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## **Abstract for thesis 'Improving Software Development - An evaluation of tool and process related inefficiency in soft-ware development'**

Software development in general is not performed as efficiently as possible. The causes for this can be, among others: Lack of insight in the relationships between artefacts associated with a software development project; too much effort in adapting a development method to a specific situation; too great complexity of software; too much repetition in software development; possibly a lack of automation in currently available tools.

My analysis shows that most of the basic human competencies can not be had by a computer. By mapping these competencies on the actions of which the software development process consists, I have shown that most of the actions of the software development process consists can not be fully automated.

I have researched ways of remedying each of the causes for inefficiency that I have mentioned. There are two possible remedies that I have researched more elaborately. These are Model Driven Architecture and method engineering.

My conclusion, after analysing the kinds of inefficiencies, the possible solutions, and the wishes and predictions of software developers, is that software development can be improved by pursuing the following developments: Mature component based development; advanced web services; advanced method engineering; more complete standardised project repositories.