

**TV quality improvement in Telecommunications**  
*Network Optimisation*

Public version

Master Thesis

Astrid van der Poel





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## Preface

Writing a master thesis is the final part of the master Business Mathematics and Informatics (BMI) at the VU University Amsterdam. The goal of this thesis is to apply the Business, Mathematics and Informatics component on a business case at an external company. I undertook this internship at Tele2 Nederland at the department Network Operations & Engineering, located in Diemen.

In this thesis we performed a comparative study on TV quality. By building a predictive model we gave insights into the future TV quality of the network.

First, I would like to thank Zoltán Szlavík (VU University) for being my supervisor during this internship. His enthusiasm about applying data mining to this problem and the given feedback provided me a lot of motivation during the last six months. I would like to thank Rob van der Mei (VU University) for being my second reader and providing me with feedback on my thesis.

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Finally, I would like to thank all of my colleagues who provided me with data, knowledge about the network and operational processes in general.

*Astrid van der Poel*  
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# Management Summary

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