

Balancing Genericity and Specificity

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

e-mail: gaudisite@gmail.com

www.gaudisite.nl

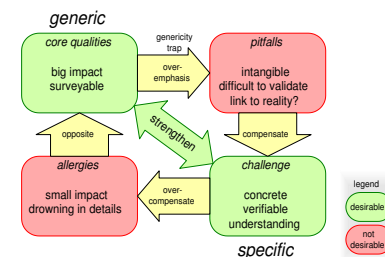
Abstract

The balance between generic and specific architecting methods is discussed. The output of the architect must be compact and hence generic, but this output is based on many specific details which have been taken into account.

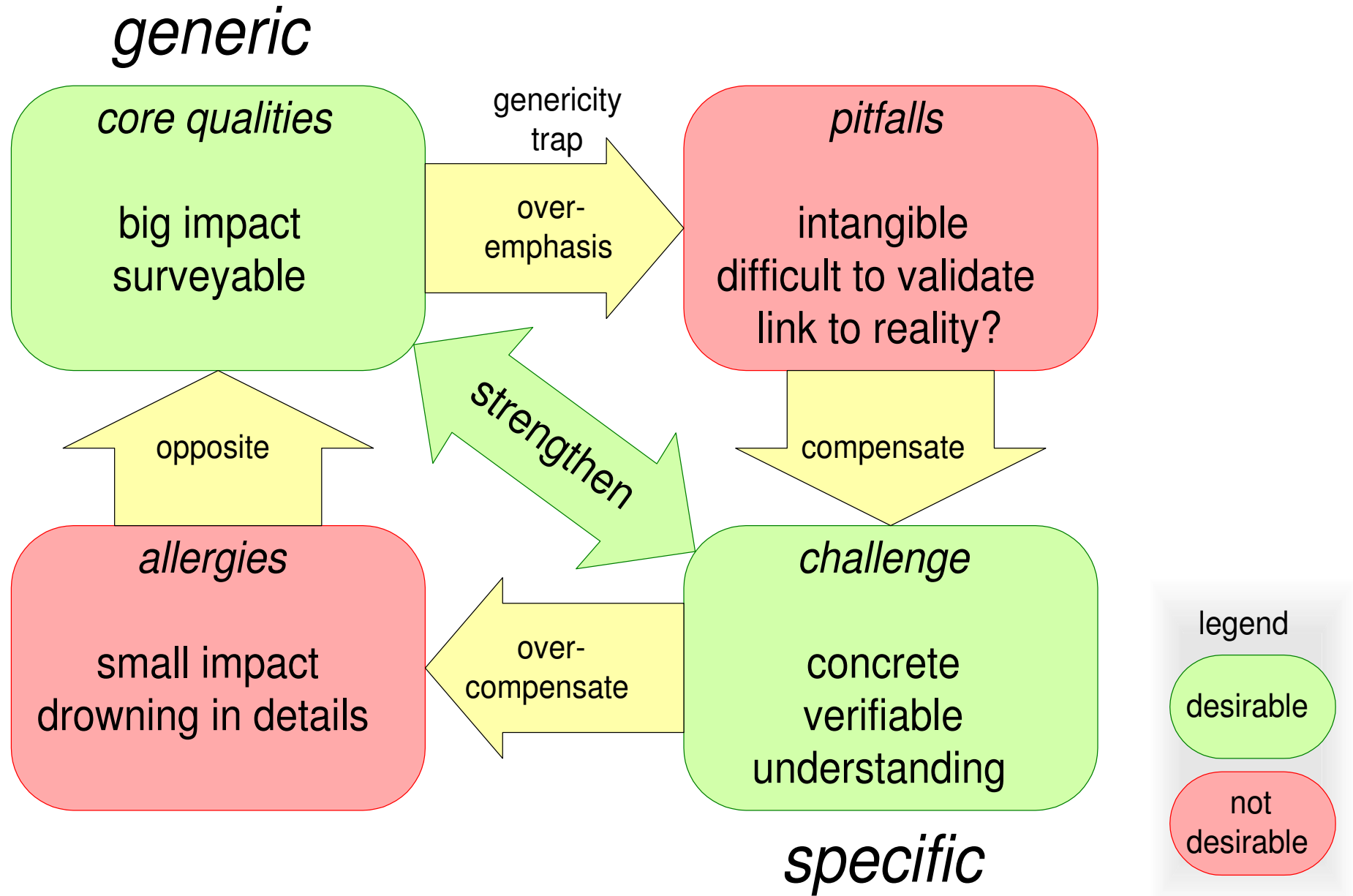
Distribution

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.

September 9, 2018
status: finished
version: 1.2



Strong and weak of generic and specific



Generic diagrams are based on specific details

Figure 15.5
SW processes

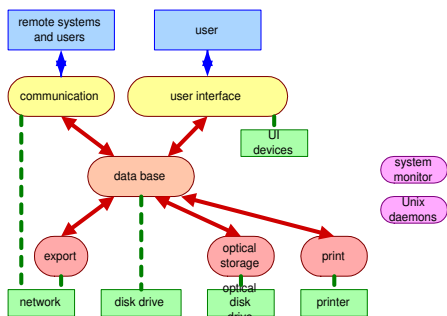


Figure 15.1
image quality context

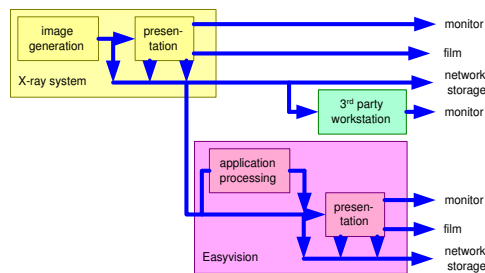
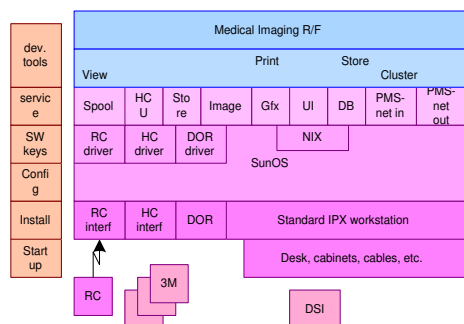


Figure 15.8
memory budget

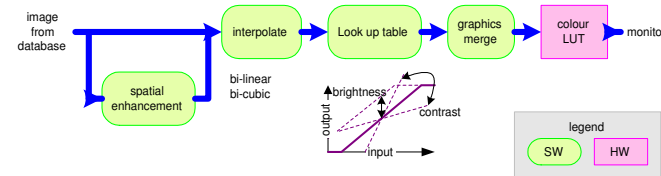
| memory budget in Mbytes | code | obj data | bulk data | total |
|-------------------------|------|----------|-----------|-------|
| shared code | 11.0 | | | 11.0 |
| UI process | 0.3 | 3.0 | 12.0 | 15.3 |
| database server | 0.3 | 3.2 | 3.0 | 6.5 |
| print server | 0.3 | 1.2 | 9.0 | 10.5 |
| DOR server | 0.3 | 2.0 | 1.0 | 3.3 |
| communication server | 0.3 | 2.0 | 4.0 | 6.3 |
| UNIX commands | 0.3 | 0.2 | 0 | 0.5 |
| compute server | 0.3 | 0.5 | 6.0 | 6.8 |
| system monitor | 0.3 | 0.5 | 0 | 0.8 |
| ASW total | 13.4 | 12.6 | 35.0 | 61.0 |
| UNIX Solaris 2.x | | | | 10.0 |
| file cache | | | | 3.0 |
| total | | | | 74.0 |

Figure 15.7
construction decomposition



high level, generic diagrams:
large impact, providing overview

Figure 15.2
processing pipeline



every block, number of word is based on hundreds of specific design details (loc, measurements, images, connections, etc.)

Architecting method: supporting the balance

