

Structural Modeling Teleconference Notes

07-11-2015

Joseph Simpson

Attendees:

Mary Simpson
Jack Ring
Constantina Spanoude
Janet Singer
Yiannis Laouris
Joseph Simpson

Highlights:

The introductions indicated a group with long-term, in-depth knowledge and expertise in the area of structural modeling.

The content of the discussion document was addressed in detail, which increased the shared knowledge base and operational context for the session participants.

During the meeting it was noted that there is a wide range of methods, processes and activities called Interpretive Structural Modeling. A key goal of the structural modeling project is the clear definition and communication of the three components of structural modeling; basic structural modeling, interpretive structural modeling and structural integration modeling.

The design document shared by Constantina and Yiannis was discussed in terms of possible implementation variations and process design decisions. Warfield's definition's were discussed along with the augmented model-exchange isomorphism (AMEI).

While some differences in approach were noted, it was also emphasized that there is a wide range of natural language interpretations that have to be considered in any specific implementation. The only suspect types of implementations are the implementations where the mathematical representation of the natural language terms present irrational results, like; allowing an individual event to precede itself. These irrational representations need to be identified and removed from the structural modeling process.

I will copy some material from one of Warfield's Battelle Monographs and distribute the material to the group. Yiannis will send more detailed information about their form of SDD implementation of ISM and I will distribute this material to the group as well. Next week, I will cover a wide range of my existing structural modeling software and design material during my presentations at INCOSE as well as during the four (4) hour structural modeling tutorial that I will present on Thursday morning.

For our next meeting, I propose that I (we) go over one of my software design documents and discuss the software implementation. My current plan is to use a Javascript implementation that I have developed. However, we are working with another group on some similar software functionality. That code is written in Python and I plan on inviting a member of the coding team to the next meeting. It might be a good idea to think about doing a small open source test program just to demonstrate ideas and concepts.

Have fun....

