

## The Importance of Clarity in Usable Requirements Specification Formats

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### Abstract

*Clarity is underappreciated as a requirements specification quality attribute. We studied the clarity of requirements forms, operationalized as ease of problem detection, least obstructive to understanding, and understandability by stakeholders. A set of use cases for an industrial system was translated into sequence diagrams and ScenarioML; problems identified during each translation were noted, and system stakeholders were interviewed and given a questionnaire on all three forms. The data showed that ScenarioML best supported requirements clarity, then sequence diagrams but only for stakeholders experienced with them, and finally use cases as the least clear form. Use cases were preferred for non-technical stakeholders to write; sequence diagrams were most effective for details of individual events and for showing interaction with architectural components; with ScenarioML preferred in all other situations.*