## Overview

1	Introduction	1
2	Economic concepts	15
3	Information technology concepts	61
4	The value web model	99
5	Value web case studies	131
6	Conclusions	183
App	pendix – Website addresses	199
Ref	erences	201

# **Table of contents**

Pre	face			ii
Abs	tract			,
Ove	rview			vii
Tab	le of co	ntents		ix
List	s of fig	ures, tab	les, and abbreviations	xiii
1	Introduction			
	1.1	Backg	ground of the study	3
	1.2	Motiv	vation of the research	5
	1.3	Resea	rch objectives, initial postulates,	
		and no	otes on research methodology	8
	1.4	Furthe	er considerations	12
	1.5	Thesis	s outline	14
2	Economic concepts			15
	2.1	Marke	ets	15
		2.1.1	On markets	16
		2.1.2	Market success factors	20
		2.1.3	Market failures	21
		2.1.4	Markets as driving forces for standardization	23
		2.1.5	Markets as governance structures	25
	2.2	Hierarchies		26
		2.2.1	On hierarchies	27
		2.2.2	The nature of the firm	30
		2.2.3	The boundaries of a firm	32
		2.2.4	Core capabilities and value chains	34
		2.2.5	The firm as governance structure	38
	2.3			39
		2.3.1	On networks	40
		2.3.2	Inter-firm cooperation and networking	42
		2.3.3	Vertical integration	43
		2.3.4	Marketing channels: kinds of networks	45
		2.3.5	Networks as governance structure	49

2.4	Theorie	es of organization	50
	2.4.1	Principal-agent theory	50
	2.4.2	Property rights theory	51
	2.4.3	Transaction cost economics	52
	2.4.4	Contracting and trust	54
	2.4.5	Markets, hierarchies, and networks as governance structures	56
2.5	Summa	ary	59
Infor	mation	technology concepts	61
3.1	Inform	nation, communication, and technology	61
	3.1.1	What is information and communication?	62
	3.1.2	What are information and communication technologies?	65
	3.1.3	Open electronic networks: the Internet	67
	3.1.4	The impact of information technology	69
	3.1.5	Some distinctive features of the information economy	71
3.2	Inform	nation technology and interorganizational systems	72
	3.2.1	Networks and coordination theory revisited	73
	3.2.2	On interorganizational systems	74
	3.2.3	Virtual organizations and communities	75
	3.2.4	Disintermediation and intermediation	79
	3.2.5	The effects of electronic markets	
		on traditional marketing channels	81
3.3	Electro	onic markets and business media	83
	3.3.1	Electronic markets	83
	3.3.2	Doing business electronically	85
	3.3.3	Electronic commerce	88
	3.3.4	The media concept applied: business media	89
	3.3.5	The digital economy that is taking shape	90
3.4	Modul	larization and IT-based business models	91
	3.4.1	The modularization of business	92
	3.4.2	On value chains, shops and networks	93
	3.4.3	Network-based businesses	96
	3.4.4	The economic rational for modularization	97
	3.4.5	A new logic of value creation	97
3.5	Summ	nary	98
	2.5 Infor 3.1 3.2 3.3	2.4.1 2.4.2 2.4.3 2.4.4 2.4.5 2.5 Summ  Information 3.1 Inform 3.1.1 3.1.2 3.1.3 3.1.4 3.1.5 3.2 Inform 3.2.1 3.2.2 3.2.3 3.2.4 3.2.5  3.3 Electro 3.3.1 3.3.2 3.3.3 3.3.4 3.3.5 3.4 Modul 3.4.1 3.4.2 3.4.3 3.4.4 3.4.5	2.4.1 Principal-agent theory 2.4.2 Property rights theory 2.4.3 Transaction cost economics 2.4.4 Contracting and trust 2.4.5 Markets, hierarchies, and networks as governance structures 2.5 Summary  Information technology concepts 3.1 Information, communication, and technology 3.1.1 What is information and communication? 3.1.2 What are information and communication technologies? 3.1.3 Open electronic networks: the Internet 3.1.4 The impact of information technology 3.1.5 Some distinctive features of the information economy 3.2 Information technology and interorganizational systems 3.2.1 Networks and coordination theory revisited 3.2.2 On interorganizational systems 3.2.3 Virtual organizations and communities 3.2.4 Disintermediation and intermediation 3.2.5 The effects of electronic markets on traditional marketing channels 3.3 Electronic markets and business media 3.3.1 Electronic markets and business media 3.3.2 Doing business electronically 3.3.3 Electronic commerce 3.3.4 The media concept applied: business media 3.3.5 The digital economy that is taking shape 3.4 Modularization and IT-based business models 3.4.1 The modularization of business 3.4.2 On value chains, shops and networks 3.4.3 Network-based businesses 3.4.4 The economic rational for modularization 3.4.5 A new logic of value creation

Table of contents xi

4	The	value w	eb model	99
	4.1	Building blocks of a value web		99
		4.1.1	Markets	100
		4.1.2	Hierarchies	101
		4.1.3		103
		4.1.4	Information technology	104
		4.1.5	New-old business models	106
	4.2	The b	locks combined: the value web model	108
		4.2.1	Bundle value with a value web	109
		4.2.2	Step 1: Cherry-picking of existing value systems	112
		4.2.3	Step 2: An intermediary of value - the value web broker	113
		4.2.4	Step 3: Close to the customer	115
		4.2.5	Step 4: Alliances with partners	118
	4.3	Distin	ctive features of the model	120
		4.3.1	The value web approach and theories of organization	120
		4.3.2	Value web broker: a business	
			model for what sort of circumstances?	122
		4.3.3	Close to the final customer	123
		4.3.4	A mix of vertical integration and market coordination	124
		4.3.5	Forces that hold a value web together	125
	4.4	Differ	ences and analogies with other models configuring value	126
		4.4.1	Differences to value chains and systems	127
		4.4.2	Differences to value shops	127
		4.4.3	Differences to value networks	128
		4.4.4	Differences with virtual organizations	128
		4.4.5	Value webs: a temporary or lasting organizational form?	129
	4.5	Summ	nary	130
5	Valu	alue web case studies		
	5.1	Case 1	- The picture of automotive distribution	131
		5.1.1	Introduction: cherry-picking of	
			existing value systems (step 1)	131
		5.1.2	Automotive industry: the world's	
			largest manufacturing business	132
		5.1.3	Automotive distribution channels	133
		5.1.4	Emerging automotive value web brokers	137
		5.1.5	Conclusions	145

xii Value Webs

	5.2	Case 2	- The democratization of capital	146
		5.2.1	Introduction: the value web broker (step 2)	146
		5.2.2	Financial industry: the retail	
			branch is in for some democracy	147
		5.2.3	The Internet and the financial industry	148
		5.2.4	Value web brokers in retail banking	150
		5.2.5	Conclusions	152
	5.3	Case 3	B - Birth of a salesman: the digital retailer	154
		5.3.1	Introduction: close to the customer (step 3)	154
		5.3.2	Retail industry: the world's a shop	154
		5.3.3	Value webs in digital retailing	156
		5.3.4	Value web brokers: category killers and new entrants	157
		5.3.5	Conclusions	161
	5.4	Case 4	- A travel odyssey: the distribution of tourism products	163
		5.4.1	Introduction: securing backward integration (step 4)	163
		5.4.2	Tourism industry: keeping the world on the move	164
		5.4.3	Value webs in the distribution of tourism products	165
		5.4.4	Value web brokers provide custom-tailored holidays	169
		5.4.5	Conclusions	173
	5.5	Case 5	5 – Bonfire of the vanities:	
			limited change in the media industry	175
		5.5.1	Introduction: a value system unchanged (so far)	175
		5.5.2	The media industry: existing oligopolies play closed shop	176
		5.5.3	The Internet and the media industry	177
		5.5.4	Value web brokers in the media industry	180
		5.5.5	Conclusions	182
6	Conc	lusions		183
	6.1	Analys	sis of the cases and the initial assumptions	184
	6.2	Summ	ary conclusions	188
	6.3	Insight	ts for practice	193
	6.4	Insight	ts for theory	195
	6.5	Close	and prospects	196
Appe	ndix –	Website	addresses	199
Refe	rences			201

# Lists of figures, tables, and abbreviations

# List of figures

rigure 2-1:	The generic value chain	3′
Figure 2-2:	The value system	31
Figure 2-3:	Modes of coordination as a	
	function of transaction costs and asset specificity	53
Figure 2-4:	Markets, hierarchies, and networks	57
Figure 3-1:	Five levels of IT-induced reconfiguration	71
Figure 3-2:	Reference model for electronic markets	86
Figure 3-3:	Architecture of a medium	89
Figure 4-1:	Electronic market platform	100
Figure 4-2:	Hierarchical relations in an open electronic network	102
Figure 4-3:	Networks of organizations	103
Figure 4-4:	Information technology platform	105
Figure 4-5:	Classification of Internet business models	107
Figure 4-6:	The value web model	111
Figure 4-7:	Cherry-picking of existing value chains	113
Figure 4-8:	The value web broker	115
Figure 4-9:	The value web broker: close to the customer	117
Figure 4-10:	Alliances with partners - securing backward integration	119
Figure 5-1:	Emerging distribution system in the auto industry	134
Figure 5-2:	Competitive forces in car distribution	137
Figure 5-3:	IT enabled strategy elements	142
Figure 5-4:	The car dealer evolves into a Mobility Adviser	144
Figure 5-5:	Emerging distribution system in retail	156
Figure 5-6:	Emerging distribution system	
	in the tourism industry (institutional view)	165
Figure 5-7:	Functional view of the travel and tourism industry	167
Figure 5-8:	Competitive forces in the travel	.57
	and tourism industry regarding CRS	168
Figure 5-9:	Value web broker for travel services	170

## List of tables

Table 3-1:	Overview of alternative value configurations	94
Table 5-1:	Critical success factors of automotive value web brokers	139
Table 5-2:	Functions and roles of a traditional	
	distribution chain and an automotive value web broker	140
Table 6-1:	Main findings of the case studies	186
Table 6-2:	Comparative contributions to the value web model	187
Table 6-3:	Summary of findings	192