# Classifying Hotel Topics and Opinions from Online Guest Review Comments

By:

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## Classifying Hotel Topics and Opinions from Online Guest Review Comments

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#### **PREFACE**

The final part of the Master Business Analytics consists of a six months internship at an organisation by choice. During this internship students are required to use their theoretical knowledge of business mathematics and informatics to support the organization with data-driven decision making, optimisation of business processes and data analysis. The deliverables generally consists of a final thesis along with a data analysis, program or simulation. The research for and creation of this thesis took place at the content department of Booking.com from September 2012 until March 2013. During this period a text mining tool is developed and a business focused data analysis is performed.

In the first and foremost place I would like to thank Vladimir Sterngold for his on-going guidance and support, giving me insight into the hotel business and providing me detailed information about the Booking.com website. In the second place I would like to acknowledge my special gratitude to my supervisors from the VU University, Mark Hoogendoorn and Piek Vossen, giving me direction and constructive comments on my thesis. In the third place I would like to thank Sandjai Bhulai, who accepted to take on the task of second reader. In the fourth place, I would like to use the opportunity to thank all the guest review associates that helped me develop a high quality labelled dataset for this project. Finally, I would like to express my grateful appreciations to my colleagues from the business analytics team, content and IT department for their collegiality and discussions that helped me write this thesis.

Nicolaas Nobel

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## **ABSTRACT**

[Classified]

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