



UCAM
UNIVERSIDAD CATÓLICA
SAN ANTONIO

JURÍDICAS Y DE LA EMPRESA

Ciencias Sociales Jurídicas y de la Empresa

**The Impact of Technological Advancements on
Intermediaries in the Motion Picture Industry**

Author:

Florian Wrobel

Directores:

Prof. Dr. Dr. Peter Kürble

Dra. M^a Mercedes Carmona Martínez

Munich, February 2016

**AUTHORIZATION OF THE DIRECTORS OF THE THESIS FOR
SUBMISSION**

Prof. Dr. Dr. Peter Kürble and Dra. M^a Mercedes Carmona Martínez as, Directors of the Doctoral Thesis “The Impact of Technological Advancements on Intermediaries in the Motion Picture Industry” by Mr. Florian Wrobel in the Departamento de Ciencias Sociales, Jurídicas y de la Empresa, authorize the submission, since it has the conditions necessary for the defense.

Sign, to comply with the Royal Decrees 99/2011, 1393/2007, 56/2005 y 778/98, in Murcia, 15 February 2016.



Prof. Dr. Dr. Peter Kürble

Dra. M^a Mercedes Carmona Martínez

ACKNOWLEDGEMENTS

A number of people have been directly and indirectly involved in the conception and development of this research project. At this point, I would like to thank them all very much for their help and support. Without them, this dissertation would not exist.

First, I would like to thank my supervisors Prof. Dr. Dr. Kürble and Dra. M^a Mercedes Carmona Martínez. I am truly grateful for their professional and personal support during the creation of this dissertation as well as for the great amount of freedom I was given to pursue my scientific interest. Additionally, I am also particularly thankful to Prof. Dr. Strauß for organizing the 3rd FOM Congress of Media Economics and providing me with such a generous time slot to discuss my research results with the participants. The fruitful discussions during the congress played an important part in finalizing the analysis approach.

I would also like to thank a number of people, who in addition to their direct support, mainly influenced and encouraged me indirectly. I am particular grateful to Scott Rosenmeier for reviewing my final manuscript for errors and encouraging me to not give up on the English language. I also would like to thank Sebastian Szewczyk, who introduced me to the exciting world of film festivals, and Carsten Ehlers, who was always available for discussions and kept pushing me to the finish line. Finally, I would also like to express my gratitude to my parents Irmgard and Jürgen Wrobel. I am very grateful for their love, support and guidance during this thrilling, but also tiring time. This dissertation is therefore dedicated to them.

TABLE OF CONTENTS

<u>AUTHORIZATION OF THE DIRECTORS OF THE THESIS FOR SUBMISSION.....</u>	<u>III</u>
<u>ACKNOWLEDGEMENTS</u>	<u>V</u>
<u>TABLE OF CONTENTS.....</u>	<u>VII</u>
<u>LIST OF FIGURES</u>	<u>XIII</u>
<u>LIST OF TABLES</u>	<u>XV</u>
<u>LIST OF ABBREVIATIONS</u>	<u>XIX</u>
<u>1 INTRODUCTION.....</u>	<u>21</u>
1.1 PROBLEM DEFINITION.....	21
1.2 RESEARCH OBJECTIVES.....	23
1.3 DISSERTATION STRUCTURE AND OUTLINE.....	27
1.4 RESEARCH METHODS.....	28
<u>2 INDUSTRIAL ECONOMICS AND INTERMEDIATION</u>	<u>33</u>
2.1 INDUSTRIAL ECONOMICS – THE THEORY OF THE FIRM.....	34
2.1.1 NEOCLASSICAL VIEW ON THE FIRM	37
2.1.2 NEW INSTITUTIONAL ECONOMICS	40
2.1.2.1 Transaction Cost Theory	45
2.1.2.2 Property Rights Approach.....	48
2.1.2.3 Principal Agent Theory	50
2.1.2.4 Comparison.....	53
2.1.2.5 Summary	55
2.1.3 INFORMATION- AND COMPETENCE PERSPECTIVE	58
2.1.3.1 Information Perspective	58

2.1.3.2	Competence Perspective	60
2.1.3.3	Summary	64
2.1.4	LIMITATIONS OF THE THEORY OF THE FIRM.....	64
2.1.5	SUMMARY	65
2.2	INTERMEDIATION	67
2.2.1	TRADE RESEARCH ON INTERMEDIATION	70
2.2.2	MARKETING RESEARCH ON INTERMEDIATION	73
2.2.3	FINANCE INDUSTRY RESEARCH ON INTERMEDIATION	77
2.2.4	REAL ESTATE INDUSTRY RESEARCH ON INTERMEDIATION	80
2.2.5	MEDIA INDUSTRY RESEARCH ON INTERMEDIATION	81
2.2.6	CROSS-INDUSTRY RESEARCH ON INTERMEDIATION	83
2.2.7	SUMMARY	88
2.3	SUMMARY	90

3 DEVELOPMENT OF THE INTERMEDIATION ANALYSIS APPROACH 93

3.1	STEP 1: RELEVANT INDUSTRY CHARACTERISTICS	95
3.1.1	PRODUCT CHARACTERISTICS	95
3.1.2	DEMAND CHARACTERISTICS.....	96
3.1.3	VALUE ADDED STRUCTURE AND MARKET PARTICIPANTS	96
3.1.4	SUMMARY	100
3.2	STEP 2: ACTIVITIES OF INTERMEDIARIES	100
3.2.1	INTERMEDIATION COST FRAMEWORK.....	102
3.2.2	ACTIVITIES ON THE INFORMATIONAL LEVEL.....	104
3.2.2.1	Identification.....	104
3.2.2.2	Selection.....	106
3.2.2.3	Inspection and Classification.....	107
3.2.2.4	Negotiation Support	108
3.2.2.5	Information Processing	108
3.2.2.6	Monitoring and Reporting.....	109
3.2.2.7	Summary	109
3.2.3	ACTIVITIES ON THE LEGAL-FINANCIAL LEVEL.....	111
3.2.3.1	Capital Procurement.....	112
3.2.3.2	Licensing / Procurement and Sales.....	112
3.2.3.3	Payment Processing.....	113
3.2.3.4	Contract Adjustments.....	113
3.2.3.5	Warranty Processing.....	113
3.2.3.6	Summary	114

3.2.4	ACTIVITIES ON THE PHYSICAL LEVEL	115
3.2.4.1	Aggregation	115
3.2.4.2	Transformation	116
3.2.4.3	Presentation	118
3.2.4.4	Reproduction	119
3.2.4.5	Distribution / Repair Processing	120
3.2.4.6	Preservation	121
3.2.4.7	Summary	122
3.2.5	INTERMEDIATION ACTIVITY ANALYSIS TOOL.....	123
3.2.6	SUMMARY	127
3.3	STEP 3: THE VALUE OF INTERMEDIARIES	128
3.3.1	INCREASED TRANSACTION EFFICIENCY	132
3.3.1.1	Baligh-Richartz-Effect and Coordination	133
3.3.1.2	Standardization	135
3.3.1.3	Scale Effects.....	136
3.3.1.4	Specialization and Experience.....	136
3.3.1.5	Risk Spreading, Risk Diversification and Risk Avoidance	137
3.3.1.6	Lower Capital Cost of the Intermediary	138
3.3.1.7	Summary	139
3.3.2	INCREASED PRODUCTION- AND LOGISTIC EFFICIENCY.....	140
3.3.2.1	Inter-company Coordination / Market Research.....	141
3.3.2.2	Logistics.....	142
3.3.2.3	Storage	142
3.3.2.4	Summary	143
3.3.3	INCREASED TRANSACTION RESULT	144
3.3.3.1	Transaction Efficiency	144
3.3.3.2	Market Power Reduction / Effective Information Processing	146
3.3.3.3	Summary	152
3.3.4	INCREASED PRODUCTION RESULT	153
3.3.4.1	Increased Quality Pressure	154
3.3.4.2	Improved Identification of Customer Needs	154
3.3.4.3	Summary	154
3.3.5	CONFLICTS BETWEEN CATEGORIES.....	155
3.3.5.1	Convenience vs. Intermediation Cost	155
3.3.5.2	Lower Transaction Cost vs. High Effectiveness of Intermediation	156
3.3.5.3	Transaction Efficiency vs. Production Efficiency and -Effectiveness	157
3.3.5.4	Transaction Efficiency vs. Parallel Intermediation Structures.....	157
3.3.6	EFFICIENCY AND EFFECTIVENESS DISADVANTAGES	158
3.3.6.1	High Market Power of the Intermediary	159

3.3.6.2	Insufficient Transfer of Knowledge and Skills.....	160
3.3.6.3	Duplication of Activities	161
3.3.6.4	Incentive Problems.....	161
3.3.6.5	Hold-up Risk.....	162
3.3.7	INTERMEDIATION VALUE ANALYSIS TOOL.....	163
3.3.8	SUMMARY	166
3.4	STEP 4: INCENTIVES AND DISINCENTIVES TO COOPERATE.....	167
3.4.1	INCENTIVES TO COOPERATE WITH INTERMEDIARIES	169
3.4.1.1	Increased Transaction- and Production Efficiency/-Effectiveness	170
3.4.1.2	Higher Degree of Flexibility / Lower Market Exit Cost.....	170
3.4.1.3	Improved Price Differentiation / Discrimination	171
3.4.1.4	Faster Market Entry and Higher Market Penetration.....	172
3.4.1.5	Improved Utilization	172
3.4.1.6	Summary	173
3.4.2	DISINCENTIVES TO COOPERATE WITH INTERMEDIARIES	173
3.4.2.1	Market Power of the Intermediary	174
3.4.2.2	Rationing and Discrimination	175
3.4.2.3	Strengthening Potential Competition.....	176
3.4.2.4	Disclosing of sensitive Information	177
3.4.2.5	Limited Tax Reductions / Avoidance of Regulation	177
3.4.2.6	Cannibalization of Direct Sales	178
3.4.2.7	Summary	178
3.4.3	INTERMEDIATION INCENTIVES ANALYSIS TOOL.....	179
3.4.4	SUMMARY	182
3.5	SUMMARY.....	183
4	<u>EX-POST ANALYSIS OF THE MOTION PICTURE INDUSTRY</u>	<u>189</u>
4.1	STEP 1: ANALYSIS OF RELEVANT INDUSTRY CHARACTERISTICS	191
4.1.1	DEMARCATIION.....	192
4.1.2	PRODUCT CHARACTERISTICS	194
4.1.2.1	Product Segments	195
4.1.2.2	Windowing	197
4.1.2.3	Blockbusters vs. Niche Releases.....	201
4.1.2.4	Innovation and Variation.....	214
4.1.2.5	Summary	218
4.1.3	DEMAND CHARACTERISTICS.....	219
4.1.3.1	Admission Cycles.....	220

4.1.3.2	Global Box Office	221
4.1.3.3	Domestic Box Office, Admissions and Ticket Prices.....	223
4.1.3.4	Foreign Box Office Importance	225
4.1.3.5	Summary	228
4.1.4	VALUE ADDED STRUCTURE AND MARKET PARTICIPANTS	229
4.1.4.1	Value System of the Motion Picture Industry.....	230
4.1.4.2	Development and Production Stage.....	236
4.1.4.3	Licensing, Distribution and Marketing Stage	244
4.1.4.4	Exploitation and Consumption Stage	246
4.1.4.5	Major Studio Sector.....	247
4.1.4.6	Summary	251
4.1.5	SUMMARY	252
4.2	ANALYSIS OF INTERMEDIARIES.....	256
4.2.1	TALENT AGENCIES.....	256
4.2.1.1	Step 2: Activities of Talent Agencies	260
4.2.1.2	Step 3: Value of Talent Agencies.....	263
4.2.1.3	Step 4: Incentives to cooperate with Talent Agencies.....	267
4.2.1.4	Summary	270
4.2.2	SALES AGENCIES	272
4.2.2.1	Step 2: Activities of Sales Agencies.....	278
4.2.2.2	Step 3: Value of Sales Agencies	281
4.2.2.3	Step 4: Incentives to cooperate with Sales Agencies	284
4.2.2.4	Summary	287
4.2.3	FESTIVALS	289
4.2.3.1	Step 2: Activities of Festivals	294
4.2.3.2	Step 3: Value of Festivals.....	295
4.2.3.3	Step 4: Incentives to cooperate with Festivals.....	297
4.2.3.4	Summary	298
4.2.4	DISTRIBUTORS	300
4.2.4.1	Step 2: Activities of Distributors	306
4.2.4.2	Step 3: Value of Distributors.....	309
4.2.4.3	Step 4: Incentives to cooperate with Distributors.....	312
4.2.4.4	Summary	315
4.2.5	LABORATORIES / DCDC	316
4.2.5.1	Step 2: Activities of Laboratories / DCDC	323
4.2.5.2	Step 3: Value of Laboratories / DCDC.....	328
4.2.5.3	Step 4: Incentives to cooperate with Laboratories / DCDC.....	331
4.2.5.4	Summary	333
4.2.6	CINEMA OPERATORS	335

4.2.6.1	Step 2: Activities of Cinema Operators	341
4.2.6.2	Step 3: Value of Cinema Operators	344
4.2.6.3	Step 4: Incentives to cooperate with Cinema Operators.....	345
4.2.6.4	Summary	347
4.2.7	VIDEO STORES	348
4.2.7.1	Step 2: Activities of Video Stores	351
4.2.7.2	Step 3: Value of Video Stores.....	354
4.2.7.3	Step 4: Incentives to cooperate with Video Stores.....	355
4.2.7.4	Summary	356
4.2.8	TELEVISION OPERATORS.....	357
4.2.8.1	Step 2: Activities of Television Operators.....	362
4.2.8.2	Step 3: Value of Television Operators	364
4.2.8.3	Step 4: Incentives to cooperate with Television Operators	365
4.2.8.4	Summary	367
4.2.9	DIGITAL DISTRIBUTORS	368
4.2.9.1	Step 2: Activities of Digital Distributors	373
4.2.9.2	Step 3: Value of Digital Distributors.....	375
4.2.9.3	Step 4: Incentives to cooperate with Digital Distributors.....	376
4.2.9.4	Summary	378
4.2.10	SUMMARY	379
4.3	IMPLICATIONS AND CRITICISM	381
4.4	SUMMARY	386
5	<u>SUMMARY AND OUTLOOK.....</u>	<u>391</u>
5.1	SUMMARY.....	391
5.2	OUTLOOK.....	397
	<u>REFERENCES</u>	<u>403</u>

LIST OF FIGURES

Fig.1: Analysis Steps, Tools and Practical Research Questions	25
Fig.2: Research Areas influencing the Theory of the Firm	36
Fig.3: Functions of the Trade	73
Fig.4: Contact Reduction through Intermediaries	84
Fig.5: IDR-Cycle.....	87
Fig.6: Steps of the Intermediation Analysis Approach	93
Fig.7: Common Practice in the Visualization of Value Added Structure.....	98
Fig.8: Enhanced Value System Model	99
Fig.9: Categories of Value	130
Fig.10: Efficiency Gain through Intermediation	132
Fig.11: Transaction Efficiency and the Number of Transactions.....	145
Fig.12: Efficiency and Effectiveness Disadvantages of Intermediation.....	159
Fig.13: Analysis Steps, -Tools and -Guidance	184
Fig.14: Sectors of the Media Industry	193
Fig.15: Product Segments of the Motion Picture Industry	195
Fig.16: Traditional Windows of Exploitation (1999)	198
Fig.17: Modern Windows of Exploitation (2014).....	199
Fig.18: Price of Movie Consumption across the Exploitation Chain.....	200
Fig.19: Share of Worldwide Revenue and Production Cost (1999-2014).....	204
Fig.20: Long Tail Theory versus Winner-Take-All Theory	211
Fig.21: Global Box Office Revenues (1999-2014).....	222
Fig.22: Domestic Ticket Sales (1999-2014).....	224
Fig.23: Average Domestic Ticket Price (1999-2014).....	225
Fig.24: Distribution of Box Office Revenues (1999-2014).....	226
Fig.25: Widest Release and Average Width of Top 100 Releases (1999-2014)	227
Fig.26: Traditional Motion Picture Value System (1999)	233
Fig.27: Modern Motion Picture Value System (2014).....	235
Fig.28: Stages of the Movie Production Process.....	236
Fig.29: MPAA Studios Average Negative Cost (1999-2007)	241
Fig.30: Vertical Integration in the Motion Picture Value System (2014).....	248
Fig.31: Agencies in the Development and Production Stage	257

Fig.32: Sales Agencies in the Licensing, Distribution and Marketing Stage.....	272
Fig.33: Licensing Complexity	274
Fig.34: Festivals in the Licensing, Distribution and Marketing Stage	289
Fig.35: Distributors in the Licensing, Distribution and Marketing Stage.....	300
Fig.36: Average Distribution of U.S. Advertising Cost in 2007	304
Fig.37: MPAA Studios Average P&A Costs per movie (1999 – 2007).....	305
Fig.38: Laboratories in the Licensing, Distribution and Marketing Stage.....	316
Fig.39: DCDC in the Licensing, Distribution and Marketing Stage	322
Fig.40: Cinema Operators in the Exploitation and Consumption Stage	335
Fig.41: Video Stores in the Exploitation and Consumption Stage.....	349
Fig.42: Television Operators in the Exploitation and Consumption Stage.....	358
Fig.43: Digital Distributors in the Exploitation and Consumption Stage	368

LIST OF TABLES

Tab.1: Research Stages, Research Methods and Results	29
Tab.2: Contributions from the Research on the Theory of the Firm	66
Tab.3: Definitions for Intermediation	68
Tab.4: Contributions from the Research on Intermediation.....	89
Tab.5: Intermediation Activity Matrix	102
Tab.6: Activities on the Informational Level	104
Tab.7: Informational Activities and Cost Factors	110
Tab.8: Activities on the Legal-Financial Level	111
Tab.9: Legal-Financial Activities and Cost Factors.....	114
Tab.10: Activities on the Physical Level.....	115
Tab.11: Physical Activities and Cost Factors	123
Tab.12: Generic Tool for the Analysis of Intermediation Activities.....	124
Tab.13: Intermediation Activity Analysis Tool	128
Tab.14: Value Sources (Transaction Efficiency)	133
Tab.15: Value Sources (Transaction Efficiency) and Requirements	139
Tab.16: Value Sources (Transaction Efficiency - Market M.) and Requirements .	140
Tab.17: Value Sources (Production- and Logistic Efficiency)	141
Tab.18: Value Sources (Production- and Logistic Efficiency) and Requirements	143
Tab.19: Value Sources (Transaction Result)	144
Tab.20: Value Sources II (Transaction Result).....	147
Tab.21: Value Sources (Transaction Result) and Requirements	153
Tab.22: Value Sources (Production Result)	153
Tab.23: Value Sources (Production Result) and Requirements	155
Tab.24: Generic Tool for the Analysis of Intermediation Value	164
Tab.25: Intermediation Value Analysis Tool.....	167
Tab.26: Cooperation Incentives	170
Tab.27: Cooperation Incentives and Requirements.....	173
Tab.28: Cooperation Disincentives	174
Tab.29: Cooperation Disincentives and Requirements	179
Tab.30: Generic Tool for the Analysis of Intermediation Incentives.....	179
Tab.31: Generic Tool for the Analysis of Intermediation Disincentives.....	180

Tab.32: Intermediation Incentive Analysis Tool.....	183
Tab.33: Intermediation Disincentive Analysis Tool	183
Tab.34: Selected Events in the Motion Picture Industry (1999-2014).....	190
Tab.35: Anderson’s Six Themes of the Long Tail Age	207
Tab.36: Recorded Music Digital Track Sales (2011).....	210
Tab.37: Theatrical Sound Versions (<i>Transformers 2014</i>)	217
Tab.38: Theatrical Movie Versions (<i>The Hobbit 2012</i>)	217
Tab.39: Value Added View of the Media Industry	231
Tab.40: Value Added View of the Motion Picture Industry	232
Tab.41: Selected Media Assets of Time Warner.....	249
Tab.42: Intermediaries in the Motion Picture Industry (1999 vs. 2014).....	255
Tab.43: Impact on Informational Activities (Talent Agencies)	261
Tab.44: Impact on Value Sources – Transaction Efficiency (Talent Agencies)	264
Tab.45: Impact on Value Sources – Transaction Result (Talent Agencies)	266
Tab.46: Impact on Cooperation Incentives (Talent Agencies)	268
Tab.47: Impact on Cooperation Disincentives (Talent Agencies).....	269
Tab.48: Summary - Impact on Talent Agencies	270
Tab.49: Impact on Informational Activities (Sales Agencies)	279
Tab.50: Impact on Physical Activities (Sales Agencies)	281
Tab.51: Impact on Value Sources – Transaction Efficiency (Sales Agencies)	282
Tab.52: Impact on Value Sources – Transaction Result (Sales Agencies).....	284
Tab.53: Impact on Cooperation Incentives (Sales Agencies).....	285
Tab.54: Impact on Cooperation Disincentives (Sales Agencies).....	286
Tab.55: Summary - Impact on Sales Agencies.....	288
Tab.56: Important Festivals and Markets	291
Tab.57: Impact on Informational Activities (Festivals)	294
Tab.58: Impact on Value Sources – Transaction Efficiency (Festivals)	296
Tab.59: Impact on Value Sources – Transaction Result (Festivals)	297
Tab.60: Impact on Cooperation Incentives (Festivals)	297
Tab.61: Impact on Cooperation Disincentives (Festivals)	298
Tab.62: Summary - Impact on Festivals	299
Tab.63: Impact on Informational Activities (Distributors).....	307

Tab.64: Impact on Legal-Financial Activities (Distributors)	308
Tab.65: Impact on Physical Activities (Distributors).....	309
Tab.66: Impact on Value Sources – Transaction Efficiency (Distributors)	310
Tab.67: Impact on Value Sources – Transaction Efficiency II (Distributors)	311
Tab.68: Impact on Value Sources – Transaction Result (Distributors)	312
Tab.69: Impact on Cooperation Incentives (Distributors)	313
Tab.70: Impact on Cooperation Disincentives (Distributors)	314
Tab.71: Summary - Impact on Distributors	315
Tab.72: Impact on Informational Activities (Laboratories)	324
Tab.73: Impact on Informational Activities (DCDC).....	325
Tab.74: Impact on Legal-Financial Activities (Laboratories)	326
Tab.75: Impact on Legal-Financial Activities (DCDC).....	326
Tab.76: Impact on Physical Activities (Laboratories).....	327
Tab.77: Impact on Physical Activities (DCDC)	327
Tab.78: Impact on Value Sources – Transaction Efficiency (Laboratories)	328
Tab.79: Impact on Value Sources – Transaction Efficiency (DCDC).....	329
Tab.80: Impact on Value Sources – Logistic Efficiency (Laboratories)	330
Tab.81: Impact on Value Sources – Logistic Efficiency (DCDC)	331
Tab.82: Impact on Cooperation Incentives (Laboratories)	331
Tab.83: Impact on Cooperation Incentives (DCDC).....	332
Tab.84: Impact on Cooperation Disincentives (Laboratories).....	332
Tab.85: Impact on Cooperation Disincentives (DCDC).....	333
Tab.86: Summary - Impact on Laboratories and the DCDC	334
Tab.87: Impact on Informational Activities (Cinema Operators).....	342
Tab.88: Impact on Legal-Financial Activities (Cinema Operators)	343
Tab.89: Impact on Physical Activities (Cinema Operators)	344
Tab.90: Impact on Value Sources – Transaction Efficiency (Cinema Operators) .	345
Tab.91: Impact on Cooperation Incentives (Cinema Operators)	346
Tab.92: Impact on Cooperation Disincentives (Cinema Operators)	347
Tab.93: Summary - Impact on Cinema Operators	347
Tab.94: Impact on Informational Activities (Video Stores)	351
Tab.95: Impact on Legal-Financial Activities (Video Stores)	352

Tab.96: Impact on Physical Activities (Video Stores).....	353
Tab.97: Impact on Value Sources – Transaction Efficiency (Video Stores)	354
Tab.98: Impact on Cooperation Incentives (Video Stores)	355
Tab.99: Impact on Cooperation Disincentives (Video Stores)	356
Tab.100: Summary - Impact on Video Stores	357
Tab.101: Impact on Informational Activities (Television Operators)	362
Tab.102: Impact on Legal-Financial Activities (Television Operators).....	363
Tab.103: Impact on Physical Activities (Television Operators)	364
Tab.104: Impact on Value Sources – Transaction Efficiency (TV Operators)	365
Tab.105: Impact on Cooperation Incentives (Television Operators).....	366
Tab.106: Impact on Cooperation Disincentives (Television Operators).....	367
Tab.107: Summary - Impact on Television Operators.....	367
Tab.108: Impact on Informational Activities (Digital Distributors).....	373
Tab.109: Impact on Legal-Financial Activities (Digital Distributors)	374
Tab.110: Impact on Physical Activities (Digital Distributors).....	375
Tab.111: Impact on Value Sources – Transaction Efficiency (Digital Distr.).....	375
Tab.112: Impact on Cooperation Incentives (Digital Distributors)	377
Tab.113: Impact on Cooperation Disincentives (Digital Distributors)	378
Tab.114: Summary - Impact on Digital Distributors	378
Tab.115: Summary – Impact on Intermediaries (1999 vs. 2014).....	380

LIST OF ABBREVIATIONS

ATA	Association of Talent Agents
ACM	Association for Computing Machinery
AVOD	Advertising (supported) Video on Demand
CAA	Creative Artists Agency
CAD	Computer-aided Design
CDN	Content Distribution Network
CGI	Computer-generated Imagery
CI	Cost of Intermediation
CPI	Consumer Price Index
DCDC	Digital Cinema Distribution Coalition
DCI	Digital Cinema Initiative
DLP	Digital Light Projector
DMA	Designated Market Area
DRM	Digital Rights Management
EC	E-Commerce, Electronic Commerce
ECFF	European Coordination of Film Festivals
EST	Electronic Sell Through
ICT	Information and Communication Technology
IMDB	Internet Movie Database
JCMC	Journal of Computer-Mediated Communication

KDM	Key Delivery Message
MPA	Motion Picture Association
MPAA	Motion Picture Association of America
NATO	National Association of Theatre Owner
NIE	New Institutional Economics
P&A	Print and Advertising
PCI DSS	Payment Card Industry Data Security Standard
PPV	Pay Per View
PR	Public Relations
QC	Quality Control
SAG	Screen Actors Guild
SCP	Structure-Conduct-Performance
SVOD	Subscription Video on Demand
TDS	Total Disincentive Strength
TIS	Total Incentive Strength
TVS	Total Value Strength
UTA	United Talent Agency
VOD	Video on Demand
VR	Virtual Reality
WME	William Morris Endeavor

1 INTRODUCTION

1.1 PROBLEM DEFINITION

Technological advancements, such as digitalization and the Internet, have an impact on most industries, the media industry however, is perhaps impacted the most significant (Zerdick et al. 2001, pp. 140-143). As Elberse (2013, pp. 154-155) points out, digitalization reduces transaction- and search cost in every industry, it also lowers an additional cost factor in the media industry: the cost for producing and reproducing. For decades, media products have been distributed from the producers (writers, filmmakers, musicians, etc.) to the consumer by traditional media companies (e.g. publishers, music labels, broadcasters, distributors, etc.). Digitalization and the Internet started to call into question some of the traditional value added structures (Hess and Walter 2007, p. 2). In particular, various authors postulate again and again that due to the influence of digitalization, intermediation will either be omitted entirely, or it will occur in a completely different form (Cunningham and Fröschl 1999, p. 31; Picard 2002, pp. 34-36; Seufert 2004, pp. 63-66; Wirtz 1995, p. 49; Wirtz 2012, p. 763). However, a closer review of the available literature indicates that the various aspects associated with intermediation are by no means systematically analyzed, so that the discussion often remains relatively flat and diffuse.

Intermediation is an economic concept, which has proven its usefulness in the analysis of certain industries such as the trade or the financial service sector. Despite the large number of authors making predictions about the impact of technological advancements on intermediaries in the media industry, the microeconomic-based concept of intermediation itself is typically not used for the analysis of technology-driven changes. In this context, it has to be noted, that so far no comprehensive theoretical contribution on intermediation in media markets has emerged.

Walter (2007) is one of the few authors, who is explicitly focusing on intermediation in media markets. In his dissertation, Walter (2007) develops and introduces the concept of content intermediation. His contribution represents a significant step forward, towards the establishment of the concept of intermediation in media markets. However, his work has some serious limitations as well. These mainly result from his sole focus on the functions of intermediaries and changes in transaction cost. Thus, a complete picture of intermediation in media markets can hardly emerge.

An author, who attempts a more holistic approach and investigates intermediation from various perspectives, is Tietz (2007). In addition to the activities of intermediaries, he also investigates the different types of value that intermediaries provide and points out, that most of all, it is the upstream and downstream companies that have to support the intermediary in order for the intermediary to survive. Tietz (2007, pp 107-110) therefore stresses the need to incorporate incentives to cooperate with intermediaries into the analysis as well.

However, his contribution has some limitations as well. These result from the fact that he focuses on the tourism industry in his dissertation rather than on the media industry. Since in the tourism industry the product is actually a service, physical activities recede into the background. In the media industry, however, especially the physical activities have a high change potential due to digitalization (Wirtz 2012, p. 763). Due to these limitations and the missing considerations of media industry specific aspects, the contribution by Tietz (2007) cannot easily be transferred and applied to the media industry.

The aforementioned limitations of the contributions by other authors and the general lack of a comprehensive analysis approach for intermediation in media markets is the starting point of this dissertation. The limitations of previous works will be addressed and a new approach that is suitable for the analysis of technological induced changes in the structure of intermediation in media markets will be created.

1.2 RESEARCH OBJECTIVES

The main research objective of this dissertation is to systematically capture and explain those changes in a particular sector of the media industry that are triggered through technological advancements and have an impact on intermediation. In order to achieve this objective, two additional research objectives have to be completed first. These can be divided into one theoretical and one practical research objective:

1. Theoretical Research Objective: Development of an Intermediation Analysis Approach that can explain the influence of technological advancements on intermediaries in media markets.
2. Practical Research Objective: Demonstrating the applicability of the Intermediation Analysis Approach by employing it in the analysis of a selected sector of the media industry.

The development of the Intermediation Analysis Approach, which is capable of capturing and explaining the influence of technological advancements on intermediaries in media markets, is the theoretical objective of this dissertation. The analysis approach can be understood as a set of tools that allow the systematical analysis of intermediation from all relevant viewpoints. The steps of the analysis approach, the various tools that will be developed and the corresponding practical research questions are all visualized in Figure 1. The analysis approach allows researchers and practitioners alike to capture the significant transformation processes and to put them in a generic context, so that implications for the practice as well as for the theory of media management and media economics can be derived. The analysis approach is designed in such a way, that it can be employed in a variety of use cases:

- Either ex-post (to explain) or ex-ante (to predict).
- For different media industry sectors and to a certain degree unrelated industries.

- To assess the impact of other factors than technological advancements on intermediation, for example new regulations.



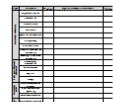
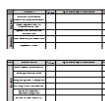
Analysis Steps	Research Questions	Analysis Tools
<p>Step 1: Analysis of Industry Characteristics</p> <p style="text-align: center;">↓</p>	<p>Q1: Who are the intermediaries in the industry? Which new intermediaries have appeared and which intermediaries disappeared in the last fifteen years?</p>	<p>Tool 1: Value System Visualization</p> 
<p>Step 2: Analysis of the Activities of Intermediaries</p> <p style="text-align: center;">↓</p>	<p>Q2: In how far and why have the activities changed?</p>	<p>Tool 2: Intermediation Activity Analysis</p> 
<p>Step 3: Analysis of the Value of Intermediaries</p> <p style="text-align: center;">↓</p>	<p>Q3: In how far and why has the value changed?</p>	<p>Tool 3: Intermediation Value Analysis</p> 
<p>Step 4: Analysis of the Incentives to cooperate with Intermediaries</p>	<p>Q4: In how far and why have the incentives to cooperate changed?</p>	<p>Tool 4: Cooperation Incentives Analysis</p> 

Fig.1: Analysis Steps, Tools and Practical Research Questions, based on: own research.

The demonstration of the applicability and usability of the analysis approach is the practical research objective of this dissertation. In order to demonstrate the applicability, the analysis approach will be applied to a sample sector of the media

industry. For this the motion picture sector has been selected. This sector is an appropriate object for the analysis as intermediaries such as sales agencies and distributors traditionally play an important role. In addition, the motion picture sector has witnessed numerous technological advancements in the past and is thus perfectly suited for an ex-post analysis of the last fifteen years. Lastly, while intermediaries in certain sectors of the media industry, especially the music (Clement and Schusser 2009; Pachet et al. 1999; Tuomola 2004; Walter 2007) and publishing sector (Janello 2010; Picot and Janello 2007), have received at least some attention, research on intermediaries in the motion picture sector is extremely limited. This dissertation will thus directly close this gap. The ex-post application of the analysis approach will provide answers to the following two-folded practical research questions:

1. Who are the intermediaries in the industry? Which new intermediaries have appeared and which intermediaries disappeared in the last fifteen years?
2. In how far and why did the activities of intermediaries in the motion picture sector change in the last fifteen years due to technological advancements?
3. In how far and why has the value that intermediaries in the motion picture sector provide changed in the last fifteen years due to technological advancements?
4. In how far and why have the incentives and disincentives to cooperate with intermediaries changed in the motion picture sector in the past fifteen year due to technological advancements?

1.3 DISSERTATION STRUCTURE AND OUTLINE

The research objectives discussed in the previous sub chapter provide the basis for the structure of this dissertation. After the introduction in Chapter 1, the theoretical foundation of this dissertation will be discussed in Chapter 2. Industrial Economics will be used as the theoretical frame of reference. It provides a suitable frame of reference for the research objectives and questions of this dissertation as it is characterized by a high degree of reality. Just as Industrial Economics in general, this dissertation is located at the interface between macroeconomics and business economics.

As part of the discussion of the basic principles of Industrial Economics, the theory of the firm is discussed in detail and from different viewpoints (Chapter 2.1). This is necessary as the theory of the firm explicitly deals with the existence and boundaries of companies. For a holistic view on changes in intermediation structure, however, the theory of the firm is not sufficient, as it merely provides an efficiency oriented instrument. Thus, relevant findings from other research areas must be considered as well. This includes findings from various research strands on intermediation, including, but not limited to, the trade and marketing literature as well as the literature on financial intermediation (Chapter 2.2). The detailed analysis of the various facets of intermediation is of great importance for the development of the analysis approach in Chapter 3 and builds the foundation for the discussion of intermediation in the following chapters.

The theoretical research objective of this dissertation is reflected in Chapter 3. Here the Intermediation Analysis Approach will be developed based on the extensive findings from Chapter 2. As pointed out by Tietz (2007, p. 74), the activities that intermediaries carry out (Chapter 3.2), the value intermediaries provide (Chapter 3.3) as well as the incentives to cooperate with intermediaries (Chapter 3.4) are key facets that have to be considered when analyzing intermediation. Consequently, a sub chapter is devoted to each facet and for each of these facets an analysis tool and guidance will be developed.

Chapter 4 on the other hand is dedicated to the practical research objective, the demonstration of the applicability of the analysis approach. The motion picture sector will be introduced and the previously developed tools will be applied. The analysis of the industry characteristics and the value added structure (Chapter 4.1) will identify numerous intermediaries. Each of these will then be examined in detail in Chapter 4.2, where the activities, the value and the incentives to cooperate will be examined for each intermediary.

Lastly, the findings of this dissertation will be summed up in Chapter 5 and an outlook on related research will be given. The literary sources used in this dissertation are referenced in Chapter 6. This dissertation has no appendix.

1.4 RESEARCH METHODS

This dissertation was created in multiple stages with different research methods being employed in each stage. The different stages and corresponding

research methods are visualized in Table 1 and will be explained in more detail in this sub chapter.

Research Stage	Research Methods	Results
Stage 1	- Qualitative literature review of contributions from various research strands	- Based on the results of the literature review the draft of the Intermediation Analysis Approach was created
Stage 2	- Presentation of the preliminary research results and the draft of the Intermediation Analysis Approach at the 3rd FOM Congress of Media Economics - (Informal) expert interviews and background discussions conducted during the Congress	- Valuable feedback and insights for the finalization of the Intermediation Analysis Approach were provided by the Congress participants
Stage 3	- Group discussion conducted as part of the program of the 3rd FOM Congress of Media Economics	- A transcript of the discussion was created based on the audio recording of the group discussion - The discussion provided some insights for the actual application of the Intermediation Analysis Approach
Stage 4	- Quantitative product and market data of the motion picture industry for the past fifteen year has been collected - Descriptive statistics has been used to visualize and describe the collected data	- Through the data collection an extensive database of the key features of 1500 motion pictures was created - The analysis provided valuable insights and context about product and demand changes in the past fifteen years
Stage 5	- Comparative-static analysis of intermediation in the motion picture industry	- Basis for the explanation of technological induced changes created

Tab.1: Research Stages, Research Methods and Results, based on: own research.

In the first stage, the creation of this dissertation relied heavily on qualitative literature analyses. The results are reflected in Chapter 2 and provide the foundation for the remaining chapters of this dissertation. The qualitative literature analysis is from paramount importance for the systematical development of the Intermediation Analysis Approach in Chapter 3. The method of qualitative literature analysis is considered an implicit, hermeneutic and interpretive approach (Mayering 2010, pp. 17-47). The literature sources used for the analysis are mainly selected and evaluated based on the frequency with which they are mentioned in relevant journals and in standard works from their specific economic disciplines.

For an analysis, however, researchers cannot solely rely on their own common sense. It would take away the possibility to differentiate between what they understand as a member of society and what they understand due to their theoretical framework (Cicourel 1970, p. 218). Thus, in addition to literature analyses, Hopf (1979, p. 14) recommends to conduct complementary expert interviews and background discussions. Accordingly, after the completion of the literature analysis and the creation of a first draft of the Intermediation Analysis Approach, in the second stage, these preliminary results have been presented at the 3rd FOM Congress of Media Economics¹ in Cologne, Germany in September 2014. The feedback and questions from the participants² provided valuable insights and aided in the refinement of the Intermediation Analysis Approach.

In the third stage, an additional research method was employed. A formal group discussion has been conducted in a separate session at the 3rd FOM Congress of Media Economics in Cologne, Germany in September 2014.³ Workshops and other formats that require the active involvement of the participants are a vital part of the congress format. The group discussion was recorded and transcribed. The objective of the group discussion was to obtain an assessment from media industry

¹ The presentation, the program and a video summary of the congress are available online (Wrobel 2014a, w/o p.; FOM 2014, w/o p.; FOM 2014a, w/o p.).

² The audience consisted of experts from various media industry sectors and all hierarchy levels – from camera men over producers to the heads of marketing agencies.

³ The preparation, execution and analysis of the group discussion was conducted by following the recommendations provided by Kühn and Koschel (2011).

experts on important changes that have occurred in the various sectors of the media industry in the past and what challenges have arisen from those changes - in particular for intermediaries. The results of the group discussion thus provided some insights into the actual application of the Intermediation Analysis Approach in Chapter 4.

In addition to the previously mentioned qualitative methods, quantitative research was conducted in the course of the creation of this dissertation as well. In the fourth stage, which started roughly in parallel to the second stage and lasted approximately seven months, data⁴ for the one hundred highest domestic⁵ grossing motion pictures for each year from 1999 to 2014 has been collected and analyzed. This was done, in order to be able to quantify some of the product and demand related changes in the motion picture sector of the past fifteen years. Selected findings based on the collected data have already been published in a separate publication in 2016 (UCAM-FOM 2016). These as well as additional findings are highlighted in Chapter 4.1 and provide valuable insights in regards to the first step of the analysis approach – the identification and analysis of relevant industry characteristics.

Lastly, in the fifth and final stage, the Intermediation Analysis Approach was applied to the motion picture industry. Through the comparative-statics analysis

⁴ The data originates from various industry databases. For an overview of the collected meta-data refer to Wrobel (2016, p. 121).

⁵ Domestic refers to the United States and Canada as the perspective of an U.S. based studio is assumed, see Chapter 4.1.3 for additional information.

of various intermediation facets in 1999 and in 2014, the impact of technological advancements could be derived. This, in turn, formed the basis for the explanation of the transformation processes that have occurred in the motion picture industry in the last fifteen years.

2 INDUSTRIAL ECONOMICS AND INTERMEDIATION

The importance of a robust theoretical foundation for this dissertation cannot be overstated. This has two reasons: (1) intermediation has various facets that all have to be taken into account. Those are the activities of intermediaries, the value intermediaries provide as well as the incentives to cooperate with them. (2) These facets are discussed in literature from various research strands. Thus, only by examining all relevant research strands in regards to their contribution towards the aforementioned three facets, can a sufficient foundation for the development of the Intermediation Analysis Approach be created.

The depth of the required literature review is reflected in the volume of this chapter. The chapter is divided into two main sections: (1) the theory of the firm will be discussed from different viewpoints in Chapter 2.1. (2) In Chapter 2.2 the focus will then shift towards intermediation. The term will be defined and literature from various research strands will be examined. Both parts will conclude with a summary, where the contribution of the preceding analysis towards the research objective - the development of the Intermediation Analysis Approach - will be highlighted.

2.1 INDUSTRIAL ECONOMICS – THE THEORY OF THE FIRM

Industrial Economics is the study of firms, industries and markets. It is concerned with the structure, the functionality and the behavior of enterprises and their interactions with the industry (Schwalbach 1997, p. 166; Tietz 2007, p. 8; Tirole 1995, p. 4). Industrial Economics therefore provides a suitable theoretical foundation for this dissertation. In the face of the broad declaration claim of Industrial Economics, it seems unsurprising that it represents no clearly defined research direction (Tirole 1995, p. 4). Instead, it consists of a variety of different research directions, which employ different methods that overlap and compliment, but also partly contradict each other (Foss and Knudsen 1996, p. 6). This situation is accurately summed up by Kaufer (1980, p. 11), who refers to Industrial Economics as a swampy terrain, whose surveying requires methodological eclecticism. The subject matter of Industrial Economics is not the individual enterprise, but rather the entire sector or industry (Bain 1968, p. vii). However, in order to be able to create an understanding of an industry, Industrial Economics must also analyze the structure and behavior of enterprises⁶, which creates

⁶ The issues Industrial Economics attempts to address can best be demonstrated with the structure-conduct-performance paradigm (SCP paradigm) and its advancement. For an overview on the SCP paradigm and its history refer to the relevant literature (Albarran 2002, pp. 29-31; Audretsch 1995, p. 4; Bain 1968, pp. 1-4; Carlton and Perloff 2005, pp. 246-267; Church and Ware 2000, p. 425; Kaufer 1980, p. 6; Mason 1939, p. 61; Mason 1957, p. 1; Oberender 1994, p. 67; Scherer 1980, p. 4; Schwalbach 1994, p. 94; Shepherd 1997, p. 5).

numerous interfaces to business administration (Schwalbach 1997, p. 165; Tietz 2007, p. 8).

One research area of Industrial Economics that is particularly useful for the analysis of potential changes in the structure of intermediation is the theory of the firm. This is because, the theory of the firm is concerned with the existence, the structure and the boundaries of companies (and hence includes intermediaries). The theory of the firm can therefore help to understand the role of intermediaries and the reasons for their existence. Since the theory of the firm is concerned with the boundaries of companies as well, it can also provide important insights for the explanation of disintermediation, because disintermediation is usually connected with a shift in company boundaries (Wrobel 2014, pp. 47-48). As a result, it is not surprising that virtually all studies on disintermediation or similar structural changes are explicitly or implicitly based on the theory of the firm, in particular the sub area of transaction cost theory (Tietz 2007, p. 8).

The theory of the firm has gained increasing attention at the beginning of the 21st century, although the basic literature, e.g. *The Nature of the Firm* from Coase (1937), was written decades ago. The theory of the firm can be understood as “the body of theory that addresses the existence, the boundaries and the internal organization of the firm” (Foss 2000, p. xxiv). The theory of the firm is not a single closed theory, rather a variety of different and sometimes contradictory scientific theories contribute to an understanding of the firm (Audretsch 1995, p. 27; Bühler and Jaeger 2002, p. 46; Foss and Knudsen 1996, p.6; Foss 2000, p. xxiv; Göbel 2002, p. 169). These theories are visualized in Figure 2 and include: (1) the neo-classical

or technical view of the firm, (2) New Institutional Economics (NIE) and (3) the information- and competence perspective.

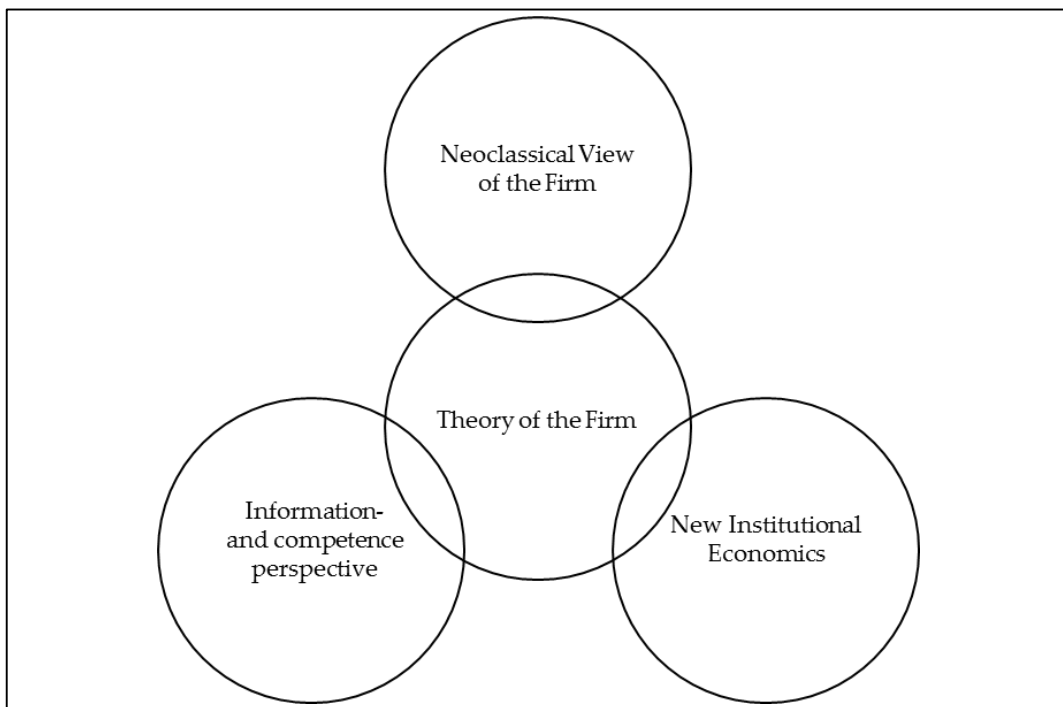


Fig.2: Research Areas influencing the Theory of the Firm, based on: Tietz 2007, p. 9.

It has to be noted that there is no consensus about the structure or grouping of research areas that have an influence on the theory of the firm. Similar and different groupings are provided by Audretsch (1995, p. 27), Bühler and Jaeger (2002, p. 13), Foss (2000, p. xxiv) as well as Tirole (1995, p. 35). Due to different points of view and independently developed schools of thought, some contradictions arise among these approaches. However, the respective approaches can therefore be applied to different problems (Foss 2000, p. xxi). In the following sub chapters, the influence of these three approaches will be analyzed more closely

and their contributions in regards to the objectives of this dissertation will be discussed.

2.1.1 Neoclassical View on the Firm

The technical view of the company, also called the production function approach, is based on a neoclassical microeconomic approach (Foss 1996, pp. 6-7). It assigns a company a specific ability of converting inputs into outputs and views the company as a profit-maximizing production unit. The corresponding process is represented by a production function (Audretsch 1995, p. 28; Bühler and Jaeger 2002, p. 14).

To maximize profits, the company aligns itself with the predetermined price and volume behavior on the market, while taking into account their cost function (Bühler and Jaeger 2002, p. 16). The cost curve is influenced by technical factors such as economies of scale and economies of scope. Economies of scale occur, when through the increase of the production volume, the average unit cost of the produced goods decreases or if the output more than doubles with twice the input (Pindyck and Rubinfeld 2013, pp. 285-287; Tirole 1995, p. 33). According to Bühler and Jaeger (2002, p. 19), economies of scale result among other things from:

1. More efficient production methods (technical economies of scale).
2. Fixed costs distributed among a larger production volume.
3. A higher degree of specialization and/or division of labor.

4. The spreading of production risks (such as damage to the machine) and/or sales risks (such as fluctuations in demand).

In reality however, with a certain size, decreasing returns of scale can be witnessed. These may result, for example, from a growing internal coordination complexity and the subsequent overburden of the management or through bottleneck factors such as the lack of appropriate developers or managers as well as from an increase in transportation costs (Bühler and Jaeger 2002, p. 20; Tietz 2007, p. 10).

Economies of scope, on the other hand, exist when a joint production of several different goods reduces the average unit cost of the goods produced or a higher output can be achieved with constant input. Advantages from economies of scope may result, among other things, from spreading fixed cost among a larger production amount, e.g. marketing costs or investments in machinery and infrastructure - if used in multiple products (Pindyck and Rubinfeld 2013, pp. 307-314; Tirole 1995, p. 33).

The technical view of the firm provides an informative basis for the optimal number and size of companies as, for example, the extent of existing economies of scale can be used to explain the size and number of existing providers within an industry, i.e. the horizontal concentration level (Tirole 1995, p. 38). Economies of scale can present a barrier to vertical integration as well. This is because a single company may not be able to achieve the minimum optimal size for the corresponding activity (Scherer and Ross 1990, p. 109; Tietz 2007, p. 10). Economies

of scope can explain, why the production of a bundle of goods by a single corporation is more efficient than the production by several specialized companies, and thus contribute to the explanation of vertical integration and market entries into production-related industries (Bühler and Jaeger 2002, p. 22).

A direct application of these concepts to intermediaries is however problematic. Since an intermediary carries out no production tasks in the technical sense, no technical scale or scope effects can exist. An expanded understanding of the concept however, allows its application to the organizational performance of a company, where scale and scope effects can occur (Tietz 2007, p. 11). Economies of scale, for example, can be achieved by specialization and economies of scope by transferring management skills. In these cases the transaction is viewed as part of the organizational performance of a company similarly to the viewpoint of production in the neoclassical view (Richter and Furubotn 2010, p. 81).

Even when taking into account this extended understanding, the neoclassical view can only represent a small component of the theory of the firm, since many questions regarding the existence, the size and the structure of enterprises remain open (Bühler and Jaeger 2002, p. 28; Foss 2000, p. xviii; Hart 1995, p. 17; Tirole 1995, p. 45). For example, no compelling theoretical explanation is provided, why advantages resulting from economies of scale decrease with a certain size or why no single giant world-company can exist (Bühler and Jaeger 2002, p. 28; Tirole, 1995, p. 45). It does also not explain, why economies of scale can only be realized within a company and not with the help of inter-company contractual agreements (Tirole 1995, p. 45). The internal organization of a company and incentive problems

regarding the delegation of tasks are additional neglected aspects (Bühler and Jaeger 2002, p. 28). Accordingly, additional contributions have to be considered as well.

2.1.2 New Institutional Economics

New Institutional Economics is concerned with the economic analysis of the institutional framework of the economy. The scientific object of investigation is thus the organization of the economy (Richter and Bindseil 1995, p. 132). Different definitions can be found for the term institution (Göbel 2002, p. 1; Picot et al. 2003, p. 39; Richter and Bindseil 1995, p. 133; Richter and Furubotn 2010, pp. 7-8). An institution can be defined, for example, as a system of behavior controlling informal and formal rules or standards, which puts human interactions for a larger group of people into order, in the sense of guiding principles for an extended time period (Göbel 2002, p. 3; Richter and Furubotn 2010, pp. 7-8). Institutions include organizations such as companies, authorities, associations, etc., but also things such as the state, money or marriage (Göbel 2002, p. 3). The publication of the widely-cited essay *The Nature of the Firm* by Coase (1937) is often called the birth of New Institutional Economics (Foss 2000, p. xix; Göbel 2002, p. 49). However, economic theorists didn't start to pay increased attention to the institutional framework of the economy until the 1960s. The term New Institutional Economics itself wasn't coined until 1975 (Tietz 2007, p. 12), when Oliver E. Williamson released *Markets and Hierarchies: Analysis and Antitrust Implications*. Williamson (1975; 1990a; 1996) in particular advanced the portion of transaction cost economics.

Just as the neoclassical microeconomic view, New Institutional Economics also assumes methodological individualism⁷, individual benefit maximization⁸ and individual rationality⁹ (Picot et al. 2003, p. 45; Richter and Bindseil 1995, p. 132; Richter and Furubotn 2010, pp. 3-6). In addition and opposed to the neoclassical perspective, New Institutional Economics also assumes limited rationality¹⁰ and secondly, opportunistic behavior, which Williamson (1975, p. 26) defines as “self-interest seeking with guile”. By assuming limited rationality, two crucial assumptions from the neoclassical perspective are no longer valid: (1) the assumption of symmetric information between parties or economic agents, as well as (2) the assumption of free and thus complete contracts (Foss 2000, p. xxvii). Information asymmetries allow opportunistic behavior and opportunistic behavior leads to incentive problems, which, among other things, New Institutional Economics attempts to solve. By assuming incomplete contracts, New Institutional Economics acknowledges that contracts cannot be created and closed for free (i.e. search or initiation costs occur), nor can they consider all eventualities that may arise after conclusion of the contract, thus monitoring and adjustment costs occur as well (Tietz 2007, p. 13).

⁷ The focus is on the preferences, objectives and decisions of single individuals (Richter and Bindseil 1995, p. 132; Richter and Furubotn 2010, p. 3).

⁸ Individuals maximize their benefits within their existing degree of freedom (Richter and Bindseil 1995, p. 132; Richter and Furubotn 2010, p. 3).

⁹ Individuals behave purposeful and rational (Kürble 2005, p. 21; Richter and Bindseil 1995, p. 132; Richter and Furubotn 2010, pp. 4-5).

¹⁰ Individuals have incomplete knowledge and limited information processing capacity (Tietz 2007, p. 12).

By repealing these two assumptions, New Institutional Economics, in contrast to the neoclassical model, accepts the existence of so-called transaction costs. Transaction costs are the costs incurred by a transaction, which according to Williamson (1990a, p. 1) occur when a good or a service is transferred across a technically separable interface. The definition by Williamson (1990a, p. 1) differs from the definition provided by Commons (1932, p. 454), for whom transaction costs are the cost that incur from a transfer of property rights. Thus Commons (1932) provides a stricter definition, since he only includes the costs for the usage of the market, but not company internal transaction costs (Göbel 2002, p. 130). Transaction costs are vividly described as the costs of running the economic system (Arrow 1969, p. 48) or the cost for producing the organizational performance (Picot et al. 2003, p. 27).

Transaction costs consist primarily of information- and communication costs, as well as follow up costs from incomplete information, such as negotiation costs and enforcement costs, which includes monetarily unquantifiable costs such as time and effort as well (Picot and Dietl 1990, p. 178; Richter and Bindseil 1995, p. 136; Tietz 2007, p. 13). Following the definition from Williamson (1990a, p. 1), two kinds of transactions can be distinguished: market transactions as well as hierarchy transactions (Benjamin and Wigand 1995, pp. 64-66; Göbel 2002, p. 132; Gumbel 1985, p. 151).

A transaction is referred to as a market transaction, when a good or a service is transferred beyond company boundaries (by using the market). A market transaction can be subdivided into several temporally successive phases, in each of

which transaction costs occur (Picot et al. 2003, p. 50; Richter and Bindseil 1995, p. 136; Richter and Furubotn 2010, p. 72):

- Initiation phase (including search and inspection from a customer viewpoint or marketing/sales from a provider perspective).
- Agreement phase (including negotiation, contract documentation and decisions).
- Processing phase (including the definition of performance controls).
- Control and adaptation phase (including monitoring and enforcement of contractual obligations regarding date, quantity, quality, etc., as well as any contract adjustments).

Within companies, transactions and transaction costs occur as well. These are also referred to as managerial transaction costs, hierarchy costs or bureaucracy costs (Göbel 2002, p. 131; Richter and Bindseil 1995, p. 136). Examples include the costs for corporate governance or information- and communication costs.

The exact percentage of the share of transaction costs of the total economic costs is hard to determine due to the difficult demarcation from production- and transport costs. An extensive investigation conducted by Wallis and North (1986, pp. 95-162) in the U.S. economy shows a doubling of the proportion of transaction cost from 26.09% in 1870 to 54.71% in 1970 and thus provides some insights into

the high significance.¹¹ The share has likely continued to rise since then (Tietz 2007, p. 14). Based on several individual studies and plausibility considerations, Richter and Furubotn (2010, pp. 65-67) for example, estimate the share to be roughly 60-70% of the gross national product.¹²

Incomplete contracts and transaction costs contribute significantly to the explanation of the existence of institutions and thus to a theory of the firm. As Coase (1937, p. 388) points out in his essay from 1937, in a world with zero transaction costs and perfect contracts, the entire economic activity could be optimally coordinated over markets with single individuals as market participants, so that companies would be superfluous. In this so called Arrow-Debreu-World all individuals are fully informed at all times about the current and future state of the world (for free). This includes the preferences of all consumers, product features, technologies etc., so that no occasions for opportunistic behavior arise. All contracts for the entire future can be completed on spot and forward (Richter and Bindseil 1995, p. 133). Taking into account transaction costs results in a more realistic representation of the economy and the existence of institutions can be explained by their ability to reduce transaction costs. Additionally, the importance of information and communication is thus highlighted (Picot et al. 2003, p. 39).

¹¹ A summary of the investigation conducted by Wallis and North (1986) is provided by Picot et al. (2003, p. 27).

¹² Hammes and Poser (1992, pp. 885-889) provide an overview on attempts to quantify transaction cost.

New Institutional Economics represents not a single theory, but rather a collection of different approaches, which, even though they are methodologically related, have different viewpoints. Accordingly, different approaches for the explanation of the phenomenon of the firm can be found. Usually, the following three approaches are named as the core components of New Institutional Economics: (1) the transaction costs theory, (2) the property rights approach and (3) the principal agent approach (Göbel 2002, p. 49; Richter and Bindseil 1995, p. 134; Tietz 2007, p. 15). These three approaches are explained in more details in the following sub chapters.

2.1.2.1 Transaction Cost Theory

Although the assumption of positive transaction costs represents a characteristic of New Institutional Economics as a whole, Göbel (2002, p. 132) identifies the transaction cost theory as an independent portion of research, which differs from the other approaches. The fundamentals of the transaction cost theory have been developed by Williamson (1990) and are based on the work by Coase (1937). In transaction cost theory the scientific object of investigation is the single transaction (Williamson 1990a, p. 20). It is assumed that contracts are generally incomplete, so that not all contingencies have been considered and significant transaction costs for the enforcement of the contract may occur (Williamson 1996, p. 7). By using transaction cost theory, different institutional arrangements and/or organizational forms for a specific transaction can be analyzed and assessed in regards to the transaction cost efficiency. Based on Coase (1937, p. 389), two basic

forms of organization are differentiated: market and hierarchy. These represent the two endpoints of a continuum, which takes intermediate forms such as cooperations into account as well (Picot et al. 2003, p. 54; Williamson 1990a, p. 18).

According to transaction cost theory, a hierarchy or company, has a justification for its existence, if it can reduce the transaction cost relative to the coordination form market (Williamson 1990a, p. 19). The classic application field of transaction cost theory is the make-or-buy decision or in other words, vertical integration and thus, the determination of the vertical boundaries of the company (Göbel 2002, p. 185; Picot and Dietl 1990, p. 182; Rindfleisch and Heide 1997, p. 32; Shelanski and Klein 1995, p. 341). Vertical integration refers to a change in the form of coordination between two vertical consecutive activities in the value system (or in the respective companies), where market-like exchange relations (with largely independent control) are replaced by coordinated or integrated and usually hierarchical (i.e. internal) exchanges (Perry 1989, p. 185).¹³ Thus, the coordination mechanisms market and hierarchy introduced by Coase (1937, p. 389), are part of the definition of vertical integration.

Due to the problematic quantification of transaction cost, most investigations do not even attempt to do so. Instead, usually a relative, indirect analysis of transaction costs is carried out by comparing discrete institutional alternatives and transaction costs influencing factors or characteristics (Williamson 1991, p. 219).

¹³ Carlton and Perloff (2005, p. 396), Fell (2001, p. 12) and Shepherd (1997, p. 274) provide additional definitions for vertical integration. Wrobel (2014, pp. 47-48) discusses the relationship between intermediation and vertical integration.

Depending on the characteristics of these factors the most efficient coordination form for the analyzed transaction can be determined. Therefore, the determination of those characteristics, which influence transaction costs, is of great importance. Based on the assumption of incomplete contracts, Williamson (1990a, p. 59) identifies three characteristics, which determine the cost of the transaction: (1) factor specificity, (2) uncertainty and (3) frequency.

For Williamson (1990), the factor specificity (i.e. asset specificity) is the most important aspect. It is high, if the value of a production factor in a specific transaction relationship is significantly higher than in its next best use case (Klein et al. 1978, p. 298). Williamson (1990a, p. 66) argues that with transaction-specific investments – i.e. investments with high specificity - a hierarchical relationship is more beneficial than a market relationship, because otherwise, significant incentives for opportunistic behavior would arise after closing the contract. This risk can be reduced through vertical integration. Opportunistic behavior after conclusion of the contract is also referred to as hold-up and plays a central role in Williamson's approach. A hold-up can occur, when a company with a high, specific investment is entering into a dependency with the contractual partner, who can opportunistically exploit this dependency as soon as loopholes in the contract are identified. By looking at the hold-up as the main problem, Williamson (1990) focuses, unlike Coase (1937), on incentive problems in regards to investments, rather than coordination aspects, to explain the existence of companies (Holmström and Roberts 1998, p. 74).

In regards to the factor uncertainty, two uncertainties can be differentiated: (1) uncertainty regarding the environment and (2) uncertainty regarding the behavior of the contract partner. Transaction cost theory primarily deals with the latter. Behavior uncertainty results from the assumption of opportunistic behavior in combination with limited rationality. But Williamson (1990a, p. 68) argues that behavior uncertainties only raise serious problems, and have a cost increasing effect, when simultaneously transaction specific investments occur. Otherwise the contract partner can be replaced relatively easily. Thus, uncertainty alone is not a sufficient reason for vertical integration.

Williamson (1990a, p. 69) assess the frequency with which a transaction occurs similarly. For rarely occurring transactions, vertical integration is rather impractical on the basis of the then underutilized capacity. On the other hand, frequently occurring transactions can easily be coordinated on the market, if there is no high specificity. Thus, the specificity is the main factor, which makes the coordination form hierarchy beneficial to the coordination form market.

2.1.2.2 Property Rights Approach

Property rights, in the context of New Institutional Economics, refers to the usage and disposal rights over tangible or intangible resources resulting from the law, contracts or social obligation (Göbel 2002, p. 67; Picot et al. 2003, p. 46). The research focus of the property rights approach is on the effects that property rights have on the behavior of economic entities in regards to the use of scarce resources. The main hypothesis is that this behavior is predictably dependent on the structure

of property rights (Göbel 2002, p. 70; Picot et al. 2003, p. 46; Richter and Bindseil 1995, p. 136; Tietz 2007, p. 18). The property rights approach, just like the transaction cost theory, assumes incomplete contracts and positive transaction costs, because without the existence of transaction costs, the optimal distribution of all available rights would occur as they would be freely transferable (Göbel 2002, p. 69; Picot et al. 2003, p. 48).

In regards to the theory of the firm, the property rights approach is capable to analyze those organizational decisions, which incorporate a change in property rights (Picot et al. 2003, p. 49). In addition to decisions within companies, the property-rights approach can contribute to the demarcation of company boundaries as well. The basis for this was developed by Grossman and Hart (1986) as well as Hart and Moore (1990), who enhanced the traditional property rights approach. The approach has some similarities with the transaction cost theory, for example the acceptance of incomplete contracts and focusing on the hold-up problem, but there are important differences as well (Foss 2000, p. xli; Holmström and Roberts 1998, p. 75). The company is understood as a sum of assets (i.e. valuables such as machines and even intangible goods) in uniform ownership (Grossman and Hart 1986, p. 63). The owner has the so called residual control right, which means that the owner can decide on the use of the assets, as long as the owner is not already contractually bound and no eventualities occur, which have not been contractually addressed. The last point is particular important. By residual control rights the hold-up problem is reduced, while the influence on the subsequent distribution of the profits increases. Thus, the biggest investment

incentives exist for an owner. It must be noted that a two-sided hold-up problem is assumed, while through vertical integration the hold-up problem for the acquiring company is solved, it creates or increases the hold-up problem for the previous owner. The optimum distribution of the available rights is therefore the distribution, which has the least number of hold-up problems and thus the overall best investment incentives (Grossman and Hart 1986, p. 78). This trade-off explains why vertical integration can bring disadvantages as well.

2.1.2.3 Principal Agent Theory

At the core, the principal agent theory is concerned with incentive problems created by asymmetric information within the framework of principal and agent. The principal agent theory examines situations in which a contracting authority (principal) commissions a contractor (agent) with the execution of a certain task or performance. Due to asymmetric information and difficulties in controlling the agent, the principal cannot be sure that the agent provides the optimal performance from the principal's perspective (Göbel 2002, p. 62; Richter and Furubotn 2010, pp. 173-174). The principal agent theory assumes the position of the principal and asks, which contractual arrangements ensure the selection, disciplination and motivation of the agent and will best pursue the interests of the principal (Göbel 2002, p. 104). Classic examples of principal-agent relationships are the relationships between employer and employee, customer and producer or shareholder and management (Meinhövel 1999, p. 27; Picot et al. 2003, p. 56; Richter and Furubotn 2010, p. 174). Examples in the services sector are the relationships between patient

and doctor or client and lawyer (Tietz 2007, p. 19). However, in many relationships both subjects can each be viewed as principal or agent. For example, a producer may see the trade as an agent, which the producer entrusts with the distribution of the products. On the other hand, the trade may see its suppliers as agents, which carry out the task of production for them (Göbel 2002, p. 104).

The following paragraphs will discuss different types of information asymmetries and the resulting problems. From the onset, pre-contractual and post-contractual information asymmetries can be distinguished (Tietz 2007, p. 20).

Pre-contractual information asymmetries include so-called hidden characteristics. The term hidden characteristics refers to the information advantage of the agent before conclusion of the contract, since the properties of the performance offered by the agent are not fully transparent for the principal (Göbel 2002, p. 101). Hidden characteristics are typical for services, because in this case, the product cannot be inspected in advance. Pre-contractual information asymmetry can be reduced through screening on the part of the principal (i.e. the search for agents with appropriate services) and signaling on the part of the agent (credible communication of the properties). Additionally, contractual incentives may be used to harmonize interests. Building trust is another option for a solution (Picot et al. 2003, p. 57). If significant hidden characteristics remain, market failure is a possible outcome due to the phenomenon of adverse selection. Since customers are unwilling to pay more than the average expected benefit for a specific product or service, quality providers will drop out of the market. This in turn lowers the

average benefit of the offered goods and a negative cycle is started, which ultimately leads to market failure (Akerlof 1970, p. 489).

Post-contractual information asymmetries are referred to as hidden actions and hidden information. A situation, in which the principal cannot completely observe the behavior of the agent - or only at unreasonable cost - is referred to as hidden action (Richter and Furubotn 2010, pp. 174-180). If the principal is not able to readily judge the quality of the product or service on the basis of the final result, the agent may behave opportunistically, for example, simply through laziness. Hidden information, on the other hand, refers to the situation in which the principal can observe the behavior of the agent, however, it is difficult to judge the quality. This phenomenon occurs often in the contracting of service providers with expertise such as lawyers or doctors (Göbel 2002, p. 101). The risk of opportunistic behavior of the agent, emerging from hidden action and hidden information, is also known as moral hazard. The moral hazard problem can be addressed by monitoring from the perspective of the principals on the one hand or reporting from the perspective of the agent (thus reducing information asymmetry) on the other hand. The building of trust and the harmonizing of interests through contractual incentives are additional solutions for the moral hazard problem (Tietz 2007, p. 20).

Hidden intentions are unknown intentions of the agent or contractor. These can exist before and after the conclusion of the contract. The hold-up problem, already discussed as part of the transaction cost theory, is caused by hidden intentions. Similarly, it is conceivable that an agent requires an advance and then

denies the provision of the service. Hidden intentions, in contrast to hidden-characteristics, -actions or -information, can usually not be addressed by reducing information asymmetry, instead, a harmonization of interests and the building of trust is required (Tietz 2007, p. 20).

For the selection of the optimal institutional arrangements the so-called agency costs can be used. Agency cost are defined by Jensen and Meckling (1976, p. 251) as the sum of (1) monitoring expenditures or monitoring and control costs of principals, (2) bonding expenditures or signaling and warranty costs of the agent, and (3) residual loss or remaining welfare loss. An exact quantification of the agency costs, however, is often hard or not possible at all, thus a mathematically-precise application of the concept of agency costs is often difficult (Göbel 2002, p. 126). Göbel (2002, p. 126) criticizes as well that no agency benefits arising from any superior skills of the agent are considered and compared to the agency costs. As a result, it remains unclear, why the principal should hire an agent at all. Accordingly, no recommendation can be derived, whether the principal should hire an agent or create the goods or services directly.

2.1.2.4 Comparison

As has been shown, there are a variety of similarities between the three New Institutional Economics approaches that contribute to the explanation of the phenomenon of the firm. All three approaches have in common that they consider contract issues and derive the decision for specific institutional arrangements from

the reduction of these contract issues or from the reduction of transaction costs.

However, the approaches look at different types of transaction costs:

- Both transaction cost theory and property rights approach focus mainly on problems after the conclusion of the contract. These problems, above all the hold-up problem, result from incomplete contracts. Especially the costs for the preparation are responsible for the incompleteness of contracts as it would be impossible and too expensive to account for all eventualities in a contract. The hold-up problem leads to a risk, because high monitoring and enforcement costs may apply.
- The principal-agent approach, on the other hand, focuses on incentive problems due to information asymmetries and opportunistic behavior rather than incomplete contracts. This approach considers transaction costs in the sense of agency costs, especially in the form of signaling and warranty costs on the part of the agent as well as monitoring and control costs on the part of the principal. Vertical integration is one of several possible solutions to reduce these costs.

Due to the diversity of these approaches, they can be interpreted as mutually complementary perspectives. This allows the consideration of a specific problem from different points of view (Williamson 1990, p. 69).

2.1.2.5 *Summary*

As the analysis in the previous chapters revealed, vertical integration represents the classical field of application for New Institutional Economics. In contrast, structural changes on the horizontal level can hardly be explained (Göbel 2002, p. 214). It has to be noted, however, that New Institutional Economics cannot fully explain the phenomenon of vertical integration. In particular, it can be criticized, that while disadvantages of contractual cooperation such as the risk of hold-up are considered, the benefits, such as the use of superior abilities of others, are not addressed at all. In addition to such conceptual criticism, the operationalization and implementation of New Institutional Economics is often criticized as well (Demsetz 1993, p. 105; Döring 1998, p. 45; Göbel 2002, p. 204; Holmström and Roberts 1998, p. 80). The main points of criticism are summarized in following paragraphs.

Representatives of New Institutional Economics, such as Williamson (1990a, p. 69), acknowledge that in addition to transaction costs, production and transport costs must also be considered when making decisions between alternative institutional arrangements. However, an instrument for the analysis of the same is not provided (Rindfleisch and Heide 1997, p. 47). There is also no consensus whether transaction costs or production- and transport costs play a greater role in the determination of the optimal institutional arrangement (Rindfleisch and Heide 1997, p. 47). The difficult distinction between production-, transport- and transaction costs creates additional problems. As has been mentioned before, due to the problematic quantification of transaction costs, usually discrete institutional

alternatives are compared and transaction costs influencing factors or characteristics examined. Due to this indirect method of analysis, an additional challenge arises: the problem of completeness. In order to make a decision in a particular case, it has to be ensured that all factors are considered.

The traditional transaction cost approach by Williamson (1990), on the other hand, puts the influencing factor specificity in the foreground. In that regard, Holmström and Roberts (1998, p. 75) accurately comment that: "Firms are complex mechanisms for coordinating and motivating individuals' activities. They have to deal with a much richer variety of problem than simply the provision of investment incentives or the resolution of hold-ups". In this context, Demsetz (1993, p. 109) notes that science has developed too few insights into the influencing factors on transaction costs to actually apply the theory. Some typically as neglected regarded aspects are (1) that vertical integration can abrogate (efficiency increasing) market control and flexibility, (2) vertical integration facilitates the transfer of knowledge, skills and information, and this induces an increase in efficiency, (3) that trust can develop better in long lasting relationships and can have an efficiency-enhancing effect.

Due the large number of influencing factors, in most cases a trade-off is likely. This means, however, that a clear decision in a particular case without quantification is hardly possible. Depending on the weighting of the factors, one or another alternative can be considered to be the efficient one. This problem is exacerbated, when not only the two coordination forms market and hierarchy are

compared, but intermediate forms such as partnerships, alliances, or long-term contracts are considered as well.

Despite the criticisms, New Institutional Economics provides a powerful toolset for the analysis of vertical organizational boundaries and, through the introduction of positive transaction costs, in contrast to the neoclassical perspective, provides valuable explanations for the existence of intermediaries and certain industrial structures. Since intermediation is also considered to be a vertical phenomenon, New Institutional Economics seems to be appropriate for the analysis of intermediation as well. It thus comes as no surprise that an essential part of the scientific research on intermediation is based explicitly or implicitly on New Institutional Economics and transaction cost theory.¹⁴ It is also not surprising that New Institutional Economics can be particularly useful for the analysis of the impact of new information and communication technologies on industrial structures, as transaction costs consist mainly of information and communication costs. Accordingly, a large part of the literature on electronic commerce and electronic markets is based on transaction cost theory as well.¹⁵

¹⁴ Popular examples include the contributions by Alderson (1954), Demsetz (1968), Picot (1986) and Spulber (1999).

¹⁵ Examples include the contributions by Chircu (2001), Hunziker (2003), Picot et al. (1997), Resnick et al. (1995) and Sarkar et al. (1995).

2.1.3 Information- and Competence Perspective

Just like New Institutional Economics, the information perspective and competence perspective on the firm also assume limited rationality and incomplete contracts (Foss 2000, p. xliv). However, they consider limited rationality from a different view point. Instead of emphasizing incentive problems or possibilities for opportunistic behavior due to limited rationality, they are concerned with the costs for capturing, processing and disseminating information (Radner 1996, p. 1361). While these costs are usually not considered in New Institutional Economics, they do represent a form of transaction costs as well (Foss 2000, p. xliv). The information perspective and the competence perspective can be distinguished. The former considers the information processing and communication tasks of a company.¹⁶ The latter regards the company as a bundle of resources used for the creation of a good or service.¹⁷

2.1.3.1 Information Perspective

Although the theoretical basis for the information-based viewpoint of the company was created in the 1970s, roughly at the same time as the work by Williamson (1975) on transaction cost, it wasn't until the 1990s that the approach received increased attention (Foss 2000, p. xliv). The approach is thus still relatively

¹⁶ Examples for the information perspective are the contributions by Bolton and Dewatripont (1994) as well as Crémer (1990).

¹⁷ Barney (1991), Foss and Knudsen (1996), Penrose (1955) as well as Rumelt (1984) and Wernerfelt (1984) are representatives of the competence perspective.

new, and accordingly cannot boast such large number of publications as New Institutional Economics does. Important contributions include those of Crémer (1990) as well as Bolton and Dewatripont (1994). To illustrate the key findings of the information perspective, the contribution by Bolton and Dewatripont (1994) will be summed up in the following paragraphs.

The company in the knowledge perspective is considered a “communication network that is designed to minimize both, the costs of processing new information, and the costs of communicating this information among its agents” (Bolton and Dewatripont 1994, p. 809). The objective is to structure the internal organization in a way that minimizes the cost of information recording, processing and dissemination. A trade-off between the advantages of specialization and the required communication effort can be witnessed. On the one hand, the division of labor creates advantages as learning effects in regards to information processing occur. On the other hand, increased communication costs occur with a division of labor, because the information must be transferred between people. On the basis of this model, recommendations on aspects such as the optimal size of a team or the optimal number of hierarchy levels can be derived. Bolton and Dewatripont (1994, p. 835) for example conclude that with a reduction of information- and communication cost, flatter hierarchies become more favorable.

As becomes evident, the strength of the information perspective is the explanation of internal structures of companies (Foss 2000, p. xlv). An application of the approach to determine company boundaries appears essentially possible. Instead of the boundaries of departments or teams, the borders of the company

would be determined. If one assumes that certain information flows across company borders are associated with higher cost than in-house, the boundaries of a company should be set in such a way that these problematic interfaces are bridged internally. On this basis, the approach should be able to particularly capture the vertical information flows of the value system in an attempt to optimize them. For example, it could be beneficial for a producer to handle the selling of the products directly, assuming customer information can thus be obtained easier or better and the customer information is actually essential for the optimization of the production (Tietz 2007, pp. 24-28).

2.1.3.2 Competence Perspective

The foundation for the competence perspective was developed by Penrose in 1955 (Foss 2000, p. xlvii). For Penrose (1955, p. 10) a company is a bundle of resources or abilities that are required for the creation of products and services. On this basis, she develops a theory of organic growth. As resources become free over time, i.e. due to efficiency increases, the company must decide on how to use them. The contractual transfer of these resources is often difficult, e.g. due to indivisibility or specificity, which implicitly implies positive transaction costs (Teece 1982, p. 224). As a result, the company will decide to use the resources for an expansion of the business, exactly in those areas, which require similar skills. Based on these

considerations, Penrose (1955) is primary able to explain horizontal growth and market entries into related industries.¹⁸

The contribution by Penrose (1955) inspired various resource-based scholars such as Lippman and Rumelt (1982), Wernerfelt (1984) and also evolutionary theorists such as Nelson and Winter (1982). After the publication of the article *A Resource-based View of the Firm* by Wernerfelt (1984), researches began to refer to the growing body of literature on the competence perspective as “the resource-based view” (Foss and Knudsen 1996, p. 3). In this context a variety closely related contributions can be identified such as on core competences (Prahalad and Hamel 1990), the capabilities approach (Langlois 1992), the competence perspective (Foss 1993; Foss and Knudsen 1996), and the dynamic capabilities approach (Teece et al. 1990). Foss and Knudsen (1996, p. 2) note that all of the aforementioned contributions highlight the “strategic importance of those firm-specific assets that are knowledge-related and intangible, often tacit, hard to trade and shared among the agents of the firm”. They therefore group all these approaches under the heading competence perspective. The assets that conform to these characteristics are what Foss and Knudsen (1996, p. 2) refer to as competences. They go on to highlight that their understanding of competence refers to the knowledge capital that allows its holder to solve problems in certain ways and more efficient than

¹⁸ Some empirical studies were able to confirm the hypothesis that the direction of expansion depends on the existing resources of a company (Teece et al. 1994). Refer to Schuler (2002, p. 158) for a concise representation of additional investigation.

others. Competence may reside in individuals, but Foss and Knudsen (1996, p. 1) point out that in the context of the theory of firm and strategic management, competence is “perhaps best seen as a property of organizations rather than individuals (it is therefore hard to imitate and transfer)”. The competence perspective allows to model a firm in terms of its competences. A special attention is given to the accumulation, protection and deployment of competences. Particular interesting for this dissertation is the observation by Foss and Knudsen (1996, p. 1) that the competences of a firm also have an influence on the boundaries of the firm, notably the firm’s degree of diversification.

Additional explanations for the vertical borders of a company come from contributions by Richardson (1972), Demsetz (1993) and Langlois (1992). Richardson (1972, p. 20) determines that in an industry, specific activities must be performed, which in turn require certain skills or capabilities. When different activities require the same skills or capabilities, they are referred to as similar activities. According to Richardson (1972, p. 21) activities are complementary, if they follow each other in the production process and must thus be coordinated with each other. Complementarity and similarity do not go together. Furthermore, he assumes that complementary activities are often dissimilar. For determining the boundaries of the company, Richardson (1972, p. 26) sees the capabilities of the company as the main criteria. Similar activities should be carried out within a company, because they require the same skills. In the event that activities, although not similar, are strongly complementary, he does not necessarily propose vertical

integration, but instead refers to the possibility of inter-firm cooperation such as long-term contracts.

Demsetz (1993, p. 116) builds on the idea that every company has special knowledge. He determines that the inter-company transfer of this knowledge, in the sense of giving work instructions or instructions regarding the use of products, can create high costs. Based on this logic he infers, that it is more cost effective or economically sensible, when (1) those with much knowledge give instructions to those with little knowledge (and not vice versa) and when (2) the boundaries of a company are set in such a way that only largely self-explanatory products are traded through the mechanism market, so that little knowledge must be transferred across company interfaces.¹⁹ Demsetz (1993, p. 11) points out that there are moments in the production process, where an intermediate result can be used for many different purposes and each purpose requires different skills. It is unlikely that all required skills can be built up in one individual company. In this context, Casson (2001, p. 94) notes that it can be beneficial for a company to not outsource the production, if there are uncertainties in regards to the abilities of the potential supplier and/or if a transfer of these skills or building up those skills would be too costly. Langlois (1992, p. 188) picks up the idea of costs for the transfer of knowledge as well as skills and integrates them more closely with the transaction cost school of thought. He coined the term “dynamic transaction costs”, which he

¹⁹ By itself, the second point would rationale a full vertical integration along the entire value system.

defines as “the costs of transferring capabilities: the costs of persuading, negotiating and coordinating with, and teaching others”.

2.1.3.3 Summary

As has been pointed out, the information perspective and competence perspective put important aspects in the foreground, which neither the neoclassical perspective nor New Institutional Economics have taken sufficiently into account. The information perspective and competence perspective therefore complete the view of the phenomenon of the firm. Since intermediaries do not carry out any production, these aspects are of increased importance. Intermediaries are often largely information processors and producers choose to work with intermediaries on the basis of their competence. In addition, it is immediately apparent that a consideration of the information processing aspect is useful for the explanation of the impact of technological advancements such as new information- and communication technologies.

2.1.4 Limitations of the Theory of the Firm

The theory of the firm is helpful for the explanation of the existence of companies as well as for the analysis of institutional arrangements. The consideration of the optimal vertical organizational boundaries, which is of paramount importance for the explanation of intermediation, represents one of the classic areas of application of the theory of the firm. Nevertheless, the theory of the firm cannot claim to explain these issues completely, because it provides strongly

efficiency-oriented instruments. However, there are a number of reasons for structural changes that are not based on efficiency and are therefore not taken into account, these include (Döring 1998, p. 45; Göbel 2002, p. 204; Tietz 2007, p. 28):

1. Aspects of competitive strategy, such as the creation of market entry barriers.
2. Benefit aspects, such as the influence of the form of an organization on the quality of the created product or service.
3. Effects, which are not directly associated with the actual production, for example tax benefits.

A focus on efficiency is legitimate, but also means that the analysis of a specific use case, based solely on the theory of the firm, is likely insufficient. The theory of the firm must be supplemented by suitable other industrial-economic approaches and methods, which can cover the missing aspects. In particular, Industrial Economics provides further insights in regards to the strategic reasons for the shift of vertical organizational boundaries. Accordingly, these aspects will be incorporated into the development of the analysis approach in Chapter 3 as well.

2.1.5 Summary

The previous sub chapters analyzed the theory of the firm from various viewpoints. This was necessary as the theory of the firm provides insights into the existence, the structure and the boundaries of companies and thus can help to

understand the role of intermediaries and the reasons for their existence. Table 2 provides an overview of the various examined research areas contributing to the theory of the firm. Their relevant contributions in regards to the objectives of this dissertation and the relevant facets of intermediation, which are explicitly or implicitly addressed, are highlighted as well. This initial consolidation of the findings not only provides a helpful overview and illustrates the different foci of the various research areas, it will also be of aid in the development of the Intermediation Analysis Approach, for which the findings for each facet will have to be further consolidated.

Research Strand	Contribution	Relevant Facet
Neoclassical view of the firm	<ul style="list-style-type: none"> - Expanded understanding of the production function as the organizational performance of a company - Economies of scale - Economies of scope 	Value provided by Intermediaries
New Institutional Economics	<ul style="list-style-type: none"> - Information asymmetries - Incomplete contracts and thus monitoring and adjustment costs - Opportunistic behavior and thus incentive problems - The existence of transaction cost 	Value provided by Intermediaries
Transaction Cost Theory	<ul style="list-style-type: none"> - Arguments for vertical integration - Market and Hierarchy as the two basic forms of organization - Factor specificity (hold-up), uncertainty and frequency as the transaction cost influencing factors 	Value provided by Intermediaries Cooperation Disincentives
Property Rights Approach	<ul style="list-style-type: none"> - The introduction of a different approach to set company boundaries - Disadvantages of vertical integration - Residual control rights 	Cooperation Incentives
Principal Agent Theory	<ul style="list-style-type: none"> - Introduction of agency cost and different types of information asymmetries: (I) Hidden characteristics, (II) hidden actions, (III) hidden information and (IV) hidden intentions 	Value provided by Intermediaries
Information Perspective	<ul style="list-style-type: none"> - Introduction of a different type of transaction costs: The costs for capturing, processing, and disseminating of information - Relevance of interfaces / information sharing 	Cooperation (Dis-) Incentives
Competence Perspective	<ul style="list-style-type: none"> - Introduction of a different type of transaction costs: The cost for building up and transferring knowledge and skills 	Value provided by Intermediaries

Tab.2: Contributions from the Research on the Theory of the Firm, based on: own research.

As has been mentioned before, the various contributions on the theory of the firm are particularly suited to explain the value intermediaries provide. This is reflected in the overview provided in Table 2 as well. However, additional insights regarding the incentives and disincentives to cooperate with intermediaries can also be derived. As was highlighted in the previous discussion, the many arguments for vertical integration provided by Williamson (1990) can be understood as arguments against intermediation as well.

Before these findings can be further consolidated into the analysis approach in Chapter 3, additional insight are necessary, particularly in regards to the activities of intermediaries as the theory of the firm is not particularly helpful in this regard. Thus, the second part of the theoretical foundation of this dissertation will be established in the next sub chapter, where intermediation will be examined from different perspectives. The objective is to gain insights in regards to the activities of intermediaries and also to identify additional benefits and cooperation incentives.

2.2 INTERMEDIATION

Composed of the Latin etyma *inter* (between) and *medius* (middle), intermediation refers to what is located in the middle or in between. Economic theory applies the concept of intermediation in markets (Schoder 2003, p. 171). Many different definitions for intermediation can be found in literature. The middle position between supply and demand in imperfect markets emerges as the

primary definitional characteristic of intermediation. A selection of definitions for intermediation is presented in Table 3.

All these definitions have in common, that the performance of the intermediary is embedded in the context of the market. In particular, the importance of supply and demand is stressed, and consequently, the aim of reducing costs for each individual market side. According to the definitions, intermediation is a theoretical concept for the analysis of entities, which are located between supply and demand. This extends the analysis compared to the term trade by not only the looking at the buying and selling of goods, but considering the agent-like mediation between trading partners as well (Walter 2007, p. 31).

Author	Intermediation Definition
Yavas (1995)	„One of the main explanations of intermediaries in search markets ... is that they resolve ... inefficiencies in return for a profit ...”.
Rose (1999)	„An intermediary is an independent, profit-maximizing economic agent mediating between two market sides in presence of market imperfections. Intermediation is the bridging of the incompatibilities between the two (market) sides involved in a transaction by transformation of output attributes of the supply market side to appropriate input attributes of the demand market side ...”.
Spulber (1999)	"An intermediary is an economic agent who purchases from suppliers for resale to buyers or who helps buyers and best-sellers meet and transact”.
Picot et al. (2003)	Intermediaries are generally understood to be entities that are the neither the provider nor the customer, but instead, enable or facilitate the functioning of the market and therefore receive a commission.
Tietz (2007)	An intermediary is an economic trading subject, whose main purpose is not the production or processing of goods, but rather the support of transactions between suppliers and customers, and with this purpose, either purchases goods from a producer or service provider in order to sell the same or a similar good to the customer (market maker), or supports the transactions between producers and customers in other ways (match maker).

Tab.3: Definitions for Intermediation, based on: Rose 1999, p. 51; Spulber 1999, p. 3; Tietz 2007, p. 31; Picot et al. 2003, p. 377; Yavas 1995, p. 18.

The number of scientific contributions, which analyze intermediation from a holistic perspective is limited. Thus, a fully developed theory of intermediation

does not exist.²⁰ Most studies are more focused on certain forms of intermediaries such as the trade or financial intermediaries. Accordingly, it is not surprising that no uniform definition exists. The most important forms of intermediaries, from an economic perspective, are financial intermediaries, such as banks or insurance companies, and trade organizations such as wholesalers or retailers. Other examples are the stock market, real estate agencies, talent agencies, distributors and content aggregators. According to an estimate by Spulber (1999, p. 2), intermediaries account for approximately a quarter of the gross domestic product of the United States.

As stated above, many contributions on intermediation can be assigned to certain research strands. These contributions focus on certain aspects or on certain types of intermediaries. Since the mid-1990s, with the raising interest in the influence of electronic commerce on industry structures, however, researchers started to take a cross-industry view on intermediation. These studies typically focus only on certain functions of intermediaries, such as the information- or the search function (Sarkar et al. 1995; Bakos 1998; Palvia and Vemuri 1999). In the following sub chapters the individual research strands dealing with intermediation will be analyzed and the most valuable contributions in each strand will be

²⁰ Winkler (1989, p. 299) already highlighted in 1989 that "a general theory of intermediation seems desirable". Despite the large amount of research on intermediation since then, Tietz (2007, p. 40) as well as Walter and Hess (2005, p. 20) point to the lack of a general theory of intermediation. Chapter 2.2.5 and Chapter 2.2.6 will discuss the shortcomings of these contributions in more detail and highlight, why thus a general theory does still not exist.

discussed. This analysis will provide the final insights for the development of the Intermediation Analysis Approach in Chapter 3.

2.2.1 Trade Research on Intermediation

The origin of the scientific interest in intermediation is the literature on the trade.²¹ Its source is the distinction between production and sales (Leitherer 1961, p. 145). While the contribution of production to the economy was generally recognized, the trade had to justify its existence from the onset. Scholastic business ethicists looked at the economic activity in regards to its compatibility with ethical standards as early as the Middle Ages (Leitherer 1961, p. 13). In their doctrine, they distinguish between farmers, artisans and merchants. Discussions arose especially about merchants, as it was difficult to measure their work. The poorly measurable level of work led to a suspicion of exploitation (Gümbel 1985, pp. 19-22) and sparked discussions about the fair price, which put the trade in the position of having to justify its existence (Leitherer 1961, pp. 15-17, Walter 2007, p. 31).

These debates about the trade can be grouped under the heading productivity conflict. This quite fundamental and, in its results, infertile discussion about the justification of the trade was primarily based on divergent views on the (intangible) productive contribution of the trade to the economy. Studies assumed less that all merchants would be dishonorable, but rather that the trade compared

²¹ A comprehensive trade literature overview is provided by Gümbel (1985, pp. 95-97), Leitherer (1961) as well as Walter (2007, pp. 31-34).

to producers (due to the trade's activities being intangible) has the chance to act dishonorably (Walter 2007, pp. 31-32).

This negative view of the trade changed with the increasing economic importance of the trade in the 14th and 15th century (Leitherer 1961, pp. 16-17). At that point in time, the services or capabilities of the trade were being tallied, which justified a wage or profit in return for the services rendered. The productivity conflict was thus gradually replaced by significantly more constructive analyses, which describe and measure the performance of the trade based on functional relations. The focus of these analyses was primary on finding a fair market price, with primary the commercial function and its share in the procuring of goods being discussed from the perspective of the overall economy. Bernard von Siena was one of the first to justify the existence of the trade through a detailed analysis and by doing so, characterized the emerging individual economics (Leitherer 1961, pp. 19-20; Walter 2007, p. 32).

The following beginnings of individual economics then comprised less theoretical theses, but rather practical trading books and holistic economic overviews. Mercantilism evolved in parallel to practical science for a long time. It builds logically on the early scholastics, but dispenses with the ethical point of view and instead, acts as an advocate of the absolutist chieftain. By comparing practical science on the one hand, and mercantilism on the other hand, the characteristic position of the trade between the individual and macroeconomic view becomes evident for the first time (Leitherer 1961, p. 81).

The disciplines of practical science and mercantilism began to dissolve at the time of the political revolutions at the end of the 18th and the beginning of the 19th century due to new scientific developments. The main innovation in the scientific field was the emergence of National Economics, which is characterized by a strong theoretical orientation (Walter 2007, p. 33). Adam Smith contributed to this new school of thought, as one of the first, by designing a theoretical construct of the capitalist economic world of his time in 1776. For Smith (1976, pp. 450-473), the trade had a high importance. He saw the productivity of the trade on the same level as the productivity of the primary production. However, also for Smith, the trade was not equally productive as other sectors of the economy (Leitherer 1961, p. 88).

While Smith and other national economists significantly shaped the modern discipline of macroeconomics, it is a special form of Austrian trade-economic literature, which contributed to the development of business economics in today's understanding in the early 20th century (Leitherer 1961, p. 97). An important representative of this school of thought is Oberparleiter (1955), who developed one of the first catalogs of trade functions (Falk and Wolf 1992, p. 41; Gumbel 1985, pp. 95-98; Tietz 1993, p. 11). The contribution by Oberparleiter (1955) has strongly influenced subsequent research on the trade, in which different attempts are made to catalog the tasks and functions of the trade (Marré 1974, pp. 709-720). While, the different catalogs vary in level of detail and grouping, as well as in content, the overarching similarity between them is the overcoming of various differences between the producer and customer through the trade as visualized in Figure 3 (Falk and Wolf 1992, p. 41; Marré 1974, p. 714; Tietz 1993, p. 12; Tietz 2007, p. 33).

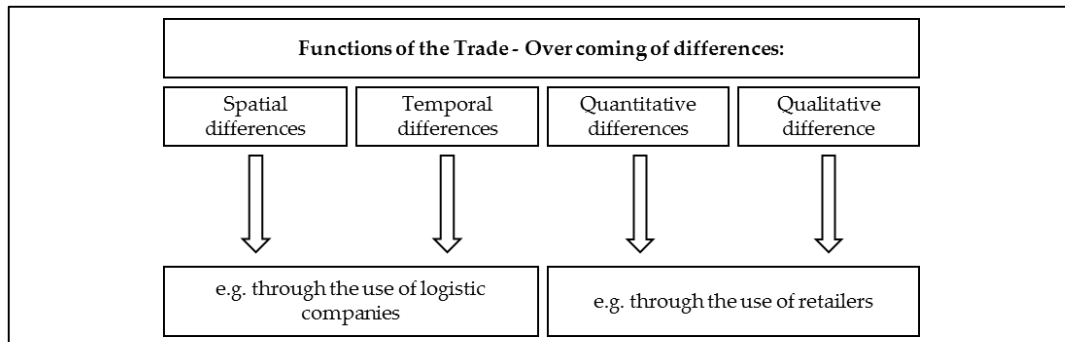


Fig.3: Functions of the Trade, based on: Tietz 2007, p. 33.

The last author who has to be mentioned as part of the trade literature is Schär (1923). With his work, Schär (1923) is considered to be the founder of the normative oriented business economics and a significant pioneer of business economics as a whole (Koch and Albach 1962, p. 16). In his work, Schär (1923) however does not take an individual economic perspective. He focuses less on the buying and selling of goods, instead, he is interested in the link between the trade and the economy as a whole (Leitherer 1961, p. 100). Schär (1923, p. 194) concludes that the existence of an intermediary is justified, if the functions of the intermediary cannot be performed as well and as economically by others. He sees two potential values: (1) increased efficiency and (2) increased effectiveness.

2.2.2 Marketing Research on Intermediation

The marketing literature was created in response to declining sales figures in the 1930s and the corresponding change from seller's to buyer's markets. This development led to the recognition that the sales related problems of the industry can only be fully understood by considering all steps from production up to the

actual consumption (Leitherer 1961, p. 104). The position of the trade, as previously discussed, between supply and demand on the one hand, and, at the same time, between individual and overall economy is thus reflected in marketing literature as well (Sundhoff 1956, p. 270; Tietz 1974, preface w/o p.).

The focus shifted away from an isolated consideration of the trade towards the view of the producers, who see the trade as a sales organ, and at the same time, towards the consideration of consumer behavior. In this context, topics such as market research and advertising are included in the scientific discussion as well. Thus, marketing literature is characterized by an interdisciplinary view on intermediation. Tietz (1974, preface w/o p.) points out, marketing literature includes selected results from psychology, social psychology and sociology.

As Leitherer (1961, p. 106) notes, by splitting up marketing activities into individual parts, the seemingly endless and diverse mercantile operations, can ultimately be reduced to certain basic tasks that comprise the very essence of the trade. This, in turn, allows researchers to explain the value that the trade provides. Leitherer (1961, p. 107) stresses, that in an industrially developed economy, the trade cannot be analyzed by itself, separated from production and consumption, instead, the trade must be considered as one part in the bridging of mismatches between human needs. This vision, mainly based on Erich Schäfer, helped the trade to be taken seriously and being seen as equal in relation to production. Such approaches evolved parallel to U.S. marketing research, wherein Shaw (1912, pp.

703-705), as one of the first, provides a classification scheme of trade functions.²² This functional point of view and the examination of the marketing or selling of goods from the producer's perspective became characteristic for marketing literature (Barth et al. 2015, p. 21; Nieschlag et al. 2002, p. 12).²³

Since a producer can decide to sell his goods with or without an intermediary, intermediaries are examined in this context as well. In the years after Shaw (1912), various catalogs of distribution functions were developed by different authors. These functions can either be executed by the producer or delegated to an intermediary (Churchill and Peter 1998, pp. 366-370; Kotler and Armstrong 2012, pp. 351-356; Rangan et al. 1992, p. 72; Zikmund and D'Amico 2001, pp. 314-316). The contribution of Churchill and Peter (1998, pp. 366-370) will serve here as an example for such a catalog. They identify the following three categories of distribution functions:

- Transactional functions: buying, selling, risk taking.
- Logistical functions: aggregation, storing, sorting, physical distribution.
- Facilitating functions: financing, grading, marketing research.

²² Shaw (1912) is thus usually credited as being the father of the functional school of marketing thought (Hunt and Goolsby 1988, p. 36; Sheth et al. 1988, p. 53).

²³ MacKenzie and Pearce (1995, p. 73) highlight that "the functional approach became so popular, it dominated marketing thought for five decades".

In contrast, the German marketing research, strongly influenced by its American roots, employs actor-centered approaches. Meyer (1973, pp. 86–87) for example, differentiates between different categories of providers and in this context considers the trade as a provider as well. Meyer (1973, p. 86) distinguishes between initial supplier (e.g. the initial creation of a product), intermediaries (e.g. reproduction) and the end-providers that offer the product to the consumer. He also considers other players such as print shops, whose function is the reproduction and conservation of the products. Thus, they are also located between production and consumption. Lastly, he points to additional players, such as market helpers (polling organizations), market consultants and opinion leaders. The marketing literature thus incorporates more players into the analysis, especially when compared to the classic trade literature. Increasingly, the justification for the existence of the trade is not only measured in relation to its contribution to the economy, but justified by comparing a situation with the presence of the trade to a situation without the presence of the trade (Gümbel 1985, p. 97).

While the function catalogs from marketing and trade literature illustrate the tasks and activities of intermediaries, they do not justify their existence, as they do not explain why a fulfillment of these activities by intermediaries is more beneficial than a fulfillment by the producers themselves (Tietz 1993, p. 14). For this purpose, other approaches and models are necessary. As mentioned previously, Schär (1923, p. 194) sees two potential values, namely increased efficiency as well as increased effectiveness. The effectiveness is often mentioned in marketing and trade

literature but usually only the efficiency gain is examined closer (Churchill and Peter 1998, p. 367; Myers 1986, p. 45; Zikmund and D'Amico 2001, p. 315). An important source of efficiency gain is highlighted by Alderson (1954, pp. 7-10). He points out that on a central marketplace with multiple buyers and sellers, the number of necessary contacts can be reduced through intermediaries. Other reasons for the more efficient, or more effective, execution of distribution activities include advantages through specialization, experience and scale effects (Gümbel 1985, p. 104; Kotler and Armstrong 2012, p. 342; Sharma and Dominguez 1992, p. 6; Tietz 1993a, pp. 21).

Lastly, it has to be noted that in the last decades, transaction cost theory has been increasingly applied to determine the advantages of specific distribution structures (Tietz 2007, p. 35). However, Alderson (1954, p. 8) already highlighted the importance of transaction costs when evaluating distribution channels in 1954: "Economic analysis of the factors in the price equilibrium generally rests on the assumption that exchange transactions are costless. Marketing analysis directed toward an understanding of trade channels must begin with a recognition of the costs involved in the creation of time, place, and possession utility".

2.2.3 Finance Industry Research on Intermediation

The concept of intermediation has particularly been applied in the financial sector (Allen and Santomero 1998; Bitz and Gunnar 2015; Diamond 1984; Greenbaum and Thakor 2007; Merton 1995; Rombach 1993; Schmidt et al. 1999). The existence of a *Journal of Financial Intermediation* also reflects the importance of

intermediation in this particular sector. As financial intermediaries do not act with material goods, logistical functions reside into the background and thus, no function catalogs are created. Intermediation is considered in the context of the performance of the market instead. The focus is on the informational level of market transactions. Thus, the market design and market organization as well as the involved exchange institutions are examined. In this context the term market microstructure was coined (Garman 1976, pp. 257; Gerke and Rapp 1994, p. 7; Hirth 2000, p. 1; Lipson 2003, p. 378; Spulber 1999, p. 3). The research focus is on the market organization and its influence on the behavior of market participants, the market efficiency and the market results (Bienert 1996, p. 136; Gerke and Rapp 1994, p. 6; Hirth 2000, p. 2; O'Hara 1997, p. 1).

Financial intermediaries are located between supply (investors) and demand (borrowers) on financial markets. They are generally described as institutions, whose function it is to establish a balance between investments and loans for different economic entities (Bitz and Gunnar 2015, p. 4). In contrast to the trade, where intermediaries primarily occur in the form of market makers, intermediaries in the financial sector occur to a greater extent in the form of match makers (Büschgen 1998, p. 34). Among the match makers, agents and brokers can be distinguished. They differ from each other in that broker are characterized by a higher degree of independence (Eckardt 2002, p. 3). The existence of intermediation on financial markets is generally examined in the context of (1) positive transaction

costs (Allen and Gale 1988, 1989, 1990; Gurley and Shaw 1960) and (2) asymmetrical information distribution (Leland and Pyle 1977; Diamond²⁴ 1984).

The work from Gurley and Shaw (1960) is considered to be an important contribution on the functions of financial intermediaries (Hellwig 1991, pp. 36-39; Spajić 2002, p. 62). They highlight that financial intermediaries reduce risk through diversification and also reduce market imperfections (Gurley and Shaw 1960, p. 191). Demsetz (1968, p. 35) considers market imperfections in the sense of positive transaction costs. He notes that the New York stock exchange reduces transaction costs by ensuring the immediate availability of the product and bringing transaction partners with compatible needs together.

In addition to the reduction of transaction costs, intermediaries can prevent market failure due to information asymmetries as well. For financial intermediaries, this aspect was examined by Leland and Pyle (1977, pp. 371-372). They discuss the problem of adverse selection when hidden characteristics are present. They come to the conclusion that, based on economies of scale, the quality of the product can be more efficiently identified by an intermediary, compared to a situation, in which the product is inspected by each individual customer (Leland and Pyle 1977, pp. 383-384).²⁵ In addition, Intermediaries can also prevent market

²⁴ In contrast to Leland and Pyle (1977), Diamond (1984, pp. 407-409) focuses on post-contractual information asymmetries and thus on moral hazards.

²⁵ Bhattacharya and Pfleiderer (1995) as well as Allen (1990) examine markets for information in this context and show that under certain circumstances, information can be gathered by a single party and sold to many investors so that the cost is shared.

failure, if the transaction would otherwise be considered too costly for many customers. Finally, Bhattacharya and Thakor (1993, p. 8) highlight that not only economies of scale, but also superior skills in the interpretation of information based on experience or specialization, can lead to efficiency gains in bridging information asymmetries.

2.2.4 Real Estate Industry Research on Intermediation

In addition to research on the trade and on financial intermediaries, intermediaries in the real estate industry have received some attention in the past as well. Real estate agents are interesting as they do not carry out any production or transport function, nor do they buy products at their own risk. They are thus purely coordinating match makers (Tietz 2007, p. 37).

Accordingly, it is the matching function by real estate agents that is primarily analyzed. Yinger (1981, p. 591), for example, models the “search-and-match” behavior of real estate brokers under the assumptions of uncertainties in regards to the number of offers, the number of buyers as well as the compatibility of supply and demand. These assumptions acknowledge the high search costs in real estate markets due to the high individuality of objects as well as varying buyer preferences. However, the value that real estate agents provide is not explained by his model (Tietz 2007, p. 37).

Although Bartlett (1981, p. 85) does not develop a formal model, he does consider the reasons for the existence of real estate agents under the aforementioned market imperfections. Firstly, he points to the function of real

estate broker as “information broker”. The broker obtains information about the available objects and forwards the information to the customers, thus reducing information costs for the buyer. In addition, Barlett (1981, p. 86) highlights that a real estate agent, in contrast to the seller, has no incentive to pass on whitewashed information. If for the broker reputation is critical, there is vice versa even a strong incentive to forward only completely accurate information. The contribution by Bartlett (1981) thus provides some important explanations for why the use of an intermediary, efficiently and effectively, eliminates pre-contractual information asymmetries.

2.2.5 Media Industry Research on Intermediation

In addition to the previously discussed research strands dealing with intermediaries, a substantial amount of literature is also available on intermediaries in the media industry. Those either deal with the media industry in general or examine specific sectors of the media industry, such as the music sector (Clement and Schusser 2009; Pachet et al. 1999; Tuomola 2004; Walter 2007) or the publishing sector (Janello 2010; Picot and Janello 2007).

Wirtz (2012, p. 763; 1995, p. 49) as well as Cunningham and Fröschl (1999, p. 31), for example, point to the Internet as the enabler of direct contact between producers and consumers. They hence predict that certain activities in the distribution chain will increasingly be eliminated. Picard (2002, pp. 34-36) examines disintermediation and reintermediation of media- and communication companies as well. Schumann and Hess (2014, pp. 192-194), on the other hand, identify and

differentiate various activities of intermediaries in the media industry. In addition to various types of intermediaries, Hermann (2002, pp. 99-102) also differentiates between various activities of intermediaries. Hass (2003, p. 48) suspects that media companies will increasingly convert to trading intermediaries, while Seufert (2004, pp. 63-66) analyses multiple intermediaries in media markets and concludes that primarily intermediaries rather than the producers are threatened by the influence of technological advancements. Lang (2001, pp. 72-74) uses the term media-intermediary and focuses on the consequences of disintermediation. Buhse (2004, pp. 102-104) and Tuomola (2004, pp. 33-37) are interested in disintermediation as well and use the music industry as an example. Finally, Caves (2003, pp. 75-79) analyses players that facilitate intermediation between artists and consumers, and for him, agencies fulfill that role.

A particularly noteworthy contribution on intermediation in media markets, as highlighted in Chapter 1, is the concept of content intermediation introduced by Walter and Hess (2005) and finalized by Walter (2007). Rather than taking the traditional view of media companies, such as publishers or TV stations, as producers and suppliers of media products such as books and motion pictures, Walter and Hess (2005, p. 20) highlight that media companies act as intermediaries in media content markets as well. Walter and Hess (2005, p. 20) argue that while the role of media companies as intermediaries in media markets has already been discussed by other authors, “a profound analysis of intermediation inside the media sector has been neglected so far”.

Following the example of the trade and marketing literature, Walter (2007, p. 80) develops a catalog of functions for content intermediation. He distinguishes between core functions, support functions as well as social and political functions, but only the core functions are examined further.²⁶ In addition, Walter (2007, pp. 67-70) introduces a cost framework for the analysis of the functions as well. While the general idea of the cost framework is a valuable addition that will find its way into the Intermediation Analysis Approach, it also represents one of the main limitations of his work. It was already highlighted before that a sole focus on the functions of intermediation and changes in transaction cost is not sufficient. Consequently, a complete picture of intermediation in media markets cannot emerge from Walter's contribution as well.

2.2.6 Cross-Industry Research on Intermediation

In the previous sub chapters the contributions on intermediation from specific industries and research strands have been examined. It has to be pointed out, however, that some studies exist, which focus on the phenomenon of intermediation across industries. To a certain degree, they thus contribute to the development of a general theory of intermediation.

The study *Vertical Market Configurations* by Baligh and Richartz (1967) is considered to be the first major milestone in regards to the development of a

²⁶ Thus, important aspects such as financing and licensing are excluded from his analysis and a holistic picture of intermediation cannot emerge.

general theory on intermediation (Tietz 2007, p. 38). Baligh and Richartz (1967) pick up knowledge from different research strands, but take a National Economics perspective. During their investigation, Baligh and Richartz (1967, p. 19) highlight the reduction of contact- and communication costs as an essential value that is provided by intermediaries.

	<u>Market Structure without Intermediary</u>		<u>Market Structure with Intermediary</u>	
Number of Market Participants	Producers m = 3	Costumer n = 3	Producers m = 3	Costumer n = 3
Contact Structure				
Number of required Contacts	$m \times n = 9$		$m + n = 6$	

Fig.4: Contact Reduction through Intermediaries, based on: Gümbel 1985, p. 112.

Baligh and Richartz (1967) assume that every transaction and every exchange is accompanied by positive contact- and communication costs. They argue that these contact- and communication costs can be significantly reduced by intermediaries.²⁷ Since the authors are able to sophisticatedly explain this idea and demonstrate it in a formal model, Gümbel (1985, pp. 110-111) refers to it as the Baligh-Richartz-Effect. The efficiency gain is highlighted in Figure 4. The efficiency

²⁷ This is essentially the same effect of contact reduction that has already been discussed as part of the analysis of the trade literature (Chapter 2.2.1).

gain only occurs if multiple customers want to contact multiple producers, for example, to compare products or to negotiate prices. Picot (1986, p. 6) adds that the efficiency advantage is greatest in a structure with multiple producers / consumers and exactly one intermediary.

With the rise of the Internet and the emergence of e-commerce²⁸ around the change of the millennium, the concept of intermediation received increased attention again. In this context, questions about the general persistence of intermediaries and tendencies of replacing traditional intermediaries by new electronic intermediaries are discussed (Bailey and Bakos 1997; Chircu and Kauffman 2000; Chircu and Kauffman 2000a; Giaglis et al. 1999; Klein and Selz 2000; Picot and Heger 2001). In early studies on the influence of e-commerce on intermediation, the role of intermediaries is often strongly reduced (Wigand and Benjamin 1995, w/o p.). In later studies, extensive catalogs of functions are developed (Sarkar et al. 1995, w/o p.; Resnick et al. 1995, pp. 289-292; Bailey 1998, pp. 33-35; Bakos 1998, p. 35, Wimmer et al. 2000, pp. 409-410). The aforementioned catalogs are characterized by a high degree of heterogeneity. They not only differ in the level of detail and in their structure, but also partly on the view taken.²⁹

From a macroeconomic perspective, the authors assume that due to the better availability of information on the Internet, direct contact between supply and

²⁸ Electronic commerce (e-commerce) refers to the support of market-related economic activities through information and communication technologies (Wigand 1997, pp. 1-16; Wyckoff 1997, pp. 5-10).

²⁹ Wrobel (2014, p. 41) provides an overview on the aforementioned catalogs.

demand increases. This is based on the idea that essential neoclassical assumptions in regards to perfect markets are satisfied to higher degree (Palvia and Vemuri 1999, pp. 118-120). In an extreme scenario, this development would result in a situation, in which intermediaries, should pure price competition indeed be achieved, would no longer be needed to mediate between supply and demand. From a product perspective, it is argued that the Internet, changes information services to information products, which equals disintermediation, as people are replaced by machines (Bieberbach and Hermann 1999, p. 7).

To a decline in the relative importance of intermediaries points the observation that through the Internet, supply and demand can find each other more easily. Entering into direct business relations with each other is easier as well. On the other hand, more buyers and sellers meet on the Internet, which should strengthen the market position of intermediaries. These discussion can be divided into the disintermediation hypothesis (Evans and Wurster 2000, pp. 69-72; Gellman 1996; Wigand and Benjamin 1995) and the intermediation hypothesis (Malone et al. 1987; Sarkar et al. 1995).

Chircu and Kauffman (1999, pp. 109-110) make the valuable contribution of integrating the two hypotheses. The two authors developed the so-called IDR-Cycle, which stands for the three cyclic phases of intermediation, disintermediation, and reintermediation in electronic commerce. The IDR-Cycle is shown in Figure 5.

Based on other scientific results and their own field studies, Chircu and Kauffman (1999, pp. 109-110) conclude that successful intermediaries in traditional

markets are increasingly supplanted (disintermediation) by new electronic intermediaries, which they refer to as EC-only intermediaries. This process continues until the traditional intermediaries integrate digital technologies into their business models (EC-able intermediary) as well. By using other advantages, such as financial strength, market position and/or reputation, the traditional intermediaries can then strengthen their market position (reintermediation) again compared to the purely digital intermediary.

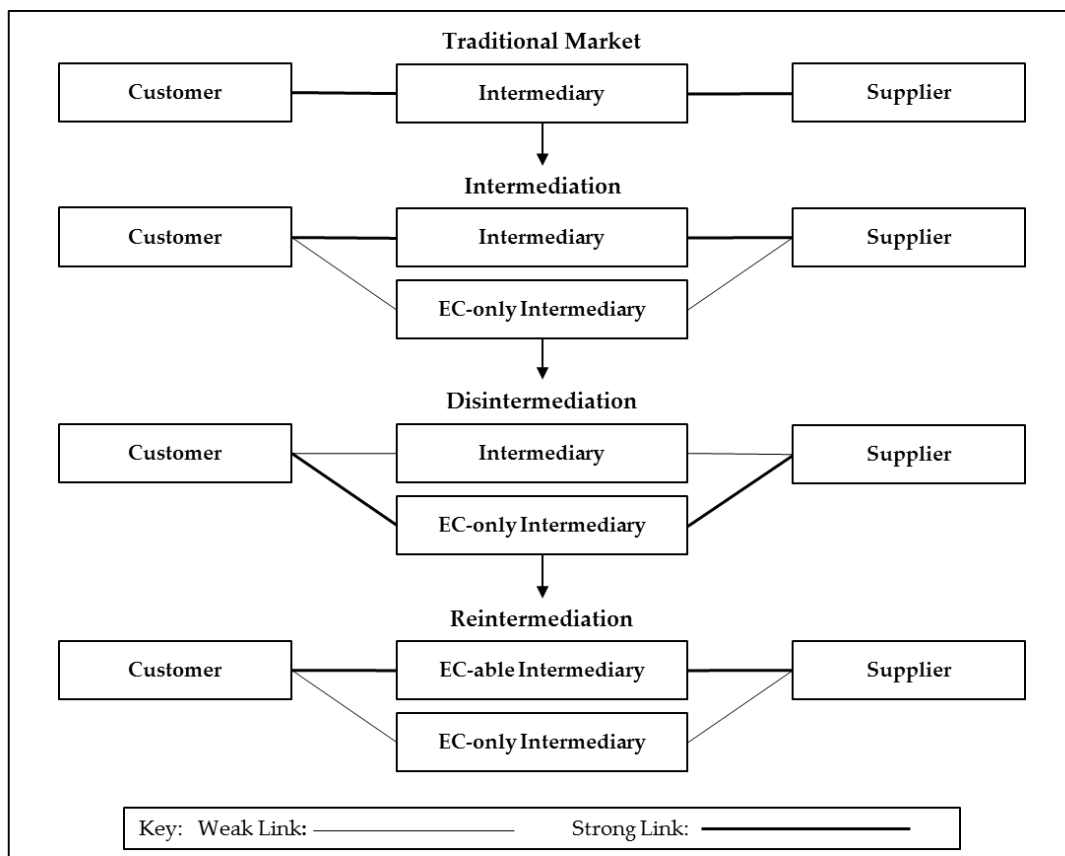


Fig.5: IDR-Cycle, based on: Chircu and Kauffman 1999, pp. 109-110.

The critical and equally positive forecast that, while intermediation is transformed by information technology, it will not be completely replaced by direct contact between supply and demand, is also confirmed by numerous other authors, including Bailey (1998), Buhl and Kundisch (2003), Mikdashi (2001), Rose (1999), Schmidt et al. (1999) and Westarp et al. (1997).

As was already highlighted in the introduction of this dissertation, a contribution that is particularly noteworthy is the one from Tietz (2007). His focus is on the influence of e-commerce on intermediaries in the travel industry and in the course of the analysis Tietz (2007, p. 74) identifies (1) the activities of intermediaries, (2) the different types of value that intermediaries provide and (3) the incentives of the upstream and downstream companies to support the intermediary as the main facets of intermediation that have to be taken into account. Tietz (2007) thus provides one of the first holistic overviews of all the various aspects that have to be taken into account when analyzing intermediation. Many of his insights will be picked up during the development of the Intermediation Analysis Approach in Chapter 3 and enhanced. This is necessary, as the contribution by Tietz (2007) cannot easily be transferred and applied to the media industry, not at least due to the strict focus on the influence of e-commerce and the travel industry, where physical activities recede into the background.

2.2.7 Summary

In the previous sub chapter, literature on intermediation from various research strands has been analyzed. The analysis was necessary in order to receive

additional insight for the development of the Intermediation Analysis Approach in the next chapter. Table 4 provides an overview of the examined research strands and highlights the key findings in regards to the development of the analysis approach – the theoretical objective of this dissertation.

Research Strand	Contribution	Relevant Facet
Trade	<ul style="list-style-type: none"> - Justification of the trade by its transaction cost reducing effect - Function catalogs of the trade - Identification of two potential benefits provided by intermediaries: Increased efficiency and increased effectiveness 	Activities and Value of Intermediaries
Marketing	<ul style="list-style-type: none"> - Catalogs of distribution functions - Transactional functions: buying, selling, risk taking - Logistical functions: aggregation, storing, sorting, physical distribution - Facilitating functions: financing, grading, marketing research 	Activities, Value and Incentives
Financial Intermediation	<ul style="list-style-type: none"> - Risk reduction through diversification - Reduction of market imperfections - Reduction of transaction costs - Importance of experience or specialization 	Activities and Value of Intermediaries
Real Estate Industry	<ul style="list-style-type: none"> - Importance of information processing capabilities of the intermediary - Matching function (search and match) 	Activities and Value of Intermediaries
Media Industry	<ul style="list-style-type: none"> - Concept of Content Intermediation - Function catalog - Activities of intermediaries in media markets 	Activities of Intermediaries
Cross-Industry Research	<ul style="list-style-type: none"> - Baligh-Richartz-Effect - Activities, functions, roles and value of intermediaries in electronic markets - IDR Cycle 	Activities, Value and Incentives

Tab.4: Contributions from the Research on Intermediation, based on: own research.

It comes as no surprise that the numerous function catalogs that have been developed in the various research strands on intermediation are particularly helpful for deriving the different activities of intermediaries. Certain research strands, for example the trade and marketing literature, particularly highlight the activities on the physical level, while other research strands, such as the research on financial intermediaries or real estate agents, focus on completely different, but

equally important activities, for example, the informational activities. Thus, with the analysis of various intermediaries, a complete picture begins to emerge.

The activities of intermediaries is however not the only facet of intermediation to which the preceding analysis contributed. In regards to the value that intermediaries provide and the incentives of up- and downstream companies to cooperate with intermediaries, additional insights could be gained as well. Particularly noteworthy is the Baligh-Richartz-Effect, which highlights and explains how intermediaries reduce contact costs – a fundamental value provided by intermediaries.

Finally, the IDR-Cycle, highlighted as part of the e-commerce literature on intermediation, has to be mentioned again as well. While the IDR-Cycle itself does not provide any input for the development of the Intermediation Analysis Approach directly, it provides a valuable indication for the application of the analysis approach. Since an ex-post analysis of intermediation in the motion picture industry will be conducted in Chapter 4, the findings by Chircu and Kauffmann (1999) might either be confirmed or proven irrelevant for this specific sector.

2.3 SUMMARY

This chapter started by pointing out the importance of a robust theoretical foundation for this dissertation. This was explained by the multiple facets that have to be taken into account when analyzing intermediation and by the fact that these facets are covered in a wide variety of research strands. Accordingly, in the preceding analysis the theory of the firm and intermediation have been discussed

from various viewpoints and in the progress, a sufficient foundation for the development of the Intermediation Analysis Approach has been created.

The individual contributions of each examined research strand in regards to the development of the analysis approach have already been summed up in Chapter 2.1.5 and Chapter 2.2.7. These results will not be repeated here. However, it is still worthwhile to reflect on the overall results.

Two problems were highlighted in the introduction of this dissertation: (1) the flat and diffuse discussion about intermediation in the available literature and (2) the lack of a comprehensive theoretical contribution on intermediation in media markets. The preceding analysis explains why both these problems exist. Only a few other research topics are scattered in or are based on so many different research disciplines. In regards to the first point mentioned, it thus comes as no surprise that the discussion about intermediation remains diffuse, when typically only transaction cost related aspects are included in the analysis. The preceding analysis showed that there are many more aspects to take into account. In regards to the second point, this dissertation is unique in that it attempts to fill the gap and provide a comprehensive theoretical contribution on intermediation in media markets. The establishment of the theoretical foundation in this chapter is the first step towards such a comprehensive theoretical contribution. The following chapter represents the next step. In the course of the development of the Intermediation Analysis Approach the various findings of this chapter will be consolidated further, so that they can be used in the analysis.

3 DEVELOPMENT OF THE INTERMEDIATION ANALYSIS APPROACH

The theoretical foundation of this dissertation has been established in the previous chapter, where the findings from the analysis of the various research strands on the theory of the firm and on intermediation have been conveniently summed up in regards to their contribution to the research objectives. The focus can thus shift towards the first research objective, the development of the Intermediation Analysis Approach. The objective now is to consolidate the findings from the previous chapter into a holistic approach that can be used in practice.

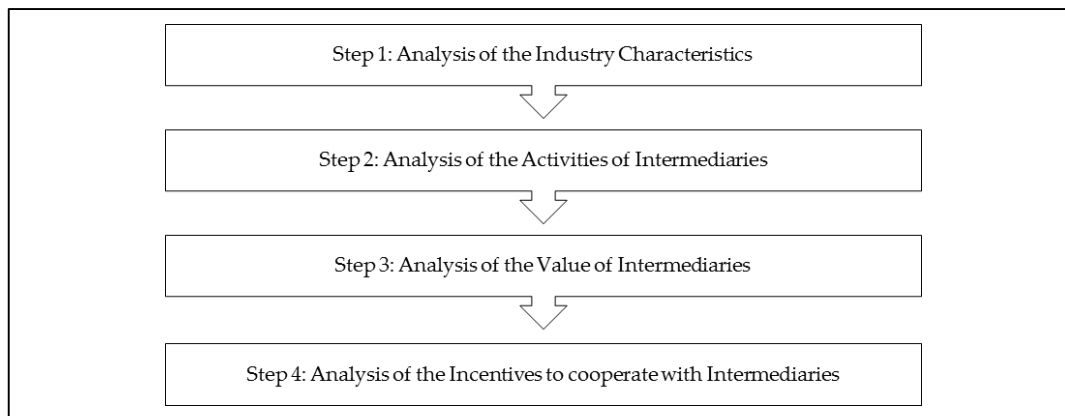


Fig.6: Steps of the Intermediation Analysis Approach, based on: own research.

As visualized in Figure 6 and already highlighted in the introduction of this dissertation, the Intermediation Analysis Approach consists of four steps. During

the first step of the analysis approach, the industry characteristics are examined. It comes as no surprise that it is necessary to identify the structure of the industry and the intermediaries before they can be analyzed. In addition, Chapter 2 revealed that demand characteristics and product characteristics influence the ability of intermediaries to add value. These aspects are thus included in Step 1 as well.

Tietz (2007, p. 45) highlights the importance of the activities of intermediaries, the value they provide as well as incentives to cooperate with them, as the main aspects that have to be taken into account when analyzing intermediation. This ensures that not only the efficiency and effectiveness are considered, but competitive strategic aspects as well. Accordingly, each of these aspects will be analyzed in an individual step.

The questions arises, in what order these aspects have to be analyzed. Chapter 2 showed that the more efficient and effective execution of certain activities are often highlighted as the main values provided by intermediaries as they translate to cost savings for supply and demand. Consequently, if technological advancements alter certain activities, the potential for the intermediary to add value through efficiency and effectiveness is likely altered as well. Thus, the activities (Step 2) will be analyzed before the value of intermediaries (Step 3). Chapter 3.4 will highlight the many incentives and disincentives for companies to cooperate with intermediaries. Some of these incentives are not linked to the activities or the value intermediaries provide at all and are purely company specific. However, the efficiency and effectiveness advantages provided by intermediaries are generally in the interest of the up- and downstream companies

as well. Thus, when the ability of the intermediary to add value is altered (for example because certain activities became obsolete), the up- and downstream companies are more likely to re-evaluate their incentives or disincentives to cooperate. Accordingly, the company specific incentives will be analyzed after the value provided by intermediaries in Step 4.

3.1 STEP 1: RELEVANT INDUSTRY CHARACTERISTICS

An understanding of the industry structure is important before it can be analyzed (Giaglis et al. 2002, p. 240). Thus, in a first step, general aspects such as the product characteristics, the demand structure as well as the value added structure have to be examined, as these factors influence the structure of intermediation (Bailey 1998, p. 54; Giaglis et al. 2002, p. 240; Scott 2000, w/o p.). These aspects will be highlighted further in the following sub chapters.

3.1.1 Product Characteristics

The analysis of the product characteristics is important and effects the ability of intermediaries to add value. For example, intermediaries can only reduce logistic costs for material, transportable products. A physical product presentation is especially relevant for products, which the customer wants to feel, taste or smell before making the purchase decision (Jin and Robey 1999, pp. 47-65). For products with hidden characteristics, an intermediary can add value by inspecting and classifying the product for potential buyers (Tietz 2007, p. 120).

3.1.2 Demand Characteristics

An analysis of the characteristics of the demand structure is important as well, as these characteristics have an effect on how intermediaries can add value. A composite demand, for example, increases the potential for a reduction of transaction costs through the aggregation of products from different producers. The transaction frequency determines to which degree benefits from the Baligh-Richartz-Effect or through coordination occur. Furthermore, the experience of the consumers determines the extent of information asymmetries and whether consumers have any specialization disadvantages compared to the intermediary. Finally, the heterogeneity of demand has an influence on how useful different, parallel existing intermediation structures are (Tietz 2007, p. 120).

3.1.3 Value Added Structure and Market Participants

A sound knowledge of the value system and the market participants is imperative for the analysis of intermediation as well. For example, only with a large number of sellers and buyers, can an increase in transaction efficiency be achieved. Whether intermediaries can add value through risk diversification or through lower capital costs, depends on the risk-aversion and the access to capital of the producers. Low skills in sales and marketing or a lack of knowledge of the customer on the part of the producer represent additional reasons for intermediation (Tietz 2007, p. 120).

In regards to the visualization of the value added structure on company- and industry level it has to be noted that the basic tools for this have been provided decades ago. The prominent value chain model, for example, was introduced by Porter in 1985. In subsequent years, Stabell and Fjeldstad (1998) expanded the value chain model and introduced the value shop model and the value network model. All three models are intended for the visualization and analysis of the value added structure on company level (Picot et al. 2007, pp. 211-214). For the analysis of value added structure at the industry level, a variety of models exist as well, the most popular ones are (1) the value system (Porter 2004, p. 35), (2) the business web model (Hagel 1996, p. 6) and (3) the value net concept (Parolini 1999, p. 80).³⁰

In practice however, especially the value chain model and value system model, are used very differently. As Bloore (2009, p. 7) accurately notes “it has been conventional to show the value chain or value system as a series of arrows or lines going from left to right, with the customer or end-user on the right”.³¹ This is exemplary illustrated in Figure 7.

³⁰ Wrobel (2014, pp. 14-28) provides an analysis and comparison of the aforementioned models.

³¹ This is reflected in almost every attempt to visualize the value added structure of the motion picture industry as well (Wrobel 2014, pp. 61-70).

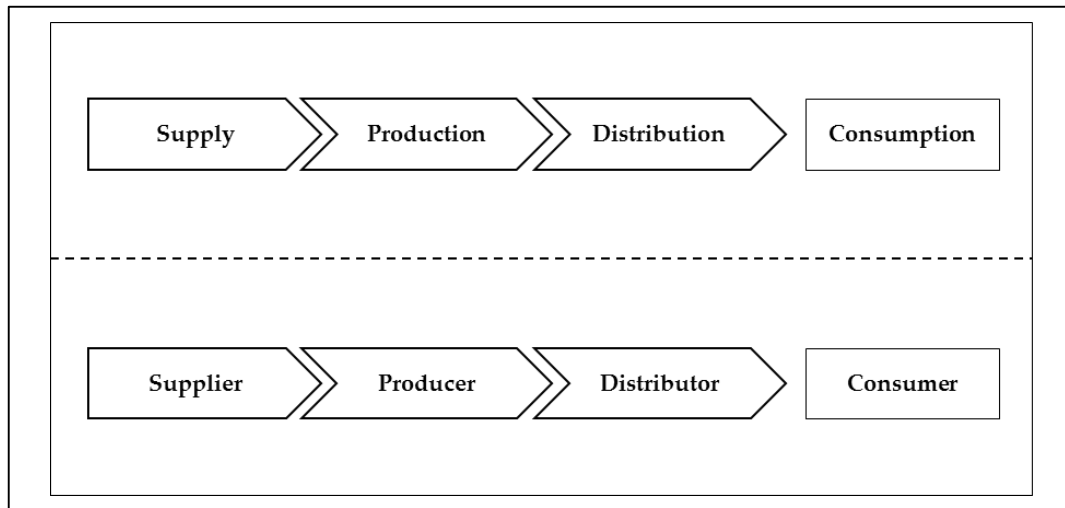


Fig.7: Common Practice in the Visualization of Value Added Structure, based on: own research.³²

This approach seems questionable for a variety of reasons³³ and it becomes evident, that such an approach would neither help with the identification and visualization of intermediaries, nor can it reflect the complexity of certain industry structures. Accordingly, a different model will be used in the Intermediation Analysis Approach. The key features of this model will be briefly highlighted in the following paragraphs and explained in more detail in Chapter 4, when the

³² Chapter 4.1.4 will highlight some of the authors that follow this practice of value chain / value system visualization.

³³ Wrobel (2014, p. 73) and Crissey (2010, pp. 5-6) discuss many of the reasons why the current practice of the use of the value chain or value system model is questionable. Some of these will also be highlighted in Chapter 4.1.4 when the value added structure of the motion picture industry will be discussed.

value added structure of the motion picture industry will be analyzed. A generic draft of the model is shown in Figure 8.

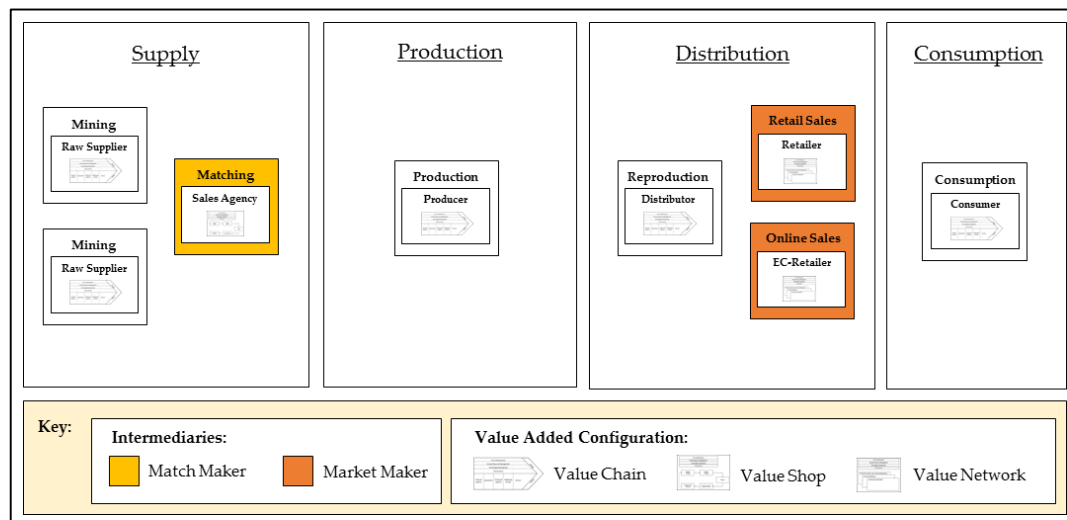


Fig.8: Enhanced Value System Model, based on: own research.

The model carries many of the features of Porter’s original value system model, but differs in a variety of aspects as well. These can be summed up as follows:³⁴

- The inclusion of different value added constellations to accurately reflect the activity logic of the value system participants.
- The introduction of a color coding to highlight intermediaries and differentiate among different types of intermediaries.

³⁴ The basis for the new value system model has been developed in a previously published work (Wrobel 2014). The value system model as used in this dissertation represents an advancement from the previously published model.

- The value system participants are described by the major activity they are carrying out.
- The model is further divided into different stages to provide additional structure.
- The model is stretched vertically to further emphasize the complexity of certain industry structures.

3.1.4 Summary

In the previous sub chapters, the product characteristics, the demand structure and the value added structure have been highlighted as relevant general industry characteristics that can have an influence on intermediation. Accordingly, these elements will be analyzed in the first step of the Intermediation Analysis Approach as has been highlighted in the preceding analysis.

Particular attention was given to the visualization of the value added structure at the industry level and the corresponding identification of the intermediaries. In this context the first tool of the analysis approach was introduced, the Enhanced Value System Model.

3.2 STEP 2: ACTIVITIES OF INTERMEDIARIES

The previous sub chapter highlighted various aspects that have to be taken into account when analyzing the influence of technological advancements on intermediation – the first step of the analysis approach. This sub chapter is

dedicated to the second step of the analysis approach – the activities of intermediaries. The objective is the development of a template or tool for intermediaries in the media industry, which (1) systematically identifies and categorizes the activities these intermediaries perform, and (2) allows the methodological assessment of the impact that technological advancements have on the identified activities.

The following sub chapters will detail each activity that has been included in the model. The activities in the model are based on both, the generic activities and functions of intermediaries that have been discussed in Chapter 2, as well as on the specific activities and functions of market participants in the sectors of the media industry as discussed in the literature on media management (Walter and Hess 2005; Walter 2007; Wirtz 2012).

The model of the activities is designed in such a way, that it is neither a purely macroeconomic perspective, which would be too abstract, nor a too detailed task-oriented perspective, which loses sight of the emergence of the market and thus, intermediation. In regards to the structuring and grouping of the activities, this approach follows Tietz (2007, p. 78) suggestion of dividing activities into three activity levels: (1) informational level, (2) legal-financial level and (3) physical level. The relevant activities for intermediaries in media markets are illustrated in Table 5.

Informational Level	Legal-Financial Level	Physical Level
Identification	Capital Procurement	Aggregation
Selection	Licensing	Transformation
Inspection and Classification	Procurement and Sales	Presentation
Negotiation Support	Payment Processing	Reproduction
Information Processing	Contract Adjustment	Distribution / Repair Processing
Monitoring and Reporting	Warranty Processing	Preservation

Tab.5: Intermediation Activity Matrix, based on: own research.

While the contribution provided by Tietz (2007, p. 78) is of aid in ensuring that all relevant activities are captured, structured and grouped in a systematical way, it does not help in the actual analysis of each relevant activity. Accordingly, a model for the comparative statics analysis of the activities will be developed in Chapter 3.2.5, once all activities have been discussed. The comparative statics analysis will be conducted on the basis of the cost for the execution of the activities in qualitative terms. It is thus necessary to develop a cost framework before each activity and their cost influencing factors can be discussed.

3.2.1 Intermediation Cost Framework

Chapter 2 highlighted that an essential part of the scientific research on intermediation is based explicitly or implicitly on New Institutional Economics and transaction cost theory. While its assumptions of opportunistic behavior, asymmetrical information and limited rationality are undeniably important, it was

already made clear that such a cost understanding cannot capture all factors that are relevant for intermediation. This is highlighted by Bailey (1996, p. 398) as well, who notes: "While more research is needed to determine the quantitative benefit of an intermediary in some markets, it is clear that reduction of transaction costs may not be the proper metric". Bailey (1996, p. 398), by citing the work of Brynjolfsson and Hitt (1998, p. 49-51) regarding the productivity paradox, further points out that "the metrics that would quantify transaction cost may come from an older market paradigm. The newer paradigm of customized goods, reduced delivery time, and greater customer satisfaction is more difficult to measure but, as the roles of an electronic commerce intermediary may indicate, most important".

While thus the focus is not just on transaction costs in the strict sense, it is still appropriate to speak of the costs that occur for the transition of goods and their reduction. The cost concept used in the dissertation has the following characteristics:

- The cost term used here includes transaction costs, as well as other costs incurred when goods or services move from the producer to the customer.
- Time and effort are included as a cost factor as well, so that, for example, a reduction in the time for the fulfilment of a specific activity is equated with a relative reduction in costs.
- The understanding of cost is of relative nature, so no absolute values are used.

- The naming of the different cost types is based on the activities they arise from, e.g. identification cost, selection cost or reproduction cost.

3.2.2 Activities on the Informational Level

As the discussion in Chapter 2 revealed, particularly the informational activities of intermediaries are discussed in a variety of contributions from various research strands. The activities on the informational level that are particularly relevant for intermediaries in the media industry and thus included in the model are highlighted in Table 6. The following sub chapter will examine each activity in detail.

Informational Level	
Identification	Negotiation Support
Selection	Information Processing
Inspection and Classification	Monitoring and Reporting

Tab.6: Activities on the Informational Level, based on: own research.

3.2.2.1 Identification

The activities identification and selection, the latter will be detailed in the next sub chapter, can be derived from various research strands, examples include the e-commerce literature, the literature on financial intermediation as well as media management specific literature. Bailey (1998, p. 38) and Bakos (1998, p. 35) define the search as one of the most important roles of intermediaries. Search itself can logically be divided into the finding of goods (identification) and into choosing

among the identified goods (selection) (Bailey 1998, p. 38). In the literature on financial intermediation, Bitz (1989, pp. 430-431) stresses that lenders and issuers must first of all obtain knowledge of the existence of suitable market partners. In regards to media markets, Wirtz and Kleineicken (2000, pp. 630-631) describe identification as collecting the produced content. Picard (2011, p. 50) is also convinced that “information-gathering” will be one of the increasingly important features of media companies in the future.

From the perspective of New Institutional Economics, identification corresponds to the screening activity and thus can be helpful to reduce information asymmetries (Hermann 2002, p. 107). Search costs are a major cost factor for the fulfillment of the identification activity and can be divided into costs for finding out prices and costs for the identification of appropriate offerings (Bakos 1997, p. 1676-1678). Markets, which are characterized by a large number of products, thus generate high search cost (Walter 2007, pp. 81-82).

It has to be noted that some authors sum up the activities identification and selection under the heading matchmaking or matching. According to Di Noia et al. (2004, p. 9) for example, “matchmaking is the process of searching the space of possible matches between demand and supply”. The authors highlight that this process is quite different from simply finding, once given a demand, a matching supply (or vice versa). Instead, it includes finding all the supplies that can fulfill the demand to some extent and identifying the most promising ones (Di Noia et al. 2004, p. 9). Thus, while identification refers to finding all offers, which can meet the demand to a certain extent, filtering out the most promising offerings is quite

different as stressed by the authors. Accordingly, selection will be analyzed separately in the subsequent sub chapter.

3.2.2.2 *Selection*

The selection activity includes rule-based matching and selection. It is carried out with the aim to ensure the suitability of the products for the customer. The selection activity can be derived from various research strands, including the trade literature and media management literature. Schumann and Hess (2014, p. 193) for example, see the selection of content according to the needs of customers as one of the essential tasks of intermediaries in media markets. Other authors highlight the importance of the selection activity as well (Picard 2011, p. 46; Wirtz and Kleineicken 2000, pp. 630-631). Negroponete (1996, p. 84), for example, notes that any kind of distribution carried out by media companies must be supplemented by filtering and selection processes.

The actual selection can be divided into a quantitative and a qualitative component. In trade literature, Oberparleiter (1955, p. 43) stresses the importance of this distinction between the quantity and the quality functions of the trade. While the objective of the quantitative component is the suitability of the products through the reduction of quantities, the qualitative component attempts to achieve the suitability on the basis of quality criteria. Therefore, quantitative selection is especially important when there is a large number of products (Oberparleiter 1955, p. 43). The cost for the selection activity, similar to the identification cost, increases not only with the number of products offered, but also with the heterogeneity of

the goods and the required quality standards of the selection process (Walter 2007, p. 84).

3.2.2.3 *Inspection and Classification*

The activities inspection and classification refer to the verification of the characteristics of goods and the creation of an appropriate classification, especially in terms of quality. In addition, it also includes the verification of the properties of the transaction partners, such as the willingness or ability of the customer to pay as well as the reliability of the producer. The classical method is the personal inspection of the product (Tietz 2007, p. 79). However, other mechanisms exist, e.g. scoring systems, in which the customers make an assessment after consuming the goods (Jallat and Capek 2001, p. 57). These activities could be subsumed under matching, but in order to highlight the importance, they are included as separate activities in the model.

The important role of intermediaries in regards to inspection and classification is often addressed in literature. This is because an intermediary can build up skills in quality assurance and thus become an expert (Biglaiser 1993, p. 212). In addition, an intermediary is in frequent contacts with the same provider and can therefore rate experience goods as well (Biglaiser 1993, p. 212; Resnick et al. 1995, p. 290). The costs for inspection and classification increase with the number of products and transaction partners to be inspected. The costs are influenced by the descriptiveness of the goods and the required quality standard as well.

3.2.2.4 *Negotiation Support*

Intermediaries can play a mediating role during negotiations, for example by moderating the negotiation or by providing bidding mechanisms for pricing (e.g. auctions). In addition, intermediaries can design the contract and the accompanying documentation as well. Through these activities, intermediaries supports the agreement phase of a transaction (Tietz 2007, p. 79). These activities have been summed up under the heading negotiation support in the model.

Negotiation support is performed by match makers and includes the facilitation of negotiations or the support of the price determination by other means. Market makers, who purchase and sell goods on their own account, conduct the negotiations in their own name as well. In both cases, different price determination mechanisms are available, including free negotiations, fixed prices by the producer and auctions. Numerous authors expect that technology will cause a shift between those mechanisms (Bakos 1998, p. 39; Gallagher 2002, p. 92; Giaglis et al. 2002, p. 238; Skiera and Spann 2002, p. 689). The costs for negotiation support depend on the type of support required and increase with the complexity of the negotiations and contracts.

3.2.2.5 *Information Processing*

In order to process a transaction, certain information flows are necessary, such as establishing product specifications or delivery dates. The intermediary can coordinate or perform this information exchange (Tietz 2007, p. 79). The importance of information processing is particularly highlighted in the information

perspective discussed in Chapter 2. The costs for information processing depend on the amount of information to be processed, the frequency and the number of transaction partners involved. Other important aspect to take into account in this regard are security concerns. Depending on the sensitivity of the processed information, additional security measures may have to be put in place (Jin and Robey 1999, pp. 47-65).

3.2.2.6 Monitoring and Reporting

Chapter 2 highlighted that the moral hazard problem can be addressed through monitoring from the perspective of the principals or reporting from the perspective of the agent. Accordingly, these activities have been included in the analysis as well. An intermediary supports the control and adjustment phase by monitoring the performance of the contract and reporting the results to the other transaction partner. The intermediary thus makes compliance with the contractual obligations transparent (Tietz 2007, p. 80). The ease of monitoring, the required quality standard and the required expertise to evaluate the performance, are the key cost factors that have to be taken into account when assessing the cost for performing these activities.

3.2.2.7 Summary

In the previous sub chapters, the six informational activities of intermediaries in media markets have been discussed in detail. The result of the discussion are

summed up in Table 7, which shows the activities on the informational level, related cost types and cost influencing factors.

Activity	Cost Types	Cost Influencing Factors
Identification	<ul style="list-style-type: none"> - Search cost - Personnel cost - Infrastructure cost 	<ul style="list-style-type: none"> - Amount of products and transaction partners - Descriptiveness of products - Distance to products - Degree of market research required - Required expertise - Required infrastructure - Degree of automation / use of ICT
Selection	<ul style="list-style-type: none"> - Selection cost - Personnel cost - Infrastructure cost 	<ul style="list-style-type: none"> - Amount of products and transaction partners - Heterogeneity of the products - Descriptiveness of products - Required quality standard - Required expertise - Required infrastructure - Degree of automation / use of ICT
Inspection and Classification	<ul style="list-style-type: none"> - Inspection cost - Classification cost - Personnel cost - Infrastructure cost 	<ul style="list-style-type: none"> - Amount of products and transaction partners - Descriptiveness of products - Distance to products - Degree of hidden characteristics - Required quality standard - Required expertise - Required infrastructure - Degree of automation / use of ICT
Negotiation Support	<ul style="list-style-type: none"> - Negotiation cost - Personnel cost - Infrastructure cost 	<ul style="list-style-type: none"> - Required support (moderation vs. pricing mechanisms) - Contract complexity - Required expertise - Required infrastructure - Degree of automation / use of ICT
Information Processing	<ul style="list-style-type: none"> - Processing cost - Personnel cost - Infrastructure cost 	<ul style="list-style-type: none"> - Amount of information to be processed - Amount of involved transaction partners - Required expertise - Required infrastructure - Required quality standard (e.g. speed) - Degree of automation / use of ICT
Monitoring and Reporting	<ul style="list-style-type: none"> - Monitoring cost - Reporting cost - Personnel cost - Infrastructure cost 	<ul style="list-style-type: none"> - Required quality standard - Ease of monitoring (distance, transparency, etc.) - Required expertise - Required infrastructure - Degree of automation / use of ICT

Tab.7: Informational Activities and Cost Factors, based on: own research.

As illustrated in Table 7, the cost for performing the six informational activities are influenced by a variety of factors. The table can be understood as the

first guidance that aids in the analysis of each activity. In practice, it will likely always come down to the degree of automation and the degree to which ICT can be used as the key factors. If the degree is low, then the activity likely requires human resources and as such, the required expertise has to be considered. Is the degree of automation and use of ICT high, then infrastructure cost and security aspects play a crucial role for the overall costs of performing the activities.

3.2.3 Activities on the Legal-Financial Level

All activities summarized under the legal- financial level have direct financial or legal implications for the intermediary. The legal-financial level is therefore primarily relevant for intermediaries that act as market makers, because they are buying and selling products at their own risk. Thus, the cash flows, in which an intermediary is directly involved in, are considered here as well. The activities on the legal-financial level that are particularly relevant for intermediaries in the media industry are highlighted in Table 8. The following sub chapters will examine each activity in detail.

Legal-Financial Level	
Capital Procurement	Payment Processing
Licensing	Contract Adjustment
Procurement and Sales	Warranty Processing

Tab.8: Activities on the Legal-Financial Level, based on: own research.

3.2.3.1 *Capital Procurement*

If the purchasing of the goods occurs before the sale takes place (or if the intermediary must pay the producer, before the producer is paid by the customer), the intermediary must have sufficient capital available to finance this time period (Tietz 2007, p. 80). In some industries, this period can be very long (Alderson 1954, p. 10). Accordingly, the activity capital procurement has been included in the model as well. The costs for performing this activity depend on the time between incoming and outgoing payments, the associated risk as well as interest rates and available capital sources.

3.2.3.2 *Licensing / Procurement and Sales*

Since market makers purchase and sell goods at their own risk, they have to determine prices and conditions for the procuring and selling of the goods. Thus, the intermediary supports the agreement phase and, from a market perspective, the price finding process of a market (Tietz 2007, p. 80).

An important characteristic of media markets however, is the fact that in these markets, not necessarily the media itself, but rather rights to content are traded on the basis of contracts (Caves 2003, pp. 79-82; Ünü 2005, pp. 45-49). Accordingly, this activity is primarily referred to as licensing. The cost of performing this activity increases with the number of products and transaction partners as well as with the desired degree of price differentiation.

3.2.3.3 Payment Processing

From the buying and re-selling of goods at their own risk, two cash flows can be identified, in which intermediaries are necessarily involved in. One from the intermediary to the producer and another from the customer to the intermediary. Since the cash flows go through the intermediary, the intermediary must manage and handle them accordingly (Tietz 2007, p. 80). The cost for payment processing particularly depend on the required quality standard (speed, security, etc.) and the required infrastructure.

3.2.3.4 Contract Adjustments

Chapter 2 highlighted that New Institutional Economics acknowledges that contracts cannot be created and closed for free, nor can they consider all eventualities that may arise after conclusion of the contract. Accordingly, in the control and adjustment phase, contract adjustments can always occur. Should an intermediary act as a market maker, the intermediary is directly involved in these adjustments (Tietz 2007, p. 81). The costs for performing this activity are mostly depended on the complexity of the contract and thus, the required expertise.

3.2.3.5 Warranty Processing

The discussion of the principal-agent approach highlighted additional transaction costs in the sense of agency costs, i.e. in the form of signaling and warranty costs on the part of the agent as well as monitoring and control costs on the part of the principal. Accordingly, since in addition to contract adjustments,

guarantee payments may also occur, which require a direct involvement of the intermediary, the activity is included in the analysis as well. Should the goods be flawed, the intermediary may be required by law or contract to partially or fully refund the purchase price or to cover the repair costs (Tietz 2007, p. 81). Warranty processing costs are particularly influenced by the failure rate of the product, legal requirements and the required quality standard (e.g. speed).

3.2.3.6 Summary

In the previous sub chapters, the activities on the legal-financial level that are particularly relevant for market makers, have been discussed in detail. The results are summed up in Table 9.

Activity	Cost Types	Cost Influencing Factors
Capital Procurement	- Capital Cost - Personnel cost - Infrastructure Cost	- Time between incoming and outgoing payments - Associated risk - Interest rates - Available capital sources
Licensing (Procurement and Sales)	- Capital Cost - Personnel cost - Infrastructure Cost	- Amount of products and transaction partners - Required expertise - Required infrastructure - Degree of price differentiation - Degree of automation / use of ICT
Payment Processing	- Processing Cost - Personnel cost - Infrastructure Cost	- Amount of payments and transaction partners - Required expertise - Required infrastructure - Required quality standard (e.g. speed) - Degree of automation / use of ICT
Contract Adjustment	- Adjustment Cost - Personnel cost - Infrastructure Cost	- Required expertise - Required infrastructure - Contract complexity - Degree of automation / use of ICT
Warranty Processing	- Capital Cost - Personnel cost - Infrastructure Cost	- Failure rate of products - Required expertise - Required infrastructure - Legal requirements (repairs/replacement/refund) - Required quality standard (e.g. speed) - Degree of automation / use of ICT

Tab.9: Legal-Financial Activities and Cost Factors, based on: own research.

Just like the informational activities, the costs for performing the activities on the legal-financial level are also influenced by a variety of factors as highlighted in Table 9. As such, this table also acts as guidance for the analysis of intermediation activities.

3.2.4 Activities on the Physical Level

The last activity level that has to be examined is the physical level. Activities here are only relevant for material goods as opposed to services. The relevant activities for intermediaries in the media industry on the physical level are highlighted in Table 10. Each of these activities will be discussed in more detail in the following sub chapters.

Physical Level	
Aggregation	Reproduction
Transformation	Distribution / Repair Processing
Presentation	Preservation

Tab.10: Activities on the Physical Level, based on: own research.

3.2.4.1 Aggregation

Aggregation can be understood as the arrangement of products. Aggregation can occur in the form of a relatively rigid bundling, e.g. titles on a music CD or alternatively, in the form of a rather loose arrangement, e.g. DVDs in a video store. In video stores, for example, DVDs are typically arranged according to genre and within the genre alphabetically. Through the aggregation of goods in a central

place, the consumer is given the opportunity to inspect and check the properties of the goods before making the purchase (Walter 2007, pp. 87-88).

Aggregation is identified as an important activity of intermediaries by various authors. For example, Hass (2002, p. 26) lists aggregation as a role of intermediaries in the media industry and refers to the agents carrying out this activity, content bundler. Bundling is identified as a step in several models of the media value chain (Hass 2002, p. 19; Schumann and Hess 2014, p. 183). Picard (2011, p. 46) does not use the term aggregation, but names “organizing” and “packaging” as important functions that are part of the production. Wirtz and Kleineicken (2000, pp. 630-631) do not use the term aggregation either, but stress the importance of the systematization, classification and packaging of content (Wirtz 2013, pp. 255-266; Wirtz 2012, p. 79). The aggregation costs are particularly influenced by the number of products as well as by their heterogeneity.

3.2.4.2 *Transformation*

From the research on financial intermediation and media management, the transformation activity can be derived as another essential activity of intermediaries (Bhattacharya and Thakor 1993, p. 8; Bitz and Gunnar 2008, p. 8). Transformation describes the adjustment of goods to ensure their suitability in regards to their use context. The proximity of transformation to production is reflected by Picard (2011, p. 44), who sees transformation as a part of the production stage in the value system, where the content is prepared for distribution. In the context of this dissertation, however, the primary difference between production

and transformation is, that in the case of transformation the product is not altered in its core. Accordingly, transformation is only regarded as an intermediation activity, if the product is not altered in its core.

Transformation can be divided into a content component and a technical component. Examples for the content component are summaries, table of contents and previews. An accurate description of media products is an important prerequisite for the presentation activity and contributes to a reduction in identification- and selection costs (Malone et al. 1987, p. 484-486). The content transformation is logically very close to production, but, as already discussed, differs from production in that the core of the product is not substantially altered. Instead, meta-data is extracted, in order to describe the goods. In the case of a newspaper article, for example, title, author, and page number in the table of contents refer to the actual content. In addition, an article can be supplemented with an abstract. For motion pictures, the trailer is the corresponding example. In each case, the actual content is reduced to its essential elements in order to attract the attention of the potential recipient. The actual product is thereby not changed in its essence, but selectively supplemented by describing elements (Walter 2007, p. 84).

The technical transformation, on the other hand, includes format-, compression- and resolution adjustments (i.e. versioning), but also the conversion from analog to digital media products in general (Gladney 2006, p. 112). Versioning refers to the creation of different technical quality levels of the same media product to provide it to different target groups at varying price levels (Kahin and Varian

2000; Shapiro and Varian 1998, pp. 53-55). Thus, particularly the number of different versions required influences the transformation costs.

3.2.4.3 *Presentation*

The presentation activity is important for all markets. However, it is from particular importance in media markets due to the immateriality of most media products (Walter 2007, p. 94). Presentation incorporates aspects such as the design of a DVD cover, a store or a website. Thus, the understanding of presentation in this dissertation goes beyond the function described in classic trade literature, where it is only considered a non-essential help function (Oberparleiter 1955, pp. 50-51). Although the term presentation is used in the marketing literature, it is only of secondary importance there as well. Nieschlag et al. (2002, p. 444), for example, highlight the importance of presentation within the distribution policy and in particular the importance of the store design.

In addition, the literature on media management also examines the presentation activity. Picard (2011, p. 50) is convinced that presentation and the collection of information will be one of the emerging features of a future media company. Wirtz and Kleineicken (2000, pp. 630-631) also highlight the importance of the presentation activity. For other authors such as Owers et al. (1998, p. 2) or Harries (2002, p. 1) the exhibition stage is one of the significant value added stages of the media industry. For Caves (2003, p. 79), promotion in addition to distribution is the specialty of media companies such as music publishers. Clement et al. (2009, pp. 8-9), who use the music sector as a practical example, argue in a similar manner

and point to the marketing function of music labels. The here established understanding of presentation merges into, what is often referred to as distribution. The term distribution is often used very widely and goes beyond the actual shipping in the direction of marketing (Clement et al. 2009, p. 9). Exactly this wide understanding in the direction of marketing is logically divided from the distribution activity (i.e. logistics, transport) and included in the understanding of presentation. The justification for this is the already mentioned particularly high importance of the presentation activity due to the immateriality of most media products.

3.2.4.4 Reproduction

The reproduction is carried out with the aim of ensuring the availability of the products and covers the spectrum from simple duplication to mass multiplication (Walter 2007, p. 89). It can be easily identified as one of the essential activities in media markets. In media management literature, reproduction is often combined with the production activity and only rarely explicitly finds its way into catalogs of the essential activities of media companies (Hollifield et al. 2015, p. 80). Because of their different nature, the primarily technical activity of reproduction is included in the activities on the physical level, whereas production is excluded, as it is typically a creative activity carried out by producers rather than intermediaries.

The costs of reproduction include the costs that arise when a copy is created from a media product. The effort required to keep the quality difference between original and copy low is an important factor contributing to the reproduction cost

(Thomas 2002, pp. 83 - 86). Distribution and reproduction together constitute the marginal costs of traditional media production (Heinrich 2010, p. 115-149). In the case of traditional television, marginal costs are particularly low, because they broadcast over radio waves, which equals a simultaneous reproduction and distribution nearly free of charge. The media industry in general is characterized by a strong fixed cost depression as ratio of one-time costs for the original (first copy) and the marginal cost for each additional unit (Linde 2008, p. 22). This phenomenon is also known as first-copy-cost effect (Kiefer and Steiniger 2014, pp. 181-184; Kruse 1996, p. 37).

3.2.4.5 Distribution / Repair Processing

Just as the reproduction activity, distribution is also an explicit and essential part of most media value systems and is logically located between production and consumption (Albarran 2002, p. 14; Hass 2002, pp. 19-20; Owers et al. 1998, p. 2; Picard 2011, p. 45; Schumann and Hess 2014, p. 183; Seufert 2004, pp. 64-66; Siegert 2003, p. 229; Wirtz 2012 p. 79). In literature, distribution is considered to be a classic function of the trade through which temporal and spatial distances between supply and demand are bridged. The term distribution is often used very broad and goes beyond shipping in the direction of marketing, especially when the term distribution policy is used (Clement et al. 2009, p. 9). As was already mentioned, these two aspects are treated separately in this dissertation, with marketing related aspects being considered under the presentation activity. Typical problems

associated with the physical distribution are warehousing, returns and limited shop space (Clement et al. 2009, pp. 9-12).

While physical goods are bound to a similarly physical distribution channel, the same cannot be said for intangible goods such as financial titles or media content. In the past, technical restrictions helped to bind intangible content to a fixed medium and thus, could only be distributed from the producer to the recipient by physical means. The only exception in classic media markets are broadcasters. Here, the content finds its way to the recipient via radio waves as the non-physical transmission medium (Walter 2007, p. 93).

Finally, after completing the distribution, additional logistic activities may be required, e.g. if the product must be adjusted or repaired. Accordingly, the activity repair processing is included in the scope as well. Repair processing incorporates sub tasks such as the roundtrip transportation between intermediary and provider (Tietz 2007, pp. 81-82).

3.2.4.6 Preservation

The preservation activity refers to the protection and the preservation of products. Princeton University (2015, w/o p.) defines preservation as "... the activity of protecting something from loss or danger..." Accordingly, the protection of the product itself (long term storage) and the protection from abuse (protection of rights) can be distinguished. A distinction can also be made between the preservation of the original and the preservation of copies (Walter 2007, p. 94).

Preservation is seen as a feature of intermediaries, since it does not substantially change the product (Meyer 1973, p. 87). For Picard (2011, p. 50) the physical and non-physical storage of media products will be a key future task of media companies. Caves (2000, p. I) also highlights the activities “assemble, distribute, and store” as essential duties of actors in the media industry.

In media markets, the durability, which refers mainly to the medium, has a strong influence on the preservation activity. The customer is expecting a certain durability from the product, e.g. a purchased DVD. However, a DVD (as a carrier medium) can get scratched or the paper of the newspaper can deteriorate. Broadcast signals on the other hand are fleeting by nature. Thus, the lifetime of content is systematically related to the lifetime of the medium (Walter 2007, p. 95). Accordingly, the preservation costs are particularly influenced by the durability of the medium, the complexity of the preservation and the required quality standard (e.g. life span).

3.2.4.7 *Summary*

The results of the preceding analysis of the activities of intermediaries on the physical level are highlighted in Table 11. Here the activities, related cost types and cost influencing factors are summed up. Unsurprisingly, product characteristics such as the heterogeneity of the products or the number of product variations impact the costs for performing most physical activities. In addition, the required infrastructure (e.g. machinery, trucks or stores) to perform specific activities has a particularly strong influence on the costs as well.

Activity	Cost Types	Cost Influencing Factors
Aggregation	- Aggregation cost - Infrastructure cost - Personnel cost	- Amount of products and transaction partners - Heterogeneity of the products - Required expertise - Required infrastructure - Required quality standard - Degree of automation / use of ICT
Transformation	- Transformation cost - Infrastructure cost - Personnel cost	- Amount of product variations (versions) - Required expertise - Required infrastructure - Required quality standard - Degree of automation / use of ICT
Presentation	- Presentation cost - Marketing cost - Infrastructure cost - Personnel cost	- Amount of products and transaction partners - Degree of marketing required - Required expertise - Required infrastructure - Required quality standard - Degree of automation / use of ICT
Reproduction	- Presentation cost - Infrastructure cost - Personnel cost	- Degree of First-Copy-Cost effect - Required expertise - Required infrastructure - Required quality standard - Degree of automation / use of ICT
Distribution / Repair Processing	- Distribution cost - Storage cost - Repair cost - Infrastructure cost - Personnel cost	- Distance to customers - Storage requirements - Required expertise - Required infrastructure - Failure rate of products - Required quality standard (e.g. speed, security, etc.) - Degree of automation / use of ICT
Preservation	- Preservation cost - Infrastructure cost - Personnel cost	- Preservation complexity of product - Amount of products - Required expertise - Required infrastructure - Required quality standard (e.g. length) - Degree of automation / use of ICT

Tab.11: Physical Activities and Cost Factors, based on: own research.

3.2.5 Intermediation Activity Analysis Tool

The previous sub chapters discussed the various activities that intermediaries in media markets perform. During the analysis different cost types that are associated with the performance of the activities have been highlighted and the cost influencing factors have been pointed out. The only thing missing now is a

systematic approach to actually analyze the activities. As highlighted in the introduction, the method of comparative statics analysis will be used in this dissertation. The generic tool for the comparative statics analysis of intermediation activities is visualized in Table 12 below and will be further detailed in the following paragraphs.

Activity (A)	Activity Cost ($C_{An}(t_0)$)	Impact of Technological Advancements	Activity Cost ($C_{An}(t_1)$)
Activity 1	low	Strong Cost increase due to ...	high
Activity 2	medium	Low No change due to ...	medium
Activity 3	high	Strong Cost decrease due to ...	low
.			
.			
Activity n	low	Low No change due to ...	low

Tab.12: Generic Tool for the Analysis of Intermediation Activities, based on: own research.

For a comparative statics analysis, the cost for the execution of a specific activity (C_{An}) at two different points in time - before (t_0) and after (t_1) the technological induced changes - have to be compared. From the difference between the costs for the execution of a specific activity ($\Delta C_{An} = C_{An}(t_1) - C_{An}(t_0)$) initial results can be derived. Those are likely to effect the intermediary internally. Three scenarios can be differentiated:

1. $C_{An}(t_0) = C_{An}(t_1)$
2. $C_{An}(t_0) > C_{An}(t_1)$

$$3. C_{An}(t_0) < C_{An}(t_1)$$

In regards to the first scenario, if the cost level does not change, the activity was not affected by technology and the intermediary will not have to adjust internally. In case the second scenario occurs, and the costs after the technological induced changes are lower than before, the ability of the intermediary to add value by performing this activity may now be limited. Depending on the strength of the cost reduction, the up- and downstream companies may decide to carry out that specific activity by themselves, if for example the activity can be performed at almost zero transaction cost. This in turn would mean that the internal structure of the intermediary is impacted, i.e. the intermediary has to reduce its size or workforce due to activities becoming obsolete. The opposite is true in the third case, should the cost rise. Due to the transaction cost reducing effect of intermediaries, this thus gives them the chance to add more value.

While the comparison of individual activities is interesting and carries some value, a complete picture can only emerge when the total costs are examined. The total costs for the execution of the activities or cost of intermediation (CI) is the sum of the individual costs for performing each activity (C_{An}). The cost of intermediation (CI) before (t_0) and after (t_1) the technological induced changes can be differentiated:

$$CI(t_0) = \sum_{n=1}^x C_{An}(t_0) = C_{A1}(t_0) + C_{A2}(t_0) + \dots + C_{An}(t_0)$$

$$CI(t_1) = \sum_{n=1}^x C_{An}(t_1) = C_{A1}(t_1) + C_{A2}(t_1) + \dots + C_{An}(t_1)$$

This allows a comparison of the cost of intermediation (CI):

$$\Delta CI = \sum_{n=1}^x C_{An}(t_1) - \sum_{n=1}^x C_{An}(t_0)$$

The difference between the cost of intermediation before and after the technological induced changes allows a comparative statics analysis of intermediation activities and their changes. Again three scenarios can be distinguished:

1. $CI(t_0) = CI(t_1)$
2. $CI(t_0) > CI(t_1)$
3. $CI(t_0) < CI(t_1)$

In regards to the first scenario, if the cost of intermediation do not change, the intermediary does not have to expect any substantial changes. In case the second scenario occurs, and the costs of intermediation after the technological induced changes are lower than before the change, the ability of the intermediary to add value may be severely limited. Depending on the specific degree of cost reduction, partial or complete disintermediation may be possible outcomes. The opposite is true in the third case, should the cost of intermediation be higher after the

technological induced changes. This would most likely strengthen the position of the intermediary due to the aforementioned transaction cost reducing effect.

3.2.6 Summary

The preceding sub chapters were dedicated to the second step of the Intermediation Analysis Approach – the analysis of the activities of intermediaries. Based on the generic activities and functions of intermediaries that have been discussed in Chapter 2 and the specific activities and functions of market participants in the sectors of the media industry, the relevant activities of intermediaries in media markets have been identified and structured by following Tietz (2007, p. 78) suggestion of dividing activities into three activity levels.

The general nature of each activity has been discussed in the preceding analysis and in the course, the factors that influence the costs for performing each activity have been highlighted. The analysis showed that there are a variety of factors that can have an influence on the costs and as such, the overviews of cost influencing factors are helpful guidance in the analysis of the activities. For the actual analysis of the activities a generic tool, which allows the conduction of a comparative statics analysis, has been developed and described. By combining the generic tool with the specific activities of intermediaries in media markets, the Intermediation Activity Analysis Tool is created. The tool is visualized in Table 13 and will be used in the analysis of the motion picture industry in Chapter 4.

Level	Activity (A)	C _{An} (t ₀)	Impact of Technological Advancements	C _{An} (t ₁)
Information Level	Identification			
	Selection			
	Inspection and Classification			
	Negotiation Support			
	Information Processing			
	Monitoring and Reporting			
Legal-Financial Level	Capital Procurement			
	Licensing (Procurement and Sales)			
	Payment Processing			
	Contract Adjustment			
	Warranty Processing			
Physical Level	Aggregation			
	Transformation			
	Presentation			
	Reproduction			
	Distribution / Repair Processing			
	Preservation			

Tab.13: Intermediation Activity Analysis Tool, based on: own research.

3.3 STEP 3: THE VALUE OF INTERMEDIARIES

Now that the general activities of intermediaries in media markets have been identified and the tools and guidance for their analysis have been created, the focus can shift towards the value that intermediaries provide – the third step of the Intermediation Analysis Approach. In this sub chapter, the complex reasons for the existence of intermediation will be captured and discussed. As the analysis in Chapter 2 highlighted, the contributions on the value provided by intermediaries are scattered in various research strands. It thus comes as no surprise that a

comprehensive, systematic and consistent representation of the value intermediaries provide is hardly ever found in literature.³⁵ Even comprehensive monographs such as those by Spulber (1999) do not contain all arguments. Spulber (1999), for example, does not discuss any competitive strategic reasons for the existence of intermediaries at all. However, in order to be able to analyze the impact of technological advancements, it is necessary to capture all of the reasons systematically in a formal model.

As previously mentioned and also highlighted by Tietz (2007, p. 83), two fundamentally different reasons for the existence of intermediation can be distinguished. (1) The creation of value through increased intermediation efficiency or -effectiveness. (2) Company-specific incentives to cooperate with intermediaries. While the first reason takes a macroeconomic perspective, the second reason takes the company specific reasons for the existence of intermediation into account. Due to the different nature of these two aspects, they will be analyzed separately. The focus in this sub chapter will be on the value provided by intermediaries, whereas the following sub chapter (Chapter 3.4) will discuss the company specific reasons for the existence of intermediaries.

In a world without transaction costs or information asymmetries, non-producing companies such as intermediaries cannot add any value (Churchill and Peter 1998, p. 366; Hellwig 1991, p. 35; Rubinstein and Wolinsky 1987, p. 581;

³⁵ Tietz (2007) is the first author who systematically captured the various reasons for the existence of intermediaries.

Schoder 2000, p. 45; Winkler 1989, p. 300). The only exception to this are transport activities as the reduction of transport costs can justify the existence of intermediaries in perfect markets. It thus comes as no surprise, that most research is based on the fundamental idea that intermediaries can reduce market imperfections such as positive transaction costs and information asymmetries. By reducing market imperfections, the performance of the market and thus, the market result is increased. Based on this observation, Tietz (2007, p. 84) identifies four different categories of value provided by intermediaries. These are visualized in form of a matrix in Figure 9.

		Benefit	
		Cost/ Efficiency	Result/ Effectiveness
Activity	Transaction/ Exchange	<p>Transaction Efficiency</p> <p><i>Are the transactions performed efficiently?</i></p>	<p>Transaction Result</p> <p><i>Are the right transactions performed?</i></p>
	Production/ Logistics	<p>Production- / Logistic Efficiency</p> <p><i>Are production and logistics performed efficiently?</i></p>	<p>Production Result</p> <p><i>Is the right product produced?</i></p>

Fig.9: Categories of Value, based on: Tietz (2007), p. 85.

The increase of the transaction efficiency and the transaction result was already discussed as part of the trade literature, where Schär (1923, p. 194) states that an intermediary can carry out the activities either more efficiently and/or more effectively. As Tietz (2007, p. 84) points out, the second point relates to the effectiveness of transactions (i.e. the transaction result), while the first point addresses at what cost and with what efficiency the exchange result is achieved.

Tietz (2007, p. 84) adds, that in addition to the efficiency and the result of the market transactions, production and logistics must be taken into account as well. As previously discussed, intermediaries can execute logistical activities on the physical level from which an increase in the efficiency of logistics can result. Even though intermediaries do not carry out any production activities by themselves, they can still have beneficial effects on production (Tietz 2007, p. 84). Weiber (2002, p. 146) explains this by pointing to the activities on the informational level of the intermediary and the positive effects the sharing of certain information can have on the production.

The objective in the following sub chapters is to match the various sources of value provided by intermediaries to each of these four categories. In the course of the analysis the positive economic effect will be detailed for each source. This will allow the systematical structuring of the findings into a comprehensive tool that can be used for the analysis.

3.3.1 Increased Transaction Efficiency

To assess, whether intermediation is beneficial in regards to the transaction efficiency, the two structural alternatives, with and without an intermediary, must be compared in the tradition of Coase (1937). In general, intermediation is beneficial, if the cost savings of buyers and sellers are higher than the entire costs of the intermediary (Picot 1986, p. 4). Accordingly, a net efficiency gain must be created as shown in Figure 10.

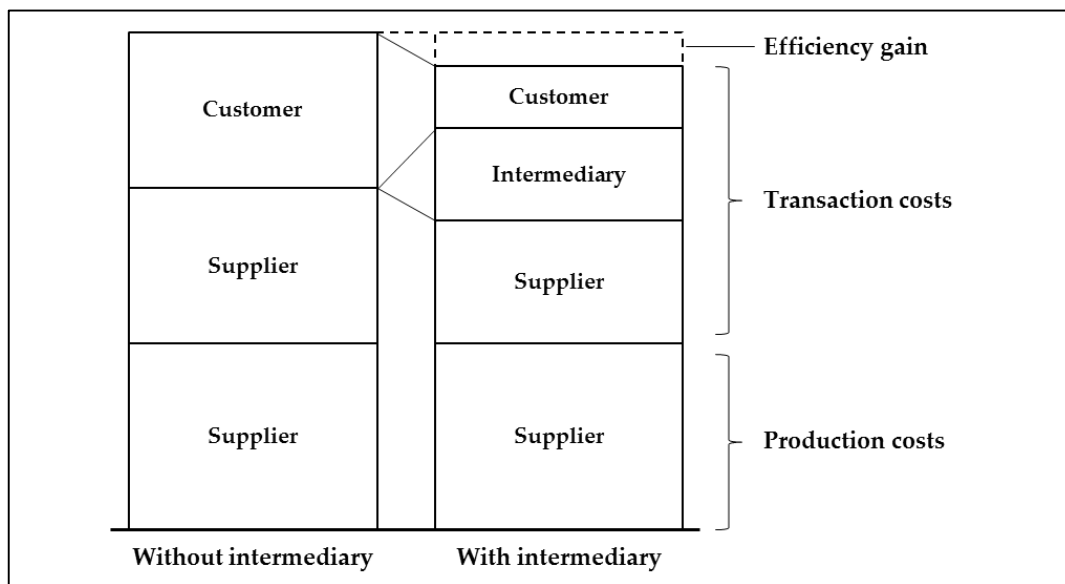


Fig.10: Efficiency Gain through Intermediation, based on: Picot 1986, p. 3.

A quantification of the net efficiency gain is not possible in practice due to the difficult calculation of transaction costs of buyers and sellers. In addition, the reduction in transaction costs can also result in savings in effort and time for a consumer. The resulting benefit is not only difficult to assess monetarily, but varies

between different consumers as well. Due to these difficulties, the advantages and disadvantages have to be compared (Tietz 2007, p. 86).

Lower transaction costs through intermediation arise from the capability of intermediaries to perform the transaction activities more efficiently than the buyers and sellers can. The basis for the efficiency advantages of intermediaries are the Baligh-Richartz-Effect, coordination, standardization, specialization, economies of scale and the experience of the intermediary. Other sources of efficiency exist, these however are only relevant for market makers, e.g. the reduction of the risk or capital cost through risk diversification as well as better access to capital (Tietz 2007, p. 86). Each of the mentioned sources for efficiency advantages is highlighted in Table 14 and will be examined in the following sub chapters.

Value Sources (Transaction Efficiency)	
Baligh-Richartz-Effect / Coordination	Risk Spreading
Standardization	Risk Diversification
Scale Effects	Lower Risk Aversion of the Intermediary
Specialization / Experience	Lower Capital Cost of the Intermediary

Tab.14: Value Sources (Transaction Efficiency), based on: own research.

3.3.1.1 Baligh-Richartz-Effect and Coordination

The Baligh-Richartz-Effect describes the transaction cost reduction effect of an intermediary by reducing the necessary contacts between buyers and sellers as was already discussed in Chapter 2. The question arises, what the conditions for the occurrence of Baligh-Richartz-Effect are. First of all, it can be noted that an

added value is only created, if multiple producers want to contact multiple customers, because otherwise no contact reduction is possible (Picot 1986, p. 6). A further prerequisite is, that the intermediary is able to aggregate multiple customer-side transactions to one provider-side transaction and vice versa. To do so, the transactions must be sufficiently standardized or in other words, characterized by low specificity (Picot 1986, p. 6). In addition, economies of scale must occur during this aggregation, i.e. (1) for the intermediary a provider-side contact on behalf of two consumers must be less than twice as expensive as two individual contacts and (2) for the buyer the contact with the intermediary for the purchase or comparison of two goods must be less costly than two single contacts.

Very similar to the contact reduction and scale-based Baligh-Richartz-Effect is the cost reduction that can be achieved through improved coordination. In this case, the intermediary does not even have to assume activities at the level of a single transaction. For example, it is sufficient if an intermediary initiates and organizes markets, so that at certain times and in specific locations potential transaction partners can meet (Tietz 2007, p. 88). Examples for this are fairs, festivals, markets or malls among others. While this does not result in a contact reduction, the costs per transaction are still reduced due to the coordination capacity of the intermediary. Despite the conceptual difference of these two effects, the result can be very similar in practice (Baligh and Richartz 1967, p. 118; Diamond 1984, p. 407).

3.3.1.2 *Standardization*

Similar to coordination, standardization can have an efficiency increasing effect as well. This is because the setting of standards and rules for the transaction process or the form of the traded products can simplify various phases of the transaction (Alderson 1954, p. 14; Bosch 2001, p. 7; Picot 1986, p. 5). Comparable to coordination, through standardization the costs per transaction are also reduced rather than a contact reduction achieved. Ultimately, intermediation is almost always connected with standardization as an intermediary is likely to create the same processes for the products from multiple vendors (Tietz 2007, p. 89). The buyers and sellers become accustomed to these processes and therefore learn to efficiently carry out transactions with the intermediary. An interaction with different providers would require this learning process every time. An advantage may also arise from standardization through technical standards for the exchange of information. Protocol standards, for example, reduce transaction costs for the communication via the Internet (Tietz 2007, p. 87).

An advantage through standardization, just as with the Baligh-Richartz-Effect or coordination, only occurs if customers contact multiple providers or vice versa. In contrast to the other two effects though, standardization can add value even if the timing of transactions does not coincide. It is sufficient, from the perspective of a provider or customer, if transactions occur repeatedly (Tietz 2007, p. 89).

3.3.1.3 *Scale Effects*

While new technologies can increase the efficiency, they are often associated with significant initial investment or fixed costs. An intermediary can increase the efficiency in both cases. Due to a larger trading volume, these costs can be distributed among a higher number of transactions and thus, efficiency is increased (Brousseau 2002, p. 358; Gumbel 1985, p. 108; Picot 1986, p. 8). On the informational level, information- and communication technologies are relevant examples, on the legal-financial level, systems for payment processing and on the physical level, storage- and transport technologies. In addition to technologies, the same effect occurs with other material resources (e.g. stores) and intangible resources (a brand or business relations) as well. An intermediary can only add value here, if buyers and sellers cannot achieve economies of scale themselves due to their small size. Otherwise the market participants can invest as efficiently in the technology or the resources (Tietz 2007, p. 90).

3.3.1.4 *Specialization and Experience*

Similar to the utilization of economies of scale through technology or other resources, benefits through specialization or experience increase the efficiency of individual transactions as well. However, in this case a particular resource is addressed, namely the organizational skills and competences of the intermediary. The basic idea has already been outlined as part of the discussion of the competence perspective in Chapter 2. Due to carrying out certain activities more often, an intermediary builds up special abilities or skills, such as in the interpretation of

information, and therefore is able to perform these activities more efficiently (Bhattacharya and Thakor 1993, p. 8).

3.3.1.5 Risk Spreading, Risk Diversification and Risk Avoidance

Through the buying and selling of goods on their own account, market makers assume risks from the producer and hence fulfill an insurance function as well (Bitz and Gunnar 2015, pp. 12-13; Brousseau 2002, p. 357; Schmitz 2000, w/o p.). The same is also true on the customer-side, because risks can exist for the customers as well, e.g. uncertainty whether the expected benefits result from the transaction (Sarkar et al. 1995, w/o p.). Through contractual agreement of guarantees an intermediary can assume an insurance function. Possible payment defaults pose an additional risk, which intermediaries can assume (Resnick et al. 1995, pp. 289-304). The assuming of risk by the intermediary can result in a reduction in risk costs and hence, in an increase in transaction efficiency, since the risk costs of market participants can be viewed as part of the transaction costs (Bienert 1996, p. 29; Clemons et al. 1993, p. 15). Three sources for risk reduction through intermediation can be identified (Tietz 2007, p. 92):

- Risk spreading.
- Risk diversification.
- Lower risk aversion of the intermediary.

An intermediary often trades with a variety of different products or in multiple markets. Thus, the spreading of risk is based on the law of large numbers

(Alderson 1954, p. 25; Brousseau, 2002, p. 359; Picot 1986, p. 7; Spulber 1999, p. xviii; Varian 2011, p. 254; Wimmer et al. 2000, p. 409). The trading of a variety of different products or trading on multiple markets can have a risk diversification effect as well. This occurs, for example, if there is a negative correlation between the demands for various products (Varian 2011, p. 254). In addition, the producer and intermediary may have different risk preferences as well (Casson 2001, p. 89). If the risk aversion of the producer is more pronounced than the aversion of the intermediary, a transfer of risk to the intermediary would result in an improved allocation of risk and lower risk costs. This results from work by Blair and Kaserman (1978, p. 271; 1983, p. 93), who have derived efficiency advantages of vertical integration from the risk aversion of the producers.

3.3.1.6 Lower Capital Cost of the Intermediary

The buying and selling of goods on their own account cannot only be connected with an insurance function, but also with a financing function. For the provider this is the case, if the payment from the intermediary to the provider occurs earlier than the payment from the customer to the intermediary (Alderson 1954, p. 10; Baligh and Richartz 1967, p. 74). Intermediaries can assume a financing function on the customer-side as well, i.e. a loan for a car purchase (Myers 1986, p. 46; Zikmund and D'Amico 2001, p. 320). In order for an efficiency increase to occur from the financing by an intermediary, the capital cost of the intermediary must be lower than the capital cost of the supplier or the buyer (Tietz 2007, p. 92).

3.3.1.7 Summary

This sub chapter began by pointing out that through intermediation lower transaction costs arise. This is based on the ability of the intermediary to perform the transaction activities more efficiently than the buyers and sellers can. Each source for the efficiency advantages of the intermediary has been analyzed and the requirements or influencing factor for each source have been identified. The results are summed up in Table 15.

Value Source	Value	Requirements
Baligh-Richartz-Effect	Reduction of the number of transaction through aggregation	- Large number of providers and customers - Scale effects through the aggregation of supply and demand - Low number of intermediaries
Coordination	Reduction of the cost per transaction through coordination	- Large number of providers and customers - Large cost reduction per transaction through coordination - Low number of intermediaries
Standardization	Reduction of the cost per transaction through standardization of the transaction process	- Large number of providers and customers - Products / Processes originally differ per provider, but a standardization is possible
Scale Effects	Reduction of the cost per transaction through investments in efficiency increasing technology or other material resources	- High investments or fix cost are required for efficiency enhancing technologies or other material resources - Size of provider and customers is too small to create an efficiency advantage through technology
Specialization / Experience	Reduction of the cost per transaction through skills and capabilities or other immaterial resources	- Skills and capabilities are relevant for the efficiency - Strong learning effects / high investments are required to build up skills and capabilities - Size of provider and customers is too small to build up skills and capabilities or other immaterial resources

Tab.15: Value Sources (Transaction Efficiency) and Requirements, based on: Tietz 2007, p. 87.

In addition, other sources of efficiency have been examined as well. These however are only relevant for market makers, who purchase and sell goods on their own account. The sources for an increase in transaction efficiency through market makers as well as the requirements or influencing factors for each source are

summed up in Table 16. Similar to the cost influencing factors that have been discussed in Step 2, the requirements or influencing factors for each value source can also be understood as guidance for the analysis of the value sources in a specific use case.

Value Source	Value	Requirements
Risk Spreading	Reduction of risk costs through the distribution of the risk on many different products and guarantees towards suppliers and customers.	- Specialized suppliers/customers with no possibilities to spread the risk - Suppliers/customers are risk averse
Risk Diversification	Reduction of risk costs through taking over of risks for different goods with a negatively correlating demand.	- Negative correlation between the demand of different goods - Multiple specialized provider, which cannot practice risk diversification as efficient
Lower Risk Aversion of the Intermediary	Reduction of risk costs through the transfer of risk from the risk averse provider to the less risk averse intermediary.	- Risk aversion of provider is higher than the aversion of the intermediary
Lower Capital Cost of the Intermediary	Reduction of capital cost through financing the time between production and consumption at lower capital cost	- Capital cost of the provider/customer are higher than the capital cost of the intermediary

Tab.16: Value Sources (Transaction Efficiency - Market M.) and Requirements, based on: Tietz 2007, p. 87.

3.3.2 Increased Production- and Logistic Efficiency

Intermediation may not only increase the efficiency of the transaction, but also the efficiency of production and logistics. The relevant value sources, which enable intermediaries to increase the efficiency of production and logistics, are illustrated in Table 17 and will be discussed in detail in the following sections.

Value Sources (Production- / Logistic Efficiency)	
Inter-company Coordination	Logistics
Market Research	Storage

Tab.17: Value Sources (Production- and Logistic Efficiency), based on: own research.

3.3.2.1 *Inter-company Coordination / Market Research*

Although intermediation, by definition, does not include any production activities, intermediaries can reduce production costs through inter-company coordination and an improved knowledge of the demand. Efficiency benefits in production can be achieved through inter-company coordination, e.g. in cases of composite demand. Tietz (2007, p. 93) provides an example from the travel industry. The two services transport and accommodation must be matched for a vacation trip. By organizing the bus transfer between airport and hotel, a package tour operator reduces the production costs. This increase in efficiency can be achieved without the intermediary carrying out the transfer directly. The efficiency increase emerges alone from the coordination capacity of the intermediary. The example shows that a trade-off or a substitution relationship between production and transaction costs can exist (Gümbel 1985, p. 171).

An intermediary conducts market research as part of the identification activity. Due to size, specialization and experience, the intermediary can often perform this activity more effectively than the producers. Should the intermediary make this information available to the producer, then the producer can use it to

optimize production and thus increase the efficiency (Picot 1986, p. 7). It must be noted that a forwarding of this information can also occur implicitly through buying and selling orders (Tietz 2007, p. 93).

3.3.2.2 *Logistics*

By handling logistics and the associated information processing, an intermediary can lower transport costs as well (Gümbel 1985, p. 106; Tietz 1993, p. 17). This is based primarily on the Baligh-Richartz-Effect in conjunction with economies of scale through efficiency-enhancing technologies. Thus, a trade-off between the benefits from a contact reduction, on the one hand, and low processing time and storage costs, on the other hand, can exist. It should be noted, that the reduction of transport costs is difficult, if product-specific means of transportation are required and, hence, no standardization is possible (Rangan et al. 1992, p. 73). The transport costs can be reduced without the intermediary carrying out the logistics activities directly (Gümbel 1985, p. 108). It is sufficient that the intermediary coordinates the logistics (Picot and Heger 2001, p. 132).

3.3.2.3 *Storage*

An intermediary can reduce storage costs, if storage activities are performed for multiple vendors, and economies of scale can be exploited through the use of more efficient technologies by the intermediary (Gümbel 1985, p. 108). However, intermediation does not necessary create a reduction in storage costs, because additional temporary storage may be required (Baligh and Richartz 1967, p. 46).

Whether an increase or a reduction of storage costs results from intermediation, therefore significantly depends on the alternative scenario. If, in a world without intermediaries, the providers would create interim storages themselves, a reduction of storage costs can arise through intermediation. If, however, the providers would otherwise do without any interim storage, for example in the context of just-in-time production, an increase of storage costs can be expected (Tietz 2007, p. 94).

3.3.2.4 Summary

An intermediary can reduce production-, transport- and storage costs. Thus, intermediation cannot only increase the efficiency of the transaction, but the efficiency of production and logistics as well. Table 18 highlights the discussed value sources, which can lead to a reduction of production-, transport- and/or storage costs. The requirements for each value source are also highlighted.

Value Source	Value	Requirements
Inter-company Coordination	Reduction of Production cost	- Inter-company coordination is necessary (e.g. composite demand) - Intermediary has coordination skills and capabilities
Market Research	Reduction of Production cost	- Intermediary conducts market research (more effective) - Market research is shared with provider - Market research is relevant for product development / production processes - High credibility of the communicated information
Logistics	Reduction of Transport cost	- High number of providers and customers - Intermediary employs efficiency-enhancing technologies - No product specific means of transportation are required - Intermediary has coordination skills and capabilities
Storage	Reduction of Storage cost	- High number of providers and customers - Intermediary employs efficiency-enhancing technologies - No product specific means of storage are required

Tab.18: Value Sources (Production- and Logistic Efficiency) and Requirements, based on: Tietz 2007, p. 87.

3.3.3 Increased Transaction Result

In addition to the increase of the transaction- and production efficiency, an intermediary can also improve the result of the transaction, i.e. the exchange result. The relevant value sources for this value category are illustrated in Table 19. As a criterion for the determination of the optimal exchange result, the allocation efficiency as well as the associated evaluation- and information efficiency can be used (Tietz 2007, p. 94). However, before it can be discussed how effective intermediation can increase allocation-, assessment-, and information efficiency, the relationship between exchange result and more efficient intermediation will be explained in the following sub chapter.

Value Sources (Transaction Result)	
Transaction Efficiency	Market Power Reduction
Effective Information Processing	

Tab.19: Value Sources (Transaction Result), based on: own research.

3.3.3.1 Transaction Efficiency

There is a close link between the already discussed transaction efficiency and the transaction result. Increased transaction efficiency, due to the enabling of cost reductions, already represents a value by itself. But, in addition to, or instead of reducing transaction costs, can also lead to a higher performance of the market and a better exchange result in the sense of allocation-, evaluation- and information efficiency (Bienert 1996, p. 31; Peiseler 1990, p. 94). A higher efficiency in the search

for information, for example, leads to a higher evaluation- and information efficiency and increases the chances of finding the most appropriate transaction partners (Tietz 2007, p. 95).

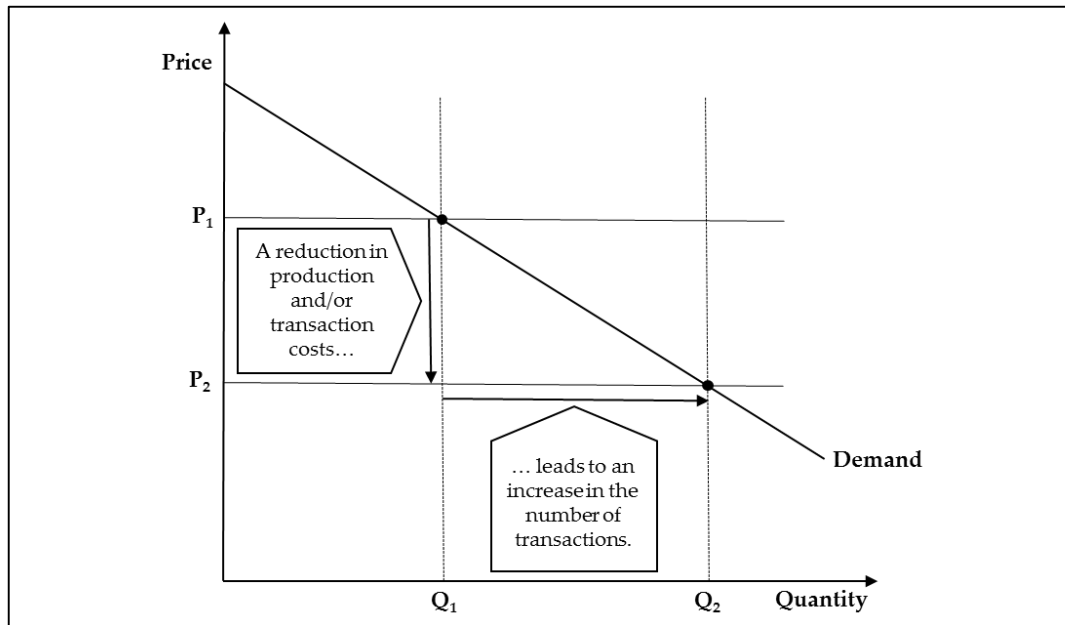


Fig.11: Transaction Efficiency and the Number of Transactions, based on: Tietz 2007, p. 96.

If a reduction in transaction costs occurs, either company internal or on the customer side, then the reduction generally leads to an increase in the volume of trade. In the case of a typical demand curve shown in Figure 11, some transactions will always fail due to prohibitive transaction costs. A reduction in transaction costs

leads to a reduction in the overall price and thus an increase in the number of transactions (Tietz 2007, p. 95).³⁶

For the failure of transactions due to prohibitive transaction costs, several examples can be found. For example, inspection costs can be too high if the product is far away. For rare, specific trade objects the search costs to find suitable transaction partners may be too high. Food can cause costly waiting costs, if the store shelves are empty. In these cases, an intermediary can add value by lowering transaction costs (thus reducing the price) and the corresponding increase in the number of customers (Spulber 1999, p. 48).

3.3.3.2 *Market Power Reduction / Effective Information Processing*

Improved transaction results can be achieved not only through more efficient, but notably through more effective intermediation as well. Although more effective intermediation does not increase the efficiency of a transaction, other market imperfections are eliminated and thus, the exchange result is improved. Two major market imperfections or effects can be differentiated: (1) the neutralization of market power as well as (2) the elimination of information asymmetries. These are illustrated in Table 20. By reducing or neutralizing market power, intermediaries can minimize monopoly rents. Intermediaries do this by aggregating demand and exploiting the increased negotiating power when

³⁶ It is assumed, that due to the presence of sufficient competition, the cost reduction leads to a corresponding price reduction.

purchasing goods (Bailey 1998, p. 36; Bose and Pingle 1995, p. 251). A variety of different intermediaries add value this way, particularly market makers such as the trade. To conduct a transaction by employing an intermediary is particularly interesting for buyers with low bargaining power, while market participants with high market power will gain no advantage in this respect (Bose and Pingle 1995, p. 251).

Market Imperfection	Description	Sources for increased effectiveness
Market Power	Reducing monopoly rents by taking over the negotiations	- Aggregation of supply and demand
Information asymmetries	Preventing adverse selection or hidden characteristics through the increased effectiveness of the inspection and classification activities	- Superior skills and capabilities in information gathering through specialization and experience - Higher trust in the communicated information through neutrality, objectivity and reputation
	Price determination through moderation or the buying and selling of goods (market maker)	
	Reducing hidden intentions through taking over of the processing	
	Preventing moral hazards or hidden information/actions by conducting the monitoring and reporting	

Tab.20: Value Sources II (Transaction Result), based on: Tietz 2007, p. 97.

In addition to market power, information asymmetries are another cause of market failures (Pindyck and Rubinfeld 2013, p. 852). The efficient bridging of information asymmetries was already examined in Chapter 3.3.1, where the focus was on the transaction cost reducing effect of intermediaries. As mentioned before, transaction costs can even be prohibitive, so desirable transactions do not take place. Although the effect is ultimately similar and a distinction can be difficult in practice, it is necessary to separate an additional case: a situation in which information asymmetries are not surmountable for providers or buyers, for

example due to confidential information. To eliminate the problem of this transaction an increase of the efficiency is not sufficient, rather the effectiveness must be increased. In order to effectively eliminate information asymmetries, an intermediary needs to have two capabilities (Tietz 2007, p. 98):

- Effective information gathering.
- Effective communication.

In regards to the first point, an intermediary must be able to gather information more effectively than the transaction partners, e.g. through superior abilities, skills and knowledge resulting from specialization and/or learning effects. In addition, and this addresses the second point, an intermediary needs to be capable of communicating this information more effectively as well. This is the case, when transaction partners have greater confidence in the information received from the intermediary. The higher trust and credibility stems from the intermediary's neutral position and associated objectivity as well as from the intermediary's better ability and higher incentive to maintain and protect his reputation. To eliminate information asymmetries, both conditions must be met. As will be explained below, an intermediary can thus fix specific information asymmetries during a market transaction (Tietz 2007, pp. 98-99):

- Adverse selection.
- Transaction aborts.
- Hidden intentions.

- Moral hazard.

An intermediary supports the initiation phase of a transaction through the following activities: identification, selection, inspection/classification and presentation. Over time, the intermediary can develop special skills in regards to all these activities, due to specialization and experience, and thus can increase the effectiveness (Casson 2001, p. 88). The important role of intermediaries in regards to inspection and classification is often addressed in literature. This is because the intermediary can build up skills in quality assurance and thus becomes an expert (Biglaiser 1993, p. 212). Furthermore, an intermediary is in frequent contact with the same provider and can therefore rate experience goods as well (Biglaiser 1993, p. 212; Resnick et al. 1995, p. 290). In addition to the reasons for the more effective gathering of the true product features as discussed before, an intermediary can also communicate these product features with a larger degree of trust: firstly, due to its neutrality³⁷ and secondly through its incentives and its ability to build up reputation³⁸ (Bartlett 1981, p. 85; Bailey 1998, p. 39; Biglaiser 1993, p. 212; Picot 1986, p. 7). Through the more effective evaluation and more credible communication of

³⁷ The neutrality gives the classifications created by intermediaries more credibility as they do not market their own product (Tietz 2007, p. 99).

³⁸ An intermediary can build up a reputation easier than a producer as the intermediary usually has the more intense and longer-lasting customer relationships (Tietz 2007, p. 99).

the true product quality³⁹, the evaluation- and information efficiency can increase and market failure due to adverse selection can be prevented (Bailey 1998, p. 39; Biglaiser 1993, p. 212; Garella 1989, p. 395; Leland and Pyle 1977, p. 383; Richter and Bindseil 1995, p. 140; Spulber 1999, p. 171).

With regard to preventing transaction aborts, it has to be noted that on imperfect markets, the price determination process can also conclude unsuccessfully due to a lack of transparency of supply and demand (Bailey 1998, p. 37; Spulber 1999, p. 27).⁴⁰ This problem can, for example, occur in the context of negotiations about unique and customized products as well as information products or other products with high fixed costs (Resnick et al. 1995, p. 291). Intermediaries can increase the effectiveness of the price determination process, so that the conduction of transactions is promoted (Bailey 1998, p. 37; Brousseau 2002, p. 362; Spulber 1999, p. 117; Wimmer et al. 2000, p. 409). An intermediary has two basic options: (1) supporting negotiations between provider and customer as a match maker or (2) the buying and selling on its own account as a market maker. As match makers, intermediaries do not perform negotiations by themselves, but rather only support them. For this purpose an intermediary can assume the role of

³⁹ In addition to the product properties, the properties of the transaction partner can be more effectively revealed as well (Schoder 2000, p. 60).

⁴⁰ This is the case, if the maximum willingness to pay of the customer is not transparent for the producer and vice versa, the opportunity cost of the producer are not transparent for the customer. Both then have an incentive to signal a lower willingness to pay or higher opportunity costs, so that an adequate price cannot be found and negotiations fail (Spulber 1999, p. 119; Wimmer et al. 2000, p. 409).

a moderator and thus increase the probability of success of the negotiations (Picot 1986, p. 7). Similar to the avoidance of adverse selection, the neutrality and associated trust of the intermediary also plays an important role in these cases. In addition, specific skills are often required as well, e.g. moderation- or translation skills. Furthermore, an intermediary can employ price determination mechanisms, for example an auction platform such as eBay, that are not always possible when buyers and sellers trade directly with each other (Bakos 1998, p. 36; Resnick et al. 1995, p. 291). A market maker can support the process of price determination through the buying and selling of goods on its own account (Spulber 1999, p. 27). On the basis of specialization, experience and market knowledge an intermediary can often better assess supply and demand, and thus set or negotiate prices accordingly (Tietz 2007, p. 100).

Effective intermediation can also increase the transaction result by mitigating hidden intentions, i.e. unknown intentions of the transaction partner. For example, it is possible that the provider fails to deliver the contractual performance despite already being paid by the customer, or vice versa, the customer doesn't pay a performance already rendered. An intermediary may have a specialization or experience advantage, if the intermediary collaborates frequently with the same suppliers or buyers and therefore knows them better. In these cases, the intermediary can communicate the information about the transaction partners more credibly (Tietz 2007, p. 100). In addition, an intermediary can also assume a fiduciary function. This is the case, when the buyer wants to minimize the risk that a paid good is not delivered and thus transfers the amount to the intermediary with

the instruction to only arrange the transfer of the money to the provider after the goods have been received. This only works if both, seller and buyer, have confidence in the intermediary (Schoder 2000, p. 57). In addition to the problem of non-performance, additional problems may arise through hidden intentions, which can also be solved by intermediation. For example, there may be the risk that the transaction partner improperly uses or shares information, such as credit card information, that was disclosed during the transaction (Schoder 2000, p. 61). An intermediary can act as a trusted third party and also minimize the risk by taking over the information processing.

Finally, an intermediary can help to avoid moral hazards. Moral hazards are created by hidden action and hidden information. They can be addressed by an intermediary by increasing the effectiveness of monitoring and reporting (Diamond 1984, p. 393; Spulber 1999, p. 256). The reasons, why an intermediary can perform the monitoring of the transaction partners more effectively, are based on the same argumentation in regards to the more effective gathering and communicating of information as was already previously discussed.

3.3.3.3 *Summary*

In addition to improving the transaction efficiency, the improvement of the transaction result through intermediation is often discussed in literature as well. The sources of value that can lead to an increased exchange result are visualized in Table 21. Just as before, the requirements or influencing factors for each value source are displayed as well.

Value Source	Value	Requirements
Transaction Efficiency	Increased Exchange Result	- A reduction in transaction costs leads to a reduction in the overall price and thus an increase in the number of transactions
Effective Information Processing	Increased Exchange Result	- Intermediary must be able to gather information more effectively than the transaction partners - Intermediary must be capable of communicating this information more effectively
Market Power Reduction	Increased Exchange Result	- Intermediary must reduce or neutralize market power of provider / customer - Aggregation of demand / supply for increased bargaining power - Market participants with low market power cooperate with the intermediary

Tab.21: Value Sources (Transaction Result) and Requirements, based on: own research.

3.3.4 Increased Production Result

Tietz (2007, p. 101) highlights that the discussion of the value added by intermediaries through efficiency and effectiveness requires to take an improvement of the production result into consideration as well. He identifies two potential effects: (1) increased quality pressure and (2) improved identification of customer needs. These are illustrated in Table 22 and will both be explained in the following two sub chapters.

Value Sources (Production Result)	
Increased Quality Pressure	Improved Identification of Customer Needs

Tab.22: Value Sources (Production Result), based on: own research.

3.3.4.1 Increased Quality Pressure

As discussed in the previous section, adverse selection can be avoided through intermediation, because an intermediary is better able to identify and communicate the true product properties. This in turn, results in an increased incentive for the provider to offer high quality products, thereby increasing the average quality of the goods offered in the market (Biglaiser and Friedman 1994, p. 510; Tietz 2007, p. 101).

3.3.4.2 Improved Identification of Customer Needs

In particular the marketing literature on intermediation highlights that intermediaries typically conduct market research (Churchill and Peter 1998, p. 367; Kotler and Armstrong 2012, p. 466). As already mentioned, an intermediary can often better identify customer needs due to the higher number of customer contacts, in particular, if the producer is small or distributes the products on a variety of heterogeneous markets. Should the intermediary share the information regarding the customer preferences with the producers, they can optimize their production not only in terms of efficiency, but in regards to the result as well (Picot 1986, p. 7; Tietz 2007, p. 102).

3.3.4.3 Summary

The preceding sub chapters looked at the improvement of the production result as the final category of value provided by intermediaries. While value of this kind usually receives little attention in literature, two relevant value sources have

been identified. These are highlighted in Table 23 as well as their influencing factors or requirements.

Value Source	Value	Requirements
Increased Quality Pressure	Increased Production Result	<ul style="list-style-type: none"> - Intermediary must be able to gather information more effectively than the transaction partners - Intermediary must be capable of communicating this information more effectively
Improved Identification of Customer Needs	Increased Production Result	<ul style="list-style-type: none"> - Small producer or products distributed on a variety of heterogeneous markets - Intermediary conducts market research (more effective) - Market research is shared with provider - Market research is relevant for product development / production processes - High credibility of the communicated information

Tab.23: Value Sources (Production Result) and Requirements, based on: own research.

3.3.5 Conflicts between Categories

The previous discussion has shown that the value through more efficient or more effective intermediation can be visualized in a matrix with four categories. It should be noted that trade-offs arise. Some of those trade-offs have already been mentioned in the previous sub chapters, additional trade-offs can be identified as well. The key trade-offs will thus be discussed further in the following sections.

3.3.5.1 Convenience vs. Intermediation Cost

Uncertain demand creates a substitution relationship between the logistics costs (especially storage costs) and the waiting costs of the customer as for the immediate availability of products, these must be stored in close proximity to the customer (Demsetz 1968, p. 35; Spulber 1999, p. 48). This trade-off is a prominent

example of a basic trade-off, namely between a minimum transaction duration or high convenience from the point of view of one transaction partner and the lowest possible monetary intermediation costs. The reduction of time and effort for the transaction partners requires additional efforts on the part of the intermediary (Tietz 2007, pp. 103-104). The bundling of products can, for example, increase the convenience for the consumer, but also requires additional activities. An assessment of this trade-off is difficult, because, apart from the already difficult monetary valuation of time and effort, the assessment differs between various market participants as well. Not every transaction partner is equally willing to incur higher costs for a reduction in the waiting period or for an increase in convenience. The actual product in question plays a role as well. A consumer is generally more likely to be willing to wait for a piece of furniture than for food. However, this also means that depending on the respective willingness to pay for increased convenience, a certain form of intermediation is only advantageous in specific customer or product segments (Tietz 2007, p. 104).

3.3.5.2 Lower Transaction Cost vs. High Effectiveness of Intermediation

Another fundamental conflict can be identified between the efficient and effective performance of intermediation activities. This conflict has already been mentioned during the discussion of the relationship between transaction efficiency and improved exchange results. An increase in the effectiveness often requires a more intensive execution of activities or even additional activities, so that additional costs such as costs for the disclosure of private information or for

building up a reputation can occur. Thus, the benefits of an increased effectiveness must be compared with the additional transaction costs. Again, a quantitative comparison proves difficult as the same problem arises: the increased effectiveness does not create the same benefit for all customers (Tietz 2007, p. 104).

3.3.5.3 Transaction Efficiency vs. Production Efficiency and -Effectiveness

The goal of low transaction costs cannot only be in conflict with a high transaction efficiency, but also with efficient and effective production and logistics (Tietz 2007, p. 104). As described in previous sections, an intermediary can increase the production efficiency or effectiveness through certain coordination activities, e.g. the identifying and forwarding of customer needs. These additional activities are not for free, so that another trade-off might occur (Gümbel 1985, p. 171).

3.3.5.4 Transaction Efficiency vs. Parallel Intermediation Structures

Previous discussions revealed that intermediation may only represent an advantage for certain market participants, such as when several customers have different degrees of bargaining power or increased convenience produces a different benefit among different consumers. Standardization is another example, since the standard introduced by the intermediary may not necessarily reflect the preferences of each customer. The examples show that with heterogeneity of demand, there is no intermediation structure that is optimal for all market participants. This is an argument for the creation of several different parallel intermediation structures. Each transaction partner can then select the option that

suits them the best. It is important to note that in those cases some advantages, such as those based on the Baligh-Richartz-Effect, would be reduced, because an optimal structure consists of only a few intermediaries and ideally, only one (Picot 1986, p. 6). Parallel structures usually incorporate a duplication of activities. Thus, there is a trade-off between a high transaction efficiency on the one hand, and the benefits of the differentiation of intermediation structures on the other hand (Tietz 2007, p. 105).

3.3.6 Efficiency and Effectiveness Disadvantages

In the previous sections the focus has been on the positive effects of intermediation in the sense of a more efficient and more effective intermediation. However, there may be significant disadvantages from intermediation, which must be taken into account and compared to the benefits to obtain a holistic picture (Tietz 2007, p. 105). Some arguments can be derived from the theory of the firm, especially from New Institutional Economics and the competence perspective, as these approaches have developed some arguments for vertical integration and thus potential arguments against intermediation. Some disadvantages, such as higher storage costs, have already been implicitly analyzed as part of the discussion of trade-offs. Other important disadvantages are highlighted in Figure 12 and will be discussed in the following sections.

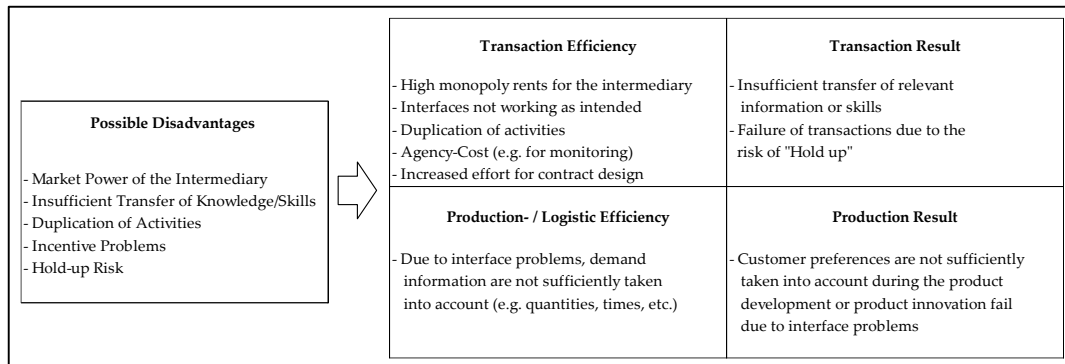


Fig.12: Efficiency and Effectiveness Disadvantages of Intermediation, based on: Tietz 2007, p. 106.

3.3.6.1 High Market Power of the Intermediary

An intermediary often has the opportunity to build up a high market power. Often a natural monopoly occurs, as the efficiency gain through intermediation is the greatest in industrial structures with exactly one intermediary (Demsetz 1968, p. 42; Gehrig 1993, p. 113; Peiseler 1990, p. 110; Picot et al. 2003, p. 378). Through the matching of supply and demand, significant network effects can also occur, such as when an increase in the number of participants corresponds with an increase in the benefits. Due to the market entry barriers thus created, the market leaders gain market power. In addition, significant switching costs can arise for the customers of an intermediary, because trust and reputation would have to be built with another intermediary or a producer from scratch. The customers adapt to the specific processes of the intermediary as well so that when a switch occurs, additional learning costs arise. This is particularly relevant for intermediaries, because due to the often wide product offering, they can build a loyal customer base especially well. Once an intermediary has built up market power, the power

can be used to increase profits, thus monopoly rents and suboptimal transaction efficiency are created (Tietz 2007, p. 106).

3.3.6.2 *Insufficient Transfer of Knowledge and Skills*

Intermediation increases the number of cross-company interfaces along the vertical view of the value system. Across these interfaces, information, knowledge and skills are transferred. The transfer of knowledge such as product know-how is essential for the functioning of the marketing and sales channel (Alderson 1954, p. 23). Vice versa, the transfer of market knowledge from the intermediary to the producer is of crucial importance for the production (Alderson 1954, p. 23.). A coordination of all relevant participants of the value system can also be essential for the introduction of product- or process innovations. Should issues arise at the interface between producer and intermediary or customer and intermediary, the advantages of intermediation can be reduced (Tietz 2007, p. 106). This concerns the transaction efficiency⁴¹ as well as the production efficiency and the production result.⁴² In addition, due to coordination issues, the innovation or technological

⁴¹ Since the transfer of information and knowledge across enterprise boundaries can be more complex than a company-internal transfer, increased transaction costs and thus a lower transaction efficiency may occur (Tietz 2007, p. 106).

⁴² If a producer has no direct customer access and there is a lack of transfer of information about the demand from the intermediary to the producer, the result can be an inefficient production and ineffective product development (Fell 2001, p. 111; Jallat and Capek 2001, p. 56).

progress and thus the production result, can suffer, since during the introduction of an innovation, the provider and intermediary must cooperate.⁴³

3.3.6.3 *Duplication of Activities*

Although intermediaries assume certain activities from sellers and buyers, this must not necessarily mean that these activities become completely obsolete in the organization of the seller or buyer. This is especially the case when direct sales and intermediation co-exist. In this case, a provider must continue to perform a variety of intermediation activities such as sales and marketing. If the execution of the corresponding activities is connected with high fixed costs, the efficiency advantages of intermediation are reduced (Tietz 2007, p. 107).⁴⁴

3.3.6.4 *Incentive Problems*

The collaboration between the provider and intermediary (or buyer and intermediary) can also be understood as a principal-agent relationship (Schmitz 2000, w/o p.; Spulber 1999, p. 319). The provider tasks the intermediary with the distribution of his products. A provider or customer can, however, only observe the behavior of the intermediary to a certain extent and therefore cannot be sure

⁴³ Accordingly, the higher innovation ability is often referred to as an advantage of vertical integration (Grant 2012, pp. 300-306).

⁴⁴ In the case of market makers some intermediation activities are always duplicated, such as the negotiation of the price and the payment processing. In addition to direct transaction activities, both match maker and market maker, usually duplicate indirect transaction activities such as general management functions (Tietz 2007, p. 108).

that the intermediary executes the delegated tasks as desired (Blair and Kaserman 1983, p. 37; Fell 2001, p. 109). This may result in increased agency costs, thus reducing the efficiency of the transaction. This is because the delegation of tasks to the intermediary creates monitoring and control costs for the provider, and on the part of the intermediary costs for signaling to the supplier or buyer (Tietz 2007, p. 108). Incentive problems are to be expected, especially for sales of complex and specific products as well as for the provisioning of services such as installations or customer service, especially when the delegated activities are complex and poorly controlled (Sharma and Dominguez 1992, p. 6).

3.3.6.5 *Hold-up Risk*

In the context of New Institutional Economics, in particular the transaction cost approach by Williamson (1990), the risk of a hold-up was highlighted as one of the reasons for vertical integration. Thus, the question arises whether through intermediation the risk of a hold-up does also occur (Tietz 2007, p. 108). This is the case, if intermediation is associated with transaction-specific investments. On the part of the intermediary transaction-specific investments cannot be ruled out, although, they are likely to occur rather rarely. This is because, as has already been previously discussed, the efficiency benefits through intermediation are often based on the aggregation of transactions and the presence of many buyers and sellers, so that internal processes will usually not be specific to a certain transaction partner. On the part of the provider or customer, transaction specific investments are conceivable, such as investments in training courses for the staff of the

intermediary (e.g. for complex products) or proprietary, inter-company information and communication systems, which are designed solely for the cooperation with a particular intermediary. In this case, there is a risk of a hold-up, which can result in increased transaction costs due to a more expensive contract design, or result in disadvantages, i.e. when the investment is not made, because of the remaining risk. Thus intermediation may not occur despite the economic benefits (Tietz 2007, p. 109).

3.3.7 Intermediation Value Analysis Tool

The preceding sub chapters highlighted the many different ways in which intermediaries can add value. In the course of the analysis the various value sources have been discussed and the requirements or value influencing factors have been highlighted. Just as with the activities of intermediaries, the question is how to actually analyze the change in value provided by intermediaries. Consequently, for the value that intermediaries provide, a comparative statics analysis will be conducted as well. The generic tool for the comparative statics analysis of the value provided by intermediaries is illustrated in Table 24.

Individual value sources (V), such as the Baligh-Richartz-Effect are examined regarding their strength (VS_{Vn}). The strength will be determined in qualitative terms and compared at two distinct points in time, before (t_0) and after (t_1) the technological induced changes. The Baligh-Richartz-Effect is a good example: The number of suppliers, customers and intermediaries have been highlighted as influencing factors. Thus, if before the changes (t_0) only a few intermediaries exist

and after the changes (t_1) their number has increased, then the effect or the value source strength would be reduced.

Value Sources (V)	Value Strength ($VS_{V_n}(t_0)$)	Impact of Technological Advancements	Value Strength ($VS_{V_n}(t_1)$)
Value Source 1	low	Strong Value increase due to ...	high
Value Source 2	medium	Low No change due to ...	medium
Value Source 3	high	Strong Value decrease due to ...	low
.			
.			
Value Source n	low	Low No change due to ...	low

Tab.24: Generic Tool for the Analysis of Intermediation Value, based on: own research.

By looking at the difference ($\Delta VS_{V_n} = VS_{V_n}(t_1) - VS_{V_n}(t_0)$) the impact on an individual value source can be assessed. Again, there different scenarios can be identified:

1. $VS_{V_n}(t_0) = VS_{V_n}(t_1)$
2. $VS_{V_n}(t_0) > VS_{V_n}(t_1)$
3. $VS_{V_n}(t_0) < VS_{V_n}(t_1)$

From the perspective of the intermediary, the third scenario would be the desired outcome – an increase in the strength of the value source. To use the same example as before, this situation would occur, if the number of suppliers and/or customers has increased or the number of intermediaries decreased. The reduction

in contact costs is thus greater, which should strengthen the intermediary. However, just as before, a complete picture can only emerge when the total value strength (TVS) is examined. The total value strength (TVS) is the sum of the individual value strengths at a specific point in time:

$$TVS(t_0) = \sum_{n=1}^x VS_{Vn}(t_0) = VS_{V1}(t_0) + VS_{V2}(t_0) + \dots + VS_{Vn}(t_0)$$

$$TVS(t_1) = \sum_{n=1}^x VS_{Vn}(t_1) = VS_{V1}(t_1) + VS_{V2}(t_1) + \dots + VS_{Vn}(t_1)$$

This allows the examination of the difference in total value strength:

$$\Delta TVS = \sum_{n=1}^x VS_{Vn}(t_1) - \sum_{n=1}^x VS_{Vn}(t_0)$$

Through the comparative statistics analysis of the total value strength the impact of technological advancements on the ability of the intermediary to add value can be determined. Again three scenarios can be distinguished:

1. $TVS(t_0) = TVS(t_1)$
2. $TVS(t_0) > TVS(t_1)$
3. $TVS(t_0) < TVS(t_1)$

Should the total value strength be higher after the technological induced changes (scenario 3), then the position of the intermediary is strengthened. Whereas in the opposite case (scenario 2), the position is likely threatened.

Depending of the severity of the reduction in total value strength, it may make no sense for up- or downstream companies to cooperate with the intermediary at all.

3.3.8 Summary

The focus in the preceding sub chapters was on the value provided by intermediaries. The sources that enable intermediaries to add value can be divided into four categories: (1) increased transaction efficiency, (2) increased production- and logistic efficiency, (3) increased transaction result and (4) increased production result.

Each category and corresponding value source has been examined in detail in the preceding analysis. In the course of the analysis, for each value source, relevant requirements or influencing factors have been pointed out. These will act as guidance for the actual analysis of the value provided by intermediaries.

Similar to the analysis of the activities of intermediaries, and for the value they provide, a generic tool that allows a comparative statistics analysis has been developed and explained in detail. By combining the generic tool with the relevant value sources, the Intermediation Value Analysis Tool is created. The tool is visualized in Table 25 and will be used in the analysis of the motion picture industry in Chapter 4.

Type	Value Source	$VS_{v_n}(t_0)$	Impact of Technological Advancements	$VS_{v_n}(t_1)$
Transaction Efficiency	Baligh-Richartz-Effect / Coordination			
	Standardization			
	Scale Effects			
	Specialization / Experience			
	Risk Spreading			
	Risk Diversification			
	Lower Risk Aversion of the Intermediary			
	Lower Capital Cost of the Intermediary			
Production- / Logistic Efficiency	Inter-company Coordination			
	Market Research			
	Logistics			
	Storage			
Transaction Result	Transaction Efficiency			
	Effective Information Processing			
	Market Power Reduction			
Production Result	Increased Quality Pressure			
	Improved Identification of Customer Needs			

Tab.25: Intermediation Value Analysis Tool, based on: own research.

3.4 STEP 4: INCENTIVES AND DISINCENTIVES TO COOPERATE

In the previous section the variety of reasons for the existence of intermediaries have been discussed from a macroeconomic perspective. However, intermediaries can only exist if the corresponding up- and downstream companies support and cooperate with intermediaries. The primary goal of these companies

is usually not the increase of welfare, but instead, the maximization of their own profits. Accordingly company specific consideration to cooperate with intermediaries must be taken into account as well.

The value added by intermediaries can behave congruent, neutral, or be in conflict with the aforementioned goal of profit maximization. A high transaction efficiency, production efficiency and production effectiveness is also in the interest of the up- and downstream companies, because all three effects allow the creation of competitive advantages over competitors and a higher producer surplus. The improvement of the result of the transaction, however, is not always to the benefit of the companies involved (Tietz 2007, p. 109). This is particularly evident in the fact that an intermediary can be tasked with reducing the market power of the upstream company through the aggregation of demand. Needless to say, this is not in the interests of the respective upstream company. The elimination of information asymmetries or an increase of the information- and evaluation efficiency is not necessarily in the interest of upstream or downstream companies either. For example, a producer, who offers products with inferior quality or not competitively priced, has no interest in perfect transparency. The same is also true for markets with hidden intentions (Tietz 2007, p. 109).

In conclusion, the objective of improving the transaction result can be in conflict to the goal of profit maximization and represents a disadvantage of intermediation from the perspective of the respective up- or downstream company. There are many additional arguments for and against a cooperation with intermediaries from a business perspective. Marketing literature provides some

input in this respect, as it deals with the arguments for or against the use of intermediaries for the distribution of the products from the producer's point of view. Additionally, some advantages and disadvantages can be derived from findings on vertical integration, as intermediation is a vertical phenomenon as well.⁴⁵ The key incentives and disincentives to cooperate with intermediaries are summarized in the following sub chapters. It is assumed that companies have the freedom of choice between cooperating with intermediaries and executing the intermediation activities themselves.⁴⁶

3.4.1 Incentives to cooperate with Intermediaries

The analysis will start by examining the incentives for market participants to cooperate with intermediaries. The relevant incentives are highlighted in Table 26 and will be analyzed in more detail in the following sub chapters.

⁴⁵ In the context of the principles of Industrial Economics that were analyzed in Chapter 2, the incentives to vertical integration were discussed as well. However, only in terms of efficiency. At this point, the non-efficiency-oriented reasons for vertical integration are relevant.

⁴⁶ This is not necessarily always the case, as in some markets establishing an own sales organization is difficult or not possible at all, i.e. due to legal or cultural conditions (Churchill and Peter 1998, p. 385; Kotler and Armstrong 2012, pp. 344-350; Zikmund and D'Amico 2001, p. 331).

Incentives	
Increased Transaction- and Production Efficiency/- Effectiveness	Improved Price Differentiation/ Discrimination
Higher Degree of Flexibility / Lower Market Exit Cost	Improved Utilization
Faster Market Entry and Penetration	

Tab.26: Cooperation Incentives, based on: own research.

3.4.1.1 Increased Transaction- and Production Efficiency/-Effectiveness

As described earlier, an increased transaction efficiency, production efficiency and production effectiveness, and sometimes also increased transaction effectiveness, represent competitive advantages that could enable a higher profitability. Accordingly, incentives for a producer to cooperate with intermediaries exist, if the distribution through intermediaries is more efficient and effective. In cases where direct sales and intermediation exist in parallel, i.e. a complementary cooperation with intermediaries, these efficiency benefits are likely reduced, because activities will be a duplicated (Tietz 2007, p. 111).

3.4.1.2 Higher Degree of Flexibility / Lower Market Exit Cost

An important criterion in assessing various distribution structures represents the flexibility of the producer to adjust the sales structure to meet new conditions (Kotler and Armstrong 2012, pp. 572-574). Vertical integration can reduce this flexibility (Grant 2012, p. 309). Similarly, this flexibility is generally higher when collaborating with intermediaries instead of building up an internal sales organization. An important example of this flexibility is the ability to withdraw

from the market at low cost after entering a new market or launching a new product (Picot 1991, pp. 38-39).

3.4.1.3 Improved Price Differentiation / Discrimination

Price discrimination exists when the same product is sold at different prices (Tirole 1995, p. 291; Varian 1989, p. 598).⁴⁷ For price differentiation, a delineation of various market segments is required, which can be achieved through the use of different sales channels or customers. It must be ensured, however, that the customer with the more favorable conditions does not resell the goods to other buyers (Carlton and Perloff 2005, p. 301; Varian 1989, p. 599).

Vertical integration with one of the customers can stop this arbitrage trading (Blair and Kaserman 1983, p. 120; Fell 2001, p. 113; Perry 1989, p. 193). These considerations lead to the conclusion that through cooperation with an intermediary price differentiation can occur, if the intermediary targets a different customer segment than the direct distribution (Brousseau 2002, p. 362). An arbitrage trade can be excluded in this case due to having control over the direct distribution channel. This is, however, more difficult, if price differentiation is sought through cooperation with several intermediaries. Purchasing and selling prices are not identical for market makers, price discrimination is thus not as obvious as in the case of direct sales or match makers. This is also the case when a

⁴⁷ This definition is simplified, Tirole (1995, p. 291) as well as Varian (1989, p. 598) provide more nuanced definitions.

market maker bundles multiple products and the price of the individual components is no longer transparent (Bailey 1998, p. 38). It is also possible that the intermediary does not reveal the name of the producer or the producer uses a different brand name for the distribution through intermediaries (Brousseau 2002, p. 362). Multiple sales channels must coexist to conduct price differentiation - either multiple intermediaries or one intermediary plus direct sales. Therefore, price differentiation may conversely be an argument for building up a direct sales capability, if goods were previously only sold through intermediaries.

3.4.1.4 Faster Market Entry and Higher Market Penetration

It is conceivable that, due to entry barriers, certain intermediation activities can only be built up in the medium to long term, e.g. in situation where a small provider would face significant capital expenditures. In this case, a provider must initially rely on intermediaries (Churchill and Peter 1998, p. 380; Kotler and Armstrong 2012, pp. 341-356). In addition, a high market penetration can be achieved faster by using intermediaries and direct sales together (Churchill and Peter 1998, p. 380).

3.4.1.5 Improved Utilization

When working with an intermediary, the producer faces the risk of becoming a victim of rationing when demand is uncertain. Conversely, an intermediary can also help the producer deal with uncertain demand more successfully, namely, if the producer can turn to the intermediary as an additional distribution channel,

e.g. in cases of temporary utilization difficulties or production surpluses. This allows the provider to optimize the utilization (Tietz 2007, p. 112).

3.4.1.6 Summary

The preceding analysis examined the incentives of up- and downstream market participants to cooperate with intermediaries. Five incentives have been identified and discussed in detail. Just as before, the relevant requirements or influencing factors have been identified as well. These are highlighted in Table 27 and will act as guidance for the application of the analysis approach in Chapter 4.

Incentives (I)	Requirements
Increased Transaction- and Production Efficiency-/Effectiveness	- The distribution through intermediaries is more efficient and effective from the producer's point of view
Higher Degree of Flexibility / Lower Market Exit Cost	- Producer requires a high degree of flexibility - High Market Entry Cost - New Product Launch Scenarios
Improved Price Differentiation/ Discrimination	- Multiple sales channels coexist - The intermediary targets a different customer segment than the direct distribution
Faster Market Entry and Penetration	- High market penetration is desired faster - High market entry barriers
Improved Utilization	- Uncertain demand - Temporary utilization difficulties - Production surpluses

Tab.27: Cooperation Incentives and Requirements, based on: own research.

3.4.2 Disincentives to cooperate with Intermediaries

The incentives of cooperating with intermediaries must be compared to the disincentives. From a business perspective, six disincentives can be identified. These are displayed in Table 28 and will be discussed in more detail in the following sections.

Disincentives	
Market Power of the Intermediary	Disclosing of sensitive Information
Rationing and Discrimination	Limited Tax Reductions / Avoidance of Regulation
Strengthening Potential Competition	Cannibalization of Direct Sales

Tab.28: Cooperation Disincentives, based on: own research.

3.4.2.1 *Market Power of the Intermediary*

As described earlier, intermediaries have the opportunity to increase their market power. An intermediary could exploit this market power in the context of setting and negotiating prices in order to maximize profits at the expense of buyers and sellers (Anderson et al. 1997, p. 60). Producers therefore have an incentive to not let the power of an intermediary grow substantially. If the intermediary already has substantial market power, the providers can attempt to circumvent the intermediary, for example, through direct sales (Fingleton 1997, p. 554; Neumann 1994, p. 282). However, if the intermediary has already built market power, the supplier is usually dependent on the intermediary, at least in the short - or medium-term. This gives the intermediary the opportunity to punish any disintermediation activities by suppliers or customers. The intermediary can thus prevent or at least delay disintermediation, even though it would be desirable from the perspective of one transaction partner (Fingleton 1997, p. 555; Sarkar et al. 1995, w/o p.; Sarkar et al. 1998, p. 219; Westerfield 1915, p. 127).

3.4.2.2 Rationing and Discrimination

When there are uncertainties about supply or demand and the price is not the only criterion for the allocation of resources, rationing can occur. This creates for some market participants the risk of not obtaining access to required resources. In literature, this risk is one of the arguments for vertical integration, because the risk of rationing can thereby be eliminated (Blair and Kaserman 1983, p. 85; Carlton and Perloff 2005, p. 403; Perry 1989, p. 206).

Even though this is most often regarded as an argument for a backward integration, it also applies in cases of forward integration, namely, if the access to distribution channels is not permanently ensured (Tietz 2007, p. 113). This reasoning can be applied to intermediation and represents a reason against the cooperation with intermediaries. Because, in the event of a decline in demand, it is likely that an intermediary will stop working with specific producers. If the affected producer depends on the intermediary, this represents a high risk. In addition, it also represents a form of rationing, if the intermediary prefers a certain producer or specific products in his marketing and sales activities. Lastly, it is also possible that the intermediary does not include a product in the portfolio at all (Kotler and Armstrong 2012, pp. 344-350). Due to the risk of rationing and discrimination, the provider has an incentive to build up direct sales, at least in addition to the cooperation with intermediaries, in order to limit the risk.

3.4.2.3 *Strengthening Potential Competition*

When cooperating with intermediaries, buyers and sellers need to disclose information and knowledge about their own business to the intermediary. This can cause the intermediary to increasingly become a potential competitor, who may threaten to enter the industry of the supplier or buyer (Anderson et al. 1997, p. 61). Thus, through the cooperation with intermediaries, the market entry barriers for the intermediary can be reduced (Blair and Kaserman 1983, p. 43; Fell 2001, p. 65; Scherer and Ross 1990, p. 526; Shepherd 1997, p. 275). This can be explained by the observation that potential entrants into the market can occur, without the new entrants having to carry out the activities of the intermediary at the same time. This is connected with lower expense and capital requirements compared to a situation where a simultaneous entry into both value system stages is required (Tietz 2007, p. 113). In addition, intermediaries can also facilitate the market entry, if the sector of the intermediary is connected with higher entry barriers than the sector of the supplier. In a vertically integrated industry structure without intermediaries, the high entry barrier for intermediaries would spread to the value system stage of the supplier (Blair and Kaserman 1983, p. 43; Scherer and Ross 1990, p. 526). Accordingly, from the perspective of buyers and sellers, any cooperation with intermediaries should be rejected, because the parallel existence of a direct sales can hardly mitigate this risk.

3.4.2.4 Disclosing of sensitive Information

The previous section already highlighted that when companies cooperate with intermediaries, they have to disclose information and knowledge about their own business to the intermediary. This might be critical and sensitive information. A disclosure of this information not only creates the risk of creating a potential competitor, but also, that this information falls into the hands of a competitor, e.g. due to not being treated confidentially by the intermediary (Tietz 2007, p. 114).

3.4.2.5 Limited Tax Reductions / Avoidance of Regulation

The literature on vertical integration also covers some legal aspects. The following three positive effects of vertical integration represent disadvantages of intermediation: (1) avoidance of price regulation, (2) avoidance of profit regulation and (3) tax optimization through profit shifting (Carlton and Perloff 2005, pp. 404-405; Fell 2001, p. 114). Since only inter-company transactions are subject to price regulations, these can be bypassed by internalizing the transactions, i.e. through vertical integration. An internalization of transactions also provides the ability to move profits from one business unit to another through a corresponding adjustment of transfer prices (Carlton and Perloff 2005, p. 404). If one of these business units is subject to earnings regulation, the company can maximize the profits by moving the surpluses generated in this unit to another unit. Finally,

based on the optimum setting of transfer prices, the overall tax burden of a vertically integrated company can be reduced (Carlton and Perloff 2005, p. 405).⁴⁸

3.4.2.6 *Cannibalization of Direct Sales*

A complementary cooperation with intermediaries carries the risks that transactions move unintentionally from the direct sales channel to the intermediary and thus, from the perspective of the provider, direct sales are being cannibalized by the intermediary. This is a disincentive when direct sales are more profitable or more beneficial in other ways, i.e. through the direct contact with customers. The risk of cannibalization is the flip side of the benefits that result from a better workload optimization and a faster market penetration (Tietz 2007, p. 115).

3.4.2.7 *Summary*

The preceding analysis highlighted that a variety of reasons exist why companies may choose not to cooperate with intermediaries. The six previously discussed disincentives to cooperate with intermediaries are highlighted in Table 29 alongside the relevant influencing factors.

⁴⁸ This is for example possible, if different business units are located in different countries and are subject to different tax rates (Carlton and Perloff 2005, p. 405).

Disincentives (DI)	Requirements
Market Power of the Intermediary	- Intermediary exploits high market power - Producers have no or limited direct distribution
Rationing and Discrimination	- Producers have no or limited direct distribution - Access to distribution channels is not permanently ensured
Strengthening Potential Competition	- Market entry barriers for the intermediary are reduced
Disclosing of sensitive Information	- Critical and sensitive information has to be disclosed
Limited Tax Reductions / Avoidance of Regulation	- Avoidance of price / profit regulations is desired - High tax burden
Cannibalization of Direct Sales	- Producers have direct distribution - Direct sales are more profitable or more beneficial

Tab.29: Cooperation Disincentives and Requirements, based on: own research.

3.4.3 Intermediation Incentives Analysis Tool

Similar to the analysis of the value of intermediaries, the incentives and disincentives of up- and downstream companies to cooperate with intermediaries will be analyzed using comparative statics analysis as well. The generic tool for the analysis of incentives is illustrated in Table 30 and the tool for disincentives in Table 31.

Incentives (I)	Incentive Strength ($IS_{In}(t_0)$)	Impact of Technological Advancements	Incentive Strength ($IS_{In}(t_1)$)
Incentive 1	low	Strong Incentive increase due to ...	high
Incentive 2	medium	Low No change due to ...	medium
Incentive 3	high	Strong Incentive decrease due to ...	low
.			
.			
Incentive n	low	Low No change due to ...	low

Tab.30: Generic Tool for the Analysis of Intermediation Incentives, based on: own research.

Following the same logic as before, individual incentives (I) or disincentives (DI) can be analyzed regarding their incentive strength (IS_{In}) or disincentive strength (DS_{Dn}) respectively. It is important to highlight again, that not the intermediary, but rather the up- or downstream company is examined. The (disincentive) cannibalization of direct sales provides a good example. A downstream company does not have direct sales before the technological induced changes (t_0), however, after the changes (t_1) the company does have its own direct sales, i.e. in form of an Internet shop. Accordingly, the disincentive strength (DS_{Dn}) of the aforementioned disincentive is low or not relevant before the technological changes and is relevant and strong after the changes.

Disincentives (DI)	Disincentive Strength ($DS_{In}(t_0)$)	Impact of Technological Advancements	Disincentive Strength ($DS_{In}(t_1)$)
Disincentive 1	low	Strong Disincentive increase due to ...	high
Disincentive 2	medium	Low No change due to ...	medium
Disincentive 3	high	Strong Disincentive decrease due to ...	low
.			
.			
Disincentive n	low	Low No change due to ...	low

Tab.31: Generic Tool for the Analysis of Intermediation Disincentives, based on: own research.

Just as before, through the difference, the impact on individual incentives ($\Delta IS_{In} = IS_{In}(t_1) - IS_{In}(t_0)$) and individual disincentives ($\Delta DS_{Dn} = DS_{Dn}(t_1) - DS_{Dn}(t_0)$) can be determined. Consequently, not only the strength of individual incentives and disincentives can be examined, but more importantly the total

incentive strength (TIS) and the total disincentive strength (TDS) as well. The total incentive strength (TIS) is the sum of the strengths of the individual incentives:

$$TIS(t_0) = \sum_{n=1}^x IS_{In}(t_0) = IS_{I1}(t_0) + IS_{I2}(t_0) + \dots + IS_{In}(t_0)$$

$$TIS(t_1) = \sum_{n=1}^x IS_{In}(t_1) = IS_{I1}(t_1) + IS_{I2}(t_1) + \dots + IS_{In}(t_1)$$

The total disincentive strength (TDS), on the other hand, is the sum of the strengths of the individual disincentives:

$$TDS(t_0) = \sum_{n=1}^x DS_{Dn}(t_0) = DS_{D1}(t_0) + DS_{D2}(t_0) + \dots + DS_{Dn}(t_0)$$

$$TDS(t_1) = \sum_{n=1}^x DS_{Dn}(t_1) = DS_{D1}(t_1) + DS_{D2}(t_1) + \dots + DS_{Dn}(t_1)$$

The difference in the total strength of incentives and disincentives allows the comparative statics analysis of the impact of technological advancements:

$$\Delta TIS = \sum_{n=1}^x IS_{In}(t_1) - \sum_{n=1}^x IS_{In}(t_0)$$

$$\Delta TDS = \sum_{n=1}^x DS_{Dn}(t_1) - \sum_{n=1}^x DS_{Dn}(t_0)$$

For a complete picture, both total incentive and total disincentives strength then have to be compared with each other. An increase in total incentives strength

is only beneficial for the intermediary, when the total disincentive strength remains flat or is reduced. Otherwise, the advantages and disadvantages may equal each other out.

3.4.4 Summary

The preceding analysis focused on the up- and downstream market participants and their incentives and disincentives to cooperate with intermediaries. The analysis showed that an exclusive collaboration with intermediaries carries significant risks, especially due to the potentially high market power of the intermediary. A cooperation with intermediaries is thus only a sensible approach, if either the efficiency or effectiveness advantages of the intermediary are very high compared to direct sales or, if a high degree of flexibility and the option of a low-cost market exit need to be preserved. Many of the disadvantages are eliminated, if the cooperation with intermediaries is only complementary to direct sales or when the cooperation with intermediaries is only temporary.

Following the logic from the previous analysis steps, the relevant influencing factors have been determined for the incentives and disincentives to cooperate with intermediaries as well. In addition, a generic tool for the comparative statics analysis of incentives and disincentives has been developed. Table 32 shows the combination of the generic tool with the discussed incentives.

Incentives (I)	IS _{in} (t ₀)	Impact of Technological Advancements	IS _{in} (t ₁)
Increased Transaction- and Production efficiency/-effektivness			
Higher Degree of Flexibility / Lower Market Exit Cost			
Improved Price Differentiation/ Discrimination			
Faster Market Entry and Penetration			
Improved utilization			

Tab.32: Intermediation Incentive Analysis Tool, based on: own research.

Table 33 on the other hand, shows the combination of the generic tool with the discussed disincentives.

Incentives (I)	IS _{in} (t ₀)	Impact of Technological Advancements	IS _{in} (t ₁)
Increased Transaction- and Production Efficiency/-Effectiveness			
Higher Degree of Flexibility / Lower Market Exit Cost			
Improved Price Differentiation/ Discrimination			
Faster Market Entry and Penetration			
Improved Utilization			

Tab.33: Intermediation Disincentive Analysis Tool, based on: own research.

3.5 SUMMARY

In this chapter the extensive results from the literature review presented in Chapter 2 have been systematically structured. In the process the Intermediation Analysis Approach was created and the first research objective achieved. The analysis approach consists of four steps. Each step has been detailed in the

preceding analysis. The development of each step resulted in a variety of tools and guidance that together are the core elements of the Intermediation Analysis Approach and can be understood as the comprehensive theoretical contribution on intermediation in media markets of this dissertation. In the following paragraphs each step will be briefly recapped and the created tools and guidelines will be highlighted. A summary of the results is shown in Figure 13.


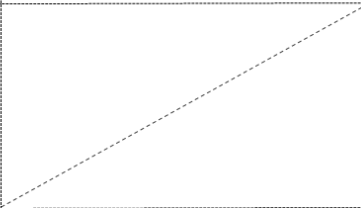






Analysis Steps	Analysis Tools	Analysis Guidelines
<p>Step 1: Analysis of Industry Characteristics</p> <p style="text-align: center;">↓</p>	<p>Tool 1: Value System Visualization</p> 	
<p>Step 2: Analysis of the Activities of Intermediaries</p> <p style="text-align: center;">↓</p>	<p>Tool 2: Intermediation Activity Analysis</p> 	<p>Guideline 1: Overviews of Cost influencing Factors</p> 
<p>Step 3: Analysis of the Value of Intermediaries</p> <p style="text-align: center;">↓</p>	<p>Tool 3: Intermediation Value Analysis</p> 	<p>Guideline 2: Overviews of Value influencing Factors</p> 
<p>Step 4: Analysis of the Incentives to cooperate with Intermediaries</p>	<p>Tool 4: Cooperation Incentives Analysis</p> 	<p>Guideline 3: Overviews of Incentive influencing Factors</p> 

Fig.13: Analysis Steps, -Tools and -Guidance, based on: own research.

Step 1 is dedicated to the analysis of general industry characteristics. Most importantly, the analysis of the value added structure and the identification of intermediaries. For this purpose, and due to the limitations of existing methods, the Enhanced Value System Model was introduced as the first tool of the analysis approach.

Step 2 focuses on the first facet of intermediation: the various activities intermediaries perform. The activities of intermediaries in media markets have been identified based on the literature review and organized according to the suggestion by Tietz (2007 p. 79). For the actual analysis of the activities a cost framework was established and the corresponding Intermediation Activity Analysis Tool created. The tool allows a comparative statics analysis of the qualitative costs for performing the activities at two distinct points in time. In order to aid in the application of the tool, guidance in the form of cost influencing factors has been developed as well.

The third step is concerned with the value that intermediaries provide. The various value sources that intermediaries can take advantage of have been identified and organized in four different value categories according to the suggestion by Tietz (2007 p. 102). The same comparative statics logic is applied here as well. This is reflected in the Value Analysis Tool, which allows a comparison of the strength of certain value sources at different points in time. To assist in the application of the tool, additional guidance has been created as well.

The same approach was followed for Step 4, where the incentives and disincentives have been discussed. The Intermediation Incentive Analysis Tool was

created for the comparative statics analysis of the strength of the incentives or disincentives and guidance for the determination of the strength has been developed as well.

A strategic conclusion can be drawn once the previous steps have been completed. While a strategic conclusion can of course only be drawn in a specific use case, first generic observations on the impact of technological advancements on intermediation can still be made. Disintermediation, for example, is only likely to occur, if the value and the company specific incentives to cooperate with intermediaries largely disappear. This in turn, is unlikely to happen, if the activities traditionally performed by intermediaries do not become obsolete or change substantially as well. Even if technological advancements eliminate the justification for the existence of intermediaries, the company specific incentives to cooperate with intermediaries still have to be taken into account. A prerequisite for disintermediation is ultimately that up - or downstream companies actually seek and enforce disintermediation. There are, however, arguments that this does not necessarily occur. For up - and downstream companies, change costs or risks may be associated with such a restructuring. For a successful disintermediation, the producer would have to perform the activities of the intermediary. The producer thus would have to build up the necessary resources as well. This may also include aspects like building up a brand or reputation. In addition, capital and certain skills would also be required. Accordingly, entry barriers exist.

It also has to be taken into account that existing intermediaries, due to their market power, can punish those companies that seek disintermediation,

(Westerfield 1915, p. 127). It is also conceivable that a provider does not seek disintermediation due to fears of a potentially higher price competition in the industry as a whole. These and any other relevant change barriers must be identified in the application of the analysis approach as well. In addition, it must be assessed whether up - and downstream companies are willing and able to overcome these barriers and enforce disintermediation. If this is not the case, it is possible that intermediation at least temporarily persists despite a lack of justification for its existence. Despite these general observations, the actual impact of technological advancements can only be assessed when the approach is applied to a specific industry. The approach will thus be applied to the motion picture industry in the next chapter where an ex-post analysis, using the tools and guidelines established in this chapter, will be carried out.

4 EX-POST ANALYSIS OF THE MOTION PICTURE INDUSTRY

Now that the Intermediation Analysis Approach has been developed and the tools and guidance for the thorough analysis of intermediaries in media markets are available, the focus can shift towards the practical research objective of this dissertation. In order to demonstrate the applicability of the developed analysis approach, it will be used for the analysis of intermediaries in the motion picture sector. It was already highlighted in the introduction of this dissertation that the motion picture sector has witnessed numerous technological advancements in the past and is thus perfectly suited for an ex-post analysis of the last fifteen years. Due to the comparative statics nature of the Intermediation Analysis Approach, the status quo of intermediaries in 1999 will be compared with their current status or the status in 2014. In order to provide a better understanding for the significance of this particular time span, an overview of selected⁴⁹ (technology driven) events is given in Table 34.⁵⁰

⁴⁹ Other relevant technological advancements, which are not explicitly discussed in this dissertation are convergence, decreasing prices and increasing performance of computing- and storage capacity (Pagani 2003, p. 5; Yoffie 1997, pp. 7-8) as well as the increase in bandwidth (Szyperski et al. 1996, p. 3; Katz 2004, pp. 31-61).

⁵⁰ For a detailed timeline of the evolution of online distribution of motion pictures refer to Cunningham and Silver (2012a, p. 189-194).

Year	Event	Overview
1995	DVD is born	1995: The first DVD specification is announced 1997: The first DVD players and discs are available in the United States 1998: The first DVD players and discs are available in Europe 2001: DVD sales in the US outpace rentals by more than four to one in dollar terms 2003: DVD sales and rentals topped those of VHS 2003: Major U.S. retailers Circuit City and Best Buy stop selling VHS tapes
1997	Netflix is born	1997: Netflix is founded 1999: Start of the subscription business model of flat-fee unlimited rentals 2006: Video on demand via the Internet is introduced with the same subscription model 2006-2011: Netflix grows quickly as DVD sales decline
1998	Digital Cinema is born	1998: Digital Light Processing (DLP) projector technology is demonstrated for the first time 1999: Texas Instrument's DLP Cinema projector is demonstrated on four screens in the U.S. 2000: There are 31 digital cinema screens in North America 2002: The Digital Cinema Initiative (DCI) is founded 2005: DCI released Version 1.0 of its Digital Cinema System Specification 2015: 38.719 screens (97% of a total screens) in the U.S. have been converted to digital
2003	iTunes Store is born	2003: iTunes store launches and quickly becomes the largest music vendor 2005: iTunes Store starts offering short videos 2007: 2 million feature-length movies are sold
2010	Amazon Studios is born	2010: Amazon Studios starts operation 2012: Amazon Studios has received more than 10,000 feature screenplay submissions 2013: 23 movies and 26 television series are in active development 2015: Amazon acquires Spike Lee's new movie <i>Chi-Raq</i> as its first Amazon Original Movie

Tab.34: Selected Events in the Motion Picture Industry (1999-2014), based on: own research.

These developments will be further discussed throughout Chapter 4. In regards to the selected time frame, however, the birth of digital cinema still has to be highlighted. As pointed out by Hawkins and Vickery (2008, p. 76), the arrival of digital cinema may be “the single most significant new stimulus to the evolution of the value system”. The first screens in the U.S. have been equipped with digital projectors in 1999. By December 2000, 31 screens have converted to digital in North America (MPA 2003, p. 24). Fast forward to 2015, where as of March 2015, 38.719 screens out of a total of 39.789 screens (more than 97%) have been converted to digital (NATO 2015, w/o p.). The conversion in the exhibition segment thus basically started and ended in the selected time frame. While many authors have

written about the possible impact of digital cinema,⁵¹ there is no contribution that captures and explains how intermediaries have actually been affected. This dissertation will thus directly close this gap.

As established in Chapter 3, the analysis will start by examining relevant industry characteristics (Step 1). As such, the following sub chapter will act as the introductory chapter to the motion picture industry as well. During the analysis of the value added structure, the magnitude of intermediaries involved in the production and distribution of motion pictures will be highlighted. Each of these intermediaries will then be examined in more detail in the proceeding sub chapters. Their role in the motion picture value system will be explained in detail and the tools for the analysis of their activities (Step 2), their value (Step 3) and the incentives to cooperate with them (Step 4), will be applied.

4.1 STEP 1: ANALYSIS OF RELEVANT INDUSTRY CHARACTERISTICS

During the development of the analysis approach it was already highlighted that an understanding of the industry structure is important for the analysis of the same (Giaglis et al. 2002, p. 240). Thus, in a first step, the general characteristics of the motion picture industry have to be examined. This includes product characteristics, the demand structure as well as the value added structure as these

⁵¹ Examples for authors discussing the possible impact of digital cinema include Eliashberg et al. (2006), Finney (2010), Hawking and Vickery (2008), Ulin (2013), Vogel (2015) and Wirtz (2012).

factors influence the structure of intermediation (Bailey 1998, p. 54; Giaglis et al. 2002, p. 240; Scott 2000, w/o p.). Accordingly, each of these characteristics and their change in the last fifteen year will be examined in the following sub chapters. Before the analysis of the industry characteristics can begin, it is important to have a common understanding of the object of investigation. Therefore a demarcation of the term motion picture industry is necessary.

4.1.1 Demarcation

According to Vogel (2015, p. 84), a motion picture or movie can be described as a sequence of sounds and pictures stored on a medium or image, which creates the impression of a moving picture. The market demarcation and corresponding determination of the product-market combination can be made in varying degrees of concretion. At the highest level, markets can be differentiated by using general product-related criteria. The result of such a demarcation for the motion picture industry is the factual determination of the market of the motion picture industry as a sector of the entertainment industry with the movie as the central element of differentiation (Wirtz 2012, p. 316).

Küng (2008, pp. 6-7) points out that this understanding of the motion picture industry as a sector of the entertainment industry is uncharacteristic for Europeans, because they tend to view the sectors of the media industry more narrowly and only include the broadcasting sector (radio and television), the print sector (newspapers, magazines, journals and books), the motion picture sector and the recorded music sector. Their U.S. peers, on the other hand, also include additional

sectors such as gaming, sports and theme parks, and when these sectors are included, the term shifts from media industry to entertainment industry (Küng 2008, p. 7; Aris et al. 2009, pp. 1-2).

This more narrow understanding of the motion picture industry as a sector of the media industry is illustrated in Figure 14. Here the various sectors of the media industry are plotted according to content type and function.

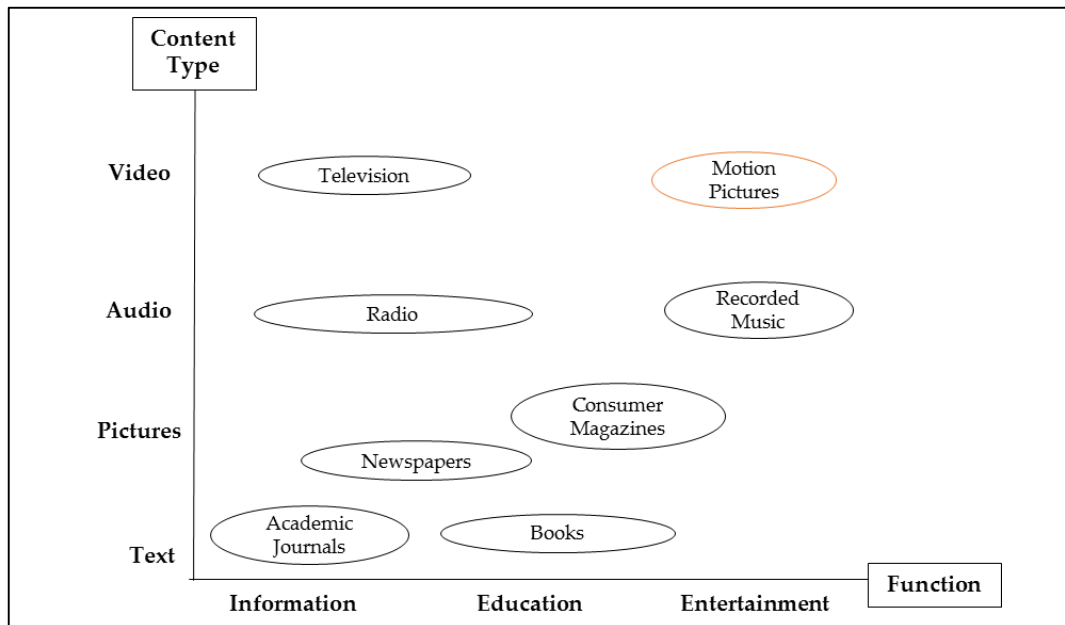


Fig.14: Sectors of the Media Industry, based on: Küng 2008, p. 7.

The focus in this dissertation is on feature movies, i.e. movies intended for the initial screening in movie theaters. Accordingly, the term motion picture industry refers to those individuals and companies that are involved in the development, production, distribution and exploitation of motion pictures (Hawkins and Vickery 2008, p. 15). From a geographical perspective, the focus is on the U.S. motion picture sector. This is justified by the observation that U.S.

movie productions dominate the box office around the globe (Silver 2007, pp. 70-88). It has to be acknowledged that locally made movies (in Europe) have been able to increase the commercial success in their home markets in the last decade, however, their share is still comparatively low. In Germany for example, the share of local productions of the total German box office was 12.5% in 2000 and rose to 16.8% in 2010 (Wirtz 2012, p. 322). Likewise, in Spain, the share of local productions of the total Spanish box office amounted to 10% in 2000 and rose to 16% by 2009 (Cunningham and Silver 2012, pp. 34-35).

4.1.2 Product Characteristics

In regards to product characteristics, the first thing that has to be highlighted is that the theatrical motion picture is not a typical product such as a car or toothbrush. Wirtz (2012, p. 315) for example points out, that motion pictures play a significant and varied role in today's society. Movies are cultural goods, entertainment goods and economic goods at the same time. This observation is important and is also highlighted by Crissey (2010, p. 4), who points out that movies have product traits, because they are manufactured, marketed and sold to customers, who have a desire to buy entertainment. However, a motion picture exhibits many of the characteristics of a work of art as well. While a commercial product is made to satisfy the needs of a customer, a work of art is often made to satisfy the needs of the artist. Consequently, customer requirements as well as traditional business attitudes in regards to competition and delivering a return on investment are frequently not considered relevant in these situations. The fact

that all motion pictures exhibit both types of traits distinguishes a movie from most other industrial products (Crissey 2010, p. 4).

4.1.2.1 Product Segments

While the focus of this dissertation is on movies, which are intended for an initial theatrical release, the revenues from the box office do not represent the only source of income for the motion picture industry. It is thus important to discuss the performance spectrum of the motion picture industry as whole and identify the relevant product segments. On the highest level the product segments of the motion picture industry can be divided into four areas: (1) theatrical exploitation, (2) home entertainment, (3) TV exploitation and (4) merchandising (Vogel, 2015, pp. 150-154; Wirtz 2012, p. 341). These segments are illustrated in Figure 15 and will be further discussed in the following paragraphs.

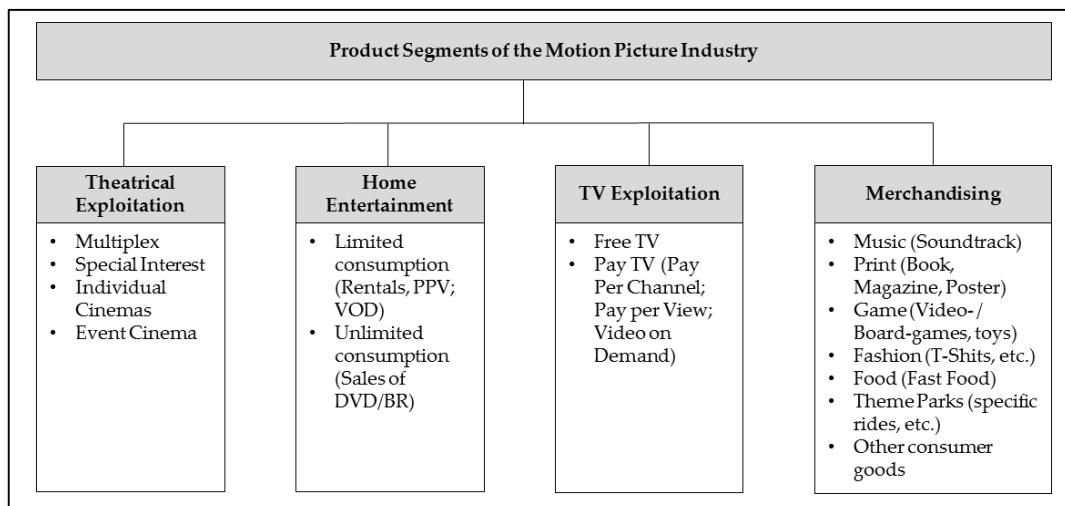


Fig.15: Product Segments of the Motion Picture Industry, based on: Wirtz 2012, p. 341.

The first segment, the theatrical exploitation, includes public screenings in movie theaters. Due to the different designs of theaters, multiplex cinemas, individual theaters and event cinemas can be distinguished (Vogel 2015, pp. 145-147). The movies themselves can be distinguished on the basis of their content. In addition to the classic differentiation between mainstream and special interest, they can be distinguished according to their genre as well (Wirtz 2012, p. 341). It has to be highlighted that the theatrical exploitation is very important in order to signal the quality of a movie. Through the number of tickets sold, the preferences of consumers are revealed, but its proportion of the overall revenues of the motion picture industry has declined from a share of 50% in 1980 to less than 15% in 2008 (Dessy and Gambaro 2010, p. 207).

The second product segment includes the various movie specific offerings in the home entertainment sector. Albarran (2002, p. 123) notes that revenues from this sector can often surpass box office revenues. The products offered in this segment can be divided on the basis of their usage rights into limited and unlimited offerings. The limited use of the movie takes place in the context of rentals from video stores, pay per view channels and video on demand. In the sell through business, on the other hand, the consumer acquires the permanent usage right of the movie, so it can be viewed when and as often as the consumer wants (Ulin 2013, pp. 196-198). In terms of content, the products in the home entertainment sector can be further divided into three subgroups: (1) theatrical version of the movie, (2) additional movie material, i.e. audio commentary and (3) alternative movie material, i.e. a Director's cut with additional scenes (Wirtz 2012, p. 342).

The third product segments includes the various offerings in the TV landscape. A general differentiation can be made between Free TV and Pay TV. The latter can be further divided into varying business models including pay per channel, pay per view and video on demand (Ulin 2013, p. 272; Wirtz 2012, p. 427).

Finally, the fourth product segment includes multiple merchandising products. In this segment a wide range of consumer goods and services can be found (Ulin 2013, pp. 445-446). Due to the diversity and heterogeneity of merchandising products a further differentiation is not feasible. However, some general product categories can be identified as highlighted in Figure 15. As this point it has to be noted that due to the very different nature of this segment, it will be excluded from the analysis.⁵²

4.1.2.2 *Windowing*

The various product segments previously discussed are not all served at the same time. As Vogel (2015, p. 138) points out, movies are normally first distributed to the market that generates the highest marginal revenue over the least amount of time. They then cascade in order of marginal revenue contribution down to markets that return the lowest revenue per time unit. This has historically meant theatrical

⁵² This dissertation is concerned with intermediation, a vertical phenomenon. The cooperation with companies from different industries, as it is usually the case in the merchandising segment, relates more closely to the diagonal dimension (as opposed to the vertical dimension) and is accordingly not in the scope of this analysis. Refer to Hagenhoff (2004, pp. 10-11) for an overview of the various dimensions.

release, followed by licensing to home entertainment distributors, pay cable program distributors, television networks, and finally local television syndicators. Distribution as Ulin (2013, p. 37) thus notes: “is all about maximizing discrete periods of exclusivity”. It has to be noted that in the United States and in most other countries, windows are negotiated between parties and are freely moveable. However, a few countries regulate windows to create order and to protect the local motion picture industry. France is the best known example as the windows for video, Pay- and Free TV exploitation are all set by law relative to the theatrical release (Ulin 2013, p. 38). Figure 16 shows how these periods have traditionally been structured, when freely negotiated between parties.

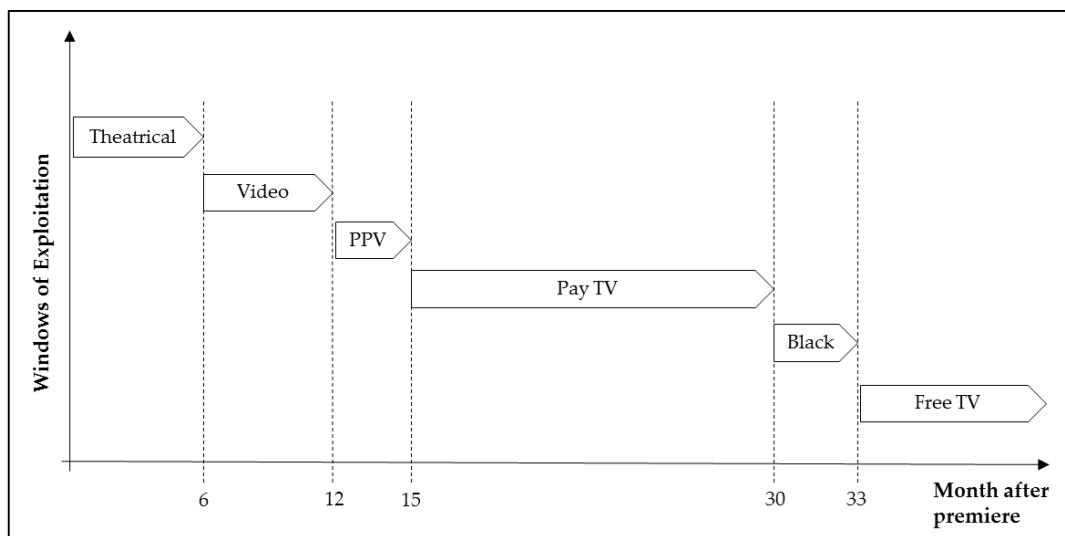


Fig.16: Traditional Windows of Exploitation (1999), based on: Ulin 2013, p. 41.

However, because the amount of capital invested in features has become so large, and the pressure for faster recoupment so great, a trend towards earlier

opening of all windows⁵³ could be witnessed in the past fifteen years. The introduction of various forms of video on demand and the digital sell through business brought additional changes to the windowing structure (Ulin 2013, pp. 39-42). These changes are illustrated in Figure 17 and highlighted in red.

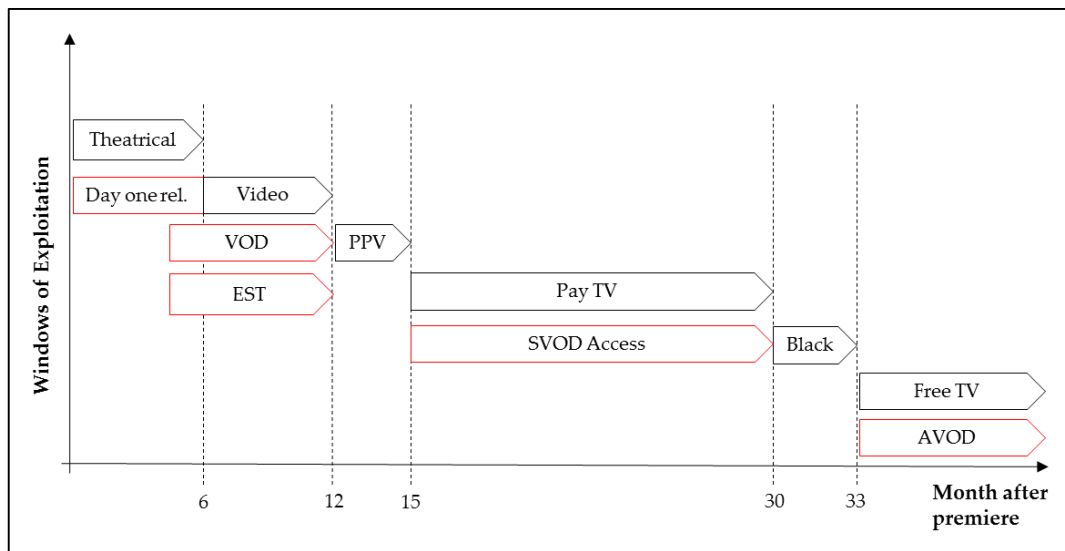


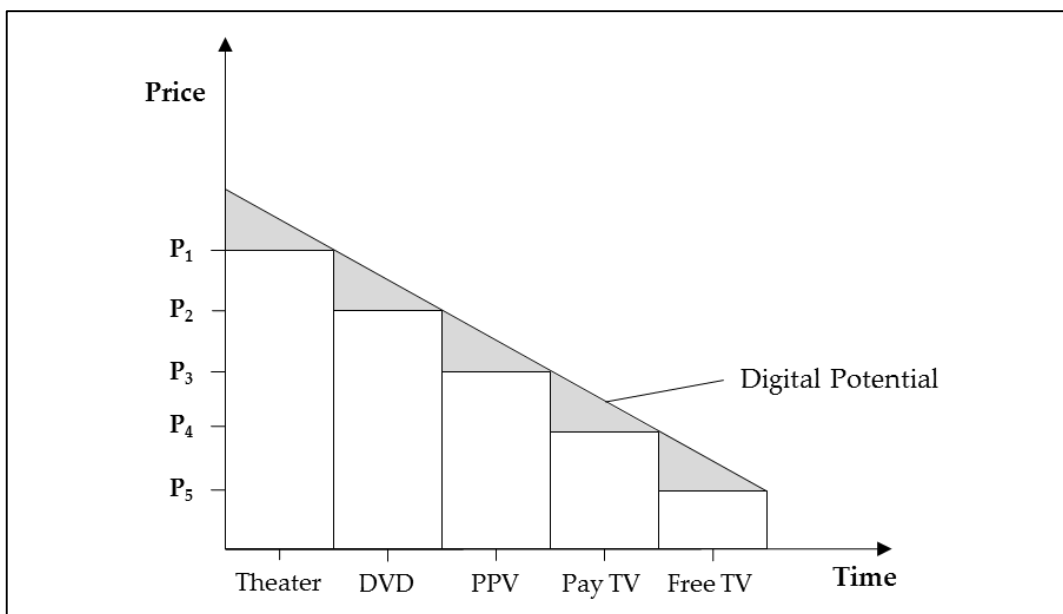
Fig.17: Modern Windows of Exploitation (2014), based on: Ulin 2013, p. 41.

As Litman (2000, p. 99) points out, the windowing strategy can be attributed to the application of the model of second-degree price discrimination.⁵⁴ Consumers are segmented according to their different demand elasticities, in order to then be able to take full advantage of their individual willingness to pay. Consumers, who

⁵³ In the motion picture and television sector the term window refers to the period of time in which contracts permit exclusive exhibition of a product (Vogel 2015, p. 611).

⁵⁴ This is essentially the same effect that has been discussed in Chapter 3.4.1.3, where price discrimination was highlighted as an incentive to cooperate with intermediaries from the producer's point of view.

want to watch a movie shortly after its theater premiere, are willing to pay a higher amount, than those who wait until the movie is available for rent or will be shown on Free TV. With increasing duration of the exploitation phase and the movie going through the individual distribution channels, the recipient's willingness to pay decreases. This is outlined in Figure 18.



**Fig.18: Price of Movie Consumption across the Exploitation Chain, based on:
Wirtz 2012, p. 375.**

Wirtz (2012, pp. 374-375) predicts in this context that through the digitalization of motion pictures, an additional sales potential (digital potential) can be developed. For example, movies could appear before or in parallel to their regular theatrical release in the form of a video stream at additional cost. It has to be pointed out, that while some producers experimented with a simultaneous digital and theatrical release, those releases have been very limited. The large

cinema chain operators will generally elect to not show movies that are simultaneously released online. A popular example is the African war drama *Beasts of No Nation* (2015), the latest movie acquired by Netflix in a \$12 million deal. Netflix debuted *Beasts of No Nation* (2015) in theaters and on its streaming service in 2015. However, since the largest circuits in the United States remain opposed to playing movies that are debuting simultaneously elsewhere, *Beasts of No Nation* (2015) was only shown in 200 to 250 independent theaters (McClintock 2015, w/o p.). This was not the first time that Netflix and exhibitors have found themselves at odds. In September 2014, Netflix and IMAX announced a deal whereby the sequel to *Crouching Tiger, Hidden Dragon* (2000) will debut day and date on Netflix and in select IMAX theaters. However, circuits that operate IMAX venues, including AMC and Regal, immediately said they wouldn't play the movie. Sony faced a similar challenge with *The Interview* (2015), which ended up being offered digitally and in theaters simultaneously, however, only independent cinemas played the movie (Setoodeh 2015, w/o p.). In conclusion, the digital potential as envisioned by Wirtz (2012) has not materialized yet.

4.1.2.3 Blockbusters vs. Niche Releases

Another important product characteristic that has to be highlighted is the differentiation between mainstream products and niche products. It was already highlighted that a motion picture can be differentiated based on content as well as

by their artistic form (e.g. camera angels and editing).⁵⁵ Content and form in turn determine the level of the artistic value, the entertainment value and ultimately, the mass suitability of the movie (Wirtz 2012, p. 371).

By taking these criteria into account, mainstream productions can be differentiated from niche products. While large studios produce expensive movies with well-known stars, smaller companies often focus on cheaper productions with a higher artistic value. In this context, the blockbuster strategy represents a production strategy of particular importance (Aris et al. 2009, pp. 84-85; Gomery 2004, p. 198). The aim of this strategy is to create and market movies with mass appeal. The whole process, from the initial idea to the production of the movie, differs significantly between a blockbuster and a conventional production (Wirtz 2012, p. 371). The main differences will be briefly outlined in the following paragraphs.

As Wirtz (2012, p. 372) points out, conventional and low-budget movies are usually initiated by independent producers, who want to produce a movie according to their own interests. In contrast, major studios, which produce mostly costly blockbusters, continuously perform market research (e.g. about the productions of competitors) as part of their strategic project planning. In parallel to this, market research institutions are also evaluating the requirements and desires

⁵⁵ The analysis of the evolution of these artistic elements is not in the scope of this dissertation. Nevertheless, Selva (2012, p. 18) highlights that changes (i.e. an increase in close-ups and camera movements) have occurred in U.S. motion picture productions.

of the customer (e.g. preferred genre or favorite actor) using focus group analyses. This basic information provides the basis for the selection of potential ideas and screenplays. When several movies are planned or produced in parallel, then the content, the available resources and the release strategy have to be coordinated over the entire portfolio. The so-called blockbuster strategy pursued since the 1980s by the big Hollywood studios has the following characteristics (Wirtz 2012, p. 372):

- Reduced annual production output, in order to market fewer products more intensively.⁵⁶
- Increased production of so-called event movies that are based on stars or well-known properties and characterized by high marketing costs.
- Generating a high share of revenues within a very short period (e.g. the opening weekend).⁵⁷

Evidence of the persistence of the blockbuster strategy throughout the time frame examined in this dissertation can be found in the data collected for the Top 100 domestic motion picture releases for each year from 1999 to 2014. The following graphic shows the percentage of the worldwide revenue the Top 10 (blue bar) and Bottom 10 (red bar) releases have achieved. This is compared to the percentage of the total production cost each group of 10 created (green and purple bar).

⁵⁶ The number of releases by MPAA studios is down from 200 motion picture releases in 1999 to 136 releases in 2014 (Wrobel 2016, p. 126).

⁵⁷ In some cases, up to 50% of total sales are achieved at the premier weekend box-office (Pascal 2002, p. 104).

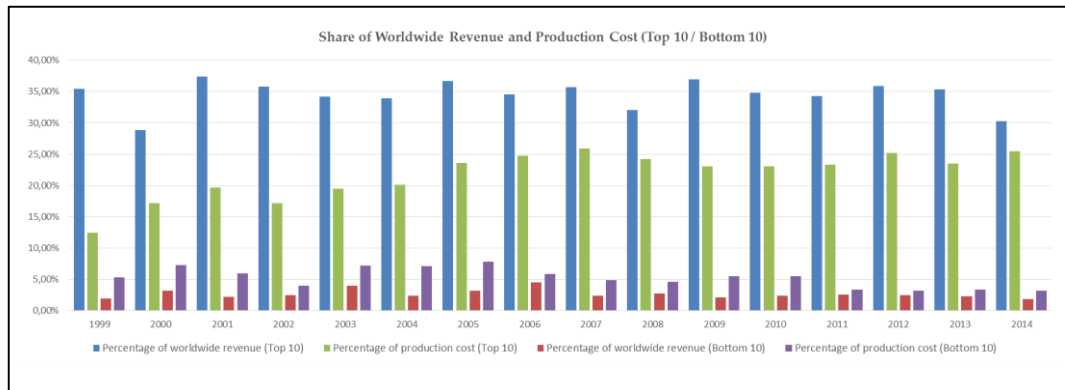


Fig.19: Share of Worldwide Revenue and Production Cost (1999-2014), based on: Information courtesy of Nash Information Services (<http://www.the-numbers.com>).

In the past fifteen years, the Top 10 movies more or less consistently contributed roughly one third of the worldwide revenue the Top 100 releases generated in total. They do however, account for one fifth to one fourth of the total production cost of all one hundred movies examined in each year. As clearly visible in Figure 19, while the share of revenue remained more or less stable in the last fifteen years, the share of the production cost has risen noticeably. In 1999 for example, the Top 10 accounted only for 12.5% of the total production cost of the best one hundred domestic releases in that year. That number has since doubled and peaked in 2007, 2012 and 2014 when the share reached 25.93%, 25.17% and 25.43% of the total production cost respectively.

Unsurprisingly, the opposite picture emerges when the bottom of the Top 100, the 91st to 100th highest grossing domestic releases, are examined. Both, in 1999 as well as in 2014, the share of worldwide revenue for the Bottom 10 was below 2%.

The share peaked in 2006 with 4.5%. The only time in the last fifteen years in which the share exceeded the 4% mark. The share usually remained relatively constant between 2% and 3%. While the revenue contribution of the Bottom 10 is low, they do account for quite a bit of the production cost. In 2000 for example, the Bottom 10 contributed 3.21% of worldwide revenues while accounting for 7.3% of the total production cost. While the cost share decreased in the following years, to around 5% in the years 2006 to 2010 and to just over 3% in the last years, its remains comparatively high. In 2014 for example, the Bottom 10 contributed 1.82% of worldwide revenues while accounting for 3.18% of the total cost.

The preceding analysis is to a certain agree able to quantify some of the aspects that have been highlighted before and the importance of blockbusters for creating large revenues becomes obvious. However, these large revenues come at the expense of considerable production cost. Finally, the analysis also showed, that the blockbuster strategy persisted in the last fifteen years. This may be unsurprising for some. After all, the strategy has been pursued by studios since at least the 1980s.⁵⁸ It is therefore necessary to highlight, that the strategy itself didn't receive much attention from practitioners and academics alike until 2013. Even more astonishing, for the most part of the last fifteen years, the long tail theory, which directly contradicts the blockbuster strategy, dominated the discussion. Understanding the difference between both approaches is crucial for a detailed

⁵⁸ Universal's Lew Wasserman is typically credited for pioneering the blockbuster strategy with the release of *Jaws* (1975) in June 1975 (Gomery 2004, p. 198).

understanding of the unique product features of motion pictures, which is the focus of this sub chapter. The following paragraphs will therefore also briefly discuss the long tail theory and explain, why the discussion is relevant for the analysis of intermediaries in the motion picture industry.

The long tail theory was formulated by Chris Anderson, editor of *Wired* magazine, and received widespread attention with the release of his best-selling book, *The Long Tail: Why the Future of Business is Selling Less of More*, published in 2006. Anderson (2008, p. 52) argues that culture and economy are increasingly shifting away from a focus on a relatively small number of hits (mainstream products and markets) at the head of the demand curve toward a huge number of niches in the tail. For him, the Internet can make narrowly targeted goods and services as economically attractive as mainstream products, because constraints of physical shelf space and other bottlenecks of distribution are removed. In other words, when consumers can find and afford products more closely tailored to their individual tastes, they will migrate away from hit products. Accordingly, it would be smart for companies to stop to rely on blockbusters and focus on the profits to be made from the long tail, i.e. niche offerings that cannot be offered profitably through bricks-and-mortar channels. Anderson (2006, pp. 95-104) concludes that the companies that will prosper, will be those that switch out of lowest-common-denominator mode and figure out how to address niches. His ideas are best summed up by the six themes he identifies for the long tail age. These are illustrated in Table 35.

#	Theme / Prediction
1	- There are far more niche goods than hits in virtually all markets. - This ratio is growing exponentially larger as the tools of production become cheaper and more ubiquitous.
2	- The costs of reaching niches are falling dramatically. - This is driven by digital distribution, powerful search technologies and a critical mass of broadband penetration - Online markets are resetting the economics of retail - It is now possible to offer a massively expanded variety of products.
3	- Simply offering more variety, does not shift demand by itself. - Filters that can drive demand down the tail include a range of tools and techniques (e.g. recommendations and rankings).
4	- With massively expanded variety and filters to sort through it, the demand curve flattens. - Hits will become relatively less popular while niches will become relatively more popular.
5	- All those niches add up. - The many niche products can collectively comprise a market rivaling the hits.
6	- Once all of this is in place, the natural shape of demand is revealed. - Undistorted by distribution bottlenecks, scarcity of information and limited shelf space.

Tab.35: Anderson's Six Themes of the Long Tail Age, based on: Anderson 2008, p. 53.

It is important to note that Anderson's (2006) idea caught on with many industry insiders. For example, Google's then chief executive officer, Eric Schmidt claims on the cover of Anderson's (2006) book, that "Anderson's beliefs influence Google's strategic thinking in a profound way" (Schmidt quoted in Anderson 2006, w/o p.). Another example is Netflix, which in the past took pride in calling itself a long-tail company (Elberse 2013, p. 157). Lastly, many of the authors who examined the media industry and/or motion picture industry in the years after 2006, explicitly base some of their assumptions on Anderson's (2006) ideas. For example, Finney (2010a, p. 17) as well as Bloore (2009, p. 17) predict disintermediation to occur in the value system of the motion picture industry. Their prediction is based on the idea that technological advancements will facilitate a closer communication

between producers and consumers. They also expect that niche audiences can be served effectively. They argue that by being able to distribute a movie to thousands of potential consumer with the click of a mouse button, traditional intermediaries typically tasked with the distribution of movies would be eliminated.

One of Anderson's (2006) observations cannot be disputed – the observation that online businesses can offer much more variety than their analog counterparts. When transaction cost decrease and physical constraints on selection disappear, merchandise assortments can grow exponentially. This can easily be seen in practice: Amazon, for example, offers hundreds of thousands of music albums, the largest offline music store on the other hand, typically stocks only ten thousand titles. Similarly, whereas Netflix's DVD title count is in the six figures, traditional video stores usually stock no more than a couple of thousand DVDs (Anderson 2008, p. 23; Elberse 2013, pp. 157-158).

In contrast, Anderson's (2006) predictions about how demand is evolving, turned out to not reflect the reality and is therefore heavily criticized by Elberse (2013)⁵⁹. As previously highlighted, Anderson (2008, pp. 52-57) argues that online channels will actually change the shape of the demand curve. He believes that consumers value niche products geared to their particular interests more than they value products designed for mass appeal. As the Internet enables consumers to find

⁵⁹ To clarify, Elberse (2008, pp. 88-96) started to question the long tail theory as early as 2008, however, her research didn't receive a lot of attention until the release of her book *Blockbusters* in 2013. Noam (2010, p. 59) is another author, who challenged Anderson's findings early on.

more niche products, their purchasing will change accordingly. In other words, consumption will shift from the head to the tail of the demand curve. In addition, Anderson (2008, p. 52-57) predicts that the tail will steadily grow longer, as more obscure products are made available, and it will also become fatter, as consumers discover products better suited to their tastes. This will eventually lead to a situation in which obscure products will erode the huge market share traditionally enjoyed by a relatively small number of hits (Anderson 2008, p. 53).

As becomes obvious by now, the changes Anderson (2008, p. 53) predicts would have meant trouble for any producer relying on a blockbuster strategy. This is where Elberse (2013, p. 159) comes in to point out that “fortunately, for those betting on hits rather than niches, actual data on how markets are evolving tells a much different story than what Anderson has predicted.” Elberse (2013, pp. 159-163) describes that with the shifting of demand from offline retailers to online channels, the sales distribution is not getting fatter in the tail. The contrary is the case, as time goes on and consumers buy more goods online, the tail is getting longer, but decidedly thinner. In regards to the blockbuster strategy, her findings indicate that the importance of individual bestsellers is not diminishing over time, instead, it is growing.

While Elberse (2013) examines multiple sectors of the entertainment industry, her examples from the recorded music sector are the most astonishing and therefore perfectly suited to bring her point across. One of these examples is illustrated in Table 36, which provides an overview of the distribution of individual digital music track sales on the iTunes Store in the U.S. in 2011.

# of titles selling at least one copy	% of sales	# of copies sold
102 titles selling 1.000.000 copies or more	15%	189.758.000 copies sold
1.412 titles selling 100.000-999.999 copies	25%	318.473.000 copies sold
13.492 titles selling 10.000-99.999 copies	29%	374.827.000 copies sold
74.246 titles selling 1.000-9.999 copies	17%	212.571.000 copies sold
382.720 titles selling 100-999 copies	9%	111.117.000 copies sold
1.620.959 titles selling 10-99 copies	4%	48.687.000 copies sold
5.927.729 titles selling fewer than 10 copies	1%	15.722.000 copies sold
8 million titles selling at least one copy	100%	1.271 billion copies sold

Tab.36: Recorded Music Digital Track Sales (2011), based on: Elberse 2013, p.

161.

These numbers impressively demonstrate, how the possibility for artists to be in direct contact with the consumer ends up in practice. In the head, 102 songs (a mere 0.001% of the eight million tracks) sold more than one million units each and thus accounted for 15% of total sales. In regards to the tail, consumer didn't find much interest in niche offerings. More than 7.5 million tracks, which amounts to 94% of the total tracks, sold fewer than 100 units each and accordingly only accounted for 5% of total sales. Even more astonishing, more than 2.5 million tracks (32% of all tracks) sold only one copy each (Elberse 2013, pp. 159-161).

Elberse (2013, p. 163) highlights that these statistics for the recorded music industry are no coincidence. As already mentioned, she analyzed other sectors of the media industry as well, including the motion picture sector. Her research on

video rentals and sales,⁶⁰ however, yields the same patterns: Rather than a shift of demand to the long tail, an increased level of concentration in the market for digital entertainment goods can be witnessed. Instead of following Anderson's (2006) long tail logic, the entertainment industry is moving more and more toward a winner-take-all market (Elberse 2013, p. 163). This is illustrated in Figure 20 below.

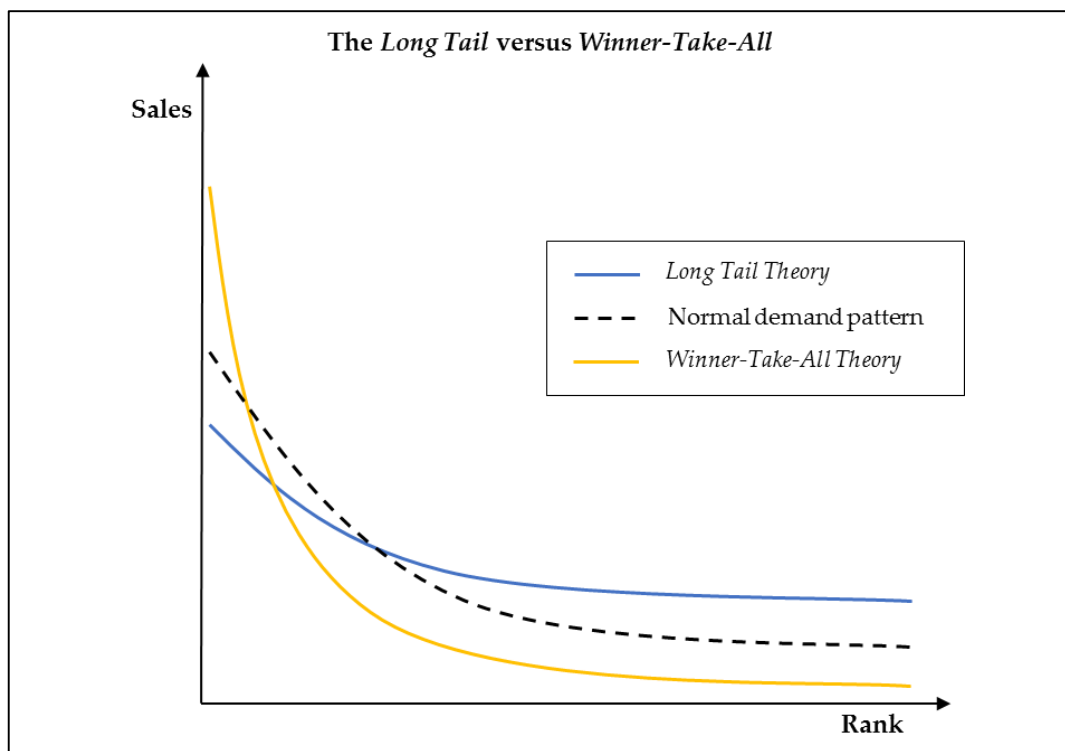


Fig.20: Long Tail Theory versus Winner-Take-All Theory, based on: Elberse 2013, p. 163.

⁶⁰ The research on video stores and video sales was conducted by Elberse and Oberholzer-Gee (2007) as well as Elberse and Schweidel (2009).

As highlighted by Elberse (2013, pp. 163-166) the whole discussion takes on an even greater meaning, when the behavior of individual consumers is taken into account.⁶¹ It becomes obvious, that it is important for manager to understand who is responsible for the volume of the business in the head and in the tail. In this regards, two old laws of consumer behavior first articulated by the sociologist William McPhee (1963) in his book *Formal Theories of Mass Behavior*, have to be highlighted. While McPhee (1963) explored his theories in settings that typically provided fewer than a dozen alternatives, Elberse (2013, p. 164) shows that his findings also hold true for enormous assortments consumers now find online.⁶²

McPhee (1963) identifies two important principles. First, he notes that a disproportionately large share of the audience for popular products consists of relatively light⁶³ consumers, while a disproportionately large share of audiences for obscure products consists of relatively heavy⁶⁴ consumers. In other words, obscure products are chosen by people who are familiar with many alternatives, popular products on the other hand are chosen by those who know of few alternatives. McPhee (1963, pp. 126-133) calls this phenomenon a “natural monopoly” because

⁶¹ While some of the previous points as well as the following discussion are more akin to demand characteristics rather than product characteristics, these aspects are still discussed here as they directly relate to the blockbuster vs long tail debate.

⁶² Unsurprisingly, many of McPhee findings are at odds with Anderson’s thinking about the long tail (Elberse 2013, p. 164)

⁶³ The term light consumers refers to consumers who buy a particular type of product infrequently (McPhee 1963, pp. 126-133).

⁶⁴ The term heavy consumers on the other hand refers to consumers who purchase a particular type of product often (McPhee 1963, pp. 126-133).

it seems that hit products monopolize light consumers. It thus comes as no surprise that when Apple proudly announced it had amassed a hundred thousand iPhone apps in its App Store, over 98 percent of iPhone users had at the time shown no interest in any of the ninety-nine thousand least popular apps. As Elberse (2013, p. 164) highlights: “Most people are perfectly content with the most popular products. (The wide appeal of these top titles is, of course, what makes them popular in the first place).”

In regards to the second principle, McPhee (1963) also shows that consumers of obscure products generally appreciated those products less than they appreciate popular products. McPhee (1963, p. 134) labels this concept as “double jeopardy” because niche products have a double disadvantage: (1) they are not well known and (2) when they become known, it is by people, who actually prefer the popular products (McPhee 1963, pp. 134-140). Elberse (2013, p. 164) points to Netflix, whose niche titles receive significantly lower ratings than its hit titles, as an example for this phenomena. Many people intuitively believe that the obscure movie or book is at least a delight to those who find it. In reality, however, as Elberse (2013, p. 164) points out, the more obscure the title, the less likely it is to be appreciated.

Unsurprisingly, Elberse’s book had quite an impact on the industry and encouraged researchers and practitioners alike to pay more attention to the importance and the economics of blockbusters. This is probably best exemplified by the following comments of Google’s Eric Schmidt, who had a change of heart about the long tail. Schmidt now acknowledges that “the tail is very interesting” but at the same time also highlights that “the vast majority of revenue remains in

the head". He points out further that businesses can have a long tail strategy, but they better have a head as well, "because that's where all the revenue is". Finally, Schmidt also recognizes that "it is probable that the Internet will lead to larger blockbusters" (Schmidt quoted in Elberse 2013, pp. 165-166).

Schmidt's statements describe what can be witnessed in the motion picture industry today. The key take away from this sub chapter is the observation that the blockbuster theory is and has been the dominant strategy in the motion picture industry. Its dominance will continue as the motion picture industry continues to move more and more towards a winner-take-all market. This does not only help in providing an understanding about the product and its development over the years, it is highly relevant for the core topic of this dissertation as well. This is because a producer cannot execute a blockbuster strategy alone, instead he has to rely on intermediaries. For example, even highly vertical integrated media conglomerates will have to cooperate with (external) intermediaries at some point. For example, for the local distribution in remote places, i.e. countries in which the distributor has yet to establish its own operation.

4.1.2.4 Innovation and Variation

The last product characteristics that have to be highlighted are aspects of innovation and variation. A motion picture usually only runs in theaters for four to twelve weeks before other movies supplant it (Swani et al. 1999, p. 352). Due to these permanent changes of the movie program, movies can be described as new products or product innovations with varying degrees of innovation (Hennig-

Thurau and Wruck 2000, p. 243; Wirtz 2012, p. 373). On the one hand, the degree of innovation can be determined in regards to the novelty of the content. Here, the production of proven concepts (*Fast and Furious 7* (2015)) and the production of new concepts (*Interstellar* (2014)) can be distinguished. In this regard, it has to be highlighted, that industry insiders and various media outlets are increasingly pointing to a decrease in novelty in Hollywood (Obst 2013; Bond 2013; Eller and Wallenstein 2015). Obst (2013, pp. 36-41) for example argues that the decline of the DVD business led to a situation, in which studios are now heavily dependent on foreign markets for profits. This dependence, in turn, directly influences the type of motion pictures that are being produced, because it is easier to market movies, which have well known stars attached to them or are based on established properties.

However, the analysis of 1.500 movies of the last fifteen years has yielded no statistical evidence to support the claim that the novelty has decreased. To the contrary, the data shows that the importance of foreign box revenues has not altered the product in any significant way in the past fifteen years. The majority of motion pictures produced in any given year are based on original screenplays. Furthermore, the vast majority of movies are neither sequels nor part of a franchise. While the actual number of franchises or sequels in any given year varies widely, the number is in no correlation with the growth and importance of the foreign box office (Wrobel 2016, pp. 130-133).

On the other hand and in addition to the novelty, technological advancements are responsible for the degree of innovation of movies as well (Wirtz

2012, p. 373). Technical innovations in the production process and the digitalization of the movie material have driven innovation in the motion picture industry in the last decade. These advancements have enabled producers to create sequences, which previously have been considered impossible. This is particular the case in new digital 3D productions.⁶⁵

While the previous two points covered aspects of innovation, aspects of variation have to be examined as well. Product variations can be achieved by versioning, which refers to producing movie versions that differ from the original and thus have different benefits for the recipient (Shapiro and Varian 1998, p. 110). The versioning of movies has traditionally been particular relevant in the home entertainment segment. As previously discussed, consumers are able to buy a premium product (Director's cut version), a standard version of the movie and also an inexpensive variant (e.g. a DVD with no additional audio tracks or supplementary content). However, with the rise of digital cinema and other technologies, the importance of versioning has also increased sharply in the theatrical segment. Table 37 gives an overview on the different versions of the movie *Transformers: Age of Extinction* (2014) from which consumers could choose from. It is important to highlight, that these versions only differ in regards to the different sound options that have been offered to consumers.

⁶⁵ *Avatar* (2009) and its use of digital 3D technology or *The Hobbit: An Unexpected Journey* (2012) and the introduction of HFR are examples for such technological product innovations.

Theatrical Movie Versions (Sound) <i>Transformers: Age of Extinction (2014)</i>	
Datasat	Dolby Atmos
Dolby Digital	Auro 11.1
Dolby Surround 7.1	

Tab.37: Theatrical Sound Versions (*Transformers 2014*), based on: own research.

When different picture and sound options are combined, the variety becomes even more pronounced. Consumers first faced this dilemma with the release of *The Hobbit: An Unexpected Journey* (2012). The movie was offered in an unprecedented number of versions as highlighted in Table 38.

Theatrical Movie Versions <i>The Hobbit: An Unexpected Journey (2012)</i>	
Film (35mm)	HFR 3D
Digital 2D	HFR 3D D-Box
Digital 3D	HFR 3D Dolby Atmos
IMAX 3D	IMAX HFR 3D

Tab.38: Theatrical Movie Versions (*The Hobbit 2012*), based on: own research.

HFR refers to high frame rate and the corresponding increase of the frame rate to 48 frames per second. This creates smoother action, more depth in the images, and less strain on the eyes if the movie is playing in 3D. D-Box takes it a step further and changes how the movie actually feels. The theater's seats themselves vibrate and sway in synch with the movie. IMAX, D-Box and Dolby Atmos all require their own uniquely-constructed theaters, consumers are thus not likely to see these formats cross paths.

4.1.2.5 Summary

The preceding analysis highlighted the unique characteristics of motion pictures. The analysis started out by highlighting that a motion picture is not a typical product, while it has product traits, it also exhibits many of the characteristics of a work of art (Crissey 2010, p. 4). The analysis continued by examining various product features, which yielded the following results:

- Products from the motion picture industry can be divided into four product segments.
- These segments are not served simultaneously, the objective is to maximize revenues from discrete periods of exclusivity. This is manifested in the windows of exploitation.
- While technological advancements had an impact on the windowing structure, the fundamental principle of maximizing revenues from discrete periods of exclusivity still remains valid.
- The blockbuster strategy is and has been the predominant production strategy of Major studios and is characterized by unique processes and economics.
- The importance of the blockbuster strategy will remain, as the motion picture sector, just as the entertainment industry as a whole, is moving more and more toward a winner-take-all market (Elberse 2013, p. 163).

- Technology has particularly driven product innovations in the motion picture industry. At the same time, the ability of studios to produce novel content has not decreased.
- Due to technological advancements in digital cinema projection and sound systems, the importance of versioning has increased in the theatrical segment. Motion pictures are now offered in a variety that has increased considerably in the last years.

Unsurprisingly, all these aspects are directly or indirectly relevant for the analysis of intermediation. The different product segments and the resulting windows of exploitation (and accordingly also price discrimination) provide insights into what to expect when the distribution of movies is examined in detail. For example, producers would either need to have multiple direct sales channels to address all segments or they would have to cooperate with intermediaries in order to achieve the desired effect. Likewise, technological product innovations and more variety, come at a cost. This already gives an indication that technology not necessarily has a cost reducing effect. Finally, the blockbuster strategy is also important as its execution typically requires the cooperation with intermediaries.

4.1.3 Demand Characteristics

In addition to the previously discussed product characteristics, it is also important to examine the demand characteristics. The next sub chapter will start with a discussion of general demand features such as demand cycles and seasonal

demand patterns. The remaining sub chapter will then highlight how the actual demand for motion picture has changed in the past fifteen years. This includes data from the global box office as well as data from the domestic box office.

4.1.3.1 Admission Cycles

In regards to general demand cycles and seasonal demand patterns, some interesting observations have been made in the past. Vogel (2015, pp. 92-94) for example points out, that the movie business has somewhat contra-cyclical characteristics. This is often derived from the depression-resistant performance of ticket sales. The same observation has been made by Nardone (1982) in the past. Nardone (1982) carried out an extensive study of cycles in demand and his study shows that the motion picture industry acts contra-cyclically to the economy 87.5% of the time in peaks and 69.3% of the time in troughs. In addition, there are also suggestions that both a four and ten year cycle in movie admission may be present. However, the statistical evidence in this regard is inconclusive.⁶⁶

Another aspect that has to be highlighted are the seasonal demand patterns. Vogel (2015, pp. 92-94) points out that these seasonal demand patterns are not as sharply defined as they used to be, for which he makes the large number of multiplexes scattered around the United States responsible. However, these seasonal demand patterns can still be distinguished and interpreted. Families in

⁶⁶ Hofler (2009) provides an overview on the conducted tests on cyclical movement. Additional studies can be found in Gottmann (2009), Hamilton (1994) and Koopsmanns (1974).

the United States find it most convenient to see movies during vacation periods such as Thanksgiving, Christmas and Easter. During the summer month, children are out of school and have time to frequent the theaters. In fall, however, school begins again, new television programs are introduced and elections are held. This does not leave much time for going to the movies. The industry thus tends to concentrate most of its important releases within just a few weeks of the year. This makes the competition more expensive than it would be if audience attendance patterns were not as seasonally skewed (Vogel 2015, p. 94).

4.1.3.2 Global Box Office

Now that some of the general demand characteristics have been discussed, the remaining sub chapters will highlighted how the demand for motion pictures at the box office has changed in the past fifteen years. The focus in this sub chapter is on the global box office, which includes all motion pictures released worldwide, regardless of distributor or country of origin (MPAA 2015, p. 4).

The development of the global box office is shown in Figure 21. A differentiation is made between domestic revenues (USA and Canada) and international or foreign revenues (all other markets). The numbers at the bottom (blue) represent the grosses that have been made at the domestic box office in the past fifteen years whereas the top row (red) highlights the international grosses.

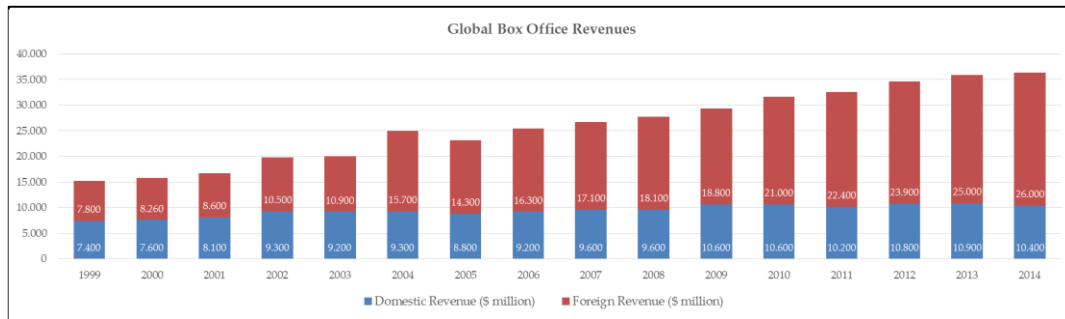


Fig.21: Global Box Office Revenues (1999-2014), based on: MPA (2006), pp. 4-5; MPA (2003), p. 4; MPAA (2015), p. 4; MPAA (2010), p. 3.

As illustrated in Figure 21, the global box office reached a new all-time high in 2014 with revenues of \$36.4 billion.⁶⁷ Compared to the \$15.2 billion reached in 1999, this represents an increase of 139% in the last fifteen years and an average annual growth rate of 9.2% (MPA 2003, p. 4; MPAA 2015, p. 4). For a more nuanced picture, the development of domestic and foreign grosses has to be examined separately (Wrobel 2016, pp. 123-124).

In 2014 the foreign box office reached revenues of \$26.0 billion and accounted for 72% of global box office revenues (MPAA 2015, p. 4). In 1999, foreign box office revenues reached \$7.8 billion, which was only slightly higher than the domestic box office with \$7.4 billion in revenues. Accordingly, the foreign box office only accounted for 51% of the global box office revenues in that year (MPA 2003, p. 4).

⁶⁷ An increasing number of academic papers have investigated the factors that are contributing to the success of motion pictures at the box office. Noteworthy studies include those of Chang and Ki (2005), Collin et al. (2002), De Vany and Walls (1999), Elberse and Eliashberg (2003), Elliott and Simmons (2008), Ravid (1999) as well as Reinstein and Snyder (2005).

These numbers show that the share of foreign revenues of the global box office increased by 21% in the last fifteen years, while the share of domestic revenues is consequently down from 49% in 1999 to 28% in 2014 (Wrobel 2016, p. 124).

When comparing the foreign box office growth rate with the global box office growth rate, it becomes evident that the foreign box office revenues are the growth driver for the global box office. This is clearly visible in Figure 21 as well. Compared to 2013, foreign box office revenues in U.S. dollars⁶⁸ are up 4% in 2014, compared to 2009 they are up 24% and compared to 1999 they are up 233%. Global box office revenues, on the other hand, are only up 15% (2009) and 139% (1999) respectively (MPAA 2015, p. 4; Wrobel 2016, p. 124).

The domestic box office on the other hand did only grow slightly in the past fifteen years, from \$7.4 billion in 1999 to \$10.4 billion in 2014. The number from 2014 is actually down 5% from the \$10.9 billion achieved in 2013. The next sub chapter will therefore examine the development of the domestic box office more closely, including the development of ticket sales and ticket prices.

4.1.3.3 Domestic Box Office, Admissions and Ticket Prices

The previous sub chapter already highlighted that the domestic box office in 2014 (\$10.4 billion) was actually down 5% from \$10.9 billion in 2013. 2014's number also represents a decrease when compared to the \$10.6 billion reached in 2009 and

⁶⁸ Vogel (2015, pp. 98-103) provides an overview on the impact of swings in foreign-currency exchange rates on the profitability of U.S. studios.

an increase of 41% when compared to the \$7.4 billion reached in 1999. Thus, while domestic revenues grew 41% over the last fifteen years, foreign revenues grew by 233% in the same time frame (MPAA 2015, p. 4; Wrobel 2016, p. 124). This dire situation of the domestic box office is also reflected in ticket sales, which are illustrated in Figure 22 below.

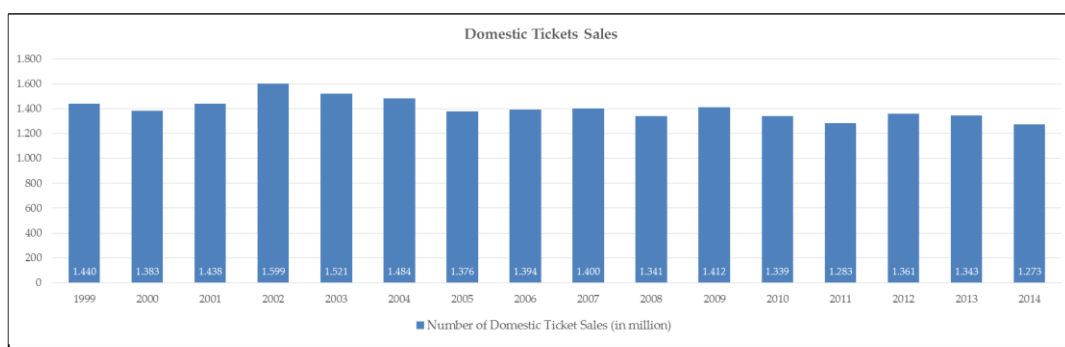


Fig.22: Domestic Ticket Sales (1999-2014), based on: MPA (2006), p. 6; MPAA (2015), p. 9.

As highlighted in Figure 22, domestic admissions or tickets sold peaked in 2002 with 1.59 billion tickets sold and are on a downward trend since then. The 1.27 billion tickets sold in 2014 is the lowest number of admissions in the last fifteen years. Admissions declined by 6% in 2014 when compared to the 1.34 billion tickets sold in 2013 and are down by 13% when compared to 1.44 billion tickets sold in 1999 (MPA 2006, p. 6; MPAA 2015, p. 9; Wrobel 2016, p. 125).

In order to be able to put the decrease in ticket sales into perspective, the development of the average ticket price has to be examined as well. The development is shown in Figure 23. In the last fifteen years the average ticket price increased by \$3.09 or 61%. In 1999 the average price for an admission was \$5.08

(MPAA 2009, p. 4), while in 2014 a ticket cost \$8.17 on average. When compared to 2013, the average ticket price only increased by 4 cents (less than 1%) in 2014, which is less than the 2% increase in inflation as measured by the Consumer Price Index (CPI) (MPAA 2015, p. 9). However, when looking at all fifteen years, the average yearly increase in domestic tickets prices is around 4%. Nevertheless, the ticket price increase cannot mitigate the decrease in admissions (Wrobel 2016, p. 125).

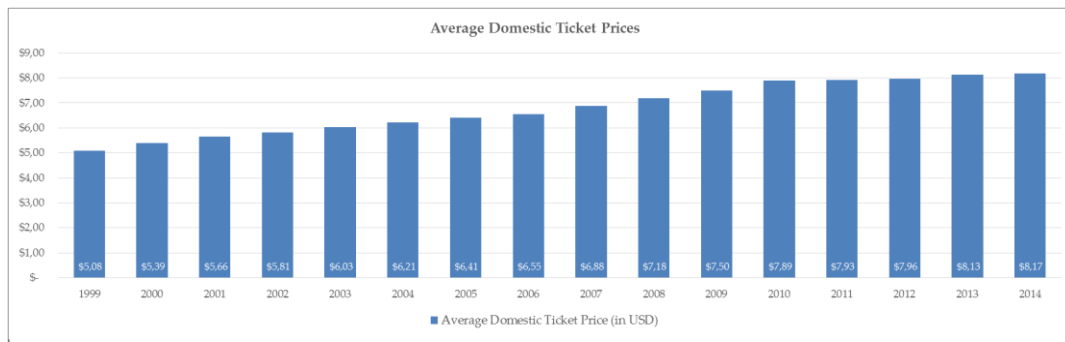


Fig.23: Average Domestic Ticket Price (1999-2014), based on: MPA (2006), p. 6; MPAA (2015), p. 9.

4.1.3.4 Foreign Box Office Importance

As highlighted during the demarcation of the motion picture industry, the focus in this dissertation is on U.S. movie productions. The previous sub chapters highlighted, that the domestic box office revenues are only slowly growing and even decreased from 2013 to 2014. It thus comes as no surprise that Hollywood studios are increasingly marketing movies to foreign territories, where the demand is stronger and the growth potential higher. This sub chapter will thus take the viewpoint of a Hollywood studio and examine how relevant foreign demand is for the overall performance of a movie.

The 100 highest domestic grossing movies for each year from 1999 and 2014 have been examined in regards to the distribution of the revenues. The result is illustrated in Figure 24, which shows the domestic and foreign box office revenues as a percentage of total box office revenues for the Top 100 domestic releases in each of the last fifteen years. The bottom row (blue) represents the percentage of domestic revenues and the top row (red) the percentage of foreign revenues.

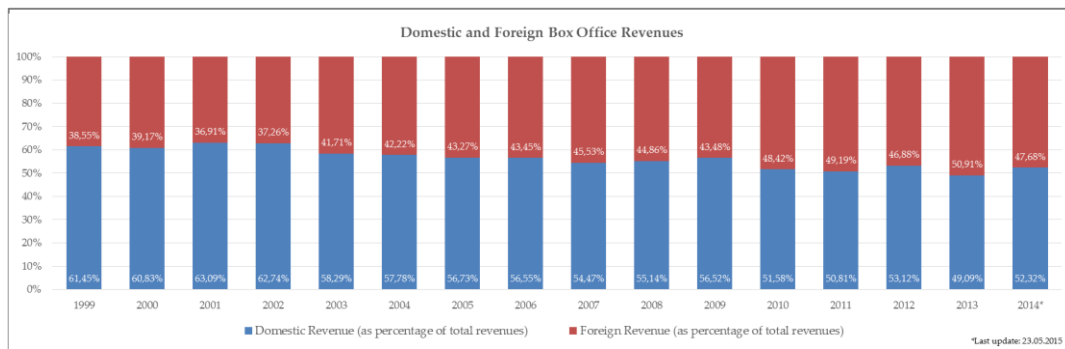


Fig.24: Distribution of Box Office Revenues (1999-2014), based on: Information courtesy of Box Office Mojo (<http://www.boxofficemojo.com>).

As highlighted in Figure 24 above, the share of foreign revenues for the Top 100 domestic movies has grown over the past fifteen years and since 2010, foreign revenues account for roughly half of the total revenues.⁶⁹ In comparison, in 1999, the Top 100 domestic motion pictures still grossed 61.45% of their total revenue domestically, with the remaining 38.55% being contributed by foreign markets.

⁶⁹ This is not a new observation. Vogel (2015, p. 147) confirms that “the top 100 films of any year have been consistent in drawing more than half of their total box-office income in foreign markets”.

That number increased to over 50% for the first time in the past fifteen years in 2013 (Wrobel 2016, p. 128).

The growth of foreign markets has two aspects that have to be considered from the perspective of Hollywood studios: (1) access to more countries and (2) access to more screens per country.⁷⁰ The first point can be examined by using the data collected for the 100 highest domestic grossing pictures for each of the last fifteen years. Figure 25 shows the number of countries the widest release of each year opened in (blue bar on the left) and the average number of countries the Top 100 motion pictures opened in (red bar on the right).

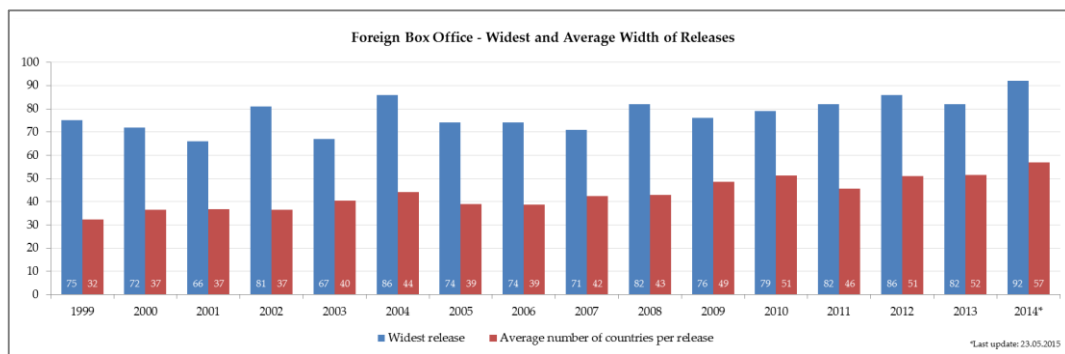


Fig.25: Widest Release and Average Width of Top 100 Releases (1999-2014), based on: Information courtesy of IMDb (<http://www.imdb.com>).

The results of the analysis of the widest releases are somewhat surprising: *Star Wars: Episode I - The Phantom Menace* (1999) opened in 75 different countries

⁷⁰ Evidence for the organic growth can be directly derived from industry reports. The Chinese box office for example increased 34% in 2014 and became the first international market to exceed \$4 billion in box office revenues (MPAA 2015, p. 5).

around the globe. That is the same number of countries *Godzilla* (2014) opened in. These numbers suggest that blockbusters with mass appeal could open in dozens of different countries fifteen years ago, just as they do today. The widest released motion picture of 2014 was released in 92 countries, a moderate 22.6% increase, when compared to the widest release from 1999 (Wrobel 2016, p. 128).

However, when looking at the average number of countries the 100 highest domestic grossing motion pictures of a given year have been released in, a clear trend can be identified. While in 1999 the Top 100 movies were released in 32 countries on average, they were released in 57 different countries on average in 2014, an increase of 78.1%. This suggests that especially mid-budget motion pictures have gained an increased exposure in recent years, being seen in 25 more countries - on average - than in 1999 (Wrobel 2016, pp. 127-129).

4.1.3.5 Summary

In the preceding sub chapters the demand characteristics have been examined. The analysis showed that demand for motion pictures has somewhat contra-cyclical characteristics and that the industry tends to concentrate most of its important releases within just a few weeks of the year (Vogel 2015, p. 94). The later aspect has been explained by seasonal demand patterns. The analysis then shifted towards the actual demand for motion pictures and the changes in the past fifteen years. The findings can be summed up as follows:

- The demand for motion pictures has been growing faster in the rest of the world than in the United States and Canada.

- By 2014, revenues from markets outside North America accounted for more than 70% of the global box office.
- From the perspective of a U.S. based studio, the importance of revenues from foreign markets has increased over the last 15 years. Foreign box office revenues currently account for roughly half of the total revenues.
- Accordingly, foreign markets represent a tremendous growth opportunity for Hollywood studios. They grow faster than the domestic market and U.S. studios have not yet been able to increase their foreign share at a similar growth rate.

While the discussion of the general demand characteristics is helpful to understand how the industry works, these aspects only have a limited influence on the analysis of intermediation. The analysis of the global and domestic box office and its evolution in the past fifteen years, however, further highlights the importance of global hits and global stars, which was previously discussed as part of the blockbuster strategy. Likewise, global distribution involves intermediaries as it is unlikely that a producer or distributor can serve every country or territory without assistance.

4.1.4 Value Added Structure and Market Participants

With the relevant product and demand characteristics discussed, the focus will now shift towards the value added structure of the industry. In the next sub

chapter the value added structure of the motion picture industry will be discussed and visualized by using the Enhanced Value System Model that was developed in Chapter 3. In the course of the analysis the actual value added process from idea to consumption will be examined and the involved market participants will be pointed out.

4.1.4.1 Value System of the Motion Picture Industry

The value chain model has emerged as a prominent analysis method in the media industry over the last ten years. It is used for the analysis of individual sectors, such as the motion picture sector, as well as for the analysis of the media industry as whole. In both cases, usually the essential steps of the value creation process are identified and structured in order to derive recommendations for the practice. For the media industry as a whole, various value chain models with varying steps can be identified. A selection of these models is illustrated in Table 39.

As becomes evident from Table 39, all authors see production and distribution as essential steps. There is however no unity in regards to where the value added process starts and ends. Some authors include acquisition and consumption as essential steps, while others do not. The various authors also do not agree whether there is an intermediate step (bundling, aggregation, etc.) between production and distribution or not.

Author	Year	Value Added View of the Media Industry
Albarran	2002	Production, Distribution
Hass	2002	Production, Bundeling, Distribution, Consumption
Owers et al.	1998	Production, Distribution, Exhibition
Picard	2011	Supplier, Producer, Distributor, Buyer
Schumann and Hess	2014	Production, Bundeling, Distribution
Siegert	2003	Production, Distribution, Consumption / Reception
Wirtz	2012	Acquisition, Production / Aggregation, Packaging, Technical Production, Distribution

Tab.39: Value Added View of the Media Industry, based on: Albarran 2002, p. 14; Hass 2002, pp. 19-20; Owers et al. 1998, p. 2; Picard 2011, p. 45; Schumann and Hess 2014, p. 183; Siegert 2003, p. 229; Wirtz 2012, p. 77.

The same observation can be made in regards to the application of value added concept to the motion picture sector. Table 40 provides an overview of popular and often referenced value added concepts for the motion picture sector.

As becomes evident, the degree in variation is even more pronounced. Production, distribution and exhibition/exploitation are the only value added steps that have been identified by all authors. Some authors identify dozens of additional steps, creating many different views on the value added structure. All contributions, follow the questionable practice of using value chain terminology, even though the structure at the industry level is discussed. This approach is questionable as it is debatable, whether all participants in the system in which a production company operates in, always work towards a common purpose. Additionally, the producer often has minimal influence over the processes in other

chains in the wider system. Both assertions, however, are key assumptions used in value chain phraseology (Crissey 2010, pp. 5-6). Therefore, contrary to contemporary usage, this dissertation will continue to draw a distinction between a value chain and a value system.

Author	Year	Value Added View of the Motion Picture Industry
Eliashberg et al.	2006	Production, Distribution, Exhibition, Consumption
Hawkins and Vickery	2008	Pre-Production, Production, Post-Production, Market Research, Marketing, Duplication, Distribution, Exhibition, Auxiliary Exploitation
Küng	2008	Acquisition / Development, Production, Licensing, Marketing, Distribution, Exhibition
Bloore	2009	Development, Financing / Pre-Sales, Production, International Sales / Licensing, International Distribution, Exhibition / Exploitation, Consumption
Finney	2010	Development, Financing, Pre-Sales, Production, Sales / Licensing, Distribution, Exploitation
Wirtz	2012	Acquisition / Pre-Production, Production / Post-Production, Licensing, Exploitation

Tab.40: Value Added View of the Motion Picture Industry, based on:

Eliashberg et al. 2006, p. 639; Hawkins and Vickery 2008, p. 63; Küng 2008, p. 71; Bloore 2009, p. 8; Finney 2010a, p. 7; Wirtz 2012, p. 344.

As already highlighted in Chapter 3, this dissertation will also not follow contemporary practice in regards to the visualization of the value added structure. The majority of the approaches highlighted in Table 39 and Table 40 follow the questionable practice of using arrows going from left to right. The shortcomings of this practice have already been discussed. This dissertation will instead use the Enhanced Value System Model developed in Chapter 3 to visualize the value

added structure of the motion picture industry. Figure 26 shows the result and illustrates the traditional value added structure of the motion picture industry.

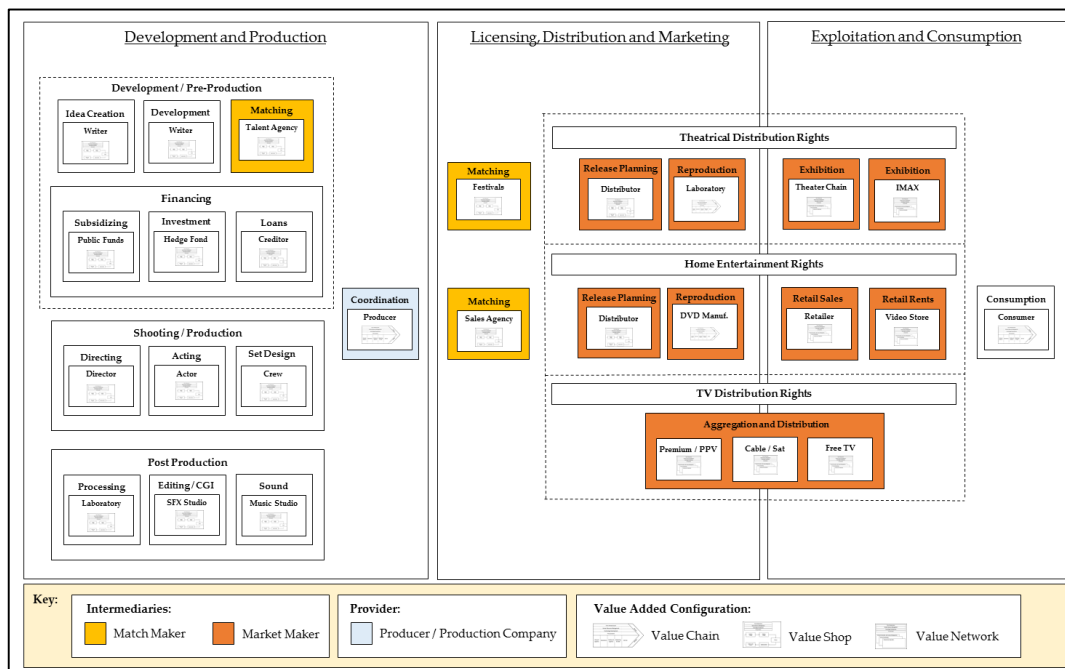


Fig.26: Traditional Motion Picture Value System (1999), based on: Wrobel 2014, p. 76.

Through the application of the model developed in Chapter 3, the complex value added structure of the motion picture industry becomes evident. Even more importantly, the magnitude of different intermediaries involved in the various stages of the model becomes obvious. These intermediaries are highlighted by the golden (match maker) and orange (market maker) boxes. Match makers play an important role in the Development and Production Stage whereas market makers are especially important in the Licensing, Distribution and Marketing Stage.

The Motion Picture Value System Model is divided into three large stages: (1) Development and Production, (2) Licensing, Distribution and Marketing as well as (3) Exploitation and Consumption. In each stage a variety of activities are carried out that all add value in one or the other way. Once one stage has been completed, the project moves to the next stage. The producer or the production company is seen as the center of the value system, this is indicated by the blue box. To use Porter's nomenclature: Actors, service providers, investors, etc. represent the supplier value chains for the production company, while sales agencies, distributors, exhibitors, etc. represent the channel value chains (Wrobel 2014, p. 75).

It is important to note, that the focus of the model is not on the individual market participants and their value added configuration. Instead, the focus is on the main activities required to produce and market a motion picture to the consumer. These main activities are the headlines included in each outer box in the model, such as coordination, matching or release planning. Examples for players that are commonly carrying out said activity are displayed in the inner boxes. This is not to suggest that these players cannot carry out other activities as well. The model should be seen as flexible and adjustable, as in theory, any player can perform any activity or group of activities (Wrobel 2014, p. 75). Now that the core design features have been discussed, the focus can shift towards the modern value added structure, which is illustrated in Figure 27.

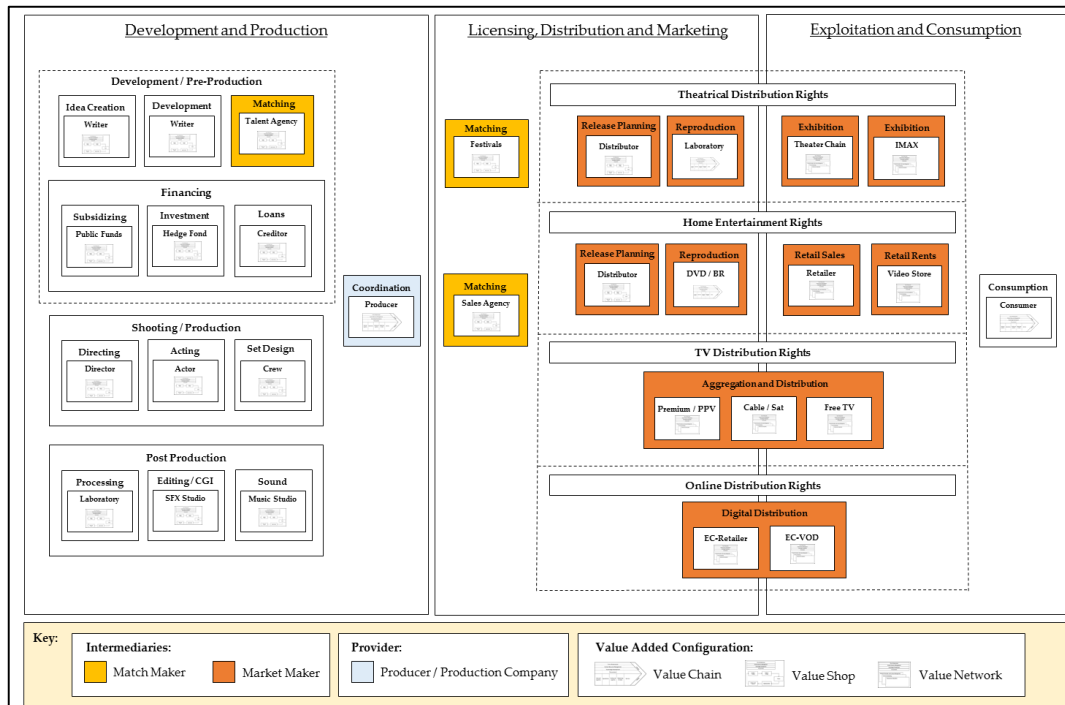


Fig.27: Modern Motion Picture Value System (2014), based on: Wrobel 2014, p. 76.

From this industry level point of view, the value added structure of the motion picture industry changed less than might have been expected. Unsurprisingly, the distribution of movies to consumers over the Internet enhanced the home entertainment segment and ultimately brought additional intermediaries into the system. Beside this obvious change, other changes are less apparent. The following sub chapter will therefore examine each stage of the motion picture value system in detail. The general activities in each stage will be discussed and the intermediaries will be pointed out. Finally, the relevant changes in the past fifteen years will be discussed for each stage as well.

4.1.4.2 Development and Production Stage

The production of motion pictures has project similar characteristics and since movies are of singular and non-reproducible guise, the production processes differ from case to case. However, the principal succession of the three steps (1) development / pre-production, (2) shooting / production and (3) post-production can be found in any movie production (Wirtz 2012, p. 365). These three steps are detailed in Figure 28 and also visualized in the motion picture value system.

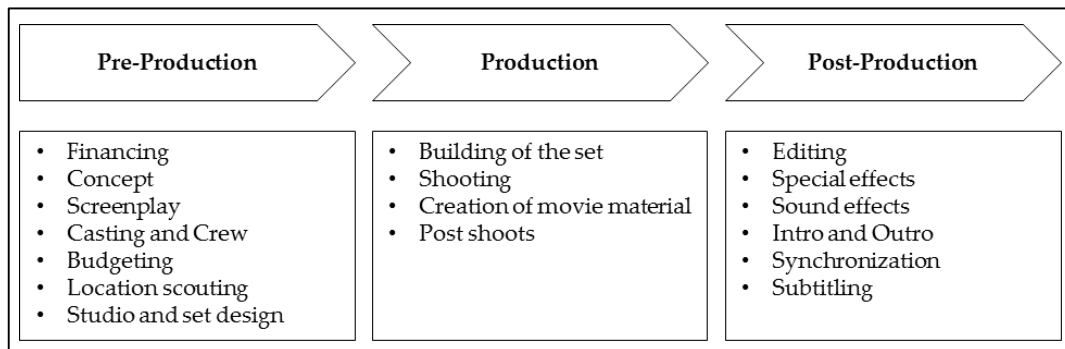


Fig.28: Stages of the Movie Production Process, based on: Wirtz 2012, p. 366.

The chronological starting point for any motion picture production is the development / pre-production phase. It includes all activities surrounding the initial concept or story idea, the acquisition of that idea, the screenwriting process, the raising of finance and the initial stage of production planning (Bloore 2009, p. 8). It has to be noted that the visualization of this stage in the motion picture value system does not accurately account for its complexity. The initial idea stage alone

is loosely structured and there are numerous different routes⁷¹ an idea can take towards a full screenplay commission (Finney 2010, p. 23).

One of the most important tasks of the producer is to secure financing for the movie, which can involve various institutions with very different objectives. Finney (2010, p. 25) points out private equity funds, banks and public subsidy funds as typical examples of such institutions. The motion picture value system only shows some of the possible parties involved in movie financing.⁷² These have to be adjusted on a project by project basis.

Other pre-production activities include the development of the property, which refers to finalizing the screenplay and transferring it into storyboards that set out the dialogue and scene structure as well as the selection and contracting of key creative personnel such as actors and directors. The producer typically does this with the help of talent agencies, the first intermediary highlighted in the motion picture value system. Lastly, creative and administrative personnel have to be contracted to design, realize and organize all aspects of the production (Hawkins and Vickery 2008, p. 64). For some major productions, the process of selecting actors and extras may often require specialized staff. In those cases a casting

⁷¹ Finney (2010, p. 24) provides an overview on the various routes an idea can take towards a full screenplay commission.

⁷² Finney (2010, pp. 61-74) discusses the financing of independent productions in details. Vogel (2015, pp. 128-134) provides an extensive analysis of the advantages and disadvantages as well as the economics behind various financing options.

director is in charge of most of the daily work involved in this pre-production process.

The actual production begins only after these preparatory activities have been completed. In this phase the motion picture is shot, which refers to the photographing and recording of live action and background sequences. This stage usually lasts a few months. During the shooting most of the intangible personality and look-and-feel value is added by various creative professions (Wrobel 2014, p. 82-83). After the movie material has been created, it goes through quality control and, when necessary, a brief period of additional shooting could follow (Wirtz 2012, p. 366). Once the shooting is completed, the motion picture enters post-production. This is where the negatives are processed and any required special effects are produced and incorporated into the negative. Additionally, voice-overs, sound effects and music are created, recorded and added to the negative. This represents the final level of creative value added within the Development and Production Stage (Hawkins and Vickery 2008, p. 65).

In regards to relevant changes in the Development and Production Stage, a variety of aspects have to be highlighted. The blockbuster strategy is unsurprisingly responsible for two changes: (1) new entities entering the production segment and (2) rising production cost. In regards to the first point, it comes as no surprise that other entities also realized that a few hits still go a long way. Netflix, traditionally an intermediary in the Licensing, Distribution and Marketing Stage, was one of the first to enter the content production business. Instead of the long tail company it once seemed intent on becoming, Netflix started

to act like an old-school television network and spend millions on its first original content (Elberse 2013, p. 168). Other player that traditionally have not been involved in the production of content followed suit. Especially noteworthy is Amazon, which founded Amazon Studios in 2010 with the goal to develop commercially viable feature movies (Fritz 2010, w/o p.; Ulin 2013, pp. 369-380). What is interesting about Amazon Studios is that it attempts to use technology to completely alter the development and production processes. Amazon Studios offers a platform to which anyone can upload a script. Other users can then review the script and provide feedback to the author. Amazon also encourages directors and producers to pick up one of the available scripts and produce a test movie. Accordingly, a whole lot of new possibilities emerge for consumers and creative talent to interact with each other. At the same time, Amazon Studios retains the exclusive right to buy the script and release a motion picture based on it as a theatrical feature (Wrobel 2004, p. 115).

This development of new players emerging in the production segment comes as no surprise. Finney (2010, p. 211) argued as early as 2010 that technology companies as well as global aggregators, such as Google and Apple, will also become involved in the production of content in order to drive their respective platforms. Finney (2010a, p. 18) goes on to predict, that this in turn will cut out third party distribution completely.

While Finney (2010) has been correct with his prediction that many new entities will get involved in the production of motion pictures. His is wrong in his assumption that third party distribution (i.e. intermediaries) will be cut out

completely. Based on the basics of the blockbuster strategy, these new players realized the importance of owning the content. However, the fundamental principles of maximizing discrete periods of exclusivity and generating a high share of revenues within a very short period are equally still valid. This explains for example why Netflix, the intermediary that also started to produce, licensed its first series to other intermediaries on international markets.⁷³

In addition to the increase of players in the production segment, the increase in production costs has to be pointed out as a relevant change as well. This increase, as previously highlighted, can to a large degree be attributed to the blockbuster strategy (Noam 2010, pp. 65-66). It is nowadays not uncommon for stars to ask for \$20 million to star in a movie (THR 2014, w/o p.). The cost for actors are however not the only aspect that have to be taken into account when looking at production cost. Production costs are the sum of all costs incurred in all three phases: (1) the cost incurred in the pre-production phase, such as the costs for the acquisition of the story rights or for the production planning, (2) the cost for the actual shooting of the movie as well as (3) the cost that result from post-production. In addition, insurance costs and, in cases of vertically integrated companies, the studio overhead can also contribute towards the production costs or the so-called negative

⁷³ In Germany, for example, Netflix didn't establish its own operations until 2014. Accordingly, when it produced and released *House of Cards* (2013), it licensed the exclusive rights to Sky Atlantic HD (Eckardt and Klode 2014, w/o p.).

cost.⁷⁴ As indicated, these cost have risen in the past fifteen years. Figure 29 shows the development of the average negative costs for MPAA⁷⁵ studios in the years from 1999 to 2007.⁷⁶

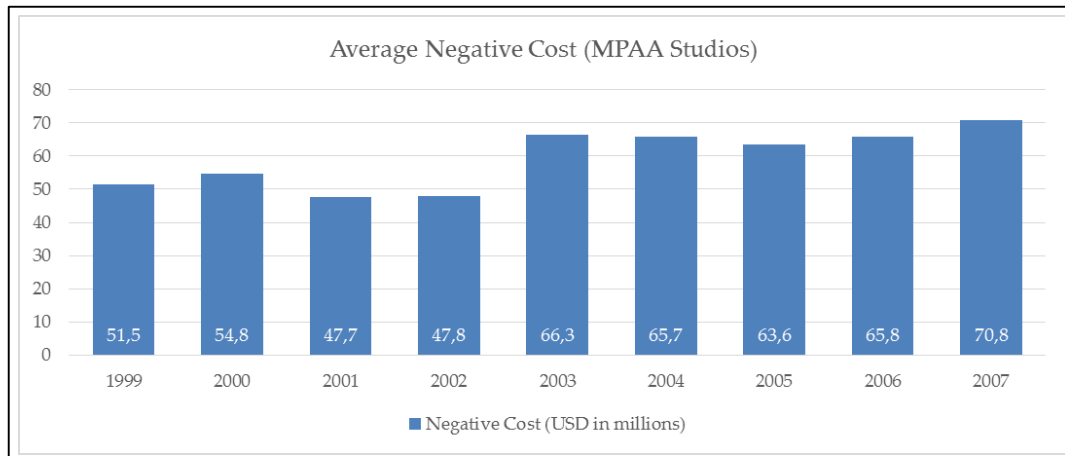


Fig.29: MPAA Studios Average Negative Cost (1999-2007), based on: MPA 2003, p. 20; MPAA 2008, p. 7.

As highlighted in Figure 29 the average negative cost for MPAA studios increased from \$51.5 million in 1999 to \$70.8 million in 2007, an increase of \$19.3

⁷⁴ Vogel (2015, pp. 133-135) provides a detailed overview of the negative cost components.

⁷⁵ Member studios include: Walt Disney Studios, Paramount Pictures, Sony Pictures, Twentieth Century Fox, Universal and Warner Bros. (MPAA 2015, p. 21).

⁷⁶ MPAA studios changed their reporting standard. 2007 was the last year in which the MPAA studios made negative as well as print and advertising costs (P&A) public. By 2010, the average production cost exceeded \$80 million for some studios (Gerbrandt 2010, w/o p.).

million or 37.5%.⁷⁷ It is important to note that these are the average negative cost for MPAA studios for one motion picture. MPAA studios typically release around 15-20 motion pictures a year, less than a handful of these will be marketed as blockbusters or event movies, which accordingly have much high production budgets than the average number suggests. Finally, in regards to the increase in negative cost, the increasing importance of digital editing in the post-production phase has to be highlighted as well. Nowadays, hardly any motion picture production that is aimed at the masses can be produced without the use of computer technologies. Since the quality of the produced images is dependent on the performance of the hardware and software, there is often a need to use state-of-the-art technologies. Otherwise the quality of the picture would result in competitive disadvantages. This is especially of major importance when digital 3D technology is used (Wirtz 2012, p. 335). Accordingly, additional cost occur that push the negative cost even higher.

In addition to the previously discussed changes, one additional aspect has to be highlighted, namely, the changes that result from the conversion from analog to digital processes in the production and post-production phases. Eliashberg et al. (2006, p. 645) point to improved efficiency as about 85% of the film shot at

⁷⁷ The average negative costs rose dramatically in the years before 1999 as well. In 1980 the average negative cost was \$8.5 million, by 1990 that number had reached \$26.8 million. The number increased again in 1996 to \$39.8 million and made another big jump the following year when the average negative cost amounted to \$53.4 million (Albarran 2002, p. 121).

production is not used. They also highlight the greater control digital technology gives to producers and how it transforms this typically linear process into a non-linear process. Digital technology enables producers to transfer scenes from one location to the other almost instantaneously. Negatives no longer have to be chemically processed, visual- and sound effects can be prepared in advance and integrated with a great deal of flexibility. Digital technology has also given producers more control over the environment in which they tell their story. That is perhaps best exemplified by the use of computer generated imagery (CGI). CGI is nowadays increasingly used to create a completely virtual environment or to create virtual characters that interact with a real environment as well as the production of stand-ins for real actors in scenes requiring dangerous or impossible stunt work (Eliashberg et al. 2006, pp. 645-646).

Finally, Hawkins and Vickery (2008, p. 99) point out, that regardless of whether the production environment is digital or analog, many of the same tasks in the movie production process remain. For example, it doesn't matter how the images are captured, live action productions retain all of the mechanical trades. Likewise, a production still requires a film editor, sound editor and composer. In other words, although the production environment has transformed, many of the now required tasks remain directly tied to human skills.⁷⁸ This also explains, why

⁷⁸ Hawkins and Vickery (2008, p. 99) provide an overview on how the required skills have evolved due to the conversion from analog to digital production processes.

technological advancements did not have a cost reducing effect on this particular stage of the value system.

4.1.4.3 Licensing, Distribution and Marketing Stage

Once all post-production activities have been completed, the project enters the Licensing, Distribution and Marketing Stage. In this stage the producer has to secure the distribution of the motion picture and the distributors prepare to deliver the motion picture to their respective buyers. A differentiation can be made between Major studio productions and independent productions. For Major studios the distribution is typically handled by a subsidiary of the studio and many international sales are handled through automatic output deals (Bloore 2009, p. 10). Independent productions on the other hand, have to find a distributor first. Sales agencies, an additional intermediary in the value system mediating between producers and distributors, usually assist with this task. In this regards, festivals, yet another intermediary, are also from particular importance. They provide independent producers with a market place to highlight their movies and to get in contact with potential buyers (i.e. distributors).

Once the producer has secured distribution, the actual distribution and marketing activities start. As Bloore (2009, p. 10) points out, each distributor has to prepare the delivery of the motion picture to their respective buyers (e.g. the theater owner, the video store, etc.). This includes activities such as sales, reproduction and transformation as well as the delivery of the movie to the respective buyers, such as a film print, DVDs, or a television master. Distributors are intermediaries as well

and play a very important role in the motion picture value system. Additionally, distributors typically cooperate with laboratories, which carry out many of the previously mentioned physical activities.

For each category of media, the distributor has to address how the motion picture is consumed and monetized. This includes setting the price, deciding where and how the motion picture is sold or rented, how many units are being made and how the inventory is managed (Ulin 2013, p. 497; Wrobel 2014, p. 86).

Unsurprisingly, technological advancements brought some fundamental changes to this particular stage of the motion picture value system. As those directly concern the intermediaries, they will be discussed in more detail in Chapter 4.2. Nevertheless, one of the profound changes should still be mentioned again at this point. It was already highlighted as part of the discussion of the windows of exploitation that the introduction of various forms of video on demand over the Internet as well as the digital sale through business created additional windows. Accordingly, the Distribution, Licensing and Marketing Stage has become more complex in the last fifteen years. Through the various forms of online offerings, new media was created for which an exclusive license could be granted. Thus, new players emerged with whom the distributor has to negotiate. Additionally, the distributors have to figure out, how these new windows of exploitation fit into the overall strategy of maximizing discrete periods of exclusivity.

4.1.4.4 *Exploitation and Consumption Stage*

In the Exploitation and Consumption Stage the motion picture is presented to and consumed by the consumer. This stage is full of market makers. The cinema operator, for example, adds value by exhibiting the movie in locations that are convenient for potential audiences and in surroundings that are conducive to promoting motion picture attendance. This includes the provision of high-technology sound and projection systems (Hawkins and Vickery 2008, p. 66).

In the home entertainment segment, DVDs and Blu-Rays are made available for consumers to purchase or to rent at various retailers. Additionally, different online distribution options are provided by various digital distributors including on demand streaming, downloads and peer-to-peer technologies (Bloore 2009, p. 10). Finally, various TV networks add value by providing an additional outlet for the public distribution of motion pictures. This includes Pay TV and Free TV (Hawkins and Vickery 2008, p. 66). Since the changes in this sector also directly relate to the intermediaries, they will likewise be discussed in Chapter 4.2.

In regards to the inclusion of the consumer in the motion picture value system, three arguments have to be highlighted. Two of them are highlighted by Bloore (2009), who points out two key value-related functions of the consumer. (1) The consumer purchases the product and thus allows financial value to return down the system. (2) The response of the consumer to the product influences the long term value and reputation of the motion picture (Bloore 2009, p. 11). The last

arguments is provided by Porter (2004, p. 34), who points out that “the ultimate basis for differentiation is a firm and its product’s role in the buyer’s value chain”.⁷⁹

4.1.4.5 Major Studio Sector

The previous sub chapters examined each stage of the motion picture value system in detail and explained, how a motion picture is created, distributed and marketed. While the focus still is on the value added structure and the market participants, this sub chapter will detail one aspect that has been mentioned throughout Chapter 4, but has not been explained so far - Hollywood’s Major studio system.

The Major studios are part of highly vertical integrated corporate conglomerates. They have dominated Hollywood for more than a century and, while the past fifteen years saw mergers, acquisitions and cooperations among those six, their dominant position has not changed.⁸⁰ The power of their oligopoly can most easily be seen in the activities of their trade association: the Motion Picture Association of America (MPAA). It deals with common concerns from rating motion pictures to smoothing the way for international distribution to protecting copyrights around the world (MPAA 2010a; 2015a).⁸¹

⁷⁹ Refer to Brack (2003, pp. 80-83) on how the individual gross benefit from media products for consumers can be classified.

⁸⁰ For a detailed overview on the history of the motion picture industry and the six major studios refer to Kreuzer (2009, pp. 16-18).

⁸¹ A poll in 1996 ranked the MPAA the 18th most powerful lobby in Washington, D.C. (Gomery 2004, p. 197).

Due to the high degree of vertical integration, these studios unite almost all resources from producers, investors, distributors, retail stores and TV networks under one corporate umbrella. Accordingly, they almost cover the entire value system (Wirtz 2012, p. 319). This is illustrated in Figure 30.

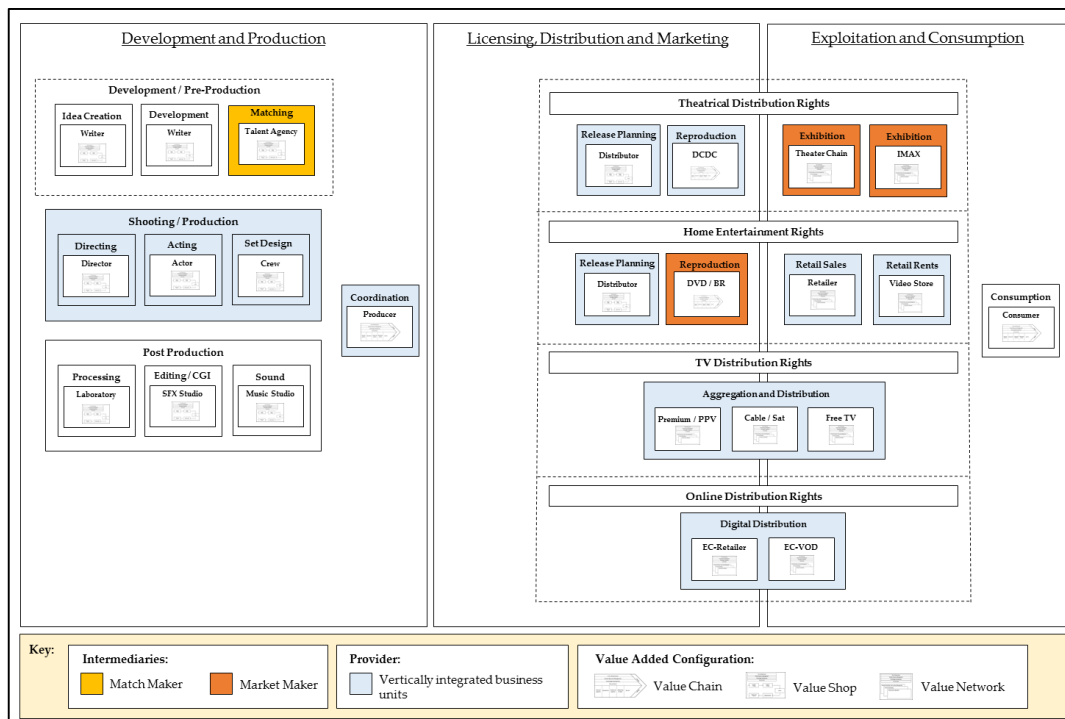


Fig.30: Vertical Integration in the Motion Picture Value System (2014), based on: own research.

In order to highlight the degree of vertical integration, all entities that can be part of a large media conglomerate are visualized with a blue box. It has to be noted, that not every conglomerate covers all highlighted entities. For example, only Disney has its own Disney Store retail chain (Vogel 2015, p. 111). Likewise, only Paramount had a stake in video stores. It purchased Blockbuster in 2004 as it

feared to lose access to this distribution channel. Despite those differences, the general structure remains the same and is true for all six. They have sufficient capital to finance and produce their own motion picture projects. Even more importantly, they can also retain control of their projects thanks to their vast sales, distribution and marketing network. This is further exemplified in Table 41, which provides an overview of selected media assets of the Time Warner conglomerate (to which Warner Bros. belongs).

Area	Assets
Feature Production	Warner Bros. Studio Facilities Warner Bros. Pictures New Line Cinema
Theatrical Distribution	Warner Bros. Pictures Warner Bros. Pictures International Warner Bros. Pictures Domestic Distribution Warner Bros. Technical Operations New Line Cinema
Home Entertainment Distribution	Warner Home Entertainment Warner Bros. Domestic Television Distribution Warner Bros. International Television Distribution New Line Home Entertainment
Free TV	Warner Bros. Television The CW Television Network
Cable TV	CNN TNT
Pay TV	HBO Cinemax HBO on Demand Cinemax on Demand
Online / other	WBshop.com Warner Bros. Consumer Products Time Warner Cable (TWC)

Tab.41: Selected Media Assets of Time Warner, based on: Warner Bros. (2015, w/o p.).

Assets worth pointing out are the Warner Bros. Studio Facilities. These are physical production facilities on a 110-acre lot including 30 soundstages. Adjacent

to the main studio lot is the Warner Bros. Ranch, a 32-acre facility which houses five additional soundstages and various exterior sets. Noteworthy are also the offices in more than 30 countries of Warner Bros. Pictures International, which releases movies in over 120 international territories, either directly to theaters or in conjunction with partners and co-ventures (Warner Bros. 2015a, w/o p.).

This distinction between the production and distribution capabilities is important. Most look at studios as super producers with the financial muscle to create a large range of products. Ulin (2013, pp. 4-5) and Noam (2010, p. 64) argue, however, that the greatest power that the studio brings to a movie is not producing. Rather, studios are financing and distribution machines that bankroll production and then dominate the distribution channels to market and release the movies they finance.⁸² This view is shared by Gomery (2004, p. 199), who points out that “worldwide distribution has long been the very basis of Hollywood’s power”. He goes on to highlight that “no other national motion picture industry has ever been so far reaching”. He explains this by pointing out that “the motion picture industry of Hollywood proved the vast and important advantages of globalizing, with its considerable power from economies of scale, long before the term global media was ever invented” (Gomery 2004, p. 200).

⁸² Noam (2010, p. 64) adds in this context that “the Major studio’s share in actual production of the motion pictures they distribute keeps declining, and is probably less than 20 percent now”.

Ulin (2013, p. 4) highlights that distribution is how studios make most of their revenue and is the unique facet that distinguishes a studio from a studio look-a-like. He adds that there are various entities that want to invest in movies and that any company, studios included, can arrange financing. The difference with studios, however, is that they will not invest in a motion picture without obtaining and exercising distribution rights. This is because they are first and foremost marketing and distribution organizations, not banks. While studios do buy properties, hire stars and finance the movies they elect to make, Ulin (2013, p. 5) argues that this can be viewed as the pretext of controlling which properties they distribute and own.

4.1.4.6 Summary

In the preceding sub chapters, the value added structure of the motion picture industry has been analyzed. This was the last aspect of the first step of the analysis approach, but also one of the most important. Due to the questionable practice in the application of traditional value added concepts and the shortcomings of existing value added models, the model developed in Chapter 3 was used for the visualization of the value added structure of the motion picture industry. The Motion Picture Value System Model is based on Porter's value system approach, but has some unique characteristics:

- Different value added constellations on company level are included to accurately reflect the activity logic of the value system participants.
- Intermediaries are highlighted with a golden and orange color coding.

- The value system participants are described by their major activity.
- The model is further divided into three distinct stages.

The analysis revealed the complex value added structure of the motion picture industry and also highlighted, how the structure has changed in the last fifteen years. Furthermore, the Motion Picture Value System Model illustrated the magnitude of intermediaries that are involved in the production, distribution and exploitation of motion pictures.

Finally, the Major studio sector was discussed in detail as well. The Major studios were introduced as parts of highly vertical integrated corporate conglomerates, which have dominated Hollywood for more than a century. The degree of vertical integration was highlighted by adjusting the motion picture value system and providing an overview on the various media assets of the Time Warner Conglomerate. Lastly, the importance of the distinction between the production and distribution capabilities of studios was highlighted. While most look at studios as a super producer, the most defining element of a studio is its distribution arm. This is how studios make most of their revenue and is the unique facet that distinguishes a studio (Ulin 2013, pp. 4-5).

4.1.5 Summary

As envisioned in Chapter 3, the previous sub chapter started the analysis of the motion picture industry by applying the first step of the Intermediation

Analysis Approach. What appeared to be a relatively easy and straightforward step during its development, turned out to be quite complex and comprehensive during the application. However, because of this, the first step was also perfectly suited as the introductory chapter to the motion picture industry.

The analysis started out with the demarcation of the object of investigation, the motion picture sector, which was introduced as part of the media or entertainment industry, with the movie as the central element of differentiation (Wirtz 2012, p. 316). The analysis continued by examining the unique product and demand characteristics. These characteristics covered a broad range of topics, which have a direct or indirect impact on intermediation. In regards to the objectives of this dissertation, the analysis of the product characteristics revealed:

- Motion pictures are unlike any other product.
- Motion pictures are exploited in different product segments.
- The exploitation of motion pictures is characterized by a high degree of price discrimination.
- Technology enabled product innovations and increased the variety.
- Blockbusters are important products that require the cooperation with intermediaries.

After the product characteristics, the focus shifted towards the demand for motion pictures and its unique facets. While the discussed admission cycles and seasonal demand patterns have no direct influence on the topic of this dissertation,

the analysis of how demand for motion pictures has evolved in the past fifteen years yielded additional insights:

- The importance of global hits and global stars, which was previously discussed as part of the discussion of the blockbuster strategy, was further highlighted.
- Due to an increase in the number of countries movies get released in, the number of intermediaries likely increased as well.

Finally, the value added structure of the motion industry was examined in detail by using the model that has been developed in Chapter 3. In the course of the analysis the various market participants and intermediaries have been highlighted and the Major studio sector has been explained. In regards to the intermediaries, the discussion showed that intermediaries are involved in all stages of the motion picture value system and their number has increased in the last fifteen years. The analysis thus directly contributed to research objectives of this dissertation and provided the answer to the first research questions. The two-folded questions asked, who the intermediaries in the industry are and which intermediaries have appeared or disappeared in the last fifteen years. By comparing the intermediaries in the traditional value system with the intermediaries in the modern value system, the answer to these questions can be derived. This is illustrated in Table 42.

Value System Stage	1999	2014
Development and Production	Talent Agencies	Talent Agencies
Licensing, Distribution and Marketing	Sales Agencies Distributors Festivals Film Laboratories DVD / VHS Manufacturer	Sales Agencies Distributors Festivals Digital Cinema Distributor DVD / Blu-Ray Manufacturer
Exploitation and Consumption	Theaters Video Stores (Sales & Rent) Free TV & Pay TV	Theaters Video Stores (Sales & Rent) Free TV & Pay TV Digital Distributor (VOD & Sales)

Tab.42: Intermediaries in the Motion Picture Industry (1999 vs. 2014), based on: own research.

As highlighted in Table 42, the year 1999 counted nine different types of intermediaries, with the majority of them being active in the Exploitation and Consumption segment. This number has increased to ten different types of intermediaries in 2014, with the increase primarily being explained by the rise of the Internet as a new distribution channel. The only other change that has to be highlighted is the observation that film laboratories, in their traditional incarnation, do not play a role in the modern motion picture value system any more. Instead, their activities have been taken over by a digital-enabled intermediary. While this high-level view on the value added structure does answer the first research question and provides a helpful overview of the changes that have occurred, it is not sufficient, nor can it explain any of these developments. Accordingly, the remainder of this dissertation will solely focus on the previously identified intermediaries and their analysis.

4.2 ANALYSIS OF INTERMEDIARIES

In order to be able to explain the changes identified during the application of the first step of the Intermediation Analysis Approach, the following sub chapters will examine each previously identified intermediary in more detail. The intermediaries will be examined in order of their appearance in the motion picture value system. The analysis of each intermediary will begin by highlighting the position of the particular intermediary between demand and supply in the motion picture value system. In addition, it will be pointed out, whether the examined intermediary is a match- or market maker. Then, the role of the intermediary will be discussed and relevant developments will be highlighted. This will provide an additional foundation for the application of the Intermediation Analysis Approach that will follow once the intermediary has been introduced. Once one intermediary has been completely analyzed, the analysis will move to the next intermediary until all intermediaries have been examined.

4.2.1 Talent Agencies

In the Development and Production Stage talent agencies have been identified as the first intermediaries in the motion picture value system. Their position between demand (production companies) and supply (creative talent) is highlighted in Figure 31.

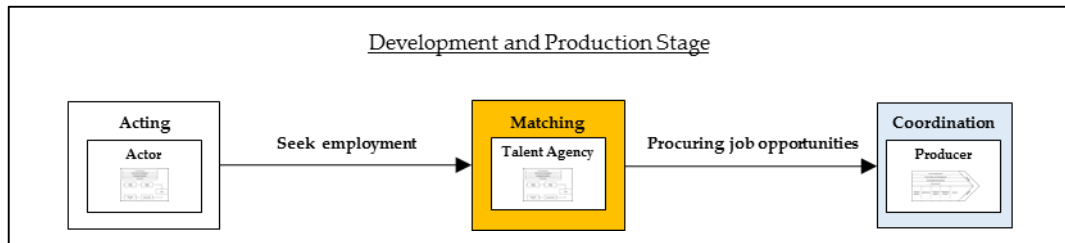


Fig.31: Agencies in the Development and Production Stage, based on: own research.

The California Labor Code defines an agent as a “person or corporation who engages in the occupation of procuring, offering, promising, or attempting to procure employment for artists” (McDonald 2007, pp. 167-168). As indicated by the golden box, talent agencies are match makers as they do not buy and sell goods on their own account. Accordingly, the activities on the legal-financial and physical level recede to the background. As highlighted by the definition from the California Labor Code, the main activity of talent agencies is to procure employment for their clients. This has been summed up under the headline matching in the motion picture value system.

As pointed out by Zelenski (2003, p. 979): “Hollywood is an impersonal, uncaring and unforgiving place”. Accordingly, artists need the sophisticated assistance of third parties to help them locate employment. This is where talent agents step in. They try to put creative talent and producers together to make a match (Levy 2000, p. 223). Their job is to get the artists they represent as much work as possible. They negotiate the deals between talent-sellers and talent buyers on behalf of the talent-sellers (Claire 1999, p. 28). It has to be pointed out that most

of these deals are short-term and project-related. Instead of establishing enduring career relationships with regular employers, actors, writers or directors typically move from employer to employer and from production to production. It is the job of their talent agency to move them from production to production and to secure for them the best deals in the process (Weiler and Myers 2011, p. 757).

For their services, talent agencies are typically paid in form of a contractual commission of their clients' gross earnings. Accordingly, they are only paid if they actually get their clients work (Weiler and Myers 2011, p. 758). Unsurprisingly, agents have thus a financial incentive to represent large numbers of clients and to procure for them as much work as possible. As highlighted by Zelenski (2003, p. 981), two problems or conflict of interest arise from this commission-payment scheme: (1) agents might act out of pure self-interest and not consider adequately what their clients actually want. Instead, they might procure whatever employment first comes along simply in order to guarantee themselves quick commissions.⁸³ (2) Since agents receive commissions only if they successfully procure employment, they have a profit motive to represent only established clients, who have a bankable reputation. As a result, many agents are reluctant to engage unexperienced actors or industry newcomers, who have unproven track records (Weiler and Myers 2011, p. 758). Although these up-and-comers can attempt to procure their own employment, their likelihood of success is slim. Most

⁸³ In order to remedy some of these problems, talent agents are regulated by state statutes and entertainment guilds (Zelenski 2003, p. 981).

lack the industry contacts necessary to get their feet in the doors of producers. Moreover, even if they were to get that far, they likely lack the ability to negotiate sophisticated employment contracts successfully (Zelenski 2003, p. 981).

Lastly, it has to be pointed out that in the last two decades, talent agencies started to do more than the traditional model assumes. They started to become deal packagers for their clients (Claire 1999, p. 28). A trend that can still be witnessed today. Deal packaging closely resembles producing, and although agents have historically been prohibited by guild franchise agreements⁸⁴ from acting as producers, they have not been prohibited from putting packages together (Zelenski 2003, p. 999). Talent agencies act as packagers when they put together teams of clients, for example, writers, directors and actors, and sell those teams to employers for percentage fees instead of commissioning each client's deal individually. Typically, the package fee is 10% of the production's entire budget rather than 10% of each client's individual salary (Weiler and Myers 2011, p. 757). This practice resembles producing in two ways. First, it enables agents to earn producer-sized fees. Second, it enables agents to exercise control over production development. As long as talent agencies represent bankable artists whom employers want to hire, they can force those employers to hire less-bankable artists as part of the package deal (Birdthistle 2000, p. 504). Packaging agents, in other words, come to the negotiation table with substantial bargaining power, and they can leverage that

⁸⁴ The SAG-ATA franchise agreement expired in January 2002 and as of 2015 no new agreement has been reached (McNary 2015, w/o p.).

bargaining power into a final say over which artists get hired. Essentially, agents get to make the decisions that traditionally have been made by employers. However, because these agents effectively act as their clients employers, they necessarily face conflicts of interest. For example, they might procure for their clients only the work that they can package (Zelenski 2003, p. 999).

In the United States the largest agencies by size are Creative Artists Agency (CAA), William Morris Endeavor (WME) and United Talent Agency (UTA). These three have dominated the industry alongside the Major Studios for the last decades. This is accurately summed up by Compaine and Gomery (2000, p. 360), who point out that “Hollywood is a small community – there are only six big movie studios, four big TV networks, and three big talent agencies. The people who own and run these organizations talk to one another every day. They confide, they feud, they forgive, they do business and they vacation together.”

4.2.1.1 Step 2: Activities of Talent Agencies

Now that a general understanding of the role of talent agencies has been established, the focus can shift towards the formal analysis of the activities of talent agencies and their change in the last fifteen years. As previously highlighted, talent agencies are match makers. Accordingly, only the activities on the informational level are of relevance.

By using the Intermediation Activity Analysis Tool and the guidance developed in Chapter 3, the impact on the activities can be assessed. The result is illustrated in Table 43. Here, the cost for executing the activities in 1999 is compared

to the cost for their execution in 2014. From this, the impact of technological advancement is derived.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost) - High quality standard (depending on production)	High
	Negotiation Support	Medium	Indirect Impact (Small cost increase) - Very limited degree of automation / use of ICT - Complexity of deals and contracts increased - Expertise and experience required (personnel cost)	High
	Information Processing	Medium	Indirect Impact (Small cost increase) - Increase in the amount of information - Increased security concerns (quality standard) - Limited degree of automation	High
	Monitoring and Reporting	Medium	Indirect Impact (Small cost increase) - Limited transparency - Increased complexity of deals and more transaction partners - Expertise and experience required (personnel cost)	High

Tab.43: Impact on Informational Activities (Talent Agencies), based on: own research.

Given the very nature of the activities of talent agencies, it comes as no surprise that technological advancements did not have a cost reducing effect on the activities on the informational level. In order to identify, select, inspect (and package) talent, talent agencies cannot rely on automation or the sole use of ICT. Scripts and novels still have to be read and evaluated by experienced personnel,

likewise performances by actors have to be observed by humans in order to identify potential clients. On the contrary, technological advancements indirectly led to a cost increase for the execution of those activities. While the identification, selection and inspection of actors, writers and directors traditionally involved watching tapes or DVDs, going to the theater or watching movies at festivals, the rise of the Internet created many more sources from which the next star could emerge.⁸⁵ This cost increase is reflected in Table 43.

A similar argument can be made for the activity negotiation support, which is likewise an activity that cannot be automated and whose costs increased as well. Negotiations require personnel with extensive expertise and experience. In addition, the deals and contracts that the talent agency is negotiating on behalf of the client have become more complicated in the past fifteen years. For example, the question of revenue participation from new ancillary markets has emerged as well as the question of the involvement of the actor in marketing the movie (i.e. whether the actor has to tweet to his followers about the movie or not).

With more talent and increased complexity of deals and contracts, also comes an increase of information that has to be processed. While ICT makes a lot of the processing easier, E-mails and mobile phones have been used in 1999, just as they are today. However, due to the increased amount of information as well as

⁸⁵ Sun (2015, w/o p.) points out that new (digital) talents bring new potential pitfalls as well. These range from plagiarism claims to political incorrectness to more serious charges such as sexual misconduct.

increased security concerns, the infrastructure expenditures for information processing have increased as well.

Talent agencies also monitor the performance of the contract and report the results to the transaction partners. Just like the previous activities, this is an activity that cannot be automated. It requires the personal involvement of the talent agency, for example in the form of driving out to the set to ensure that the contractual obligations are met for the client. Following the same logic, an increase in talent with very limited involvement of automation / ICT, the cost for monitoring and reporting increased as well.

4.2.1.2 Step 3: Value of Talent Agencies

Now that the activities of talent agencies and their change have been discussed, the focus can shift towards the value provided by talent agencies. As highlighted in Chapter 3, a quantification of the added value is problematic, accordingly an indirect analysis of the relevant value sources and their relative strength will be carried out. For this the Value Analysis Tool and corresponding guidance will be used. From the onset, two categories of value can be ruled out. As talent agencies do not perform inter-company coordination or any logistic and storage activities, they cannot enhance the production- and logistic efficiency. Likewise, given the early stage of the value system, they also do not increase the production result by increasing the quality pressure or identifying consumer needs.

Talent agencies do, however, increase the transaction efficiency and the transaction result. In regards to the transaction efficiency, Table 44 illustrates the corresponding value sources and their change in the last fifteen year.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	Low	<p>Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - Increase in transaction partners (more buyers and sellers) - Number of talent agencies remained comparatively low 	Medium
	Standardization	Low	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Processes differ per transaction, but only limited standardization possible - Degree of standardization remained comparatively low 	Low
	Scale Effects	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Required investments in immaterial resources remained (Business relationships, brand, reputation) - Individual talent is too small to create an efficiency advantage 	Medium
	Specialization / Experience	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Required skills, capabilities and experience remained high - Required investments to build up skills and capabilities remained high - Individual talent is too small to build up skills and capabilities 	High

Tab.44: Impact on Value Sources – Transaction Efficiency (Talent Agencies), based on: own research.

In regards to the Baligh-Richartz-Effect, it has to be pointed out that talent agencies reduce the number of contacts. They mediate between thousands of talents and multiple producers or production companies. If each artist or writer were to contact each producer directly, without using the talent agency as an intermediary, the number of contacts and therefore transaction costs would increase. Due to the increase in the number of talents, the strength of this value source increased in the past fifteen years. Compared to other areas of the value system, however, where the number of contacts are even larger, the value strength is comparatively low.

As previously highlighted, intermediation is almost always connected with standardization. This is true for talent agencies as well, who, to a certain degree, establish standardized processes. The buyers (the production companies) and sellers (the talent) get used to these processes and therefore learn to efficiently carry out transactions with the talent agency. An interaction with different providers would require this learning process every time. However, given the individuality of each talent and the varying nature of each motion picture project, the strength of this value source is and remained comparatively low.

Scale effects are relevant for talent agencies as well. Rather than scale effects through technology though, the scale effects particularly result from intangible resources. In case of the large three talent agencies in the U.S., the importance of the brand and business relations of these agencies have already been highlighted. Scale effects also occur in regards to highly qualified personnel ranging from talent scouts, to lawyers and account managers. Due to their small size, individual talent would not be able to achieve economies of scale themselves and therefore cannot invest as efficiently in these resources.

Finally, the specialization or experience of talent agencies increases the efficiency of individual transactions as well. As talent agencies continuously procure employment for various clients, they build up special abilities and skills, such as the gathering and the interpretation of information. They are therefore able to perform these activities more efficiently. Talent agents are typically aware of any new scripts, uncasted roles, productions in trouble and movies that are about to go

into development or production. Individual talents would not be able achieve this as efficient as talent agencies.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Result	Transaction Efficiency	Low	Indirect Impact (Small increase in strength) - The ability to reduce transaction costs increased slightly - Due to lower transaction cost, more transactions take place	Medium
	Effective Information Processing	Medium	No direct or indirect impact - Ability of talent agencies to reduce information asymmetries remained - Importance of a talent agency's reputation remained	Medium
	Market Power Reduction	Medium	No direct or indirect impact - Market power of individual talent remained low - Talent agencies increase their market power through the aggregation of supply (especially when packaging) - Ability of talent agencies to reduce market power of producers remained	Medium

Tab.45: Impact on Value Sources – Transaction Result (Talent Agencies), based on: own research.

In addition to the increase in transaction efficiency, talent agencies also improve the transaction result. This is highlighted in Table 45. They, for example, add value by reducing the market power of producers and are thus minimizing any monopoly rents. This is most evident, when the agency packages multiple talents as previously discussed. Through the aggregation of supply, talent agencies come to the negotiations table with substantial bargaining power. As individual talents usually have a much lower bargaining power by themselves, it is particular interesting for them to conduct a transaction by using the talent agency.

Finally, the more effective information processing also has to be mentioned as a relevant value source that increases the transaction result. All criteria established in Chapter 3 are met. Between talent and producer a situation can occur in which information asymmetries are not surmountable at all. Talent agencies can

gather information more effectively than the transaction partners, e.g. through superior abilities, skills and knowledge resulting from specialization advantages. Talent agencies are capable of communicating this information more effectively as well. This is because both transaction partners have greater confidence in the information received from the talent agency. The higher trust and credibility especially results from the talent agency's strong incentive to maintain and protect its reputation.

4.2.1.3 Step 4: Incentives to cooperate with Talent Agencies

Finally, the incentives and disincentives for talent and producers to cooperate with talent agencies have to be examined as well. Thus, the analysis now also takes competitive strategic aspects into account. During the development of the Incentive Analysis Tool it was highlighted that the assumption is that there is freedom of choice. The previous discussion revealed that this is not necessarily the case for talent agencies. In practice, the cooperation with talent agencies is neither optional for talents, nor for the production companies. Nevertheless, two incentives and three disincentives can be identified. The incentives are illustrated in Table 46 along with the assessment of the incentive strength.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency/-Effectiveness	Medium	<p style="text-align: center;">Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - The efficiency and effectiveness provided by talent agencies increased slightly - The cooperation with talent agencies is more efficient and effective from the talent's point of view 	High
Faster Market Entry and Penetration	Medium	<p style="text-align: center;">No direct or indirect impact</p> <ul style="list-style-type: none"> - High market entry barriers remained - When initially cooperating with talent agencies, talents find job opportunities faster 	Medium

Tab.46: Impact on Cooperation Incentives (Talent Agencies), based on: own research.

As the previous discussion revealed, talent agencies increase the transaction efficiency in a variety of ways. From the point of view of individual talents as well as from the point of view of production companies, the cooperation with talent agencies is therefore beneficial. Without talent agencies, the transaction between producers and talents would not be as efficient and effective. In addition, from the point of view of individual talents, the cooperation with talent agencies allows them to enter the market (i.e. find employment) faster and also to penetrate the market wider (i.e. being presented to more producers).

There are however, a variety of disincentives as well, i.e. arguments against a cooperation with talent agencies. These are illustrated in Table 47. While talents can benefit from the high bargaining power of (some) talent agencies, it also represents one of the main arguments against cooperating with them, i.e. to avoid further increasing the talent agencies power. The large talent agencies in the U.S. practically act as an additional gate keeper. While it is almost impossible for individual talents to procure a job opportunity by themselves, it is just as difficult

to find meaningful representation. As discussed, talent agencies have a profit motive to represent only established clients, who have a bankable reputation. This makes it especially hard for newcomers and aspiring talents.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	Medium	No direct or indirect impact - Talent agencies retained a high market power - Dependence on talent agencies to get in contact with producers remained	Medium
Rationing and Discrimination	Low	No direct or indirect impact - Access to producers is not permanently ensured	Low
Disclosing of sensitive Information	Low	No direct or indirect impact - Critical and sensitive information has to be disclosed	Low

Tab.47: Impact on Cooperation Disincentives (Talent Agencies), based on: own research.

Likewise, the risk of discrimination is another strong disincentives for talents to cooperate with talent agencies. However, due to the lack of alternatives, as direct procurement of jobs is not realistic in the majority of cases, its relevance is highly debatable. Nevertheless, discrimination can occur on both sides: talent agencies can limit the access of talent to certain producers and, vice versa, limit the access of producers to certain talents. This chapter already mentioned many of the motives a talent agency might have to infer with the job opportunities of their clients.

The talent-agent relationship naturally requires the disclosing of sensitive information. These range from simple personal data such as the name and the date of birth to more sensitive data including medical records. Again, due to the lack of alternatives, this argument is arguable irrelevant for most talents as well. In addition, the reputation, especially of the well-known talent agencies, likely mitigates this disincentive for most talents.

4.2.1.4 Summary

Talent agencies, mediating between talents and producers, have been introduced as the first intermediaries in the motion picture value system. The preceding sub chapters examined talent agencies in detail by using the tools and guidance developed in Chapter 3. Table 48 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Talent Agencies	Medium	High	Low	Medium	Medium	High	Low	Low

Tab.48: Summary - Impact on Talent Agencies, based on: own research.

Based on these results, the practical research questions can be answered in respect to talent agencies. The second research question asks, in how far and why the activities of intermediaries in the motion picture sector have changed in the last fifteen years. The analysis of talent agencies revealed that the activities in their core have not been affected by technological advancements. They remain personnel intensive and require a great amount of experience and specialization. Nevertheless, technology increased the number of talents and, as such, the cost for performing the majority of the activities increased as well.

This, however, is in the interest of talent agencies. If talent agencies would not perform the activities, then the production companies and individual talents would have to carry out the activities themselves. With the cost for their execution increasing, both, producers and talents have strong incentives to not do so. While

this observation by itself suggests that talent agencies could strengthen their position in the last fifteen years, a full picture can only emerge, when the remaining facets of intermediation are taken into account as well.

The third research question asks, in how far and why the value that intermediaries in the motion picture sector provide has changed in the last fifteen years. The analysis of talent agencies revealed that they increase the transaction efficiency and the transaction result. For each of these two categories the relevant value sources, their strength and the change in strength in the past fifteen years have been examined. It was shown that technological advancements had a positive effect on the value provided by talent agencies. In other words, the total value strength has increased in 2014 when compared to 1999. Talent agencies are thus able to add more value than before, which further strengthened their position.

Finally, the fourth practical research question asks, in how far and why the incentives and disincentives of working with intermediaries changed in the past fifteen year. From the onset it was pointed out that the cooperation with talent agencies is in reality not optional. It is rather a mandatory requirement to find employment. Nevertheless, the analysis still revealed some incentives and disincentives. It was pointed out that the incentive strength increased, while the disincentive strength remained low in the last fifteen years. In conclusion, it now becomes evident, why talent agencies have been able to strengthen their position despite all the technological advancements influencing the industry.

4.2.2 Sales Agencies

After talent agencies, sales agencies have been highlighted as the next intermediaries in the motion picture value system. They have been visualized as part of the Licensing, Distribution and Marketing Stage and they are mediating between producers and distributors. Examples for sales agencies in the United States are Paradigm, UTA Independent Film Group and WME Global.

It has to be pointed out again, that Major studios typically handle the distribution of movies through subsidiaries around the globe. Accordingly, they have no need for sales agencies. Independent producers on the other hand, have to find a distributor first. This is where sales agencies come in. They sell the distribution rights for the producer to interested buyers (distributors). Thus, sales agencies are typically only relevant for independent productions. The position of sales agencies between demand (distributors) and supply (producers) is highlighted in Figure 32.

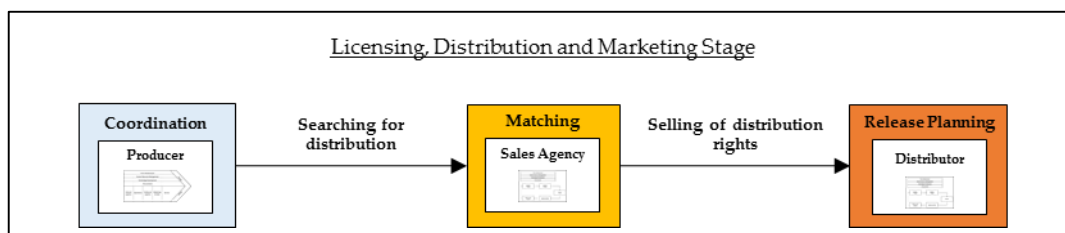


Fig.32: Sales Agencies in the Licensing, Distribution and Marketing Stage, based on: own research.

As indicated by the golden box, sales agencies are match makers as well. They do not buy and re-sell a product at their own risk, but rather support the transaction

in different ways. According to Finney (2010, p. 48) one of the key activities of sales agencies is to “negotiate a license with the distributor (the buyer) for one or more films in one or more territories, negotiating the terms of commercial exploitation in one or more vertical media like theatrical, DVD retail and rent, VOD, Pay TV, Free TV for a fixed license period”, these activities are summed up under the term matching in the value system model. Most independent producers are not able to reach distributors and the international marketplace by themselves. They therefore heavily depend on sales agencies. In regards to the international market, it has to be noted that the Motion Picture Value System Model as well as Figure 32 dramatically simplify the situation. Figure 33 gives a better visualization of the actual complexity of this stage.

In the Motion Picture Value System Model only the licensing to one theatrical distributor or one home entertainment distributor is illustrated. As indicated in Figure 33, many more distributors can be involved, each purchasing the distribution rights for a specific territory and media. Both Bloore (2009) and Finney (2010) highlight the importance of sales agencies, and point out that their role within the motion picture industry is often overlooked. Finney (2010, p. 48) for example claims that “many players outside the sales sector remain unclear about the functions and strategic role of a sales company”.

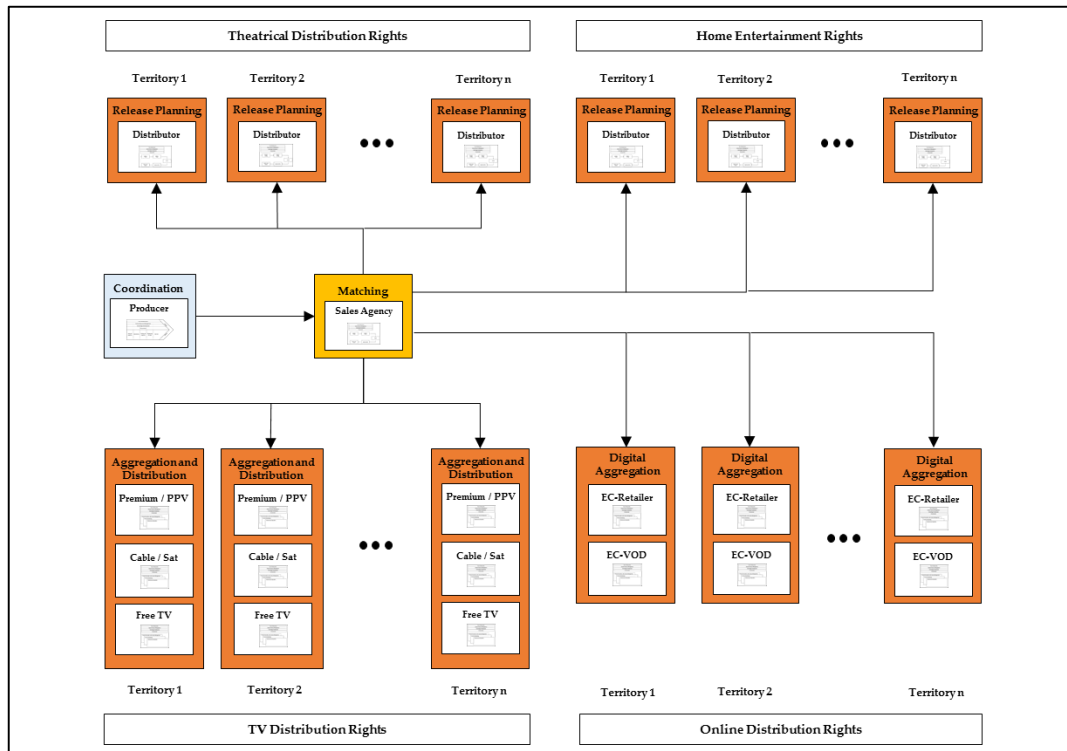


Fig.33: Licensing Complexity, based on: Wrobel 2014, p. 84.

The key driver for a sales agency is a flow of new movies to sell. Accordingly, the acquisition is of paramount importance. Specialized staff will actively track projects and talented producers for the agency to pursue. Sales agencies typically track new potential movies, movies in production and monitor older projects as well. For all of these projects, sales agencies collect notes on the script as well as information on the director, the involved talent and budget. As such, the most important role of the acquisition staff or acquisition executives is the development of a strong network of producers (Finney 2010, p. 48).

Once the sales agency has established a relationship with a producer, the agency's job is to nurture the relationship and provide a channel for information

and feedback, for example, regarding the development of the script and the talent package. For this, sales agencies read scripts, treatments and other written submissions and provide reviews and recommendations. The focus of sales agencies is on the commercial prospects of the package. They will be aware of the credits, reputations and career paths of directors, actors, producers and financiers. They also screen completed motion pictures at festivals, on screeners or at private screenings and report on their suitability for the agency (Finney 2010, p. 48).

Once sales agencies have identified promising projects and closed an agreement with the producer about the sale of the distribution rights, the actual sales process starts. Sales agencies typically have specialized sales executives, who negotiate a license with the distributor. As previously highlighted, this stage is very complex and can involve multiple distributors. The sales agency licenses these rights in return for a share of revenue and usually receives an upfront advance against that share. The importance of exclusivity has already been highlighted, accordingly the rights are normally licensed exclusively to only one distributor per media per territory. It is thus unsurprising, that a very strong movie is normally the subject of major competition. Accordingly, identifying the optimum deal requires a high degree of knowledge of the territory in questions, about the bidding distributors, their expertise, track record, credit rating and future plans. The sales agency will also acquire knowledge about the distributor's plan for marketing and releasing the motion picture and evaluate, how those fit with the specific market and product. Finally, the sales agency ensures that required approvals for the deal are obtained from producers and/or financiers (Finney 2010, pp. 48-49).

It should come as no surprise that the movie sales business involves numerous documents and agreements that tend to lack consensus on standard terms and conditions. Accordingly, in addition to sales staff, qualified in-house lawyers, paralegals or experienced contract executives are involved in these negotiations as well. This extends to the definition of media rights and territories to be granted even before hard commercial and financial points are reached (Finney 2010, p. 50).

Depending on the specific production, sales agencies can also be involved much earlier in the motion picture value system. Independent producers often need a set of estimates in order to attract and start negotiations with financiers and investors in the Development and Production Stage. It is the job of the sales agency to compile those sales estimates. They estimate the value of a movie in each territory in the world. It has to be noted, that these estimates cover all territories available. However, in reality, many motion pictures fail to be sold to more than five to ten territories around the world and some sell to no territories outside their home market (Finney 2010, p. 49). Based on this observation, a conflict of interests arises. On the one hand, sales agencies have an incentive to provide positive estimates upfront. Financiers and investors use these numbers to determine whether they are going to invest in the movie or provide a loan for its production. Should the estimates be not compelling, then the movie does not get produced and the sales agency has nothing to sell. However, sales agencies are well aware about the importance of their reputation. Accordingly, they have an incentive to remain realistic about the market value of the motion picture in question. According to

Finney (2010, p. 49) the reputation of a sales agency “almost exclusively comes down to its ability to meet the majority of its estimates. These estimates are the currency they compete and trade in”. Producers come to depend on the estimates and live in hope that serious pre-sales are possible to achieve. The financiers, in turn, depend on the reliability, experience and reputation of the sales agency to deliver on the estimates (Finney 2010, p. 49). The described activities are often summed up under the term pre-sales in value system models for the independent sector (Bloore 2009, p. 8; Finney 2010, p. 11; Finney 2010a, p. 7).

Lastly, sales agencies have their own marketing departments that are responsible for the image and positioning of each movie on the agency’s slate. As a motion picture is prepared for the market prior to, or during, production, a concept poster is commissioned and designed, often by an outside agency. A teaser or trailer is commissioned as well. The marketing department likewise prepares information for the trade and press, as well as materials that distributors can use for local markets. It is important to highlight that it is never the sales agencies job to market the motion picture to audiences, instead, their job is to get distributors interested, which is what their marketing activities are aimed at (Finney 2010, pp. 49-52).

The preparation for festivals, where movies are being launched, is a major part of the marketing department’s responsibilities as well. Festivals, an additional intermediary in the motion picture value system, will be discussed in Chapter 4.2.3. The following looks at festivals from the point of view of sales agencies. Individual tasks include the booking of the appropriate office, technical equipment, poster

hanging as well as screens for trailers and promos to run. The sales agency needs to wield considerable strategic skill when weaving together complex festival- and market events. They for example have to decide, when to launch a movie and at what point in time sales can be attempted to close. In addition, they have to evaluate the timing and profile of each festival in regards to the fit with the overall sales and marketing strategy (Finney 2010, p. 49). Finally, they ensure that all the physical materials necessary to exploit the movie, including the picture and audio materials, foreign language tracks, marketing elements and documentation, are available. Just like distributors, sales agencies also rely on an out-sourced company, for the actual execution of these physical activities. Nevertheless, service executives from the sales agency typically have in-depth technical knowledge of different formats and interact with laboratories and distributors to ensure the timely and cost-effective provision of all necessary materials. They will also manage supplier relations to ensure the agency's time-sensitive communications are reliable, including material shipments, couriering of legal documentation and delivery of marketing materials to trade shows and other events (Finney 2010, p. 50).

4.2.2.1 Step 2: Activities of Sales Agencies

Now that a general understanding of the role of sales agencies has been established, the focus can shift towards the formal analysis of their activities. The analysis will start with the activities on the informational level. Table 49 shows the impact of technological advancements on the informational activities. The cost for

executing the relevant activities in 1999 are compared to the cost for their execution in 2014.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Negotiation Support	Medium	Indirect Impact (Small cost increase) - Very limited degree of automation / use of ICT - Complexity of deals and contracts increased - Expertise and experience required (personnel cost)	High
	Information Processing	Medium	Indirect Impact (Small cost increase) - Increase in the information amount - Increased security concerns (quality standard) - Limited degree of automation	High
	Monitoring and Reporting	Medium	Indirect Impact (Small cost increase) - Limited transparency - Increased complexity of deals and more transaction partners - Expertise and experience required (personnel cost)	High

Tab.49: Impact on Informational Activities (Sales Agencies), based on: own research.

For the activities identification, selection, inspection and classification a cost increase occurred. On the supply side, digital technologies enabled more and more independent producers to produce their own motion pictures. In 1999, for example, 256 independent motion pictures have been released in North America, this

number has risen to 571 releases in 2014.⁸⁶ The identification, selection, inspection and classification of promising motion pictures involves mostly manual labor. Scripts have to be read, movies have to be screened and festival have to be visited. None of these activities can be automated by technology. Accordingly, an increase in supply led to an increase in cost.

This assessment becomes even more evident, when the demand side is examined as well. As highlighted throughout Chapter 4, the number of buyers also increased. Firstly, the number of countries in which motion pictures are on average released in has risen by 25 countries in the last fifteen year. While new countries can be served by traditional distributors, new buyers have emerged as well. Secondly, the rise of the Internet as a new media in which motion pictures can be exploited in, brought additional potential buyers to the table.

Both of these aforementioned reasons are ultimately also responsible for the increase in complexity of deals and contracts. This in turn is reflected in the negotiation support activity. An increase in complexity, with limited degree of automation and heavy involvement of experienced professionals, accordingly also resulted in an increase in the cost for the execution of said activity. The same argumentation is also valid for the two remaining activities information processing as well as monitoring and reporting, whose execution likewise experienced a cost increase.

⁸⁶ As previously highlighted, the number of release of MPAA member studios (that typically do not employ sales agencies) declined from 200 release to 136 in the same time frame (Wrobel 2016, p. 126).

While sales agencies are typically match makers, the detailed discussion of these intermediaries revealed that depending on the motion picture project, they can be involved in various stages of the value system and carry out additional activities. One of these, is the presentation activity, as highlighted in Table 50.

Level	Activity (A)	$C_{An}(t_{1999})$	Impact of Technological Advancements	$C_{An}(t_{2014})$
Physical Level	Presentation	Medium	<p>Indirect Impact (Small cost increase)</p> <ul style="list-style-type: none"> - Increase in transaction partners (more buyers and sellers) - Increased competition => Higher degree of marketing required - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost) 	High

Tab.50: Impact on Physical Activities (Sales Agencies), based

on: own research.

The variety of (B2B) marketing activities that sales agencies do sometimes carry out has already been highlighted. These activities are summed up under the term presentation as established during the development of the analysis approach in Chapter 3. As highlighted in Table 50, the cost for the execution of this activity on the physical level have also increased. It is likewise an activity that cannot be automated, but instead, has to be carried out by professionals.

4.2.2.2 Step 3: Value of Sales Agencies

Now that the activities of sales agencies and their change have been discussed, the focus can shift towards the value they provide. Just like talent agencies, sales agencies also do not perform the required activities to increase the production- and logistic efficiency, nor do they increase the production result. Sales agencies do however increase the transaction efficiency and the transaction result.

Table 51 highlights the value sources that enable sales agencies to increase the transaction efficiency as well as the strength of each value source at the two examined points in time.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	Low	Indirect Impact (Small increase in strength) - Increase in transaction partners (more buyers and sellers) - Number of sales agencies remained comparatively low	Medium
	Standardization	Low	No direct or indirect impact - Processes differ per transaction, but only limited standardization possible - Degree of standardization remained comparatively low	Low
	Scale Effects	Medium	No direct or indirect impact - Required investments in immaterial resources remained (Business relationships, brand, reputation) - Producers are too small to create an efficiency advantage	Medium
	Specialization / Experience	High	No direct or indirect impact - Required skills, capabilities and experience remained high - Required investments to build up skills and capabilities remained high - Producers are too small to build up skills and capabilities	High

Tab.51: Impact on Value Sources – Transaction Efficiency (Sales Agencies), based on: own research.

It comes as no surprise that sales agencies reduce contact costs due to their mediating position between multiple producers and numerous distributors. Since the number of transaction partners increased on both sides, the strength of the Baligh-Richartz-Effect has increased as well.

As previously highlighted, sales agencies can only to a certain degree standardize the transaction between producers and distributors. Many (legal) documents lack a consensus and will thus vary to a certain degree with each project. While this indicates a comparatively low value source strength, sales agencies still add value through standardization. This for example includes the

provisioning of sales estimates, a streamlined process, which producers and financiers have gotten used to. Likewise, the actual selling of the movie, follows largely standardized processes that distributors know and come to expect. This for example includes how the distributor is approached and how the motion picture is presented (e.g. accompanying documentation, etc.).

Sales agencies add value through scale effects as well. Similar to talent agencies, this relates to intangible resources, such as reputation and business relationships as well as immaterial resources in the form of highly specialized and qualified personnel. Sales agencies can invest in purchasing-, sales-, marketing- and service-executives with highly specialized knowledge, because they can spread these investments on a larger number of transactions. If every producer were to invest in these resources, the transaction efficiency would be reduced. Ultimately, their specialization and experience is the key source that allows sales agencies to increase the transaction efficiency.

In addition to the increase of the transaction efficiency, sales agencies also increase the transaction result. The relevant sources for this value category as well as their individual value strength is highlighted in Table 52.

The previous paragraphs highlighted the various ways in which sales agencies increase the transaction efficiency. Chapter 3 already pointed out that in addition to a reduction in transaction costs, this can also lead to a higher performance of the market and a better exchange result in the sense of allocation-, evaluation- and information efficiency (Bienert 1996, p. 31; Peiseler 1990, p. 94).

Based on the previous discussion, sales agencies likewise increase the transaction result, i.e. without sales agencies, fewer distribution rights would be sold.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Result	Transaction Efficiency	Low	<p>Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - The ability to reduce transaction costs increased slightly - Due to lower transaction cost, more transactions take place 	Medium
	Effective Information Processing	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Ability of sales agencies to reduce information asymmetries remained - Importance of a sales agency's reputation remained high 	Medium
	Market Power Reduction	Low	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Market power of individual producers remained low - Ability of sales agencies to reduce market power of distributors remained, but is overall low 	Low

Tab.52: Impact on Value Sources – Transaction Result (Sales Agencies), based on: own research.

In addition, situations in which information asymmetries between producer and distributor are not surmountable at all, are conceivable as well. Due to their specialization, skills and experience, sales agencies can gather the required information more effectively. Even more importantly, due to their reputation (and the importance of maintaining a high reputation), they can also more effectively communicate this information to producers and distributors. This in turn enables sales agencies to effectively eliminate information asymmetries and thus, to improve the transaction result.

4.2.2.3 Step 4: Incentives to cooperate with Sales Agencies

Finally, the incentives and disincentives for producers and distributors to cooperate with sales agencies have to be examined as well. The analysis is thus now focusing on the sales agency's up- and downstream market participants rather than

on the sales agencies directly. Similar to talents, for whom the cooperation with talent agencies is in practice not optional, the cooperation with sales agencies is also not optional for independent producers, who want to achieve meaningful distribution. As the tool for the analysis of the incentives and disincentives to cooperate with intermediaries was created under the assumption that there is freedom of choice, the meaning of the following results is likely diminished. Nevertheless, incentives and disincentives to cooperate can still be identified. The analysis will start with the incentives to cooperate with sales agencies. Two incentives can be identified. These as well as their development are illustrated in Table 53.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency/-Effectiveness	Medium	<p>Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - The efficiency and effectiveness provided by sales agencies increased slightly - The cooperation with sales agencies is more efficient and effective from the producer's point of view 	High
Faster Market Entry and Penetration	Medium	<p>Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - High market entry barriers remained - Sales agencies can achieve sales faster and penetrate the market wider - Number of relevant countries / territories increased 	High

Tab.53: Impact on Cooperation Incentives (Sales Agencies), based on: own research.

A strong argument for both, producers and distributors, to cooperate with sales agencies is the previous described ability of sales agencies to increase the transaction efficiency and effectiveness. The decrease in transaction cost and the increase in transactions is in the interest of producers and distributors as well.

In addition, the cooperation with sales agencies allows producers to enter the market faster and penetrate it wider as would be the case, if the producers would try to achieve international distribution by themselves. Since especially the international market has grown and motion pictures are licensed to an increasing number of countries, the incentive to cooperate is more pronounced as well.

Unsurprisingly, there are also a variety of arguments against a cooperation with sales agencies. For example, sales agencies can attain considerable market power and use it to ask for a bigger share of revenues, which is neither in the interest of producers, nor in the interest of distributors.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	Low	No direct or indirect impact - Sales agencies have retained some market power - Producers depend on sales agencies to get in contact with distributors	Low
Rationing and Discrimination	Low	No direct or indirect impact - Access to distribution is not permanently ensured	Low
Disclosing of sensitive Information	Low	No direct or indirect impact - Critical and sensitive information has to be disclosed	Low

Tab.54: Impact on Cooperation Disincentives (Sales Agencies), based on: own research.

Likewise, as highlighted in Table 54, the risk of discrimination and the disclosing of sensitive information are additional disincentives for the cooperation with sales agencies. From the producer’s point of view, the access to the distribution channels is not permanently secured. Producers thus rely heavily on sales agencies. While sales agencies have a profit incentives to sell the distribution rights to as many countries as possible, situations can arise in which a less popular movie is marketed less intensively as other products. While an argument can be

made that digital technology has given birth to numerous distribution alternatives (e.g. the producer can distribute the movie directly over the Internet without the need of a sales agency), the direct distribution over the internet is not the reason why most independent producers elect to create a motion picture in the first place. In addition, the importance of price differentiation in order to maximize profits as well as the slim success changes of direct online releases, have already been discussed. Independent producers know this and therefore want to reach theatrical distribution – and then the cooperation with sales agencies usually is necessary.

In regards to the disincentive of having to disclose sensitive information, it has to be highlighted, that this is the first point at which the producer hands the product over to another party. For example in form of a screener to get the agencies interested in the movie at the beginning of the relationship. The producer has to be sure that the sales agency handles those materials with care. This risk has become even more pronounced with the rise of piracy over the Internet. Should such a screener land on the Internet, the revenue potential of the movie would be severely diminished.

4.2.2.4 Summary

The previous sub chapters focused on the analysis of sales agencies, which are mediating between producers and distributors in the motion picture value system. Table 55 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Sales Agencies	Medium	High	Low	Medium	Medium	High	Low	Low

Tab.55: Summary - Impact on Sales Agencies, based on: own research.

Based on these results, the practical research questions can be answered for sales agencies. The second research questions asks, in how far and why the activities of intermediaries in the motion picture sector have changed in the last fifteen years. The analysis of sales agencies revealed that the activities in their core have not been affected by technological advancements. They remain personnel intensive, requiring a great amount of experience and specialization. Nevertheless, technology increased the number of buyers and sellers and as such, the cost for performing the majority of the activities increased as well. This, however, is in the interest of sales agencies. If they would not perform the activities, then the production companies and distributors would have to carry out the activities themselves. With the costs for their execution increasing, both, producer and distributor have strong incentives to not do so.

The third research questions asks, in how far and why the value that intermediaries in the motion picture sector provide has changed in the last fifteen years. The analysis of sales agencies revealed that they increase the transaction efficiency as well as the transaction result. For each of these two categories the relevant value sources have been examined. It was shown that technological advancements had a positive effect on the value provided by sales agencies.

Finally, the fourth practical research questions asks, in how far and why the incentives and disincentives of working with intermediaries changed in the motion picture sector in the past fifteen years due to technological advancements. From the onset it was pointed out that the cooperation with sales agencies is in reality not optional for most producers. It is rather a mandatory requirement to find meaningful distribution. Nevertheless, the analysis still revealed relevant incentives and disincentives and showed that the incentive strength increased in the last fifteen years while the disincentive strength remained low.

4.2.3 Festivals

Festivals have been highlighted as additional intermediaries in the motion picture value system. They are part of the Licensing, Distribution and Marketing Stage as well. Just like sales agencies, festivals are also mediating between producers and distributors. Their position between demand and supply is highlighted in Figure 34.

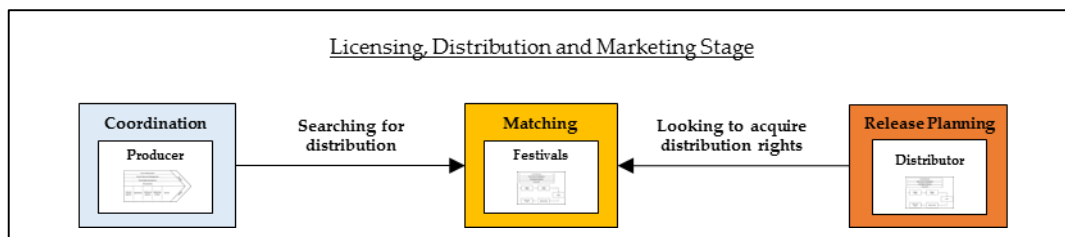


Fig.34: Festivals in the Licensing, Distribution and Marketing Stage, based on: own research.

As indicated by the golden box, festivals are typical match makers as well. They do not buy and re-sell a product at their own risk, but rather support the transaction in different ways. Unlike the previous intermediaries, however, festivals are not directly involved in the transactions between producers and distributors. Instead, they merely provide a marketplace for demand and supply to meet. Accordingly, the coordination capabilities of festivals are of paramount importance. This makes them interesting and warrants a detailed analysis.

Film festivals are typically annual events, in which selected movies are presented to the public (including buyers, critics⁸⁷, entertainment press and audiences). Festivals typically do not show movies of mainstream character, instead, they focus on movies, which are notable for their style, their content, or the treated subject. Given the event nature of festivals, they typically receive large media coverage, which, in turn, provides producers with an opportunity to get attention for their project.

The importance of festivals is highlighted by Finney (2010, p. 55), who notes that “festivals are one of the few marketing and positioning platforms outside the studio release system that the rest of the movie business has to make people aware of their motion pictures”. This observation is also confirmed by Kreuzer (2009, p. 31) for whom festivals are the most efficient way to position a movie on the (international) market. He adds that movies that do find an international

⁸⁷ Refer to Reinstein and Snyder (2005) for an investigation on the influence of movie critics on the demand for motion pictures.

distributor, do so for the most part thanks to a successful festival run. The marketing hook of potential awards increases the effectiveness of these market even further.

Different types of festivals can be distinguished. There are for example competitive and non-competitive festivals, market-driven or press-driven events, national or international festivals, and finally, independent festivals that are designed to showcase work produced outside of large studios system (Hoover 2013, p. 163). It thus comes as no surprise that there is a hierarchy among festivals. While during some international events, multi-million dollar deals are routinely made, others festivals are completely insignificant. Some of the best-known and most prestigious festivals are highlighted in Table 56. These festivals are intensely competitive, and compete for the most promising, interesting, and often the most controversial movies every year.

Festival	Timing	Location
Cannes International Film Festival	~May	Cannes, France
Venice Film Festival	~August	Venice, Italy
San Francisco International Film Festival	Spring	San Francisco, USA
Toronto International Film Festival	September	Toronto, Canada
Seattle International Film Festival	~May	Seattle, USA
Sundance Film Festival	January	Utah, USA
South by Southwest (SXSW)	Spring	Austin, USA
Tribeca Film Festival	Spring	New York City, USA

Tab.56: Important Festivals and Markets, based on: Hoover 2013, pp. 163-166.

Given the large variety of festivals, it is also not surprising that each festival has its own policies and guidelines (Finney 2010, p. 55). Some festivals for example are invite-only. In other words, the festival organization identifies promising movie projects in advance and invites the producers to screen the movie at the festival. Other festivals are submission driven. Those festivals set out guidelines to which the movie must adhere to in every regard. This may include the content, the format, the runtime and so forth (Hoover 2013, p. 163). Any producer with a movie that meets these criteria can submit a movie for entry. The festival staff then has to screen all of those submissions and determine, which movies should be included in the festival program. The press is typically the critical element of the festival process. All events need to be assessed in terms of industry attendance and foreign press presence. Festival directors make their selections and design their schedules with both contingents in mind (Finney 2010, p. 55).

In regards to changes in the last fifteen years, two developments have to be highlighted: (1) an increase in submissions and (2) an increase in festivals. The Sundance Film Festival for example had 129 potential slots for feature movies available in 2002 for which it received 1.740 submissions. This number increased to 2.000 submission in 2003. In 2009, the available slots decreased to 118, however, the number of submissions reached 3.661 (Kreuzer 2009, p. 32). Finally in 2014,

Sundance received 4.057 full-length movie submissions for 119 slots (Sundance 2014, w/o p.).⁸⁸

Not only did the number of movie entries increase, the number of festivals has grown dramatically in the last fifteen years as well. The number has arguably become unmanageable for most producers. The European Coordination of Film Festivals (ECFF) counted 800 festivals in the territory of the European Union alone in 2007 (Kreuzer 2009, p. 33). In 2014, more than 5.000 festivals can be identified worldwide (Fischer 2012, p. 154). Kreuzer (2009, p. 33) points to digitalization and advances in presentation technologies as factors that have given life to many small festivals. In addition, the Internet is also responsible for the growth in festival numbers as it has given rise to online film festivals. The increase in festival numbers is not necessary beneficial for producers. A major disadvantage is that it has become even more difficult to determine, which festivals are really useful and can be valuable for a particular movie. Even without those changes, navigating the festival circuit is not an easy task for producers as was already highlighted in the previous chapter, when the important role of sales agencies in carrying out the relevant festival activities for the producer was highlighted. The rise in the number of festivals adds to the complexity for both parties.

⁸⁸ Geoffrey Gilmore, the Sundance festival director until 2009, makes the rise of digital production technologies responsible for the increase in submissions. He points out that filmmakers had to thoroughly learn the handling of a film camera in the past, nowadays, they can just pick up a digital camera and get started (Spiegel 2003, w/o p.).

Finally, it has to be pointed out that in parallel to big festivals, often markets are held on which sellers and buyers meet. Major markets run alongside the festivals in Cannes, Berlin and Los Angeles. Film markets are entirely commercial events that take the form of trade shows. The entire point of these events is to facilitate the motion picture industry. Participants include buyers, sellers and those, who are looking to get new movies produced. Participating in these markets can cost thousands of dollars, for example, for booths and displays or for renting the required infrastructure to screen the movie. Producers thus face the risk of not being able to recoup the costs of participating should they not get a deal (Hoover 2013, pp. 170-172).

4.2.3.1 Step 2: Activities of Festivals

Now that a general understanding of the role of festivals has been established, the focus can shift towards the formal analysis of their activities. Table 57 shows the impact of technological advancement on the informational activities.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in the number of submissions - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in the number of submissions - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in the number of submissions - Expertise and experience required (personnel cost)	High

Tab.57: Impact on Informational Activities (Festivals), based on: own research.

As previously highlighted, festivals provide a market for producers and distributors to meet. They are not directly involved in the transaction between

producers and distributors. Accordingly, they do not carry out some of the informational activities. They, for example, do not support the negotiations, nor do they monitor transaction partners or process information between both parties. They do, however, indirectly influence the transaction between demand and supply by identifying, selecting, as well as inspecting and classifying those motion pictures that will be included in the festival program. In other words, the festival director ultimately decides, which producers will have an opportunity to present their motion pictures to buyers and critics. The cost for executing these three activities have increased in the past fifteen years. This was prominently highlighted by using Sundance as an example, which saw the number of submission more than double in the past fifteen years.

4.2.3.2 *Step 3: Value of Festivals*

Now that the activities of festivals and their change have been discussed, the focus can shift towards the value festivals provide. Just like the previous discussed intermediaries, festivals also increase the transaction efficiency and the transaction result. Table 58 highlights the value sources that enable festivals to increase the transaction efficiency.

Unlike the previous intermediaries, festivals do not decrease the number of contacts. However, as described in Chapter 3, the provisioning of a market for demand and supply to meet has a very similar transaction cost reducing effect. Closely related to the coordination capabilities of festivals, their specialization and experience is a particular relevant value source as well. The organization and

execution of a festival that attracts the attention of buyers, critics and the media alike, requires highly specialized and qualified personnel. Ultimately, this specialization and experience is the key source that allows festivals to increase the transaction efficiency.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Coordination	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Festivals reduce transaction costs through coordination - Importance of coordination capacity remained high 	High
	Standardization	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Festivals standardize various processes - The importance of standardization hasn't changed 	Medium
	Scale Effects	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Required investments in immaterial resources remained high (brand and reputation) - Producers are too small to create an efficiency advantage 	Medium
	Specialization / Experience	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Required skills, capabilities and experience remained high - Required investments to build up skills and capabilities remained high 	High

Tab.58: Impact on Value Sources – Transaction Efficiency (Festivals), based on: own research.

In addition to the increase of the transaction efficiency, festivals increase the transaction result as well. The relevant source for this value category is highlighted in Table 59. Just as before, an argument can be made that the reduction of transaction cost, which results from the provisioning of a marketplace for supply and demand to meet, leads to more transactions taken place, i.e. more motion pictures find distribution.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Result	Transaction Efficiency	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - The ability to reduce transaction costs remained - Due to lower transaction cost, more transactions take place 	Medium

Tab.59: Impact on Value Sources – Transaction Result (Festivals), based on: own research.

4.2.3.3 Step 4: Incentives to cooperate with Festivals

Finally, the incentives and disincentives for producers and distributors to cooperate with festivals have to be examined as well. The analysis is thus now focusing on the festival's up- and downstream market participants rather than on the festivals themselves. Unlike the previous intermediaries, the cooperation with festivals is to a much larger degree optional for producers and distributors. The analysis will start with the relevant incentives to cooperate with festivals. Two incentives can be identified. These as well as their development are illustrated in Table 60.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency/Effectiveness	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - The effectiveness provided by festivals remained - The cooperation with festivals is more efficient and effective from the producer's or sales agency's point of view 	Medium
Faster Market Entry and Penetration	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - High market entry barriers remained - Movies presented at festivals generally can achieve sales faster 	High

Tab.60: Impact on Cooperation Incentives (Festivals), based on: own research.

A strong argument for both, producers and distributors, to cooperate with festivals is their previous described ability to increase the transaction efficiency and

effectiveness. In addition, from the producer's point of view, the cooperation with festivals also provides the opportunity to enter the market faster and penetrate it wider. International festivals, for example, provide the opportunity to present the movie to international buyers.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Disclosing of sensitive Information	Medium	No direct or indirect impact - Critical and sensitive information has to be disclosed	Medium

Tab.61: Impact on Cooperation Disincentives (Festivals), based on: own research.

Finally, one argument against a cooperation with festivals has to be highlighted as well, namely, the disclosing of the sensitive information. This is highlighted in Table 61. A producer has to ensure, that the festivals is trustworthy, before submitting a screener in the hope of getting selected. Should the festival not handle the submitted information with care, it may wrongfully land on the Internet. With the increase in piracy, this is a very real risk and a strong argument for avoiding a cooperation with festivals.

4.2.3.4 Summary

The previous sub chapters focused on the analysis of festivals. Festivals are mediating between producers and distributors in the motion picture value system. They have been introduced as special match makers, because, unlike the previous intermediaries, festivals are not directly involved in the transaction between producers and distributors. Instead, they provide a marketplace for demand and

supply to meet. Table 62 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Festivals	Medium	High	Medium	Medium	High	High	Medium	Medium

Tab.62: Summary - Impact on Festivals, based on: own research.

Based on these results, the practical research questions can be answered in respect to festivals. The analysis revealed that the activities in their core have not been affected by technological advancements. They remain personnel intensive, requiring a great amount of experience and specialization. Nevertheless, technology increased the number of producers and thus, the number of submissions also grew. As such, the costs for performing the activities increased as well. This, however, is in the interest of festivals. If they would not perform the activities, then the production companies and distributors would have to carry out the activities themselves. With the cost for their performance increasing, both, producer and distributor have strong incentives to not do so.

In regards to the value that intermediaries in the motion picture sector provide, the analysis of festivals revealed that they increase the transaction efficiency as well as the transaction result. For each of these two categories the relevant value sources have been examined. It was shown that technological advancements had a neutral effect on the value provided by festivals.

Finally, the incentives and disincentives to cooperate with festivals have been examined as well. The analysis revealed relevant incentives and disincentives and showed that neither the incentive strength nor the disincentive strength was affected by technological advancements.

4.2.4 Distributors

Distributors have been identified as additional intermediaries in the Licensing, Distribution and Marketing Stage. They are generally mediating between producers and cinema operators. Their position between supply and demand is highlighted in Figure 35.

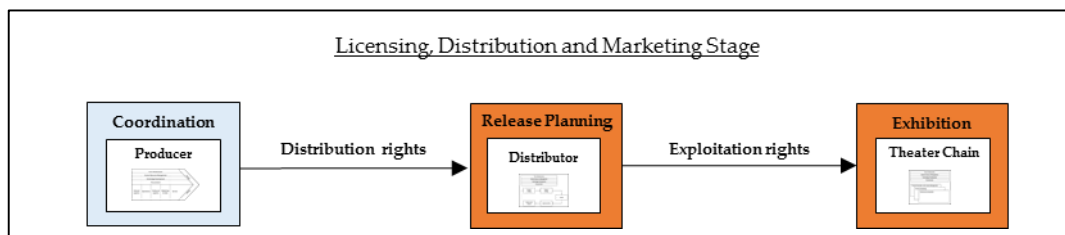


Fig.35: Distributors in the Licensing, Distribution and Marketing Stage, based on: own research.

As indicated by the orange box, distributors have been identified as the first market markers in the motion picture value system. This is because they buy and sell the distribution / exploitation rights for motion pictures at their own risk. It has to be highlighted, that the mediating position of distributors is not as clearly defined as Figure 35 suggests. On the supply side, producers are typically not able to directly negotiate a deal with the distributors. As previously discussed, in those

cases, sales agencies take the place of the producers as they will be in negotiations with the distributors (on behalf of the producers).

On the demand side, most distributors will decline to acquire only theatrical rights as the theatrical distribution is often not as profitable as other media. They thus often try to acquire as much territory and media as they can. If they do not serve a particular territory or media themselves, they will lay off rights on sub-distributors, and take a fee for serving as the middle man (Wrobel 2014, p. 84). Accordingly, distributors are not only in contact with cinema operators, but with other intermediaries from the exploitation segment as well. These include video stores, TV networks as well as digital distributors, and in some cases, other distributors or sub-distributors. Even more importantly, distributors are also responsible for marketing the movie to consumers. Accordingly, consumers are relevant entities to be considered on the demand side as well.

Based on these considerations, the tasks and activities of distributors can be divided into two distinct groups: (1) strategies to maximize value over the life of a single property, and (2) strategies to drive consumption by increasing awareness and interest. In regards to the first aspect, the distributor typically starts the distribution process by screening the movie to focus groups in order to determine the general distribution approach. For each category of media, the distributor has to address how the motion picture is consumed and monetized. This includes setting the price, deciding where and how the motion picture is sold or rented, how many units are being made and how the inventory is managed (Ulin 2013, p. 497; Wrobel 2014, p. 86). In addition to the positioning of the movie, its placement

compared to competing productions is of major importance as well (Swami et al. 1999, p. 352). The positioning of the movie refers to the timing of the release and to the selection of movie theaters and cinema chains in which the movie will be screened (Wirtz 2012, p. 377). All these activities are summarized as release planning in the Motion Picture Value System Model. The objective as highlighted is to maximize consumption and corresponding revenues across multiple exploitation options. With the increase in media and territories in the past fifteen years, the complexity of these activities has risen as well. The challenge that distributors are facing is accurately summed up by Ulin (2013, p. 54), who points out that “the trick, which all distributors of motion pictures will need to master, is how to prudently manage the continuing maturation of traditional ancillary distribution while continuing to enfranchise the unquestioned potential inherent in digital distribution through new media; all within the context of continuing to grow the overall revenue generated by this continually evolving array of opportunities for consumers to enjoy motion pictures.”

In regards to the second point, the multiple marketing strategies used by distributors to increase interest and awareness have to be highlighted. The setting of the promotional budget initially forms the basis for the marketing campaign. For the actual execution of the campaign, various instruments are available. The movie poster is the main advertising medium. It gives the movie a trade mark and ensures a high recognition value. The layout of the poster is often also used as the cover of DVDs and Blu-Rays. In addition to globally distributed movie posters, specific cultural alterations are produced as well (Wirtz 2012, pp. 378).

Other instruments are trailers and teasers, which are produced using actual movie footage and presented to audiences in theaters immediately before the screening of another feature. They are thus an inexpensive and efficient way to reach interested audiences (Wirtz 2012, p. 378). It comes as no surprise that the Internet is increasingly used as an information platform for new releases as well. Special trailers and teasers lure prospective buyers to the movie-specific homepage and increase the interest and awareness before the start of the classic advertising activities. In addition, trailer and teaser are published on video platforms such as YouTube in the hope of it being distributed from user to user (i.e. viral marketing). Preview screenings, i.e. screenings before the actual premiere event, are another instrument used to intensify interest in the public. These screenings typically take place in front of a selected audience from which the distributor expects positive word of mouth and good reviews (Wirtz 2012, p. 378).

Especially for costly productions, television, radio and print advertising are the most important means of communication. This is because a large number of potential viewers can only be reached within a short period of time through the use of the mass media. Information events for journalists, edited newspaper articles and interviews with actors are typical examples for instruments in the area of public relations (Wirtz 2012, p. 379). Figure 36 gives an overview of the distribution of advertising cost for MPAA studios in 2007.

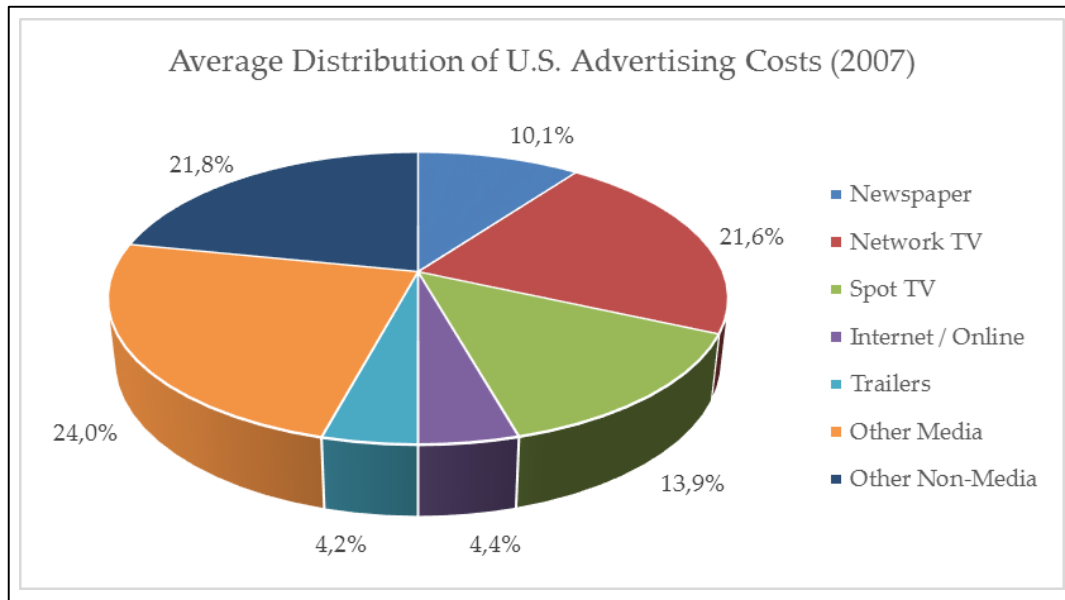


Fig.36: Average Distribution of U.S. Advertising Cost in 2007, based on: MPAA 2008, p. 7.

As illustrated in Figure 36, TV commercials make up the largest cost block and are the biggest cost driver in marketing motion pictures.⁸⁹ Other media includes radio ads, ads in magazines and billboards, while other non-media expenditures, include creative services, exhibitor services, promotion and publicity as well as market research (MPAA 2008, p. 7).

In this context it has to be noted that the marketing costs have risen sharply in recent years. Wirtz (2012, p. 377) points out that the average marketing cost for a motion picture increased to \$35.9 million per movie, which represents roughly

⁸⁹ Refer to Elliot and Simmons (2010, pp. 201-205) for an investigation of the factors determining motion picture advertising strategies and the determinants of advertising expenditure in different media.

one-third of the total cost. This development is illustrated in Figure 37. Here the average costs for prints and advertising as well as their sum, the so called P&A costs, for MPAA studios from 1999 to 2007 are highlighted.

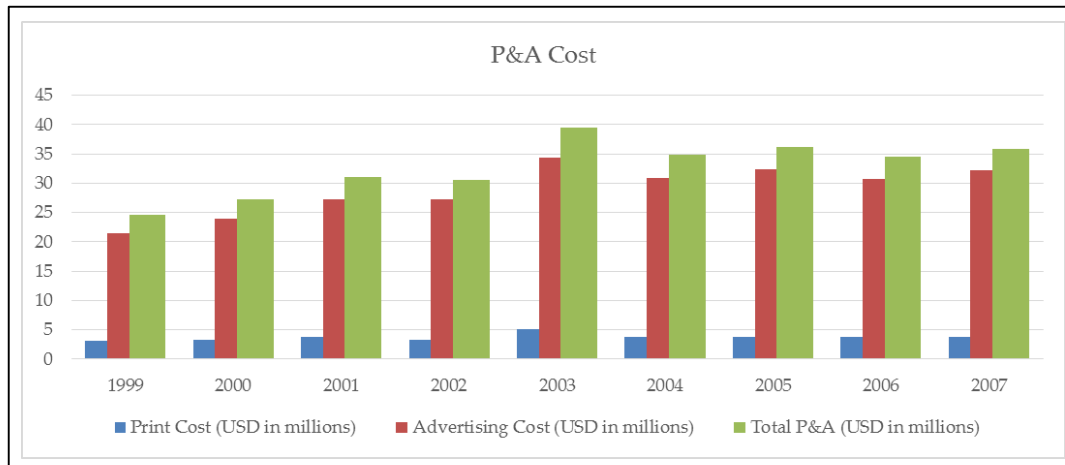


Fig.37: MPAA Studios Average P&A Costs per movie (1999 – 2007), based on: MPA 2003, p. 20; MPAA 2008, p. 7.

While no official MPAA data is available for the years after 2007, McClintock (2014, w/o p.) suspects that, if the MPAA still tracked spending on P&A, the number would be north of \$40 million today for medium-size motion pictures. She also highlights that to market tentpoles internationally, distributors are spending an additional \$100 million per movie. She uses *Transformers* (2007) as an example and points to the \$150 million spent in 2007 to market the movie domestically and

internationally. This number increased by 33% to \$200 million to market *Transformers: Age of Extinction* (2014) in 2014 (McClintock 2014, w/o p.).⁹⁰

4.2.4.1 Step 2: Activities of Distributors

Now that a general understanding of the role of distributors has been established, the focus can shift towards the formal analysis of their activities. Since distributors are market makers, all three activity levels are relevant. The analysis will start with the activities on the informational level, which are highlighted in Table 63.

Just as was the case with the previous intermediaries, for distributors the cost for executing the three activities identification, selection, inspection and classification increased as well. Not only did the number of motion pictures that are seeking distribution increase, the number of transaction partners increased as well, e.g. new digital distributors appeared.

Unlike talent agencies and sales agencies, distributors do not support negotiations, instead, they conduct negotiations in their own name. Nevertheless, the increase in territories, the rise of new media windows and other technological advancements, also increased the complexity of the negotiations and contracts for distributors. This is also the reason why the cost for information processing as well as monitoring and reporting increased.

⁹⁰ For an analysis of the impact of total advertising on movie revenues refer to Elberse and Anand (2005), Elliot and Simmons (2008), Hennig-Thurau et al. (2006) as well as Prag and Casavant (1994).

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Negotiations	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more sellers) - Very limited degree of automation / use of ICT - Complexity of deals and contracts increased - Expertise and experience required (personnel cost)	High
	Information Processing	Medium	Indirect Impact (Small cost increase) - Increase in the information amount - Increased security concerns (quality standard) - Limited degree of automation	High
	Monitoring and Reporting	Medium	Indirect Impact (Small cost increase) - Limited transparency - Limited degree of automation / use of ICT - Expertise and experience required (personnel cost)	High

Tab.63: Impact on Informational Activities (Distributors), based on: own research.

The aforementioned increase in complexity also has an effect on the activities on the legal-financial level. These activities are highlighted in Table 64. The licensing is one of the most important activities of distributors. It is an activity that requires a great amount of experience and skills and accordingly cannot be automated or in other way significantly altered by technology. Due to the increase in complexity of deals, and the increase in transaction partners, the costs for the

execution of this activity have increased as well. The same reasons are responsible for the increase of the costs for payment processing as well.⁹¹

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Legal-Financial Level	Capital Procurement	Medium	Indirect Impact (Small cost increase) - Higher capital requirements / higher risks	High
	Licensing	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more buyers and sellers) - Expertise and experience required (personnel cost) - Very limited degree of automation / use of ICT - Increased complexity of deals and contracts - Degree of price discrimination further increased	High
	Payment Processing	Medium	Indirect Impact (Small cost increase) - Increase in payments and transaction partners - High quality standard (security)	High
	Contract Adjustment	Medium	Indirect Impact (Small cost increase) - Expertise and experience required (personnel cost) - Increased complexity of deals and contracts - Limited degree of automation / use of ICT	High

Tab.64: Impact on Legal-Financial Activities (Distributors), based on: own research.

The activity contract adjustment is particular relevant for agreements made with cinema operators as will be discussed in more detail when the exhibition sector will be examined. However, due to the increase in complexity of contracts, the execution of this activity creates higher cost in 2014 when compared to 1999 as well.

In regards to the activities on the physical level, it has to be highlighted that the literature on media management typically identifies distribution and

⁹¹ It has to be highlighted, that the distributor is in the middle of the remittance chain. They collect revenues from all upstream participants and distribute them downstream.

reproduction as core activities of distributors. However, as highlighted in the motion picture value system, distributors do not carry out those physical activities by themselves. The transformation, reproduction, distribution and repair processing are all outsourced to an additional intermediary – laboratories in the past and the DCDC in recent years. The only physical activity that distributors typically carry out themselves, is presentation, which, in the case of distributors, solely refers to the extensive marketing activities they perform. The increase in marketing cost was already discussed. The cost increase for the execution of the presentation activity thus comes as no surprise. This is also highlighted in Table 65 below.

Level	Activity (A)	$C_{An}(t_{1999})$	Impact of Technological Advancements	$C_{An}(t_{2014})$
Physical Level	Presentation	Medium	<p>Indirect Impact (Small cost increase)</p> <ul style="list-style-type: none"> - Increased competition => Higher degree of marketing required - Very limited degree of automation / use of ICT - Expertise and experience required (personnel cost) 	High

Tab.65: Impact on Physical Activities (Distributors), based on: own research.

4.2.4.2 Step 3: Value of Distributors

Now that the activities of distributors have been discussed, the focus can shift towards the value distributors provide. Table 66 highlights the first set of value sources that enable distributors to increase the transaction efficiency.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	Low	Indirect Impact (Small increase in strength) - Increase in transaction partners (more buyers and sellers) - Number of distributors remained comparatively low	Medium
	Standardization	Medium	No direct or indirect impact - Standardization is of paramount importance - The importance of standardization remained high	Medium
	Scale Effects	High	No direct or indirect impact - Required investments in immaterial and material resources remained high - Producers are too small to create an efficiency advantage	High
	Specialization / Experience	High	No direct or indirect impact - Required skills, capabilities and experience remained high - Required investments to build up skills and capabilities remained high - Producers are too small to build up skills and capabilities	High

Tab.66: Impact on Value Sources – Transaction Efficiency (Distributors), based on: own research.

Distributors also reduce contact costs due to their mediating position between multiple sellers and multiple buyers. With the number of transaction partners increasing on both sides, the strength of the Baligh-Richartz-Effect has increased as well.

Likewise, distributors also reduce transaction costs through standardization. The buyers and sellers get used to the processes of distributors and therefore learn to efficiently carry out transactions with them. This situation has not changed in the last decade.

Scale effects as well as the specialization and experience of distributors are particularly strong value sources. Scale effects occur in regards to material resources, i.e. offices around the globe or a global distribution network, but also for intangible resources, such as their reputation and business relationships as well as immaterial resources in the form of highly specialized and qualified personnel.

Since distributors are market makers, additional value sources that increase the transaction efficiency have to be considered as well. These are illustrated in Table 67.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Risk Spreading	Low	Indirect Impact (Small increase in strength) - Spreading of the risk through the distribution of multiple movies - P&A cost increased and associated risk has grown accordingly	Medium
	Lower Risk Aversion of the Intermediary	Low	Indirect Impact (Small increase in strength) - Risk aversion of distributors is less pronounced - Associated risks have grown	Medium
	Lower Capital Cost of the Intermediary	Low	Indirect Impact (Small increase in strength) - Capital cost of distributors are lower - Capital requirements have risen	Medium

Tab.67: Impact on Value Sources – Transaction Efficiency II (Distributors), based on: own research.

Due to the high marketing costs of motion pictures, the distributor faces considerable risks, which have increased with escalating marketing cost. A producer would face the same risk, if the producer were to distribute the movie directly. Unlike individual producers, however, distributors can spread the risk over their entire portfolio. Accordingly, risk cost and thus transaction cost are reduced (Noam 2010, p. 63). A similar argument can be made in regards to the risk aversion. Due to the aforementioned reasons, is a distributor more likely to risk high marketing expenditure compared to individual producers or production companies. Lastly, and in particular when the distributor is part of a larger media conglomerate, the capital cost of the distributor are lower than those of individuals production companies, whose access to capital is much more limited.

In addition to the increase of the transaction efficiency, distributors increase the transaction result as well. The relevant sources for this value category are illustrated in Table 68. Just as before, an argument can be made that the reduction of transaction cost, and the reduction of market power of producers and cinema operators, results in more transactions taken place, i.e. more motion picture being distributed.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Result	Transaction Efficiency	Medium	Indirect Impact (Small increase in strength) - The ability to reduce transaction costs increased slightly - Due to lower transaction cost, more transactions take place	High
	Market Power Reduction	Low	No direct or indirect impact - Market power of producers remained low - Distributor increase their market power through the aggregation of demand and supply - Ability of producers to reduce market power of the exhibition segment remained at the same level	Low

Tab.68: Impact on Value Sources – Transaction Result (Distributors), based on: own research.

4.2.4.3 Step 4: Incentives to cooperate with Distributors

Finally, the incentives and disincentives for producers and cinema operators to cooperate with distributors have to be examined as well. The analysis is thus now focusing on the distributor’s up- and downstream market participants rather than on the distributors themselves. Similar to talents, for whom the cooperation with talent agencies is in practice not optional, the cooperation with distributors is also not optional for producers, who want to their movie to be seen around the globe and revenues maximized over the lifetime of the movie. Nevertheless, various incentives and disincentives to cooperate with distributors can still be

identified. The analysis will start with the incentives. Three incentives can be identified, these are illustrated in Table 69.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency/Effectiveness	Medium	<p>Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - The efficiency and effectiveness provided by distributors increased - The cooperation with distributors is more efficient and effective from the producer's or cinema's point of view 	High
Improved Price Differentiation/Discrimination	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Multiple sales channels can be reached through distributors - Producer typically has no direct distribution 	High
Faster Market Entry and Penetration	Medium	<p>Indirect Impact (Small increase in strength)</p> <ul style="list-style-type: none"> - High market entry barriers remained - Distributors can achieve global distribution faster - Amount of potential markets increased 	High

Tab.69: Impact on Cooperation Incentives (Distributors), based on: own research.

A strong argument for both, producers and cinema operators or other players in the Exploitation and Consumption Stage, to cooperate with distributors is their previously described ability to increase the transaction efficiency and - effectiveness. The decrease in transaction cost and the increase in transactions is in the interest of producers and cinema operators as well.

In addition, the cooperation with distributors provides producers the opportunity to enter the market faster and penetrate it wider. Producers by themselves would not be able to distribute the movie internationally as efficiently. Since the number of countries and the importance of the international market has grown, the incentive to cooperate is more pronounced as well.

Unsurprisingly, there are also a variety of arguments against a cooperation with distributors. For example, particularly the distribution arms of the Major

studios wield a considerable market power. They use their market power to demand a large share of revenues and fees, which is neither in the interest of the producer, nor in the interest of cinema operators or other licensees.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Distributors retained a tremendous amount of market power - They take over control of the movie and therefore also a large portion of the revenues - Theater operators depend on a continuous flow of products 	High
Rationing and Discrimination	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Access to (worldwide) distribution is not ensured - Theater operators depend on a continuous flow of products 	Medium
Disclosing of sensitive Information	Low	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Critical and sensitive information has to be disclosed 	Low

Tab.70: Impact on Cooperation Disincentives (Distributors), based on: own research.

Likewise, as highlighted in Table 70, the risk of discrimination is an additional disincentives to cooperate with distributors. From the producer's point of view the access to the distribution channels is not permanently secured. Producers are thus highly dependent on distributors. They therefore should theoretically avoid this dependency and the risk of being discriminated. However, as previously mentioned, producers face a lack of alternatives.

The disincentive of having to disclose sensitive information is particular relevant for cinema operators, which, due to the nature of their agreements with distributors, have to provide detailed reports about ticket sales, screenings and so on. The distributor often even has the right to audit the cinema operator directly or through a third party. A strong argument to not cooperate with distributors - if an alternative would exist.

4.2.4.4 Summary

The previous sub chapters focused on the analysis of distributors. They are mediating between producers and cinema operators in the motion picture value system. Table 71 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Distributors	Medium	High	Medium	High	Medium	High	Medium	Medium

Tab.71: Summary - Impact on Distributors, based on: own research.

Based on these results, the practical research questions can be answered in respect to distributors. The analysis revealed that the activities in their core have not been affected by technological advancements. They remain personnel intensive, requiring a great amount of experience and specialization. Nevertheless, technology increased the number of buyers and sellers and as such, the cost for performing the majority of the activities increased as well.

In regards to the value that intermediaries in the motion picture sector provide, the analysis revealed that distributors increase the transaction efficiency as well as the transaction result. For each of these two categories the relevant value sources have been examined. It was shown that technological advancements had a positive effect on the value provided by distributors.

Finally, the incentives and disincentives to cooperate with distributors have been examined as well. From the onset it was pointed out that the cooperation with distributors is in reality not optional for most producers. It is rather a mandatory

requirement. Nevertheless, the analysis still revealed relevant incentives and disincentives and showed that the incentive strength increased in the last fifteen years while the disincentive strength remained at a similar level.

4.2.5 Laboratories / DCDC

Laboratories such as Deluxe and Technicolor have been highlighted as additional intermediaries in the motion picture value system. They are the last intermediaries in the Licensing, Distribution and Marketing Stage. Their position between supply (distributors) and demand (exhibition outlets such as cinemas or video stores) is visualized in Figure 38.

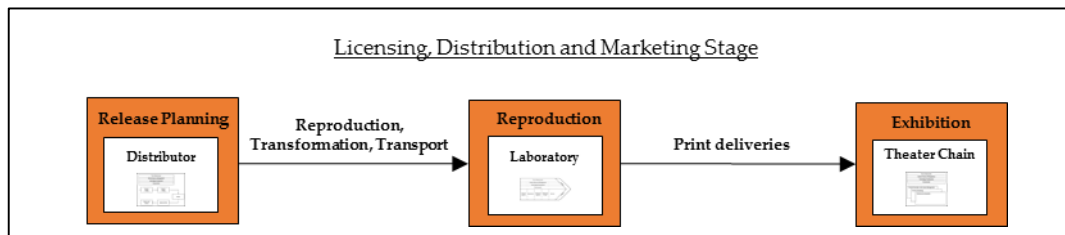


Fig.38: Laboratories in the Licensing, Distribution and Marketing Stage, based on: own research.

The previous chapter highlighted the various activities of distributors and pointed out that most of the physical activities are outsourced. This is where laboratories such as Deluxe or Technicolor traditionally stepped in to ensure that the movie material is delivered to the respective buyers on time and in the desired quantities. They support the transaction between distributor and cinema operator by taking over the physical reproduction, transformation and distribution of

motion pictures for the distributor. They do not acquire any property rights, nor do they sell the reproduced movies to cinema operators. Instead, they receive a fee for their service from the distributor.

Unsurprisingly, the conversion of cinema screens worldwide to digital projection affected laboratories dramatically. This was predicted by many authors, however, no one foresaw the developments that have actually occurred. The following paragraphs will thus briefly chronic the evolution of laboratories in the last fifteen years, before the new world – the new standard of delivering motion pictures to cinemas - will be presented.

Deluxe and Technicolor have been the pillars in the film service segment for nearly a century. Technicolor's film development business dates back to 1914, while Deluxe has been processing film since 1915. Both have been the leaders in lab services in California and worldwide (Giardina 2011, w/o p.). In 1999, a feature with a length of about two hours consisted of six projection reels, each weighing approximately 40kg (Hawkins and Vickery 2008, p. 77). This was required to show the movie on one screen. The job of Technicolor and Deluxe was to ensure that movies could be shown on thousands of screens simultaneously. They handled the chemical process of reproducing the film reels and delivering those reels to theaters across North America. Setting up the duplication process forms a major part of the duplication costs. Accordingly, it made sense to use an intermediary. The distributors could avoid investing in the required machinery to duplicate film reels,

while laboratories were able to spread the investment over a larger number of transactions.⁹²

As was already highlighted, the digital cinema revolution started in 1999. From then on, each year, more and more screens converted to digital projection – eliminating the need for film reels. As movies still had to be delivered to theaters somehow, Deluxe and Technicolor ventured in the digital cinema segment as well. They started to focus on theatrical digital cinema mastering, distribution and key management services. This follows the post-production process and gets the files ready for distribution into cinemas (made into a DCP), checks them (QC), gets them into cinemas (delivery of hard drives) and makes sure that the security keys (KDM⁹³) are sent out and any problems are dealt with. In addition, they also ventured into related businesses including digital postproduction and digital cinema distribution. However, both Technicolor and Deluxe struggled to get their own distribution solutions accepted by the market (Hancock 2015, w/o p.).

Then, in only the last five years, a number of remarkable events occurred. It started in 2010, when Deluxe announced that it had formed a joint venture with EchoStar. This marriage essentially brought together the digital asset management

⁹² While it didn't matter for the most part of the last century, the investments conducted by those laboratories are characterized by a high degree of specificity and thus created a hold-up for the laboratories.

⁹³ The abbreviation KDM refers to Key Delivery Message. It is a component of the DRM system used in DCI-compliant digital cinema servers.

and distribution expertise of industry veteran Deluxe with the satellite operations and transmission expertise of EchoStar Satellite Services (Variety 2010, w/o p.).

In July 2011, Deluxe and Technicolor began an orderly retreat from film, inking three-year subcontracting agreements that reduced their footprint of film services around the world. Per the agreement, Technicolor subcontracted its 35mm bulk release printing business to Deluxe in North America, while Deluxe subcontracted its 35mm print distribution business in the US to Technicolor. Additionally, Deluxe subcontracted its 35mm/16mm color negative processing business to Technicolor in London (Giardina 2011, w/o p.). For many these news underscored the approaching end of the era where film dominated the theatrical motion picture industry.

Then, in 2013, the Digital Cinema Distribution Coalition (DCDC) was formed by AMC Theatres, Regal Entertainment Group, Cinemark Theatres, Universal Pictures and Warner Bros. Entertainment. The three largest theater chains and two Major studios came together with the goal to offer a range of satellite and terrestrial offerings to theaters. Their aim was to send movies and other content to theaters via a satellite network, eliminating the need to ship hard drives. In addition to the two studios involved directly in the joint venture, the DCDC had also reached agreements with Lionsgate, Disney, and Paramount Pictures to provide each with theatrical digital-delivery services across North America (DCDC 2015, w/o p.).

In the same year, the Deluxe/EchoStar joint venture announced that it has been selected by the Digital Cinema Distribution Coalition to provide digital asset management, distribution by satellite and other means, as well as operations

support for its advanced theatrical digital delivery platform (Deluxe/EchoStar 2013, w/o p.). Up to this point, Deluxe/EchoStar was the primary competitor in the digital delivery business, as Deluxe/EchoStar was offering their own delivery systems to theater operators. With the announcement, Deluxe/EchoStar also became DCDC's primary service provider.

In 2014, Deluxe closed its remaining Film Lab in Hollywood. COO Warren Stein acknowledged that processing volumes had declined sharply, and as a result, the laboratory had incurred significant financial losses. Technicolor has already ceased offering these services in Southern California, meaning that with the shutting of Deluxe's lab, only privately owned Fotokem in Burbank remained in this market (Giardina 2014, w/o p.).

In the same year, DCDC acquired the Deluxe/Echostar satellite network. As previously pointed out, until this point, Deluxe/Echostar had been both DCDC's primary service provider and owner of a competing distribution network. Many theaters had to have satellite dishes for both networks. Under the deal Deluxe/Echostar remained DCDC's primary service provider and over the next year, DCDC converted the 699 already deployed Deluxe/Echostar screens to DCDC's technology. The DCDC absorbed the costs of the conversion (Cohen 2014, w/o p.).

With this transaction, some confusion in the digital cinema distribution market was eliminated and the Digital Cinema Distribution Coalition (DCDC) became effectively the sole player in delivering features to cinemas. This was highlighted in 2015, when the DCDC announced that it is accelerating its rollout of

technologies, predicting that its satellite-distribution system will reach 32,000 movie screens at 3,000 locations by 2018. As of 2015, the DCDC has pacts with 73 theater circuits spanning 2,300 locations and 28,000 screens. About 1,700 of those locations and 22,000 screens have DCDC's proprietary equipment installed.⁹⁴ In addition, DCDC has agreements with 24 content providers, including all major studios and various independent production companies (Kelley 2015, w/o p.).

The DCDC has established the new de-facto standard for digital movie delivery and became the dominant player in this segment in just two years. It is thus warranted to explain, how the digital delivery of motion picture looks like now and will look like for the foreseeable future.

Once the post-production is complete a master hard drive is delivered to DCDC's ingest point at Deluxe in Burbank, California. Here the file is quality controlled by highly qualified personnel before it is ingested into the network. The content then travels two different routes via fiber optic cable: (1) to the DCDC network operations center in Salt Lake City and (2) to DCDC's uplink in Gilbert, Arizona. At DCDC's uplink in Gilbert, the content is checked once again before it is beamed to DCDC's full time transponder on AMC 15, EchoStar's state of the art satellite. AMC 15 is in synchronous orbit above the center of the United States. From there the content is transmitted to individual cinemas across North America.

⁹⁴ As previously highlighted, as of March 2015, 38,719 screens (97% of total screen) have been converted to digital projection. The DCDC delivers the content to 56% (22,000) of those digital screens in 2015 and plans to increase the share to 72% by 2018.

In the cinema, the digital assets are captured by DCDC's proprietary catch server, which is required at each satellite enabled location. As soon as the theater has been booked for the transmitted feature, the content becomes available for digestion into the local theater management server, from where it can then be transferred to its assigned playback auditorium. This new situation is illustrated in Figure 39 (DCDC 2015a, w/o p.).

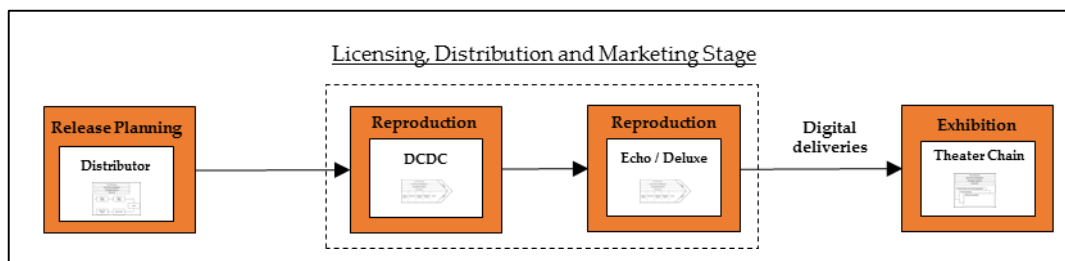


Fig.39: DCDC in the Licensing, Distribution and Marketing Stage, based on: own research.

While the short amount of time in which the DCDC managed to build its monopoly is certainly impressive, the fact itself should come as no surprise. As discussed before, a structure with one intermediary is often the most efficient. In addition, from the perspective of cinema operators, each investment in delivery technologies is an investment with high specificity, i.e. two receiver, two satellite dishes, etc. It is in their interest to only have to deal and maintain the technology from one provider rather than from multiple providers. While studios and producers do not face high investments, it is also in their interest to only deal with one provider to cover the distribution rather than having to make agreements and monitor multiple providers.

In retrospective, the players involved in the joint venture are also not surprising. The motion picture industry is characterized by a large degree of vertical integration. The conversion from analog to digital projection provided the Major studios with the opportunity to integrate further. In addition, having Major studios involved certainly helped with getting more content providers on board. Likewise, the involvement of the large cinema chains makes sense. They, after all, are the most affected and, as previously mentioned, have a strong interest to establish a single standard as soon as possible to avoid unnecessary costs. With the large chains directly involved, they cannot only shape the standard, but also drive adaptation on the exhibition side. Arguably, the key to the success of the DCDC is exactly that important and established players from both sides came together. Ultimately, this is just another example for the observation that the players in the motion picture industry would rather work with a known rival than see a new competitor arise (Gomery 2004, p. 203).

4.2.5.1 Step 2: Activities of Laboratories / DCDC

Now that a general understanding of the traditional role of laboratories and the new role of the DCDC have been established, the focus can shift towards the formal analysis of their activities. As the previous discussion highlighted, laboratories such as Deluxe and Technicolor have been strongly impacted by technology. The conversion from analog to digital projection altered many of the physical activities that have been traditionally carried out by laboratories and ultimately led to a situation, in which laboratories (in their original incarnation) are

no longer part of the motion picture value system. They have been succeeded by the DCDC. This has implications for the application of the Intermediation Analysis Approach as a comparative statics analysis is not possible. Therefore a deviation in the approach is necessary.

Table 72 highlights the relevant activities of laboratories on the information level as well as the cost for their execution in 1999. As indicated, the execution of these activities was generally associated with high cost as they mostly involved manual labor. Qualified personnel had to inspect any master they received. From particular importance also were the activities information processing as well as monitoring and reporting. It was the job of laboratories to coordinate delivery dates with distributors and cinema operators. They had to track the deliveries, the repairs of reels and had to report back to the distributor. None of which was automated in 1999.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements
Informational Level	Inspection and Classification	High	- High cost due to mostly manual labor - Very limited degree of automation possible - High cost as specific expertise was required
	Information Processing	High	- High cost due to mostly manual labor - Very limited degree of automation possible - High cost as specific expertise was required
	Monitoring and Reporting	Medium	- High cost due to mostly manual labor - High cost due to limited transparency - Very limited degree of automation possible

Tab.72: Impact on Informational Activities (Laboratories), based on: own research.

In contrast to this, a different picture emerges when the DCDC is examined. The same informational activities are still relevant in 2014, however, they are now

performed by the DCDC and the costs for their execution are lower, which is illustrated in Table 73.

Level	Activity (A)	Impact of Technological Advancements	$C_{An}(t_{2014})$
Informational Level	Inspection and Classification	- Cost decrease through the removal of most manual labor - Cost decrease through full digitalization and large degree of automation - Specific infrastructure and expertise required	Low
	Information Processing	- Cost increase due to a higher amount of information - Cost decrease due to large degree of automation - Specific infrastructure and expertise required	Medium
	Monitoring and Reporting	- Cost decrease due to increased transparency - Cost decrease due to large degree of automation	Low

Tab.73: Impact on Informational Activities (DCDC), based on: own research.

The digitalization of the delivery process has also impacted the activities on the informational level. The inspection of the master is now mainly done by computers. The processing of information now relies heavily on the use of ICT and is to a certain degree automated. The DCDC, for example, provides their customers a portal on the Internet, which is used as a communication platform and allows cinema operators to manage their deliveries. The cost for monitoring and reporting have decreased as well. Digital technologies allow real time tracking of when movies are delivered to the catch server at cinema sides and when they are transferred to the cinema management server.

On the legal-financial level, warranty processing is an activity with high relevance. As indicated in Table 74, the costs for executing this activity in 1999 were high. Film prints had an extremely limited life span. They deteriorated in proportion to the number of times they were projected (Husak 2004, p. 923).

Accordingly, the processing of repairs and warranties was an important activity of laboratories.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements
Legal-financial Level	Warranty Processing	High	<ul style="list-style-type: none"> - High failure rate - Very limited automation possible - Expertise and experience required (personnel cost)

Tab.74: Impact on Legal-Financial Activities (Laboratories), based on: own research.

Unsurprisingly, the cost for warranty processing have decreased dramatically with the conversion from analog to digital cinema as the described deterioration does not occur with digital files. This is also illustrated in Table 75.

Level	Activity (A)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Legal-financial Level	Warranty Processing	<ul style="list-style-type: none"> - Decrease in failure rate - High degree of automation / use of digital technologies 	Low

Tab.75: Impact on Legal-Financial Activities (DCDC), based on: own research.

Finally, the activities of the physical level are the most important ones and the most affected by technological advancements. The relevant activities and the cost for their execution in 1999 are illustrated in Table 76.

Level	Activity (A)	$C_{An}(t_{1999})$	Impact of Technological Advancements
Physical Level	Transformation	High	- High cost due to mostly manual labor - Very limited degree of automation possible - High cost as specific infrastructure and expertise was required
	Reproduction	High	- Very high <i>First-Copy-Cost</i> effect - High cost due to mostly manual labor - High cost as specific infrastructure and expertise was required
	Distribution / Repair Processing	High	- High cost due to mostly manual labor - High cost due to high failure rate of product - High cost as specific infrastructure and expertise was required

Tab.76: Impact on Physical Activities (Laboratories), based on: own research.

In 1999, the costs for their execution was high. The creation of different versions (transformation), the reproduction of thousands of film reels and the shipping of those reels across North America, involved mostly manual labor. Those activities required a very specific infrastructure (i.e. machinery) and qualified personnel that knew how to use the machinery.

Level	Activity (A)	Impact of Technological Advancements	$C_{An}(t_{2014})$
Physical Level	Transformation	- Cost decrease through the removal of most manual labor - Cost decrease through full digitalization and large degree of automation - Cost increase through an increase in variations (versions) - Specific infrastructure and expertise required	Low
	Reproduction	- Cost decrease through the removal of most manual labor - Cost decrease through full digitalization and large degree of automation (<i>First-Copy-Cost</i> effect decreased) - Cost increase through an increase in variations (versions) - Specific infrastructure and expertise required - Simultaneous reproduction and distribution possible	Low
	Distribution / Repair Processing	- Cost decrease through the removal of most manual labor - Cost decrease due to lower failure rate - Specific infrastructure and expertise required - High quality standard (security) - digitally monitored	Low

Tab.77: Impact on Physical Activities (DCDC), based on: own research.

This situation has changed dramatically in 2014 as illustrated in Table 77. The delivery of motion pictures over satellite equals a simultaneous reproduction and distribution. Instead of having to reproduce thousands of film reels. The master

only has to be made into a DLP and beamed to the satellite from where the file is sent to each theater. While all this still requires a very specific infrastructure as well as specific skills and capabilities, the cost for executing those activities is still lower than compared to 1999.

4.2.5.2 Step 3: Value of Laboratories / DCDC

Now that the activities have been discussed, the focus can shift towards the value laboratories and the DCDC provide. Both increase the transaction efficiency as well as the logistic efficiency. Table 78 highlights the value sources that enabled laboratories to enhance the transaction efficiency.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements
Transaction Efficiency	Baligh-Richartz-Effect	Medium	- Large amount of buyers and sellers - Comparatively high cost per contact due to large amount of manual (physical) activities
	Standardization	High	- Large degree of standardization
	Scale Effects	High	- Laboratories have been able to exploit scale effect in regards to machinery as well as reputation and business relations
	Specialization / Experience	High	- The reproduction and delivery of movies required specific skills and capabilities

Tab.78: Impact on Value Sources – Transaction Efficiency (Laboratories), based on: own research.

In 1999, with digital cinema still being in the very early stages, laboratories were able to decrease transaction costs in a variety of ways. Firstly, they reduced contact costs due to their mediating position between multiple distributors and thousands of cinema sides. Standardization played an important role as well. By then, distributors and cinema operators had been working with Technicolor and Deluxe for many decades and learned to efficiently conduct transactions. Scale

effects, particular in regards to material resources, i.e. the machinery and infrastructure required to reproduce thousands of film reels, also was an important value source. Since Technicolor and Deluxe were able to spread the investments over a larger number of transactions, compared to a situation in which each distributor builds up his own reproduction and distribution capabilities, the transaction efficiency was increased.

The same value sources are still relevant in 2014. This is highlighted in Table 79. The DCDC still reduces contact costs, however, the cost per contact are considerable lower due to the use of technology. Accordingly, the strength of this value source is less pronounced now than it was 15 years ago for laboratories.

Type	Value Source	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	- Large amount of buyers and sellers - Comparatively low cost per contact due to digital technologies	Low
	Standardization	- Established the new de-facto standard for digital theatrical delivery in North America - Importance is likely to increase as distributors and cinema operators get used to the new processes	High
	Scale Effects	- High investments in machinery have been replaced by equally high investments in digital distribution technology - Efficiency increased	High
	Specialization / Experience	- DCDC acquired new skills and capabilities - High investment are necessary to built up skills	High

Tab.79: Impact on Value Sources – Transaction Efficiency (DCDC), based on: own research.

The importance of standardization, scale effects and specialization remained, even though the standards, required infrastructure and skills have changed over the past fifteen years. The DCDC replaced old standards and established new ones. While no longer machinery is required to reproduce thousands of film reels, the

operation of a satellite distribution network nevertheless requires considerable investments. With so many content providers and cinema operators on board, the DCDC can spread these costs over a larger number of transactions, which increases the efficiency.

In addition to the transaction efficiency, laboratories increased the logistics efficiency as well. This is illustrated in Table 80. It should come as no surprise that it is more efficient to have Deluxe and Technicolor reproduce, store and ship film reels to cinema sides, than a situation in which all distributors have to perform the aforementioned activities by themselves.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements
Logistic Efficiency	Logistics	High	- Manual logistic activities carried out by laboratories resulted in efficiency advantages - The strong coordination skills and capabilities of laboratories was one of the reasons for the efficiency increase.
	Storage	High	- Manual storage activities carried out by laboratories resulted in efficiency advantages

Tab.80: Impact on Value Sources – Logistic Efficiency (Laboratories), based on: own research.

While the cost for storing and delivering motion pictures is considerably lower in 2014, the DCDC does increase the logistic efficiency as well. This follows the same logic as previously discussed and is illustrated in Table 81.

Type	Value Source	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Logistic Efficiency	Logistics	- Logistic activities have been completely digitalized, however, by taking over the digital distribution for multiple producers or distributors the logistic efficiency is still increased - The importance of coordination skills and capabilities has not diminished	Medium
	Storage	- Storage activities have been completely digitalized, however, by taking over the storage for multiple producers/distributors the storage efficiency is still increased	Medium

Tab.81: Impact on Value Sources – Logistic Efficiency (DCDC), based on: own research.

4.2.5.3 Step 4: Incentives to cooperate with Laboratories / DCDC

Finally, the incentives and disincentives for distributors and cinema operators to cooperate with laboratories or the DCDC also have to be examined. Similar to many of the previous intermediaries, the cooperation with laboratories or the DCDC is in practice not optional as well. Due to the high cost associated with building up the required infrastructure to reproduce and deliver motion pictures, distributors had to rely on laboratories and now have to rely on the DCDC. Nevertheless, one incentive to cooperate with laboratories can still be identified. This is illustrated in Table 82.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements
Increased Transaction- and Logistic Efficiency	High	- Laboratories provided many efficiency and effectiveness advantages

Tab.82: Impact on Cooperation Incentives (Laboratories), based on: own research.

A strong argument for both, distributors and cinema operators, to cooperate with laboratories was the previous described ability to increase the transaction- and

logistic efficiency. The decrease in transaction cost was in the interest of distributors and cinema operators as well. The same incentive is still valid in 2014. The DCDC also increases the transaction efficiency, which is still in the interest of distributors and cinema operators. This is illustrated in Table 83.

Incentives (I)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction- and Logistic Efficiency	- DCDC provides many efficiency and effectiveness advantages - For distributors / producers as well as cinema operators the cooperation with these intermediaries is more efficient and effective	High

Tab.83: Impact on Cooperation Incentives (DCDC), based on: own research.

There is also a strong argument against a cooperation with laboratories and the DCDC, namely their high market power. For laboratories this is illustrated in Table 84. The laboratories, which have been operating in a duopoly for almost a century, could use their market power to ask for higher fees, which is not in the interest of distributors.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements
Market Power of the Intermediary	Medium	- Laboratories yielded considerable market power in a duopoly - Alternatives were virtually not existent

Tab.84: Impact on Cooperation Disincentives (Laboratories), based on: own research.

In 2014, this disincentive is even more pronounced with the DCDC operating in a monopoly as illustrated in Table 85. In addition, from a cinema operator's point of view, specific investments are required in order to be able to receive content digitally from the DCDC. Cinema operators thus enter into a strong dependency. They face the risk of a hold-up and discrimination. For these reasons a cooperation

with the DCDC should theoretical be rejected, however, due the lack of alternatives, this is a mood point.

Disincentives (DI)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	- DCDC created a monopoly in a very short amount of time - High investment specificity (hold-up)	High
Rationing and Discrimination	- DCDC created a monopoly in a very short amount of time - DCDC thus controls the digital delivery of motion pictures	High

Tab.85: Impact on Cooperation Disincentives (DCDC), based on: own research.

4.2.5.4 Summary

The previous sub chapters focused on the analysis of traditional laboratories as well as their digital equivalent, the DCDC. Both are mediating between distributors and cinema operators and carry out many of the physical activities for the distributor. The preceding analysis revealed that the conversion from analog to digital projection altered many of the physical activities that have been traditionally carried out by laboratories and ultimately led to a situation, in which laboratories are no longer part of the motion picture value system. Accordingly, a deviation for the analysis approach was necessary. Table 86 provides a summary of the results of the preceding analysis.

Based on these results, the practical research questions can be answered in respect to laboratories and the DCDC. The analysis revealed that the activities of laboratories have been altered in their core by technological advancements. This led to a decrease in the cost for executing most activities. Particularly, the activities on the physical level have been affected. For example, the satellite delivery of

motion pictures allows a simultaneous reproduction and distribution, whereas laboratories had to reproduce thousands of film reels and ship them manually.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Laboratories	High	X	High	X	Medium	X	Medium	X

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
DCDC	X	Low	X	High	X	High	X	High

Tab.86: Summary - Impact on Laboratories and the DCDC, based on: own research.

In regards to the value that intermediaries in the motion picture sector provide, the analysis revealed that both, laboratories and the DCDC, increase the transaction efficiency as well as the transaction result. Naturally, with the relevance of laboratories fading in recent years, their value decreased as well.

Finally, the incentives and disincentives to cooperate with laboratories and the DCDC have been examined as well. From the onset it was pointed out that the cooperation with neither of them is or was optional. It is rather a mandatory requirement in order to get the movie material into theaters. Nevertheless, the analysis still revealed relevant incentives and disincentives and showed that the incentives, but also disincentives to cooperate, are more pronounced in 2014.

4.2.6 Cinema Operators

Cinema operators have been introduced as the first intermediaries in the Exploitation and Consumption Stage. They are mediating between distributors and consumers. This position is highlighted in Figure 40.

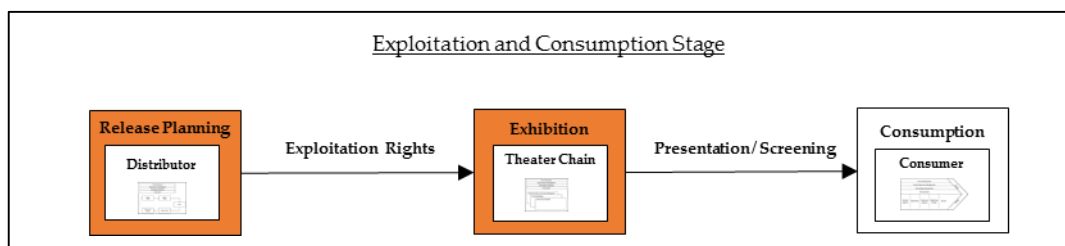


Fig.40: Cinema Operators in the Exploitation and Consumption Stage, based on: own research.

As indicated by the orange box, just like distributors, cinema operators are market markers as well. They procure (rent) the exploitation rights from distributors and sell tickets to consumers. They do so at their own risk. Before cinema operators will be discussed in more detail, it is worthwhile to look back. By now, a single, simple idea for a movie eventually generated hundreds of pounds of legal paperwork and hundreds of thousands feet of processed film or computer hard drives filled with trillions of digits. Multiple parties, and especially a variety of intermediaries, have been involved in this long creative manufacturing process. This process is coming to an end with the screening of the movie in the theater. However, it is also the beginning of a new process: as consumers leave their dollars at the box office, the chain of remittances begins (Vogel 2015, p. 238).

The business model operated by movie theaters is based on conducting and marketing screenings of motion pictures. Cinema operators procure a wide range of products and services, however, the negotiations with distributors are the most important (Wirtz 2012, p. 354). The various aspects that distributors have to consider when releasing a movie have already been discussed. Cinema operators have to agree to the terms and conditions under which the movie is rented to the theater. In addition, cinema operator and distributor also have to agree on the timing proposed by the distributor. It has to be highlighted, that while theater chains can keep all the revenues from selling popcorn and soda, they share the box office revenues with the distributor of the movie.⁹⁵ In addition to distributors, cinema operators will be in contact with multiple other parties including technology- and infrastructure suppliers (e.g. DCDC), building owners, wholesalers, goods manufacturers and suppliers (for food, drinks, and merchandising articles) as well as advertising agencies to acquire advertising customers (Wirtz 2012, p. 354).

In order to present movies to audiences, theaters must operate and maintain specific infrastructure, particularly the building as well as the projection technology. Cinema operators will also conduct market research prior to negotiating deals with distributors. This primarily relates to the evaluation of the

⁹⁵ While terms can vary to a certain degree, in general cinema operator and distributor each receive 50% of the box office revenues. For an overview of the different types of deals between distributor and cinema operator refer to Vogel (2015, pp. 205-223).

target groups and the market potential on which cinema operators base their program planning on. The performance process differs between cinema chains and individual cinemas, in particular regarding the program planning. While cinema chains can coordinate and optimize their program among a large number of cinemas, the operator of a single theater can only take into account the location- and movie-specific consumer requirements (Swani et al. 1999, pp. 352-372; Wirtz 2012, p. 354).

The importance of cinemas and the relationship between cinema operators and distributors cannot be overstated. The behavior of the cinema operator as well as the specifics of the deal between cinema operator and distributor directly influence the income of other parties downstream. The cinema operator, for example, negotiates with the distributor the house expense (the so called nut). This is an item that can be inflated to ensure a profit for the cinema operator. The degree of this inflation can be the result of long-standing tacit agreement, or it may be subject to momentary relative bargaining strength. Either way, the size of the nut ultimately affects the grosses (rentals) received by the distributor and thus the income of other parties downstream (Vogel 2015, p. 238).

Ticket-pricing policies, however, may generally have the greatest effect on what the downstream participants might ultimately receive. Pricing is subject to local competitive conditions, moviegoer-demand schedules, and the cinema operator's interest in making as much as possible from concession sales. Cinema operators, who attempt to promote concession sales by setting low admission prices, are in effect diverting, and thereby diminishing, income available for

downstream disbursements. To prevent abuses in this area, distributors occasionally write contracts, which specify the minimum per capita ticket prices (Vogel 2015, pp. 238-239).

The incomes of those parties would also be reduced, if theater owners paid their bills slowly. Playing the float (i.e. the time value of money) is another problem. This is somewhat surprising, because box office income is mostly in cash, and, in theory, cinema operators should have absolutely no difficulty in paying rentals immediately. Moreover, because theater owners normally have an interest in playing a distributor's next movie, large distributors have important leverage to encourage prompt remittances. Nevertheless, in practice, playing the float appears at all levels of the industry and when interest rates are high it has a significant cumulative adverse effect on profit participants (Vogel 2015, p. 239).

In addition to the previously mentioned points, various other unscrupulous practices exist, which can be used by cinema operators to skim rentals properly belonging to the distributor - diminishing income available for downstream disbursements. These include (Vogel 2015, pp. 238-239):

- False national advertising.
- Distributor-exhibitor settlements.
- Bicycling.
- Palming tickets or changing ticket roles.
- Unauthorized reprinting of the negative.

Cinema operators and distributors might be tempted to cooperate and falsely claim that national advertising has been conducted, when the advertising in reality is characteristically local. National advertising is typically charged to the producer's share, leaving the distributor and exhibitor a large profit. It is also sometimes possible for an unscrupulous exhibitor to obtain false invoices for more local advertising (paid on a co-op basis with the distributor) than is actually placed in local papers or quantity rebates are not disclosed to distributors (Vogel 2015, p. 238).

Distributor-exhibitor settlements are renegotiations of terms for pictures that do not perform according to expectations or that reflect shifting bargaining power between distributor and cinema operator. These settlements can be abused. The distributor may cooperate with the cinema operator to agree to terms that deprive producers and other participants of income that would otherwise be theirs (Vogel 2015, p. 239).

Bicycling refers to the practice of using a single print, without authorization, to generate free revenues by showing it at more than one location. In multiscreen theaters, for example, a picture that is not playing at capacity might, in violation of contract terms, be replaced in some showings by another movie that is unauthorized, but more popular. Two screens might also be serviced with one projector and print, often without the distributor knowing (Vogel 2015, p. 239).

Palming tickets refers to the practice of leaving the ticket untorn and recycling it to the box office, where it can be resold without disturbing the number sequence of the ticket roll. Alternatively, the ticket roll itself could also be changed

after a few hundred tickets have been sold. Ticket sales on the substituted roll then go unreported (Vogel 2015, p. 239).

The cinema operator may also engage in piracy and use the received print to create unauthorized copies. This includes felonious reproductions of DVDs, tapes, and Internet site downloads, the distribution of which results in significant diminishment of revenues (Vogel 2015, p. 240).

Now that some of the moral hazards that cinema operators are facing have been discussed, the focus can shift to the changes that have occurred in the last fifteen years. One of the changes that has to be highlighted is the intensified competition from a glut of multiplex facilities, which have been built in the United States in the last decade. This put most theater operators in a tense economic situation. This situation has intensified further due to the required investment-intensive upgrades to digital technologies. However, digital technologies have also given cinema operators a greater flexibility in program planning. Thus, the initial drawbacks of high costs for new technologies could to a certain degree be mitigated. In addition to the conversion to digital projection technology, the upgrade to digital 3D cinema required a considerable investment as well. These costs could to a certain degree be mitigated. 3D technology enabled many theaters to establish increased ticket prices in the form of a 3D surcharge, a potential competitive advantage over cinemas without 3D technology (Wirtz 2012, pp. 333-335).

Finally, it has to be highlighted that most of the multiplexes in North America are organized as chains to take advantage of economies of scale and increased

bargaining power when negotiating with distributors or the discounts on items sold at their concession stands (Gomery 2004, p. 204). The largest cinema chains in North America are: AMC Theatres, Carmike Cinemas, Century Theatres, Cinemark Theatres, Edwards Theatres, Regal Cinemas, Regal Entertainment Group and United Artists Theatres.

4.2.6.1 Step 2: Activities of Cinema Operators

Now that a general understanding of the role of cinema operators has been established, the focus can shift towards the formal analysis of their activities. The analysis will start with the activities on the informational level. The relevant activities are highlighted in Table 87.

Just as was the case with most of the previously discussed intermediaries, the cost for executing the three activities identification, selection, inspection and classification increased for cinema operators as well. Not only did the number of motion pictures increase, but also new alternative content has become available, which cinema operators have to consider for their program planning as well.

Just like distributors, cinema operators also do not support negotiations, instead, they conduct negotiations in their own name. The increased complexity of the negotiations as well as the corresponding contracts that was already discussed when distributors were analyzed, is reflected here as well.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Negotiations	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more sellers) - Very limited degree of automation / use of ICT - Complexity of deals and contracts increased - Expertise and experience required (personnel cost)	High
	Monitoring and Reporting	Medium	Indirect Impact (Small cost increase) - Limited transparency - Limited degree of automation / use of ICT - Expertise and experience required (personnel cost)	High

Tab.87: Impact on Informational Activities (Cinema Operators), based on: own research.

The aforementioned increase in complexity has an effect on the activities on the legal-financial level as well. These activities are highlighted in Table 88. With more alternatives and versions being available, the procurement of content has become more complicated. Offering these different versions and alternative content to audiences also affected the complexity of sales, i.e. pricing structure.

The processing of payments creates high cost for cinema operators. They have to handle cash, but also have to offer a variety of other payment options, i.e. credit card, which require the adherence to certain security standards. The

importance of contract adjustments was already highlighted when distributor-exhibition settlements have been discussed.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Legal-Financial Level	Procurement and Sales	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Increase in the complexity of price differentiation - Increased automation / use of ICT - Expertise and experience required (personnel cost)	High
	Payment Processing	High	No direct or indirect impact - Increase in payment options - Increased automation / use of ICT - Specific infrastructure required - High security standard (e.g. PCI DSS)	High
	Contract Adjustment	Medium	No direct or indirect impact - Expertise and experience required (personnel cost) - Limited degree of automation / use of ICT	Medium
	Warranty Processing	Medium	Indirect Impact (Small cost decrease) - Decrease in failure rate - High degree of automation / use of digital technologies	Low

Tab.88: Impact on Legal-Financial Activities (Cinema Operators), based on: own research.

In regards to warranty processing, the deterioration of film reels has already been discussed. In the past, this resulted in screenings being interrupted mid-screening, forcing the cinema operator to reimburse the ticket price. With film reels becoming obsolete, the cost for performing this activity decreased.

On the physical level, two activities are relevant for cinema operators. These are highlighted in Table 89. The presentation activity includes the screening of the motion picture to audiences as well the marketing activities conducted by cinema operators. The aggregation activity on the other hand refers to the arrangement of multiple motion pictures and versions into a program that meets the preferences of

as many consumers as possible. The high upgrade costs necessary to present movies have already been highlighted and are responsible for the cost increase.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Physical Level	Aggregation	Medium	Indirect Impact (Small cost increase) - Increased use of digital technologies / automation - Increase in product variations (versions) and alternatives - Specific infrastructure and expertise required	High
	Presentation	Medium	Indirect Impact (Small cost increase) - Increased use of digital technologies / automation - Increase in product variations (versions) and alternatives - Specific infrastructure and expertise required - Increased competition => Higher degree of Marketing required - Very limited descriptiveness of products	High

Tab.89: Impact on Physical Activities (Cinema Operators), based on: own research.

4.2.6.2 Step 3: Value of Cinema Operators

Now that the activities of cinema operators and their change have been discussed, the focus can shift towards the value cinema operators provide. Table 90 highlights the value sources that enable cinema operators to enhance the transaction efficiency.

Cinema operators also reduce contact costs due to their mediating position between multiple sellers and millions of consumers. Nevertheless, the contact reduction was greater in 1999 when 170 million more tickets were sold compared to 2014. Likewise, cinema operators also reduce transaction costs through standardization. Consumers and distributors get used to the processes and learn to efficiently carry out transactions with them. This situation has not changed in the last decade. Scale effects as well as the specialization and experience of cinema

operators are particularly strong value sources. Scale effects occur in regards to material resources, i.e. the cinema infrastructure, but also for immaterial resources such as highly specialized and qualified personnel, i.e. for handling the projectors.

Type	Value Source	VS _{V_n} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{V_n} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	High	Indirect Impact (Small decrease in strength) - Comparatively large decrease in the number of consumers - Number of cinemas increased	Medium
	Standardization	Medium	No direct or indirect impact - Cinema operators standardize multiple processes	Medium
	Scale Effects	Medium	Indirect Impact (Small increase in strength) - Required investments in material resources increased	High
	Specialization / Experience	Medium	No direct or indirect impact - The required skills and capabilities changed with digital conversion but remained important - Required investments to build up skills and capabilities remained high	Medium

Tab.90: Impact on Value Sources – Transaction Efficiency (Cinema Operators), based on: own research.

4.2.6.3 Step 4: Incentives to cooperate with Cinema Operators

Finally, the incentives and disincentives for distributors and consumers to cooperate with cinema operators have to be examined as well. The question arises again, whether the cooperation is really optional. While consumers can just wait and consume the motion picture in other media, the distributor does not have a lot of choice. In order to maximize revenues, distributors depend on theaters. Nevertheless, two incentives can be identified. These are illustrated in Table 91.

Incentives (I)	IS _{in} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{in} (t ₂₀₁₄)
Increased Transaction Efficiency	Medium	<p style="text-align: center;">No direct or indirect impact</p> <ul style="list-style-type: none"> - The efficiency and effectiveness provided by theater operators remained the same - The cooperation with cinemas is more efficient and effective from the producer's or sales agency's point of view 	Medium
Improved Price Differentiation/ Discrimination	High	<p style="text-align: center;">No direct or indirect impact</p> <ul style="list-style-type: none"> - Multiple sales channels desired by distributors 	High

Tab.91: Impact on Cooperation Incentives (Cinema Operators), based on: own research.

A strong argument for distributors to cooperate with cinema operators is their previous described ability to increase the transaction efficiency. The decrease in transaction costs is in the interest of distributors as well. Even more important, from the distributor's point of view, is the ability to differentiate prices for which multiple outlets are required.

Unsurprisingly, there are also a variety of arguments against a cooperation with cinema operators. It was already highlighted that cinema operators can use their market power to negotiate higher fees, which is not in the interest of distributors. Likewise, as highlighted in Table 92, the risk of discrimination and the disclosing of sensitive information are additional disincentives to cooperate with cinema operators. From the distributor's point of view the access to this particular distribution channel is not permanently secured. If cinema operators reject to screen a particular motion picture, there is not much the distributor can do. With the rise of alternative content, this risk arguable further increased, i.e. cinema

operators may elect to screen the World Cup Final during summer time leaving less room for features.⁹⁶

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	Medium	No direct or indirect impact - Cinema operators retained high market power - Cinema operators have control of the distribution channel	Medium
Rationing and Discrimination	Low	Indirect Impact (Small increase in strength) - Risk increased due to an increase in alternative content - Access to distribution channel is not permanently ensured	Medium

Tab.92: Impact on Cooperation Disincentives (Cinema Operators), based on: own research.

4.2.6.4 Summary

The previous sub chapters focused on the analysis of cinema operators. They are mediating between distributors and consumers in the motion picture value system. Table 93 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Cinema Operators	Medium	High	Medium	Medium	High	High	Low	Medium

Tab.93: Summary - Impact on Cinema Operators, based on: own research.

Based on these results, the practical research questions can be answered in respect to cinema operators. The analysis revealed that most activities have been

⁹⁶ Alternative content accounted for less than 1% of revenues for cinema operators in 2014. Tim Warner, chief executive of Cinemark Holdings Inc., predicts that number to increase to 10% or more in three to five years (Verrier 2014, w/o p.).

affected by technological advancements. These activities in general remained personnel intensive, requiring a great amount of experience and specialization. However, with the rise of new projection and delivery technologies, additional skills and capabilities had to be build up. In addition, technology increased the amount of content and the number sellers, and as such, the cost for performing the majority of the activities increased as well.

In regards to the value that intermediaries in the motion picture sector provide, the analysis revealed that cinema operators increase the transaction efficiency as well. However, it was shown that technological advancements had no effect on the ability of cinema operators to add value. The value strength remained on a similar level.

Finally, the incentives and disincentives to cooperate with cinema operators have been examined as well. From the onset it was pointed out that the cooperation with cinema operators is in reality not optional for distributors. Nevertheless, the analysis still revealed relevant incentives and disincentives and showed that the incentive strength remained at a similar level in the last fifteen years, while the disincentive strength increased.

4.2.7 Video Stores

As highlighted in the motion picture value system, video stores are additional intermediaries in the Exploitation and Consumption Stage. Just like cinema operators, video stores are also mediating between distributors and consumers. Their position between supply and demand is highlighted in Figure 41.

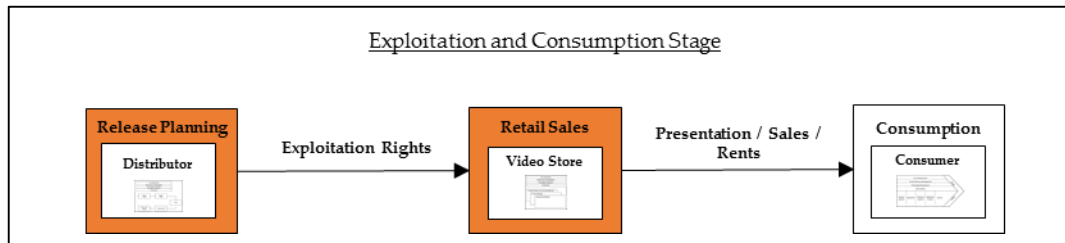


Fig.41: Video Stores in the Exploitation and Consumption Stage, based on: own research.

Similar to cinema operators, video stores are also market markers. They buy movies on DVD or Blu-Ray from distributors and sell or rent them to consumers at their own risk. It is important to highlight that it was technology that created the situation, in which there is now a differentiation between sales and rentals of movies. In the 1980s, VHS cassettes were typically only sold to video stores, where consumers could then rent them. Consumers did not have the option to buy movies directly in stores (Ulin 2013, pp. 203-207). Then in the late 1990s revenue sharing arrangements started to take off. This was a scheme, in which the distributors gave the major rental chains, such as Blockbuster and Hollywood Video, their movies on a consignment basis. Instead of charging \$29-40 for a movie, the distributors deferred the up-front revenue in favor of a split of rental income.⁹⁷ Moreover, once a movie was past its peak release period, excess inventory was sold in store with the proceeds shared between the distributor and rental chain (Ulin 2013, p. 217).

⁹⁷ Although the deals differed, it was reputed that as a rule of thumb, studios were granted 60% of the revenue from rental transactions (Ulin 2013, p. 117).

Some have theorized that the introduction of revenue sharing was a gambit to increase DVD penetration, as the studios encouraged the shift away from VHS. The distributors realized as early as 2001 that the DVD business is shaping up as a sellers, not a renters, market. Accordingly, they simply sold the DVD's outright to video stores and the video stores could then rent or sell them. The revenue sharing schemes thus waned with the shift from VHS to DVD (Fabrikant 2001, w/o p.).

At the same time, an even bigger shift of video economics occurred. Many of the distributors started selling their DVD's directly to retailers such as Wal-Mart and Target for about the same price they charged rental chains such as Blockbuster. While with retail sales, new outlets for consumers to purchase movies have become available, it signaled the end of the rental market. Distributors became much less financially vested in the movie rental business. Consequently, the dependence on chains such as Blockbuster started to decline as well. As Warren Lieberfarb, president of Warner Home Video, stated in 2001: "Blockbuster is an endangered species" (Lieberfarb quoted in Fabrikant 2001, w/o p.).

The increase in broadband connections and the Internet becoming an increasingly interesting distribution channel, then made things even worse for video stores. The competition from Netflix and Redbox, for example, caused Blockbuster to lose significant revenue forcing it to file for bankruptcy protection in 2010. In fact, video stores have become an endangered species around the world. In Germany, for example, the number of video stores has decreased from more than 5.000 in 1999 to 2.795 in 2010 (Wirtz 2012, p. 329). In North America the largest

video store chain still in operation is Family Video with 775 stores in 19 U.S. states and Canada (Family Video 2015, w/o p.).

4.2.7.1 Step 2: Activities of Video Stores

Now that a general understanding of the role of video stores has been established, the focus can shift towards the formal analysis of their activities. The analysis will start with activities on the informational level. These are illustrated in Table 94.

Level	Activity (A)	$C_{An}(t_{1999})$	Impact of Technological Advancements	$C_{An}(t_{2014})$
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in products and variations - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in products and variations - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in products and variations - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Negotiations	Medium	Indirect Impact (Small cost decrease) - Increase in transaction partners (more sellers) - Very limited degree of automation / use of ICT - Complexity of deals and contracts decreased - Expertise and experience required (personnel cost)	Low

Tab.94: Impact on Informational Activities (Video Stores), based on: own research.

Just as was the case with cinema operators, the cost for executing the three activities identification, selection, inspection and classification increased for video stores as well. This is because the number of products and variations increased and

with limited shelf space video stores have to ensure that they have the right products in sufficient quantity. Video stores also do not support negotiations, instead, they conduct negotiations in their own name. With revenue sharing agreement becoming obsolete and negotiations being reduced to simple purchase agreements, the cost for executing this activity have decreased.

The activities on the legal-financial level have been affected as well. This is illustrated in Table 95. While video stores received movies on a consignment basis in the past, they now have to purchase them at wholesale price from distributors, which requires more capital. Accordingly, the cost for capital procurement increased.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Legal-Financial Level	Capital Procurement	Low	Indirect Impact (Small cost increase) - Switch from rental to sell through model increased capital requirements	Medium
	Procurement and Sales	Medium	Indirect Impact (Small cost increase) - Increase in products and variations - Increase in the complexity of price differentiation - Increased automation / use of ICT - Expertise and experience required (personnel cost)	High
	Payment Processing	High	No direct or indirect impact - Increase in payment options - Increased automation / use of ICT - High security standard (e.g. PCI DSS) - Decrease in payment complexity	High
	Warranty Processing	Medium	Indirect Impact (Small cost decrease) - Failure rate of products decreased - Limited degree of automation / use of ICT	Low

Tab.95: Impact on Legal-Financial Activities (Video Stores), based on: own research.

The procuring and selling of movies has become more complex as well. Not only are there more products and variations for which the appropriate prices have

to be determined, the switch from the rental to sell through model also forces video stores to carefully evaluate, how much inventory to stock and when to sell excessive stock off. Similar to cinema operators, the processing of payments creates high cost for video stores as well. They have to handle cash and also have to offer a variety of other payment options. The importance of warranty processing on the other hand has decreased, similar to film reels, VHS tapes also have a higher failure rate when compared to DVDs. With tapes becoming obsolete, the cost for performing this activity decreased.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Physical Level	Aggregation	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Increase in products and variations (versions) - Specific expertise required - Very limited descriptiveness of products 	Medium
	Presentation	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Increase in products and variations (versions) - Specific infrastructure and expertise required - Increased competition => Higher degree of Marketing required - Very limited descriptiveness of products 	High
	Distribution	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - No changes to distribution or storage requirements - Limited degree of automation / use of ICT - Specific infrastructure and expertise required 	Medium

Tab.96: Impact on Physical Activities (Video Stores), based on: own research.

The activities on the physical level have not been influenced by technological advancements as illustrated in Table 96. These activities remain labor intensive and require a specific infrastructure, i.e. a storefront and storage. In addition, movies have to be aggregated inside the store by personnel, i.e. on the basis of their genre.

4.2.7.2 Step 3: Value of Video Stores

Now that the activities of video stores have been discussed, the focus can shift towards the value they provide. Table 97 highlights the value sources that enable video stores to enhance the transaction efficiency.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	High	Indirect Impact (Small decrease in strength) - Comparatively large decrease in the number of consumers - Number of video stores decreased equally fast	Medium
	Standardization	Low	No direct or indirect impact - Retail / Video stores standardize multiple processes - Relevance of standardization relatively low	Low
	Scale Effects	Medium	Indirect Impact (Small decrease in strength) - With the reduction of stores, also scale effects decreased	Low

Tab.97: Impact on Value Sources – Transaction Efficiency (Video Stores), based on: own research.

Video stores reduce contact costs due to their mediating position between multiple sellers and millions of consumers. Nevertheless, the contact reduction was greater in 1999. This is explained by the large number of consumers that moved to video on demand on the Internet.

Likewise, video stores also reduce transaction cost through standardization. Consumers and distributors get used to the processes and learn to efficiently carry out transactions with them. Scale effects are a relevant value source as well and mainly occur in regards to material resources, i.e. stores and other infrastructure.

4.2.7.3 Step 4: Incentives to cooperate with Video Stores

Finally, the incentives and disincentives for distributors and consumers to cooperate with video stores have to be examined. Unlike most of the previous intermediaries, the cooperation with video stores is optional for both consumers and distributors as for both a variety of alternatives are available. The analysis will start with the incentives to cooperate with video stores. Two incentives can be identified. These as well as their development are illustrated in Table 98.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency	Medium	<p>Indirect Impact (Small decrease in strength)</p> <ul style="list-style-type: none"> - The efficiency advantages provided by video stores have decreased - Only in specific circumstances is the cooperation with video stores more efficient from the consumer's point of view 	Low
Improved Price Differentiation/Discrimination	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Multiple sales channels desired by distributors 	High

Tab.98: Impact on Cooperation Incentives (Video Stores), based on: own research.

A strong argument for distributors to cooperate with video stores was their previous described ability to increase the transaction efficiency. The decrease in transaction costs is also in the interest of distributors. However, since the efficiency advantage has decreased, the strength of this particular incentive decreased as well. An additional argument for distributors to cooperate with video stores is that they provide an additional outlet, which enables further price differentiation.

Unsurprisingly, a variety of arguments against cooperating with video stores can be identified as well. For example, in the past large video store chains such as Blockbuster had considerable market power, which they could use to

negotiate better deals with distributors. As previously highlighted though, their market power decreased and this disincentive is thus less pronounced.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	Medium	Indirect Impact (Small decrease in strength) - Market power of Retail / Video stores decreased - Retail / Video stores control this distribution channel	Low
Rationing and Discrimination	Medium	Indirect Impact (Small decrease in strength) - Risk decrease due to multiple alternatives (sell through)	Low
Disclosing of sensitive Information	Low	No direct or indirect impact - Critical and sensitive information has to be disclosed	Low

Tab.99: Impact on Cooperation Disincentives (Video Stores), based on: own research.

In addition, as highlighted in Table 99 the risk of discrimination and the disclosing of sensitive information are additional disincentives to cooperate with video stores. In the past, distributors depended on video stores. The access to this particular distribution channel was not permanently secured. With the switch to the sell through model and by directly selling DVDs to large retailers, this dependency vanished and the disincentive is now less pronounced. The disclosing of sensitive information is particular relevant for consumers. In addition to their payment details, such as credit card data, they typically have to sign up to rent a movie and are thus forced to provide additional personal information as well.

4.2.7.4 Summary

The previous sub chapters focused on the analysis of video stores, which are mediating between distributors and consumers in the motion picture value system. Table 100 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Video Stores	Medium	High	Medium	Low	High	Medium	Medium	Low

Tab.100: Summary - Impact on Video Stores, based on: own research.

Based on these results, the practical research questions can be answered for video stores. The analysis revealed that the activities in their core have not been affected by technological advancements. They remain personnel intensive and require specific infrastructure such as stores and storage. Technology did, however, increase the number of products and variations, and as such, the cost for performing the majority of the activities increased as well.

In regards to the value that intermediaries in the motion picture sector provide, the analysis revealed that video stores increase the transaction efficiency. It was shown that technological advancements had a negative effect on the value provided by video stores.

Finally, the incentives and disincentives to cooperate with video stores have been examined. The analysis revealed relevant incentives and disincentives and showed that the strength of both has decreased in the last fifteen years.

4.2.8 Television Operators

Television operators have been highlighted as additional intermediaries in the motion picture value system. They are also located in the Exploitation and

Consumption Stage. Their position between demand (consumers) and supply (distributors) is highlighted in Figure 42.

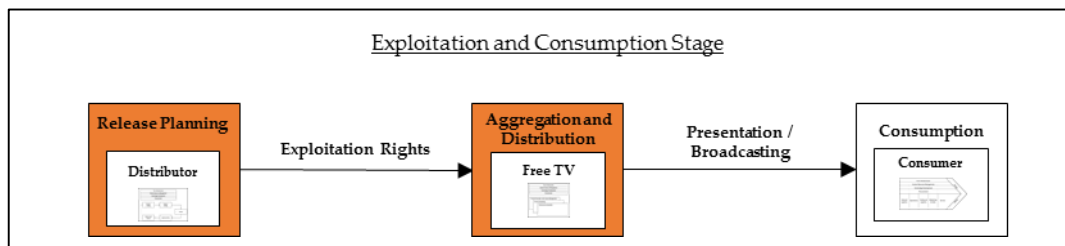


Fig.42: Television Operators in the Exploitation and Consumption Stage, based on: own research.

Just like cinema operators, television operators are also market markers. They purchase the exploitation rights from distributors and sell the movie to their consumers, for example in form of pay per view. As previously highlighted, the television sector is part of the media industry, just like the motion picture sector. The TV market is thus both a primary and secondary platform for content. Ulin (2013, p. 272) points out that TV is traditionally thought about in terms of TV series and other made-for-television productions. However, the TV sector also relies heavily on other products, for example, on motion pictures. Accordingly, the following paragraphs will not focus on analyzing first run programming, but rather focus on how television garners revenues for motion pictures that can be aired on television, but were originally produced for theatrical distribution.

The U.S. market is divided into terrestrial over-the-air national networks (Free TV) as well as cable and satellite television stations (Pay TV). The five largest national networks in the United States are NBC, CBS, ABC, CW and Fox. These are

part of larger media conglomerates just like the movie studios. These networks are somewhat complicated entities. They are really a grouping of local television stations that are either owned or affiliated with the parent network company. The large five networks can be understood as an aggregation of local TV broadcasters and affiliated stations. These cover all major designated market areas (DMA) and reach nearly all the potential households in the United States. These networks are primarily financed through advertising revenue and fees. For the consumer, consumption on the networks is free, the networks generate revenues through fees and the displaying of advertising. Ultimately, the advertisers pay for the attention of a specific target group (Ulin 2013, pp. 276-277).

That is what distinguishes Free TV from Pay TV. In contrast to Free TV, Pay TV relies on fees from the recipient markets. This means that consumers, who are not willing to pay, are excluded from consumption. This is technically enforced through encryption. The TV signal is encrypted and only paying customers can decrypt the signal with a decoder. The range of Pay TV channels differs significantly from Free TV offerings. This comes as no surprise, as without differentiation and greater perceived benefits, the consumer will have no willingness to pay for the offered services (Wirtz 2012, pp. 429-430). There are currently over 200 cable stations in the United States, with top tiered channels bundled in basic carriage packages. These channels have to be distinguished from premium cable channels such as HBO, Showtime and Starz, for which the consumer pays a direct incremental fee (Ulin 2013, pp. 267-277).

The market for motion pictures on TV has traditionally been very strong, and for years a key sales benchmark was a license to one of the major national networks. As highlighted during the discussion of the windowing strategy, in the best case scenario, the market even provides multiple successive TV windows. Traditionally, a theatrical feature movie is licensed to a broadcast network for debut approximately three years after its theatrical release. This allows an exclusive period for the theatrical run, followed by the home entertainment window and a Pay TV license, i.e. a 12-18 month window on premium cable channels such as HBO, Showtime, and Starz. Then, the 3-4 year window on network TV begins, which is followed by multi-year windows on cable and in syndication, allowing for millions of dollars continuously flowing in for well over decade (Ulin 2013, pp. 276-277).

The so-called network window has historically been the most lucrative, as the networks simply had a larger reach and audience share. With the larger advertising revenues earned, they could simply pay more (Ulin 2013, p. 280). The peak demand for network motion picture licenses appears to have been reached in the late 1970s. At this point in time, cable was still in its infancy and the broadcasting networks had a lot of cash. Accordingly, they bid aggressively for rights to exhibit recent theatrical hits. Many of the major licenses at the time permitted up to five runs for fees as high as \$20 million per movie (Vogel 2015, p. 228).

However, once it became apparent that pay cable was siphoning off the potential for high network ratings with early showing of uncut movies without commercial interruptions, the enthusiasm for bidding cooled down. Despite this

development, movies, which had their first network appearance in the early 1980s, could still command an average of \$5 million for two runs. (Vogel 2015, p. 228)

A similar trend could be witnessed in regards to premium cable channels such as HBO and Showtime. They realized early that the availability of relatively recent movies was essential to attracting new subscribers and building a brand. In an attempt to distinguish themselves from competitors, premium channels began to arrange exclusive long-term output deals with studios, which were happy to oblige. That is because in a typical year, a studios receiving an average of \$10 million per movie for 20 movies might be able to cover much, if not all, of its annual overhead costs. By the early 2000s, Hollywood's major studios had been collecting more than \$1 billion from this rich source of income. More recently however, saturation of potential premium channel subscriber households and proliferation of other ways to watch movies through DVDs, iPads, digital downloads, and advertiser-supported networks, has led pay-channel services providers to turn towards more self-produced original programming. This has accordingly resulted in significant reduction of financial support for both major and independent studios (Vogel 2015, p. 153).

With the decline in network clout and the growth of cable channels, the traditional sequential TV windows are becoming more of an historical artifact. There are cases where movies go to network, then cable and then syndication, however, it is now common for cable stations to buy-out network windows or to partner with networks on shared long-term windows with oscillating periods of exclusivity. The playing field is relatively level and cable stations such as FX,

USA/SyFy, TBS/TNT, AMC, Spike, Bravo and ABC Family can compete with the networks, even in cases, where the networks may be an affiliated sister company. Because the licensors are trying to get the best deal for their specific movie or package, the best option may cut across different studio lines and unexpected cooperations can emerge (Ulin 2013, pp. 280-284).

4.2.8.1 Step 2: Activities of Television Operators

Now that a general understanding of the role of television operators has been established, the focus can shift towards the formal analysis of their activities. The analysis will start with the activities on the informational level. These are illustrated in Table 101.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Informational Level	Identification	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Negotiations	Medium	Indirect Impact (Small cost increase) - Increase in transaction partners (more sellers) - Very limited degree of automation / use of ICT - Complexity of deals and contracts increased - Expertise and experience required (personnel cost)	High

Tab.101: Impact on Informational Activities (Television Operators), based on: own research.

Just as was the case with cinema operators, the cost for executing the three activities identification, selection, inspection and classification increased for television operators as well. Television operators conduct negotiations in their own name. Unsurprisingly, technological advancements also made the contracts and deals that distributors and television operators negotiate more complex. This is best exemplified with the traditionally simple definition of a run. The Internet and digital technology introduced the ability to simulcasts on multiplex channels, such as NBC and NBC HD or to offer free streaming VOD repeats on the Internet. Accordingly, negotiations now have to determine, whether simulcasts on multiplex channels is only one run or two. The same question also arises for VOD repeats.

In regards to the legal-financial level, the procuring and selling of movies has also become more complex. This is explained by the increase in products and variations as well as increased complexity in contracts. This is highlighted in Table 102.

Level	Activity (A)	$C_{An}(t_{1999})$	Impact of Technological Advancements	$C_{An}(t_{2014})$
Legal-Financial Level	Procurement and Sales	Medium	Indirect Impact (Small cost increase) - Increase in offerings and alternatives - Increase in the complexity of price differentiation - Increased automation / use of ICT - Expertise and experience required (personnel cost)	High
	Payment Processing	Low	No direct or indirect impact - Degree of automation / use of ICT remained similar	Low

Tab.102: Impact on Legal-Financial Activities (Television Operators), based on: own research.

Unlike cinema operators or video stores, the processing of payments creates comparatively low cost for television operators. They do not have to handle cash

or offer a wide variety of payment options, they either send invoices or withdraw the invoice amount directly.

The activities on the physical level have not been influenced by technological advancements as illustrated in Table 103. These activities still require a specific infrastructure, i.e. the technology required to broadcast to millions of households.

Level	Activity (A)	C _{An} (t ₁₉₉₉)	Impact of Technological Advancements	C _{An} (t ₂₀₁₄)
Physical Level	Aggregation	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Increased use of digital technologies / automation - Increase in product variations (versions) and alternatives - Specific infrastructure and expertise required 	Medium
	Presentation	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Increased use of digital technologies / automation - Increase in product variations (versions) and alternatives - Specific infrastructure and expertise required - Increased competition => Higher degree of marketing required - Very limited descriptiveness of products 	Medium
	Distribution	Low	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Simultaneous transformation, reproduction and distribution - Specific infrastructure and expertise required 	Low

Tab.103: Impact on Physical Activities (Television Operators), based on: own research.

4.2.8.2 Step 3: Value of Television Operators

Now that the activities of television operators have been discussed, the focus can shift towards the value they provide. Table 104 highlights the value sources that enable television operators to enhance the transaction efficiency.

Type	Value Source	VS _{Vn} (t ₁₉₉₉)	Impact of Technological Advancements	VS _{Vn} (t ₂₀₁₄)
Transaction Efficiency	Baligh-Richartz-Effect	Medium	No direct or indirect impact - Very large number of consumers and multiple distributors - Number of television channel providers increased	Medium
	Standardization	Medium	No direct or indirect impact - Television channel standardize multiple processes - The importance of standardization remained at the same level	Medium
	Scale Effects	Medium	No direct or indirect impact - Required investments in material resources remained at the same level	Medium
	Specialization / Experience	High	No direct or indirect impact - Required skills, capabilities and experience remained high - Required investments to build up skills and capabilities remained high	High

Tab.104: Impact on Value Sources – Transaction Efficiency (TV Operators), based on: own research.

Television operators also reduce contact costs due to their mediating position between multiple sellers and millions of consumers. Likewise, they also reduce transaction cost through standardization. Scale effects as well as the specialization and experience are particularly strong value sources. Scale effects occur in regards to material resources, i.e. the infrastructure, but also for immaterial resources in the form of highly specialized and qualified personnel, i.e. for handling the network operations.

4.2.8.3 Step 4: Incentives to cooperate with Television Operators

Finally, the incentives and disincentives for distributors and consumers to cooperate with television operators have to be examined as well. Unlike most of the previous intermediaries, the cooperation with television operators is optional for both consumers and distributors as for both a variety of alternatives are available. The analysis will start with incentives to cooperate with television

operators. Two incentives can be identified. These as well as their development are illustrated in Table 105.

Incentives (I)	IS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency	Medium	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - The efficiency and effectiveness provided by TV operators remained the same - The cooperation with TV operators is more efficient and effective from the producer's or sales agency's point of view 	Medium
Improved Price Differentiation/ Discrimination	High	<p>No direct or indirect impact</p> <ul style="list-style-type: none"> - Multiple sales channels desired by distributors 	High

Tab.105: Impact on Cooperation Incentives (Television Operators), based on: own research.

A strong argument for distributors to cooperate with television operators is their previous described ability to increase the transaction efficiency. The decrease in transaction costs is in the interest of distributors as well. Even more important from the distributor's point of view is the previously highlighted ability to differentiate prices. For this, distributors require multiple outlets, and the television sector represents one of the traditional outlets.

Two arguments against a cooperation with television operators can be identified as well. These are highlighted in Table 106. One of them is market power, which television operators could use to negotiate lower fees with distributors. With alternative options becoming available, i.e. Netflix buying out the cable window, the market power of television operators decreased and the disincentive is thus less pronounced. Thus, the risk of discrimination is less pronounced as well.

Disincentives (DI)	DS _{In} (t ₁₉₉₉)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	Medium	Indirect Impact (Small decrease in strength) - Market power of TV operators decreased slightly - TV operators control this distribution channel - More convenient alternatives from the consumer's point of view emerged	Low
Rationing and Discrimination	Medium	Indirect Impact (Small decrease in strength) - Risk decreased due to an increase in alternative distribution options - Access to distribution channel is not permanently ensured	Low

Tab.106: Impact on Cooperation Disincentives (Television Operators), based on: own research.

4.2.8.4 Summary

The previous sub chapters focused on the analysis of television operators. Just like previous intermediaries in the exploitation segment, television networks are also mediating between distributors and consumers in the motion picture value system. Table 107 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
TV Operators	Medium	High	Medium	Medium	High	High	Medium	Low

Tab.107: Summary - Impact on Television Operators, based on: own research.

Based on these results, the practical research questions can be answered in respect to television operators. The analysis revealed that most activities have not been directly affected by technological advancements. The activities in general remained personnel intensive and require specific infrastructure as well as a great amount of experience and specialization.

In regards to the value that intermediaries in the motion picture sector provide, the analysis revealed that television operators also increase the transaction efficiency. However, it was shown that technological advancements had no effect on the ability of television operators to add value. The value strength remained on a similar level.

Finally, the incentives and disincentives to cooperate with television operators have been examined as well. The analysis revealed the relevant incentives and disincentives and showed that the incentive strength remained at a similar level in the last fifteen years, while the disincentive strength decreased.

4.2.9 Digital Distributors

Digital distributors have been highlighted as the final intermediaries in the motion picture value system. They are part of the Exploitation and Consumption Stage as well. Just like the previous intermediaries, digital distributors such as Netflix or iTunes are also mediating between distributors and consumers. Their position between demand (consumer) and supply (distributor) is highlighted in Figure 43.

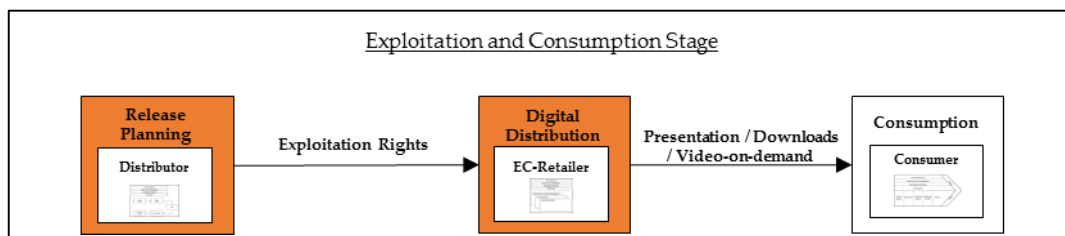


Fig.43: Digital Distributors in the Exploitation and Consumption Stage, based on: own research.

Like all intermediaries introduced in the Exploitation and Consumption Stage, digital distributors are market makers as well. They buy the exploitation right for a particular movie for specific online media as well as specific territories and then offer the movie to consumers over the Internet. The process is essentially similar to other intermediaries in that the distributor provides a master to the buyer. The difference is that instead of a glass master or negative, the distributor provides a compressed encoded master, which the digital distributor then has to encrypt. The encryption is part of the sophisticated DRM system, which restricts how, where, and how often the content may be played (Ulin 2013, p. 363).

As the discussion of the previous two intermediaries revealed, the two largest and most important ancillary revenue streams for motion picture distribution have been the home entertainment segment and the licensing of movies to pay television and broadcast and/or basic cable networks. These distribution businesses have matured and revenue growth begun to flatten or even to decline. Ulin (2013, p. 361) points to digital distributors and the increased availability of motion pictures through digitally delivered alternatives as the reasons for the flattening of the growth curve for the traditional ancillary distribution. The following paragraphs will examine these developments from the point of view of digital distributors.

Unsurprisingly, the first wave of digital distributors was initiated by the Major studios, which recognized the potential of the market and the need to have legitimate platforms to counteract piracy and therefore launched their own Internet download services at the beginning of the millennium. The largest was MovieLink, a service co-owned by Sony, Universal, MGM, Paramount and Warner. MovieLink

went live in November 2002 (Cunningham and Silver 2012, p. 49; Ulin 2013, p. 423). A competitive service, CinemaNow, founded in 1999, also offered a range of studio productions.

While these digital distributors were pioneers in providing a legal option for movie downloading, neither of these services caught on and adoption remained limited. Many reasons for this can be identified, for example the functionality, piracy, pricing and available content. Ulin (2013, p. 423) argues, however, that the reasons for why the services didn't catch on ultimately do not matter. He reasons that part of the early strategy for the studios was to simply show that they were offering a legal alternative to pirate peer-to-peer sites.

By mid-2006, everyone was predicting a revolution in the world of video content and how programming would be consumed over the Internet as opposed to traditional television viewing. Ulin (2013, pp. 362-363) even argues that the years 2006-2008 will be viewed historically as the years which revolutionized how consumers watched, accessed and paid for video-based content. The explosion of video on the Internet came about suddenly and much of the change was enabled by technology. This includes widely adopted, reliable and flexible digital rights management (DRM) technology, increased broadband penetration, the introduction of the iPod and then the iPhone, the rise of Google and the realization that the Internet can be monetized as well as the emergence of instant streaming and video on demand (Ulin 2013, p. 363).

Since 2007, the emerging major players in the online distribution space have been led by Apple, Netflix, Amazon and Hulu. The fundamental difference

between them and the previous wave is that they brought with them an existing critical mass of consumers to whom they could market their new digital services to. This has proven to be the key to success (Cunningham and Silver 2012, p. 53).

Apple's iTunes store for example has been selling 50.000 movies per day since 2008 (Cunningham and Silver 2012, p. 52). Another example is Netflix, which in 2006 placed 10.000 titles from its movie library online to watch instantly as a free value added service for its large base of existing customers. By 2010, Netflix transformed its core business model from a monthly subscription for DVDs-delivered home to a monthly subscription service for unlimited movie and TV downloads via video on demand (Cunningham and Silver 2012, p. 53). This prepared consumer for the digital transition and by 2015, Netflix subscriber count grew to 65.55 million, with 42.2 million subscribers in the U.S. and 23.35 million internationally (Udland 2015, w/o p.). Netflix currently has exclusive Pay TV window deals with various studios. These deals in essence, give Netflix exclusive streaming rights and are not distinct from the distribution rights held by traditional pay television services, which are also effectively prohibited from obtaining first-run linear television rights with these deals. Netflix also holds rights to back-catalog movies from distributors such as Warner Bros., Universal Pictures, Sony Pictures Entertainment, 20th Century Fox and Disney (Szalai 2014, w/o p.).

As has been highlighted before, these digital distributors also realized the important of hits and exclusivity in order to drive their platforms. While Netflix began to produce series early on, it wasn't until 2014 that Netflix announced they would be producing and releasing their first original movie: the sequel to *Crouching*

Tiger, Hidden Dragon (2000), entitled *The Green Legend* (2016), which is scheduled for simultaneous Netflix and theatrical release (McClintock 2015, w/o p.; Setoodeh 2015, w/o p.).⁹⁸

Finally, Amazon has to be highlighted as well. Their service debuted in 2006, when it was still called Amazon Unbox (Amazon 2007, w/o p.). In 2008, the service was then renamed Amazon Video on Demand and rebranded again in 2011 as Amazon Instant Video. Amazon also added access to 5.000 movies and TV shows for Amazon Prime members (Amazon 2011, w/o p.). Amazon Instant Video is available in the United States, United Kingdom, Japan, Austria, Germany and soon India (Mishra and Jayadevan 2015, w/o p.). Similar to its competitors, Amazon has pursued a number of exclusive content deals to differentiate its service. In 2012, Amazon signed a deal with Pay TV channel Epix to feature movies on their streaming service (Bloomberg News 2012, w/o p.). Most recently, Amazon reached a multi-year licensing deal with HBO. However, Amazon also realized the importance of original content and premiered its first two original series in November 2013. Amazon also acquired Spike Lee's new movie *Chi-Raq* as its first Amazon Original Movie in 2015 (McClintock and Jarvey 2015, w/o p.).

⁹⁸ As previously highlighted, the large cinema chains in the U.S. will boycott the movie as they want to protect their exclusive theatrical window (McClintock 2015, w/o p.; Setoodeh 2015, w/o p.).

4.2.9.1 Step 2: Activities of Digital Distributors

Now that a general understanding of the role of digital distributors has been established, the focus can shift towards the formal analysis of their activities. Similar to the DCDC, digital distributors did also not exist in 1999. This has implications for the application of the Intermediation Analysis Approach as a comparative statics analysis is not possible. Therefore, for digital distributors a deviation in the approach is necessary as well. The analysis will start with the activities on the informational level. These are illustrated in Table 108.

Level	Activity (A)	Impact of Technological Advancements	$C_{An}(t_{2014})$
Informational Level	Identification	- Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Selection	- Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Inspection and Classification	- Very limited degree of automation / use of ICT - Very limited descriptiveness of products - Expertise and experience required (personnel cost)	High
	Negotiations	- Very limited degree of automation / use of ICT - Complexity of deals and contracts increased - Expertise and experience required (personnel cost)	High

Tab.108: Impact on Informational Activities (Digital Distributors), based on: own research.

Similar to the previous intermediaries, the cost for executing the three activities identification, selection, inspection and classification are high for digital distributors as well. A tremendous amount of content is available, which has to be identified and selected by qualified personnel. Digital distributors conduct negotiations in their own name and deals are as complex as the previously

discussed deals with traditional outlets. Accordingly, for negotiations, experienced and specialized personnel is required, which creates high costs.

Level	Activity (A)	Impact of Technological Advancements	$C_{An}(t_{2014})$
Legal-Financial Level	Procurement and Sales	<ul style="list-style-type: none"> - Large amount of products and transaction partners - High degree of automation / use of ICT - Specific infrastructure and technologies required - Expertise and experience required (procurement) 	Medium
	Payment Processing	<ul style="list-style-type: none"> - Large amount of products and transaction partners - Multiple payment options - High degree of automation / use of ICT - Specific infrastructure and technologies required - High security standard (e.g. PCI DSS) 	Low

Tab.109: Impact on Legal-Financial Activities (Digital Distributors), based on: own research.

In regards to the legal-financial level, the procuring and selling of content also creates costs for digital distributors. The processing of payments on the other hand creates comparatively low costs for digital distributors. They do not have to handle cash. By their very nature, they process all payments electronically. This is reflected in the assessment shown in Table 109.

The activities on the physical level do only produce comparatively low cost as well. This is highlighted in Table 110. Similar to broadcasters, the reproduction and distribution occur simultaneously over the Internet. Accordingly, almost no cost occur for the reproduction (Noam 2010, p. 67). The transformation occurs to a large degree automatically as well. Nevertheless, cost for executing those activities still do occur as specific infrastructure and experience are still required.

Level	Activity (A)	Impact of Technological Advancements	$C_{An}(t_{2014})$
Physical Level	Aggregation	- Large amount of products and variations (versions) - Specific infrastructure and expertise required	Low
	Transformation	- Large amount of format and devices have to be served - Specific infrastructure (CDN) and expertise required - Large degree of automation	Low
	Presentation	- Large degree of automation - Increased importance of end-user devices - Specific infrastructure (Web Shop) and expertise required - Use of filter technologies - Increased importance of recommendations (algorithms)	Low
	Distribution	- Simultaneous reproduction and distribution - Distribution options limited by bandwidth - Large degree of automation / use of ICT	Low

Tab.110: Impact on Physical Activities (Digital Distributors), based on: own research.

4.2.9.2 Step 3: Value of Digital Distributors

Now that the activities of digital distributors have been discussed, the focus can shift towards the value they provide. Table 111 highlights the value sources that enable digital distributors to enhance the transaction efficiency.

Type	Value Source	Impact of Technological Advancements	$VS_{Vn}(t_{2014})$
Transaction Efficiency	Baligh-Richartz-Effect	- Very large number of consumers and multiple distributors - Comparatively large number of digital intermediaries	High
	Standardization	- Standardization largely through protocol standards	Medium
	Scale Effects	- High investments in material and immaterial resources required	High
	Specialization / Experience	- Specific skills, capabilities and experience required - High investments required to build up skills and capabilities	High

Tab.111: Impact on Value Sources – Transaction Efficiency (Digital Distr.), based on: own research.

Digital distributors also reduce contact costs due to their mediating position between multiple sellers and millions of consumers. Likewise, they also reduce transaction costs through standardization. Scale effects, specialization and experience are particularly strong value sources. Scale effects occur in regards to material resources, i.e. the infrastructure, but also for immaterial resources in the form of highly specialized and qualified personnel, i.e. for handling the network operations.

4.2.9.3 Step 4: Incentives to cooperate with Digital Distributors

Finally, the incentives and disincentives for distributors and consumers to cooperate with digital distributors have to be examined as well. Unlike most of the previous intermediaries, the cooperation with digital distributors is optional for both consumers and distributors as for both a variety of alternatives are available. The analysis will start with incentives to cooperate with digital distributors. Multiple incentives can be identified. These are illustrated in Table 112.

A strong argument for distributors and consumers to cooperate with digital distributors is their previous described ability to increase the transaction efficiency as the decrease in transaction cost is also in the interest of distributors and consumers. Since the online segment is still relatively new, the cooperation with digital distributors gives distributors greater flexibility. They can experiment in this new segment and exit the market faster compared to a situation, where they would build up their own infrastructure for online distribution. The previously

highlighted importance of price differentiation is also a strong argument for distributors to cooperate with digital distributors.

Incentives (I)	Impact of Technological Advancements	IS _{In} (t ₂₀₁₄)
Increased Transaction Efficiency	- Digital intermediaries provide some efficiency advantages - Particularly for most consumers, the cooperation with these intermediaries is more efficient and effective - For producers and distributors this depend on the individual scenario	High
Higher Degree of Flexibility / Lower Market Exit Cost	- High degree of flexibility and convenience provided to consumers - Offer flexibility for producers and distributors to experiment in this relative new exploitation segment	High
Improved Price Differentiation/ Discrimination	- Multiple sales channels desired by distributors	High
Faster Market Entry and Penetration	- Offers particularly independent producers the option to reach a wide audience at low cost	Medium

Tab.112: Impact on Cooperation Incentives (Digital Distributors), based on: own research.

Unsurprisingly, a variety of arguments against a cooperation with digital distributors can be identified as well. These are illustrated in Table 113. For example, some digital distributors such as Netflix have attained considerable market power, which they can use to negotiate better deals with distributors.

The risk of discrimination is comparatively low as distributors have multiple digital distributors they can choose to cooperate with. The risk of strengthening a potential competitor on the other hand, is a very strong disincentives. Netflix is a prominent example for this.

Disincentives (DI)	Impact of Technological Advancements	DS _{In} (t ₂₀₁₄)
Market Power of the Intermediary	- Some digital intermediaries gained considerable size and market power - They thus can also have considerable bargaining power - However, also a multiple alternatives exist	Medium
Rationing and Discrimination	- Risk is rather low due to multiple distribution options	Low
Strengthening Potential Competition	- Risk is considerable as witnessed by the multitude of players also migrating into production	High
Disclosing of sensitive Information	- Critical and sensitive information has to be disclosed	Medium

Tab.113: Impact on Cooperation Disincentives (Digital Distributors), based on: own research.

4.2.9.4 Summary

The previous sub chapters focused on the analysis of digital distributors. Just like previous intermediaries in the Exploitation and Consumption Stage, digital distributors are also mediating between distributors and consumers in the motion picture value system. Table 114 provides a summary of the results of the preceding analysis.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Digital Distributors	X	Medium	X	High	X	High	X	Medium

Tab.114: Summary - Impact on Digital Distributors, based on: own research.

Based on these results, the practical research questions can be answered for digital distributors. In regards to the activities of digital distributors, the analysis revealed that for the majority of activities, comparatively high costs still do occur. This was explained by the observation that their performance requires a certain

experience and specific skills. The exception are activities on the physical level. Here, typically lower cost occur compared to traditional intermediaries such as video stores.

In regards to the value that intermediaries in the motion picture sector provide, the analysis revealed that digital distributors also increase the transaction efficiency. Particular strong value sources are the Baligh-Richartz-Effect and scale effects.

Finally, the incentives and disincentives to cooperate with digital distributors have been examined as well. The analysis revealed relevant incentives and disincentives and showed that strong incentives for both consumer and distributors exist to cooperate with digital distributors.

4.2.10 Summary

Chapter 4.2 was solely dedicated to the analysis of the intermediaries in the motion picture industry. Each intermediary was examined in detail and the tools for the analysis of their activities, the value they provide as well as for the analysis of the incentives and disincentives to cooperate with them have been applied. Table 115 provides a summary of the results.

Intermediary	Activities		Value		Incentives		Disincentives	
	CI (t ₁₉₉₉)	CI (t ₂₀₁₄)	TVS (t ₁₉₉₉)	TVS (t ₂₀₁₄)	TIS (t ₁₉₉₉)	TIS (t ₂₀₁₄)	TDS (t ₁₉₉₉)	TDS (t ₂₀₁₄)
Talent Agencies	Medium	High	Low	Medium	Medium	High	Low	Low
Sales Agencies	Medium	High	Low	Medium	Medium	High	Low	Low
Festivals	Medium	High	Medium	Medium	High	High	Medium	Medium
Distributors	Medium	High	Medium	High	Medium	High	Medium	Medium
Laboratories	High	X	High	X	Medium	X	Medium	X
DCDC	X	Low	X	High	X	High	X	High
Cinema Operators	Medium	High	Medium	Medium	High	High	Low	Medium
Video Stores	Medium	High	Medium	Low	High	Medium	Medium	Low
TV Operators	Medium	High	Medium	Medium	High	High	Medium	Low
Digital Distributors	X	Medium	X	High	X	High	X	Medium

Tab.115: Summary – Impact on Intermediaries (1999 vs. 2014), based on: own research.

With the summary in Table 115 the changes that have occurred can be explained and a complete picture of intermediation in the motion picture industry emerges. For the majority of intermediaries, technological advancements did not have a direct impact on the activities. However, digital technologies increased the number of motion pictures produced and the Internet created a new exploitation segment. The increased number of products, transactions partners and increased complexity of contracts is ultimately responsible that the total cost for performing the examined activities increased in most cases.

A notable exception are laboratories. They have been directly impacted by the conversion from film to digital projection technologies. This led to

disintermediation of laboratories in their traditional incarnation and provided the opportunity for other players to carry out the activities in their new digital form.

In regards to the value that intermediaries provide. The analysis revealed that various ways exist in which intermediaries in the motion picture industry add value. Most notably by reducing transaction cost. As indicated in Table 115, technological advancement did not reduce the value added by intermediaries, instead, the total value strength increased or remained on a similar level for most intermediaries. The only exception here are video stores.

Finally, similar observations have also been made in regards to the incentives and disincentives to cooperate with intermediaries. While in most cases the cooperation is not optional, the incentives to cooperate still outweigh the disincentives. In addition, the incentives increased in a lot of cases, whereas the disincentives decreased or remained at a similar level.

4.3 IMPLICATIONS AND CRITICISM

As demonstrated in the preceding sub chapters, the Intermediation Analysis Approach allows a structured analysis of intermediaries in media markets. The approach ensures that as many relevant aspects as possible are taken into account and thus reduces uncertainty. As the focus of this dissertation was on the past and an ex-post analysis has been conducted, the results may not be of particular high strategic value. Researchers and practitioners, who want to draw strategic implications for relevant market participants from the analysis approach, would fare better with a forward looking analysis (ex-ante). The results of such an analysis

are strategically highly relevant for potential or existing intermediaries as they allow a company to define realistic goals in regards to the future role as an intermediary. This applies to the question, whether any activities in the market should be sought after as well as to the question of the desired form of intermediation or the desired business model. Once the target position is defined, an appropriate strategy can be developed.

While the results of this dissertation are not particularly suited to draw strategic conclusion, the results are nevertheless highly relevant. This dissertation started out by pointing out that particularly authors in media management, postulate again and again that due to the influence of digitalization, intermediation in media markets will either be omitted entirely or will occur in a completely different form (Cunningham and Fröschl 1999, p. 31; Picard 2002, pp. 34-36; Seufert 2004, pp. 63-66; Wirtz 1995, p. 49; Wirtz 2012, p. 763). As highlighted by the referenced authors, some of the predictions were made more than a decade ago, while others have been made as recent as 2012. While there are many contributions that predict developments, there is no research that captures the actual developments and explains them. The preceding ex-post analysis filled both gaps. The results highlighted that in contrast to the predictions, intermediation in the motion picture industry was neither omitted entirely nor did it occur in a completely different form.

Many of the previously highlighted authors focus on all sectors of the media industry or the media industry in general. However, the predictions of those authors that focus on the motion picture sector, are equally diffuse. In order to

further highlight the importance of the ex-post analysis of the motion picture sector and the viability of the analysis approach, the following paragraphs will pick up some of these predictions and contrast them to the results of the preceding analysis.

The first common theme that emerges from previous research on the motion picture is the overestimation of the impact of technology on the duplication activity. Hawkins and Vickery (2008, p. 103) for example, lament that “when the marginal costs of the duplication activity is reduced to virtually nothing, then the duplication activity will evolve into little more than issuing a license to exhibit”. They envision an environment in which the producer simply feeds the completed motion picture directly to cinemas operators. This view is shared by Bloore (2009) and Finney (2010). However, they both go even further and predict that producers will short-circuit the value system by marketing and distributing their motion pictures directly to the consumer. Finney (2010a, p. 17) sees the distributor’s role being taken over by the consumer-aware producer and/or the digitally-programmed cinema operator. It has to be highlighted, that both authors are heavily influenced by the long tail theory. In this regards, Bloore (2009, p. 17) predicts increased profitability of cinema releases of niche movies and for Finney (2010a, p. 10) “niche audiences, once able to be tapped and marketed directly, have significant value, if they can be reached less expensively”.

It has to be highlighted that the contributions of the aforementioned authors are noteworthy and brought the discourse of intermediation and value added structure in the motion picture industry forward. Nevertheless, the ex-post analysis revealed that none of these predictions has yet occurred. As was highlighted

throughout this dissertation, when intermediation is typically examined, the focus is typically very narrow. The aforementioned authors did also only consider the impact of technological advancements on the activities on the physical level. This is not sufficient.

By using the Intermediation Analysis Approach, it would have been apparent that the proposed direct contact between producer and cinema operator has a variety of consequences. For example, all activities on the legal-financial level would then have to be handled by the producer, i.e. the processing of payments and distribution of payments downstream. The same is true for the activities on the informational level as well. When the value of distributors and laboratories / DCDC would have also been considered, it would have been obvious that a direct contact between producers and cinema operators would result in a tremendous increase in contact cost for both sides, resulting in higher transaction costs and decreased efficiency. Likewise, an analysis of scale effects or specialization and experience would have highlighted that a direct contact between producers and cinema operators is neither efficient, nor effective.

In regards to the duplication activity, standardization is the factor that has been ignored. The DCI released the first digital standard in 2005. The standard clearly states the infrastructure and key management procedures required for the digital delivery of motion pictures. If each producers builds up the infrastructure to adhere to the standard, the efficiency would only be further reduced. The preceding remarks are not meant to diminish the contributions of previous authors, they are, however, necessary to highlight the value the analysis approach can have

and how it can help to address the problem of relatively flat and diffuse discussion about intermediation.

The Intermediation Analysis Approach was designed in such a way, that many of the flaws of other approaches were addressed from the onset. For example, most contributions on intermediation are criticized for the sole reliance on transaction cost theory. Accordingly, an expanded understanding of transaction costs was established and other aspects, such as the value intermediaries provide, have been included in the analysis as well. In addition to the activities and value of intermediaries, competitive strategic aspects (in the form of cooperation incentives and disincentives) have also been incorporated into the analysis approach. Finally, many of the previous approaches are characterized by a low degree of applicability. Therefore, a special attention was given to the applicability during the development of the Intermediation Analysis Approach and multiple tools and guidance have been created. However, despite all these precautions, the Intermediation Analysis Approach is not without flaws as well. These will be discussed in the following paragraphs.

One point of criticism is the limited transferability of the approach. Per design, the approach was created for media markets. However, intermediaries play an important role in many industries as highlighted in Chapter 2. The application of the analysis approach to the financial sector for example, is likely not sensible without some adjustments.

Another important point of criticism is the unavoidable subjectivity of indirect comparison in qualitative terms. When no numbers are used, the

determination of the cost of performing certain activities, the assessment of the value strength and the strength of incentives and disincentives, becomes subject to the researcher's experience. While the developed guidelines are aimed at addressing exactly this problem, as they provide a clear frame of reference for the assessment, the subjectivity still remains. For industry insiders with access to relevant data, the use of actual numbers rather than a qualitative assessment is certainly more desirable.

Finally, the application of the Intermediation Analysis Approach on intermediaries in the motion picture industry revealed an additional flaw. For some intermediaries a comparative statics analysis is simply not possible. This was prominently highlighted with laboratories and the DCDC. A comparative statics analysis may thus not be the best approach to examine intermediaries. Other approaches may be better suited to capture the dynamics that laboratories have experienced, i.e. disintermediation. Despite these observations, it was still demonstrated that with a certain degree of flexibility and minor adjustments, even those cases can be captured and analyzed.

4.4 SUMMARY

The focus in Chapter 4 was on the practical research objective of this dissertation, the demonstration of the applicability of the developed analysis approach. The motion picture industry was chosen as the subject of the investigation. The analysis started with Step 1 of the Intermediation Analysis Approach. The motion picture industry was demarcated from other sectors of the

media- or entertainment industry and the unique product- and demand characteristics have been discussed. This was followed by the analysis of the value added structure, which highlighted the magnitude of intermediaries that are part of the motion picture value system. At the same time the first practical research question was answered as the relevant intermediaries have been identified. New intermediaries emerged in the Exploitation and Consumption Stage, while disintermediation occurred in the Distribution, Licensing and Marketing Stage. Traditional laboratories became obsolete and their activities were taken over by a new intermediary, the DCDC. Accordingly, the number of different types of intermediaries has increased rather than decreased in the last fifteen years.

After the completion of Step 1, the focus shifted towards the identified intermediaries. Each intermediary was examined in detail and analysis Steps 2-4 have been applied. Through this the remaining practical research questions could be answered for each intermediary individually. In regards to the activities of intermediaries and their change in the last fifteen years, the analysis showed, that the activities of most intermediaries have not been directly influenced by technological advancements. Particularly the activities on the informational level require a high degree of specialization and experience. These activities cannot be automated, but instead have to be carried out by human beings. It thus comes as no surprise that technology did not directly impact those activities.

However, digital technologies enabled more producers to create their own motion pictures and accordingly the number of talents and motion pictures increased. The Internet, in addition, created a new exploitation segment. This led

to an increase in complexity of deals and brought more transactions partners into the picture as well. Together, these effects then indirectly increased the total cost for performing the examined activities of intermediaries. The exception, as previously highlighted are laboratories, which have been replaced by the DCDC due to a strong direct impact on their activities.

In regards to the value that intermediaries in the motion picture sector provide and its change in the last fifteen years, the analysis revealed a variety of value sources, which enable intermediaries to add value. The contact reduction based on the Baligh-Richartz-Effect, standardization, scale effects and specialization are the most prominent value sources that enable the intermediaries in the motion picture industry to increase the transaction efficiency. In addition to the efficiency, a variety of intermediaries, particular those in the Licensing, Distribution and Marketing stage, increase the effectiveness of transactions as well. Laboratories in the past and the DCDC now, also increase the logistic efficiency as they do perform the necessary logistic activities to add value in this respect. Given the unique characteristics of motion pictures, it is unsurprising that no intermediary can increase the production result.

In regards to changes in the value provided by intermediaries in the motion picture industry, the analysis showed that technological advancement did not reduce the strength of most value sources, instead, the total value strength increased or remained on a similar level. This is explained, on the one hand, by the increase in transaction partners, which leads to a greater reduction in contact cost and, on the other hand, by the observation that the importance of standardized

processes, the investment in material and/or immaterial resources and the experience of intermediaries remained. The exception to this are video stores, whose total value strength decreased, due to more efficient alternatives to consume motion pictures on the Internet.

In regards to the incentives and disincentives of up- and downstream market participants to cooperate with intermediaries, the analysis showed that a variety of incentives and disincentives can be identified. However, in most cases the cooperation is not optional, often for both of the intermediary's transaction partners. Prominent examples for this are the relationship between talent and talent agencies, producer and sales agency and producer/sales agency and distributor. While the dependency is not as strong with the intermediaries in the Exploitation and Consumption Stage, the same dynamics are still present. A distributor that wants to maximize revenues over as many periods of exclusivity as possible, ultimately has to find an agreement with one intermediary in each exploitation segment. While distributors can decide to not cooperate with television operators or digital distributors, they would ultimately hurt their revenue potential by doing so. Nevertheless, the analysis still revealed noteworthy incentives and disincentives. The most prominent one is the observation that the decrease in transaction costs and increase in transaction efficiency is in the interest of the involved transaction partners as well. In addition, since most intermediaries' ability to increase efficiency improved, the incentives to cooperate with them grew stronger as well. The strength of the disincentives on the other hand decreased or

remained at a similar level. For most intermediaries, the incentives thus heavily outweigh the disincentives.

By answering the practical research questions, the changes of the past fifteen years have been described and explained. Furthermore, the applicability of the Intermediation Analysis Approach has been demonstrated. In addition, the analysis approach was then also used to further stress the importance of a holistic approach, when examining intermediaries. Examples of predictions of well-known authors have been used for this. The ex-post analysis revealed that the predictions did not occur and that there are several reason, why these predictions are flawed. For example, the authors only focus on some of the physical activities and ignored the other activity levels. In addition, they also do not consider the value intermediaries provide, most prominently their transaction efficiency enhancing effect.

Finally, flaws of the Intermediation Analysis Approach and attempts to mitigate them have been discussed as well. Relevant flaws include the limited transferability, the subjectivity of indirect qualitative comparisons as well as the limited feasibility of a comparative statics analysis in some cases.

5 SUMMARY AND OUTLOOK

5.1 SUMMARY

This dissertation started by highlighting that the media industry is perhaps impacted the strongest by technological advancements. In addition, it was pointed out that, while intermediaries play an important role in the sectors of the media industry, no comprehensive theoretical contribution on intermediaries in media markets has been developed so far. This dissertation set out to fill this void. Accordingly, the main research objective of this dissertation was to systematically capture and explain those changes in a particular sector of the media industry that are triggered through technological advancements and have an impact on intermediation. From the main objective, one theoretical and one practical research objectives have been derived:

1. Theoretical Research Objective: Development of an Intermediation Analysis Approach that can explain the influence of technological advancements on intermediaries in media markets.
2. Practical Research Objective: Demonstrating the applicability of the Intermediation Analysis Approach by employing it in the analysis of a selected sector of the media industry

In order to achieve the first research objective, it was necessary to establish the theoretical foundation of this dissertation (Chapter 2) and consolidate the results into a useable analysis approach (Chapter 3). In regards to the theoretical foundation, two large research strands have been identified. (1) Industrial Economics and the theory of the firm as well as (2) the large amount of literature on intermediation from various research strands.

In regards to the first research strand, the analysis highlighted that a variety of different and sometimes contradictory scientific theories contribute to an understanding of the firm (Audretsch 1995, p. 27; Bühler and Jaeger 2002, p. 46; Foss 2000, p. xxiv; Göbel 2002, p. 169;). The discussion of the neoclassical view of the firm (with an expanded understanding of the production function), for example, introduced economies of scale and scope, which was identified as a possible value source for intermediaries. The analysis of New Institutional Economics as a whole introduced information asymmetries and incomplete contracts. Thus monitoring and adjustment costs were introduced and additional activities and benefits of intermediaries highlighted. The analysis of transaction cost theory then highlighted many of the arguments for vertical integration, which can also be understood as arguments against intermediation. In addition, the relevance of factor specificity (hold-up) has been highlighted. The discussion of the property rights approach, on the other hand, pointed out the disadvantages of vertical integration and thus highlighted arguments for intermediation. The analysis of the principal agent theory introduced agency cost and different types of information asymmetries. Thus additional ways for intermediaries to add value

were identified. Finally, the analysis of the information perspective and competence perspective highlighted the importance of efficient and effective information processing as well as the importance of the resources of companies.

In regards to the second part of the theoretical foundation, the literature on intermediation, the analysis started by highlighting that intermediation is a theoretical concept for the analysis of entities, which are located between supply and demand. Similar to the literature on the theory of the firm, the literature on intermediation is spread in various research strands as well. The analysis of the literature on the trade highlighted the justification of intermediaries by their transaction cost reducing effect as a common approach. In addition, the potential value provided by intermediaries was identified: increased efficiency and increased effectiveness. The analysis of the marketing literature revealed the first catalogs of distribution functions from which many of the activities of intermediaries have been derived. The analysis of the contributions on financial intermediation on the other hand, highlighted additional value sources for intermediaries such as the reduction of risk through diversification or the increase of effectiveness through the reduction of market imperfections. The analysis of intermediaries in the real estate industry further highlighted the importance of the information processing capabilities of the intermediary, whereas the media management literature revealed many of the media industry specific intermediation activities. Finally, the review of cross-industry research on intermediation introduced among other aspects the Baligh-Richartz-Effect – a fundamental source of value.

Once the theoretical foundation had been established, the focus shifted towards the development of the Intermediation Analysis Approach in Chapter 3. The analysis approach was envisioned as a set of tools that allow the systematical analysis of intermediation from all relevant viewpoints. The approach consists of four steps. In Step 1 general industry characteristics have to be examined, the value added structure of the industry has to be visualized and the intermediaries have to be identified. For this purpose and due to the limitations of existing methods, the Enhanced Value System Model was introduced as the first tool for the analysis. The second step focused on the various activities intermediaries perform. The activities of intermediaries in media market have been identified based on the preceding literature review. For the actual analysis of the activities a cost framework was established and the Activity Analysis Tool as well as the corresponding guidance was created. For the third step, the various value sources of intermediaries that have been identified during Chapter 2, were organized in four different value categories according to the suggestion by Tietz (2007 p. 85). In addition, the Value Analysis Tool and corresponding guidance was created. The same approach was followed for Step 4. Here the incentives and disincentives have been identified and the Incentive Analysis Tool as well as the corresponding guidance was created.

With the Intermediation Analysis Approach created and the first research objective achieved, the focus shifted to the motion picture industry in Chapter 4 and the second research objective – the demonstration of the applicability of the analysis approach. During the application of the first step of the analysis approach, the motion picture sector was demarcated from other sectors of the media industry

and the unique product characteristics were discussed, most prominently the commercial and artistic product traits that all motion pictures exhibit. The blockbuster strategy was highlighted as an important product characteristic as well. The analysis continued by examining the demand characteristics and it was pointed out that the international box office is growing, whereas the domestic box office is on a downwards trend – at least in regards to admission. Finally, by using the previously developed Enhanced Value System Model, the value added structure has been analyzed as well. In this context, the magnitude of intermediaries in the motion picture industry became evident for the first time. At the same time, the first research question was answered. The traditional intermediaries and new intermediaries have been identified, which was the prerequisite for the following analysis. It was highlighted, that the number of intermediaries has increased as new intermediaries entered the online segment. Additionally, disintermediation occurred with laboratories, whose place was assumed by the DCDC.

The focus of the analysis then shifted towards the identified intermediaries and each intermediary was examined in detail. After the introduction of the intermediary, the formal analysis started and the activities, value as well as the incentives and disincentives have been examined by using the tools and guidance developed in Chapter 3. The result of this detailed analysis provided the basis for answering the practical research questions. In addition, a complete picture of intermediation in the motion picture industry and the changes that have occurred, emerged for the first time. The results can be summed up as follows:

-
- The activities of most intermediaries have not been directly influenced by technological advancements.
 - The majority of the activities require a high degree of specialization and experience.
 - Technological advancement led to an increase in the number of transaction partners, products and increased the complexity of contracts. This has a cost increasing effect on most activities.
 - The contact reduction based on the Baligh-Richartz-Effect, standardization, scale effects and specialization are the most prominent value sources.
 - Increased transaction efficiency is a benefit all intermediaries provide. Selected intermediaries also increase the effectiveness of the transactions as well as the efficiency of logistics.
 - Technological advancement did not reduce the strength of most value sources. Instead, the total value strength increased or remained on a similar level.
 - In most case, the cooperation with intermediaries in the motion picture sector is not optional.
 - The observation that the increase in transaction efficiency is in the interest of the involved transaction partners as well, is a strong incentive to cooperate with intermediaries.
 - For most intermediaries the incentives heavily outweigh the disincentives.

Lastly, the results of the analysis have been used to highlight, why predictions about developments in the motion picture sector did not occur. The several reasons, why these predictions are flawed have been emphasized. Finally, the flaws of the Intermediation Analysis Approach and attempts to mitigate them have been discussed as well. Relevant flaws include the limited transferability, the subjectivity of indirect qualitative comparisons as well as the limited feasibility of a comparative statics analysis in some case.

5.2 OUTLOOK

The preceding analysis examined the various facets of intermediation in detail. Furthermore, the motion picture industry was highlighted as an interesting object of investigation. In addition to intermediaries, the motion picture industry provides multiple other research topics, which warrant research in their own right. To conclude this dissertation, the following four research topics, which have only been briefly mentioned during the preceding analysis, will be highlighted as topics for future research:

- Research on DCDC's satellite distribution.
- Research on preservation in the digital age.
- Empirical research on the blockbuster theory.
- Ex-Ante application of the analysis approach.

The preceding analysis highlighted the unique position of the DCDC, which managed to dominate the theatrical delivery of motion pictures in just two years. The very technical process of delivering motion pictures into theaters via satellite was described as well. Despite the detailed analysis of the DCDC itself, many interesting questions remain unanswered. These accordingly warrant their own research. The first aspect that would have to be further examined are the various contracts between parties. For outsiders the contract structure between distributor and the DCDC, the DCDC and Deluxe/EchoStar, as well as between the DCDC and cinema operators is not transparent. The preceding analysis highlighted many of the disincentives to cooperate with the DCDC, it would be interesting to understand, if and how contractual agreements mitigate certain problems, i.e. discrimination. Even more importantly, there is the questions of fees. Who is paid what for the delivery is unclear, due to the lack of available research. Ten to 15 years ago, it cost about \$2.500 to deliver a film print to a theater. Verrier (2013, w/o p.) claims that these cost have decreased to \$50-\$125 for the distribution over DCDC's digital platform. However, in 2008, the costs for the transmission of motion pictures over satellite were still too high according to Hawkins and Vickery (2008, pp. 78-79). Instead, it was cheaper to physically ship hard drives to cinema operators across North America. Accordingly, the strong cost decrease described by Verrier (2013, w/o p.) seems questionable and warrants further research. As previously mentioned, not only the analysis of costs is necessary, but the actual fees paid by distributors have to be analyzed as well.

The next area that warrants future research is the preservation of motion pictures. Preservation has been identified as one of the possible activities of intermediaries on the physical level. Yet, none of the discussed intermediaries is carrying out this activity. This by itself is not necessary surprising, as it is the producer or the owner of the intellectual property, who is responsible for preserving the motion picture. Traditionally, studios stored motion pictures on film. This has proven to be sufficient for the preservation for at least one hundred years. With film becoming obsolete and movies being digitally produced, the traditional archiving process is naturally affected as well. There is no current research on how and who is preserving today's motion pictures for future generations. In addition, the future of preservation seems to be equally interesting as well. Technicolor, for example, is currently employing over 250 researchers around the world to work on a project, which attempts to preserve a movie onto tiny strands of DNA. DNA lasts for up to 700.000 years without proper storage and with proper storage, it can endure for millions of years. Therefore, information stored on DNA would not have to be re-saved every few years like current data storage methods require (Munson 2015, w/o p.).

In addition to satellite delivery and preservation, the blockbuster theory as discussed by Elberse (2013) warrants additional research as well. While Elberse (2013) analyzed all entertainment sectors, she only includes limited examples from the motion picture sector and those examples date back to 2007 and 2011. In her book, Elberse (2013) relies heavily on the presentation of data from the music industry such as data from iTunes and Spotify. From the perspective of the motion

picture industry a quantification of this effect and its change over time would be desirable as well. This includes the theatrical exploitation as well as data from digital distributors such as Netflix, Hulu and Amazon Instant Video.

In addition to these research topics, the concept of intermediation as established in this dissertation warrants further research as well. In future research, the Intermediation Analysis Approach could be applied for different use cases, for example, an ex-ante analysis of the motion picture industry in an attempt to predict future developments. Due to the high degree of complexity and multiple causality of changes in industry structure, future changes cannot be predicted with certainty. Nevertheless, the ex-ante application of the analysis approach would allow a structured discussion. The technological driven transformation processes are still ongoing and additional change is already on the horizon. The analysis approach could for example be used to forecast the impact of Virtual Reality (VR) on the structure of intermediation. Theaters around the globe have so far been able to keep up with technology. They invested in better and brighter picture quality and more sophisticated sound systems. Accordingly, consumers kept coming, despite various alternatives to consume entertainment. This situation however may change with VR. In the near future, all it takes is a pair of VR-Glasses and the consumer will be able to emerge in his own theater with a screen larger than anything that could be reasonably built in reality (Russell 2015, w/o p.).

Interestingly, the above scenario may reveal additional weaknesses of the Intermediation Analysis Approach. In the above scenario, the activities, value and incentive may be less relevant. Instead other factors, such as social- and political

factors may have to be considered as well. The consumer may for example prefer the (real life) theater experience due to social aspects, i.e. hanging out with friends or just meeting people, despite the experience being inferior from a technological view point. In the mid- to long-term however, VR may change that as well and consumers will be able to meet friends or strangers virtually, e.g. a simulated theater with everyone being represented by some form of avatar (Epstein and Watercutter 2015).

In the long-term, VR is expected to fundamentally change the motion picture itself. The consumer will be given the chance to emerge in the motion picture itself - rather than being in a simulated theater showing the motion picture. This will most likely not only impact intermediaries, but especially the creative aspects of the production process. Story telling processes and camera perspectives might have to be invented from scratch (Epstein and Watercutter 2015, w/o p.; Russell 2015, w/o p.). However big the changes from VR might be, if the past teaches anything, it is almost certain that the motion picture industry will eventually establish it as yet an additional window of exploitation. This in turn, will then likely create additional intermediaries that will provide the consumers with the content and the means to experience it.

REFERENCES

- Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *Quarterly Journal of Economics*, 84 (3), 488-500.
- Albarran, A. B. (2002). *Media economics: understanding markets, industries and concepts*, 2nd ed., Ames: Blackwell.
- Alderson, W. (1954). Factors Governing the Development of Marketing Channels. In R. M. Clewett (Ed.), *Marketing Channels for Manufactured Products* (5-34), Homewood: Irwin.
- Alexander, A., Owers, J., Carveth, R., Hollifield, C. A., Greco, A. N. (Eds.) (2004). *Media Economics: Theory and Practice*, 3rd ed., London: Routledge.
- Allen, F. (1990). The Market for Information and the Origin of Financial Intermediation. *Journal of Financial Intermediation*, 1, 3-30.
- Allen, F., Gale, D. (1988). Optimal Security Design. *Review of Financial Studies*, 1, 229-263.
- Allen, F., Gale, D. (1989). Arbitrage, Short Sales and Financial Innovation. *University of Pennsylvania - Rodney L. White Center Working Paper*, 10 (89).
- Allen, F., Gale, D. (1990). Incomplete Markets and Incentives to Set Up an Options Exchange. *Geneva Papers on Risk and Insurance*, 15, 17-46.
- Allen, F., Santomero, A. M. (1998). The Theory of Financial Intermediation. *Journal of Banking and Finance*, 21 (11/12), 1461-1485.

- Altmeyden, K.-D. (Ed.) (2004). *Ökonomie der Medien und des Mediensystems*, Opladen: Westdeutscher Verlag.
- Altmeyden, K.-D., Karmasin, M. (Eds.) (2004). *Medien und Ökonomie – Band 2: Problemfelder der Medienökonomie*, Wiesbaden: VS Verlag für Sozialwissenschaften.
- Amazon. (Ed.) (2007). *Press Release: Amazon Unbox on TiVo Now Available, Offering Over 1.5 Million Broadband-Ready TiVo Subscribers Access to Thousands of Movies and TV Shows*. Retrieved 08 September 2015 from <http://phx.corporate-ir.net/phoenix.zhtml?c=97664&p=irol-newsArticle&ID=971365&highlight=>.
- Amazon. (Ed.) (2011). *Press Release: Amazon Prime Members Now Get Unlimited, Commercial-free, Instant Streaming of More Than 5,000 Movies and TV Shows at No Additional Cost*. Retrieved 08 September 2015 from <http://phx.corporate-ir.net/phoenix.zhtml?c=176060&p=irol-newsArticle&ID=1531234>.
- Anderson, C. (2006). *The Long Tail: How Endless Choice is Creating Unlimited Demand*, London: Business Books.
- Anderson, C. (2008). *The Longer Long Tail: Why The Future of Business is Selling Less of More*, New York: Hyperion.
- Anderson, E., Day, G. S., Rangan, K. V. (1997). Strategic Channel Design. *Sloan Management Review*, 38 (4), 59-69.
- Aris, A., Bughin, J. (2009). *Managing Media Companies: Harnessing Creative Values*, 2nd ed., West Sussex: Wiley.

- Arrow, K. J. (1969). The Organization of Economic Activity: Issues Pertinent to the Choice of Market versus Nonmarket Allocation. In Joint Economic Committee – 91st Congress – 1st Session (Eds.), *The Analysis and Evaluation of Public Expenditures: The PPB-System* (47-64), 1, Washington: U.S. Government Printing Office.
- Audretsch, D. B. (1995). Überblick über Stand und Entwicklung der Industrieökonomik, *Wirtschaftszentrum Berlin discussion papers FS IV 94-6*.
- Badillo, P.-Y., Lesourd, J.-B. (Ed.) (2010). *The Media Industries and their Markets: Quantitative Analyses*, New York: Palgrave Macmillan.
- Baligh, H. H., Richartz, L. E. (1967). *Vertical Market Configurations*, Boston: Allyn and Bacon.
- Bailey, J. P. (1996). The Emergence of Electronic Market Intermediaries. *Proceedings of the 17th International Conference on Information Systems*, 391-399.
- Bailey, J. P. (1998). *Intermediation and Electronic Markets: Aggregation and Pricing in Internet Commerce*, Cambridge: MIT.
- Bailey, J. P., Bakos, Y. (1997). An Exploratory Study of the Emerging Role of Electronic Intermediaries. *International Journal of Electronic Commerce*, 1 (3), 7-20.
- Bain, J. S. (1968). *Industrial Organization*, 2nd ed., New York: Wiley.
- Bakos, Y. (1997). Reducing Buyer Search Costs: Implications for Electronic Marketplaces. *Management Science*, 43 (12), 1676-1692.

- Bakos, Y. (1998). The Emerging Role of Electronic Marketplaces on the Internet. *Communications of the ACM*, 41 (8), 35-42.
- Barnes, S. J., Hunt, B. (Eds.) (2000). *E-Commerce and V-Business*, Oxford: Butterworth-Heinemann.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17 (1), 99-120.
- Barth, K., Hartmann, M., Schröder, H. (2015). *Betriebswirtschaftslehre des Handels*, 7th ed., Wiesbaden: Gabler.
- Bartlett, R. (1981). Property Rights and the Pricing of Real Estate Brokerage. *The Journal of Industrial Economics*, 30 (1), 79-94.
- Benjamin, R., Wigand, R. T. (1995). Electronic Markets and Virtual Value Chains on the Information Superhighway. *Sloan Management Review*, 36 (2), 62-72.
- Bentele, G., Brosius, H. B., Jarren, O. (Eds.) (2003). *Öffentliche Kommunikation - Handbuch Kommunikations- und Medienwissenschaft*, Wiesbaden: VS Verlag für Sozialwissenschaften.
- Bhattacharya, S., Pfleiderer, P. (1985). Delegated Portfolio Management. *Journal of Economic Theory*, 36, 1-25.
- Bhattacharya, S., Thakor, A. V. (1993). Contemporary Banking Theory. *Journal of Financial Intermediation*, 3 (1), 2-50.
- Bieberbach, F., Hermann, M. (1999). Information als Handelsware auf elektronischen Märkten. *Arbeitsberichte des Lehrstuhls für Allgemeine und Industrielle Betriebswirtschaftslehre der Technischen Universität München*, 20.

- Bienert, H. (1996). *Der Marktprozeß an Aktienbörsen. Bewertungseffizienz und Umverteilung*, Wiesbaden. Gabler.
- Biglaiser, G. (1993). Middlemen as experts. *RAND Journal of Economics*, 24 (2), 212-223.
- Biglaiser, G., Friedman, J. W. (1994). Middlemen as guarantors of quality. *International Journal of Industrial Organization*, 12 (4), 509-531.
- Birdthistle, W. A. (2000). A Contested Ascendancy: Problems with Personal Managers Acting as Producers. *L.A. Entertainment Law Review*, 20 (3), 493-559.
- Bitz, M. (1989). Erscheinungsformen und Funktionen von Finanzintermediären. *WiSt*, 10, 430-436.
- Bitz, M., Gunnar, S. (2015). *Finanzdienstleistungen: Darstellung - Analyse – Kritik*, 9th ed., München: Oldenbourg.
- Blair, R. D., Kaserman, D. L. (1978). Uncertainty and the Incentive for Vertical Integration. *Southern Economic Journal*, 45 (1), 266-272.
- Blair, R. D., Kaserman, D. L. (1983). *Law and Economics of Vertical Integration and Control*, New York: Academic Press.
- Bloomberg News. (Ed.) (2012). *Amazon Adds Movies to Streaming Service in New Challenge to Netflix*. Retrieved 08 September 2015 from <http://adage.com/article/media/amazon-adds-epix-movies-streaming-service/237003/>.

- Bloore, P. (2009). *Re-defining the Independent Film Value Chain*, Norwich: BFI 2009.
Retrieved 05 September 2015 from http://industry.bfi.org.uk/media/pdf/h/b/Film_Value_Chain_Paper.pdf.
- Bolton, P., Dewatripont, M. (1994). The Firm as a Communication Network. *The Quarterly Journal of Economics*, 109 (4), 809-839.
- Bond, P. (2013). *Steven Spielberg Predicts 'Implosion' of Film Industry*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/news/steven-spielberg-predicts-implosion-film-567604>.
- Bosch, R. (2001). *Market-maker als Liquiditätsspendende Intermediäre in Börsenmärkten*, Wiesbaden: Gabler.
- Bose, G., Pingle, M. (1995). Stores. *Economic Theory*, 6, 251-262.
- Box Office Mojo. (2015). *Yearly Grosses*. Retrieved 23 May 2015 from <http://www.boxofficemojo.com/yearly/>.
- Brack, A. (2003). *Das strategische Management von Medieninhalten: Gestaltungsoptionen für die langfristige Erfolgssicherung in Medienmärkten*, Wiesbaden: Deutscher Universitäts-Verlag.
- Brock, G. W. (Ed.) (1995). *Toward a competitive telecommunication industry: selected papers from the 1994 Telecommunications Policy Research Conference*, Hillsdale: Erlbaum.

- Brousseau, E. (2002). The Governance of Transactions by Commercial Intermediaries: An Analysis of the Re-engineering of Intermediation by Electronic Commerce. *International Journal of the Economics of Business*, 9 (3), 353-374.
- Brynjolfsson, E., Hitt, L. M. (1998). Beyond the productivity paradoxon. *Communications of the ACM*, 41 (8), 49-55.
- Buhl, H. U., Kundisch, D. (2003). Transformation von Finanzintermediären durch Informationstechnologie. *Wirtschaftsinformatik*, 45 (5), 503-508.
- Buhse, W. (2004). *Wettbewerbsstrategien im Umfeld von Darknet und Digital Rights Management - Szenarien und Erlösmodelle für Onlinemusik*, Wiesbaden: Deutscher Universitäts-Verlag.
- Bühler, S., Jaeger, F. (2002). *Einführung in die Industrieökonomik*, Berlin: Springer.
- Büschgen, H. E. (1998). *Bankbetriebslehre - Bankgeschäfte und Bankmanagement*, 5th ed., Wiesbaden: Gabler.
- Carlton, D. W., Perloff, J. M. (2005). *Modern Industrial Organization*, 4th ed., Boston: Pearson/Addison Wesley.
- Casson, M. (2001). *Information and Organization – A New Perspective on the Theory of the Firm*, Oxford: Oxford University Press.
- Caves, R. E. (2000). *Creative Industries: Contracts between Art and Commerce*, Cambridge: Harvard University Press.
- Caves, R. E. (2003). Contracts Between Art and Commerce. *Journal of Economic Perspectives*, 17 (2), 73-83.

- Chang, B.-H., Ki, E.-J. (2005). Devising a practical model for predicting theatrical movie success: focusing on the experience good property, *Journal of Media Economics*, 18, 247-269.
- Chircu, A. M. (2001). *Intermediation in Electronic Commerce*, Minnesota: Ann Arbor.
- Chircu, A. M., Kauffman, R. J. (1999). Strategies for Internet Middlemen in the Intermediation / Disintermediation / Reintermediation Cycle. *Electronic Markets*, 9 (2), 109-117.
- Chircu, A. M., Kauffman, R. J. (2000). Digital Intermediation in Electronic Commerce: The eBay Model. In S. J. Barnes, B. Hunt (Eds.), *E-Commerce and V-Business* (45-66), Oxford: Butterworth-Heinemann.
- Chircu, A. M., Kauffman, R. J. (2000a). Reintermediation Strategies in Business-to-Business Electronic Commerce. *International Journal of Electronic Commerce*, 4 (4), 7-42.
- Church, J., Ware, R. (2000). *Industrial Organization – A Strategic Approach*, Boston: McGraw-Hill.
- Churchill, G. A., Peter, J. P. (1998). *Marketing - Creating Value for Customers*, 2nd ed., Boston: McGraw-Hill.
- Cicourel, A. V. (1970). *Methode und Messung in der Soziologie*, Frankfurt a. M.: Suhrkamp.
- Claire, R. W. (1999). *Entertainment 101: An Industry Primer*, Beverly Hills: Pomegranate Press.

- Clement, M., Schusser, O. (Eds.) (2009). *Ökonomie der Musikindustrie*, 2nd ed., Wiesbaden: Gabler.
- Clement, M., Papies, D., Schusser, O. (2009). Herausforderungen in der Musikindustrie. In M. Clement, O. Schusser (Eds.), *Ökonomie der Musikindustrie* (2nd ed., 1-14), Wiesbaden: Gabler.
- Clemons, E. K., Reddi, S. P., Row, M. C. (1993). The Impact of Information Technology on the Organization of Economic Activity: The "Move to the Middle" Hypothesis. *Journal of Management Information Systems*, 10 (2), 9-35.
- Clewett, R. M. (1954). *Marketing Channels for Manufactured Products*, Homewood: Irwin.
- Coase, R. H. (1937). The Nature of the Firm. *Economica*, 4, 386-405.
- Cohen, D. S. (2014). *Digital Cinema Distribution Coalition To Acquire Deluxe/Echostar Satellite Network*. Retrieved 05 September 2015 from <http://variety.com/2014/film/news/digital-cinema-distribution-coalition-to-acquire-deluxeechostar-satellite-network-1201147830/>.
- Collins, A., Hand, C., Snell, M. (2002). What makes a blockbuster? Economic analysis of film success in the UK. *Managerial and Decision Economics*, 23, 343-354.
- Commons, J. R. (1932). The Problem of Correlation Law, Economics and Ethics. In J. R. Commons, R. John, M. Rutherford, W. J. Samuels (Eds.), *John R. Commons: Selected Essays (453-473)*, London: Routledge.

- Commons, J. R., John, R., Rutherford, M., Samuels W. J. (1997). *John R. Commons: Selected Essays*, London: Routledge.
- Compaine, B. M., Gomery, D. G. (2000). *Who owns the media? Competition and Concentration in the Mass Media industry*, 3rd ed., Mahwah: Erlbaum.
- Crémer, J. (1990). Common knowledge and the co-ordination of economic activities. In N. J. Foss (Ed.), *The Theory of the Firm*, 3 (255-275), London: Routledge.
- Crissey, J. (2010). *Any value in the chain?*. Retrieved 05 September 2015 from http://royalholloway.academia.edu/JCCrissey/Papers/646173/Any_value_in_the_chain.
- Cunningham, P., Fröschl, F. (1999). *Electronic Business Revolution: Opportunities and Challenges in the 21st century*, Berlin: Springer.
- Cunningham, S., Silver, J. (2012). On-line Film Distribution: Its History and Global Complexion. In D. Iordanova, S. Cunnigham (Eds.), *Digital Disruption: Cinema Moves On-line* (33-66), St. Andrews: St. Andrews Film Studies.
- Cunningham, S., Silver, J. (2012a). Timeline - On-line Distribution of Feature Films. In D. Iordanova, S. Cunnigham (Eds.), *Digital Disruption: Cinema Moves On-line* (189-194), St. Andrews: St. Andrews Film Studies.
- DCDC. (Ed.) (2015). *Our Founders*. Retrieved 05 September 2015 from <http://www.dcdcistribution.com/our-founders/>.
- DCDC. (Ed.) (2015a). *About Us*. Retrieved 05 September 2015 from <http://www.dcdcistribution.com/about-us/>.

- De Vany, A., Walls, W. D. (1999). Uncertainty in the movies: can star power reduce the terror of the box office? *Journal of Cultural Economics*, 23, 285-318.
- Deluxe/EchoStar. (Ed.) (2013). *Press Release: Deluxe/EchoStar LLC Enables Movie Delivery for Digital Cinema Distribution Coalition*. Retrieved 05 September 2015 from <http://www.echostar.com/NewsEvents/PressReleases/PressRelease.aspx?prid=1054>.
- Demsetz, H. (1968). The Cost of Transacting. *Quarterly Journal of Economics*, 82 (1), 33-53.
- Demsetz, H. (1993). The Theory of the Firm Revisited. In N. J. Foss (Ed.): *The Theory of the Firm*, 4 (102-122), London: Routledge.
- Dessy, O., Gambaro, M. (2010). Demand for Movies in Europe and the Effects of Multiplex Diffusion. In P.-Y. Badillo, J.-B. Lesourd (Eds.), *The Media Industries and their Markets: Quantitative Analyses* (207-219), New York: Palgrave Macmillan.
- Di Noia, T., Di Sciascio, E., Donini, F. M., Mongiello, M. (2004). A System for Principled Matchmaking in an Electronic Marketplace. *International Journal of Electronic Commerce*, 8 (4), 9-37.
- Diamond, D. W. (1984). Financial Intermediation and Delegated Monitoring. *Review of Economic Studies*, 51 (3), 393-414.
- Döring, H. (1998). *Kritische Analyse der Leistungsfähigkeit des Transaktionskostenansatzes*, Göttingen: Georg-August-Universität.

- Eckardt, M. (2002). Agent and Broker Intermediaries in Insurance Markets - An Empirical Analysis of Market Outcomes, *Thünen-Series of Applied Economic Theory*, working paper 34.
- Eckardt, L. M., Klode, U. (2014). *Deutsche Netflix-Kunden gehen leer aus*. Retrieved 11 September 2015 from <http://www.stern.de/kultur/tv/house-of-cards--dritte-staffel-kommt-im-februar---deutsche-netflix-kunden-gehen-leer-aus-3260202.html>.
- Elberse, A. (2008). Should you invest in the Long Tail? *Harvard Business Review*, July–August 2008, 88-96.
- Elberse, A. (2013). *Blockbusters Why Big Hits – and Big Risks – are the Future of the Entertainment Business*, New York: Henry Holt and Co.
- Elberse, A., Anand, B. (2005). The effectiveness of pre-release advertising for motion pictures, *Harvard Business School Working Paper*, 06 (002).
- Elberse, A., Eliashberg, J. (2003). Demand and supply dynamics for sequentially released products in international markets: the case of motion pictures. *Marketing Science*, 22, 329-354.
- Elberse, A., Oberholzer-Gee, F. (2007). Superstars and Underdogs: An Examination of the Long Tail Phenomenon in Video Sales. *MSI Reports: Working Paper Series*, 4 (2007), 49–72.
- Elberse, A., Schweidel, D. A. (2009). *Popularity Profiles: How Customers' Use of a Long-Tail Assortment Relates to their Service Retention*. Retrieved 05 May 2009 from http://www.people.hbs.edu/aelberse/papers/elberse_schweidel_2009.pdf.

- Eliashberg, J., Elberse, A., Leenders, M. A. A. M. (2006). The Motion Picture Industry: Critical Issues in Practice, Current Research, and New Research Directions. *Marketing Science*, 25 (6), 638–661.
- Eller, C., Wallenstein, A. (2015). *Broken Hollywood: The Biz's Top Players Call Out Ways Industry Needs to Change*. Retrieved 05 September 2015 from <http://variety.com/2015/film/news/broken-hollywood-the-bizs-top-players-call-out-ways-industry-needs-to-change-1201416866/>.
- Elliott, C., Simmons, R. (2008). Determinants of UK box office success: the impact of quality signals. *Review of Industrial Organization*, 33 (2), 93-111.
- Elliott, C., Simmons, R. (2010). Advertising Media Strategies in the Film Industry. In P.-Y. Badillo, J.-B. Lesourd (Eds.), *The Media Industries and their Markets: Quantitative Analyses* (195-206), New York: Palgrave Macmillan.
- Engerman, S. L., Gallman, R. E. (Eds.) (1986). *Long-Term Factors in American Economic Growth*, Chicago: University of Chicago Press.
- Epstein, M., Watercutter, A. (2015). *How VR Filmmakers Can Make Classics in Their All-New Medium*. Retrieved 10 September 2015 from <http://www.wired.com/2015/08/virtual-reality-storytelling-essay/>.
- Evans, P., Wurster, T. S. (2000). *Blown to bits: How the New Economy of Information Transforms Strategy*, Boston: Harvard Business School Press.
- Fabrikant, G. (2001). *Sale of DVD's Is Challenging Movie Rental Business*. Retrieved 10 September 2015 from <http://www.nytimes.com/2001/04/16/business/16DISC.html>.

- Falk, B., Wolf, J. (1992). *Handelsbetriebslehre*, 11th ed., Landsberg: Verlag Moderne Industrie.
- Family Video. (Ed.) (2015). *About Us*. Retrieved 09 September 2015 from http://www.familyvideo.com/about_us.php.
- Fell, U. (2001). *Vertikale Integration und vertikale Gegenmacht*, Bayreuth: PCO.
- Fingleton, J. (1997). Competition Between Intermediated and Direct Trade and the Timing of Disintermediation. *Oxford Economic Papers*, 49, 543-556.
- Finney, A. (2010). *The International Film Business: A Market Guide Beyond Hollywood*, London: Routledge.
- Finney, A. (2010a). *Value Chain Restructuring in the Global Film Industry*, Grenoble: Grenoble Ecole de Management. Retrieved 09 September 2015 from http://ec.europa.eu/culture/media/programme/docs/public_cons_media2010/44.pdf.
- Fischer, A. (2012). The Fully Clickable Submission: How Withoutabox Captured the Hearts and Minds of Film Festivals Everywhere. In D. Iordanova, S. Cunningham (Eds.), *Digital Disruption: Cinema Moves On-line* (143-166), St. Andrews: St. Andrews Film Studies.
- FOM. (Ed.) (2014). 3. *FOM Kongress der Medienwirtschaft: Medienwirtschaft 2014 Branchenmonitor der Digitalisierung*. Retrieved 09 September 2015 from http://www.fom.de/fileadmin/fom/presse_aktuell/PDFs/FOM327-K_Medienwirtschaft_2014_14_08_15_RZ_Online.pdf.

- FOM. (Ed.) (2014a). 3. *FOM Kongress der Medienwirtschaft*, Retrieved 09 September 2015 from <https://www.youtube.com/watch?v=IYYI9-dXxxw>.
- Foss, N. J. (1993). Theories of the Firm: Competence and Contractual Perspectives. *Journal of Evolutionary Economics*, 3, 127-144.
- Foss, N. J. (2000). The Theory of the Firm – an Introduction to Themes and Contributions. In N. J. Foss (Ed.), *The Theory of the Firm*, 1 (xv-lxi), London: Routledge.
- Foss, N. J. (Ed.) (2000a). *The Theory of the Firm*, Vol. 1-4, London: Routledge.
- Foss, N. J., Knudsen, C. (1996). *Towards a competence theory of the firm*, New York: Routledge.
- Fritz, B. (2010). *Amazon.com going into movie producing with new website, first look deal with Warner Bros.* Retrieved 09 September 2015 from <http://latimesblogs.latimes.com/entertainmentnewsbuzz/2010/11/amazoncom-going-into-movie-producing-with-new-website-first-look-deal-with-warner-bros.html>.
- Gallaugh, J. M. (2002). E-Commerce and the Undulating Distribution Channel. *Communications of the ACM*, 45 (7), 89-95.
- Garella, P. (1989). Adverse Selection and the Middleman. *Economica*, 56, 395-399.
- Garman, M. B. (1976). Market Microstructure. *Journal of Financial Economics*, 3, 257-275.
- Gehrig, T. (1993). Intermediation in Search Markets. *Journal of Economics & Management Strategy*, 2 (1), 97-120.

- Gellman, R. (1996). Disintermediation and the Internet. *Government Information Quarterly*, 13 (1), 1-8.
- Gerbrandt, L. (2010). *Does movie marketing matter?* Retrieved 11 September 2015 from <http://www.hollywoodreporter.com/news/does-movie-marketing-matter-24514>.
- Gerke, W., Rapp, H. W. (1994). Strukturveränderungen im internationalen Börsenwesen. *Die Betriebswirtschaft*, 54 (1), 5-23.
- Giaglis, G. M., Klein, S., O'Keefe, R. (1999). *Disintermediation, Reintermediation, or Cybermediation? The Future of Intermediaries in Electronic Marketplaces*. Retrieved 09 September 2015 from <http://www.wi.uni-muenster.de/wi/forschen/veroeff/InterVersion.pdf>.
- Giaglis, G. M., Klein, S., O'Keefe, R. (2002). The role of intermediaries in electronic marketplaces: developing a contingency model. *Information Systems Journal*, 12 (3), 231-246.
- Giardina, C. (2011). *Deluxe, Technicolor Begin Orderly Retreat From Film Services*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/news/deluxe-technicolor-begin-orderly-retreat-212459>.
- Giardina, C. (2014). *Deluxe's Hollywood Film Lab to Close May 9*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/behind-screen/deluxes-hollywood-film-lab-close-686600>.
- Giovannini, A., Mayer, C. (Eds.) (1992). *European Financial Integration*, Cambridge: Cambridge University Press.

- Gladney, H. M. (2006). Principles for digital preservation - Focusing on end users' needs rather than those of archiving institutions. *Communications of the ACM*, 49 (2), 111-116.
- Gomery, D. (2004). The Economics of Hollywood: Money and Media. In A. Alexander, J. Owers, R. Carveth, C. A. Hollifield, A. N. Greco (Eds.), *Media Economics: Theory and Practice* (3rd ed., 193-206), London: Routledge.
- Gottmann, J. M. (2009). *Time Series Analysis: A Comprehensive Introduction for Social Scientists*, Cambridge: Cambridge University Press.
- Göbel, E. (2002). *Neue Institutionenökonomik*, Stuttgart: Lucius & Lucius.
- Grant, R. M. (2012). *Contemporary Strategy Analysis*, 8th ed., Hoboken: Wiley.
- Greco, A. (Ed.) (2000). *The Media and Entertainment Industries: Readings in mass communications*, Boston: Allyn and Bacon.
- Greenbaum, S. I., Thakor, A. V. (2007). *Contemporary Financial Intermediation*, 2nd ed., Boston: Elsevier Academic Press.
- Grossman, S. J., Hart, O. (1986). The costs and benefits of ownership: a theory of vertical and lateral integration. In N. J. Foss, (Ed.), *The Theory of the Firm*, 3 (63-89), London: Routledge.
- Gurley, J. G., Shaw, E. S. (1960). *Money in a Theory of Finance*, Washington: Brookings Institution.
- Gümbel, R. (1985). *Handel, Markt und Ökonomik*, Wiesbaden: Gabler.
- Hagel, J. (1996). SPIDER versus SPIDER. *The McKinsey Quarterly*, 1, 4-18.

- Hagenhoff, S. (2004). Kooperationsformen: Grundtypen und spezielle Ausprägungen. *Arbeitspapiere der Abt. Wirtschaftsinformatik II*, 4 (2004).
- Hamilton, J. D. (1994). *Time Series Analysis*, Princeton: Princeton University Press.
- Hammes, M., Poser, G. (1992). Die Messung von Transaktionskosten. *Das Wirtschaftsstudium*, 21 (11), 885-889.
- Hancock, D. (2015). *Deluxe and Technicolor end long-standing duopoly*. Retrieved 05 September 2015 from <https://technology.ihs.com/529671/deluxe-and-technicolor-end-long-standing-duopoly>.
- Harries, D. (Ed.) (2002). *The New Media Book*, London: BFI.
- Hart, O. (1995). *Firms, Contracts, and Financial Structure*, Oxford: Oxford University Press.
- Hart, O., Moore, J. (1990). Property rights and the nature of the firm. In N. J. Foss, (Ed.), *The Theory of the Firm*, 3 (90-127), London: Routledge.
- Hass, B. (2002). *Geschäftsmodelle von Medienunternehmen: Ökonomische Grundlagen und Veränderungen durch neue Informations- und Kommunikationstechnik*, Wiesbaden: Deutscher Universitäts-Verlag.
- Hass, B. (2003). Desintegration und Reintegration im Mediensektor: Wie sich Geschäftsmodelle durch Digitalisierung verändern. In A. Zerdick, A. Picot, K. Schrape, J.-C. Burgelman, R. Silverstone, V. Feldmann, D. K. Heger, C. Wolff (Eds.), *E-Merging Media: Kommunikation und Medienwirtschaft der Zukunft: Digitalisierung der Medienwirtschaft* (33-57), Berlin: Springer.

- Hawkins, R., Vickery, G. (2008). *Remaking the Movies: Digital Content and the Evolution of the Film and Video Industries*, Paris: OECD.
- Heinrich, J. (2010). *Medienökonomie Band 2: Rundfunk und Fernsehen*, 2nd ed., Wiesbaden: Westdeutscher Verlag.
- Hellwig, M. (1991). Banking, financial intermediation and corporate finance. In A. Giovannini, C. Mayer (Eds.), *European Financial Integration* (35-72), Cambridge: Cambridge University Press.
- Hennig-Thurau, T., Houston, M. B., Sridhar, S. (2006). Can good marketing carry a bad product? Evidence from the motion picture industry. *Marketing Letters*, 17, 205-219.
- Hennig-Thurau, T., Wruck, O. (2000). Warum wir ins Kino gehen: Erfolgsfaktoren von Kinofilmen. *Marketing ZFP*, 22, (322), 241-259.
- Hermann, M. (2002). *Vom Broadcast zum Personalcast: Ökonomische Potenziale der Individualisierung audiovisueller Medienprodukte*, Wiesbaden: Deutscher Universitäts-Verlag.
- Hess, T. (Ed.) (2007). *Ubiquität, Interaktivität, Konvergenz und die Medienbranche*, Göttingen: Universitätsverlag Göttingen.
- Hess, T., Walter, B.v. (2007). Toward Content Intermediation: Shedding New Light on the Media Sector. *The International Journal on Media Management*, 8 (1), 2-8.
- Hirth, H. (2000). *Zur Theorie der Marktstruktur*, Stuttgart: Schäffer-Poeschel.
- Hofler, R. (2009). Silver Linings? It's a Myth that Showbiz is Recession Proof, *Variety*, August 10, 2009.

- Hollifield, C. A., Wicks, J. L., Sylvie, G., Lowrey, W. (2015). *Media Management - a Casebook Approach*, 5th ed., New York: Routledge.
- Holmström, B., Roberts, J. (1998). The Boundaries of the Firm Revisited. *Journal of Economic Perspectives*, 12, (4), 73-94.
- Hopf, C. (1979). Soziologie und qualitative Sozialforschung. In C. W. Hopf, E. Weingarten (Eds.), *Qualitative Sozialforschung* (11-37), Stuttgart: Klett Cotta.
- Hoover, S. (2013). *Film Production Theory and Practice*, Marston Gate: Stephen Hoover.
- Hunziker, D. (2003). *Bricks & Clicks im E-Business*, Lohmar: Eul.
- Hunt, S. D., Goolsby, J. (1988). The Rise and Fall of the Functional Approach to Marketing: A Paradigm Displacement Perspective. In T. Nevett, R. A. Fullerton (Eds.), *Historical Perspectives in Marketing* (35-51), Lexington: Lexington Books.
- Husak, W. (2004). Economic and Other Considerations for Digital Cinema. *Signal Processing: Image Communication*, 19, 921-936.
- Iordanova, D., Cunnigham, S. (Eds.) (2012). *Digital Disruption: Cinema Moves Online*, St. Andrews: St. Andrews Film Studies.
- IMDb. (2015). *Country Release Data*. Retrieved 23 May 2015 from <http://www.imdb.com>.
- Jallat, F., Capek, M. J. (2001). Disintermediation in Question: New Economy, New Networks, New Middlemen. *Business Horizons*, 44 (2), 55-60.
- Janello, C. (2010). *Wertschöpfung im Digitalisierten Buchmarkt*, Wiesbaden: Gabler.

- Jensen, M. C., Meckling, W. H. (1976). The theory of the firm: managerial behavior, agency costs and ownership structure. In N. J. Foss (Ed.), *The Theory of the Firm*, 1 (248-306), London: Routledge.
- Jin, L., Robey, D. (1999). Explaining Cybermediation: An Organizational Analysis of Electronic Retailing. *International Journal of Electronic Commerce*, 3 (4), 47-65.
- Joint Economic Committee – 91st Congress – 1st Session (Ed.) (1969). *The Analysis and Evaluation of Public Expenditures: The PPB-System*, Vol. 1, Washington: U.S. Government Printing Office.
- Kahin, B., Varian, H. R. (2000). *Internet Publishing and Beyond: The Economics of Digital Information and Intellectual Property*, Cambridge: MIT Press.
- Karmasin, M., Knoche, M., Winter, C. (Eds.) (2001). *Medienwirtschaft und Gesellschaft I: Medienunternehmung und die Kommerzialisierung von Öffentlichkeit*, Münster: LIT.
- Katz, M. L. (2004). Industry Structure and Competition: Absent Distribution Bottlenecks. In E. Noam, J. Groebel, D. Gerbarg (Eds.), *Internet Television* (31–60), Mahwah: Lawrence Erlbaum.
- Kaufer, E. (1980). *Industrieökonomik – Eine Einführung in die Wettbewerbstheorie*, München: Vahlen.
- Kelley, S. (2015). *Digital Cinema Distribution Coalition Predicts 32,000 Screens by 2018*. Retrieved 05 September 2015 from <http://variety.com/2015/film/news/digital-cinema-distribution-coalition-predicts-32000-screens-by-2018-1201559742/>.

- Klein, B., Crawford, R. G., Alchian, A. A. (1978). Vertical Integration, Appropriable Rents, and the Competitive Contracting Process. *The Journal of Law and Economics*, 21 (2), 297-326.
- Klein, S., Selz, D. (2000). Cybermediation in Auto Distribution: Channel Dynamics and Conflicts. *Journal of Computer-Mediated Communication*, 5 (3), w/o p.
- Kiefer, M. L., Steiniger, C. (2014): *Medienökonomik*, 3rd ed., München: Oldenbourg.
- Koch, H., Albach, H. (1962). *Zur Theorie der Unternehmung - Festschrift zum 65. Geburtstag von Erich Gutenberg*, Wiesbaden: Gabler.
- Koopsmanns, L. H. (1974). *The Spectral Analysis of Time Series*, New York: Academic Press.
- Kotler, P., Armstrong, G. (2012). *Principles of Marketing*, 14th ed., Boston: Prentice-Hall.
- Kreuzer, H. (2009). *Digitale Film-Distribution - Funktionsweise und kritische Beleuchtung der Auswirkungen auf die Filmindustrie*, Wien: Filmakademie Wien.
- Kruse, J. (1996). Publizistische Vielfalt und Medienkonzentration zwischen Marktkräften und politischen Entscheidungen. In K.-D. Altmeppen (Ed.), *Ökonomie der Medien und des Mediensystems* (25-52), Opladen: Westdeutscher Verlag.
- Kühn, T., Koschel, K.-V. (2011). *Gruppendiskussionen: Ein Praxis Handbuch*, Wiesbaden: VS Verlag für Sozialwissenschaften.
- Küng, L. (2008). *Strategic Management in the Media: Theory to Practice*, London: SAGE.

- Kürble, P. (2005). Total Outsourcing? Ein neuer alter Trend auf dem Prüfstand unter Verwendung des Transaktionskostenansatzes. *FOM-Schriftenreihe: Beiträge für die Wirtschaftspraxis*, 4.
- Lamb, R. (Ed.) (1984). *Competitive Strategic Management*, Englewood Cliffs: Prentice-Hall.
- Lang, G. (2001). Dis-Intermediation im Mediensektor: Gewinner, Verlierer, und Anpassungsstrategien. In M. Karmasin, M. Knoche, C. Winter (Eds.), *Medienwirtschaft und Gesellschaft I: Medienunternehmung und die Kommerzialisierung von Öffentlichkeit* (71-82), Münster: LIT.
- Langlois, R. N. (1992). Transaction-cost economics in real time. In N. J. Foss (Ed.), *The Theory of the Firm*, 4 (167-194), London: Routledge.
- Leitherer, E. (1961). *Geschichte der handels- und absatzwirtschaftlichen Literatur*, Köln: Vs Verlag für Sozialwissenschaften.
- Leland, H. E., Pyle, D. H. (1977). Informational Asymmetries, Financial Configuration, and Financial Intermediation. *The Journal of Finance*, 32 (2), 371-387.
- Levy, F. (2000). *Hollywood 101: The Film Industry*, Los Angeles: Renaissance Books.
- Linde, F. (2008). *Ökonomie der Information*, 2nd ed., Göttingen: Universitätsverlag Göttingen.
- Lipson, M. L. (2003). Market microstructure and corporate finance. *Journal of Corporate Finance*, 9, 377-384.

- Litman, B. (2000). The Structure of the Film Industry. In A. Greco (Ed.), *The Media and Entertainment Industries: Readings in mass communications* (99-121), Boston: Allyn and Bacon.
- Lippman, S., Rumelt, R. (1982). Uncertain imitability: An analysis of interfirm differences in efficiency under competition. *Bell Journal of Economics*, 13, 418-438.
- MacKenzie, H. F., Pearce, M. R. (1995). Some Problems in Market Distribution: Revisited. *7th Marketing History Conference Proceedings*, VII, 73-81.
- Malone, T., Yates, J., Benjamin, R. (1987). Electronic Markets and Electronic Hierarchies. *Communications of the ACM*, 30 (6), 484-497.
- Marré, H. (1974). *Handelsfunktionen*. In B. Tietz (Ed.), *Handwörterbuch der Absatzwirtschaft* (709-720), Stuttgart: C.E. Poeschel.
- Mason, E. S. (1939). Price and Production Policies of Large-Scale Enterprise. *American Economic Review*, 29, 61-74.
- Mason, E. S. (1957). *Economic Concentration and the Monopoly Problem*, Cambridge: Harvard University Press.
- Mayering, P. (2010). *Qualitative Inhaltsanalyse: Grundlagen und Techniken*. 11th ed., Weinheim: Beltz.
- McClintock, P. (2014). *\$200 Million and Rising: Hollywood Struggles With Soaring Marketing Costs*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/news/200-million-rising-hollywood-struggles-721818>.

- McClintock, P. (2015). *Most Theater Circuits Won't Screen Netflix's War Drama Beasts of No Nation*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/news/theater-circuits-wont-screen-netflixs-778993>.
- McClintock, P., Jarvey, N. (2015). *Amazon's Spike Lee Movie "Chi-Raq" to Debut in Theaters for December Oscar Run (Exclusive)*. Retrieved 08 September 2015 from <http://www.hollywoodreporter.com/news/amazon-prime-day-spike-lee-808769>.
- McDonald, P. (2007). *The contemporary American film industry*, Oxford: Blackwell.
- McPhee, W. N. (1963). *Formal Theories of Mass Behavior*, New York: Free Press.
- McNary, D. (2015). *SAG-AFTRA Approves Higher Commissions for Agents in Six Cities*. Retrieved 05 September 2015 from <http://variety.com/2015/film/news/sag-aftra-approves-higher-commissions-for-agents-in-six-cities-1201430404/>.
- Meinhövel, H. (1999). *Defizite der Principal-Agent-Theorie*, Lohmar: Eul.
- Merton, R. C. (1995). A Functional Perspective of Financial Intermediation. *Financial Management*, 24 (2), 23-41.
- Meyer, P. W. (1973). *Die machbare Wirtschaft - Grundlagen des Marketing*, Essen: Girardet.
- Mikdashi, Z. M. (2001). *Financial Intermediation in the 21st century*, New York: Palgrave.

- Mishra, P., Jayadevan, P. (2015). *Amazon readies \$5 billion chest for bigger play in India, to launch subscription-base*. Retrieved 08 September 2015 from http://articles.economictimes.indiatimes.com/2015-07-20/news/64638620_1_amazon-india-indian-internet-amazon-prime.
- MPA. (2003). *MPA Market Statistic 2002*. Retrieved 24 May 2015 from <http://www.stop-runaway-production.com/wp-content/uploads/2009/07/2002-MPAA-Market-Stats-60-pages.pdf>.
- MPA. (2006). *MPA Market Statistic 2005*. Retrieved 24 May 2015 from <http://www.stop-runaway-production.com/wp-content/uploads/2009/07/2005-MPAA-Market-Stats-26-pages.pdf>.
- MPAA. (2008). *Entertainment Industry Market Statistics 2007*. Retrieved 24 May 2015 from <https://robertoigarza.files.wordpress.com/2008/11/rep-entertainment-industry-market-statistics-mp-2007.pdf>.
- MPAA. (2009). *Theatrical Market Statistics 2008*. Retrieved 24 May 2015 from <http://www.stop-runaway-production.com/wp-content/uploads/2009/07/2008-MPAA-Theatrical-Stats.pdf>.
- MPAA. (2010). *Theatrical Market Statistics 2009*. Retrieved 24 May 2015 from http://www.womeninfilm.ca/_Library/docs/MPAATheatricalMarketStatistics2009.pdf.
- MPAA. (2010a). *Trade barriers to the export of U.S. Filmed Entertainment*. Retrieved 24 March 2014 from <http://www.mpa.org/resources/69721865-ac82-4dc4-88ec-01ee84c651a1.pdf>.

- MPAA. (2015). *Theatrical Market Statistics 2014*. Retrieved 24 May 2015 from <http://www.mpa.org/wp-content/uploads/2015/03/MPAA-Theatrical-Market-Statistics-2014.pdf>.
- MPAA. (2015a). *Our Story*. Retrieved 24 May 2015 from <http://www.mpa.org/our-story/>.
- Munson, E. (2015). *This Harvard scientist is coding an entire movie onto DNA*. Retrieved 24 May 2015 from <http://www.globalpost.com/article/6628554/2015/08/09/harvard-scientist-coding-entire-movie-dna>.
- Myers, J. H. (1986). *Marketing*, New York: McGraw-Hill.
- Nardone, J. M. (1982). Is the Movie Industry Contracyclical?. *Cycles*, 33 (3).
- Nash Information Services. (2015). *Production cost*. Retrieved 25 May 2015 from <http://www.the-numbers.com>.
- NATO. (Ed.) (2015). *Cinema Technologies*. Retrieved 08 September 2015 from <http://natoonline.org/initiatives/cinema-technologies/>.
- Negroponte, N. (1996). *Being digital*, New York: Vintage Books.
- Nelson, R., Winter, S. (1982). *An evolutionary theory of economic change*, Cambridge: Harvard University Press.
- Neumann, M. (1994). *Theoretische Volkswirtschaftslehre III*, 2nd ed., München: Vahlen.
- Neumann, M. (Ed.) (1994a). *Unternehmensstrategie und Wettbewerb auf globalen Märkten und Thünen-Vorlesung*, Berlin: Duncker & Humblot.
- Neuman, W. R. (Ed.) (2010). *Media, Technology, and Society: Theories of Media Evolution*, Ann Arbor: University of Michigan Press.

- Nevett, T., Fullerton, R. A. (Eds.) (1988). *Historical Perspectives in Marketing*, Lexington: Lexington Books.
- Nieschlag, R., Dichtl, E., Hörschgen, H. (2002). *Marketing*, 19th ed., Berlin: Duncker und Humblot.
- Noam, E. (2010). Hollywood 2.0: How Internet Distribution Will Affect the Film Industry. In W. R. Neuman (Ed.), *Media, Technology, and Society: Theories of Media Evolution* (59-68), Ann Arbor: University of Michigan Press.
- Noam, E., Groebel, J., Gerbarg, D. (Eds.) (2004). *Internet Television*, Mahwah: Lawrence Erlbaum.
- Oberender, P. (1994). Industrieökonomik. *Das Wirtschaftsstudium*, 23 (2), 65-73.
- Oberparleiter, K. (1955). *Funktionen und Risiken des Warenhandels*, Wien: Springer Vienna.
- Obst, L. (2013). *Sleepless in Hollywood – Tales from the New Abnormal in the Movie Business*, New York: Simon & Schuster.
- O'Hara, M. (1997). *Market Microstructure Theory*, Malden: Blackwell Business.
- Owers, J., Carveth, R., Alexander, A. (1998). An Introduction to Media Economics: Theory and Practice. In A. Alexander, J. Owers, R. Carveth, C. A. Hollifield, A. N. Greco (Eds.), *Media Economics: Theory and Practice* (3rd ed., 1-43), London: Routledge.
- Pachet, F., Roy, P., Cazaly, D. (1999). A Combinatorial Approach to Content-Based Music Selection. *Proceedings of the IEEE Multimedia Computing and Systems International Conference*.

- Pagani, M. (2003). *Multimedia and Interactive Digital TV: Managing the Opportunities Created by Digital Convergence*, Hershey: IRM Press.
- Palvia, S. C. J., Vemuri, V. K. (1999). Distribution Channels in Electronic Markets. *Electronic Markets*, 9 (2), 118-125.
- Parolini, C. (1999). *The value net: a tool for competitive strategy*, Chichester: Wiley.
- Pascal, A. (2002). Ich liebe Spektakel: Interview mit Amy Pascal. *Der Spiegel*, 43, 104–107.
- Peiseler, E. (1990). *Börsencomputersysteme – Eine ökonomische und rechtliche Analyse*, Köln: Müller Botermann.
- Penrose, E. (1955). Research on the business firm: limits to growth and size of firms. In N. J. Foss (Ed.), *The Theory of the Firm*, 4 (3-14), London: Routledge.
- Perry, M. K. (1989). Vertical Integration: Determinants and Effects. In R. Schmalensee, R. D. Willig (Eds.), *Handbook of Industrial Organization*, 1 (183-255), Amsterdam: North-Holland.
- Pfingsten, A. (Ed.) (1997). *Betriebs- und Volkswirtschaftslehre: Geschwisterliebe und Familienzwist*, München: Accedo.
- Picard, R. G. (2002). *The Economics and Financing of Media Companies*, New York: Fordham University Press.
- Picard, R. G. (2011). *The Economics and Financing of Media Companies*, 2nd ed., New York: Fordham University Press.
- Picot, A. (1986). Transaktionskosten im Handel. *Betriebs-Berater*, 27, 1-16.

- Picot, A. (1991). Ein neuer Ansatz zur Gestaltung der Leistungstiefe. *Zeitschrift für betriebswirtschaftliche Forschung*, 43 (4), 336–357.
- Picot, A., Bortenlänger, C., Röhl, H. (1997). Organization of Electronic Markets: Contributions from the New Institutional Economics. *The Information Society*, 13, 107-123.
- Picot, A., Dietl, H. (1990). Transaktionskostenökonomik. *Das Wirtschaftsstudium*, 19 (4), 178-183.
- Picot, A., Heger, D. K. (2001). Handel in der Internet-Ökonomie. *Zeitschrift Führung + Organisation*, 70 (3), 128-134.
- Picot, A., Janello, C. (2007). *Wie das Internet den Buchmarkt verändert - Ergebnisse einer Delphistudie*, Berlin: Friedrich-Ebert-Stiftung.
- Picot, A., Reichwald, R., Wigand, R. T. (2003). *Die grenzenlose Unternehmung: Information, Organisation und Management*, 5th ed., Wiesbaden: Gabler.
- Picot, A., Schmid, M. S., Kempf, M. (2007). Die Rekonfiguration der Wertschöpfungssysteme im Medienbereich. In T. Hess (Ed.), *Ubiquität, Interaktivität, Konvergenz und die Medienbranche* (205-257), Göttingen: Universitätsverlag Göttingen.
- Pindyck, R. S., Rubinfeld, D. L. (2013). *Mikroökonomie*, 8th ed., München: Pearson Studium.
- Porter, M. E. (2004). *Competitive advantage*, New York: Free Press.

- Prag, J., Casavant, J. (1994). An empirical study of the determinants of revenues and marketing expenditures in the motion picture industry. *Journal of Cultural Economics*, 18, 217-235.
- Prahalad, C. K., Hamel, G. (1990). The Core Competence of the Corporation. *Harvard Business Review*, 68 (3), 79-91.
- Princeton University. (2015). *WordNet*. Retrieved 09 September 2015 from <http://wordnet.princeton.edu/>.
- Radner, R. (1996). Bounded rationality, indeterminacy, and the theory of the firm. *The Economic Journal*, 106, 1360-1373.
- Rangan, K., Menezes, M. A. J., Maier, E. P. (1992). Channel Selection for New Industrial Products: A Framework, Method, and Application. *Journal of Marketing*, 56, 69-82.
- Ravid, S. A. (1999). Information, blockbusters and stars: A study of the film industry. *Journal of Business*, 72, 463-492.
- Reinstein, D., Snyder, C. (2005). The influence of expert reviews on consumer demand for experience goods: a case study of movie critics. *Journal of Industrial Economics*, 53, 27-52.
- Resnick, P., Zeckhauser, R., Avery, C. (1995). Roles for Electronic Brokers. In G. W. Brock (Ed.), *Toward a competitive telecommunication industry: selected papers from the 1994 Telecommunications Policy Research Conference* (289-304), Hillsdale: Erlbaum.

- Richardson, G. B. (1972). The organisation of industry. In N. J. Foss (Ed.), *The Theory of the Firm*, 4 (15-29), London: Routledge.
- Richter, R., Bindseil, U. (1995). Neue Institutionenökonomik. *Das Wirtschaftsstudium*, 24 (3), 132-140.
- Richter, R., Furubotn, E. G. (2010). *Neue Institutionenökonomik*, 4th ed., Tübingen: Mohr Siebeck.
- Rindfleisch, A., Heide, J. B. (1997). Transaction Cost Analysis: Past, Present, and Future Applications. *Journal of Marketing*, 61, 30-54.
- Rombach, E. M. (1993). *Finanzintermediation und Bankenregulierung*, St. Gallen: Hochschule für Wirtschafts-, Rechts- und Sozialwissenschaften.
- Rose, F. (1999). *The Economics, Concept, and Design of Information Intermediaries*, New York: Physica-Verlag.
- Rubinstein, A., Wolinsky, A. (1987). Middlemen. *The Quarterly Journal of Economics*, 102, 581-593.
- Rumelt, R. (1984). Towards a strategic theory of the firm. In R. Lamb (Ed.), *Competitive Strategic Management* (556-570), Englewood Cliffs: Prentice-Hall.
- Russell, K. (2015). *Here's What We Need to Do to Get VR to Take Off*. Retrieved 10 September 2015 from <http://www.wired.com/2015/08/vr-creative-process/>.
- Sarkar, M. B., Butler, B., Steinfield, C. (1995). Intermediaries and Cyber-intermediaries: A Continuing Role for Mediating Players in the Electronic Marketplace. *Journal of Computer-Mediated Communication*, 1 (3).

- Sarkar, M. B., Butler, B., Steinfield, C. (1998). Cybermediaries in Electronic Marketspace: Toward Theory Building. *Journal of Business Research*, 41 (3), 215-221.
- Schär, J. (1923). *Allgemeine Handelsbetriebslehre*, 5th ed., Leipzig: Gloeckner.
- Scherer, F. M. (1980). *Industrial Market Structure and Economic Performance*, 2nd ed., Boston: Houghton Mifflin.
- Scherer, F. M., Ross, D. (1990). *Industrial Market Structure and Economic Performance*, 3rd ed., Boston: Houghton Mifflin.
- Schildhauer, T. (Ed.) (2003). *Lexikon Electronic Business*, München: Oldenbourg.
- Schmalensee, R., Willig, R. D. (Eds.) (1989). *Handbook of Industrial Organization*, Vol. 1, Amsterdam: North-Holland.
- Schmidt, R. H., Hackethal, A., Tyrell, M. (1999). Disintermediation and the Role of Banks in Europe. *Journal of Financial Intermediation*, 8, 36–67.
- Schmitz, S. W. (2000). The Effects of Electronic Commerce on the Structure of Intermediation. *Journal of Computer-Mediated Communication*, 5 (3).
- Schuler, F. (2002). *Der Einfluss des Internets auf die Unternehmensgrenzen*, Wiesbaden: Deutscher Universitäts-Verlag.
- Schumann, M., Hess, T. (2014). *Grundfragen der Medienwirtschaft*, 5th ed., Berlin: Gabler.
- Schoder, D. (2000). *Die ökonomische Bedeutung von Intermediären im Electronic Commerce*, Freiburg: Universität Freiburg.

- Schoder, D. (2003). Intermediär. In T. Schildhauer (Ed.), *Lexikon Electronic Business* (171-172), München: Oldenbourg.
- Schwalbach, J. (1994). Stand und Entwicklung der Industrieökonomik. In M. Neumann (Ed.), *Unternehmensstrategie und Wettbewerb auf globalen Märkten und Thünen-Vorlesung* (93-109), Berlin: Duncker & Humblot.
- Schwalbach, J. (1997). Industrieökonomik und Betriebswirtschaftslehre. In A. Pfingsten (Ed.), *Betriebs- und Volkswirtschaftslehre: Geschwisterliebe und Familienzweist* (165-181), München: Accedo.
- Scott, J. (2000). Emerging Patterns from the Dynamic Capabilities of Internet Intermediaries. *Journal of Computer-Mediated Communication*, 5 (3).
- Selva, L. C. (2012). *La influencia de la fotografía cinematográfica en el estilo visual. Análisis del estilo de Dick Pope en las obras cinematográficas del director Mike Leigh: Life is sweet, Naked, Secrets and lies, Career girls, Topsy-Turvy, All or nothing, Vera Drake and Happy-go-Lucky*, Murcia: UCAM.
- Setoodeh, R. (2015). *How Netflix's 'Beasts of No Nation' Could Change the Movie Business*. Retrieved 05 September 2015 from <http://variety.com/2015/film/news/beasts-of-no-nation-netflix-idris-elba-cary-fukunaga-1201582041>.
- Seufert, W. (2004). Medienvertrieb über das Internet - Ende der Intermediäre? In K. D. Altmeppen, M. Karmasin (Eds.), *Medien und Ökonomie: Problemfelder der Medienökonomie* (63-93), Wiesbaden: VS Verlag für Sozialwissenschaften.

- Shapiro, C., Varian, H. R. (1998). *Information Rules - A Strategic Guide to the Network Economy*, Boston: Harvard Business School Press.
- Sharma, A., Dominguez, L. V. (1992). Channel Evolution: A Framework for Analysis. *Journal of the Academy of Marketing Science*, 29 (1), 1-15.
- Shaw, A. W. (1912). Some Problems in Market Distribution. *Quarterly Journal of Economics*, 26, 703-765.
- Shelanski, H. A., Klein, P. G. (1995). Empirical Research in Transaction Cost Economics: A Review and Assessment. *The Journal of Law, Economics, & Organization*, 11 (2), 335-361.
- Shepherd, W. G. (1997). *The Economics of Industrial Organization – Analysis, Markets, Policies*, 4th ed., Upper Saddle River: Prentice-Hall.
- Sheth, J. N., Gardner, D. M., Garrett, D. E. (1988). *Marketing Theory: Evolution and Evaluation*, New York: Wiley.
- Siegert, G. (2003). Medienökonomie. In G. Bentele, H. B. Brosius, O. Jarren (Eds.), *Öffentliche Kommunikation - Handbuch Kommunikations- und Medienwissenschaft* (228-244), Wiesbaden: VS Verlag für Sozialwissenschaften.
- Silver, J. D. (2007). *Hollywood's dominance of the movie industry: How did it arise and how has it been maintained?*, Queensland: Queensland University of Technology.
- Skiera, B., Spann, M. (2002). Flexible Preisgestaltung im Electronic Business. In R. Weiber (Ed.), *Handbuch Electronic Business* (2nd ed., 689-706), Wiesbaden: Gabler.

- Smith, A., Cannan, E., Stigler, G. J. (1976). *An Inquiry into the Nature and Causes of the Wealth of Nations*, Chicago: University of Chicago Press.
- Spajić, L. D. (2002). *Financial Intermediation in Europe*, Boston: Springer.
- Spulber, D. F. (1999). *Market microconfiguration: intermediaries and the theory of the firm*, Cambridge: Cambridge University Press.
- Stabell, C. B., Fjeldstad, Ø. D. (1998). Configuring Value for Competitive Advantage: on Chains, Shops, and Networks. *Strategic Management Journal*, 19, 413–437.
- Sun, R. (2015). *Why Agencies Don't Care About The Fat Jew's Plagiarism Problem*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/news/why-agencies-dont-care-fat-816443>.
- Sundance. (2014). *30 years of Sundance film festival*. Retrieved 05 September 2015 from <http://www2.sundance.org/festivalhistory/>.
- Sundhoff, E. (1956). Besprechung zu Gutenberg, *BFuP* 1956, 270.
- Spiegel. (2003). *Sundance Filmfestival: Wo Hollywood-Stars ihre kreativen Seiten ausleben*. Retrieved 05 September 2015 from <http://www.spiegel.de/kultur/kino/sundance-filmfestival-wo-hollywood-stars-ihre-kreativen-seiten-ausleben-a-230773.html>.
- Swani, S., Eliashberg, J., Weinberg, C. (1999). SilverScreener: A modelling approach to Movie Screens Management. *Marketing Science*, 18 (3), 352-372.

- Szalai, G. (2014). *Netflix Gets Rights to Sony Animation Films*. Retrieved 05 September 2015 from <http://www.hollywoodreporter.com/news/netflix-gets-rights-sony-animation-707134>.
- Szyperski, N., Gagsch, S., Trilling, S. (1996). Strukturdynamik der Medienmärkte - Zukunftsperspektiven für neue Mediendienste, *Abschlussbericht des Arbeitskreises 6 - Mediendienste des Projektes Dienstleistung 2000plus der Universität zu Köln*.
- Teece, D. J. (1982). Towards an economic theory of the multiproduct firm. In N. J. Foss (Ed.), *The Theory of the Firm*, 4 (217-242), London: Routledge.
- Teece, D. J., Rumelt, R., Dosi, G., Winter, S. (1994). Understanding corporate coherence: Theory and evidence. In N. J. Foss (Ed.), *The Theory of the Firm*, 4 (74-101), London: Routledge.
- Teece, D. J., Pisano, G. P., Shuen, A. (1990). *Firm capabilities, resources, and the concept of strategy*, Berkeley: University of California.
- Thomas, D. (2002). Innovation, Piracy, and the Ethos of New Media. In D. Harries (Ed.), *The New Media Book* (82-91), London: BFI.
- THR. (Ed.) (2014). *Hollywood Salaries Revealed, From Movie Stars to Agents (and Even Their Assistants)*. Retrieved 11 September 2015 from <http://www.hollywoodreporter.com/news/hollywood-salaries-revealed-movie-stars-737321>.
- Tietz, B. (Ed.) (1974). *Handwörterbuch der Absatzwirtschaft*, Stuttgart: C.E. Poeschel.

- Tietz, B. (1993). *Der Handelsbetrieb Grundlagen der Unternehmenspolitik*, 2nd ed., München: Vahlen.
- Tietz, B. (1993a). *Marketing*, 3rd ed., Düsseldorf: Werner.
- Tietz, D. (2007). *Der Einfluss des Internets auf Intermediäre im Tourismus*, Wiesbaden: Deutscher Universitäts-Verlag.
- Tirole, J. (1995). *Industrieökonomik*, München: Oldenbourg.
- Tuomola, A. (2004). Disintermediation and Reintermediation of the Sound Recording Value Chain: Two Case Studies. *Journal of Media Business Studies*, 1 (1), 27-46.
- UCAM-FOM (Eds.) (2016). *UCAM-FOM Doctoral School of Business: Yearbook 2015*, Herzogenrath: Shaker.
- Udland, M. (2015). *Netflix stock explodes after earnings*. Retrieved 08 September 2015 from <http://uk.businessinsider.com/netflix-second-quarter-earnings-2015-7?r=US&IR=T>.
- Ulin, J. C. (2013). *The business of media distribution - Monetizing film, TV, and video content*, 2nd ed., Oxford: Focal Press.
- Ünlü, V. (2005). *Content protection - Economic analysis and techno-legal implementation*, München: Utz.
- Varian, H. R. (1989). Price Discrimination. In R. Schmalensee, R. D. Willig (Eds.), *Handbook of Industrial Organization*, 1 (597-648), Amsterdam: North-Holland.
- Varian, H. R. (2011). *Grundzüge der Mikroökonomik*, 8th ed., München: Oldenbourg.

- Variety. (Ed.) (2010). *Deluxe, EchoStar pact boosts d-cinema*. Retrieved 05 September 2015 from <http://variety.com/2010/digital/news/deluxe-echostar-pact-boosts-d-cinema-1118024407/>.
- Verrier, R. (2013). *Studios and exhibitors unveil digital cinema network*. Retrieved 05 September 2015 from <http://articles.latimes.com/2013/oct/23/entertainment/la-et-ct-studios-digital-cinema-20131023>.
- Verrier, R. (2014). *CinemaCon 2014: Cinemas see satellite tech as ticket to bigger revenue*. Retrieved 05 September 2015 from <http://www.latimes.com/entertainment/envelope/cotown/la-fi-ct-cinemark-satellite-20140325-story.html>.
- Vogel, H. L. (2015). *Entertainment Industry Economics*, 9th ed., Cambridge: Cambridge University Press.
- Wallis, J. J., North, D. (1986). Measuring the Transaction Sector in the American Economy, 1870-1970. In S. L Engerman, R. E. Gallman (Eds.), *Long-Term Factors in American Economic Growth* (95-162), Chicago: University of Chicago Press.
- Walter, B. v. (2007). *Intermediation und Digitalisierung*, Wiesbaden: Deutscher Universitäts-Verlag.
- Walter, B. v., Hess, T. (2005). Content-Intermediation - Konzept und Anwendungsgebiet. *Arbeitspapiere des Instituts für Wirtschaftsinformatik und Neue Medien*, 5 (05), München: LMU München.

- Warner Bros. (Ed.) (2015). *Warner Bros. Entertainment Inc.* Retrieved 05 September 2015 from <http://www.warnerbros.com/studio/divisions/warner-bros-entertainment-inc>.
- Warner Bros. (Ed.) (2015a). *Studio Facilities*. Retrieved 05 September 2015 from <http://www.warnerbros.com/studio/divisions/studio-facilities>.
- Weiber, R. (2002). Markterfolg im Electronic Business durch wettbewerbsorientiertes Informationsmanagement. In R. Weiber (Ed.), *Handbuch Electronic Business* (2nd ed., 143-180), Wiesbaden: Gabler.
- Weiber, R. (Ed.) (2002a). *Handbuch Electronic Business*, 2nd ed., Wiesbaden: Gabler.
- Weiler, P. C., Myers, G. (2011). *Entertainment, Media, and the Law: Text, Cases, Problems*, 4th ed., St. Paul: West Academic Publishing.
- Wernerfelt, B. (1984). A Resource-based View of the Firm. *Strategic Management Journal*, 5, 171-180.
- Westarp, F. v., Weber, S., Buxmann, P., König, W. (1997). Communication Services Supplied by Intermediaries in Information Networks: The EDI Example, *Institut für Wirtschaftsinformatik*, 97 (2), Frankfurt.
- Westerfield, R. B. (1915): *Middlemen In English Business: Particularly Between 1660 And 1760*, New Haven: Kelley Pubs.
- Wigand, R. T. (1997). Electronic Commerce: Definition, Theory, and Context. *The Information Society*, 13 (1), 1-16.
- Wigand, R. T., Benjamin, R. I. (1995). Electronic Commerce: Effects on Electronic Markets. *Journal of Computer-Mediated Communication*, 1 (3).

- Williamson, O. E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: Free Press.
- Williamson, O. E. (1990). A Comparison of Alternative Approaches to Economic Organization. *Journal of Institutional and Theoretical Economics*, 14, 61-71.
- Williamson, O. E. (1990a). *Die ökonomischen Institutionen des Kapitalismus: Unternehmen, Märkte, Kooperationen*, Tübingen: Mohr Siebeck.
- Williamson, O. E. (1991). Comparative economic organization of discrete structure alternatives. In N. J. Foss (Ed.), *The Theory of the Firm*, 3 (219-251), London: Routledge.
- Williamson, O. E. (1996). *Transaktionskostenökonomik*, 2nd ed., Hamburg: Lit.
- Winkler, G. M. (1989). Intermediation under trade restrictions. *Quarterly Journal of Economics*, 104 (2), 299-324.
- Wimmer, B. S., Townsend, A. M., Chezum, B. E. (2000). Information Technologies and the Middleman: The Changing Role of Information Intermediaries in an Information-Rich Economy. *Journal of Labor Research*, 21 (3), 407-418.
- Wirtz, B. W. (1995). Technologie-Innovationen, Marketingstrategie und Preismanagement im Handel. *THEXIS*, 12 (4), 46-51.
- Wirtz, B. W. (2012). *Medien- und Internetmanagement*, 8th ed., Wiesbaden: Gabler.
- Wirtz, B. W. (2013). *Electronic Business*, 4th ed., Wiesbaden: Gabler.
- Wirtz, B. W., Kleineicken, A. (2000). Geschäftsmodelltypologien im Internet. *WiST*, 29 (11), 628-635.

- Wrobel, F. (2014). *Digital Video and Disintermediation in the Value System of the Motion Picture Industry*, Herzogenrath: Shaker.
- Wrobel, F. (2014a). *Digitalisierung und Intermediation in der Medienbranche*. Retrieved 09 September 2015 from <https://prezi.com/p1ustlromxzm/digitalisierung-und-intermediation-in-der-medienbranche/>.
- Wrobel, F. (2016). Digitalization and Motion Pictures: A Theatrical Market Analysis. In *UCAM-FOM Doctoral School of Business: Yearbook 2015* (117-140), Herzogenrath: Shaker.
- Wyckoff, A. (1997). Imagining the impact of Electronic Commerce. *OECD Observer*, 208, 5-10.
- Yavas, A. (1995). Can Brokerage Have an Equilibrium Selection Role?. *Journal of Urban Economics*, 37, 17-37.
- Yinger, J. (1981). A Search Model of Real Estate Broker Behavior. *American Economic Review*, 71, 591-605.
- Yoffie, D. B. (1997). Chess and Competing in the Age of Digital Convergence. In D. B. Yoffie (Ed.), *Competing in the Age of Digital Convergence* (1-36), Boston: Harvard Business School Press.
- Yoffie, D. B. (Ed.) (1997a). *Competing in the Age of Digital Convergence*, Boston: Harvard Business School Press.
- Zelenski, D. (2003). Talent Agents, Personal Managers, and Their Conflicts in the New Hollywood. *Southern California Law Review*, 76 (4).

- Zerdick, A., Picot, A., Schrape, K., Artopé, A., Goldhammer, K., Lange, U. T., Vierkant, E., López-Escobar, E., Silverstone, R. (2001). *Die Internet-Ökonomie: Strategien für die digitale Wirtschaft*, 3rd ed., Berlin: Springer.
- Zerdick, A., Picot, A., Schrape, K., Burgelman, J.-C., Silverstone, R., Feldmann, V., Heger, D. K., Wolff, C. (Eds.) (2003). *E-Merging Media: Kommunikation und Medienwirtschaft der Zukunft: Digitalisierung der Medienwirtschaft*, Berlin: Springer.
- Zikmund, W., D'Amico, M. (2001). *Marketing: Creating and keeping customers in an e-commerce world*, 7th ed., Cincinnati: South-Western College Pub.