



## Tutorial: Product Line Strategy Choices and their Impact on Feature Management (T01)

**Monday, September 12, 2016 (Full-day)**

<http://re16.org/pages/conference/tutorials/#T01>

Successful software product line organizations evolve by ensuring they align their forecasts of market trends and their ability to influence those trends with their product line strategy and in turn ensure their engineers understand this alignment. Without careful management of that alignment over time the execution of a product line strategy becomes far less effective. This tutorial discusses how strategy choices impact on engineering decisions with a particular focus on how features are developed and managed over time. It draws on many years' product line experience at Nokia, Danfoss and Roche Diagnostics. At the end of this tutorial a participant will be able to:

- i. present an overview of business and product line engineering strategy options
- ii. describe how strategy choices influence decisions to make/buy features
- iii. show how strategy choice affects the implementation of feature variability management
- iv. discuss how planned/unplanned organizational factors can affect business-engineering strategy alignment.

This tutorial is aimed at requirements engineers, software engineers, project managers, faculty staff, and PhD students who want to learn about effective modern requirements reuse. You should have an intermediate knowledge of requirements engineering and the problems of developing medium to large computer-based systems. You will not need to know the detail of domains used for the case studies. Sufficient introduction will be provided.



**Professor Mike Mannion is Vice-Principal (Research) at Glasgow Caledonian University, Glasgow, Scotland, UK.** His research interests include product-line engineering, software engineering and engineering education. He is a Chartered Engineer, a Chartered Information Practitioner and a member of the British Computer Society, IEEE and ACM, published more than 50 papers and run more than 20 tutorials.



**Dr. Juha Savolainen is Head of Software Architecture at Roche Diagnostics International Ltd, Zurich, Switzerland.** He has extensive experience in working closely with numerous product lines in helping them to manage and realize variability. His main research interests include requirements engineering, software architectures and product line development. He has published more than 50 papers.