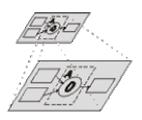




# Clear Role and Process Definitions as a Means to Analyze and Understand Conflicts between Project Management and Requirements Engineering

### PM & RE as Areas of Expertise

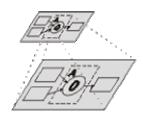
Andrea Herrmann, University of Heidelberg Ralf Fahney, Independent Consultant Christian Rückert, Büren & Partner Software-Design Rüdiger Weißbach, IS manager in a financial service enterprise



#### Who we are and what we do



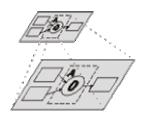
- German Informatics Society (GI)
- SIG 2.1.6 "Requirements Engineering (RE)"
- WG "RE & Project Management (RE&PM)"
- Twelve members interested in the topic being IT end users, IT researchers, IT consultants
- Started in January 2005
- Analyzing IT projects but do think our results are relevant for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



#### How we started



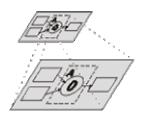
- What is commonly meant by "Project Management" and "Requirements Engineering"?
  - Twelve people, twelve definitions, twelve meanings
- Two measures:
  - Empirical approach by collecting case studies
  - Theoretical approach by performing literature research



### 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:

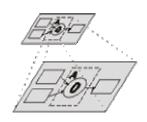
Analyzing and managing project scope

Software Engineering:

Constructing the solution

**Estimating effort** 

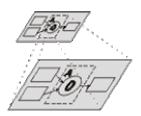
**Performing Quality Management** 



# Five areas of expertise Five different interests

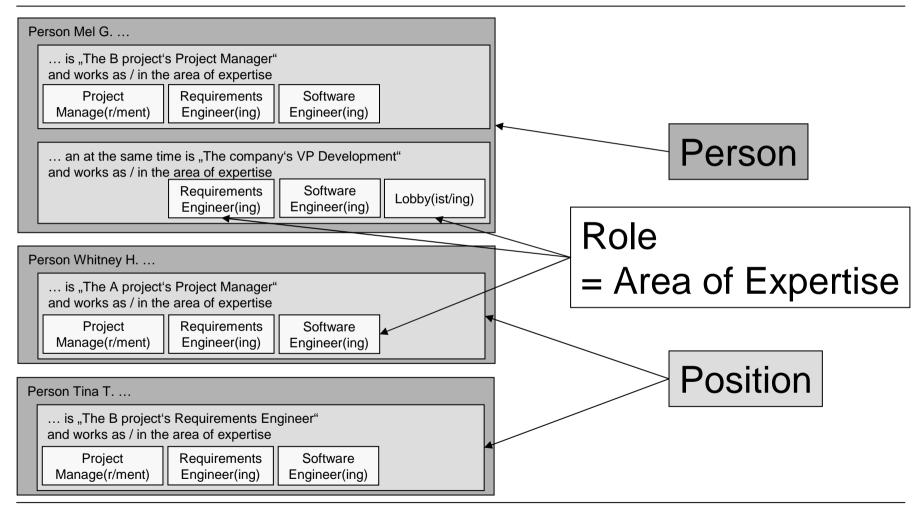


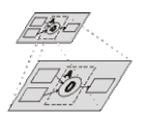
- We found these five AoEs by analyzing the process of "An IT consultancy firm sells a project"
- We find Lobbying and Stakeholding to be the project drivers
- Quality Management can be seen as separate AoE. But for the purpose of analyzing the relationship between PM and RE, it seems as if QM needs 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

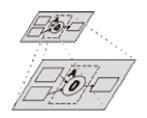






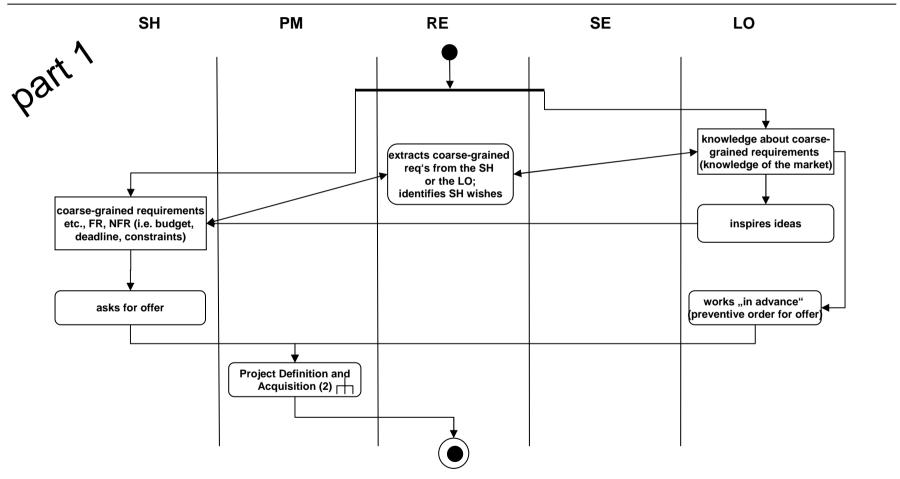
### GI-FG 2.1.6 (RE) Requirements Engineering



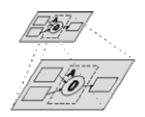


### Example: The process of "An IT consultancy firm sells a project"



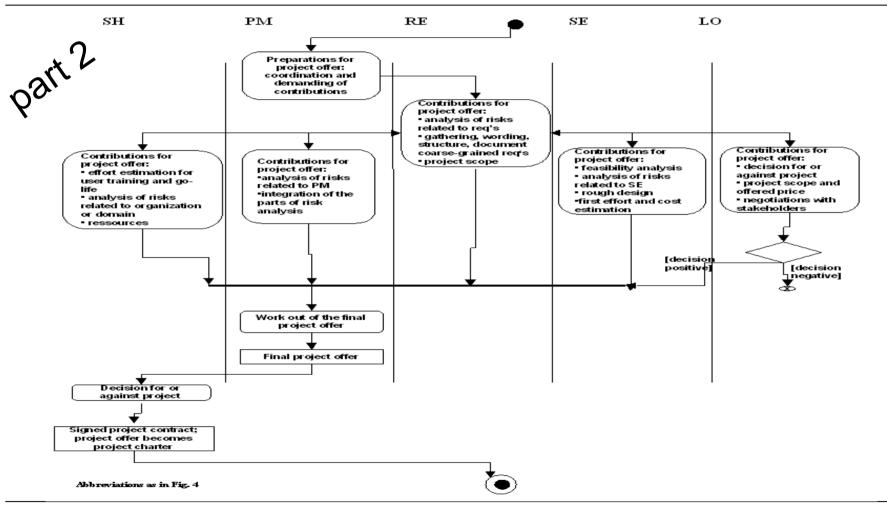


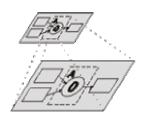
Abbreviations: SH = Stakeholding, PM = Project Management, RE = Requirements Engineeing, SE = Software Engineeing, LO = Lobbying



### Example: The process of "An IT consultancy firm sells a project"



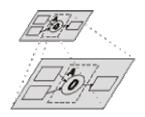




# Five areas of expertise Five different interests



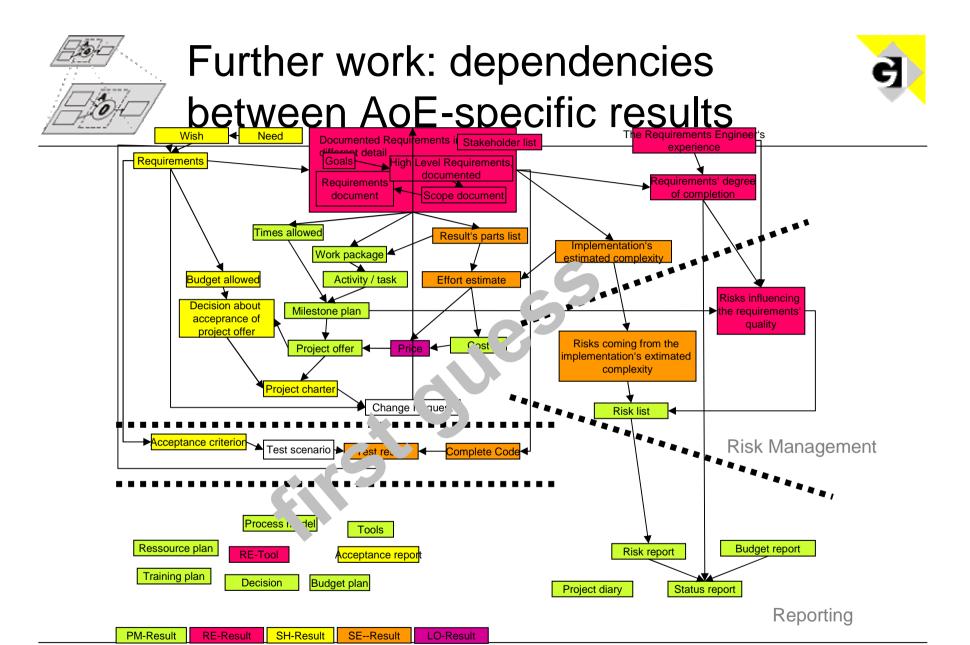
- Stakeholding:
  - Being affected by the project results, but not necessarily interested in the project to be conducted
- Lobbying:
  - Being interested in the project to be conducted but not necessarily affected by the project results
- Project Management:
  - Controlling and steering the project
-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

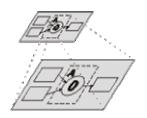


### Further work: AoE instead of role



- 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"

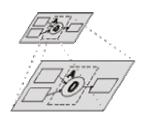




# Further work: contribution of AoEs to job positions



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	7			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	469			50%	50%	
Tester	4.4		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"