

# Introductie voor de verdediging van het proefschrift

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## Abstract

Het proefschrift beschrijft een ontwerpmethode voor Embedded Systemen. Embedded Systemen zijn systemen waarin de ingebouwde computers en software een onmisbare rol spelen. Het ontwerpen van deze systemen is gecompliceerd door de vele vakgebieden die bij het ontwerp betrokken zijn. Het CAFCR model vormt de basis van de ontwerpmethode. De ontwerpmethode is achteraf toegepast op een medisch werkstation.

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logo  
TBD

# Systemen met ingebouwde computers en software



chip



GSM



MRI scanner



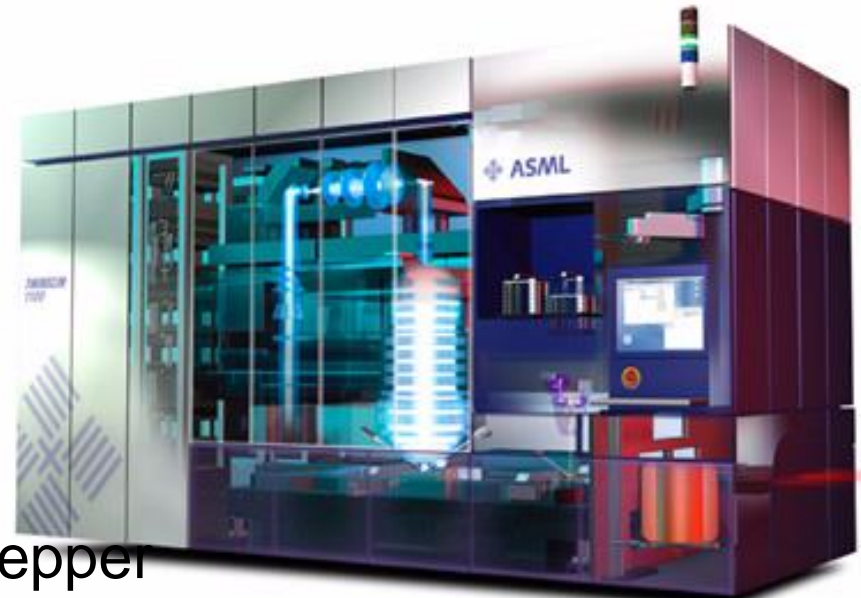
cardio X-ray system



television

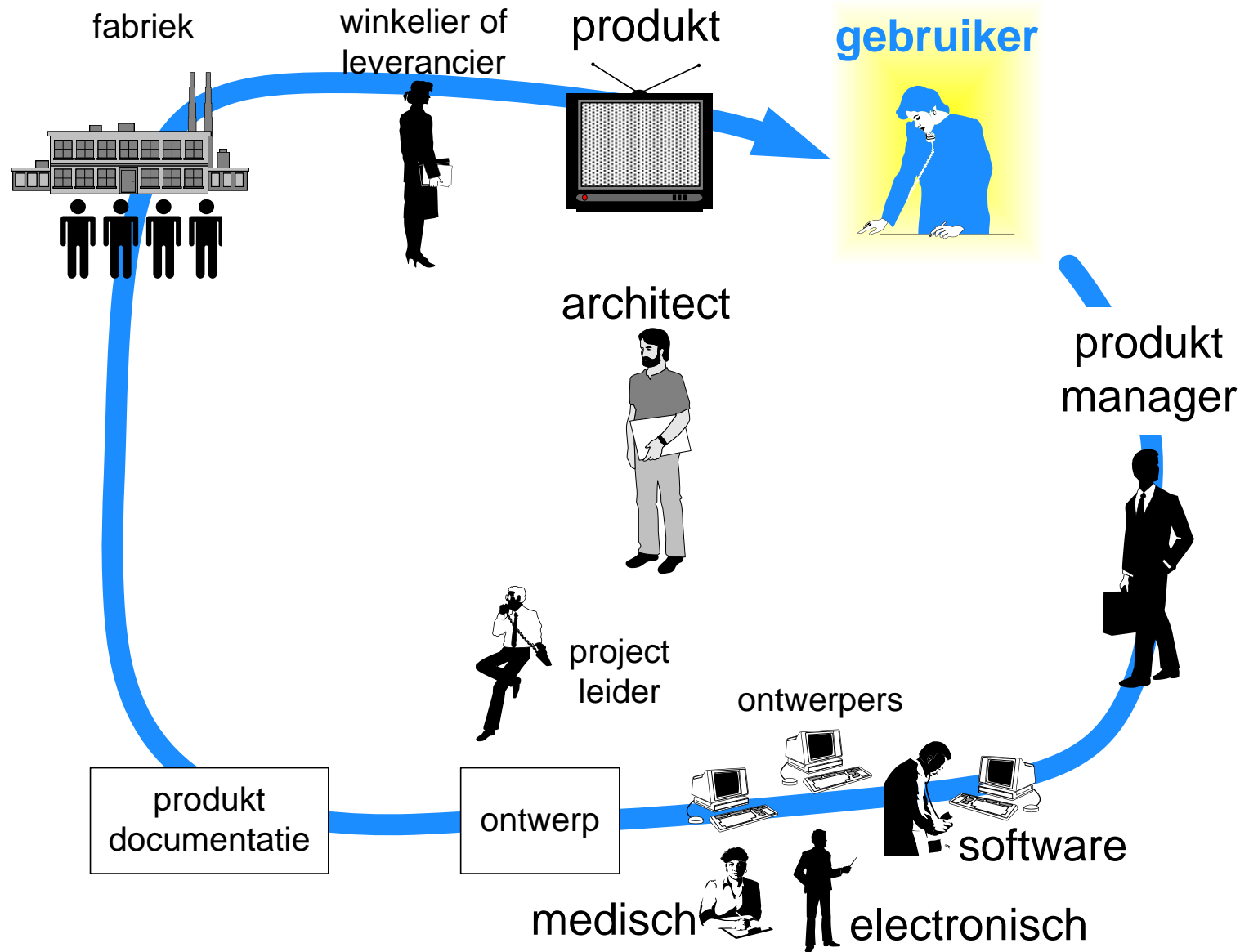


printer

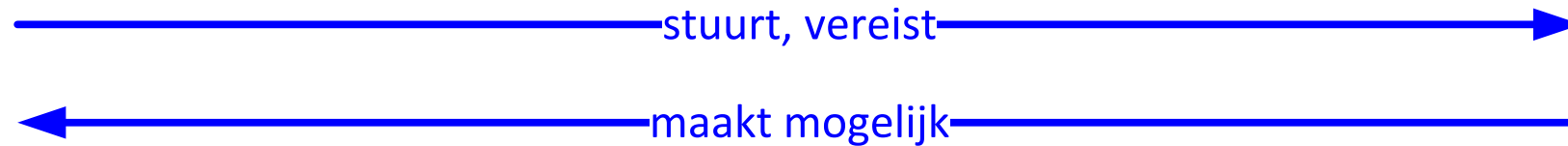


wafer stepper

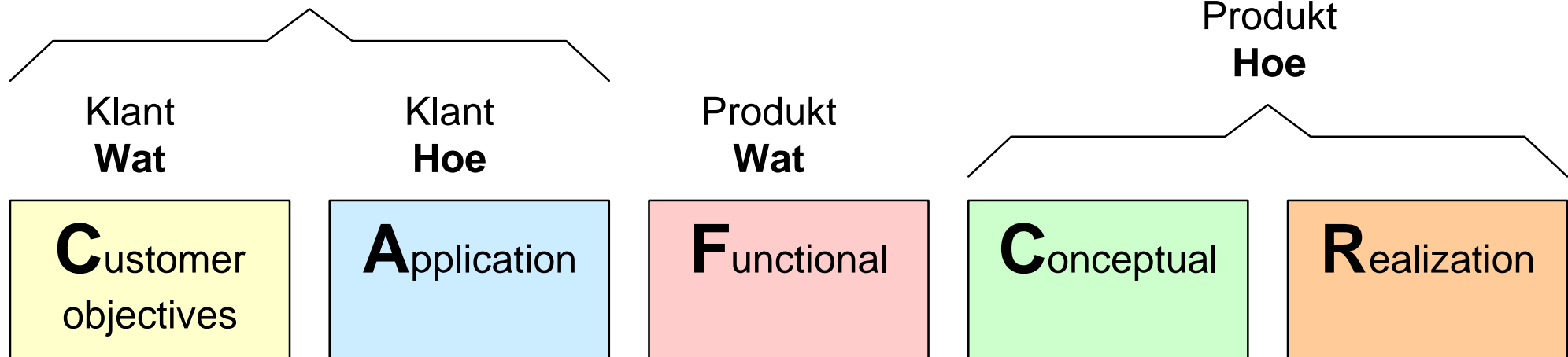
# Produkt creatie cyclus: veel vakgebieden



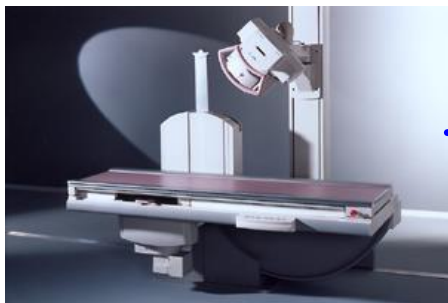
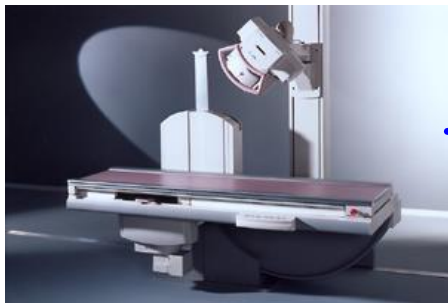
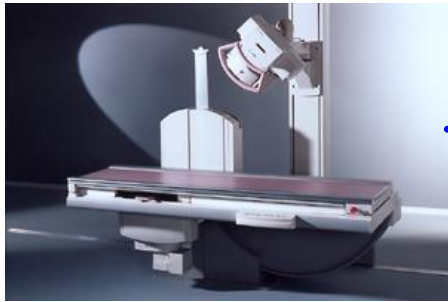
# Het CAFCR model: begrijp de klant



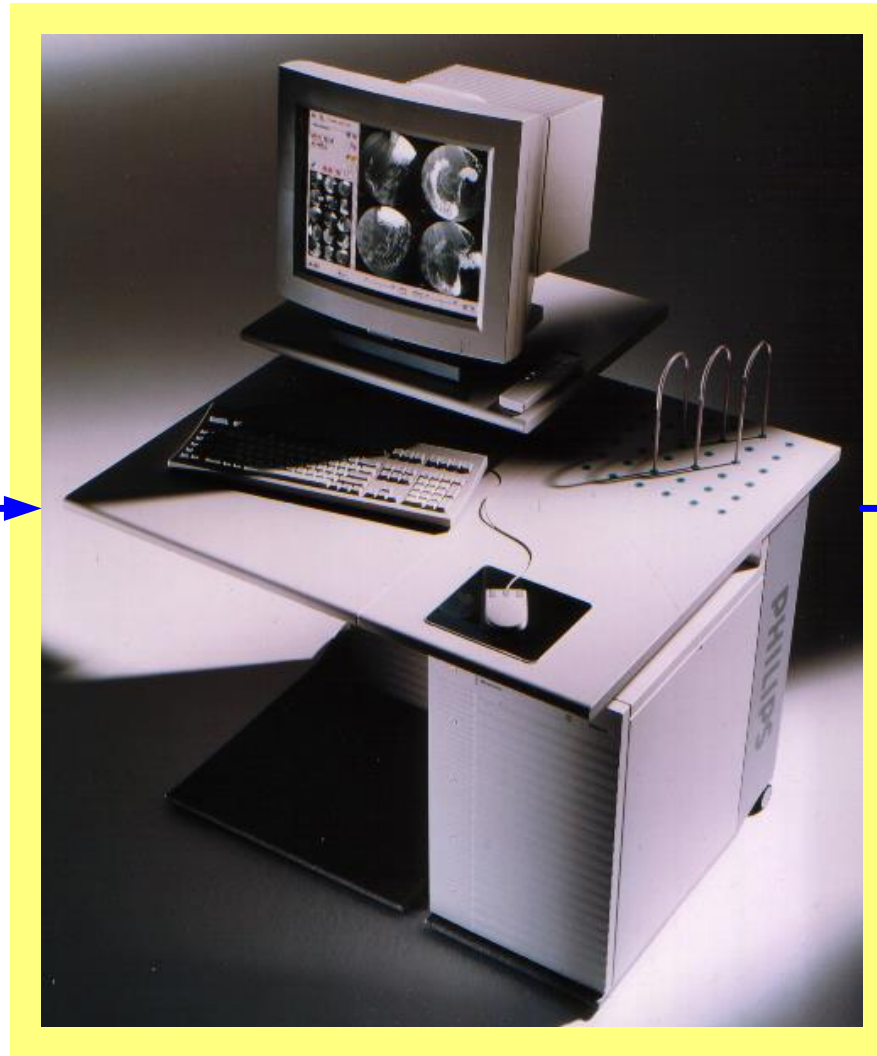
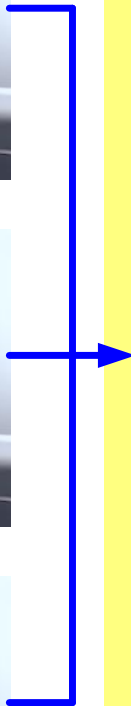
**Wat** heeft de Klant nodig  
in het Produkt en **Waarom?**



# Medisch workstation als casus



URF-systems

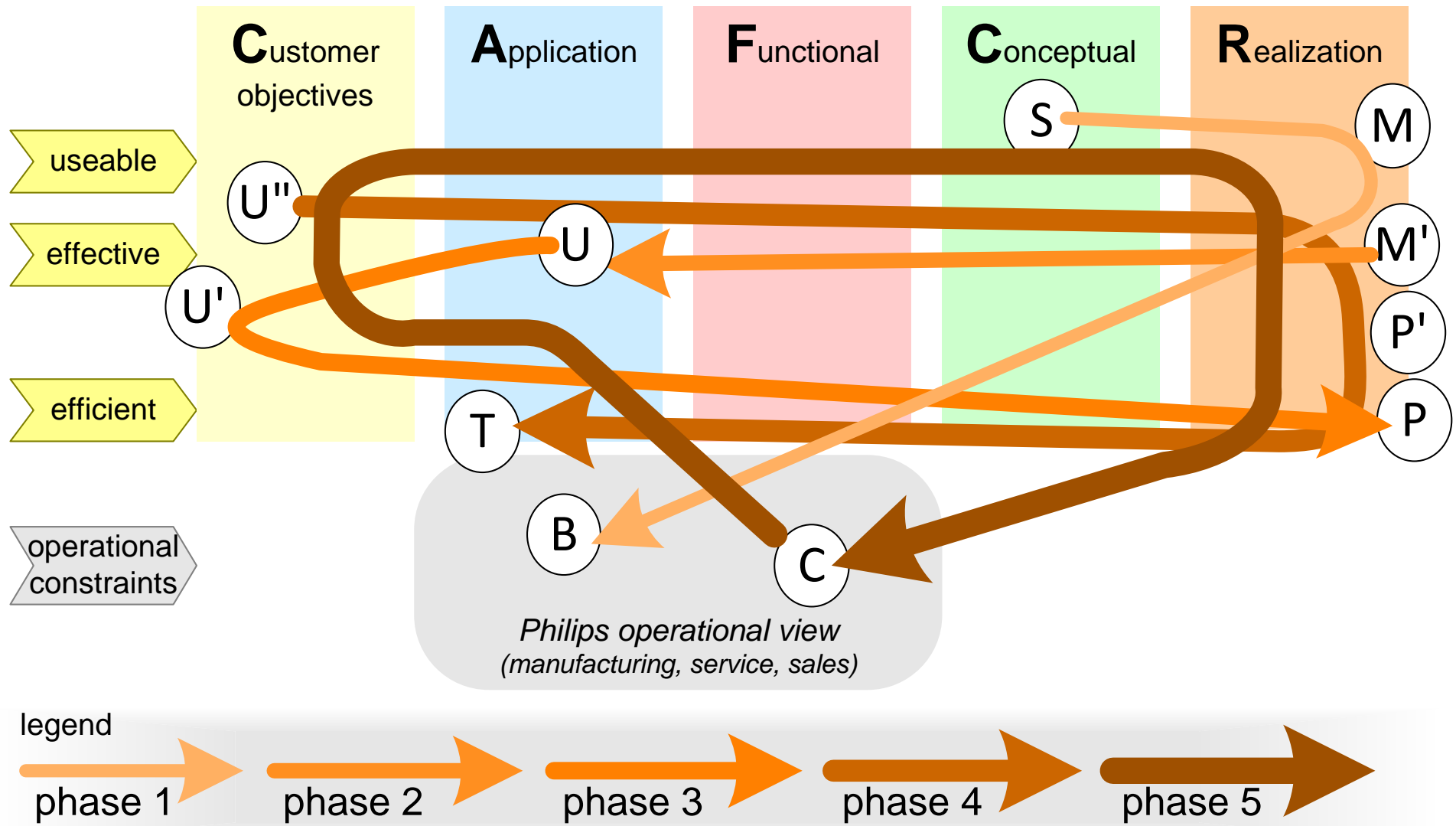


EasyVision: Medical Imaging Workstation



typical clinical image (intestines)

# "Draden van redenering"



# De Systemearchitect als twintigkoppig-monster



$$t_{\text{recon}} = t_{\text{filter}}(n_{\text{raw-x}}, n_{\text{raw-y}}) + n_{\text{raw-x}} * ( t_{\text{fft}}(n_{\text{raw-y}}) + t_{\text{col-overhead}} ) + n_y * ( t_{\text{fft}}(n_{\text{raw-x}}) + t_{\text{row-overhead}} ) + t_{\text{corrections}}(n_x, n_y) + t_{\text{control-overhead}}$$