

Preface

The idea for this work originated from my work for the Future Research department at the Volkswagen AG and in the context of my startup Mapegy GmbH. Both enterprises depend heavily on current technological developments and are therefore permanently looking for ways to detect and assess technological trends as early as possible.

Volkswagen's future research department was organized as a model kit with different tools, each suitable to examine elements of the STEEP methodology. I was a member of the Technology Foresight team and I used diverse mostly quantitative methods to consult other departments in strategic questions of technology and innovation management. All of the studies were generated from publicly available data such as patents, scientific and press publications, as well as internet based media such as blogs or social networks.

Since the data is publicly available and strategic technology and innovation management questions are being asked not only in the automotive industry, at one point my colleague Dr. Peter Walde and I founded the company Mapegy GmbH in order to provide the same service to a larger audience. Mapegy generates automated reports from large volumes of data. Among other things these reports can determine technological trends, estimate a firm's technology strategy, or rank inventors regarding their attribution to a certain field of research.

I am glad I was able to put my professional knowledge to use in this work. At the same time, however, I was also able to pick my own subject rather than focusing on topics based on the strategic relevance for my clients. Deadlines were not as time critical, which allowed me to set my own scientific standards very high. I embraced this freedom very much, and used it to work with people whose company I enjoy very much.

I would like to thank my parents Sabine and Bernd Albert and my girlfriend Linn for emotional support. My academic mentor and "Doktorvater" Professor Dr. Martin G. Möhrle for providing valuable input throughout all stages of the writing process as well as for high frequency supervision, especially during the late stages of the dissertation. He is a great person. Reviewers and examiners of the final dissertation, Prof. Dr. Martin Kloyer, Dr. Iciar Dominguez Lacasa, Dr. Lothar Walter, as well as Prof. Dr. Jens Pöppelbuß for his willingness to help. My dear colleague Jens Potthast for helping me with major coding, soft- and hardware challenges and struggles. Christopher Perkins for

cross-reading the manuscript and improving readability and intelligibility. Steffen Cords for being a valuable sparring partner concerning mathematical and statistical thoughts.

Berlin, August 2015

Till Albert



<http://www.springer.com/978-3-658-12131-0>

Measuring Technology Maturity
Operationalizing Information from Patents, Scientific
Publications, and the Web
Albert, T.
2016, XXIX, 311 p. 86 illus., Softcover
ISBN: 978-3-658-12131-0