

Summary of Contents

1 Introduction	1
1.1 Rationale	1
1.2 Objective of the research	2
1.3 Research methodology	4
1.4 Structure of the argument.....	11
2 Conceptual Framework	13
2.1 Paradigms in strategic management research.....	13
2.2 Approaches to the theory of industrial location	29
2.3 An activity-based approach for studying strategic management in the global air transport industry	44
3 The Global Air Transport Industry	50
3.1 General background of the air transport industry.....	50
3.2 Economics of demand	81
3.3 Economics of supply	94
3.4 Industry chain dynamics.....	113
4 Business Models in the Global Air Transport Industry	133
4.1 A critical revision of the strategy and business models concepts.....	133
4.2 Cost-leadership strategies: The no-frill, point-to-point operators	135
4.3 Differentiation strategies: The network operators	146
4.4 Focus strategies: The niche players	154
4.5 Risky strategies: The stuck-in-the-middle carriers	164
4.6 Challenges and Outlook	170
5 The New Level Playing Field	177
5.1 Industry paradigm shifts	177
5.2 Today's playing field: An alliance frenzy	187
5.3 Tomorrow's playing field: Industry consolidation and management of multinational networks	203
6 Closing Remarks	308
6.1 Issues of environmental sustainability	308
6.2 Business model innovation	310
6.3 Conclusions and suggestions for further research.....	325

Table of Contents

Summary of Contents	i
Table of Contents	iii
List of Figures	x
List of Tables	xii
List of Abbreviations	xiii
1 Introduction.....	1
1.1 Rationale	1
1.2 Objective of the research	2
1.2.1 Theoretical objective	2
1.2.2 Practical objective	3
1.2.3 Combining theoretical and practical objectives	3
1.3 Research methodology	4
1.3.1 Scientific theory	4
1.3.2 Research approach.....	5
1.3.2.1 Qualitative research.....	5
1.3.2.2 Development of illustrative industry analysis theory	6
1.3.3 Research design and methods	7
1.3.3.1 Design: Case study research.....	7
1.3.3.2 Methods: Interviews and desk research.....	9
1.3.4 Summary.....	10
1.4 Structure of the argument.....	11
2 Conceptual Framework	13
2.1 Paradigms in strategic management research	13
2.1.1 Dimensions of management.....	13
2.1.2 Early development of strategic management	14
2.1.2.1 The classical works of Chandler, Ansoff and Learned et al.	14
2.1.2.2 Synthesis and influence upon strategic management.....	16

2.1.3	The IO-economics paradigm.....	16
2.1.3.1	The S-C-P framework and the work of Porter.....	16
2.1.3.2	Strategic groups analysis.....	19
2.1.3.3	Competitive dynamics.....	20
2.1.3.4	Synthesis and influence upon strategic management.....	21
2.1.4	The organisational economics paradigm.....	22
2.1.4.1	Transaction costs economics.....	22
2.1.4.2	Agency theory.....	23
2.1.4.3	Synthesis and influence upon strategic management.....	24
2.1.5	The paradigm of resources and capabilities.....	24
2.1.5.1	The resource-based view of the firm.....	25
2.1.5.2	The knowledge-based view of the firm.....	27
2.1.5.3	Synthesis and influence upon strategic management.....	27
2.1.6	The future direction: Synthesis of strategic management paradigms.....	28
2.2	Approaches to the theory of industrial location.....	29
2.2.1	Early developments of location theory.....	29
2.2.2	General business administration approach.....	30
2.2.2.1	Neo-classical, normative industrial location theory.....	30
2.2.2.2	Behavioural approach.....	31
2.2.2.3	Structural approach.....	32
2.2.3	General economic theory approach.....	33
2.2.4	New dynamic location theories.....	34
2.2.4.1	Porter's concept of national competitiveness.....	34
2.2.4.2	Clusters and innovative milieus.....	37
2.2.5	Synthesis.....	40
2.2.5.1	Implications for strategic management.....	41
2.2.5.2	Locational considerations for air transport.....	42
2.3	An activity-based approach for studying strategic management in the global air transport industry.....	44
2.3.1	Benefits of an activity-based approach.....	45
2.3.1.1	Focus on a close link to strategy.....	45
2.3.1.2	Scope dimension: Individual firm and industry at large.....	46
2.3.1.3	Locational dimension: Across national and organisational borders.....	47
2.3.1.4	Competitive dimension: Own markets on all levels along the industry value chain.....	48
2.3.2	Synthesis: A suitable reference framework for the development of illustrative industry analysis.....	49

3 The Global Air Transport Industry	50
3.1 General background of the air transport industry	50
3.1.1 Modes of air transport.....	51
3.1.1.1 Scheduled passenger services.....	51
3.1.1.2 Charter passenger services.....	52
3.1.2 Macro environment of the air transport industry.....	53
3.1.2.1 Economic factors.....	53
3.1.2.2 Social factors	56
3.1.2.3 Technological factors.....	59
3.1.2.4 Environmental factors.....	63
3.1.3 Regulatory context of the air transport industry.....	64
3.1.3.1 Arguments for regulation and intervention.....	65
3.1.3.2 Guiding principles of the Chicago System.....	65
3.1.3.3 The spirit of liberalisation	67
3.1.4 Influence upon competition and industry development	68
3.1.4.1 Perspectives for the future.....	70
3.1.4.2 The likely path of liberalisation.....	79
3.2 Economics of demand	81
3.2.1 Variables of demand	81
3.2.2 Rate of growth and cyclicity.....	84
3.2.3 Segments of demand and differentiability of products.....	86
3.2.4 Availability of substitutes.....	90
3.2.4.1 High-speed railways.....	90
3.2.4.2 Telecommunication technologies	93
3.3 Economics of supply	94
3.3.1 Product characteristics.....	94
3.3.1.1 Inseparability of production and consumption	94
3.3.1.2 Discreteness of seat supply	94
3.3.1.3 Marginal economies of scale.....	95
3.3.1.4 Homogeneity of the basic product	96
3.3.2 Cost issues.....	97
3.3.2.1 Fixed and variable cost components.....	98
3.3.2.2 Economies of density and scope.....	99
3.3.2.3 Entry and exit barriers.....	101

3.3.3	Concentration through alliances	103
3.3.3.1	Code-sharing.....	103
3.3.3.2	Franchising	106
3.3.3.3	Capacity provision and wet-lease agreements.....	109
3.3.3.4	Frequent traveller programmes.....	110
3.3.3.5	Effects on competition	111
3.4	Industry chain dynamics.....	113
3.4.1	Bargaining powers of suppliers.....	113
3.4.1.1	Airframe suppliers.....	113
3.4.1.2	Powerplant suppliers	115
3.4.1.3	Airport services suppliers	116
3.4.1.4	Air traffic management suppliers	118
3.4.1.5	Suppliers of labour	120
3.4.1.6	Suppliers of finance	121
3.4.1.7	Distribution partners.....	123
3.4.2	Bargaining powers of customers	124
3.4.3	Distribution characteristics	125
3.4.3.1	Importance of indirect distribution	126
3.4.3.2	Potential of direct distribution	127
3.4.3.3	Advance of ticketless travel	129
3.4.3.4	Contemporary issues and future challenges	130
4	Business Models in the Global Air Transport Industry	133
4.1	A critical revision of the strategy and business models concepts.....	133
4.2	Cost-leadership strategies: The no-frill, point-to-point operators	135
4.2.1	Value proposition: Competitively from A to B without frills	136
4.2.2	Economics of point-to-point operators.....	137
4.2.2.1	Input costs	137
4.2.2.2	Process design.....	140
4.2.3	Traits of a successful cost-leadership strategy and inherent challenges..	142
4.3	Differentiation strategies: The network operators	146
4.3.1	Value proposition: From anywhere to everywhere at all times	147
4.3.2	Economics of hub-and-spoke networks.....	147
4.3.2.1	Hub dominance.....	150
4.3.2.2	Dichotomy of supply and demand.....	151
4.3.2.3	Infrastructural impediments	151
4.3.3	Traits of a successful differentiation strategy and inherent challenges....	153

4.4 Focus strategies: The niche players	154
4.4.1 Focus by service segmentation	155
4.4.1.1 Value proposition: In style to your favourite destinations	155
4.4.1.2 Risk and rewards	156
4.4.2 Focus by geographical segmentation	158
4.4.2.1 Value proposition: In partnership from our airport to key business centres	158
4.4.2.2 Risk and rewards	158
4.4.3 Focus by input-cost segmentation.....	160
4.4.3.1 Value proposition: Low-cost air transport	161
4.4.3.2 Risk and rewards	161
4.4.4 Traits of a successful focus strategy and inherent challenges	162
4.5 Risky strategies: The stuck-in-the-middle carriers.....	164
4.5.1 Lost-in-the-middle: No cost-leadership	164
4.5.2 Stuck-in-the-middle: No critical hub-dominance	165
4.5.3 Puzzled-in-the-middle: A combination of strategies	166
4.5.4 Challenges for stuck-in-the-middle carriers.....	169
4.6 Challenges and Outlook	170
4.6.1 Strategy and business models in the praxis cosmos	171
4.6.2 Strategy and business concept innovation in the air transport industry...	174
5 The New Level Playing Field.....	177
5.1 Industry paradigm shifts	177
5.1.1 IATA Cartel.....	180
5.1.2 Regional deregulation	180
5.1.3 Global marketing alliances	183
5.1.4 Multinational networks and industry consolidation	185
5.1.5 Future consolidation of travel and transport market	186
5.2 Today's playing field: An alliance frenzy	187
5.2.1 Unprofitable growth	188
5.2.2 Fragmentation of the industry	190
5.2.3 Types of alliances.....	192
5.2.4 A Three-pronged strategy of growth.....	194
5.2.5 A Three-stage alliance evolution	197
5.2.5.1 Phase One: Revenue generation.....	198
5.2.5.2 Phase Two: Cost reduction.....	199
5.2.5.3 Phase Three: Joint-venture orientation	199
5.2.6 Issues of dissolution and long-term stability	202

5.3 Tomorrow's playing field: Industry consolidation and management of multinational networks	203
5.3.1 Paradigm shift thanks to regulatory plurilateralism	205
5.3.1.1 Guiding principles and associated issues	207
5.3.1.2 Importance and influence upon strategic management: The new level playing field.....	211
5.3.1.3 A wider perspective	212
5.3.2 The upgraded value proposition	213
5.3.3 Value wheel of a network managing carrier.....	214
5.3.3.1 Customer	212
5.3.3.1.1 Frequent traveller programme	216
5.3.3.1.2 Brand management.....	219
5.3.3.2 Development and management of a multinational network management organisation.....	222
5.3.3.2.1 Generic template of network management in a cross-organisational airline context.....	223
5.3.3.2.2 Network and capacity management	226
5.3.3.2.3 Revenue management	233
5.3.3.2.4 Partner procurement and partner management processes	236
5.3.3.3 Sales, marketing and distribution management	240
5.3.3.4 Production management of flight operations.....	242
5.3.3.4.1 Asset procurement.....	243
5.3.3.4.2 Service delivery management	245
5.3.3.4.3 Operational control management and ground operations	246
5.3.3.4.4 Asset maintenance.....	247
5.3.3.5 Customer relation management: The solid copula.....	248
5.3.3.6 Support activities.....	255
5.3.3.6.1 Investor relation management	256
5.3.3.6.2 Risk management	258
5.3.4 Mega Hubs: An efficient tool for network carriers?.....	261
5.3.4.1 Rationale behind and types of hubs.....	261
5.3.4.2 Locational factors of hubs.....	264
5.3.4.3 Challenges	268
5.3.4.3.1 Operational Impediments	268
5.3.4.3.2 Changing traffic flow parameters	270
5.3.4.3.3 Sustainability of hub locations.....	282
5.3.4.4 Outlook.....	284

5.3.5	Labour: The key challenge.....	286
5.3.5.1	Cost and productivity of labour.....	286
5.3.5.2	Employee groups and trade unions	288
5.3.5.3	Crew seniority and scope clause issues	290
5.3.5.4	Intercompany consolidation	291
5.3.6	Complexity: Addressing the weakness of networks.....	293
5.3.6.1	Network structure	295
5.3.6.2	Service policies for world-class service	296
5.3.6.3	Fleet structure.....	299
5.3.6.4	Pricing structure and distribution strategy.....	300
5.3.7	Summary.....	302
6	Closing Remarks	308
6.1	Issues of environmental sustainability	308
6.2	Business model innovation	310
6.2.1	Business Concept Innovation	311
6.2.2	Business Concept Progression	312
6.2.2.1	Relation to general aviation	313
6.2.2.1.1	Background on general aviation	313
6.2.2.1.2	Customers' value and rewards	316
6.2.2.2	Opportunities and risks	318
6.2.2.3	Likely arrangements.....	321
6.3	Conclusions and suggestions for further research.....	325
	Appendix 1: Bibliography.....	331
	Appendix 2: List of Interview Partners	382

List of Figures

Figure 2-1: The Diamond of National Competitiveness.....	35
Figure 2-2: The generic value wheel	49
Figure 3-1: The size of the globalised area will increase nearly twelvefold by 2027	54
Figure 3-2: Total population of selected countries in 2050 aged 60 or older.....	56
Figure 3-3: Determinants of Airline Demand.....	82
Figure 3-4: Airline Declining Yield and Traffic Growth Trends	83
Figure 3-5: Major traffic flows between regions in 2001.....	84
Figure 3-6: Annual net profit or loss as a percentage of total revenue of ICAO member airlines, 1970–2003.....	85
Figure 3-7: Belobaba’s Airline Market Demand Segmentation Framework.....	87
Figure 3-8: Total travel time comparison in the London to Paris market.....	91
Figure 3-9: Airline booking percentage in direct distribution.....	130
Figure 4-1: Ryanair’s cost advantage.....	139
Figure 4-2: O&D markets in a hub-and-spoke network.....	148
Figure 4-3: The S-curve.....	150
Figure 5-1: Industry Paradigm Shifts: Staying in touch with the times	177
Figure 5-2: Industry Paradigm Shifts: Evolution of the Global Air Transport Industry ...	179
Figure 5-3: World airlines’ net profit margin in per cent 1947–2000	188
Figure 5-4: Underlying passenger demand against traffic and capacity.....	190
Figure 5-5: Forms of network-related airline alliances	193
Figure 5-6: Value wheel of a network managing carrier.....	215
Figure 5-7: Network level for airline management.....	225
Figure 5-8: Generic profit and loss overview of alliance partner airlines.....	228

Figure 5-9: The global market for computer reservation systems	255
Figure 5-10: The airlines' risk cosmos	259
Figure 5-11: Different types of hubs	263
Figure 5-12: Average airport taxes per turnaround for one B-747-400, one A-300-600 and six B-737-400	265
Figure 5-13: Top ten city-pairs in 2019 suitable for A-380 point-to-point operations	275
Figure 5-14: Projected major traffic flows in 2020	277
Figure 5-15: Profitable and intelligent competition alongside no-frills carriers	294
Figure 6-1: Fractional Ownership Growth in the United States	318
Figure 6-2: Return on capital across the industry chain	326

List of Tables

Table 3-1: American Airlines' fare structure in the BOS-LAX market.....	89
Table 3-2: Traffic and number share of global marketing alliances	112
Table 3-3: Government shareholding in international airlines as of January 2000.....	122
Table 3-4: Breakdown of airline distribution costs, 1996	126
Table 3-5: Distribution costs via internet sales compared to current sales outlets	128
Table 4-1: Comparison of Boeing 737-300 operating costs, United States carriers.....	138
Table 4-2: EasyJet's yield management: London-Zurich, October to November 1999 .	141
Table 4-3: Ryanair's proclaimed air fare savings	142
Table 4-4: Low-cost carriers in Europe: passenger operations 2000	145
Table 4-5: Key Financial Indicators for selected U.S. Airlines, 1989–1999	174
Table 5-1: Airline Business Top 150 airline groups 2001: Analysis by type	191
Table 5-2: Airline Business Top 150 airline groups 2001: Analysis by margins	192
Table 5-3: Business process cost-savings estimate for the joint-venture oriented alliance template	200
Table 5-4: Top 20 airline group financial rankings: 2000 in comparison to 1990	204
Table 5-5: Formula for earning Medallion Qualification Miles incorporating the money spent principle	249
Table 5-6: Mileage Comparison of two frequent flyer types	251
Table 5-7: Trips required to achieve elite status with Delta SkyMiles.....	252
Table 5-8: KLM service fees in Norway, Sweden and Denmark.....	301
Table 6-1: Traffic share of different transportation modes	319