

Clear Role and Process Definitions as a Means to Analyze and Understand Conflicts between Project Management and Requirements Engineering

-

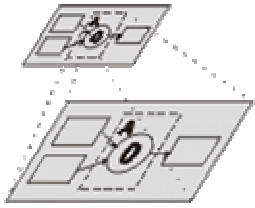
PM & RE as Areas of Expertise

Andrea Herrmann, University of Heidelberg

Ralf Fahney, Independent Consultant

Christian Rückert, Büren & Partner Software-Design

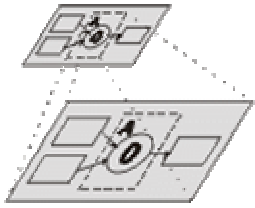
Rüdiger Weißbach, IS manager in a financial service enterprise



Who we are and what we do



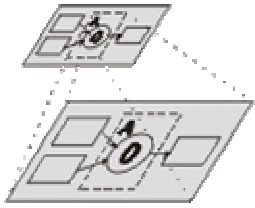
- German Informatics Society (GI)
- SIG 2.1.6 “Requirements Engineering (RE)”
- WG “RE & Project Management (RE&PM)”
- Twelve members interested in the topic being IT end users, IT researchers, IT consultants
- Started in January 2005
- Analyzing IT projects but do think our results are relevant for other kind of projects, too
- www.repm.de



How we started



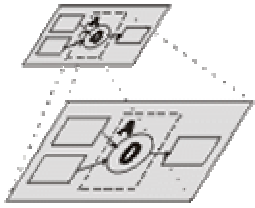
- What is commonly meant by “Project Management” and “Requirements Engineering”?
 - Twelve people, twelve definitions, twelve meanings
- Two measures:
 - Empirical approach by collecting case studies
 - Theoretical approach by performing literature research



Results and first guess



- Problems related to roles seemed to be crucial in every case study
 - Literature did not provide adequate help
 - Our approach:
 - Differentiating between a person's position and a person's role
 - Defining „Taking a role X“ to mean the same as „Working in the X area of expertise (AoE)“
 - Identifying five AoEs
 - SH - Stakeholding
 - LO - Lobbying
 - PM - Project Management
 - RE - Requirements Engineering
 - SE - Software Engineering (the AoE of constructing the solution)
- to be necessary to clarify the relationship between PM and RE

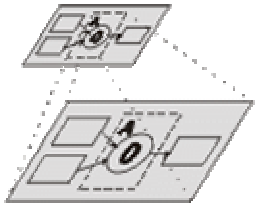


Five areas of expertise

Five different interests



- Stakeholding:
Being affected by the project results,
but not necessarily interested in the project to be conducted
- Lobbying:
Being interested in the project to be conducted
but not necessarily affected by the project results
- Project Management:
Controlling and steering the project
- Requirements Engineering:
Analyzing and managing project scope
- Software Engineering:
Constructing the solution
Estimating effort
Performing Quality Management

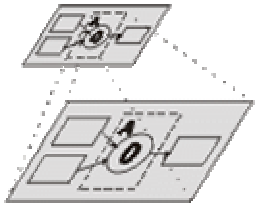


Five areas of expertise

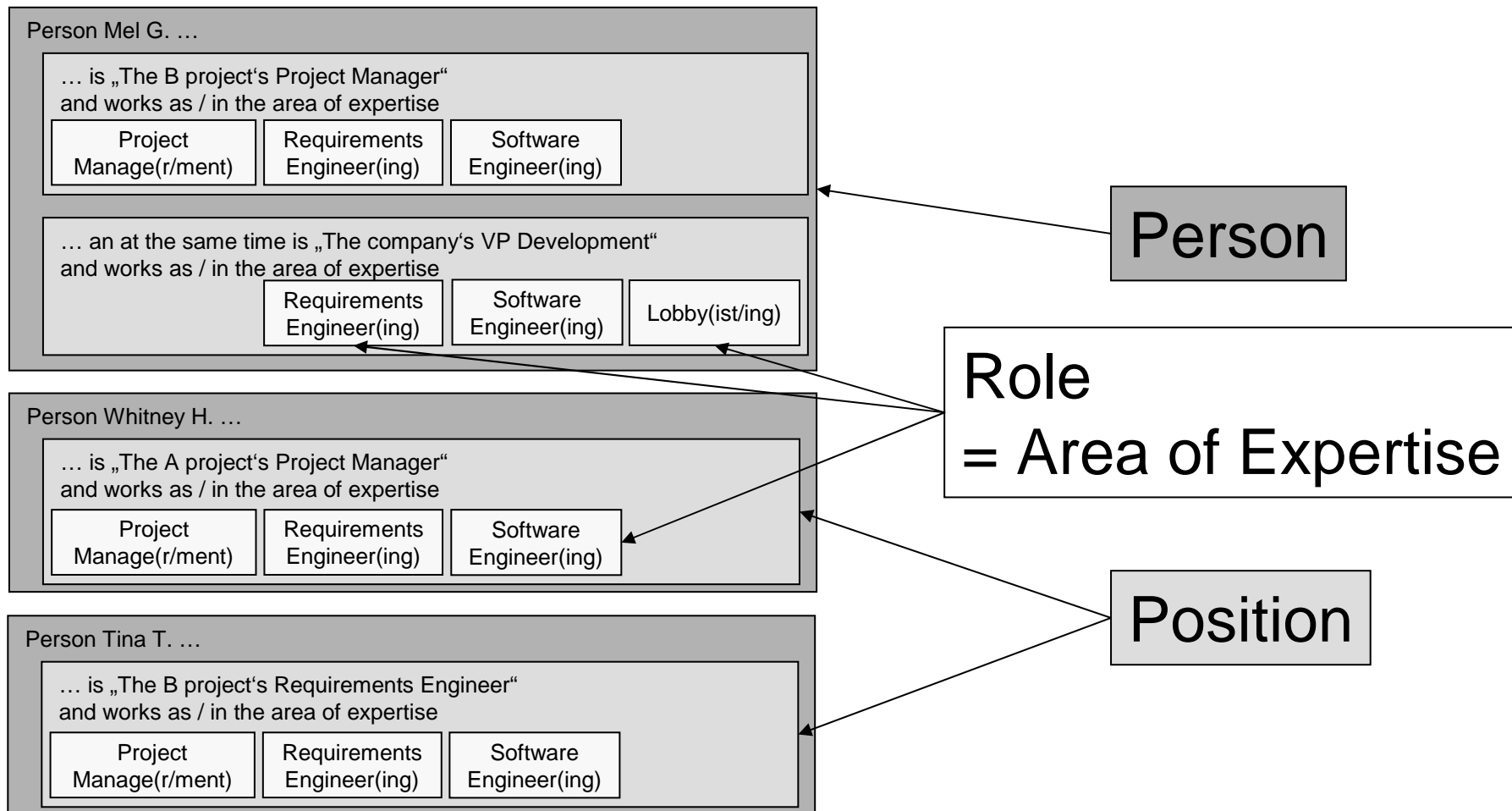
Five different interests

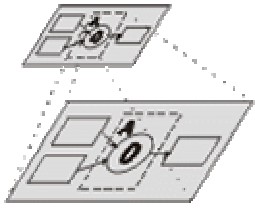


- We found these five AoEs by analyzing the process of „An IT consultancy firm sells a project“
- We find Lobbying and Stakeholding to be the project drivers
- Quality Management can be seen as separate AoE. But for the purpose of analyzing the relationship between PM and RE, it seems as if QM needs not to be regarded as separate AoE. Therefore we currently combine QM and SE to form the AoE of constructing the solution

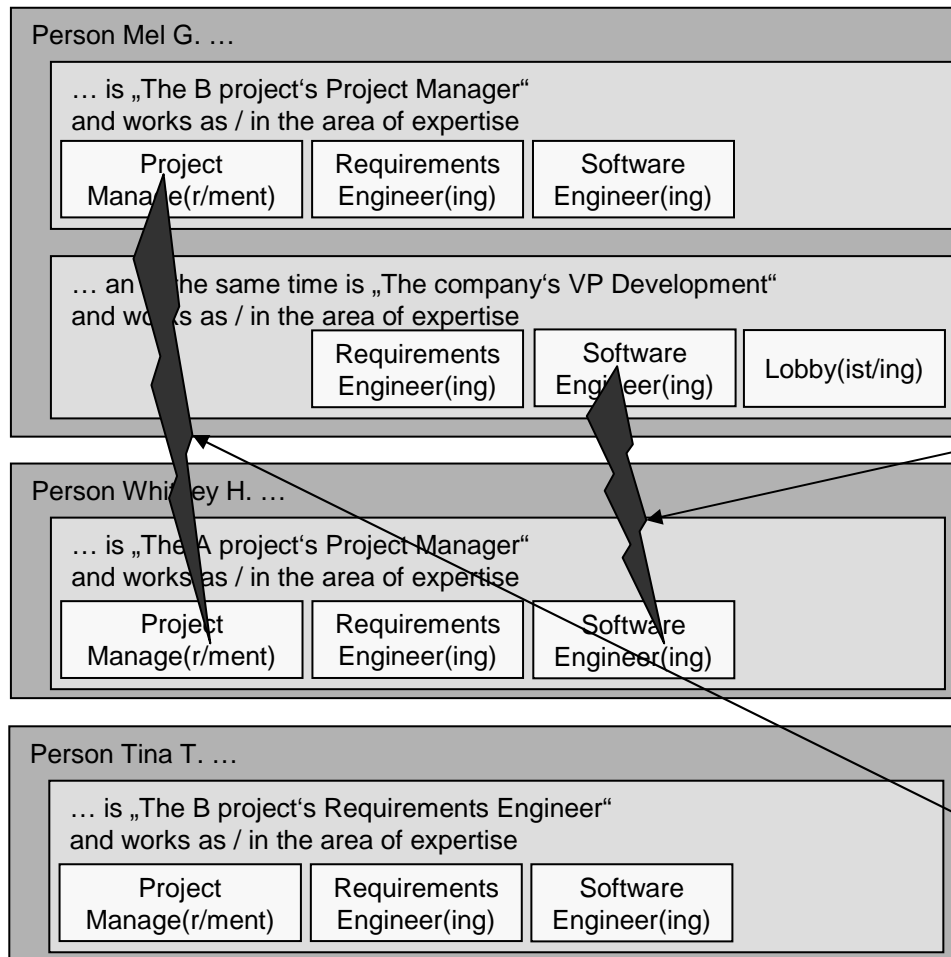


Example: relationship between persons, positions and roles



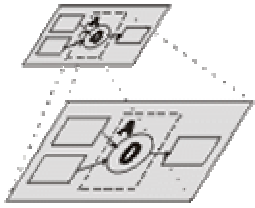


Example: Conflicts relating to roles



Different
estimates

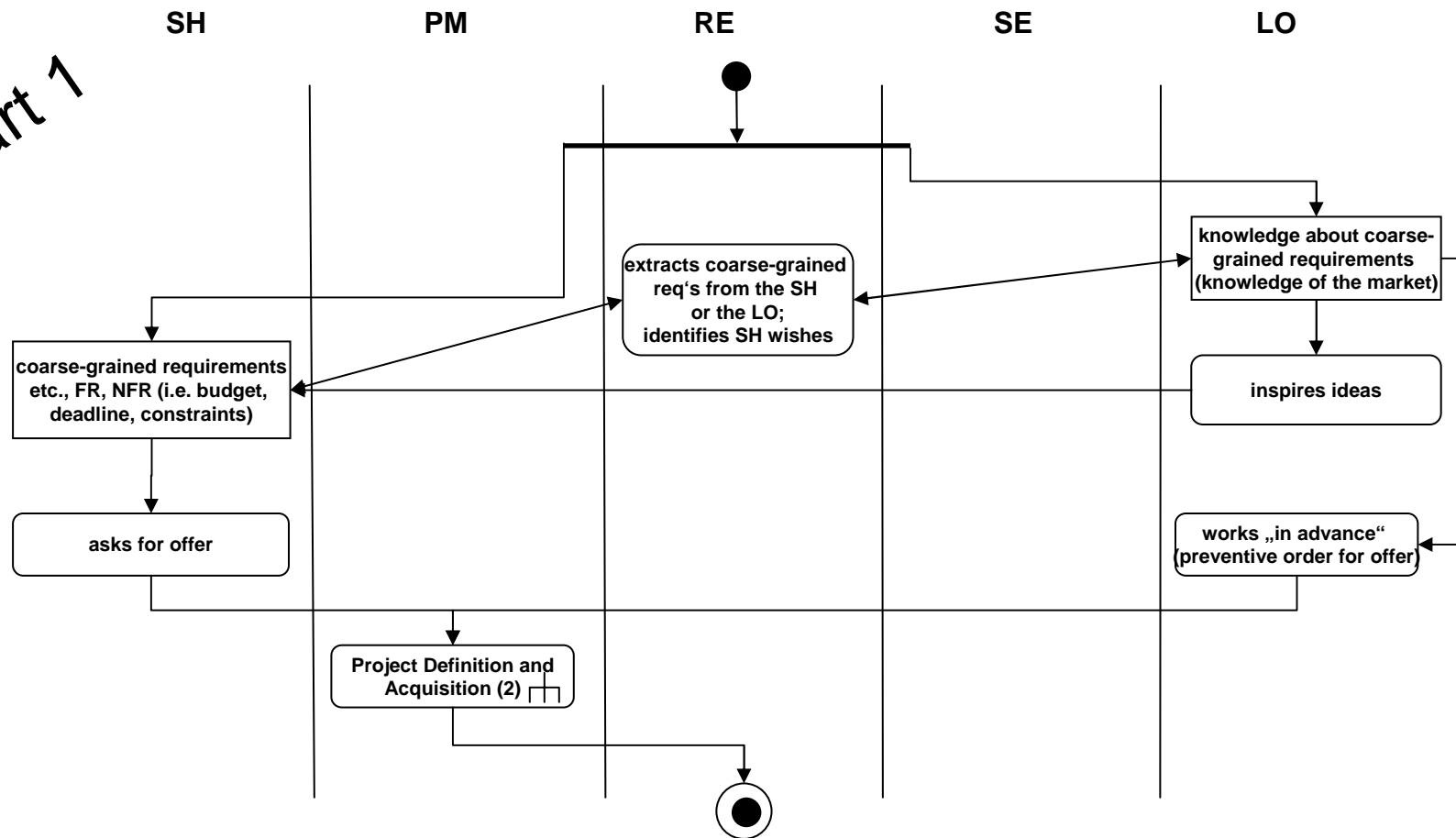
Competition for
ressources



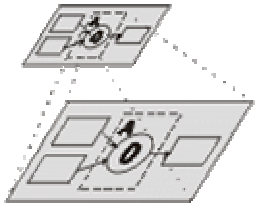
Example: The process of „An IT consultancy firm sells a project“



part 1



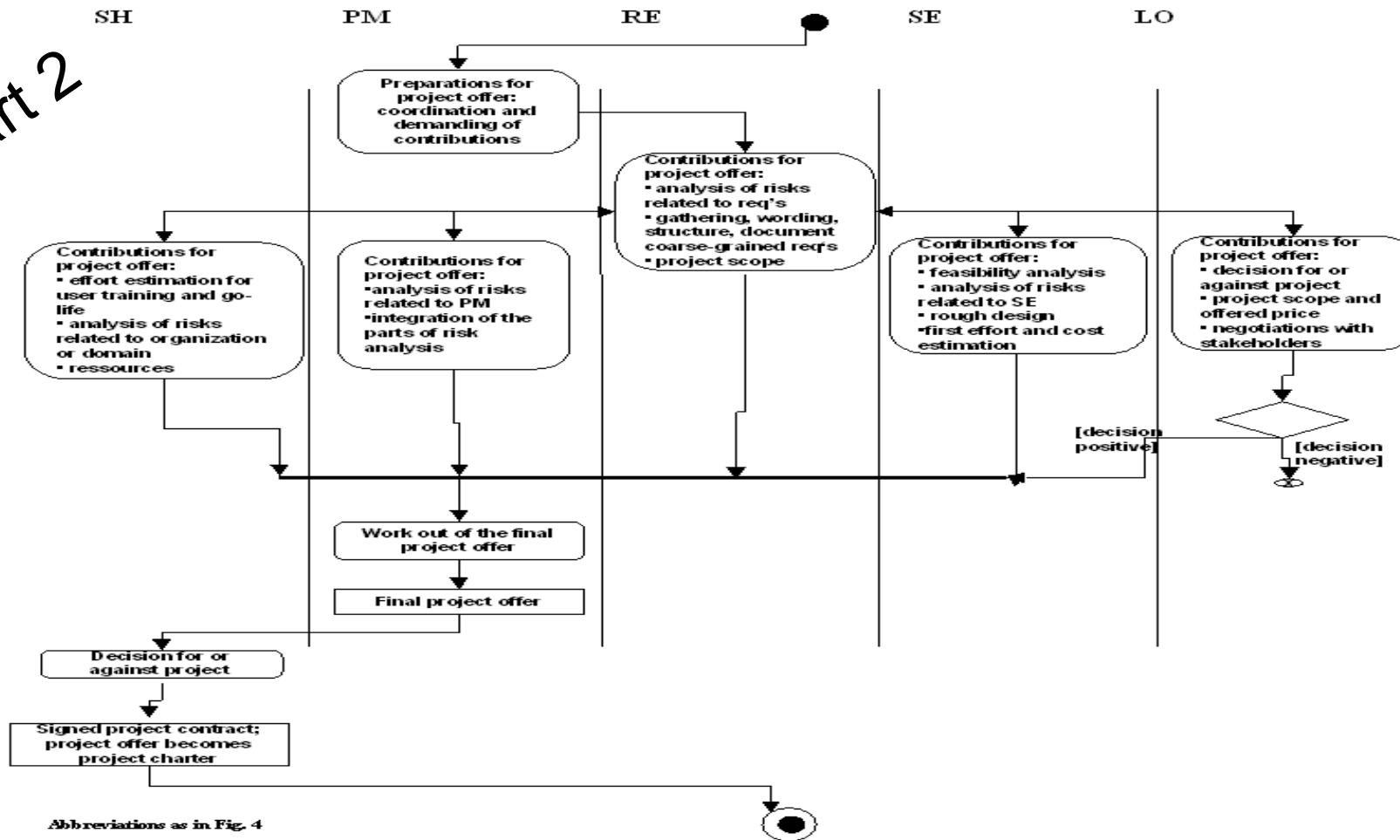
Abbreviations: SH = Stakeholding, PM = Project Management, RE = Requirements Engineering, SE = Software Engineering, LO = Lobbying

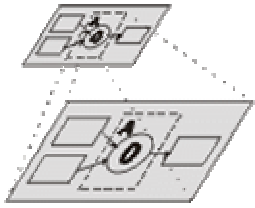


Example: The process of „An IT consultancy firm sells a project“



part 2



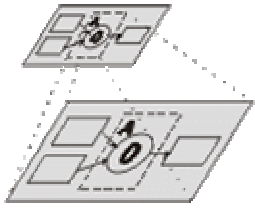


Five areas of expertise

Five different interests



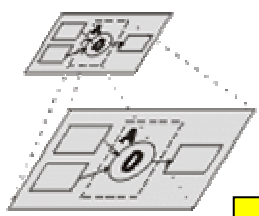
- Stakeholding:
Being affected by the project results,
but not necessarily interested in the project to be conducted
- Lobbying:
Being interested in the project to be conducted
but not necessarily affected by the project results
- Project Management:
Controlling and steering the project
- Requirements Engineering:
Analyzing and managing project scope
- Software Engineering:
Constructing the solution
Estimating effort
Performing Quality Management



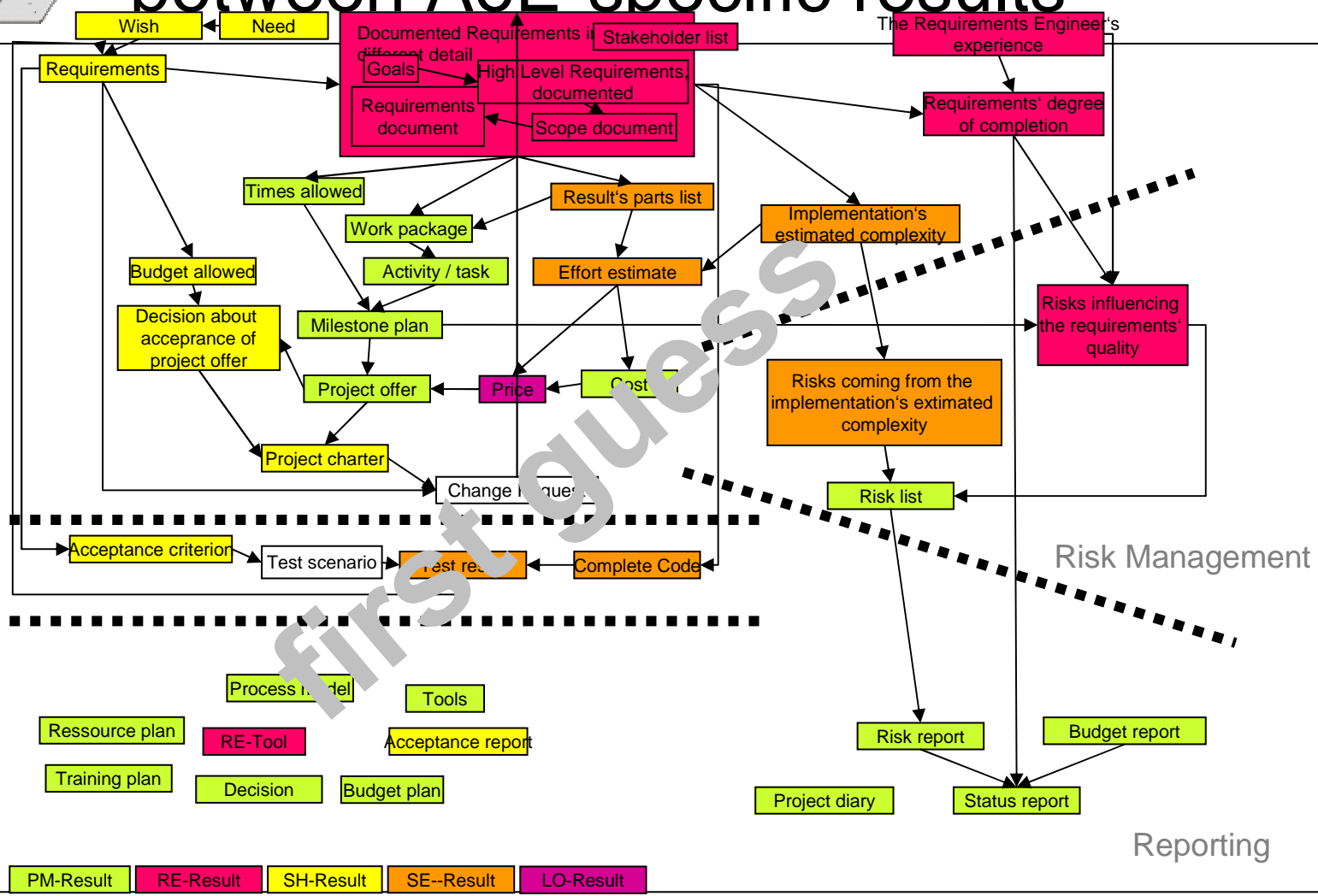
Further work: AoE instead of role

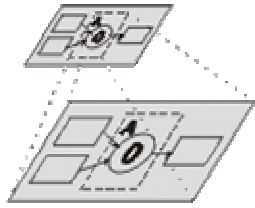


- Discussing about „roles“ is crucial
 - Twelve people, twelve different understandings of what „role“ means
 - Confusion in differentiation between „role“ and „position“
 - multiple usage of „role“ in literature
- Our definition was „Taking a role X“ to mean the same as „Working in the X are of expertise“
- From now on we talk about „areas of expertise“



Further work: dependencies between AoE-specific results

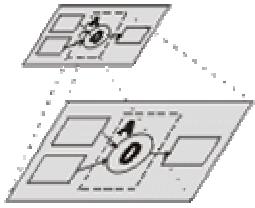




Further work: contribution of AoEs to job positions



Position / Role / Job Title	Description	Areas of Expertise				
		SH	PM	RE	SE	LO
Product Manager	The product's attorney	50%		30%		20%
Business Project Manager			70%	20%	10%	
IT Project Manager			50%	25%	25%	
Sales	is satisfied when provisioned		10%	20%	10%	60%
Key Account Manager	The customer's internal attorney		20%	35%	10%	35%
An IT project's Requirements Engineer			10%	80%	10%	
Requirements Engineer in line function				70%	10%	20%
Project Assistant			90%	10%		
A subproject's Project Manager			80%	10%	10%	
Vice President Development		10%	10%	30%	40%	10%
Managing Director		40%	10%	10%		40%
Enduser		70%		10%	10%	10%
Quality Manager			50%	50%		
User Guide's author				50%	50%	
Tester			20%	50%	30%	
Workers council's member		80%		20%		



Conclusion



- To clarify the relationship between PM and RE, five areas of expertise need to be taken into account
 - SH - Stakeholding
 - LO - Lobbying
 - PM - Project Management
 - RE - Requirements Engineering
 - SE - Software Engineering (the AoE of constructing the solution, including Quality Management)
- Discussion about „areas of expertise“ instead of „roles“
 - Using the word „role“ leads to multifold misunderstandings
 - „Having certain skills“ means „to be competent in certain AoEs“