

Preface

Increasingly, models are starting to become commonplace and Model Driven Engineering (MDE) is gaining acceptance in many domains including automotive, aerospace, railways, telecommunications, business applications, and financial organizations. Over the last years, several modeling platforms have been developed to simplify and automate many steps of MDE processes. However, still several challenges have to be solved in order to enable a wider adoption of MDE technologies. One of the most important impediments in adopting MDE tools is related to the reduced flexibility of existing modeling platforms that do not permit to relax or enforce their rigidity depending on the stages of the applied development process. For instance, EMF does not permit to enter models which are not conforming to a metamodel: on one hand it allows only valid models to be defined, on the other hand it makes the corresponding pragmatics more difficult. In this respect, there is a wide range of equally useful artefacts between the following extremes:

- diagrams informally sketched on paper with a pencil
- models entered in a given format into a generic modeling platform, e.g., Ecore/EMF

At the moment, modeling platforms encompasses only the latter possibility. However, while depending on the stage of the process it makes sense to start with something closer to the former (to promote communication among stakeholders) to eventually end up with the latter (to allow automatic model processing and code generation). Thus, we are interested in exploring the possible forms of flexibility that are required when applying MDE processes, ranging from agile ways to develop modeling artifacts and languages to their flexible application in concrete domains.

Flexibility is also needed to enable wider possibilities for reusing MDE artefacts, like model transformations and code generators. In particular, to deal with the growing complexity of software systems, it is necessary to enforce consistent reuse and leverage the interconnection of the modeling artifacts that are produced and consumed during the different phases of the applied development processes. In such contexts, modularization mechanisms have to be devised in order to enable the development of complex modeling artifacts from smaller ones, which are easier to process and reuse.

The first edition of the Flexible Model Driven Engineering workshop (FlexMDE) – previously known as Extreme Modeling Workshop (XM) - has been co-located with the ACM/IEEE 18th International Conference on Model Driven Engineering Languages & Systems (MODELS 2015). It provided a forum for researchers and practitioners where different forms of agility have been discussed as demonstrated by the technical program, including agile development of domains specific languages, agile requirements engineering, and fast development of data-intensive Web applications. The program included also a keynote by Prof. Colin Atkinson (University of Mannheim) entitled “Maximizing the Amount of Information Not Modelled in MDE”. As part of the workshop, an informal tool demonstrations session has been also organized consisting of 5 tools aiming at adding flexibility to MDE at different extents.

Many people contributed to the success of FlexMDE 2015. We would like to truly acknowledge the work of all Program Committee members, and reviewers for the timely delivery of reviews and constructive discussions given the very tight review schedule. Finally, we would like to thank the authors, without them the workshop simply would not exist.

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