What do 449 MDE Practitioners Think About MDE? (Keynote Speech)

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This talk will present the results of an in-depth survey of model-driven engineering (MDE) industrial practice. The survey, disseminated electronically, consisted of 35 questions on MDE use and received 449 responses. The study focused on six key criteria related to productivity and maintainability for evaluating MDE success. Each of these can be impacted positively or negatively depending on how MDE is applied. The study aimed to understand whether, in current practice, the positive impacts outweigh the negative ones. Findings indicate that productivity gains from code generation tend to outweigh losses from integration with existing code. Successful MDE practitioners follow best practice guidelines by making changes at the model level. MDE allows for faster turn-arounds on new requirements, but there is a risk that it may prevent organizations from responding to new business opportunities. Findings also indicate that MDE increases overall training costs. Finally, UML is not yet universally accepted as the modeling language of choice and, in fact, domain-specific modeling languages are much more prevalent than anticipated. This is joint work with John Hutchinson and Mark Rouncefield.

Biography

Jon Whittle is a full Professor, Chair of Software Engineering and Royal Society Wolfson Merit Scholar at Lancaster University. He has parallel research interests in model-driven engineering and social computing. In particular, his recent interests are in how new social media and social networking can influence or contribute to MDE. Jon has been intimately involved with the MDE community for over ten years, having served as Chair of the Steering Committee of MODELS from 2006-2008 and serving as PC Chair in 2011. He also sits on the editorial board of the Journal of Software and System Modeling. Jon is currently principal or co-investigator on a number of interdisciplinary research projects, with a total net worth of around £5M.