ORM 2008 PC Co-chairs' Message

Following successful workshops held in Cyprus (2005), France (2006) and Portugal (2007), this was the fourth in a series of fact-oriented modeling workshops run in conjunction with the OTM conferences. Fact-oriented modeling is a conceptual approach to modeling and querying the information semantics of business domains in terms of the underlying facts of interest, where all facts and rules may be verbalized in language that is readily understandable by users working in those business domains. Unlike Entity-Relationship (ER) modeling and UML class diagrams, fact-oriented modeling treats all facts as relationships (unary, binary, ternary, etc.). How facts are grouped into structures (e.g., attribute-based entity types, classes, relation schemes, XML schemas) is considered a design level, implementation issue that is irrelevant to the capturing of essential business semantics. Avoiding attributes in the base model enhances semantic stability and populatability, as well as facilitating natural verbalization and thus more productive communication with all stakeholders. For information modeling, fact-oriented graphical notations are typically far more expressive than those provided by other notations. Fact-oriented textual languages are based on formal subsets of native languages, so are easier to understand by business people than technical languages like OCL. Fact-oriented modeling includes procedures for mapping to attribute-based structures, so may also be used to front-end other approaches. Though less well known than ER and object-oriented approaches, fact-oriented modeling has been used successfully in industry for over 30 years, and is taught in universities around the world. The fact-oriented modeling approach comprises a family of closely related dialects, the most well known being Object-Role Modeling (ORM), Cognition enhanced Natural language Information Analysis Method (CogNIAM) and Fully-Communication Oriented Information Modeling (FCO-IM). Though adopting a different graphical notation, the Object-oriented Systems Model (OSM) is a close relative, with its attribute-free philosophy. In December 2007, the Semantics of Business Vocabulary and Business Rules (SBVR) proposal was adopted by the Object Management Group, becoming the latest addition to the family of fact-oriented approaches.

Commercial tools supporting the fact-oriented approach include the ORM solution within Microsoft's Visio for Enterprise Architects, the CogNIAM tool Doctool, and the FCO-IM tool CaseTalk. Free ORM tools include InfoModeler and Infagon, as well as various academic prototypes. DogmaStudio is an ORM-based tool for specifying ontologies. NORMA, an open-source plug-in to Visual Studio, is currently under development to provide deep support for second generation ORM (ORM 2). Other ORM 2 tools under development include ActiveFacts and Richmond. Various SBVR tools are also currently under development. General information about fact-orientation and SBVR, respectively, may be found at www.ORMFoundation.org and http://omg.org/technology/documents/bms_spec_catalog.htm#SBVR.

This year we had 32 original proposals for workshop papers, with slightly fewer full paper submissions. After an extensive review process by a distinguished international program committee, with each paper receiving 3 or more reviews, we accepted the 15 papers that appear in these proceedings. Congratulations to the successful authors!

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