# FCT NOVA – COMPUTER SCIENCE PhD PROGRAM

## QUALITY EVALUATION OF REQUIREMENTS MODELS: THE CASE OF GOAL MODELS AND SCENARIOS

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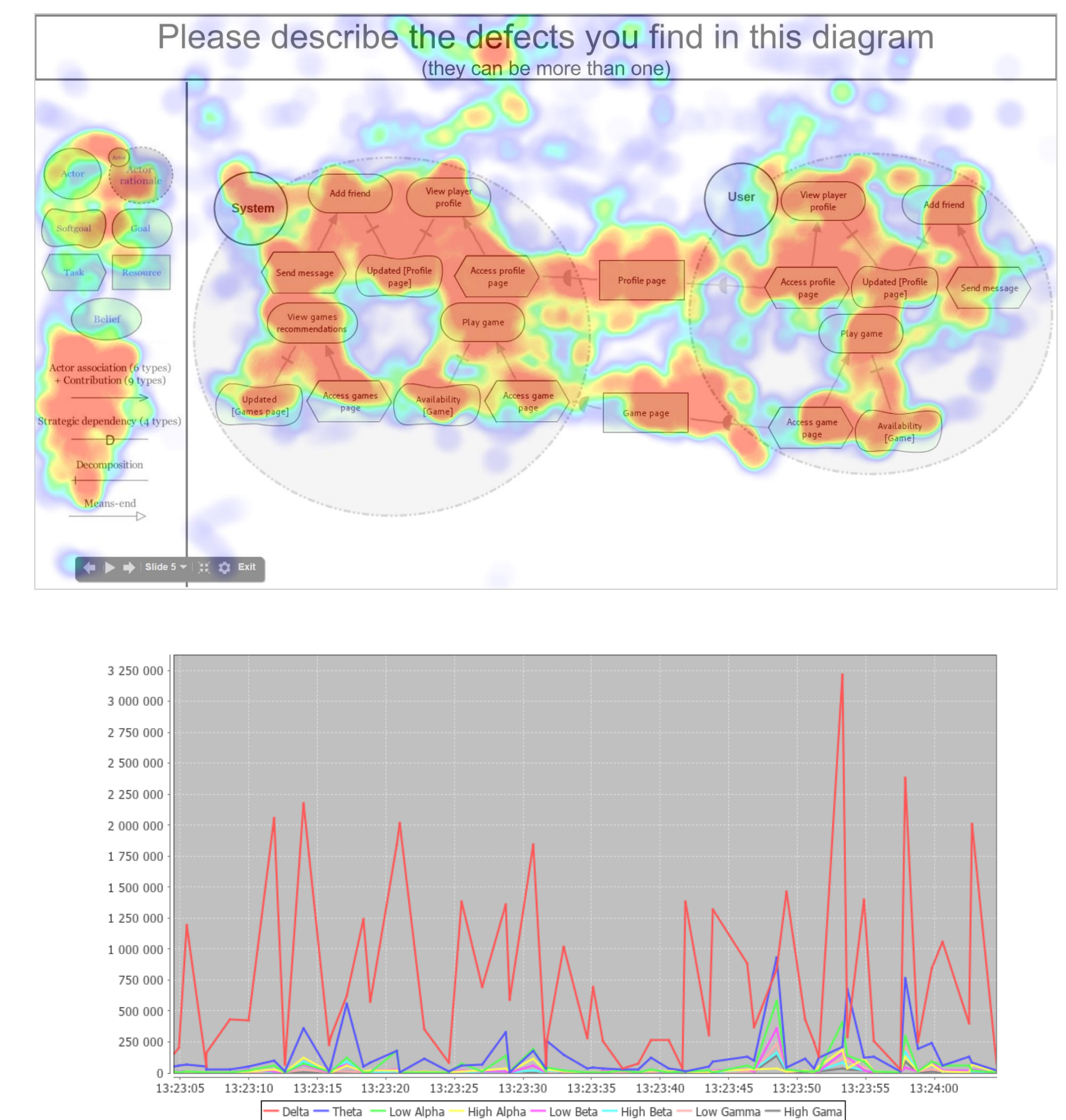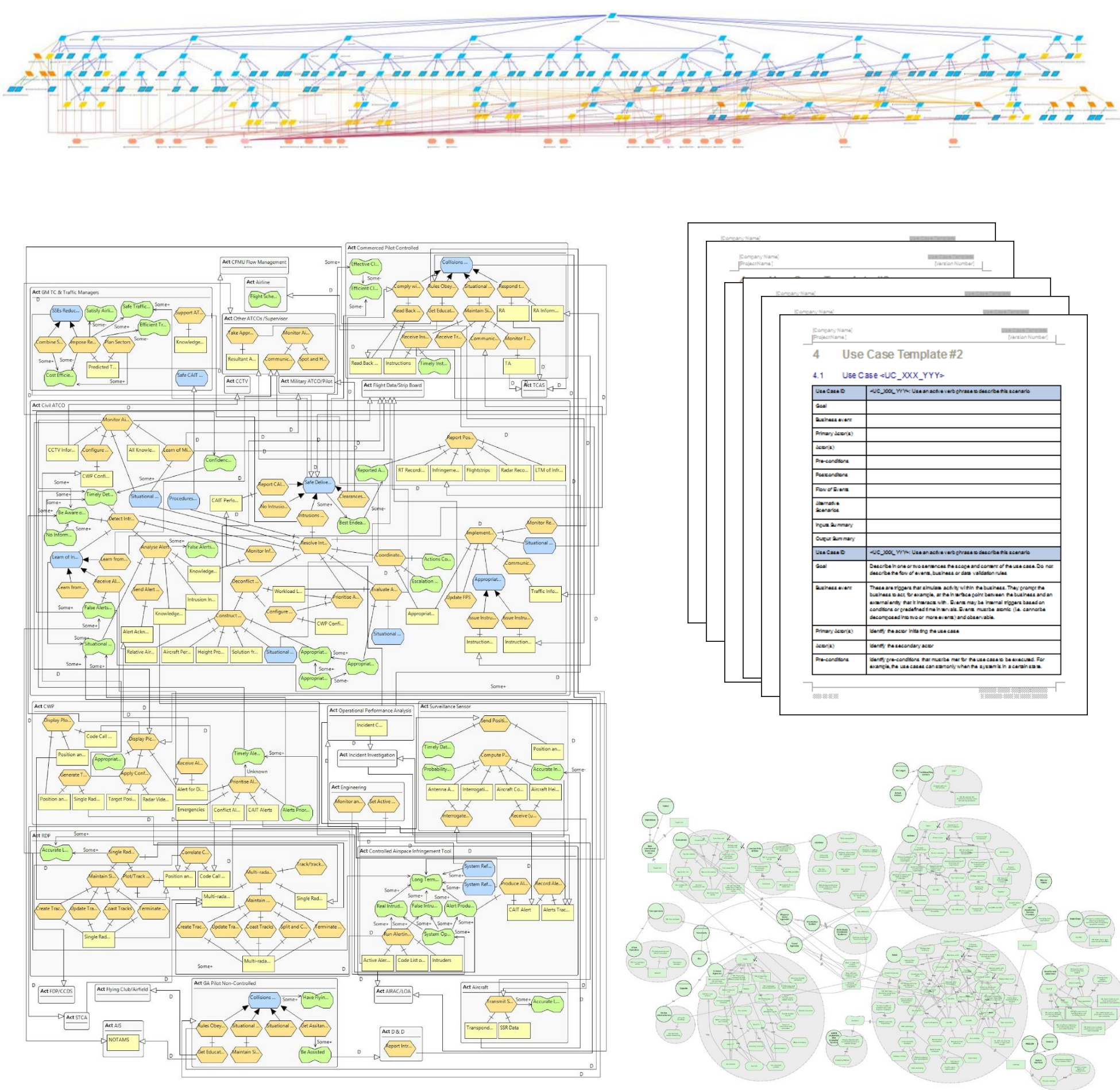
## Motivation and Challenges

Requirements models are used for requirements elicitation and analysis

Requirements engineers and other stakeholders need to have a common understanding of the models

Current approaches are still struggling when it comes to managing the quality of the modes

Problems in quality may cause difficulties in the management and understanding of those models

These problems lead to incorrect implementation of the software system and increased development time and cost

## Approach and Techniques

Evaluate the appropriateness recognizability and learnability of goal models and scenarios

By understanding the quality problems that affect those models, it is possible to identify opportunities for their improvement

Product metrics

Stakeholders perception

Biometrics

Success and time
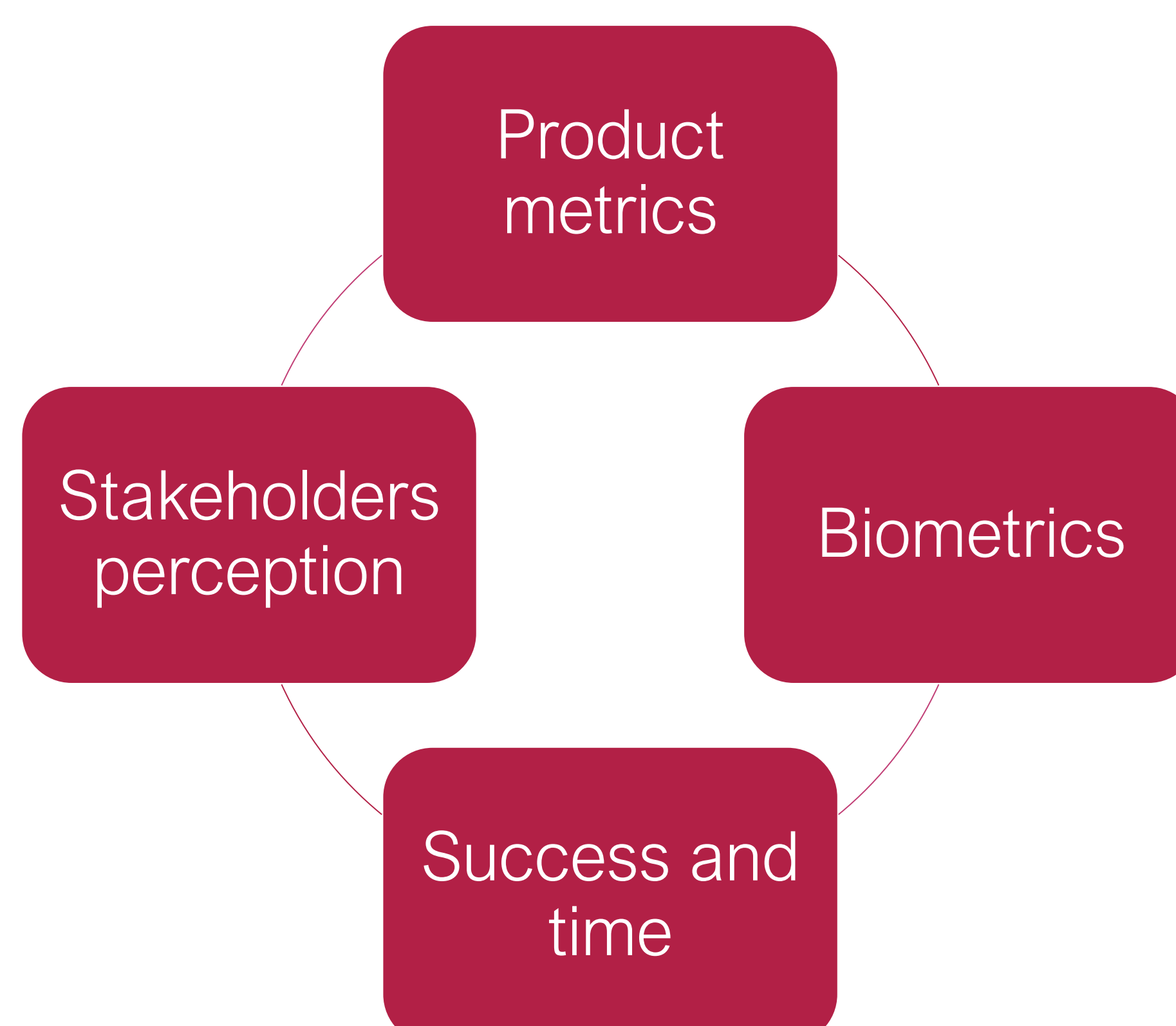
## Results

Generic framework for the evaluation of requirements models

Set of quality metrics

Family of experiments

Quality evaluation of i* *vs* iStar 2.0

Evaluation of use cases with template *vs* without template

Identification of improvement opportunities

### Selected Publications

**Rank A\*:** ICSE 2018
**Rank A:** CAiSE 2014 (Best Paper), ISJ 2015, RE 2016, ER 2016, RE 2018, ER 2018