

Requirements Engineering Magic

Practical Application of Systems Engineering Alchemy

Tim Wiseley, Sandia National Laboratories

Kent de Jong, University of Maryland and
Sandia National Laboratories (retired)



A. JAMES CLARK
SCHOOL OF ENGINEERING

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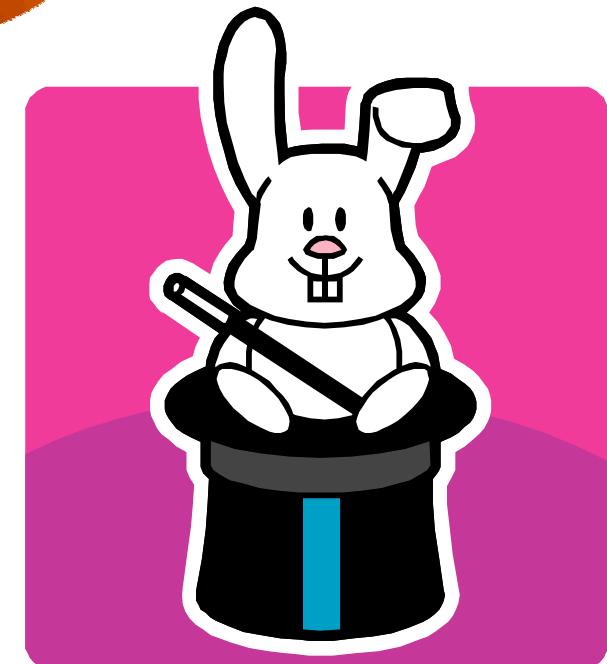
Background

- What is requirements engineering?
- Our project effort coincident with ISO standard
- Most engineers avoid developing requirements



How do we develop well written, high quality requirements?

magic.



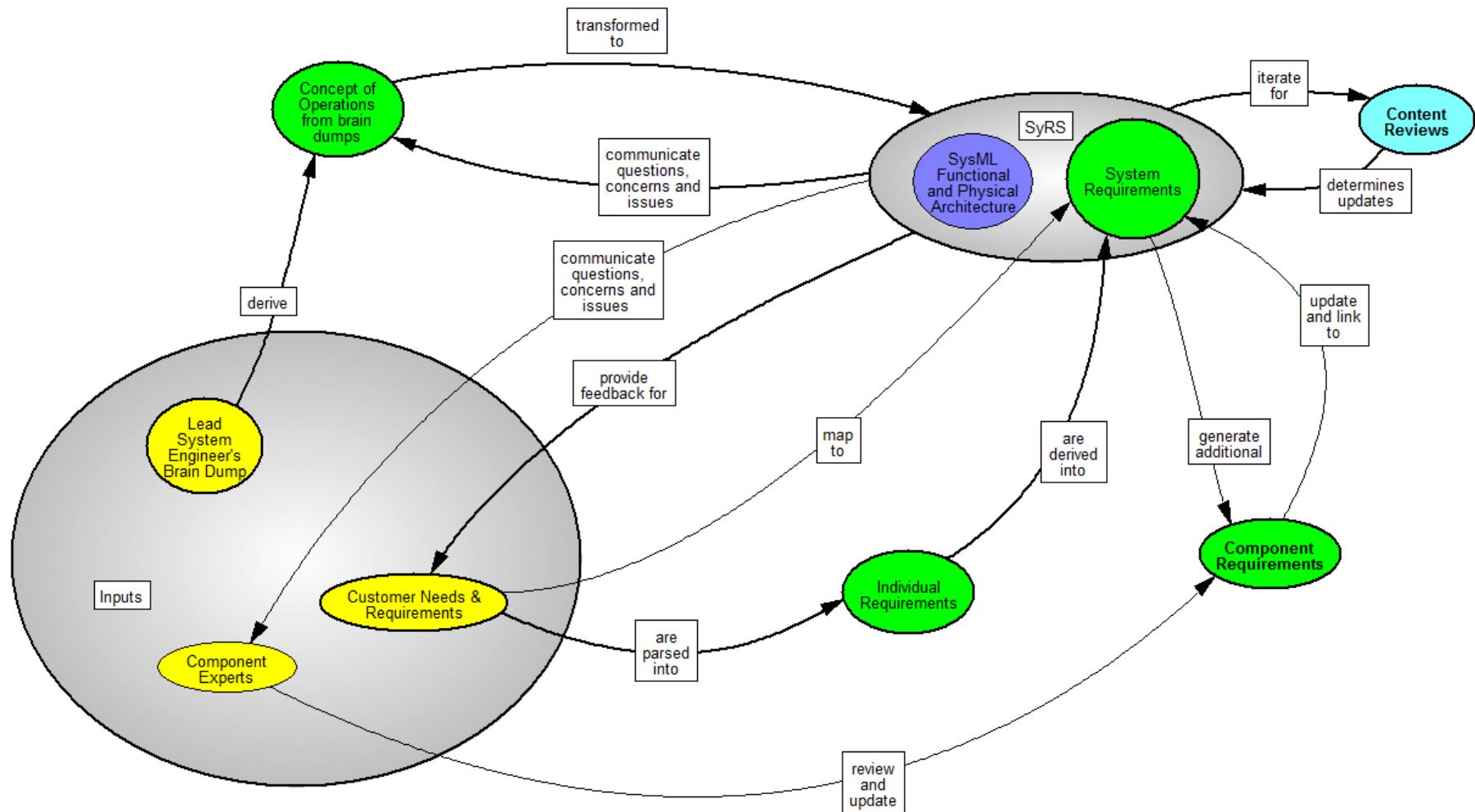


How to Make Magic

- Tailor, create RE process working for project
- Model to develop better requirements
- Teaming for requirements engineers

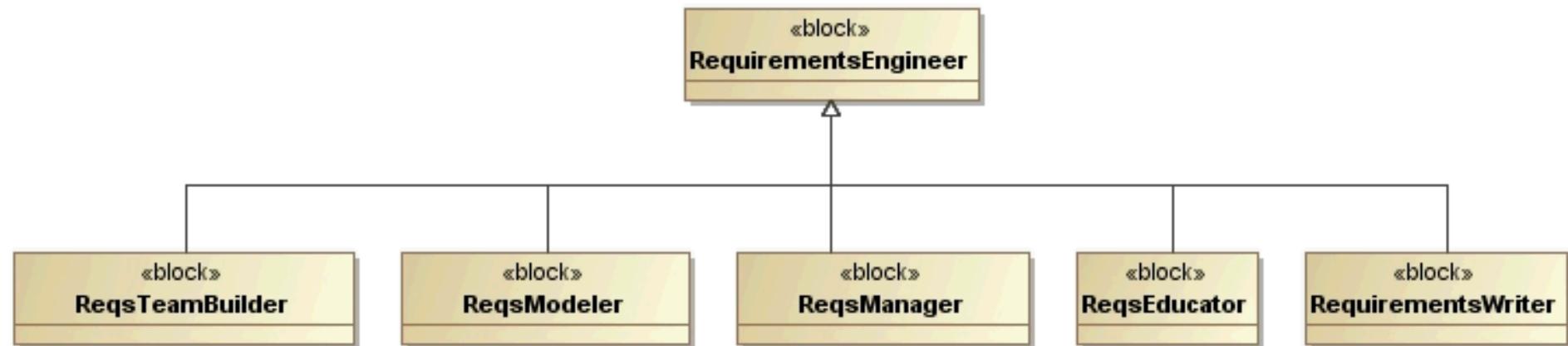


A Tailored Process





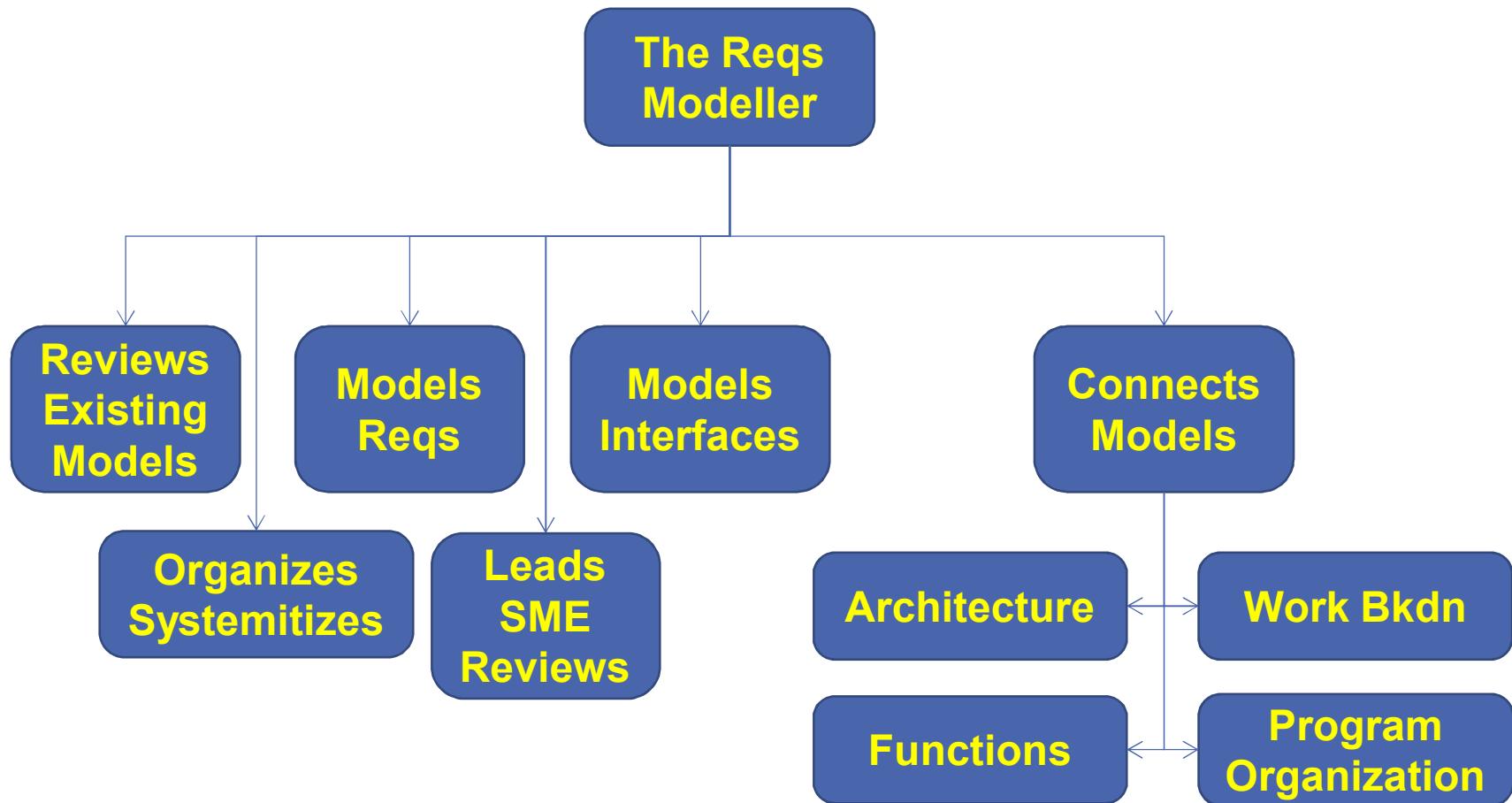
Requirements Engineering Roles





The Helpful Requirements Author

- Asks “Why”
- Understands problem domain
- Uses operational concepts
- Furnishes rationale
- Includes verification method & strategy





Requirements Team Building

- Gather groups of experts, elicit requirements
 - Build teams dedicated to good requirements
- Small requirements authoring team
 - 1-2 people
 - More productive than single requirements engineer
 - Mentoring new requirements engineers
- Teaming & uncertainty



System Engineering Alchemy

- Requirements engineering, a TEAM effort
- Tailor existing process, discover RE roles
- Modeling helps develop good requirements





Questions?





Our Contact Information

- Tim Wiseley
 - Sandia National Laboratories
 - thwisel@sandia.gov
- Kent de Jong
 - University of Maryland
 - kdejong@umd.edu
 - kent.dejong@incose.org