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Nota di contenuto	Foreword; Preface; Table of Content; List of Figures; List of Tables; List of Abbreviations; PART I - Introduction, Economic Relevance, and Research Design ; 1 Introduction; 1.1 Initial Problem Statement; 1.2 Economic Relevance; 1.3 Organization of this Thesis; 1.4 Published Work; 1.4.1 Book Chapters; 1.4.2 Papers in Conference Proceedings; 1.4.3 Other Publications; 2 Research Design; 2.1 Semantic Technologies and Ontologies; 2.2 Research Goal; 2.3 Research Questions; 2.4 Research Methodology; 2.4.1 Design Science Research Methodology; 2.4.2 Ontology Development Methodology PART II - Foundations: Data Quality, Semantic Technologies, and the Semantic Web 3 Data Quality; 3.1 Data Quality Dimensions; 3.2 Quality Influencing Artifacts; 3.3 Data Quality Problem Types; 3.3.1 Quality Problems of Attribute Values; 3.3.2 Multi-Attribute Quality Problems; 3.3.3 Problems of Object Instances; 3.3.4 Quality Problems of Data Models; 3.3.5 Common Linguistic Problems; 3.4 Data Quality in the Data Lifecycle; 3.4.1 Data Acquisition Phase; 3.4.2 Data Usage Phase; 3.4.3 Data Retirement Phase; 3.4.4 Data Quality Management throughout the Data Lifecycle 3.5 Data Quality Management Activities3.5.1 Total Information Quality Management (TIQM); 3.5.2 Total Data Quality Management (TDQM);

Sommario/riassunto	Christian Fürber investigates the useful application of semantic technologies for the area of data quality management. Based on a literature analysis of typical data quality problems and typical activities of data quality management processes, he develops the Semantic Data Quality Management framework as the major contribution of this thesis. The SDQM framework consists of three components that are evaluated in two different use cases. Moreover, this thesis compares the framework to conventional data quality software. Besides the framework, this thesis delivers important theoretical findings, namely a comprehensive typology of data quality problems, ten generic data requirement types, a requirement-centric data quality management process, and an analysis of related work. Contents Data Quality and Semantic Technology Basics Data Quality in the Semantic Web Architecture and Evaluation of the Semantic Data Quality Management Framework Target Groups Researchers and students in the fields of economics, information systems and computer science Practitioners in the areas of data management, process management and business intelligence The Author Dr. Christian Fürber completed his doctoral study under the supervision of Prof. Dr. Martin Hepp at the E-Business and Web Science Research Group of the Universität der Bundeswehr München. He is founder and CEO of the Information Quality Institute GmbH, a company that consults organizations of any size to improve the quality of their data.