

Architecture; the building as a product

by *Gerrit Muller* Buskerud University College

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.

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The product

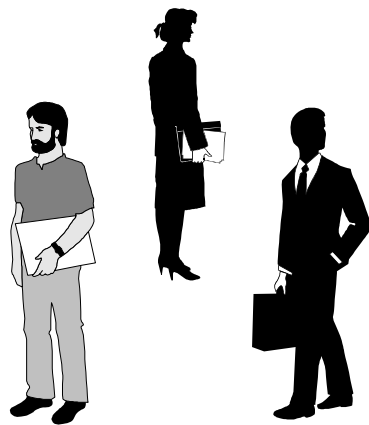


What is Architecting?

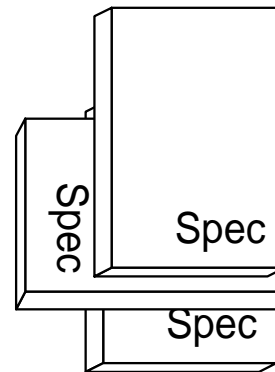


Do the right things

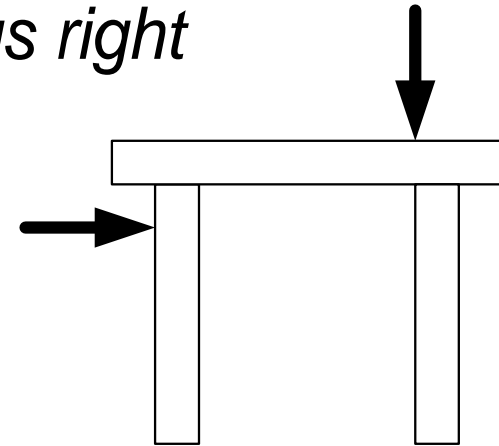
Do the things right



Stakeholders
with Needs
and Concerns



Requirements



Construction
Constraints and
Opportunities

Philips management objectives w.r.t. Campus

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

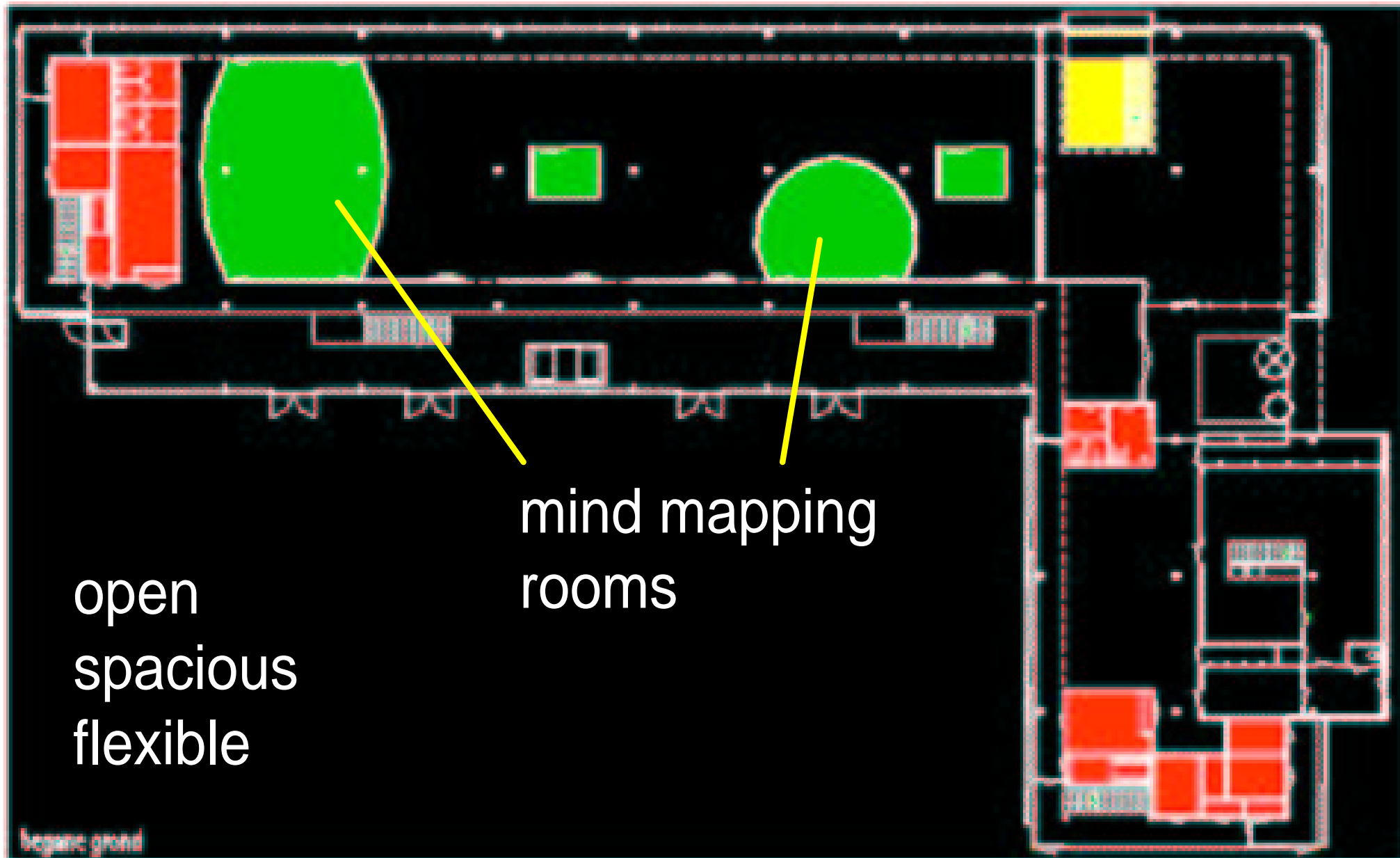
Objectives (English translation)

- 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

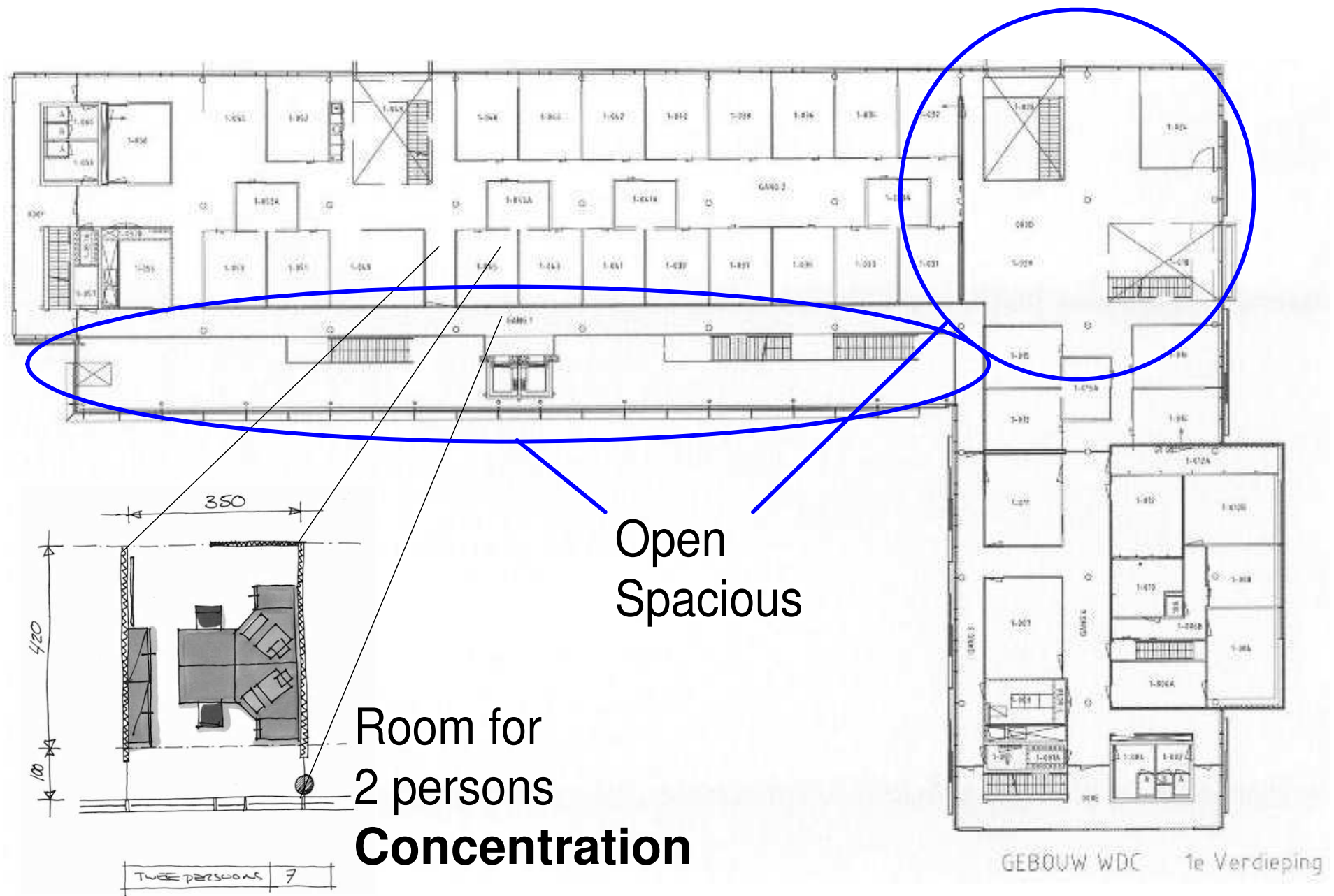
The architects vision



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

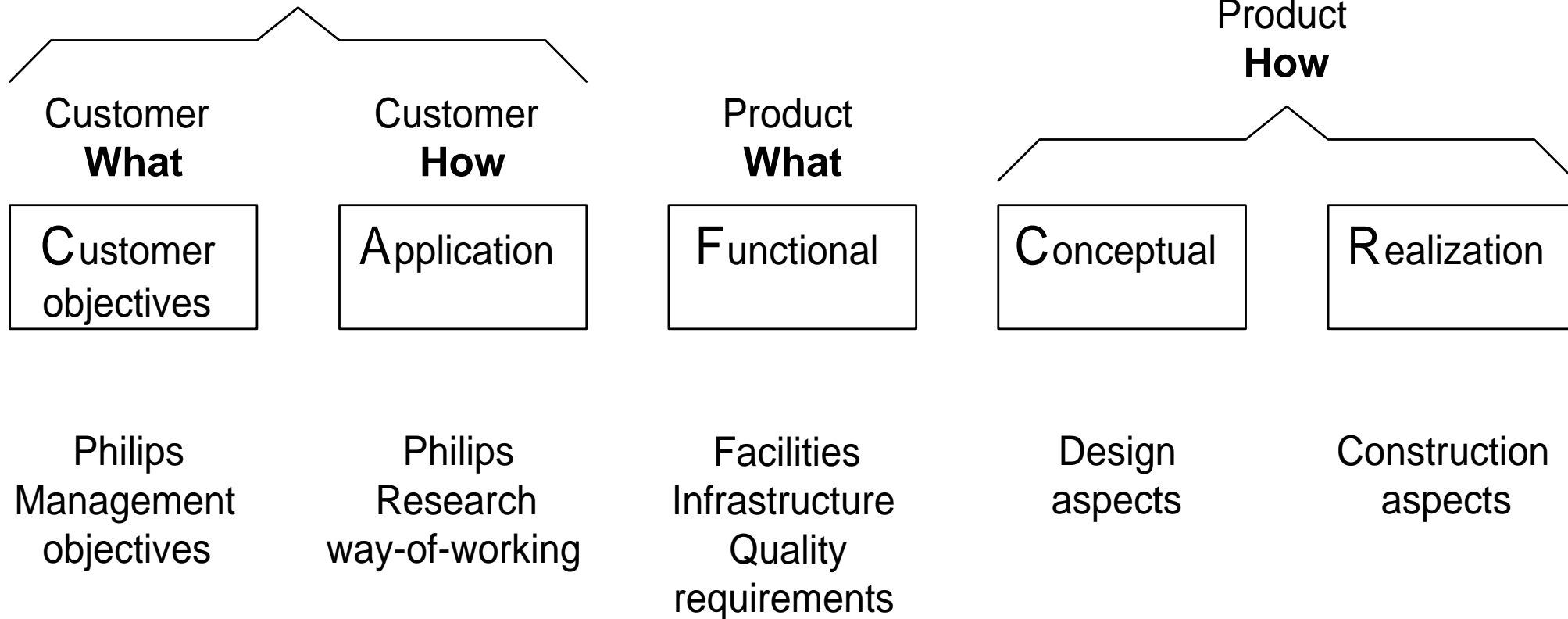
- + maintenance
- + safety
- + security
- + flexibility
- + campus style

construction aspects

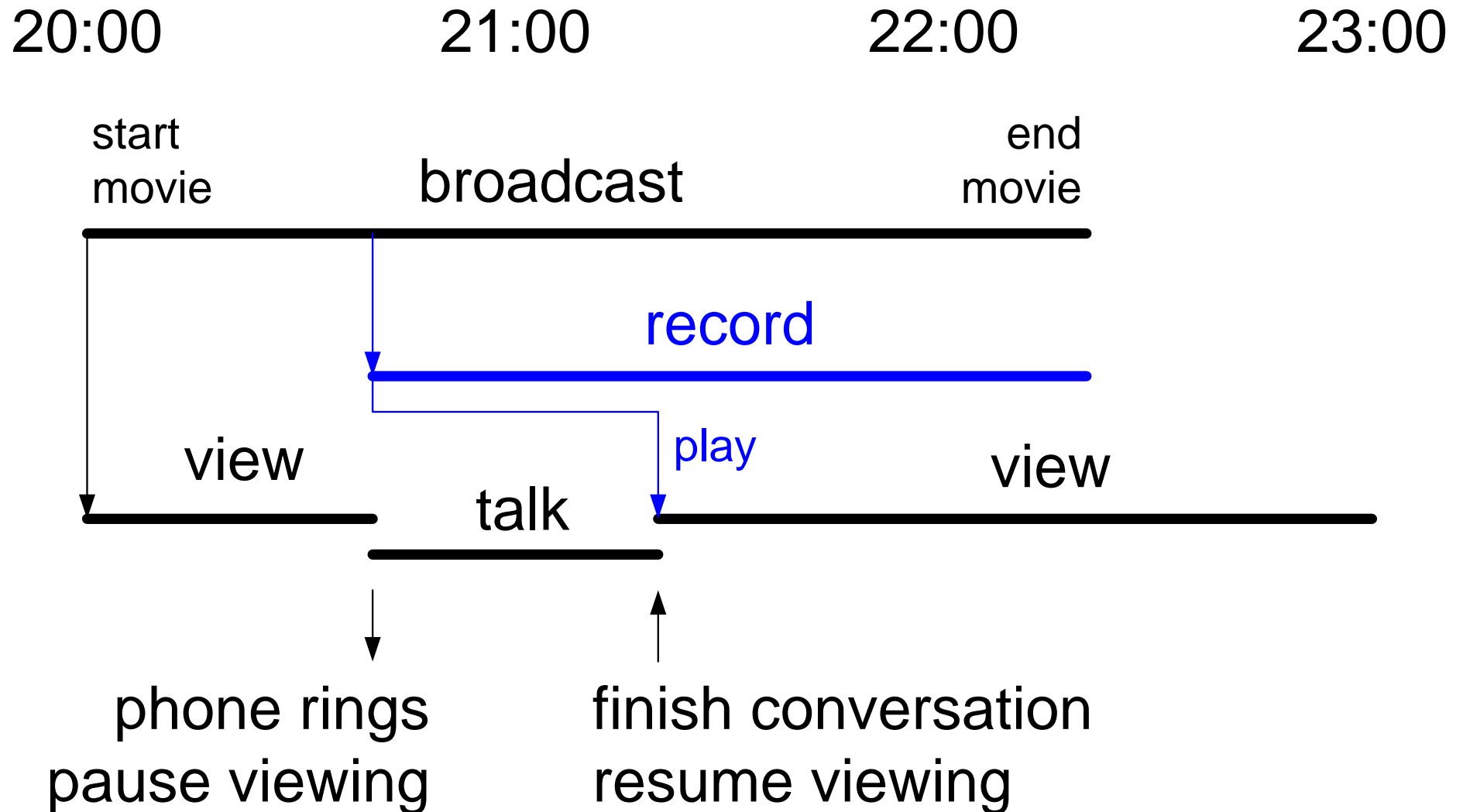
- + legislation
- + material properties
- + weight, size, strength
- + cost, effort
- + tools

WDC architecting mapped on "CAFCR"

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



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

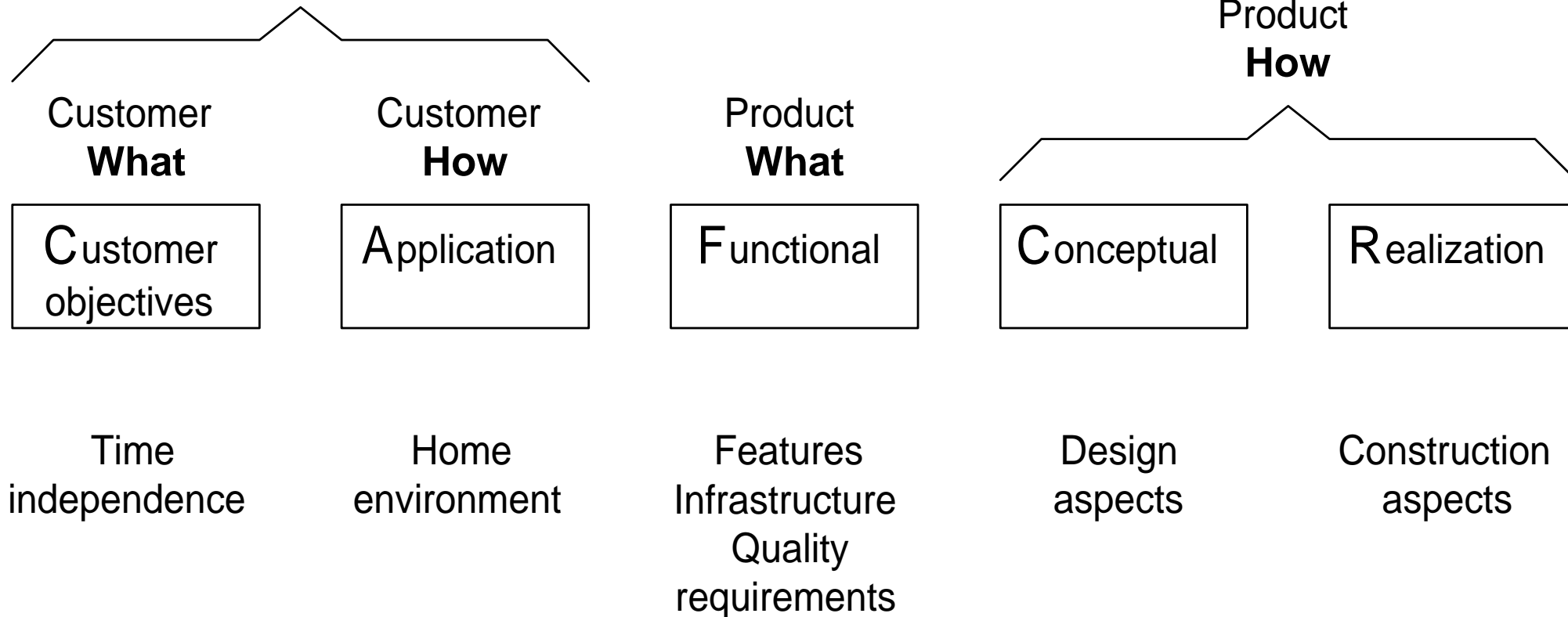
- + reliability
- + safety
- + security
- + content protection
- + brand style

construction aspects

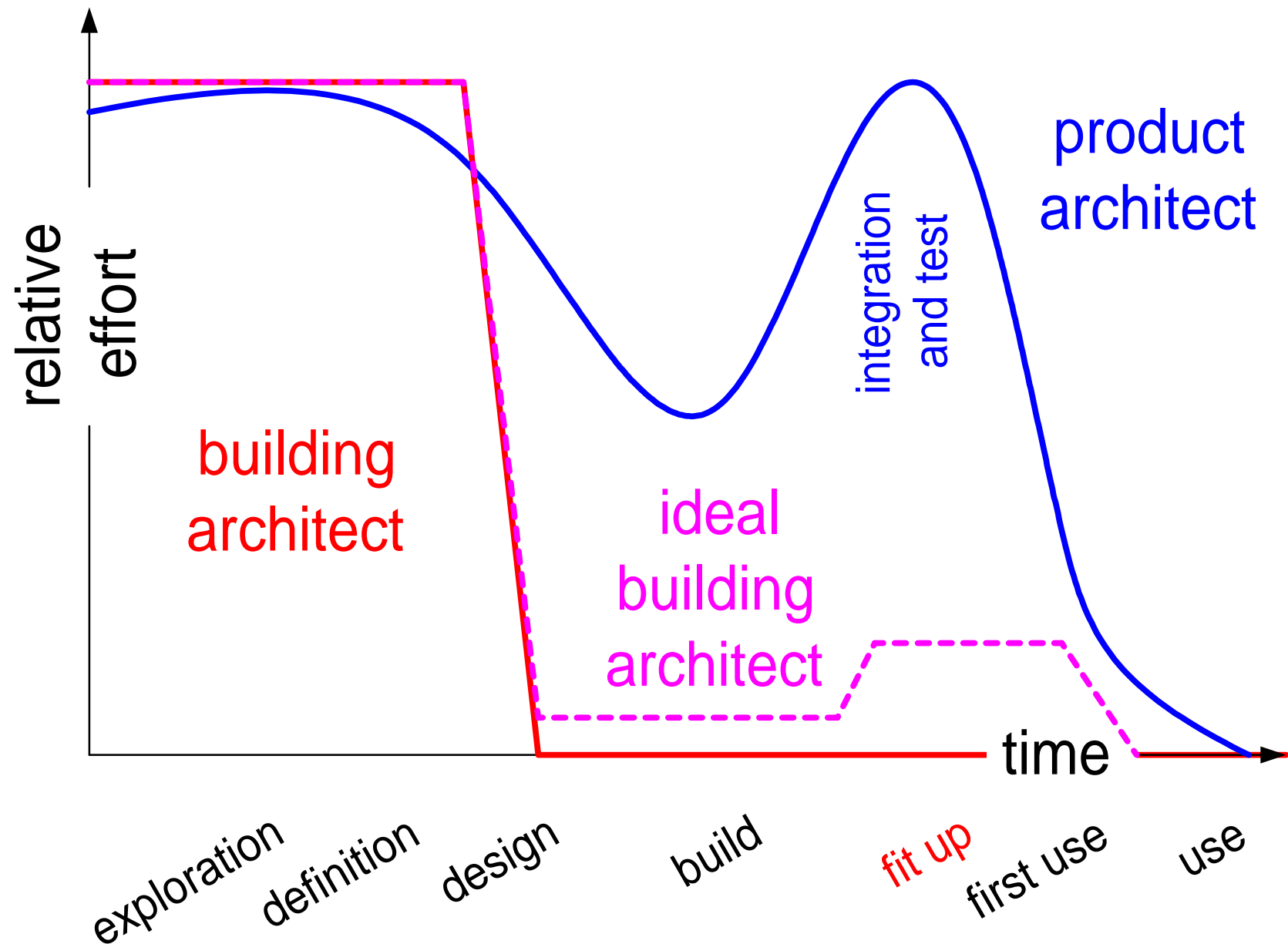
- + performance
- + physical properties
- + weight, size
- + cost, effort
- + tools

Product architecting mapped on "CAFCR"

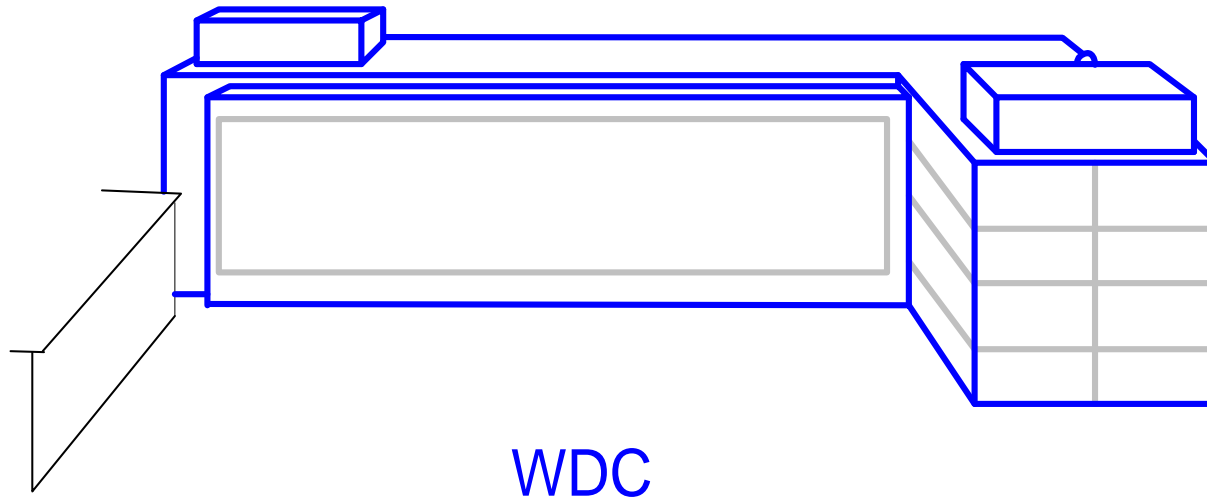
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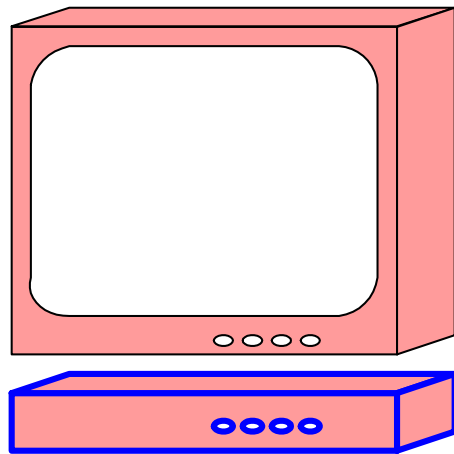
Architecting dynamics



Bridging 2 worlds



WDC



DVR

Stakeholders



Architect

Construction