

# Contents

<b>1</b>	<b>Analysing Collaborative Demand and Supply Networks in a Global Economy.....</b>	<b>1</b>
1.1	SME Networks: a European Way to Collaborative Innovation..... <i>A. Villa and D. Antonelli</i>	2
1.2	Industrial Districts: Historical Tools for Complex Systems .....	5
	<i>V. Marchis</i>	
1.3	Motivations for a New Analysis Methodology..... <i>A. Villa and D. Antonelli</i>	13
	References.....	19
<b>2</b>	<b>A View of SME Clusters and Networks in Europe.....</b>	<b>23</b>
2.1	An Overview of SME Networks Across Europe .....	24
	<i>T. Potinecke and T. Rogowski</i>	
2.2	Poles of Competitiveness in France..... <i>X. Boucher and A. Dolgui</i>	29
	2.2.1    The French Context and Advantages Offered by Competitiveness Clusters .....	30
	2.2.2    Thematic and Geographical Distribution .....	31
	2.2.3    Governance and Managerial Mechanisms .....	32
	2.2.4    Case Study .....	35
2.3	Science Parks in Greece .....	38
	<i>S. Agoti, C. Stylios and P. Groumpas</i>	
	2.3.1    STEPA Characteristics.....	39
	2.3.2    Science Park Institution .....	40
	2.3.3    Present Situation .....	41
2.4	Outsourcing Networks in Ireland..... <i>C. Heavey, P. Liston and P. J. Byrne</i>	45
	2.4.1    Electronics Manufacturing Field Study.....	46
	2.4.2    Network Creation: The RFx Process.....	48
	2.4.3    Case 1: Contract Manufacturer .....	50

2.4.4	Case 2: Supplier Sourcing Company .....	51
2.4.5	Case 3: Virtual Breeding Environment Supply Network .....	52
2.4.6	Summary .....	53
2.5	Industrial Districts in Italy .....	54
	<i>M. Salvador and S. Salvador</i>	
2.5.1	Basic Features and Figures of Industrial Districts.....	54
2.5.2	SMEs Clusters and Institutional Support: the FVG Case Study.....	57
	References.....	60
<b>3</b>	<b>Promote Aggregation of SMEs: Suggestions and Actions.....</b>	<b>61</b>
3.1	Strengthening SME Network Governance .....	61
	<i>A. Villa and D. Antonelli</i>	
3.1.1	A Short Catalogue of Graph Models of SME Networks .....	62
3.1.2	Justifying Necessity of SME Network Governance.....	66
3.1.3	Benefits from Cooperative Management in Enterprise Networks.....	68
3.2	Addressing Collaboration in Industrial Networks .....	70
	<i>B. Caroleo</i>	
3.2.1	Collaboration.....	70
3.2.2	Reasons for Addressing Collaboration.....	72
3.2.3	Examples of Collaborative Networks .....	74
3.3	Improving SMEs from a Supply Chain Perspective: a QFD-Based Approach.....	76
	<i>M. Barad</i>	
3.3.1	The SME Situation in Israel Motivating the QFD-Based Approach.....	76
3.3.2	Scientific Contributions to SCM Knowledge in a Nut Shell .....	77
3.3.3	Methodology .....	80
3.3.4	Findings .....	83
3.3.5	Discussion of Results and Further Empirical Research ...	85
3.4	SMEs in Supply Chain Networks: Cooperation and Competition.....	86
	<i>J. C. Hennet</i>	
3.4.1	The SCM Perspective.....	87
3.4.2	The SME Perspective.....	89
3.5	Trust in Demand and Supply Networks.....	94
	<i>T. Potinecke and T. Rogowski</i>	

3.6	Training Networks in Ireland .....	96
	<i>D. Whelan and C. Heavey</i>	
3.6.1	Development of Training Strategy in Ireland.....	96
3.6.2	Skillnets Training Networks .....	98
3.6.3	Case Study 1: Renewable Energy Skills .....	100
3.6.4	Case Study 2: First Polymer Training.....	101
3.6.5	Some Concluding Remarks.....	102
3.7	SME Networks for Car Recycling in Hungary: an Agent-Based Approach.....	103
	<i>G. L. Kovács and G. Haidegger</i>	
3.7.1	The E-Mult Project Approach.....	103
3.7.2	Two Project Test Sites .....	106
3.7.3	Governance and Managerial Mechanisms .....	107
3.7.4	Some Details on the E-Mult Project.....	107
3.7.5	A Few Remarks to Conclude .....	111
	References.....	111
4	<b>The CODESNET Approach to SME Networks Analysis .....</b>	117
4.1	A Model to Represent SME Networks: Structure, Governance and Interactions with Markets .....	117
	<i>A. Villa and D. Antonelli</i>	
4.2	A SME Networks Model for Performance Analysis Through Comparison.....	122
	<i>D. Antonelli and A. Villa</i>	
4.3	A Formal Model for SME Networks Performance Understanding .....	126
	<i>D. Antonelli and A. Villa</i>	
4.4	An Example of Cluster Analysis .....	129
	<i>B. Caroleo and T. Taurino</i>	
4.4.1	Basic Concepts for SME Network Performance Analysis .....	136
4.5	The SME Network Analysis Methodology .....	136
	<i>D. Antonelli, B. Caroleo and T. Taurino</i>	
	References.....	144
5	<b>The CODESNET Website: a Portal Supporting SME Network Innovation.....</b>	145
5.1	The CODESNET Website Structure .....	145
	<i>T. Taurino</i>	
5.1.1	The CODESNET Web Portal.....	146
5.1.2	Virtual Laboratory.....	150
5.1.3	Virtual Library .....	155

5.2	CODESNET: a Bridge Between Academia and Industry.....	157
	<i>B. Caroleo and T. Taurino</i>	
5.3	Analysing and Comparing SME Networks Through the CODESNET Website .....	163
	<i>D. Antonelli and T. Taurino</i>	
5.3.1	SWOT Analysis of the Networks.....	164
5.3.2	Principal Component Analysis of the Innovation Level Inside SME Networks .....	168
	References.....	179
	<b>Authors .....</b>	181
	<b>Index .....</b>	187