

Threads of Reasoning in the Medical Imaging Case

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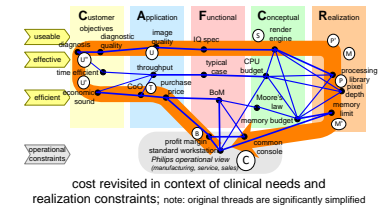
Abstract

A thread of reasoning is build up in steps and the underlying reasoning is explained.

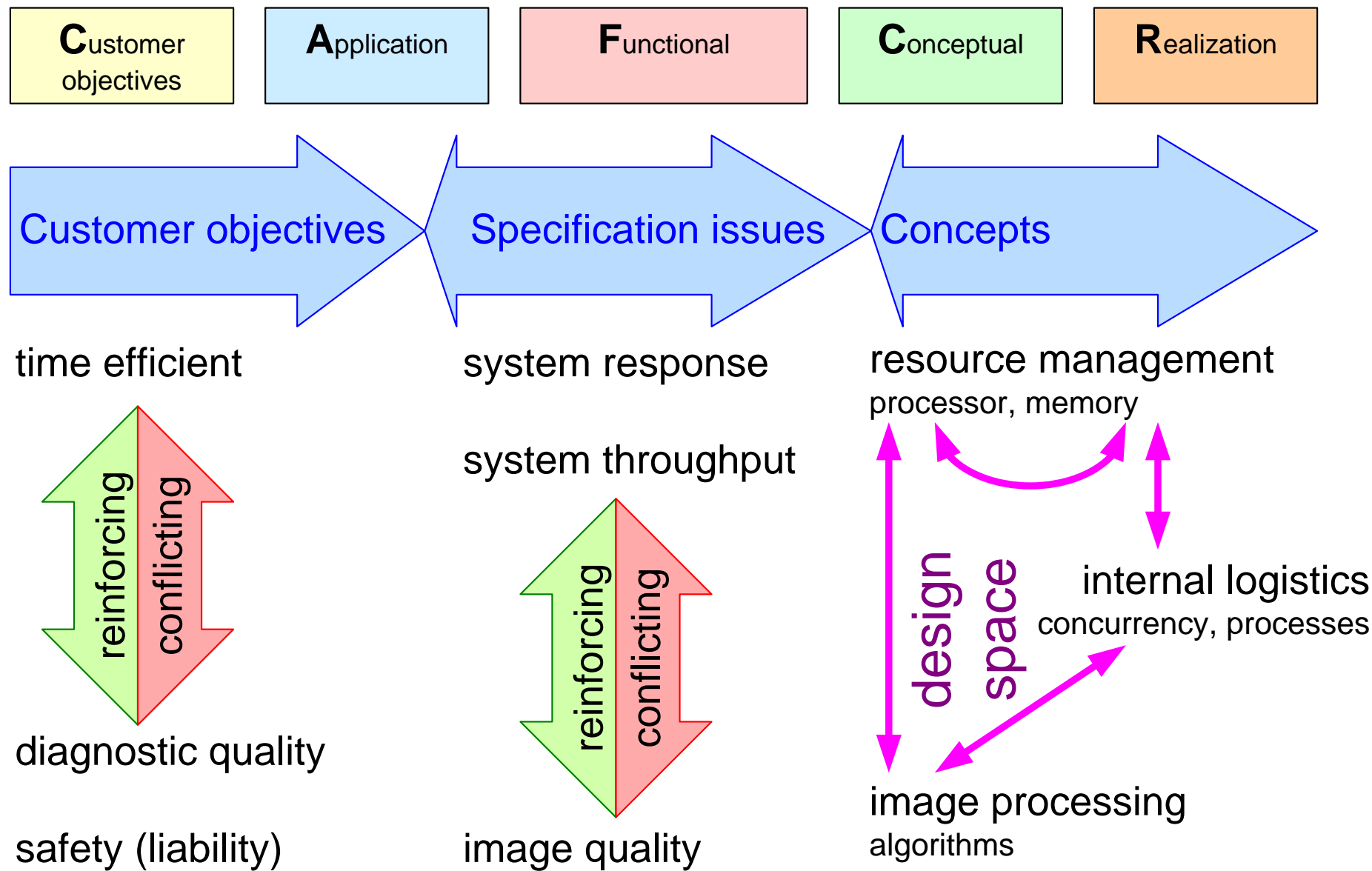
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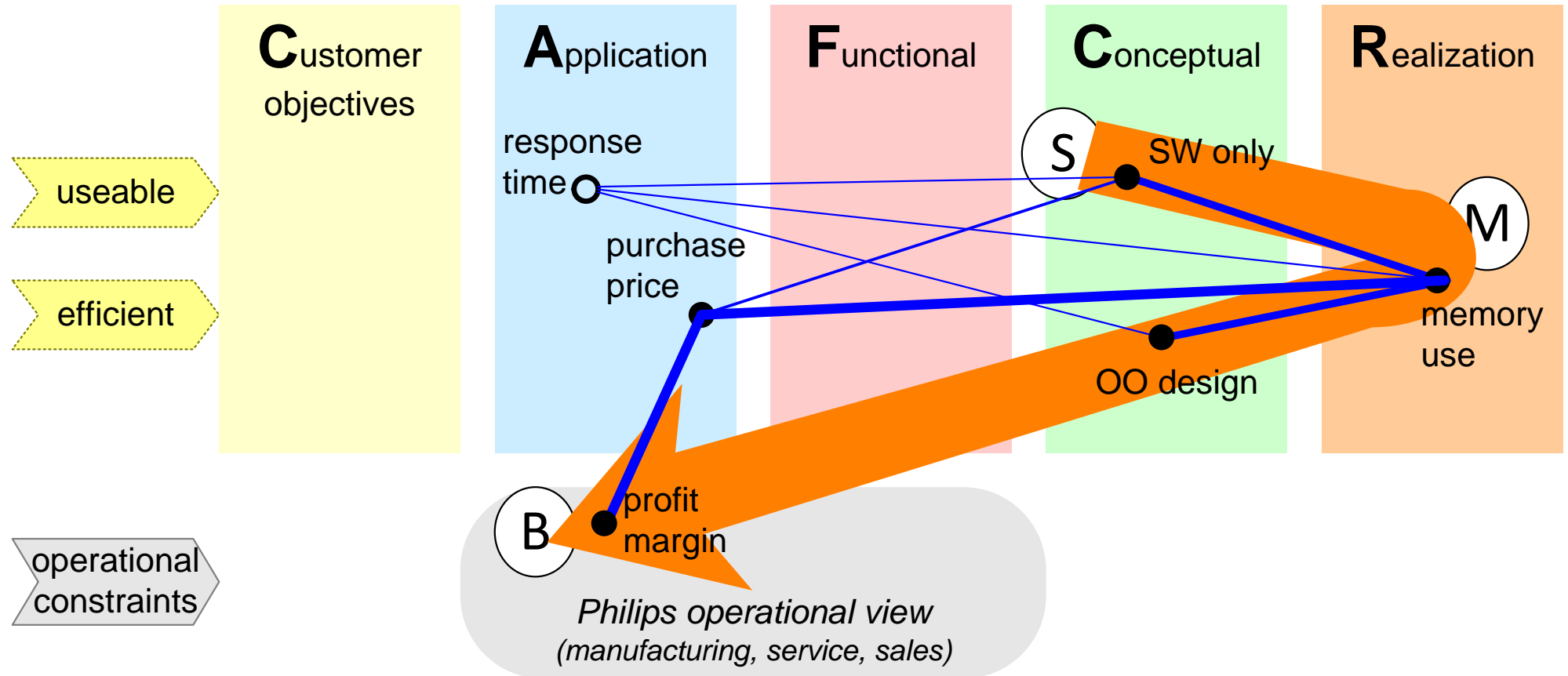
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Thread of reasoning based on efficiency-quality tension

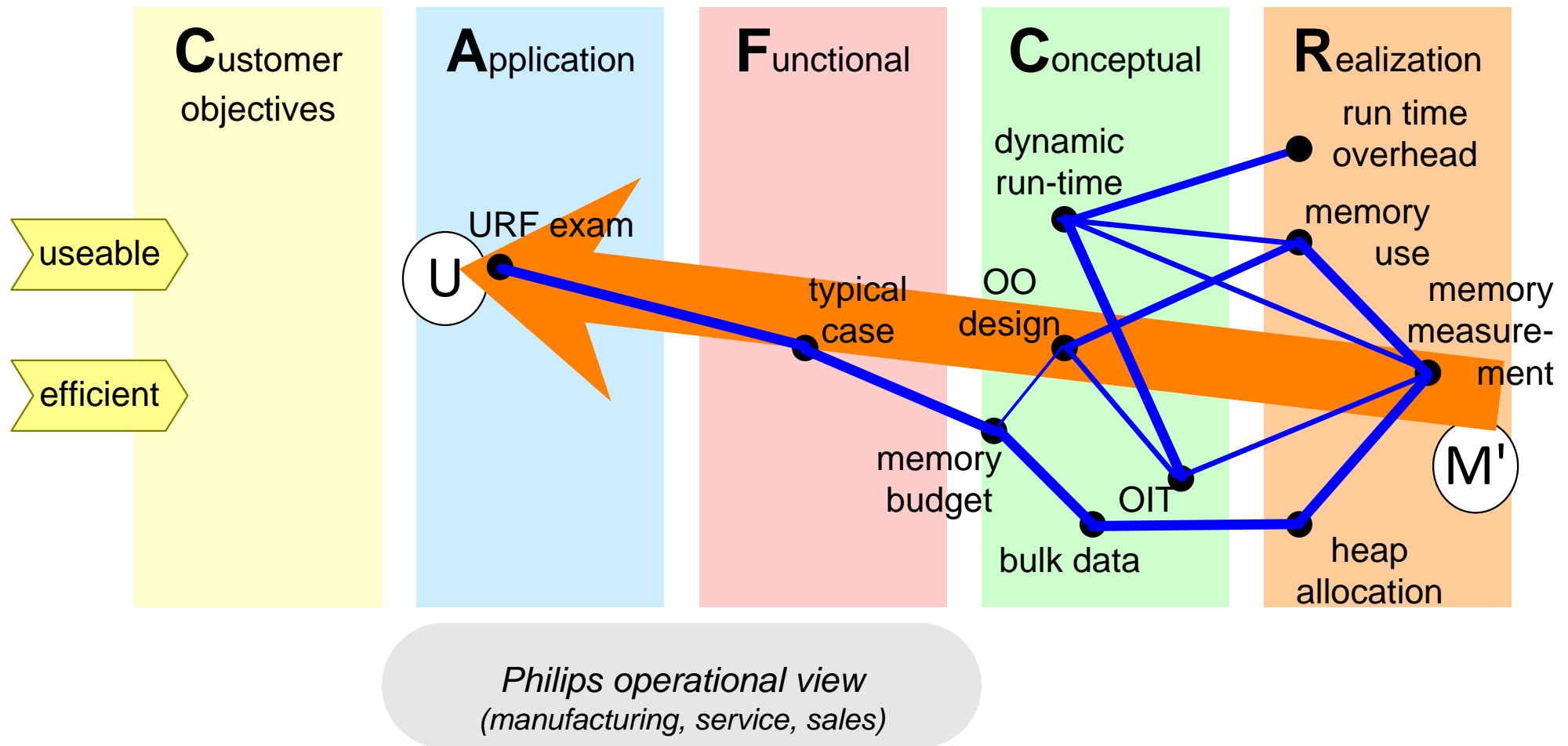


Thread of reasoning; introvert phase



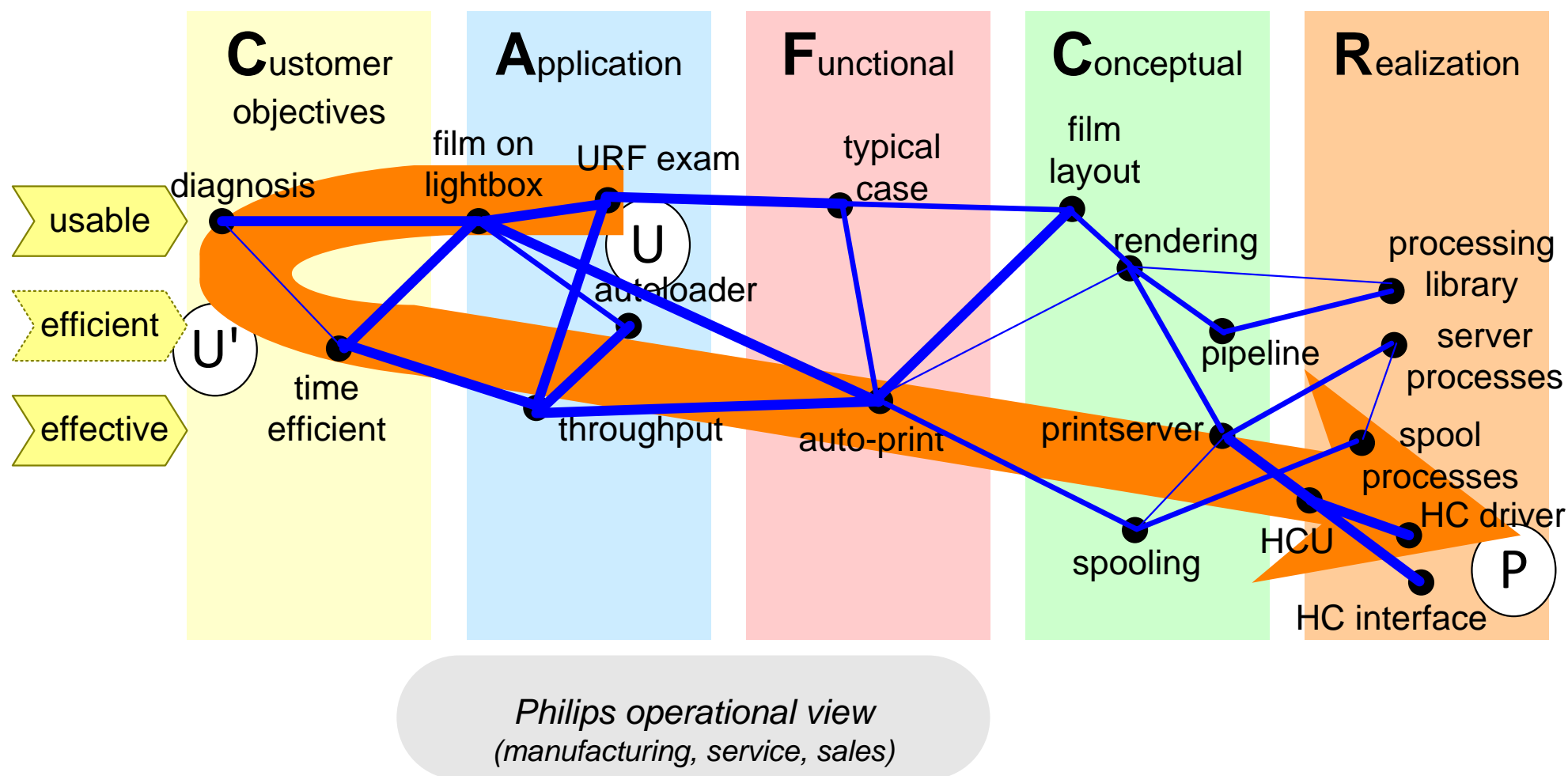
Introvert view: cost and impact of new technologies

Thread of reasoning; phase 2



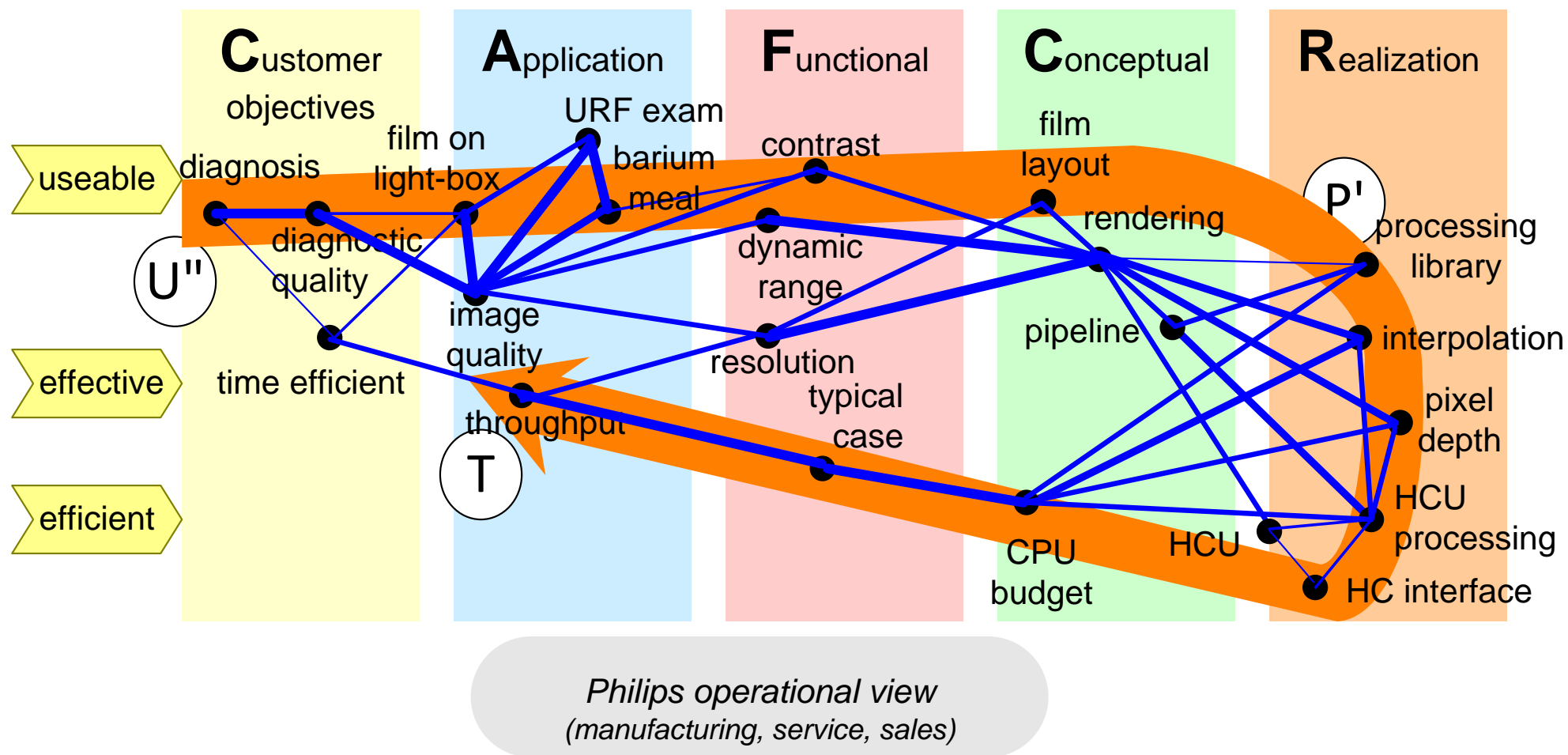
How to measure memory, how much is needed?
from introvert to extrovert

Thread of reasoning; phase 3



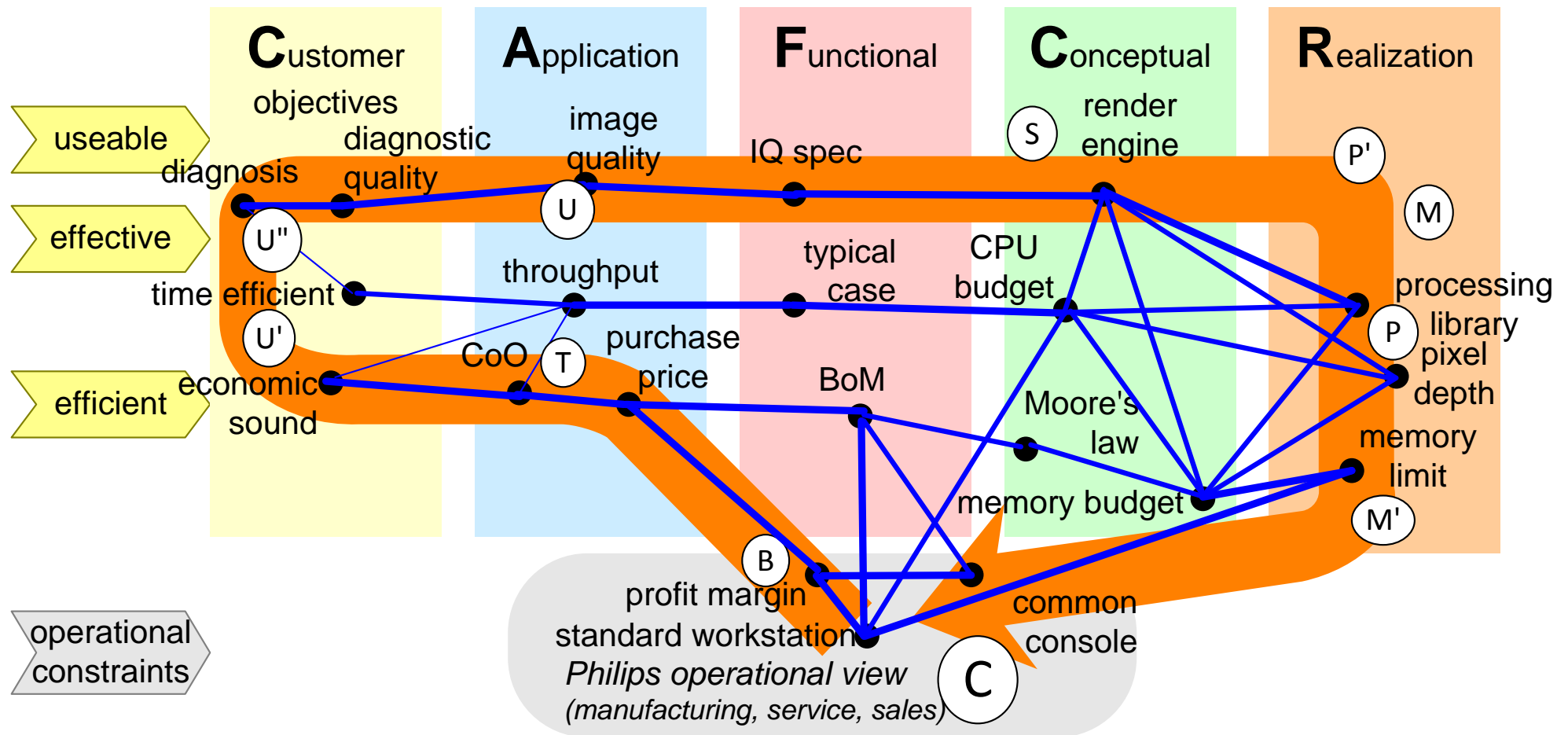
Radiologists diagnose from film, throughput is important
Extrovert view shows conceptual and realization gaps!

Thread of reasoning; phase 4



from extrovert diagnostic quality, via image quality, algorithms and load, to extrovert throughput

Thread of reasoning; phase 5



cost revisited in context of clinical needs and realization constraints; note: original threads are significantly simplified