

Contents

Introduction	17
Part I: The World of Rational Choice and Isolated Maximizing Individuals	21
1. Coordination within Neoclassical Economics: The Degree of Vertical Integration	23
1.1 Transaction Costs Theory and the Choice of the Coordination Structure Between 'Market' and 'Hierarchy'	27
1.1.1 The Boundaries of the Firm	35
1.1.2 Frequency of Use and Transaction-Specific Investment ~ an Attempt to make Transaction Cost Economics 'Operational'	41
1.1.3 The Inappropriateness of the Neoclassical Dichotomy for Conditions of Fragmentation, Net-Structures and Strong Uncertainty	50
1.2 First Résumé	54
2. Market and Hierarchy – Two 'Void Sets' Without Practical Evidence	57
2.1 The Relevance of Globalization and Fragmentation for Transactions	60
2.2 Bounded Rationality and Radical Uncertainty Require New Forms of Coordination	63
2.3 Second Résumé	71
Part II: The World of Direct Interdependencies and Complexity	75
3. Networks as Alternative Coordination Structures: The Development of the 'Organizational Triangle'	77
3.1 The Emergence of Network Cooperations as Institutions	80
3.2 The Organizational Triangle	83
3.3 Local Clusters	83
3.4 Different Net Types of the New Kind and their Categorization in the Organizational Triangle	89
3.4.1 Hub&Spoke Networks	90
3.4.2 Open Source Networks	94
3.5 'Structure-Governance-Performance': Concept and Measurement	98
	13

Part III: Case Studies – Real World Network Structures in the Organizational Triangle	103
4. Empirical Appearances of Networks Distinctive to ‘Market’ and ‘Hierarchy’ – Mercedes as a ‘Closed Shop’-Structure	105
4.1 DaimlerChrysler in Tuscaloosa, Alabama, and its suppliers as a Hub&Spoke-Structure	106
4.1.1 The Hub – Mercedes Benz United States International (MBUSI)	110
4.1.2 Decoma	115
4.1.3 FormelD	120
4.1.4 Delphi	123
4.1.5 Hoerbiger Hydraulics Inc.	126
4.1.6 Eberspaecher North America, Inc.	130
4.1.7 ZF Industries, Inc.	134
4.1.8 TW-Fitting-NA	140
4.1.9 Borgers USA Corp.	143
4.1.10 Brose Tuscaloosa, Inc.	146
4.1.11 Weidman Plastics Technology North America, Inc.	149
4.1.12 ISE Innomotive Systems U.S., Inc.	153
4.1.13 Eissmann Automotive North America, Inc.	156
4.1.14 ORIS Automotive Parts AL, Inc.	160
4.2 ‘Ideal Market’ Versus ‘Ideal Hierarchy’ Versus ‘Ideal, Institutionalized Cooperation/Network’: Positioning of the Mercedes Benz Network in the Organizational Triangle – The Views of the Hub and the suppliers	163
4.2.1 Network Structure	166
4.2.2 Governance	168
4.2.3 Performance	171
4.3 Spatial Proximity and Diversification of Customer Base as Criteria to Categorize the Current Network Structure	172
4.4 Fourth Résumé	177
5. Openness, Shared Information and the Willingness to Reciprocate: Different Institutions in the Internet Economy	179
5.1 Some Explorative Interviews of Linux Representatives in Germany and the U.S.	187
5.1.1 LUG Bremen	187
5.1.2 LUG Osnabrueck	193

5.1.3	LUG Walsrode	197
5.1.4	LUG Wilhelmshaven	200
5.1.5	Open Source Development Laboratories (OSDL), Portland, Oregon	203
5.2	Allocation of Linux Within the Organizational Triangle – General Tendencies in ‘Network Structure’, ‘Governance’ and ‘Performance’	209
5.2.1	Network Structure	210
5.2.2	Governance	211
5.2.3	Performance	213
5.3	Other Approaches to Open Source – Wikipedia and OScar in Comparison to MBUSI and Linux	214
5.3.1	The Wikipedia Case	214
5.3.2	Transferring the Advantages of Open Source into Manufacturing - OScar: The Open Source Car	215
Part IV: Consequences from the Case Studies for the Theory of Coordination		217
6.	Possible Learning Effects – is the Open Source Model a Chance for Traditional Industries to Deal With Uncertainty and Complexity?	219
6.1	Network Structure – Spatial Proximity and the Emergence of Trust	220
6.2	Governance – Duration of the Cooperation and the Flow of Information for Highly Complex Products	222
6.3	Performance – Advantages of ‘Open’ Approaches in Comparison to Hierarchical Coordinational Structures	225
6.4	Résumé: Further Research Perspectives	227
7.	Summary and Conclusion	229
Tables and Illustrations		231
References		233