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## Customizing, BMP standards; creating Enterprise Specific Languages, Transformations and Tools

### **Abstract**

The increased global competition requires enterprises to focus on the agility and efficiency of their business process.

An enterprise can use Business Process Management (BPM) tools to model, simulate and optimize its business processes and automate them through a BPM system. State-of-the-art BPM tools provide standard business process modeling notations to model business processes at a conceptual level and fixed transformations that are able to transform business process models to specific technologies.

This thesis shows that state-of-the-art BPM tools are insufficient for a particular enterprise that requires distinct use of modeling concepts, uses technology in unique ways, and has defined its own development process. The thesis sets up the hypothesis that applying the model driven development principles of direct representation and automation to BPM tools will heighten the development productivity and decrease number of errors in implementations. An enterprise will be able to model its business processes directly in enterprise specific concepts, and write transformations that encapsulate its specific use of technology, and that automate the generation of code. The hypothesis is tested and evaluated through a tool experiment.

The contributions of the thesis are threefold: First, it reports on challenges and lessons learned in adopting BPM in Danske Bank through an empirical case study.

Second, it shows the effect of developing BPM languages, tools and transformations specific to Danske Bank.

Third, it develops a framework that allows an enterprise to customize BPM languages, tools and transformations to its needs instead of develop them from scratch. Commercial BPM tools would improve their usability and heighten the development productivity of the specialized enterprise if they adopted this framework.