Master Thesis Computer Science Thesis no: MCS-20YY-NN MM YYYY



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Dept. Computer Science & Engineering Blekinge Institute of Technology SE–371 79 Karlskrona, Sweden This thesis is submitted to the Department of Computer Science & Engineering at Blekinge Institute of Technology in partial fulfillment of the requirements for the degree of Master of Science in Computer Science. The thesis is equivalent to XX weeks of full-time studies.

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#### Abstract

**Context**. Strategic release planning (sometimes referred to as roadmapping) is an important phase of the requirements engineering process performed at product level. It is concerned with selection and assignment of requirements in sequences of releases such that important technical and resource constraints are fulfilled.

**Objectives**. In this study we investigate which strategic release planning models have been proposed, their degree of empirical validation, their factors for requirements selection, and whether they are intended for a bespoke or market-driven requirements engineering context.

Methods. In this systematic review a number of article sources are used, including Compendex, Inspec, IEEE Xplore, ACM Digital Library, and Springer Link. Studies are selected after reading titles and abstracts to decide whether the articles are peer reviewed, and relevant to the subject.

**Results**. 24 strategic release planning models are found and mapped in relation to each other, and a taxonomy of requirements selection factors is constructed.

**Conclusions**. We conclude that many models are related to each other and use similar techniques to address the release planning problem. We also conclude that several requirement selection factors are covered in the different models, but that many methods fail to address factors such as stakeholder value or internal value. Moreover, we conclude that there is a need for further empirical validation of the models in full scale industry trials.

**Keywords:** 3-4 keywords, maximum 2 of these from the title, starts 1 line below the abstract.

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# Introduction

### Related Work

# Method

### Results

# Analysis

#### Conclusions and Future Work

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