

The Importance of System Architecting for Development

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Abstract

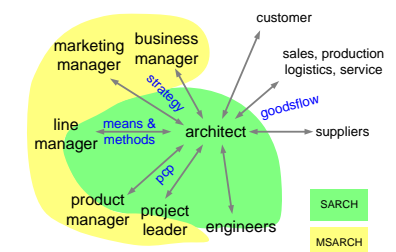
The importance of system architecting for development of products is explained. Current trends show an exponential growth of development teams, product complexity. Team size and product complexity are problematic from cost, time to market and risk point of view. The challenge is to create new products with manageable sized teams. System architecting is one of many measures to cope with this problem.

Architecting is explained in its context and a few main concepts are shown. A curriculum is being developed for (potential) system architects. The next step is to address the managerial context of the system architect. For this purpose a 2 day Management SARCH is developed.

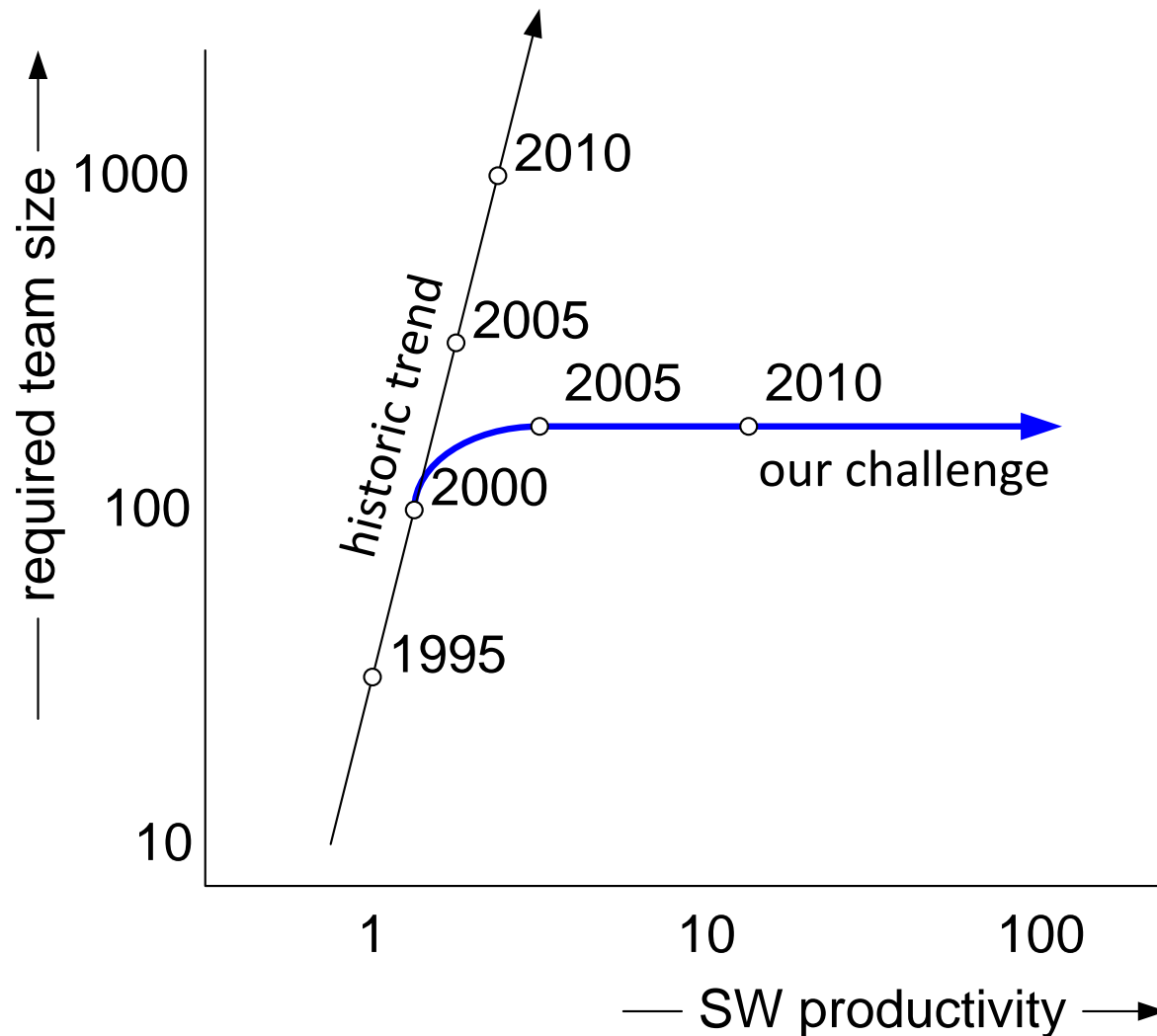
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The Challenge



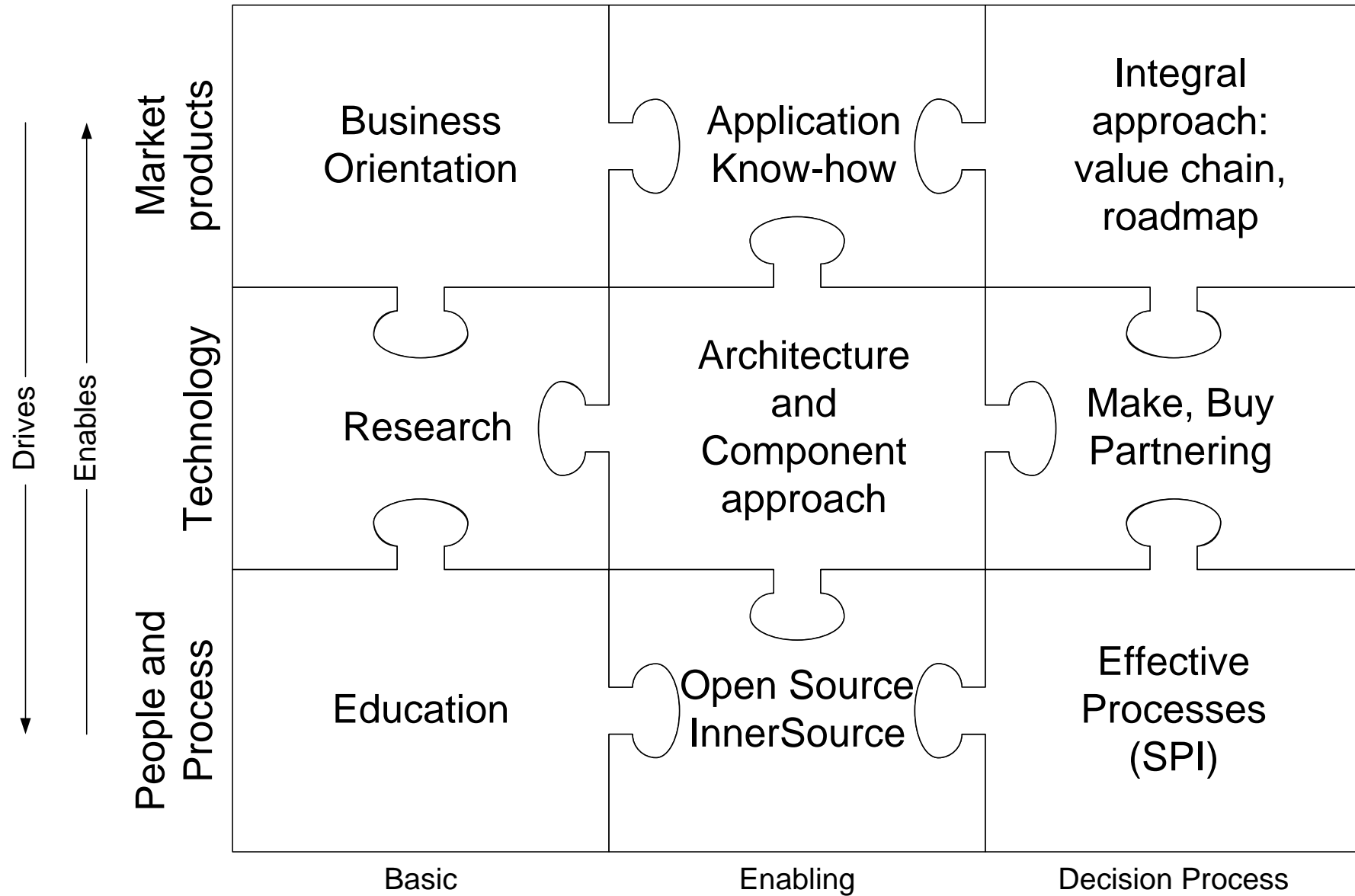
Manage large PCP
teams of > 1000 people

or

Significantly increase
SW productivity

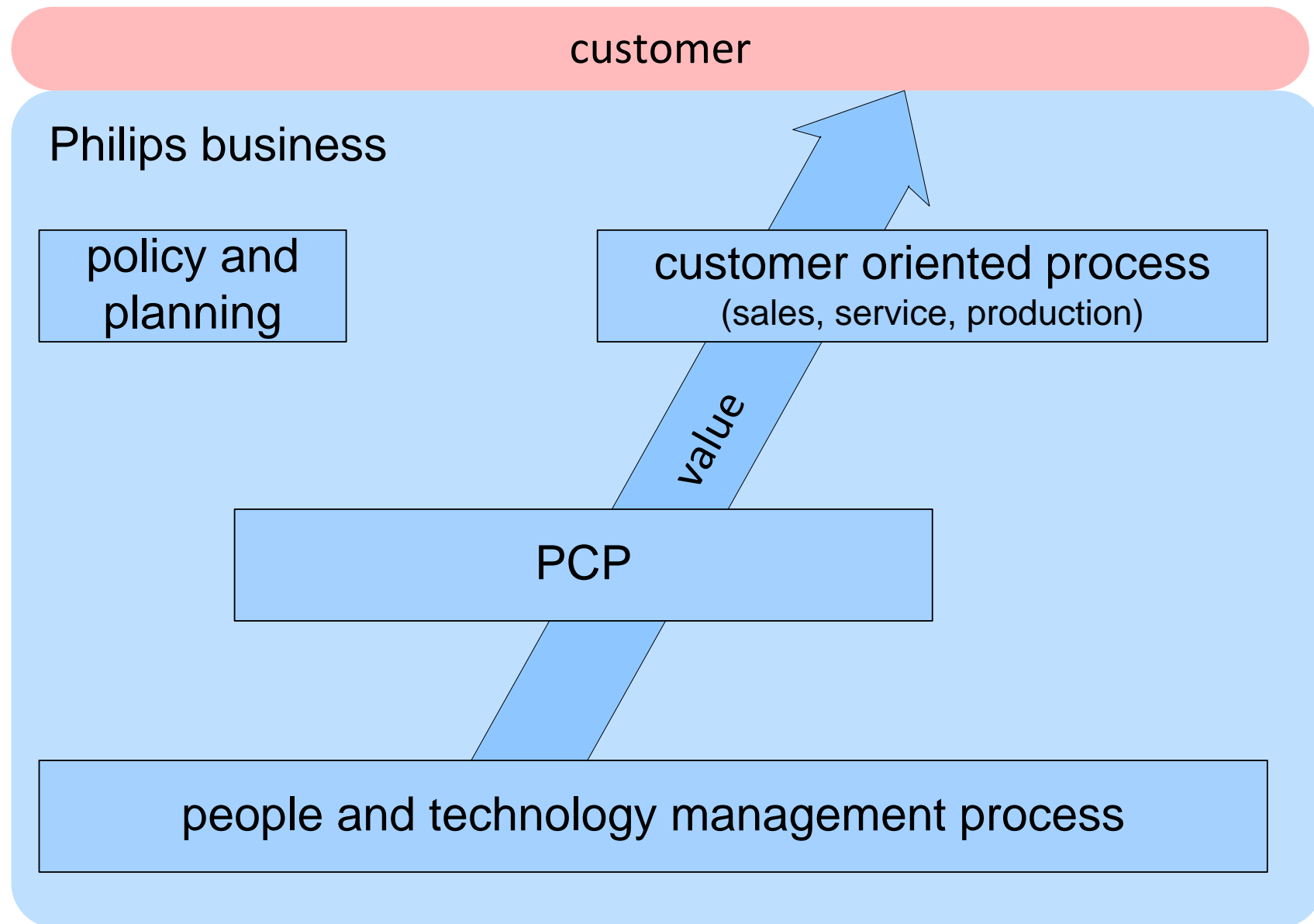
from: Ad Huijser
Philips Software Conference 2001

When all pieces fit ...

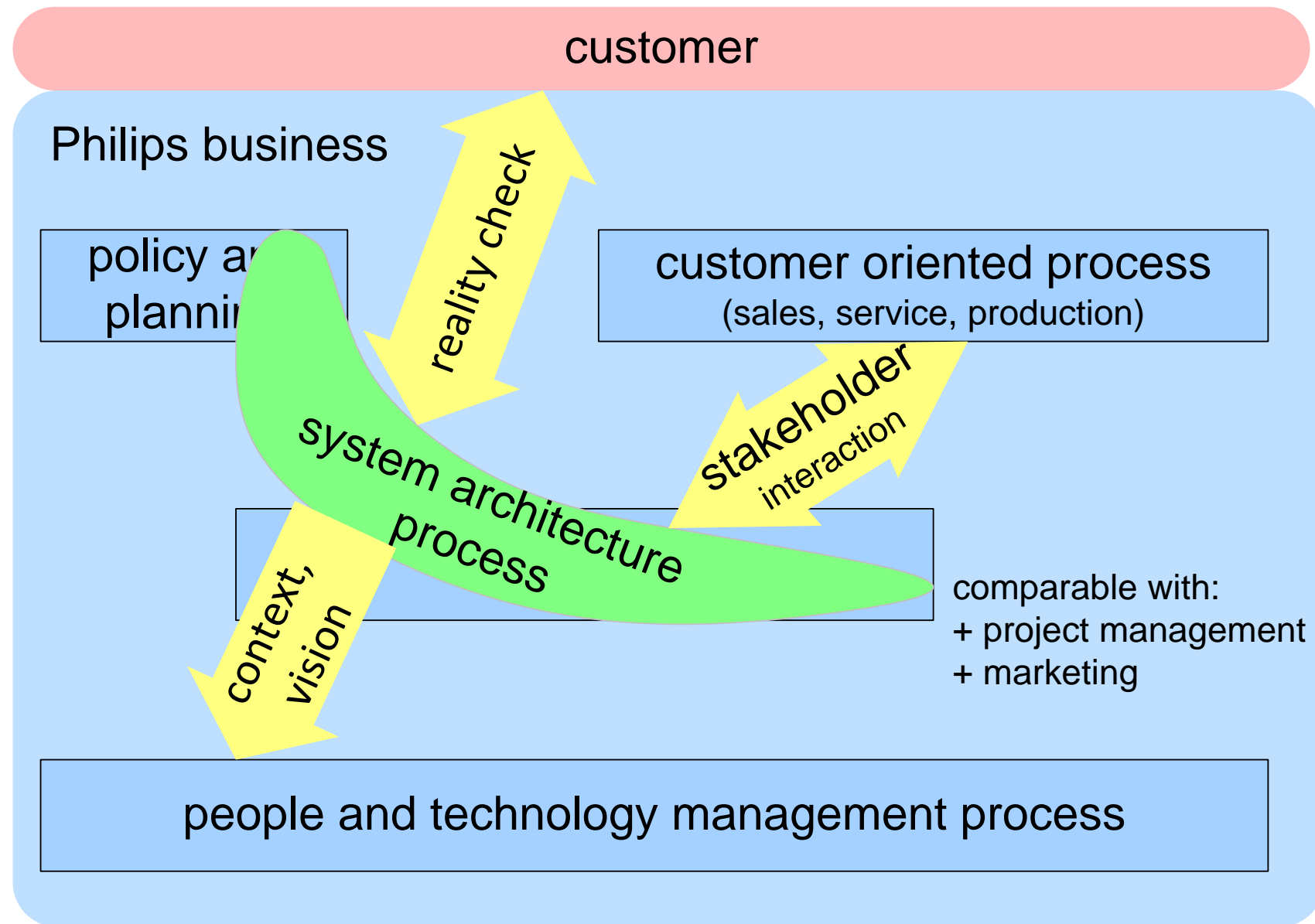


from: Ad Huijser Philips Software Conference 2001

Simplified process view



System architecture process



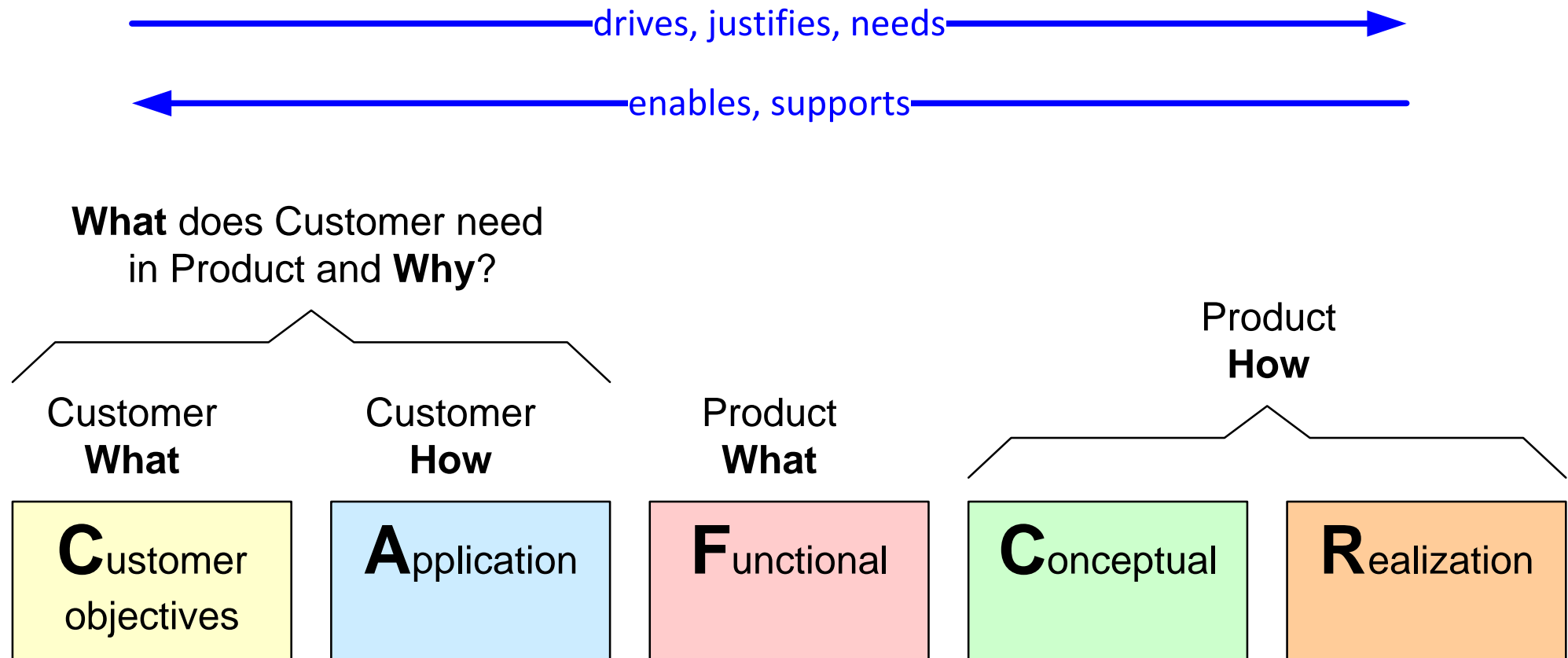
What is architecting?



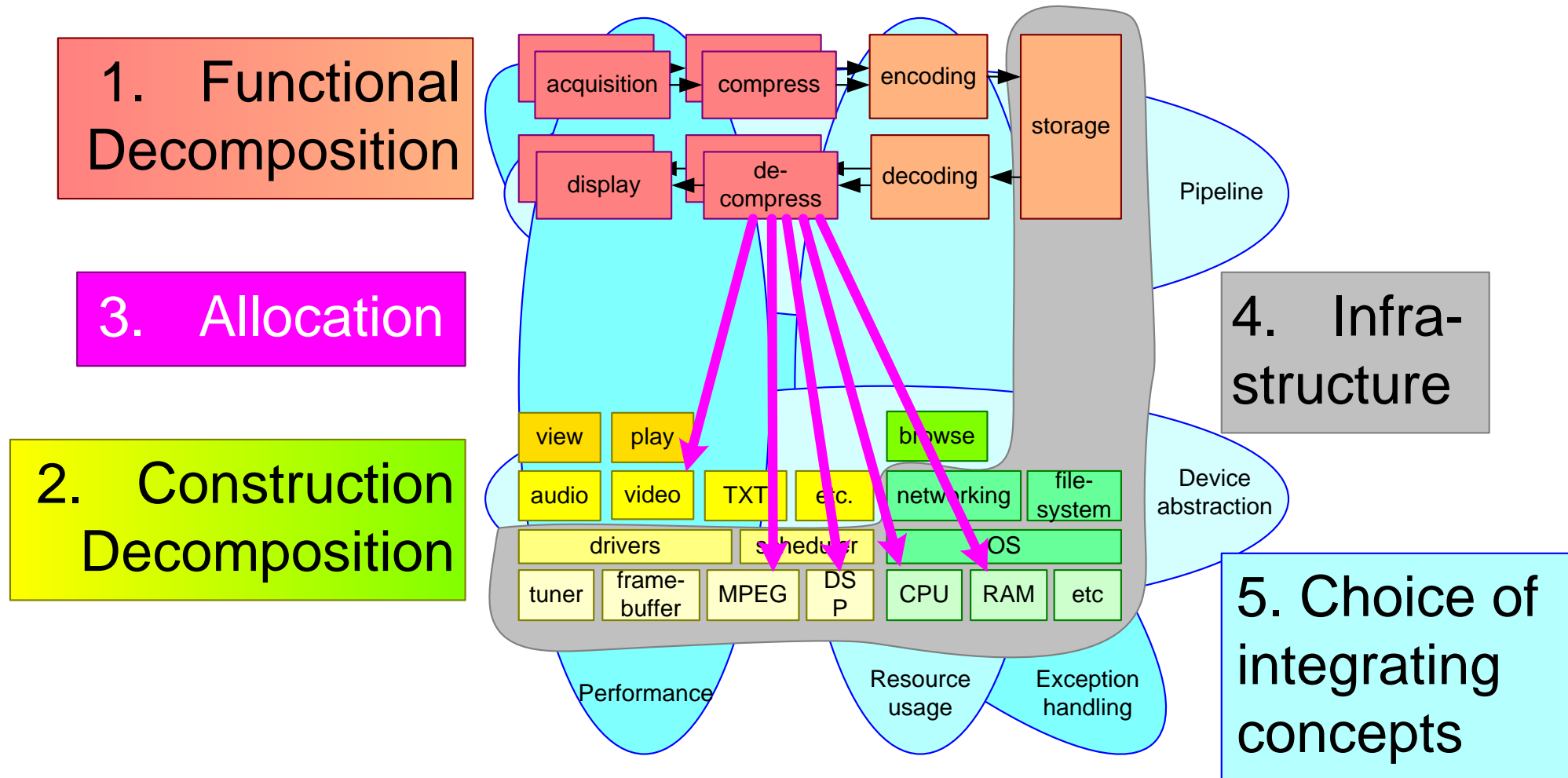
Do the right things

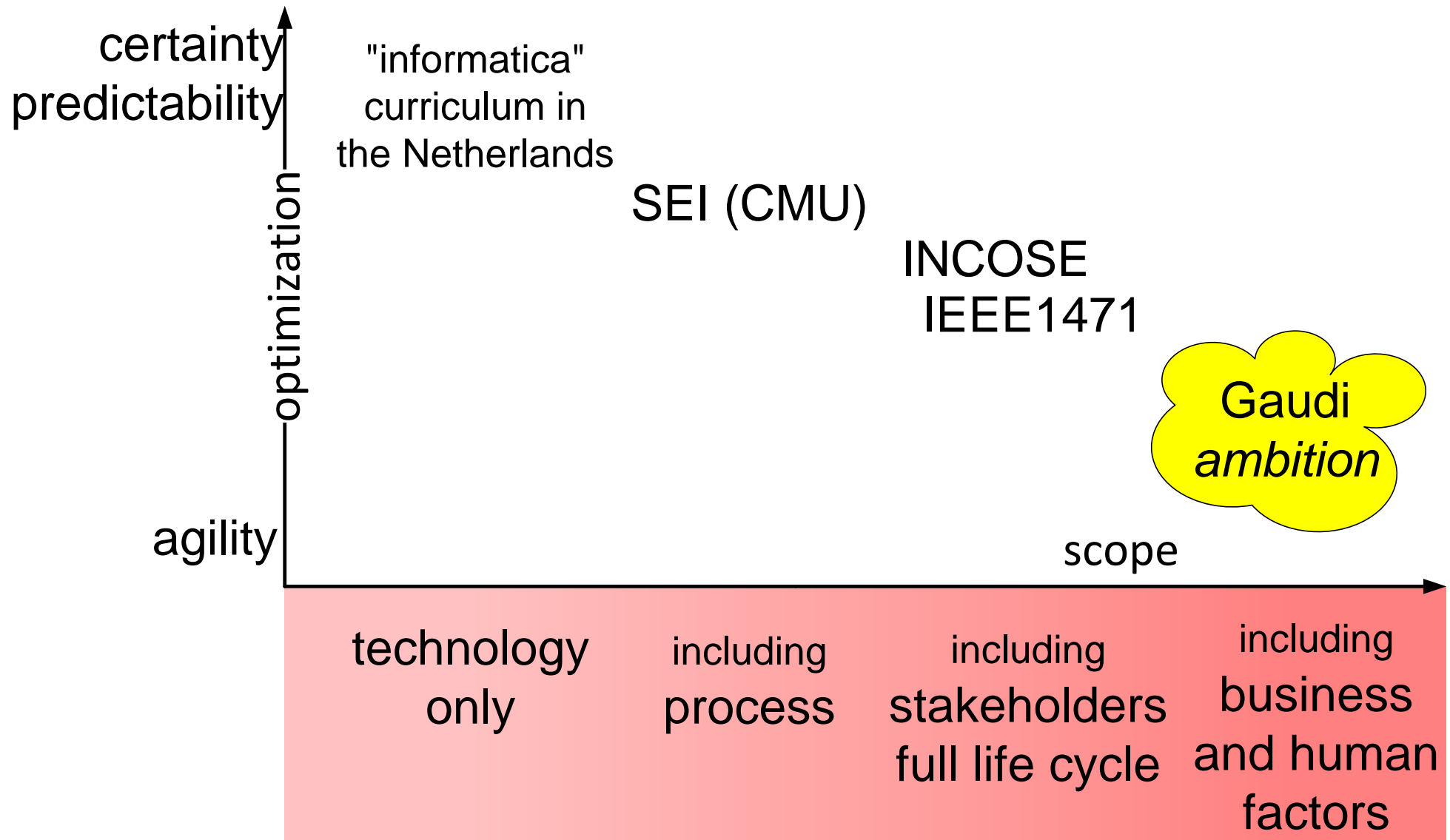
Do the things right

"CAFCR" model

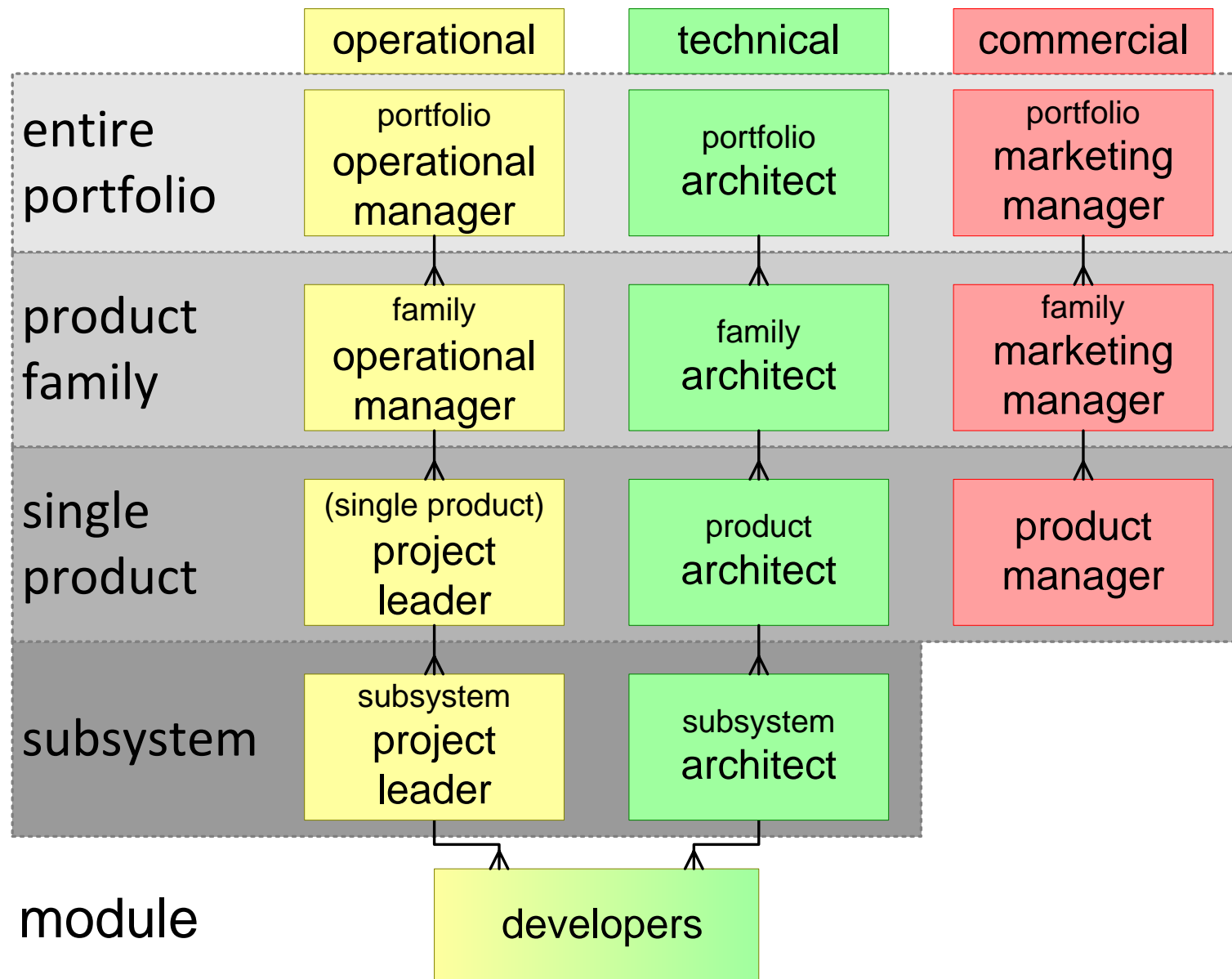


Guiding how

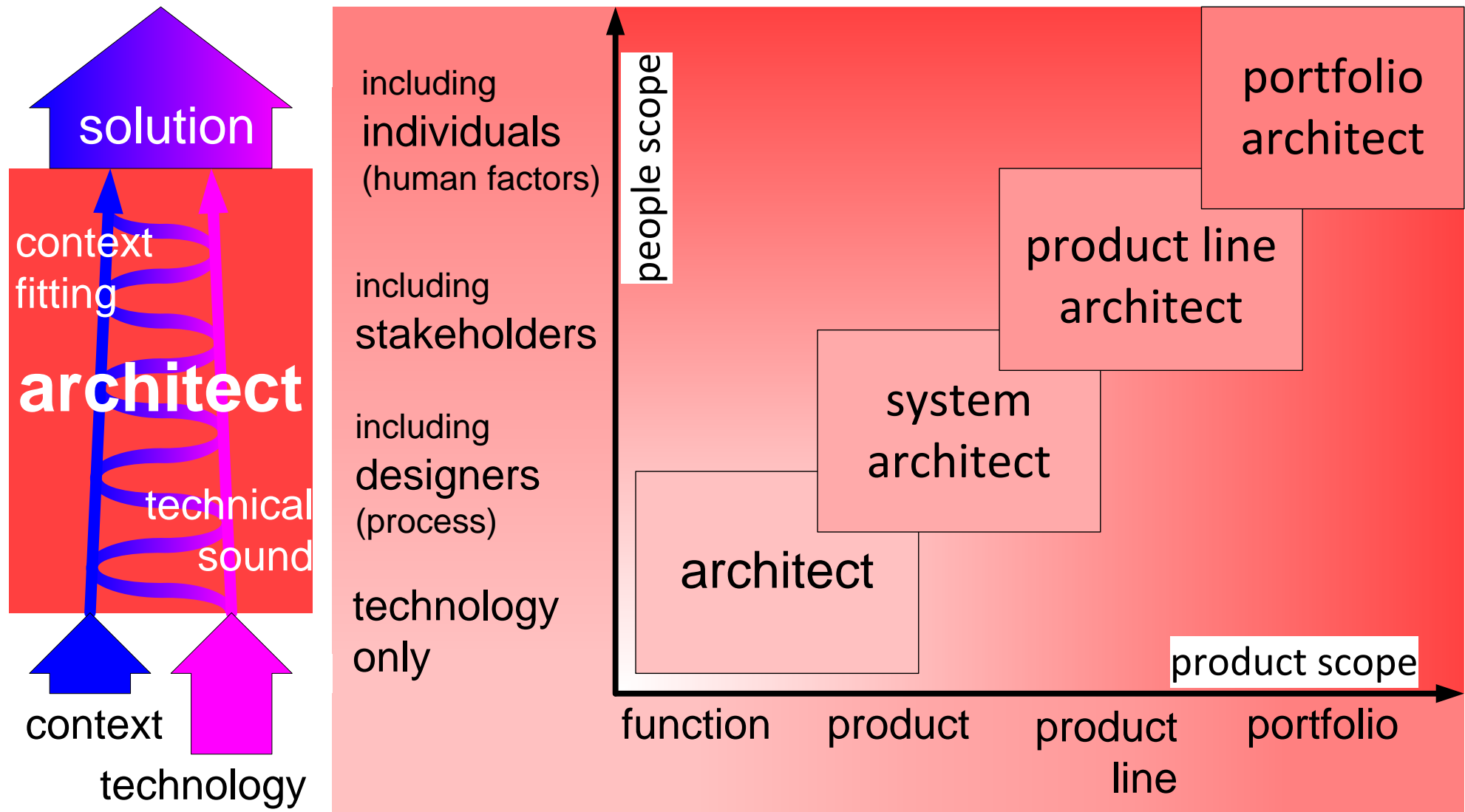




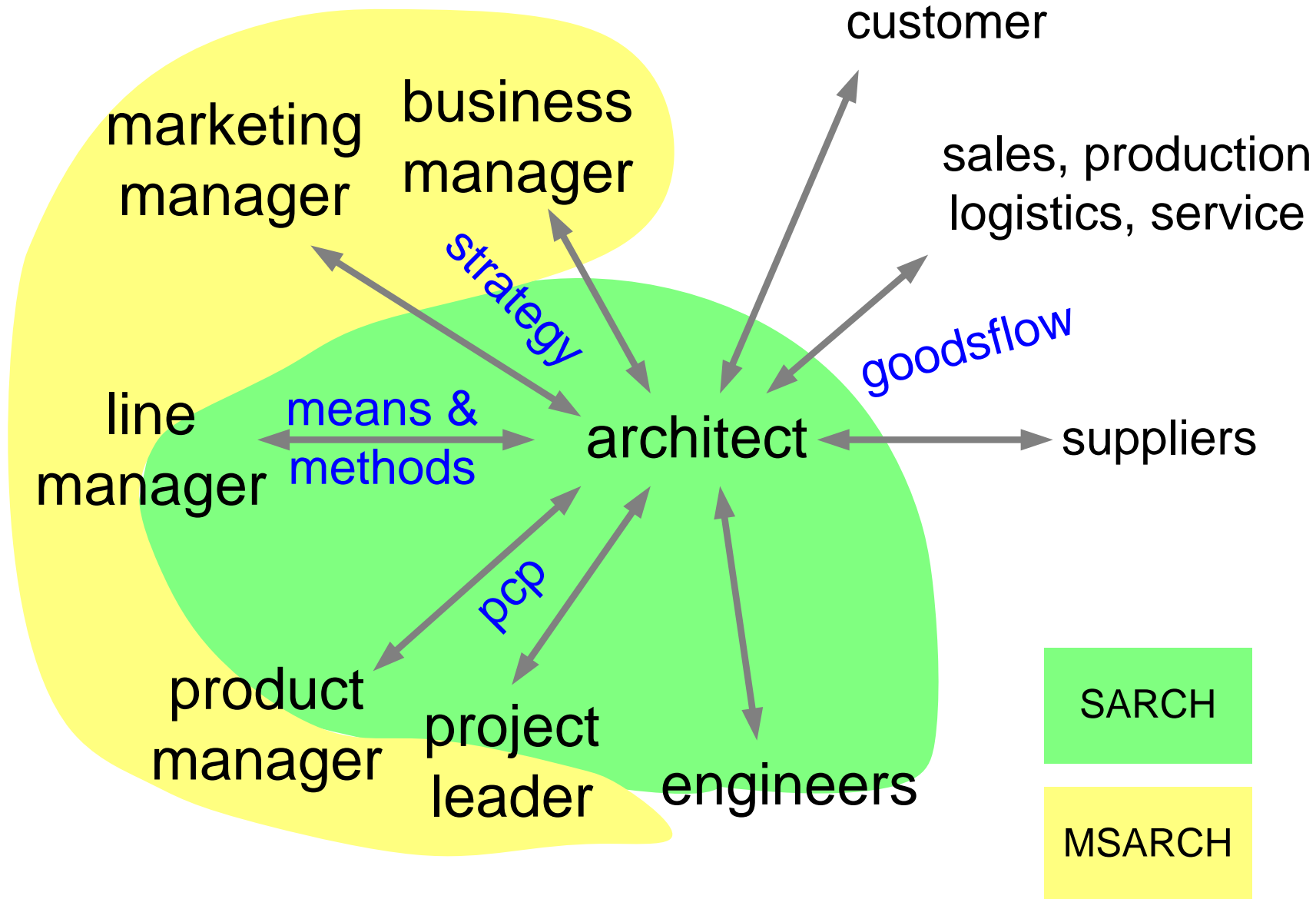
Operational hierarchy



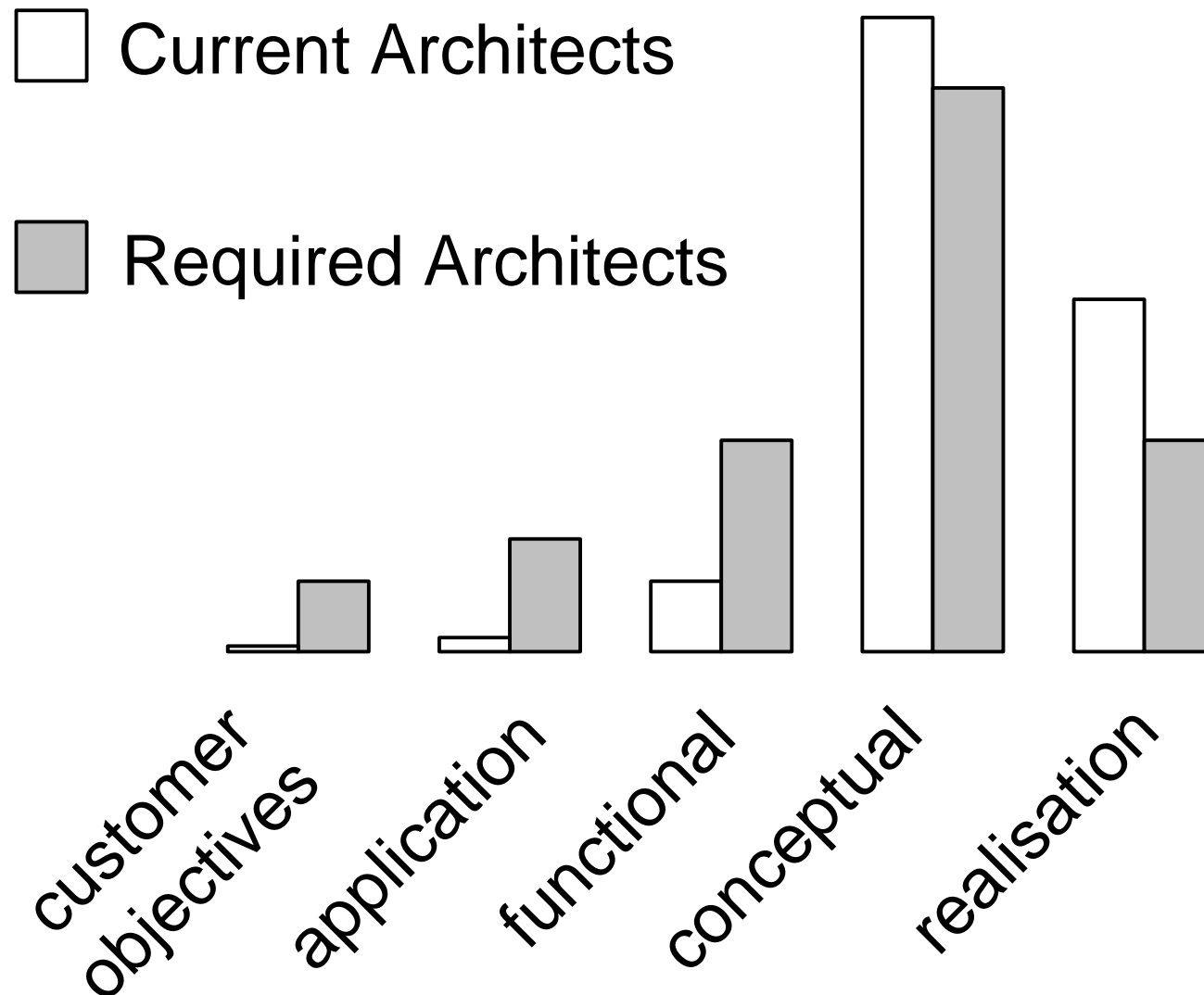
Architecting Scope



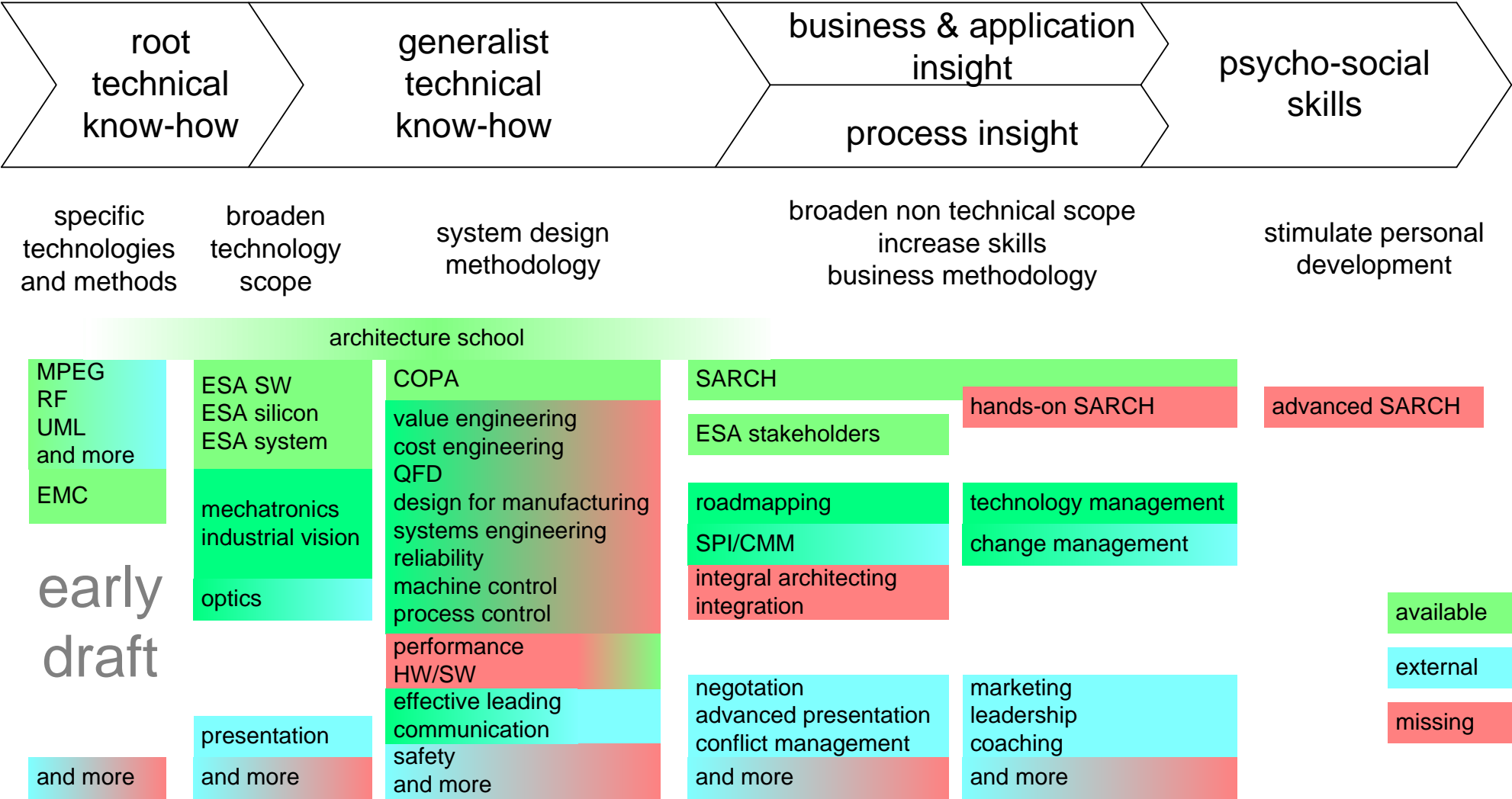
Stakeholders Architect



Profile of System Architect



Draft System Architect Curriculum



Course status in Philips

Course	Abbreviation	number of courses upto May 2002	appr. total participants	Lecturers
System Architecture	SARCH	15	230	Gerrit Muller 2002 H2: others
Embedded Systems Architecting; Stakeholders	ESA	5	80	Pierre America Frank Pijpers
System Architecting for Managers	MSARCH	1	12	Gerrit Muller

Goals of 2-day Management SARCH course

managerial awareness of:

- + what is architecting
- + business impact of architecting
- + role and profile of an architect

to

- + enable integral approach
- + stimulate architects to substantially contribute:
 - * at business level
 - * to strategic goals
 - * from technological strength

Program of 2-day Management SARCH

session	subject
day 1 morning	positioning the System Architecture Process Product Creation Process
	product families, generic developments
day 1 afternoon	role and task of the system architect profile of the system architect
	documentation, reviewing and other supportive processes
day 2 morning	requirements capturing, roadmapping
day 2 afternoon	HRM aspects; selection, appraisal, career path, etcetera wrap up, expectations, how to continue, evaluation