

Are we Close to Open Models?

John Mylopoulos
University of Trento

Panel discussion, ER 2013,
Hong Kong, November 12, 2013



Models here-and-there and everywhere

- 🌈 The use of conceptual models in Computer Science and Information Management is (finally!) a fact beyond dispute or discussion.
- 🌈 Models are used routinely for software design, data management, enterprise management, system adaptation, ...
- 🌈 As with software, the next big challenges to tackle are: How do we build large models? ... Bring down the cost of building them?? ... Do so while improving their quality???
- 🌈 As with software, the answers are: (a) Models as components, (b) Automated generation of models, (c) Open models.

Models as components

- 🌈 Basic idea here is that we build models as components that have a well defined interface and can be composed into large models through some form of composition.
- 🌈 Interfaces allow the management of name spaces.
- 🌈 Semantic Web folks have been doing similar things with ontologies.

Automated generation of models

- 🌈 For software, there are generative techniques that generate automatically code from domain models.
- 🌈 The OO Method (Pastor et al) is a good example of a successful generative method.
- 🌈 For models, we need techniques that support the generation of models from existing information sources, such as legal text (Natural Language), log data (structured data)

Open models

- 🌐 We want to duplicate the success of open source software (OSS).
- 🌐 For OSS, large communities of use have been built around a software system of general interest, e.g., linux.
- 🌐 These communities have been sustained by a simple legal framework and a set of operational rules of conduct.
- 🌐 OSS works thanks to a good set of operational rules, rather than new technology/tools.

How to get closer to open models

- 🌐 Find a topic of general interest that requires large models, e.g., business process models, enterprise models, ...
- 🌐 Get someone to contribute a substantial initial set of models.
- 🌐 Others will join the community because it is much cheaper and faster to get off the ground by joining the OM community than by starting from scratch.
- 🌐 Our approach to making open models a reality should be *methodological* (method-based), rather than *technological* (tool-based).