



Understanding the Context of Architecture Evaluation Methods

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What to do, what to do?



- You want to evaluate your architecture.
- You have read about various architecture evaluation methods.
- How to choose?
 - Believe what the authors of the methods say. Not likely
 - Look at various surveys of methods. They seem to miss what is important.
- The claim of our paper is that the context of evaluation determines the method you should use.

Examples

- You need the results in a hurry
 - Do not choose a method that requires up front arrangements
- You want the results to be kept private
 - Do not choose a method where the results are public
- No implementation of the system exists
 - Do not choose a method that includes code analysis

What is the paper about?

- We identified a collection of contextual factors
- We analyzed four methods based on these contextual factors
- i.e. We generated a matrix that looks like

	Methods 	
Contextual Factors		
		

What are the contextual factors?



- **Inputs**
 - Explicit or implicit?
 - Assumed before review or generated as a portion of review?
- **Outputs**
 - What is the criteria used during the evaluation?
 - Who sees the results?
- **Mechanisms**
 - Who are participants?
 - Who sets priorities (tradeoffs)?
 - What kind of social interaction is there in the method?

More Contextual factors

- Controls
 - What are the evaluation objectives?
 - What is the scope?
- Process
 - What is the schedule?
 - How open is the process?
 - When in the life cycle is the evaluation held?
- What systems did you evaluate and what were your conclusions
 - READ THE PAPER

Research Questions



- Cost/benefit for architecture evaluations
 - Lots of data about cost/benefit for code reviews. Only anecdotal data for architecture evaluations
- Effect of corporate culture on frequency and type of evaluations

Questions for me?

