

SIEMENS CORPORATE RESEARCH

15th IEEE International
Requirements Engineering
Conference
October 15-19th, 2007
India Habitat Center, New Delhi



2nd International Workshop on Visualization in Requirements Engineering REV'07

Program Chairs
Brian Berenbach & Olly Gotel

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Program Committee

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Daniel Berry, University of Waterloo
Manfred Broy, Technische Universität München
Bernd Brügge, Technische Universität München
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Why a workshop on Visualization (1)?

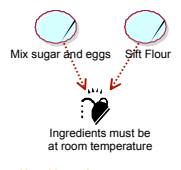
It has been found empirically that text specifications are inherently ambiguous. The ambiguity is exacerbated with global software development, different languages and cultures.

Graphical models are inherently unambiguous

"Mix the sugar and eggs.
Sift the flour. The ingredients must be at room temperature"

Mix what? – the sugar, the eggs
the flour or some combo?

vs.



Unambiguous!

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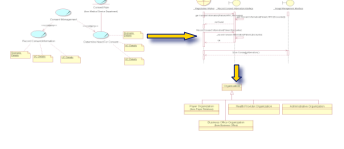
Why a workshop on Visualization (2)?

- It is extraordinarily difficult to get stakeholders across multiple time zones to effectively review complex requirement specifications
- Graphical models can be reviewed by all stakeholders together with minimal language or cultural issues.

This



vs.



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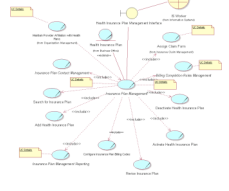
Why a workshop on Visualization (3)?

- Hierarchical Storage Mechanisms for requirements breakdown with cross-cutting requirements and scale.
- Graphical models size nicely and manage crosscutting requirements without difficulty

Trace Map



vs.



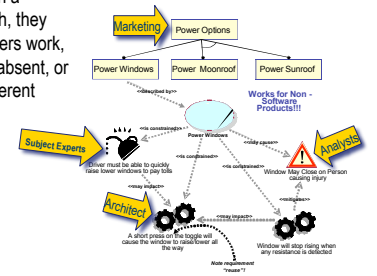
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Why a workshop on Visualization (4)?

Different teams work on different requirement sets. With a conventional approach, they may not see each others work, or the traces may be absent, or may break across different media.



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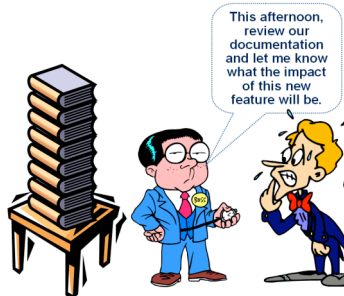
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Why a workshop on visualization (5)?

Natural Language techniques just do not SCALE!



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Conclusions

- Natural language techniques alone are not sufficient and viable
- Visualization techniques work, and work better than traditional text approaches:
 - Scalability
 - Overcoming global boundaries
 - Improved Communication
 - Support for cross-cutting
 - Inherently Unambiguous

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Workshop Goals

- The workshop aims to provide a collaborative session in which ideas related to the visualization of requirements and ways of making them practical are shared, reviewed and debated.
- The controversy surrounding the practicality of non-traditional requirements engineering techniques will be discussed.
- The workshop will be used to identify future work, issues, problems and priorities, and to propose recommendations around these dimensions for requirements engineering visualization research.

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Program

09:00 – 09:30 Welcome to REV and Program Overview
 09:30 – 10:30 **Session 1: Visualizing Goals**
 Open Discussion on Presenters' Visualization Posters (10 minutes)
 10:30 – 11:00 Coffee/Tea Break
 11:00 – 12:30 **Session 2: Visualizing Relationships and Dynamics**
 Open Discussion on Presenters' Visualization Posters (10 minutes)
 12:30 – 14:00 Lunch
 14:00 – 15:30 **Session 3: Visualizing Product Lines and Models**
 Open Discussion on Presenters' Visualization Posters (10 minutes)
 15:30 – 16:00 Coffee/Tea Break
 16:00 – 16:45 **Session 4: Visualization Visions in Requirements Engineering**
 Open Discussion on Presenter's Visualization Posters and Guided Brainstorming/Future-Gazing Session (25 minutes)
 16:50 – 17:00 REV Wrap-up and Closing Comments

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Key Points to Look for

What is the problem you are working on?
 How and why is visualization expected to help?
 Who and what is the visualization for? How are they expected to use it?
 What visualization(s) have you created?
 How was it (they) derived and constructed?
 How does it (they) work?
 Show and tell – explain your poster...
 Has your visualization(s) been used in practice? If so, with what results? If not, what are your plans for validating your work?
 Critique your visualization(s) (i.e., pros, cons, strengths and weaknesses).
 Next steps? Open questions? Include any suggestions as to how things could be done differently/better. Perhaps compare with the state of the art or state of the practice.

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And Now...

On with the workshop!

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