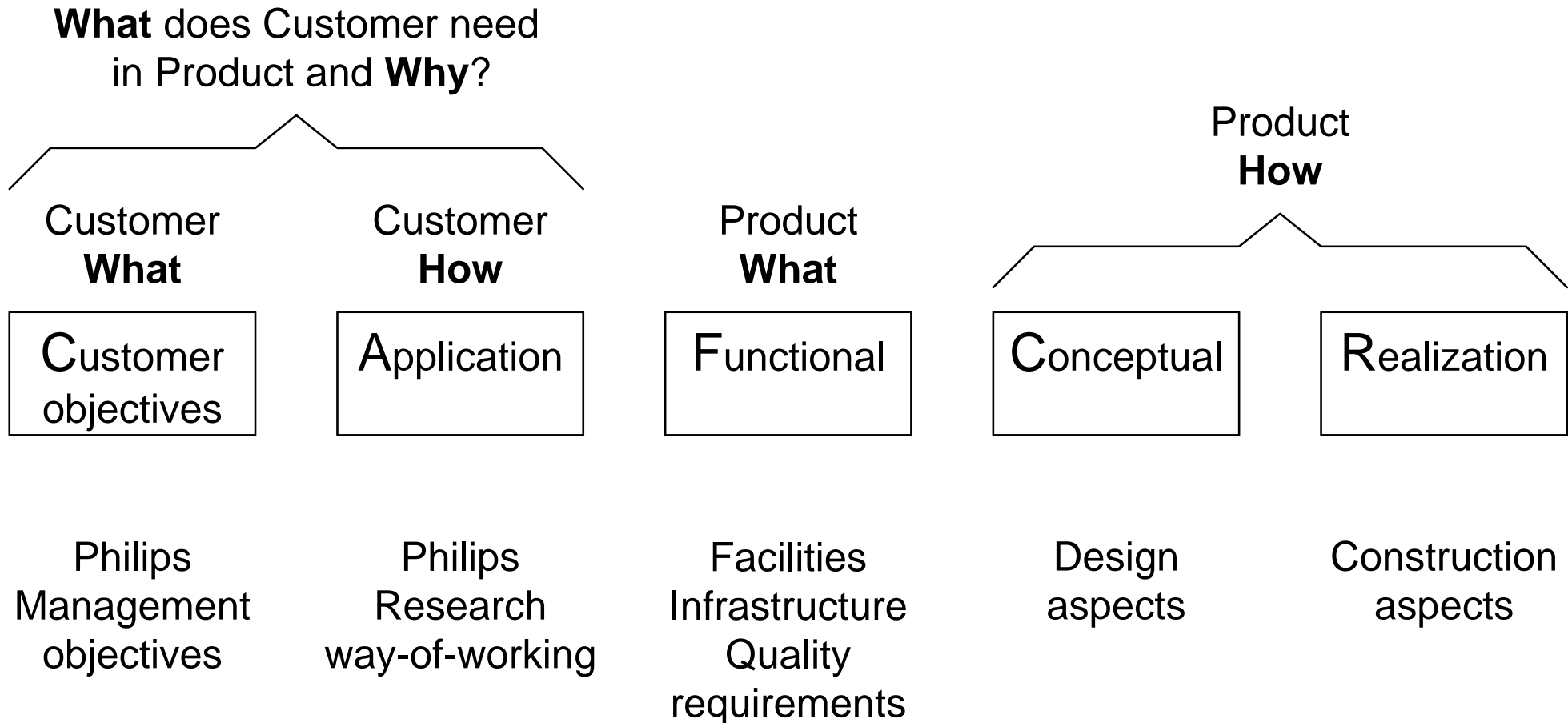
## design aspects

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

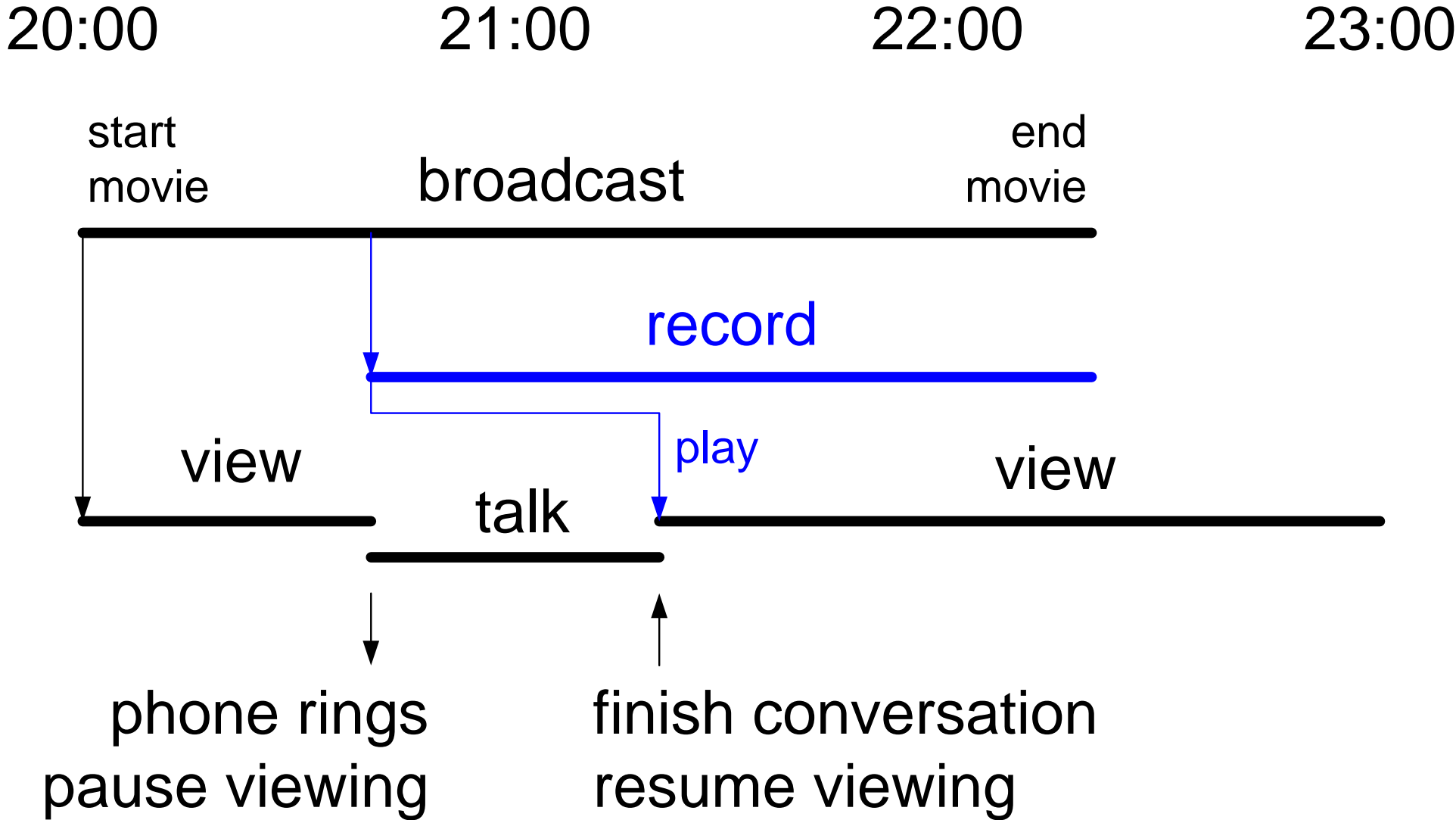
## construction aspects

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

# WDC architecting mapped on "CAFCR"



# Example product: Digital Video Recorder



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

# The technical side of the architecture

---

## features

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

## infrastructure

- + power
- + analog and  
digital network

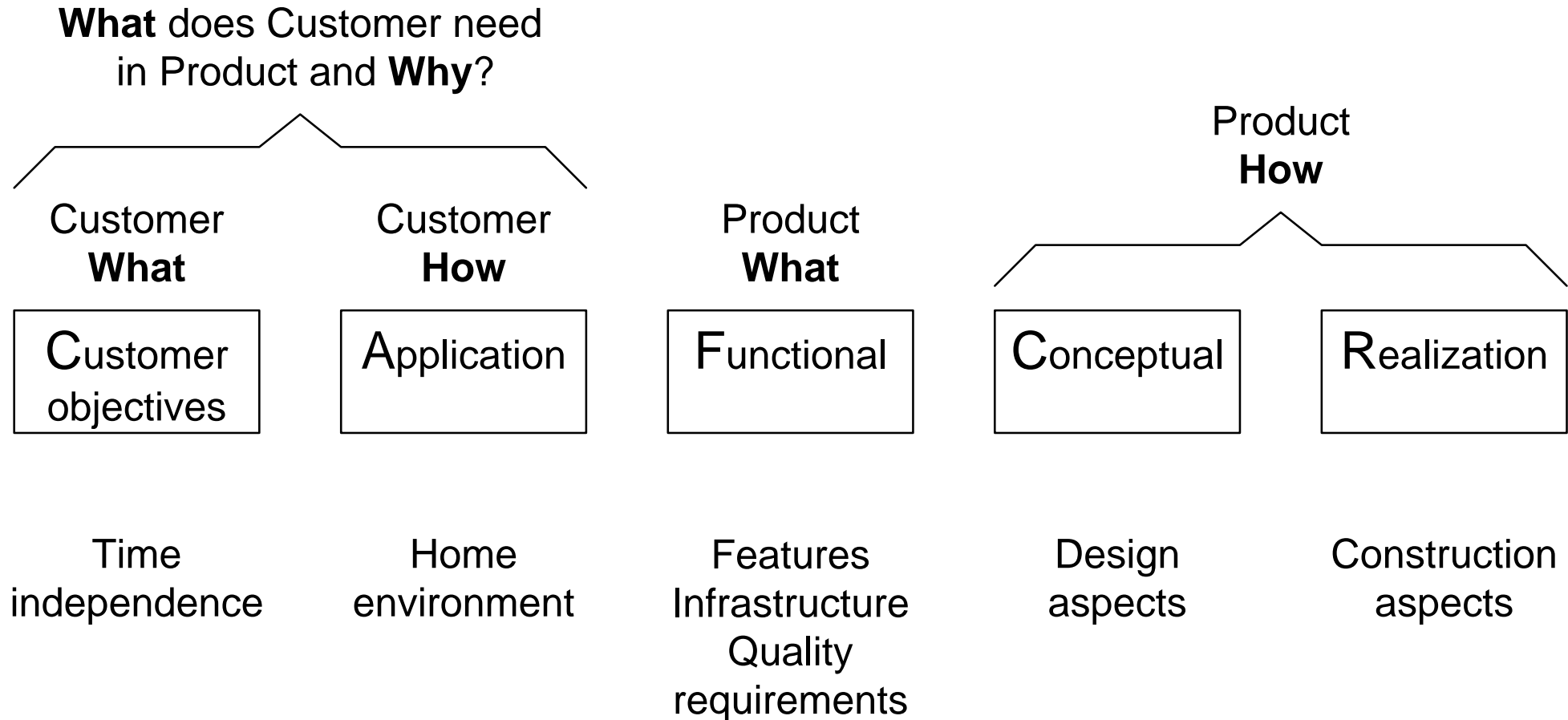
## design aspects

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

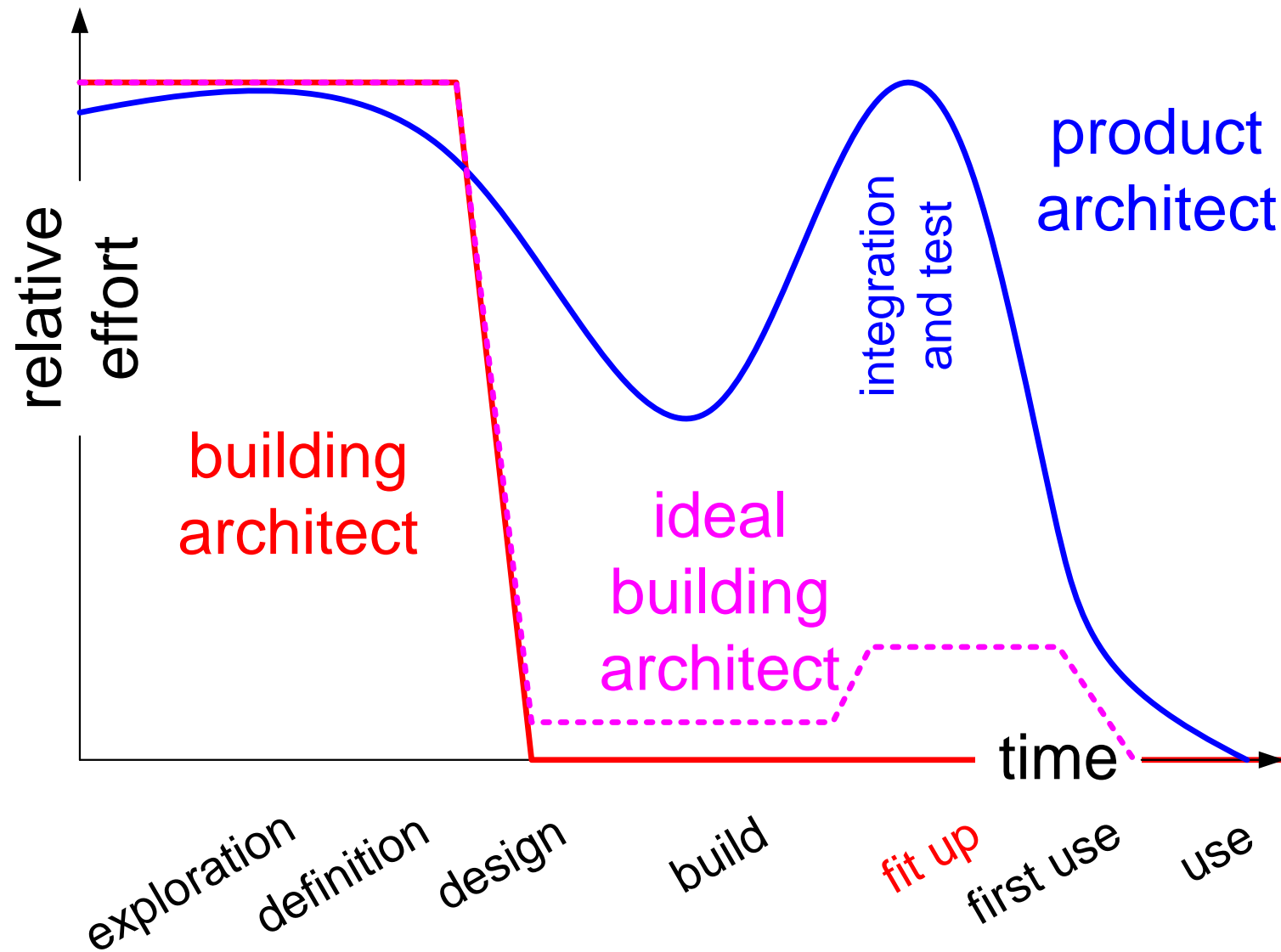
## construction aspects

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

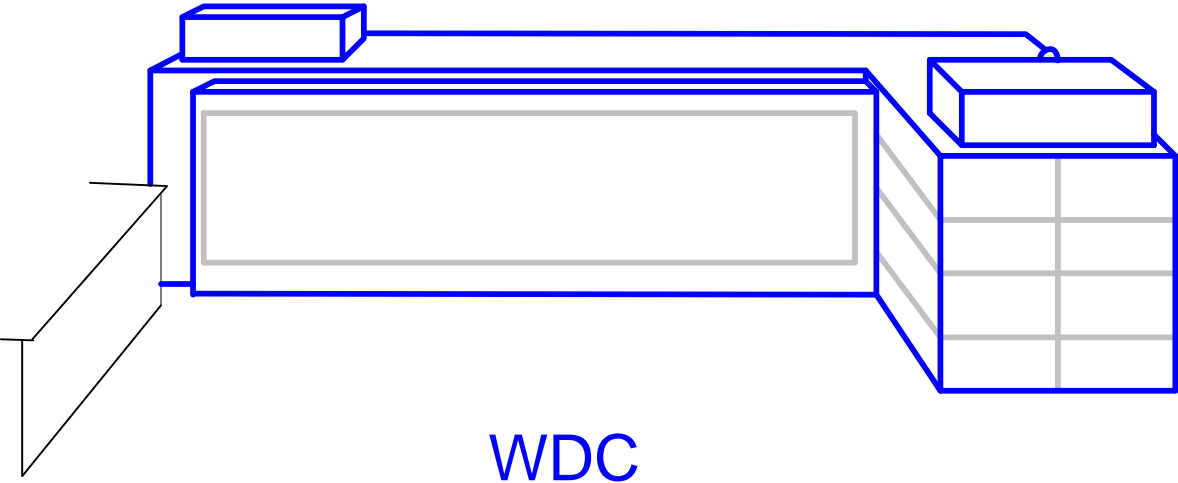
# Product architecting mapped on "CAFCR"



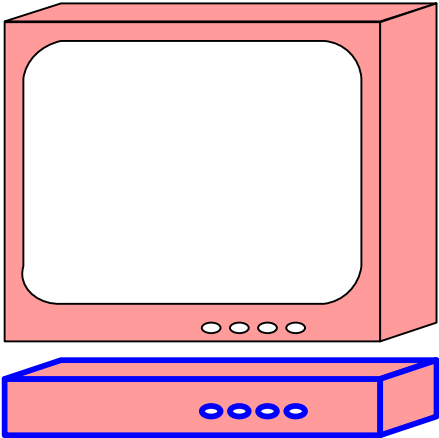
# Architecting dynamics



# Bridging 2 worlds

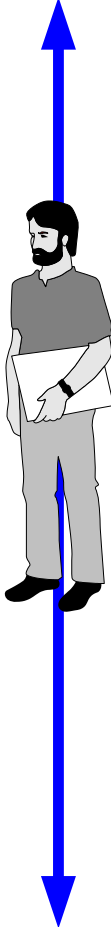


WDC



DVR

Stakeholders



Architect

Construction