

Table of Contents

List of Tables	iv
List of Figures	vi
Acronyms	vii
A. Foundation.....	1
I. Introduction	2
I.1 Motivation	2
I.2 Research Gaps and Research Questions.....	5
I.3 Structure of the Thesis	8
I.4 Research Context and Design	10
I.5 Anticipated Contributions.....	12
II. Theoretical Background.....	14
II.1 From Back-Office Automation to Digital Transformation	14
II.2 Implications of Digital Technologies and Digital Innovation for Incumbents	18
II.3 Ecosystems as a New Lens for Economic Relationships	22
B. Studies	26
I. Clarification of the Ecosystem Concept and Its Relation to IS	27
1 Study 1: Unraveling the Interaction of Information Systems and Ecosystems.....	28
1.1 Introduction	29
1.2 Theoretical Background.....	31
1.3 Methodology.....	33
1.4 Findings.....	37
1.5 Discussion and Implications	43
1.6 Limitations and Conclusion.....	50
II. Contextualization of the Ecosystem Concept in Industrial-Age Business Environments	52
1 Study 2: Ecosystem Change in the Era of Digital Innovation.....	53
1.1 Introduction	54
1.2 Theoretical Background.....	55
1.3 Methodology.....	59
1.4 Results and Analysis	63

1.5	Discussion of Findings.....	67
1.6	Limitations and Future Research	72
2	Study 3: Building Platform Ecosystems for IoT – Exploring the Impact on Industrial-Age Firms	74
2.1	Introduction	75
2.2	Theoretical Background.....	76
2.3	Methodology.....	79
2.4	Results	83
2.5	Discussion.....	86
2.6	Conclusion	88
2.7	Limitations and Future Research	89
III.	Specification and Application of Digital Platform Ecosystems.....	91
1	Study 4: Digital Platform Ecosystems - Taxonomy, Archetypes and Patterns....	92
1.1	Introduction	93
1.2	Background	94
1.3	Research Design.....	99
1.4	Results and Analysis	104
1.5	Discussion and Implications	119
1.6	Limitations and Future Research	122
1.7	Conclusion	123
1.8	Appendix A: Figures and Tables.....	124
1.9	Appendix B: Additional Descriptions	134
C.	Contributions.....	137
I.	Findings and Results	138
I.1	Findings Regarding the Clarification of the Ecosystem Concept and Its Relation to IS	138
I.2	Findings Regarding the Contextualization of the Ecosystem Concept in Industrial-Age Business Environments.....	140
I.3	Findings Regarding the Specification and Application of Digital Platform Ecosystems	144
I.4	Synthesis.....	147
II.	Implications for Theory and Practice	151
II.1	Implications for Research	151
II.2	Implications for Practice	155
III.	Concluding Remarks.....	158
III.1	Limitations	159

III.2 Future Research Opportunities.....	160
References	162
Appendix	viii