Gaudi Project; from Incremental Growth towards Publication

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www.gaudisite.nl

Abstract

The Gaudí project has been ongoing for 10 years. The philosophy of the project is described, and the status after 10 years of incremental development. Next challenge is to consolidate some of the work in the form of published book.

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status: preliminary draft
version: 0

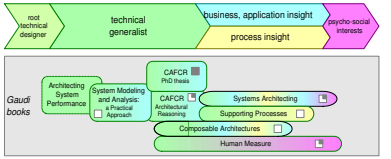


Figure Of Contents™

1. Who is Gerrit

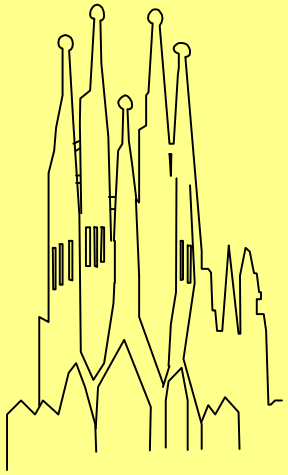
Gaudi Project

2. Goals

3. Process and Concepts

4. Results

5. Future

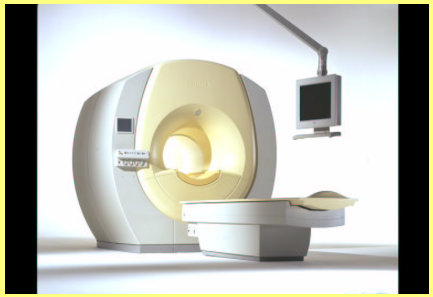


6. Published Book

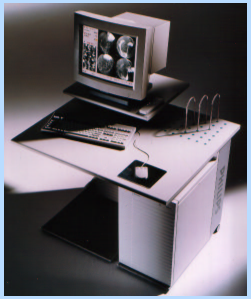
Background Gerrit

CT
OSS
NM
X-ray

MR



EasyVision



manager system engineering

Gaudí

Philips Medical | ASML | Philips NatLab | ESI

1980 1990 2000

industrial experience

time pressure
pragmatics
sales
cost constraints
products
lots of people

research

reflection
evidence
exposure
education

Buskerud

Goals

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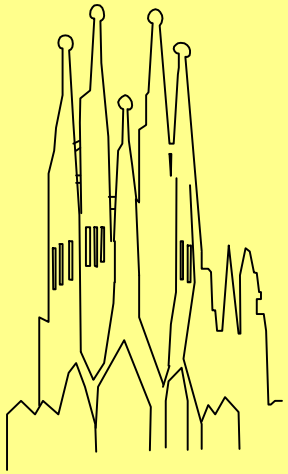
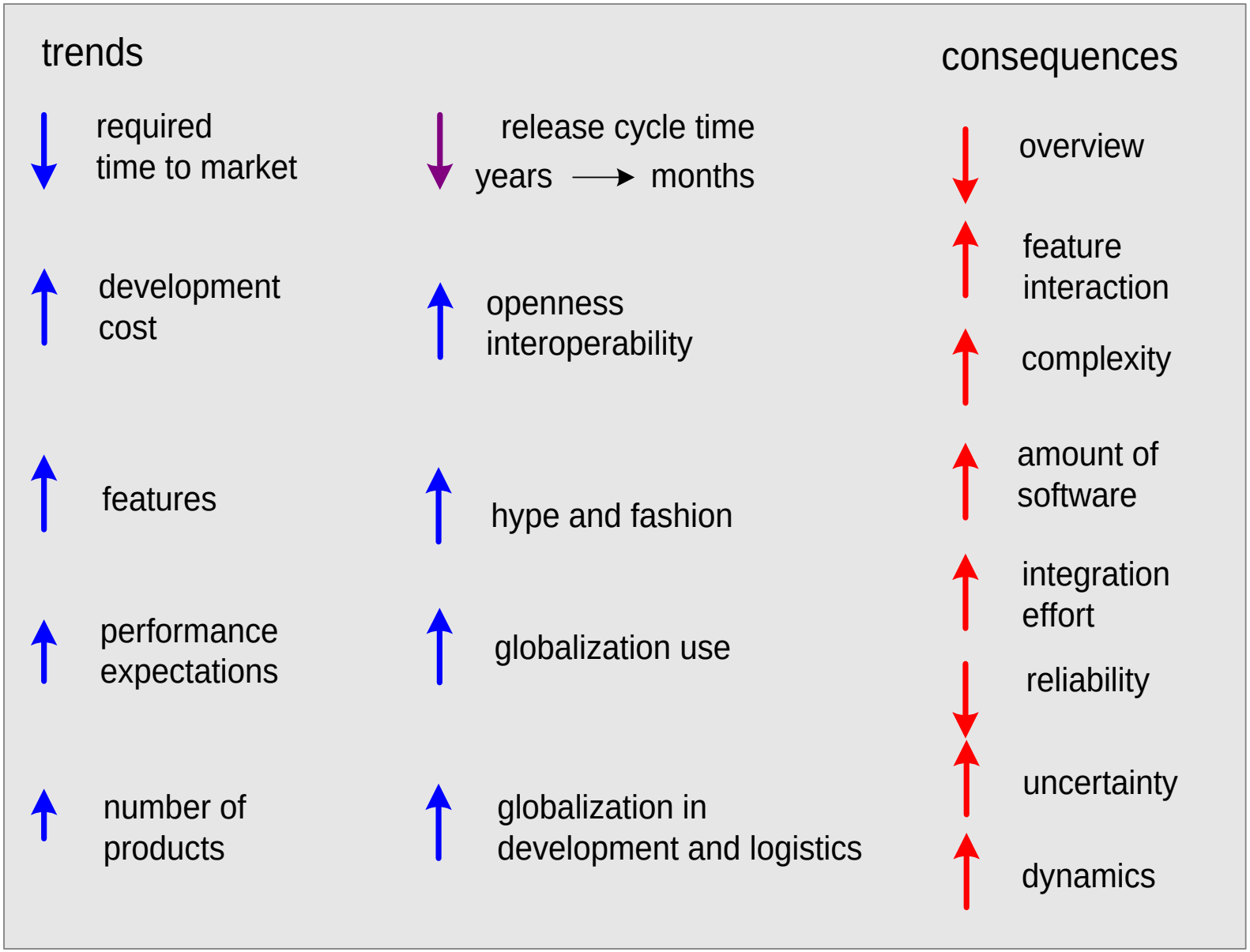


6. Published Book

Companies need more Systems People!



Goals of the Gaudí Project

- Consolidate existing Systems Architecting Methods

  evaluate, reflect, generalize

- Make the Systems Architecting art more accessible

  case descriptions

- Enable the education of (future) System Architects

  curriculum, course material

- Research new or improved Systems Architecting Methods

  industry as laboratory

Gaudisite.nl home page

Navigation

Books

Courses

Cases

Research& Education

search

Major Books and Courses

Most recent changes

Down load top 10

Process and Concepts

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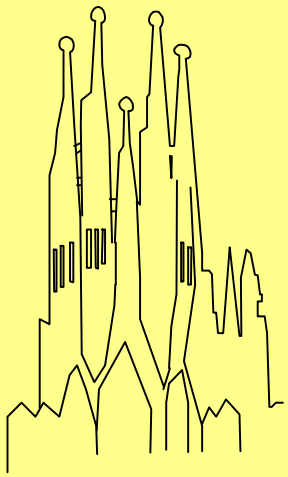
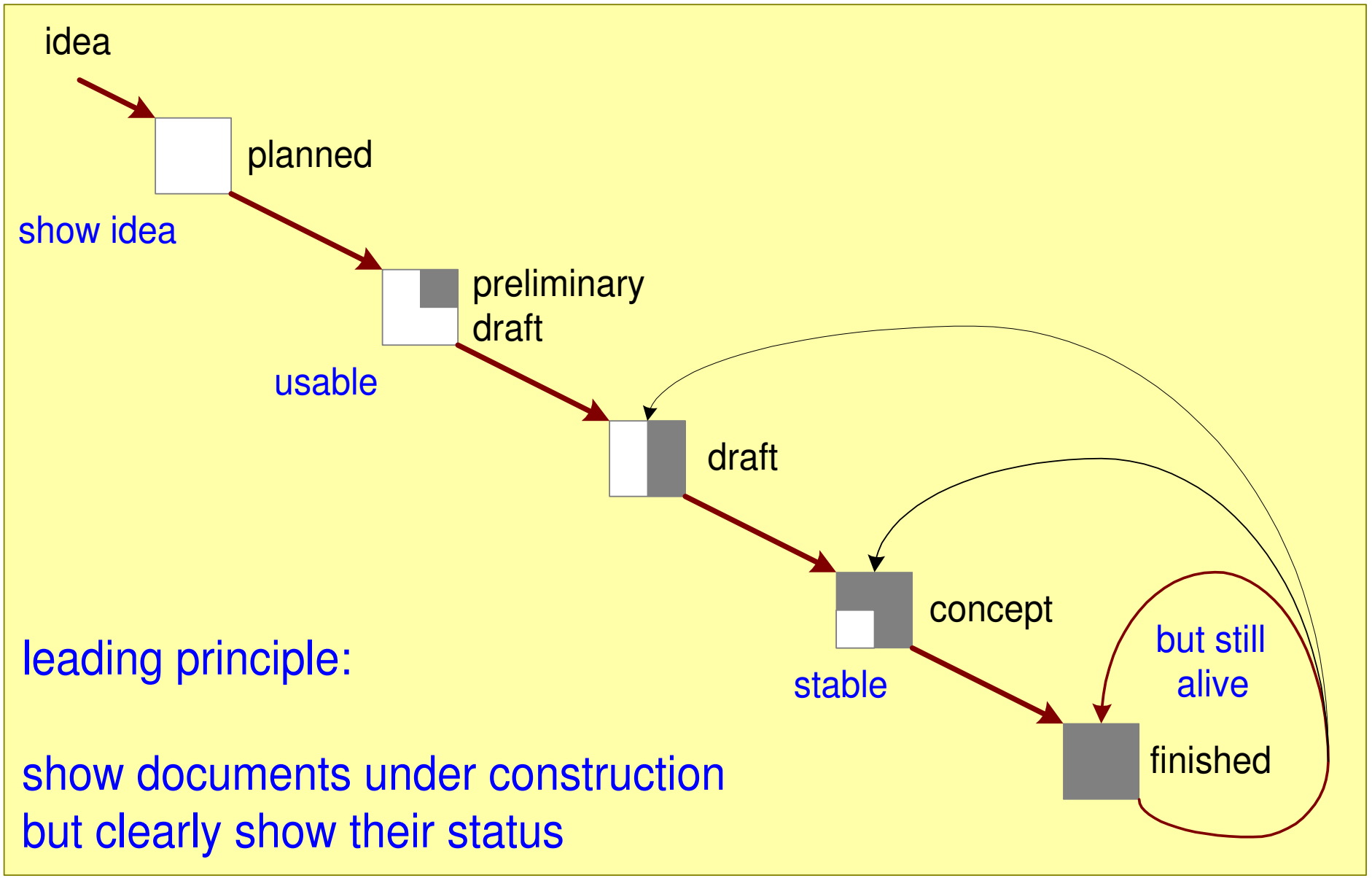
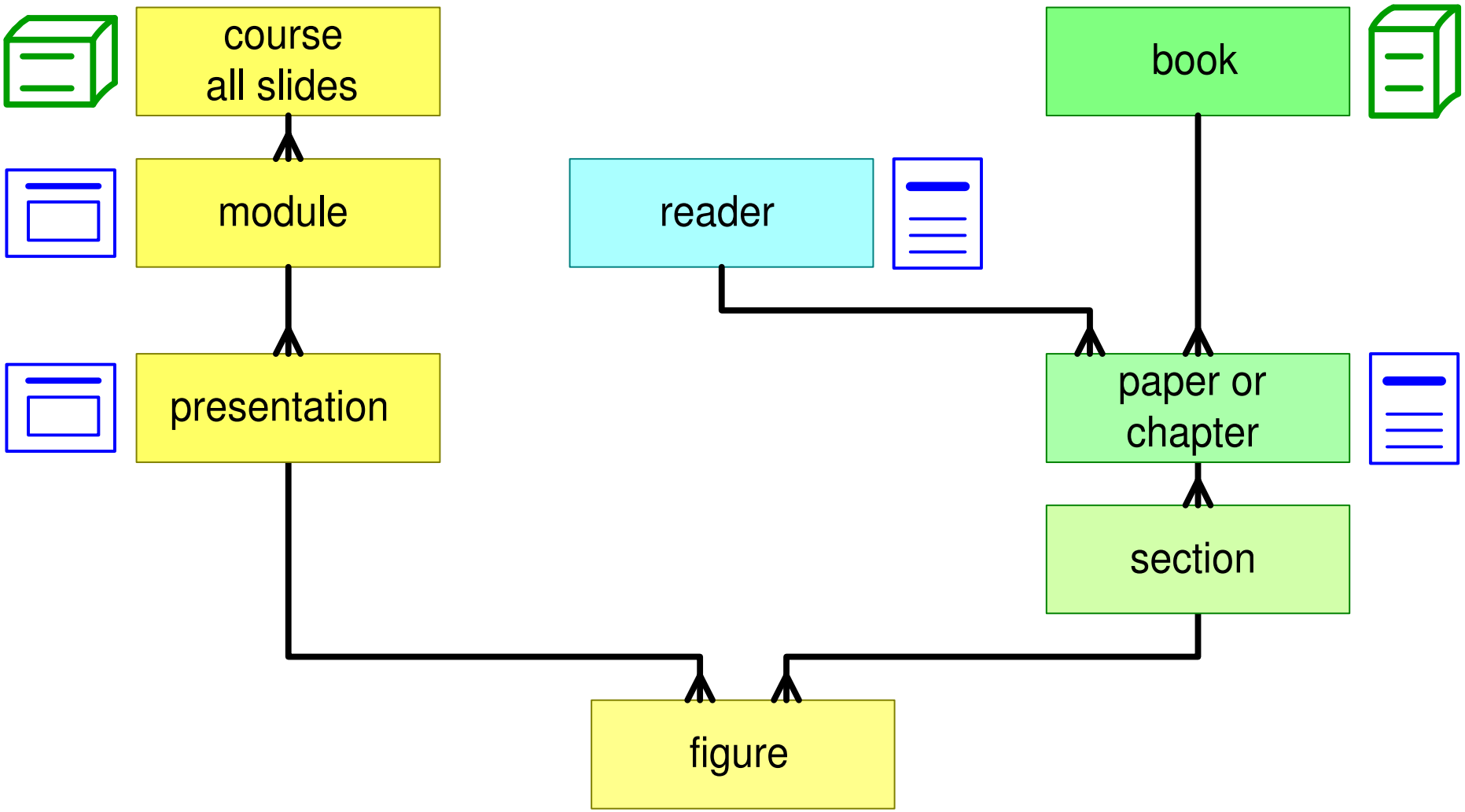


6. Published Book

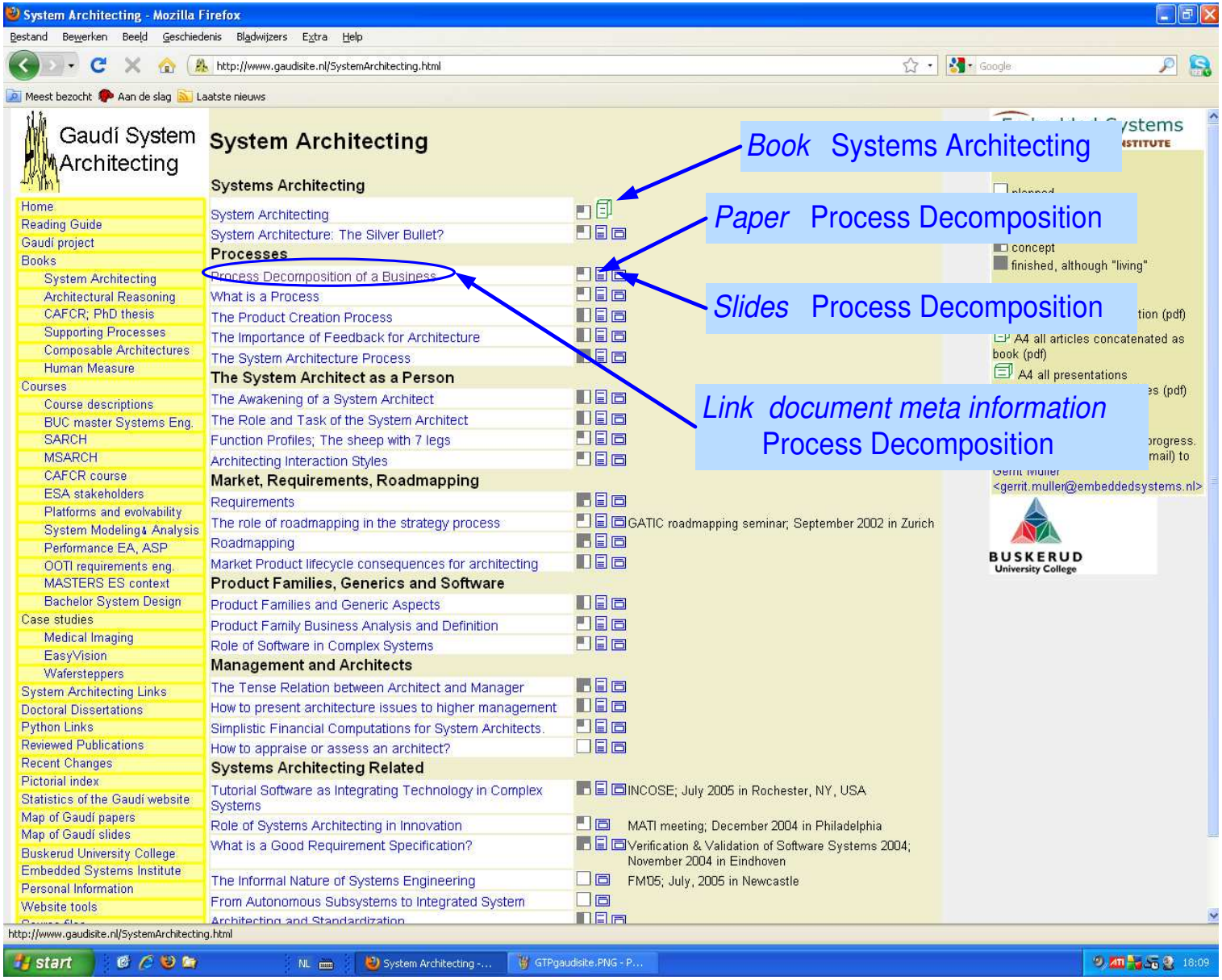
Show Early to Get Feedback



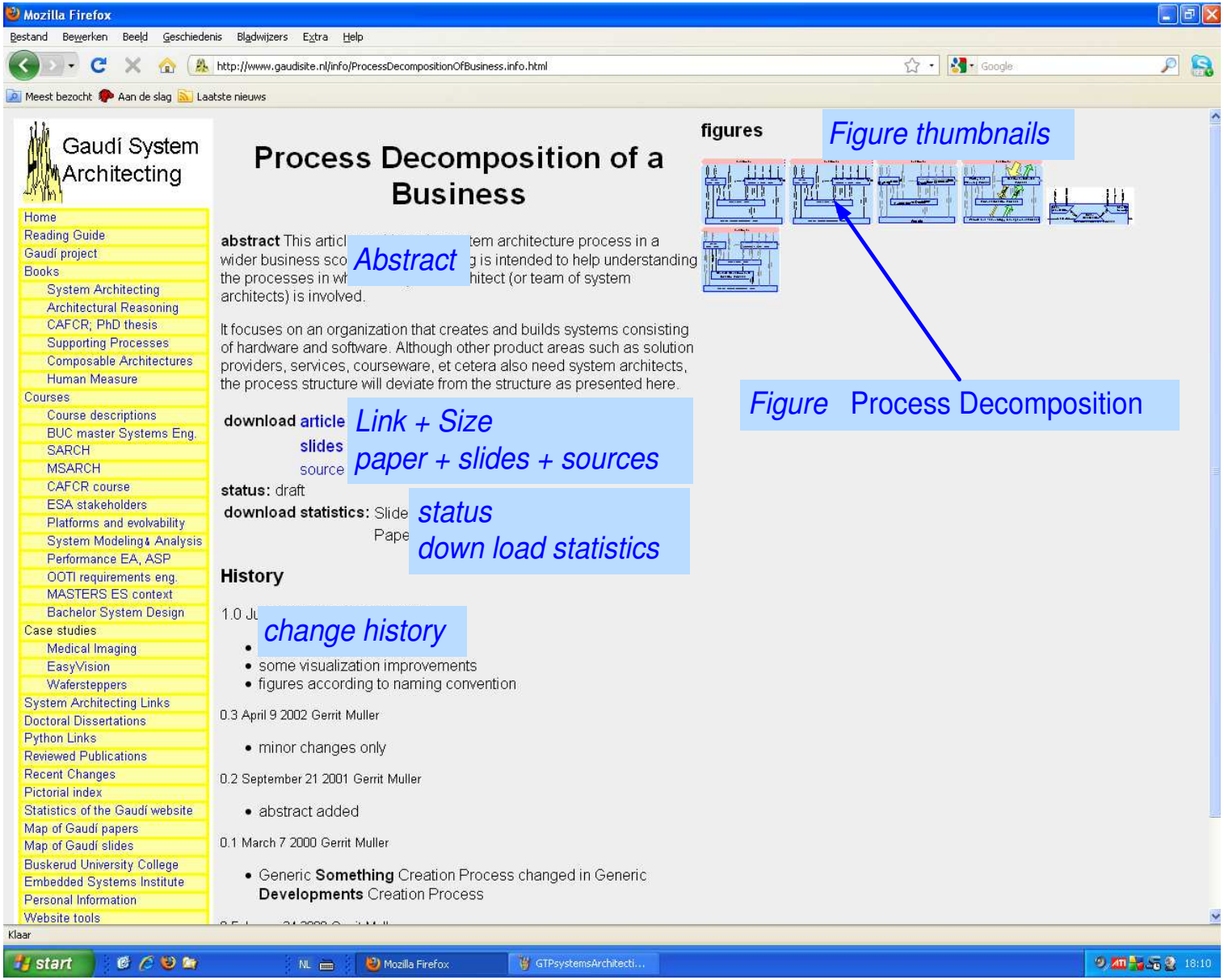
Modular approach



Example Book “Systems Architecting”



Example Document “Process Decomposition”



Example Figure “Process Decomposition”

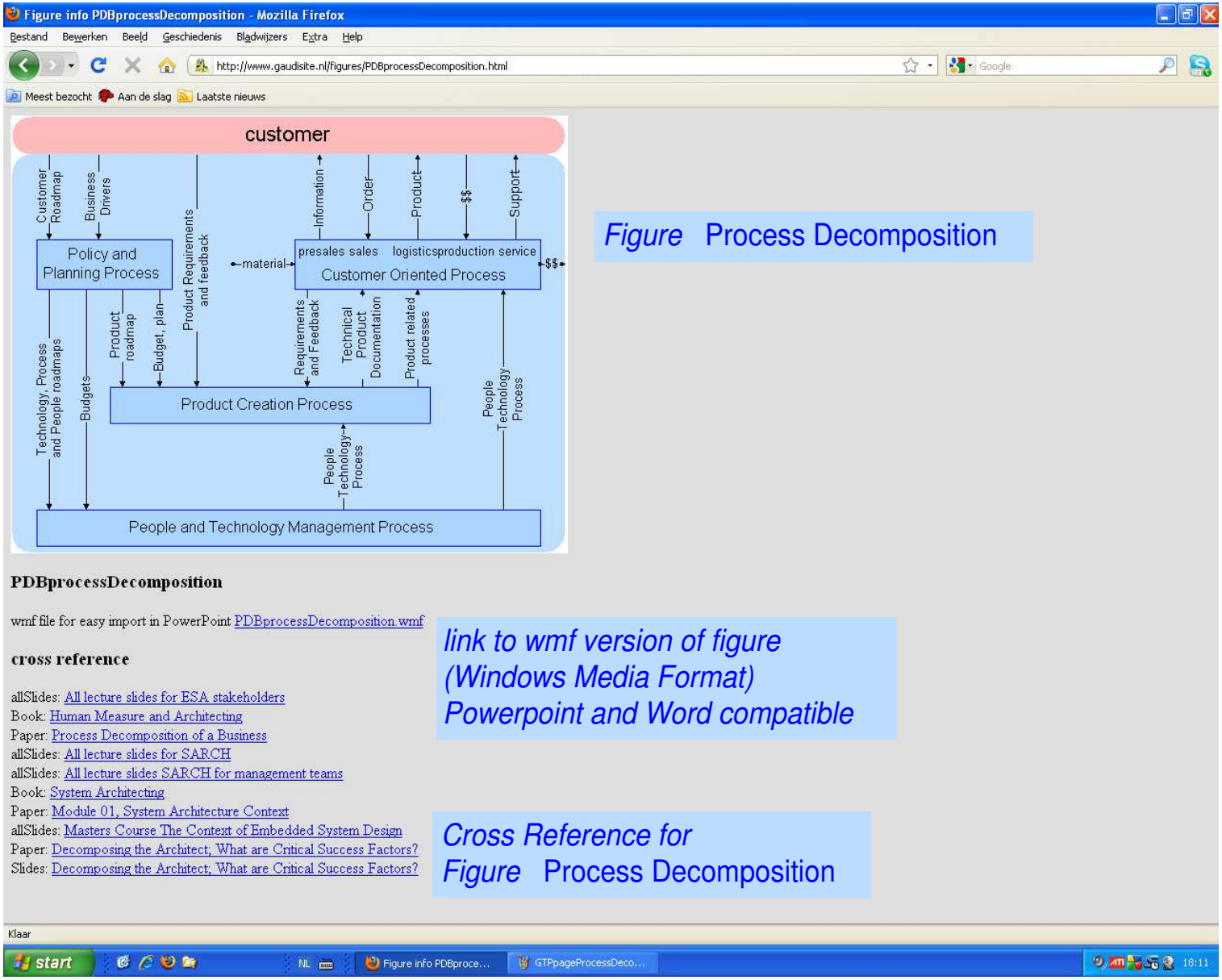
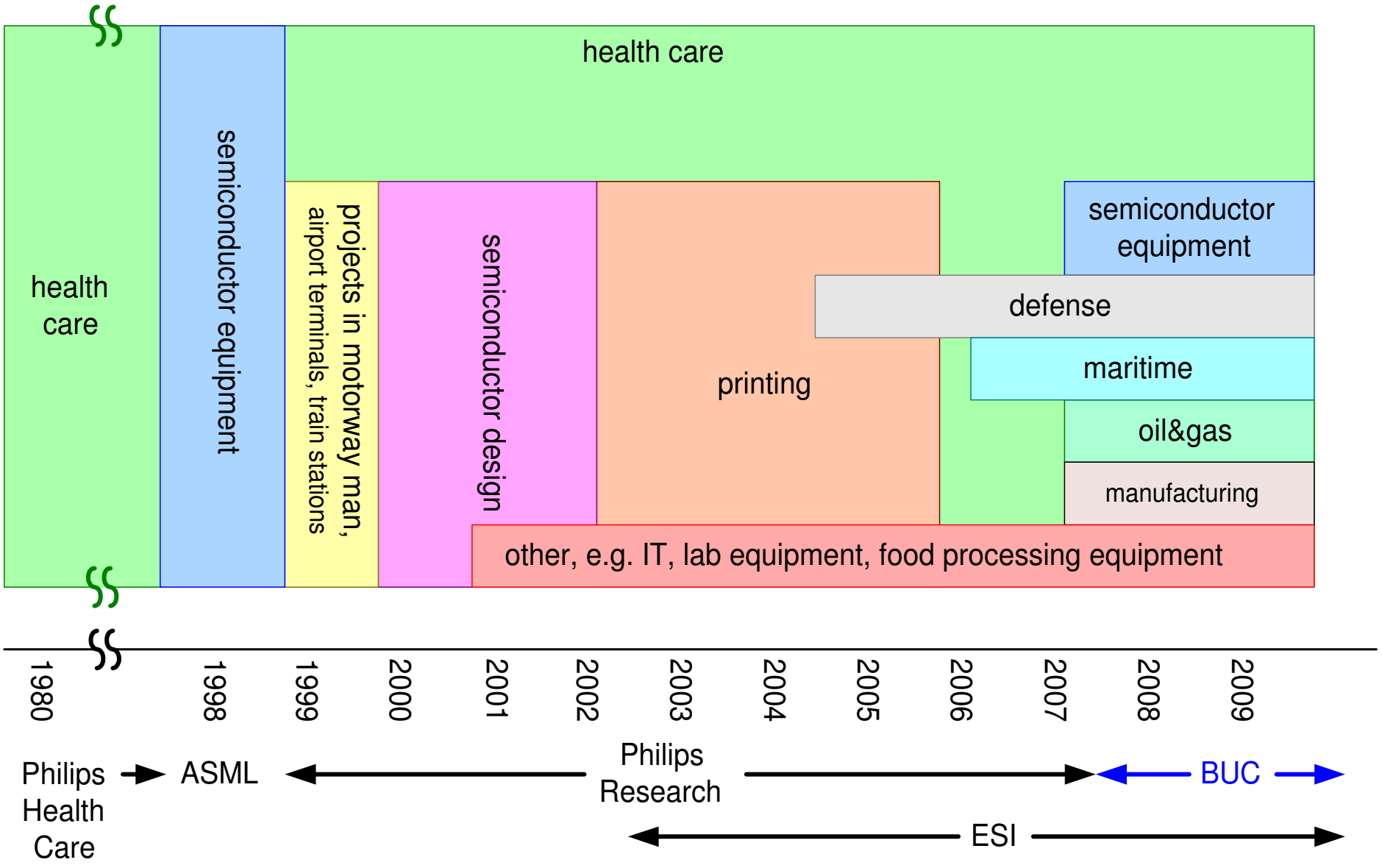


Figure Process Decomposition

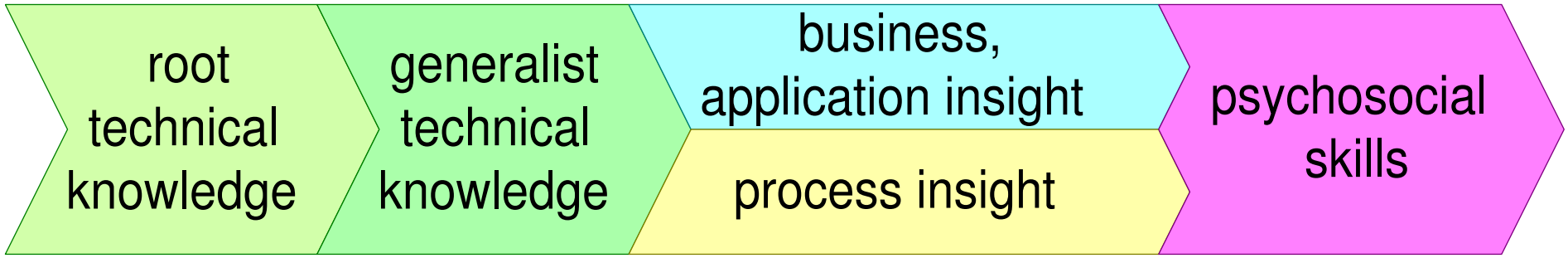
link to wmf version of figure (Windows Media Format) Powerpoint and Word compatible

Cross Reference for Figure Process Decomposition

Leading Domains



Growth of the System Architect



Results

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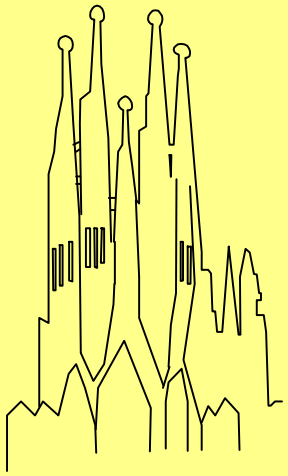
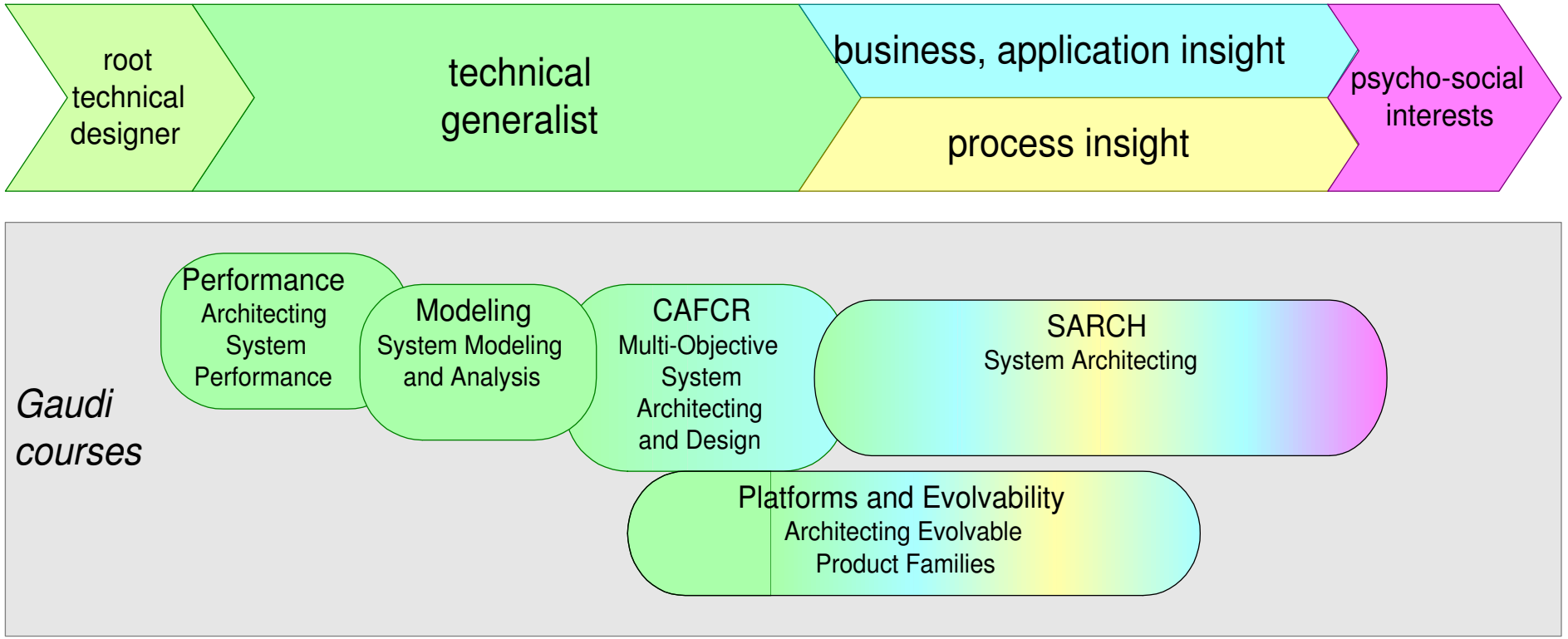
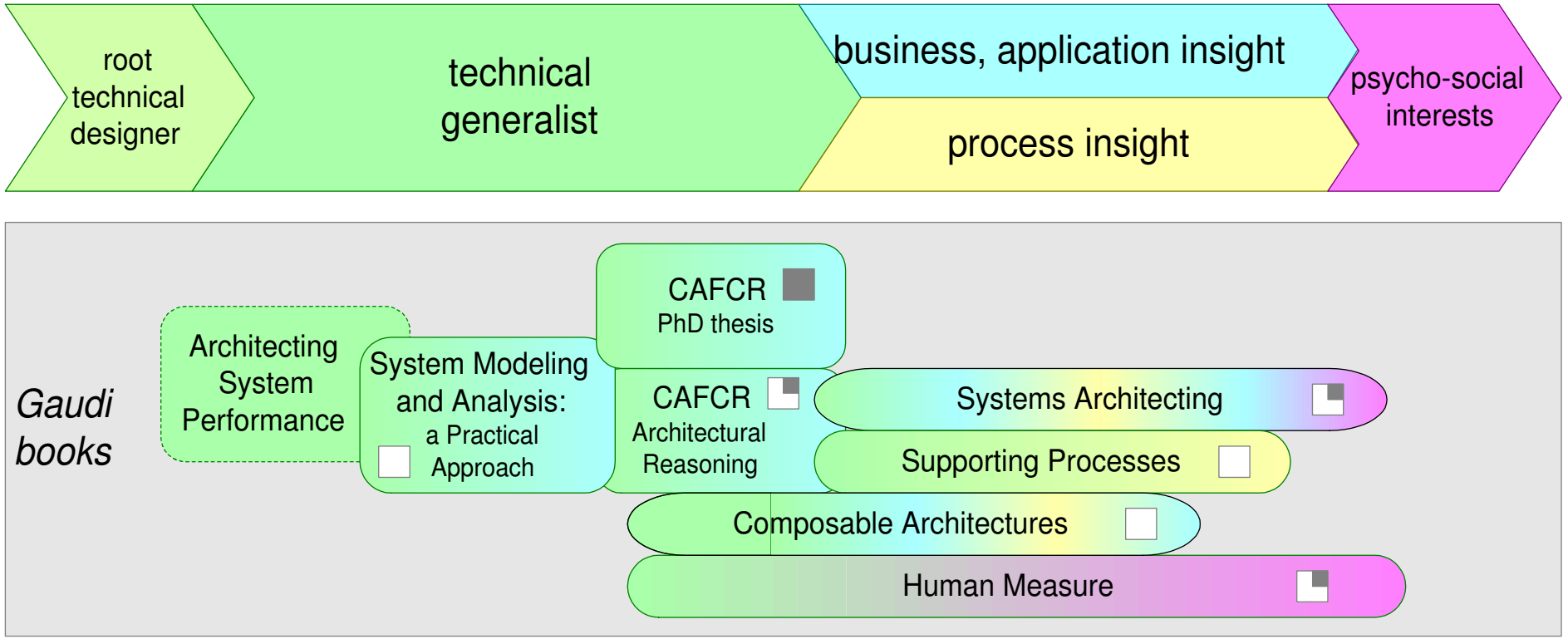


6. Published Book

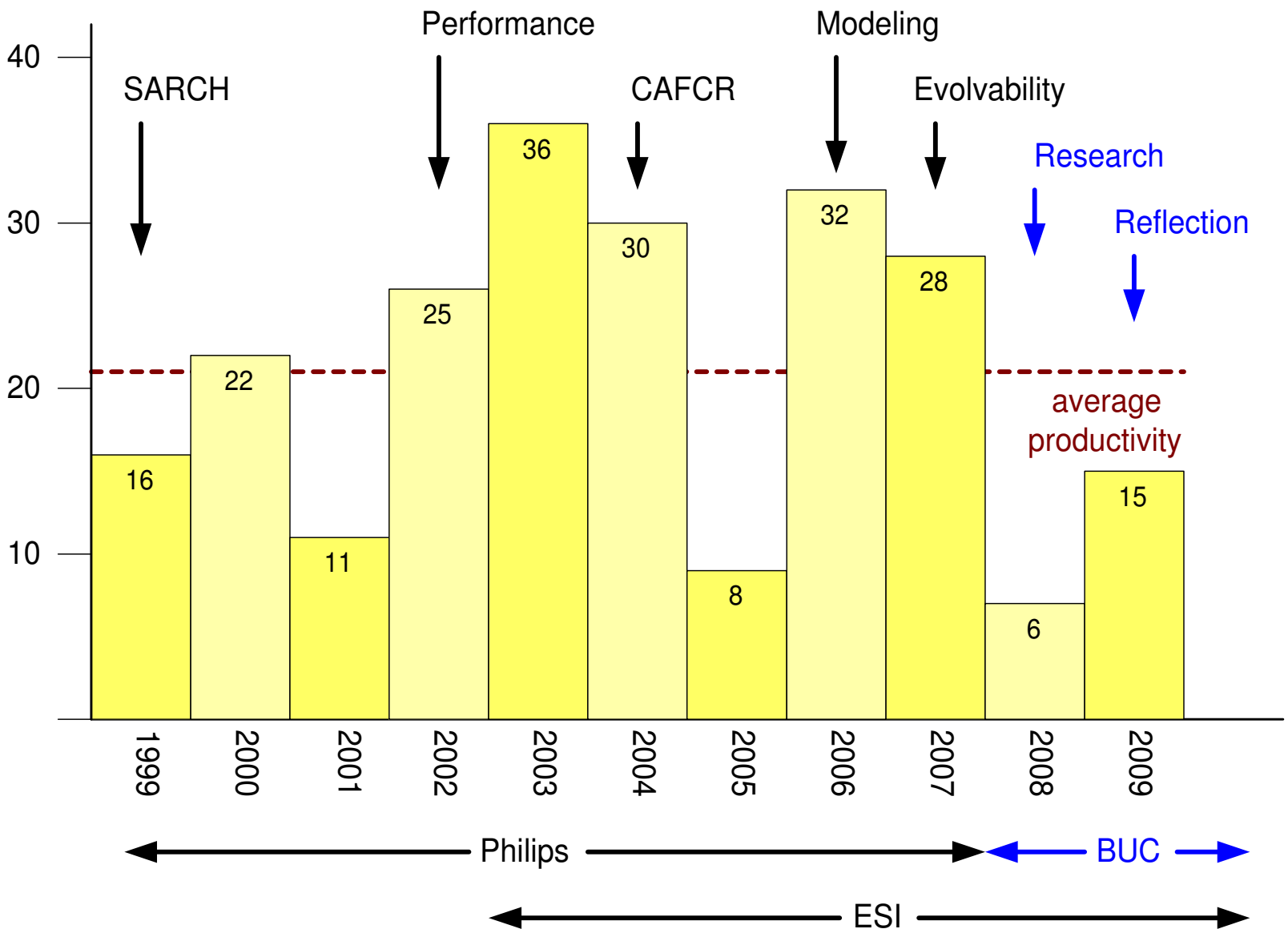
Positioning Courses



Positioning Books



Productivity: number of new entries



Different Perspectives

industrial perspective	*academic perspective*
industrial relevance of subject (valuable, useful)	scientific relevance of subject (new, original)
goal, solution oriented how to — practical (broad, integral)	knowledge oriented — deep why, what
single author (other contributors are reviewers, clear responsibility)	all contributors are authors (including reviewers)
pointers to related relevant information	pointers to related scientific work — self citations are not-done
clear description juicy description understandable lots of signal, very low noise level	clear argumentation every statement is supported by reference, verifiable facts — blocks broadly interested scientists in development correct language clear positioning, well linked in with existing scientific work

strong cultural filter in scientific magazines and conferences

productivity	*value*
low overhead (e.g. reviews)	practitioners appreciate info
few constraints (e.g. academic musts)	academics appreciate info
immediate feedback (especially through courses)	
80/20 principle (80% ofvalue in 20% of effort)	
no territorial problems (co-authors)	
free choice of tooling (Visio, Latex, Python)	
modular, incremental and evolutionary approach	

Future

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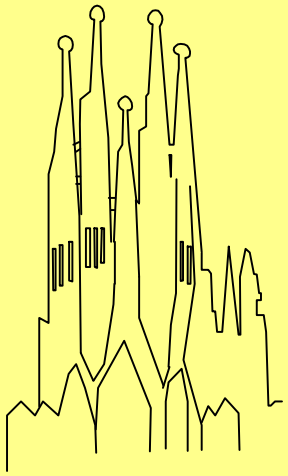

6. Published Book

Ideas for Near Future

	2010	2011	2012
Education	SE master program Reflective Practice yr 2 Master Project Modeling and Analysis Bachelor level	Reflective Practice yr 3 System Design Systens Engineering for other masters	SE PhD program
Research	Master Projects Methodology Research Agenda	staffing research model	PhD Projects Methodology broadening
SE Networks	local: SESG, BUC alumni, strategy&roadmapping, KSEE, ESI Sr architecten global: architectingforum.org, SoSE network, INCOSE academic forum, symposium, CSER, SEANET		
Tools, website	navigation and search	*ideas are welcome!*	
Book publication		Systems Architecting in Context	Multi-view Architecting and Modeling

Published Book

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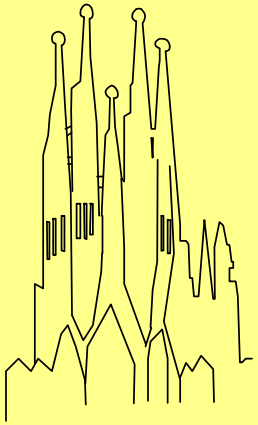


6. Published Book

Stakeholders

Publisher

acquisition

sales

support

Author

Readers

industrial system engineers

(junior..senior..fellow)

managers

(e.g. project leader, line manager)

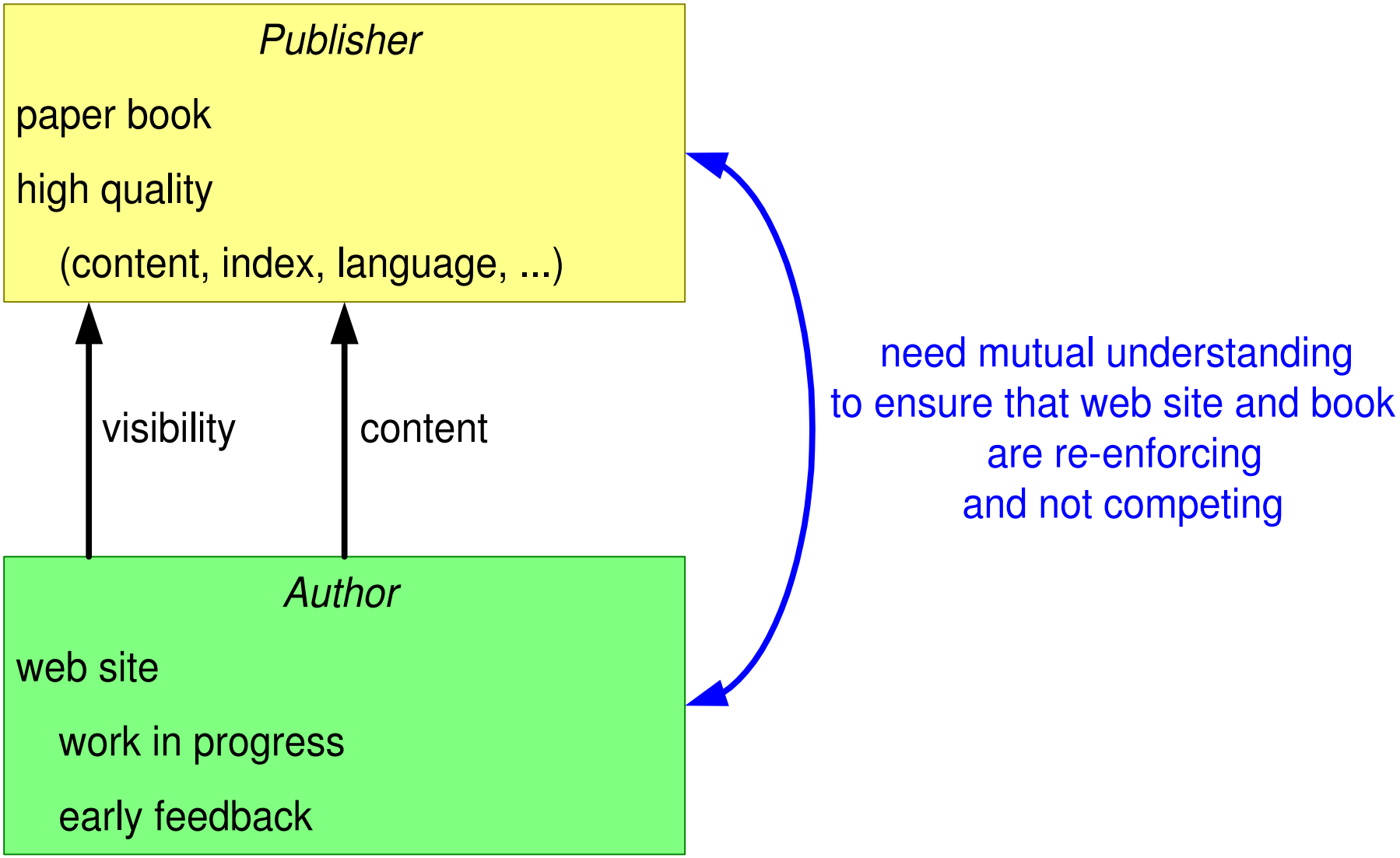
students

(bachelor, master, PhD)

academics

(e.g. professor, teacher, researcher)

Value Proposition



Content

1. How does systems architecting fit in the **organization** and its **processes**?
2. **What** are **deliverables**, **responsibilities** and **activities** of the system architect?
3. How to **elicit requirements**?
4. What **methods**, **tools** and **techniques** are available for the architect?
5. How to anticipate on **future needs**, **trends**, and **changes**?
6. How to **harvest synergy**?
7. How to **present** to less technical **management teams**?
8. What **human factors** impact systems architecting?
9. How to **apply** this material in the own **organization**, short term and long term.

Work to Do

to do

find publisher, agree on approach

integrate all chapters
- remove duplications
- make consistent
- determine order
- unify terminology

add foreword, glossary, index, ...

improve language quality

ensure greylevel quality images

current status

1 chapter

8 chapters

7 chapters

4 chapters

0 chapters

Conclusions

Open development yields high productivity.

Feedback mainly through teaching and presentations.

Practitioners appreciate material.

Academics appreciate material, but don't know how to cope with unconventional model.

The final 20% to finish is a lot of work.

Paper books will be around for a few more decades.

Your feedback is highly appreciated and always welcome!