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Transformation of German IT Infrastructure Sales Ecosystems during the Course of Digitalisation

KALTENBACH, Ralf Friedhelm

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**Transformation of
German IT Infrastructure Sales Ecosystems
during the Course of Digitalisation**

Ralf Friedhelm Kaltenbach

Diplom-Ingenieur
Diplom-Wirtschaftsingenieur

A thesis submitted in partial fulfilment of the requirements of
Sheffield Hallam University
for the degree of Doctor of Business Administration

January 2020

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Ralf Kaltenbach

Name	Ralf Friedhelm Kaltenbach
Date	January 2020
Award	Doctor of Business Administration (DBA)
Faculty	Sheffield Business School
Director(s) of Studies	MBS Prof. Dr. Hans H. Jung, Prof. Dr. Michael John McAuley

Abstract

The businesses of IT infrastructure product and service manufacturers in Germany are exposed to a variety of opportunities and risks. Some of the opportunities they face emerge from the rapid pace of technological development and the resulting business potential in artificial intelligence, big data analytics, internet of things and cloud technologies. These technologies offer their customers a vast amount of opportunities to innovate their business models and design their digital transformation to compete. IT infrastructure vendors can benefit from associated investments. However, these developments also entail certain business risks for vendors, such as those arising from the availability of innovative public cloud offerings, which can replace commoditised IT infrastructure. As a result, IT Infrastructure vendors experience significant changes in customer (purchasing) behaviour, which threatens their business success. Some of these changes are of a disruptive nature and affect both the manufacturers and also their indirect sales partners in the IT infrastructure sales ecosystem. Based on a Grounded Theory Methodology (GTM) research approach, this study has aimed to improve the understanding of these market dynamics and to provide a transformation framework that enables vendors and their partners to adapt to the changes. Data collection was carried out by conducting twenty-four semi-structured interviews with business professionals who reported on their long-term experiences and observations in this regard. The study analysed which relevant influencing factors have to be considered and how the affected sales ecosystems are structurally changing.

As the findings of the study indicate, successful IT infrastructure sales ecosystem transformations depend on a variety of influencing factors. From a customer perspective, these factors relate to the necessity of a modified vendor sales differentiation strategy, providing added value to clients during digital business transformation. Corresponding activities build on the prior development of the skills of the vendors' sales teams. Furthermore, the study underlines the relevance of developing and expanding the sales partner landscape to provide customers with a scalable ecosystem with all digitalisation-relevant core competencies during the increasingly demanding sales process. The study also revealed an increased need to particularly take into account individual sales employee needs and concerns during transformation efforts and to promote improved procedural and organisational agility. For each of these aspects, the study presents and discusses a variety of adequate action strategies. Compared to the existing literature, the findings particularly suggest a different way of thinking during transformation that takes into account the relevance of ambidexterity, trust and empowerment of employees and partners to ensure transformation success. As a further contribution to both theory and practice the study provides the so-called "A.C.T.I.V.A.T.E." model for managing transformational change, which integrates the identified influencing factors and provides concrete strategies to handle them. For this purpose, the framework allows the assessment of the individual maturity level of sales ecosystems and suggests concrete recommendations to develop them further. This approach enables vendors and their partners to exploit and explore both existing and new market opportunities and to mitigate transformation risks to the same extent.

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TABLE OF CONTENTS

Abstract.....	iii
Acknowledgements.....	iv
Table of Contents.....	v
List of Figures.....	x
List of Tables.....	xiii
List of Appendices.....	xvi
Acronyms and key terms used in this study.....	xvii

CHAPTER ONE – INTRODUCTION 1

1.1	Background and Context	1
1.2	Role of the Researcher	3
1.3	Problem Statement	4
1.4	Statement of Purpose, Research Question and Objectives	4
1.5	Significance of the Study	5
1.6	Methodology Overview	6
1.7	Thesis Structure.....	7

CHAPTER TWO – RESEARCH FIELD AND LITERATURE REVIEW 11

2.1	Introduction	11
2.2	A Structural View on IT Infrastructure Sales Ecosystems	13
2.3	Evolving Customer Behaviour.....	15
2.4	Progressing Digital Technology	20
2.5	Change and Transformation Management	24
2.6	Digitalisation and Digital Transformation.....	29
2.7	Cloud-based Information Technology	33
2.8	Advanced Sales Methodologies and Skills	37
2.9	Sales Transformation Models	42
2.10	Conclusion	47

CHAPTER THREE – RESEARCH PARADIGM, METHODOLOGY AND DESIGN OF THE STUDY	49
3.1 Introduction	49
3.2 Research Paradigm	49
3.3 Research Methodology	53
3.3.1 Evaluating different Qualitative Research Methodologies	53
3.3.2 GTM as Methodology of Choice	56
3.4 Research Design	59
3.4.1 Research Methods.....	59
3.4.1.1 Data Source Identification Process.....	60
3.4.1.2 Data Collection with Interviews	63
3.4.1.3 Interview Transcription	64
3.4.1.4 Memo writing and Constant Comparison.....	65
3.4.2 Data Sampling Process and Thoughts about Triangulation	66
3.4.3 Data Analysis	70
3.4.3.1 Theoretical Background of Coding Procedures	70
3.4.3.2 Application of the Coding Procedures	73
3.5 Ethical Considerations	77
3.6 Issues of Validation and GTM Evaluative Criteria	78
3.7 Conclusion	80
CHAPTER FOUR – PRESENTATION AND DISCUSSION OF RESEARCH PARTICIPANTS’ PERCEPTIONS	81
4.1 Introduction	81
4.2 Field Perceptions about Transformational Change in Indirect Sales of IT Infrastructures.....	82
4.2.1 Overview.....	82
4.2.2 Perceptions about the Changing IT Infrastructure Market.....	82
4.2.2.1 General Market Transition	83
4.2.2.2 Progressing Digitalisation	88
4.2.2.3 Evolving Customer Expectations and Behaviour	90

4.2.3	Perceptions about Customer Requirements on IT Infrastructure	
	Sales Ecosystems.....	93
4.2.3.1	Business Value Creation	93
4.2.3.2	Customer Digitalisation Inspiration	96
4.2.3.3	Trusted Digitalisation Advisorship.....	99
4.2.4	Perceptions about Vendor’s Internal Transformational Change	
	Issues	101
4.2.4.1	Business Strategy.....	101
4.2.4.2	Management & Leadership.....	103
4.2.4.3	Raising the Bar	106
4.2.4.4	Fundamental Sales Attitude.....	109
4.2.4.5	Internal Communication.....	112
4.2.4.6	Organisational Readiness	114
4.2.4.7	Agile Process Development.....	117
4.2.4.8	Software Tools.....	120
4.2.4.9	Sales Employee Reactions to Transformational Change	124
4.2.4.10	Change Encouragement.....	126
4.2.4.11	Trust and Empowerment	128
4.2.4.12	Skill Development.....	131
4.2.4.13	Business Cadence and Reporting	134
4.2.4.14	Transformational Change Management Governance.....	136
4.2.4.15	Sales Staff Participation and Commitment	139
4.2.5	Perceptions about Partner-relevant Transformational Change	
	Issues	141
4.2.5.1	Sales Ecosystem Partner Expectations	141
4.2.5.2	Vendor’s Ecosystem Expectations	144
4.2.5.3	Go-to-Market Redefinition.....	147
4.2.5.4	Programmatic Governance.....	149
4.2.5.5	Partner Portfolio Development.....	151
4.2.5.6	Field Sales Alignment.....	154
4.2.5.7	Partner Enablement.....	155
4.2.5.8	Partner Inspiration	159

4.2.6	Perceptions about further relevant Parameters in the Digitalisation Context	161
4.2.6.1	Culture and Values	161
4.2.6.2	Dynamics of Shareholder and Sales Staff Interests	164
4.2.6.3	Consideration of Regional Differences	167
4.2.6.4	Legal and Compliance	169
4.3	Structural Changes of IT Infrastructure Sales Ecosystems	171
4.4	Conclusion	175
CHAPTER FIVE – DISCUSSION OF CORE TRANSFORMATION ISSUES AND STRUCTURAL ECOSYSTEM CHANGES		178
5.1	Introduction	178
5.2	Core Issues for the Transformation Management of IT Infrastructure Sales Ecosystems.....	179
5.2.1	Core Issue #1 – Customer Sales Consulting on Digital Transformation as a Differentiation Opportunity	179
5.2.2	Core Issue #2 – The Need to Transform IT Infrastructure Vendor Sales.....	183
5.2.3	Core Issue #3 – The Importance of Enhanced Partner Alliances with Digitalisation Capabilities.....	187
5.2.4	Core Issue #4 – The Sales Individual in the Tension Field of Transformational Change	191
5.2.5	Core Issue #5 – The Relevance of Agile and Broad-based Vendor Transformation.....	195
5.3	The Impact of Structural Changes of IT Infrastructure Sales Ecosystems	199
5.4	Conclusion	202
CHAPTER SIX – DEVELOPMENT OF A TRANSFORMATION FRAMEWORK FOR IT INFRASTRUCTURE SALES ECOSYSTEMS		204
6.1	Introduction	204
6.2	Development of a Transformation Framework.....	204
6.2.1	Establishing Customer Digitalisation Companionship.....	205

6.2.2	Transforming Vendor Sales Approach	210
6.2.3	Building Digital Partner Alliances	215
6.2.4	Taking Care about Sales Individuals	221
6.2.5	Redefining Transactions, Sales Organisation and Procedures.....	226
6.2.6	The Core Category	231
6.2.7	The “A.C.T.I.V.A.T.E.” Framework as Transformational Change Management Model for IT Infrastructure Sales Ecosystems.....	240
6.3	Comparison of the “A.C.T.I.V.A.T.E.” Framework with the Literature	245
6.4	Conclusion	249
CHAPTER SEVEN – CONCLUSION		251
7.1	Introduction	251
7.2	Summary of Main Research Findings	251
7.3	Contribution to Professional Practice	254
7.4	Contribution to Knowledge.....	259
7.5	Limitations of the Study.....	261
7.6	Recommendations for Further Research	263
7.7	Final Reflections	264
BIBLIOGRAPHY		266
APPENDIX.....		I
8.1	Informed Consent Letter	I
8.2	Interview Questionnaire	II
8.3	Sample Memo.....	V
8.4	Code System	VIII
8.5	Contexts, Causal and Intervening Conditions for the Main Categories Found	XIII
8.6	Dependencies and Relationships between derived Categories	XVII
8.7	Further Sales Transformation-related Reflections on the Core Category Elements	XIX
8.8	GTM Checkpoints regarding Methodological Consistency, Quality and Applicability.....	XXV

8.9	Self-Assessment Model for IT Infrastructure Vendors to evaluate their Sales Ecosystems.....	XXX
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List of Figures

Figure 1:	Outline of the thesis (own creation).....	9
Figure 2:	Relevant areas for literature review (own creation).....	12
Figure 3:	Overview of the core elements of IT infrastructure sales ecosystems (own creation, adapted from Gabrielsson, Manek Kirpalani & Luostarinen, 2002, p. 76).....	14
Figure 4:	Development of digital technologies in the context of the IDC 3 rd Platform Model (own creation, adapted from Gens, 2013).....	21
Figure 5:	Positioning of technological terms in the context of progressive digitalisation (own creation)	23
Figure 6:	Industry 4.0 Interoperability Framework (own creation, adapted from Lu, 2017, p. 5).....	32
Figure 7:	Industry 4.0 investments in Germany in Bln. Euro from 2013 – 2020 (prediction) (Source: Statista, 2018)	33
Figure 8:	Worldwide Amazon Web Service Cloud Computing revenue in Mio USD from Q1/2014 – Q2/2018 (Source: Statista, 2019)	35
Figure 9:	Five i’s Model for managing strategic sales organisation transformations (own creation, adapted from Piercy and Lane, 2009a).....	45
Figure 10:	Paradigms of social theory (own creation, adapted from Burrell & Morgan, 1979; Urquhart, 2013).....	50
Figure 11:	Coding Paradigm analogue to Corbin & Strauss (1996, p. 78 et seq., 2015, p. 156 et seq., own creation).....	72
Figure 12:	Structuring of the presentation and discussion Chapters 4, 5 and 6 on the way to modelling the transformation framework (own creation).....	81
Figure 13:	Open category “General Market Transition” – Properties and dimensions (own creation)	83

Figure 14: Open category “Progressing Digitalisation” – Properties and dimensions (own creation)	88
Figure 15: Open category “Evolving Customer Expectations and Behaviour” – Properties and dimensions (own creation)	91
Figure 16: Open Category “Business Value Creation” – Properties and dimensions (own creation)	94
Figure 17: Open category “Customer Digitalisation Inspiration” – Properties and dimensions (own creation)	97
Figure 18: Open category “Trusted Digitalisation Advisorship” – Properties and dimensions (own creation)	99
Figure 19: Open category “Business Strategy” – Properties and dimensions (own creation)	101
Figure 20: Open category “Management and Leadership” – Properties and dimensions (own creation)	104
Figure 21: Open Category “Raising the Bar” – Properties and dimensions (own creation)	107
Figure 22: Open Category “Fundamental Sales Attitude” – Properties and dimensions (own creation)	110
Figure 23: Open category “Internal Communication” – Properties and dimensions (own creation)	113
Figure 24: Open category “Organisational Readiness” – Properties and dimensions (own creation)	115
Figure 25: Open category “Agile Process Development” – Properties and dimensions (own creation)	118
Figure 26: Open category “Software Tools” – Properties and dimensions (own creation)	121
Figure 27: Open category “Sales Employee Reactions to Transformational Change” – Properties and dimensions (own creation)	124
Figure 28: Open category “Change Encouragement” – Properties and dimensions (own creation)	126
Figure 29: Open category “Trust and Empowerment” – Properties and dimensions (own creation)	129

Figure 30: Open category “Skill Development” – Properties and dimensions (own creation)	131
Figure 31: Open category “Business Cadence and Reporting” – Properties and dimensions (own creation)	134
Figure 32: Open category “Transformational Change Management Governance” (own creation).....	136
Figure 33: Open category “Sales Staff Participation and Commitment” – Properties and dimensions (own creation).....	139
Figure 34: Open category “Sales Ecosystem Partner Expectations” – Properties and dimensions (own creation).....	142
Figure 35: Open category “Vendor Ecosystem Expectations” – Properties and dimensions (own creation)	145
Figure 36: Open category “Go-to-Market Redefinition” – Properties and dimensions (own creation)	147
Figure 37: Open Category “Programmatic Governance” – Properties and dimensions (own creation)	149
Figure 38: Open category “Partner Portfolio Development” – Properties and dimensions (own creation)	151
Figure 39: Open category “Field Sales Alignment” – Properties and dimensions (own creation)	154
Figure 40: Open category “Partner Enablement” – Properties and dimensions (own creation)	156
Figure 41: Open category “Partner inspiration” – Properties and dimensions (own creation)	159
Figure 42: Open category “Culture and Values” – Properties and dimensions (own creation)	162
Figure 43: Open category “Dynamics of Shareholder and Sales Staff Interests” – Properties and dimensions (own creation).....	165
Figure 44: Open category “Consideration of Regional Differences” – Properties and dimensions (own creation).....	167
Figure 45: Open category “Legal and Compliance” – Properties and dimensions (own creation)	169

Figure 46: Relevant observations on the possible effects of structural changes of IT infrastructure sales ecosystems (own creation).....	172
Figure 47: Evolution of IT Infrastructure Sales Ecosystems (own creation) ..	200
Figure 48: Composition of Main Category “Establishing Customer Digitalisation Companionship” (own creation).....	207
Figure 49: Composition of Main Category “Transforming Vendor Sales Approach” (own creation).....	211
Figure 50: Composition of Main Category “Building Digital Partner Alliances” (own creation).....	216
Figure 51: Composition of Main Category “Taking Care about Sales Individuals” (own creation)	222
Figure 52: Composition of Main Category “Redefining Transaction, Sales Organisation and Procedures” (own creation)	227
Figure 53: Transformational Change Management Framework for IT Infrastructure Sales Ecosystems, visualised as paradigmatic model (own creation)	242
Figure 54: The “A.C.T.I.V.A.T.E.” IT Infrastructure Sales Ecosystem Transformation Framework and its five submodels (symbolic representation, own creation).....	243
Figure 55: The “A.C.T.I.V.A.T.E.” Framework for Managing Transformational Change in IT Infrastructure Sales Ecosystems (own creation)	244
Figure 56: Template informed consent letter (own creation)	I

List of Tables

Table 1: Overview of various examples of selected models for organisational purchasing processes (Source: Juha & Pentti, 2008, p. 254).....	17
Table 2: Technological and business dimensions of cloud desire (own creation, adapted from Venters & Whitley, 2012).....	19

Table 3:	Comparison of three exemplary selected models for the mgmt. of emergent change (own creation, adapted from Todnem, 2005)	28
Table 4:	Comparison of four exemplary selected sales transformation models and their main focus (own creation)	46
Table 5:	Positivist, interpretivist and critical research paradigms (Source: Adapted from Orlikowski and Baroudi (1991), Urquhart (2013, p. 59))	51
Table 6:	Key characteristics of five relevant qualitative research methodologies (own creation, adapted and combined from Creswell (2007, p. 78/79)).....	55
Table 7:	List of interviewees/sample group with anonymised names, job roles and various experience indicators (own creation)	62
Table 8:	Grounded Theory Evaluative Criteria (Source: Corbin & Strauss, 1990, p. 16-19).....	79
Table 9:	Submodel I – Establishing Customer Digitalisation Companionship (own creation)	209
Table 10:	Submodel II – Transforming IT Infrastructure Vendor Sales (own creation)	214
Table 11:	Submodel III – Building Digital Partner Alliances (own creation)..	220
Table 12:	Submodel IV – Taking Care about Sales Individuals (own creation)	225
Table 13:	Submodel V – Redefining Transactions, Sales Organisation and Processes (own creation).....	230
Table 14:	Important characteristics of the relationship between the elements of the core category and the main categories, depending on their intensity (own creation)	239
Table 15:	Overview of Open, Main and Core Categories (own creation).....	241
Table 16:	Comparison of the “A.C.T.I.V.A.T.E.” Transformation Framework with other models documented in the literature (own creation)....	246
Table 17:	Overview of Main Findings (with schematic representation of Figure 47, p. 201, and Figure 54, p. 244, own creation)	252
Table 18:	Code system that results from GTM data analysis (own creation) XII	

Table 19:	Context and causal/intervening conditions for five main categories (own creation).....	XIV
Table 20:	Context and causal/intervening conditions for five main categories (own creation, continued i)	XV
Table 21:	Context and causal/intervening conditions for five main categories (own creation, continued ii).....	XVI
Table 22:	Relationships between core categories in terms of mutual benefits and requirements (own creation).....	XVIII
Table 23:	Structural ambidexterity vs. contextual ambidexterity in sales organisations (own creation, adapted from Birkinshaw & Gibson, 2004a, p. 50).....	XX
Table 24:	Application of a specific input-process-output ambidexterity model to the field of indirect IT infrastructure sales (own creation based on and adapted from Fojcik, 2015, p. 55)	XXII
Table 25:	Application of specific criteria of trust and empowerment research to the results of this thesis and its findings on indirect IT infrastructure sales ecosystems (own creation)	XXIV
Table 26:	Methodological Consistency of this GTM study (own creation, adapted from Corbin & Strauss, 2015, p. 353).....	XXVIII
Table 27:	Checkpoints to evaluate quality and applicability of the GTM study (own creation, adapted from Corbin & Strauss, 2015, p. 356).....	XXX
Table 28:	Self-Assessment in the “A.C.T.I.V.A.T.E.” Maturity Model (own creation).....	XXXI
Table 29:	IT Infrastructure Vendor Assessment – “Alliance”-element of the “A.C.T.I.V.A.T.E.” Model (own creation).....	XXXII
Table 30:	IT Infrastructure Vendor Assessment – “Customer Companionship”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)	XXXIII
Table 31:	IT Infrastructure Vendor Assessment – “Transactions, Sales Organisation and Procedures”-element of the “A.C.T.I.V.A.T.E.” Model (own creation).....	XXXIV

Table 32: IT Infrastructure Vendor Assessment – “Sales Individual’s Needs”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)	XXXV
Table 33: IT Infrastructure Vendor Assessment – “Transform Vendor Sales”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)	XXXVI
Table 34: IT Infrastructure Vendor Assessment – “Ambidextrous Governance”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)	XXXVII
Table 35: IT Infrastructure Vendor Assessment – “Trusting the Sales Employee and Partners”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)	XXXVIII
Table 36: IT Infrastructure Vendor Assessment – “Empowering”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)	XXXIX

List of Appendices

Appendix 1 – Informed Consent Letter
Appendix 2 – Interview Questionnaire
Appendix 3 – Sample Memo
Appendix 4 – Code System
Appendix 5 – Contexts, Causal and Intervening Conditions
Appendix 6 – Dependancies and Relationships between Main Categories
Appendix 7 – Further Reflections on Core Category Elements
Appendix 8 – GTM Checkpoints
Appendix 9 – Self-Assessment Model for IT Infrastructure Vendors

Acronyms and key terms used in this study

AI	Artificial Intelligence
B2B	Business to business
BpaaS	Business Process as a service
CAPEX	Capital expenditure
CDO	Chief Digitalisation Officer
cf.	confer
CRM	Customer Relationship Management
etc.	et cetera
e.g.	exempli gratia
et al.	et alii, et aliae
et seq.	et sequens
GTM	Grounded Theory Methodology
IaaS	Infrastructure as a service, i.e. the ability to use processor, memory, network or other relevant computing resources supplied by the provider to run any software that may contain operating systems or applications.
i.e.	id est
IoT	Internet of things
IT	Information Technology
MBO	Management by Objectives
Mgmt.	Management
n/a	Not applicable
OPEX	Operational expenditure
OTE	On-target-earning
p.	Page
PaaS	Platform as a service, i.e. the possibility of running applications programmed by the customer itself or acquired in another way on the provider's cloud infrastructure (using its programming languages, libraries, services and tools).
RO	Research Objective
SaaS	Software as a service, i.e. the ability to use the applications provided by the cloud provider on the cloud infrastructure.
VMS	Vision, Mission, Strategy

Chapter One – Introduction

1.1 Background and Context

The aim of this research is to investigate the effects of digitalisation and evolving customer behaviour on sales ecosystems of multinational IT infrastructure manufacturers in the German market¹. The intention is to develop a framework which enables these vendors² to react to disruptive market changes with a suitable transformation model. A peculiarity is that these manufacturers usually work with indirect sales models. This means that they do not sell their products and services directly to the end customer, but use one or more intermediaries, which could add additional complexity to the sales transformation process for the vendors.

In this context, digitalisation can be seen as a phenomenon associated with numerous changes not only in business life, but also in private domains. In the private sector, digitalisation is becoming visible for example through the increasing use of social media platforms such as Facebook, Twitter and Instagram (Praprotnik, 2016). Technically, this development results, inter alia, from the ubiquitous availability of mobile services, internet access and computing capacities, for example in the form of smartphones. These technical achievements in turn provide the basis for certain forms of internet-based platform economies that offer so-called app-based products and services for almost all areas of private life (e.g. Fuentes, Bäckström & Svingstedt, 2017).

Such developments naturally also have an impact on the B2B (business-to-business) sector. These businesses experience from the consumer side and through the emergence of new, agile market participants that they have to adapt

¹ The term “multinational IT infrastructure manufacturer” refers to globally operating IT infrastructure vendors. Because of their high importance, the research participants primarily had experience with Anglo-American companies.

² In order to increase the readability of this thesis, the terms IT infrastructure “vendor” and “manufacturer” are used alternately as synonyms. These are companies that fabricate IT infrastructure products and make them available for purchase via sales ecosystem partners.

their business models to the realities of the markets changed by digitalisation (Gartner, 2018; Kreutzer, Land & Tichy, 2015). In private terms, this manifests itself, for example, in the form of digitalised sales channels for innovative banking products, the dematerialisation of products previously distributed physically in the media and entertainment world, or the development of the autonomous car. Digitalisation is also increasingly penetrating business areas such as marketing automation, logistics (Gomez, Grand & Grivas, 2015), the manufacturing industry in the so-called industry 4.0 (Kagermann, 2014; Maresova et al., 2018; Senvar & Akkartal, 2018; Bornemann, 2016) or the financial services industry (Karagiannaki, Vergados & Fouskas, 2017).

The efforts of companies to keep pace with these developments and at best to shape them are summarised under the term digital transformation (Westerman, Bonnet & McAfee, 2014). IT infrastructure manufacturers initially play only an indirect role here, because their traditional products and services form virtually only the backbone for new technologies around social (Li, Su, Zhang & Mao, 2018), mobile (Hanelt et al., 2015), analytics (Duerr, Wagner, Weitzel & Beimborn, 2017), cloud (Clohessy, Acton & Morgan, 2017) and IoT³ (Richter, Vodanovich, Steinhüser & Hannola, 2017), on which the advancing digitalisation and the digital transformation of business models take place (Vial, 2019, p. 5). For IT infrastructure companies, this is compounded by the fact that many of their classic products are regarded as commoditised because customers often regard them as interchangeable with each other and do not expect any competitive advantages from them (Piccoli & Lui, 2014; Carr, 2003). For this reason, and because customers today have access to a variety of internet-based information sources, some reports suggest that customers are less interested in interacting more than necessary with IT infrastructure vendors and their channel partners (Gartner, 2015). Their resulting erosion of relevance could be reinforced by the risk that numerous IT infrastructure architectures previously implemented at the customer's premises can be replaced by easy-to-use, subscription-based public cloud solutions (Venters & Whitley, 2012).

³ IoT stands for Internet-of-things, cf. Section 2.4.

In order to secure their business success, it is therefore suggested that IT infrastructure manufacturers consider how they can maintain, build and regain their strategic relevance for their customers (Bronkhorst, Schaveling & Janssen, 2019; UoTP, 2017). In addition to innovative, high-performance IT infrastructure products and services, this requires an effective sales force that knows how to ensure this strategic relevance at the direct interface to the customer. In this regard, the sales (skill) transformation is suggested not only to include the existing sales structures of the vendors but also those of the sales ecosystem partners in order to achieve an impact (Hawkins, 2015). Existing scholarly sales transformation models such as the “five i’s”⁴ framework (Piercy & Lane, 2005, 2009a, 2009b) offer well designed sales transformation approaches. However, important aspects of indirect IT infrastructure sales environments are only rudimentarily considered in these models. This thesis focuses on the detailed conditions that have to be taken into account in these structures and how a transformation framework that can be used for this purpose can be designed. To do this, it is useful to first consider my role as a researcher.

1.2 Role of the Researcher

Before and during the preparation of this thesis I worked in leading sales positions for various IT infrastructure vendors. This allowed me to see the challenges that vendors and their partner organisations face in sales ecosystems from my own perspective. Therefore, I have been in the position to incorporate my own extensive experience into the preparation of the study. These circumstances brought me also certain advantages over researchers who have not worked in this environment. In this way, I had access to the expertise and experience of the research participants, which may have been closed to other external researchers. Thus, the study benefits from a certain openness that the participants showed me because they work in the same industry or in similar companies.

⁴ For reasons of simplicity, Malshe, Al-Habib, Al-Torkistani, & Al-Khatib (2013, p. 349) referred to the sales transformation models of Piercy (2010) and Piercy & Lane's (2003) with the abbreviation “five i’s”, which stand for its core components. This simplifying naming is also used in this thesis, more details are provided in Section 2.9.

However, my professional background also had some potential disadvantages, for example in the form of a possible bias. It was therefore important for me to remain aware of my own perspectives, distortions and assumptions, and to proactively apply strategies to counteract the resulting risks to the quality of the study (Corbin & Strauss, 2015, p. 46) This included keeping a journal, regularly, and critically, reflecting on the progress of the findings and implementing the method of continuous comparison in all phases of the research progress, including during the interview phase. Although any qualitative study is potentially subject to a certain degree of subjectivity, I am convinced that the research objectives associated with the study have been achieved. These objectives concerned a research problem that can be described as follows.

1.3 Problem Statement

Research and practical experience, as well as professional observation indicate that IT infrastructure vendors are facing severe market transitions, impacting their core businesses. These market transitions arise from changing customer (buying) behaviour and IT infrastructure market conditions, mainly induced by the effects of progressing digitalisation. A vast amount of scholarly and professional literature is available on sales transformation in general. However, there is little information and guidance in these regards as to indirect IT infrastructure sales ecosystems⁵, considering both internal and channel sales transformation. Hence the purpose of this study, the research question and objectives can be derived as follows.

1.4 Statement of Purpose, Research Question and Objectives

The purpose of this grounded theory study was to explore with twenty-four individuals, who gained significant professional experience during their careers, how IT infrastructure vendors can effectively transform their sales ecosystems in view of digitalisation and changed customer behaviour as change drivers. It is expected that an improved understanding of these change drivers as well as of

⁵ In the following, IT infrastructure sales ecosystems are meant if they are only called “ecosystems” or “sales ecosystems”.

individual perceptions from different perspectives on the phenomenon of transformational change can contribute to the development of a suitable management framework, applicable in practice.

Hence, the study has focused on the following research question:

How can multinational IT infrastructure vendors effectively transform their sales ecosystems in Germany, considering industry digitalisation and changed customer demands as change drivers?

To approach the scope of work systematically, the research has been guided by and structured according to the following research objectives:

Research objective 1: Investigate which influencing factors should be considered in order to manage transformational change processes in IT infrastructure sales ecosystems in connection with progressive digitalisation and changed customer behaviour (key observations from sales professionals at IT infrastructure vendors and partners).

Research objective 2: Explore the extent to which IT infrastructure sales ecosystems are changing structurally as a result of the underlying drivers of change (IT infrastructure sales ecosystem evolution).

Research objective 3: Develop a framework that can be used by IT infrastructure vendors to manage the transformational changes induced by these drivers in the indirect sales model, taking into account the results found (Transformational change management framework for IT infrastructure sales ecosystems).

As described hereafter, the study makes a significant contribution to the aforementioned research objectives.

1.5 Significance of the Study

This study intends to provide IT infrastructure vendors with a framework for coping with transformational change processes in indirect sales models, as they arise from increasing digitalisation and changing customer behaviour. Managers

and individual employees at vendors as well as sales partners can benefit from the results, both at the vendor/partner interface and in cooperation with customers. A thorough understanding of the influencing factors in this context can help to accompany customers and sales partners more effectively on their path to digital transformation, to manage transformational change processes more effectively, to optimise processes and organisational structures, and in particular to consider the individual needs of employees on their path to change in an improved form. Thus, potential inefficiencies due to organisational changes can be minimised and indirect sales organisations can be better adapted to changing market conditions.

To provide a contribution to mastering these challenges, the study builds on existing research results in various fields. In view of the above-mentioned changing market conditions, the prospering development of (public) cloud IT as a result of changing customer behaviour and ongoing digitalisation plays an important role. Customers of IT infrastructure manufacturers adapt their business models to new conditions with change initiatives that can be summarised under the heading of the so-called digital transformation. Corresponding to this, IT infrastructure vendors and their partners continue to evolve through the application of advanced sales methodologies. This study therefore attains its significance on the one hand by considering not only the current relevant research status on these topics but also important fundamental aspects of change and transformation management. On the other hand, its peculiarity is characterised by the fact that it critically examines and expands existing sales transformation models and enables their applicability in the area of indirect sales ecosystems of IT infrastructure. These aspects are further elaborated in the literature review (cf. Chapter 2). Prior to this, a brief overview of the methodology applied in this thesis can be given as follows.

1.6 Methodology Overview

With the aim of achieving the research objectives of this thesis (cf. Section 1.4), I examined the perceptions and observations of twenty-four business professionals with many years of experience in the sales of IT infrastructure

products and services. In doing so, I paid attention to a balanced measure of the research participants who were employed both in individual contributor roles and in the management of the vendors or partners in responsible positions. The Grounded Theory Methodology (GTM) approach seemed to be the most suitable research methodology to examine in the best possible way their experiences and observations regarding the complexity of transformational change management in relation to the research subject. For this purpose, the GTM of Corbin and Strauss (2015) was selected from a variety of available GTM approaches. Data collection was carried out with semi-structured in-depth interviews. The GTM data analysis performed used coding techniques that allowed the identification of specific open, main and appropriate core categories. This approach formed the basis for the development of the intended transformational change management framework. The development of this framework represents one of the main objectives of this thesis, which is structured as follows.

1.7 Thesis Structure

This study is divided into seven main chapters. In Chapter One, after a short introduction, the illustration of my role as a researcher is followed by an explanation of the research problem. Thereafter an overview of the research question and the associated research objectives follows, before the significance of the study is discussed. The methodological overview outlines how these research objectives were achieved.

After a brief explanation of the literature review structure, Chapter Two begins with a general consideration of the role of literature reviews in GTM studies. Thereafter the research field of IT infrastructure sales ecosystems is explained. This is followed by a review of the current state of research on the topic of advancing digital technology and changing customer behaviour. These considerations lead to an inventory of the relevant literature on change and transformation management, digitalisation and digital transformation induced by the aforementioned change drivers. One characteristic of changing customer behaviour in combination with the availability of digital technologies is the emergence of cloud-based information technology. Without its review the

research topic cannot be adequately addressed. At the end of the chapter, an insight into existing sales transformation models and their potential deficiencies is given. This also substantiates the need for research on which this thesis is based.

Chapter Three discusses the paradigmatic foundations of the research project with epistemological and ontological considerations. The section on research design reflects the selection and application of the Corbin & Strauss (2015) Grounded Theory Methodology. The chapter concludes with a discussion of ethical research aspects and an evaluation of relevant validation issues.

Chapter Four presents and discusses the perceptions of the research participants with regard to the research objectives 1 and 2, i.e. with reference to their observations and experiences on influencing factors affecting IT Infrastructure sales ecosystem transformations and with regard to the structural changes of these systems. The chapter finishes with a summary of five important core issues that influence the related transformation success.

In Chapter Five, the identified core issues are first discussed with the aim of creating a basis for the following in-depth data analysis and synthesis of a transformation framework. The insights gained are also compared with the existing literature.

Chapter Six focuses on the development of the transformation framework (research objective 3). Using the paradigmatic GTM model by Corbin & Strauss (1996, 2015), different action strategies are evaluated before the evolved main categories are integrated into one core category. This is followed by the development of the so-called “A.C.T.I.V.A.T.E.” model for the transformation of IT infrastructure sales ecosystems, which integrates all the conceptualisations evolved during the in-depth data analysis.

Chapter Seven first summarises the main findings of the thesis. The presentation of the contribution to professional practice includes recommendations and refers to a self-assessment questionnaire for IT Infrastructure vendors that was

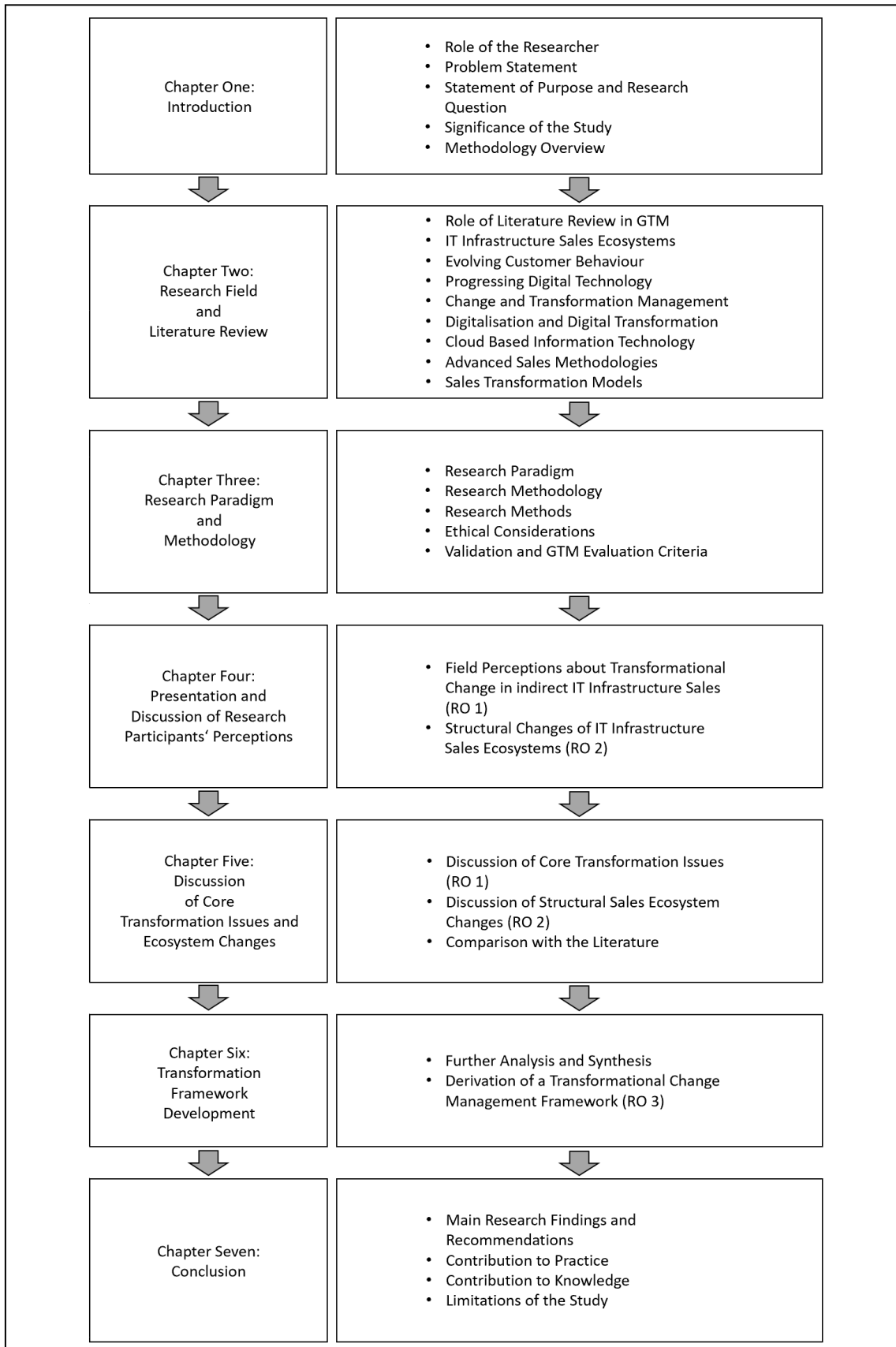


Figure 1: Outline of the thesis (own creation)

developed in this research project. The chapter also contains a depiction of the contributions to knowledge achieved with the study. A discussion of the limitations of the thesis is rounded off with final recommendations for further research and a personal reflection.

The next chapter is concerned with the presentation of the research field and the literature review to build a basis for the further discussions.

Chapter Two – Research Field and Literature Review

2.1 Introduction

There are different views on the question to what extent a study that follows the guidelines of the Grounded Theory Methodology (GTM) should be subject to a literature review before the data collection and analysis is carried out (cf. Corbin & Strauss, 1996; Dunne, 2011; Glaser & Strauss, 1967). As outlined in Chapter 3, this work follows the GTM principles of Corbin and Strauss (2015), who consider the examination of existing literature in the preparation of the data collection phase as useful for the intended research process. Coffey and Atkinson (1996, p. 157) summarise the usefulness of an analysis of available literature by warning the researcher not to confuse “open-mindedness” with “empty mindedness”. These authors recommend an appropriate examination of the theoretical background of the respective research discipline before starting research. In preparing this thesis, it was in some respects inevitable in any case to take into account the current state of research on the topic under investigation, as I have a profound practical and theoretical knowledge in the research subject due to my professional background. This prerequisite rather raises the question of possible bias and how to deal with it appropriately (cf. Section 1.2).

There is little scholarly literature available on the topic of transformational change management with special reference to the sales ecosystems of IT infrastructure vendors. The first section of this literature review therefore first provides a basis for further considerations by discussing the general nature of IT infrastructure sales ecosystems with reference to the sources that have been identified. For this purpose, both scholarly and professional publications are consulted due to their practical relevance (cf. Section 2.2). Thereafter, the two change drivers of evolving customer behaviour and progressively developing digital technologies on which this study is focused are considered to the extent necessary to conduct the research (cf. Sections 2.3 and 2.4).

This is followed by a general section on change and transformation management, through which such change drivers can generally be countered (cf. Section 2.5).

The literature review on these first four relevant fields for the transformation of IT infrastructure sales ecosystems is complemented by a review of the areas in which these fields overlap (cf. Figure 2).

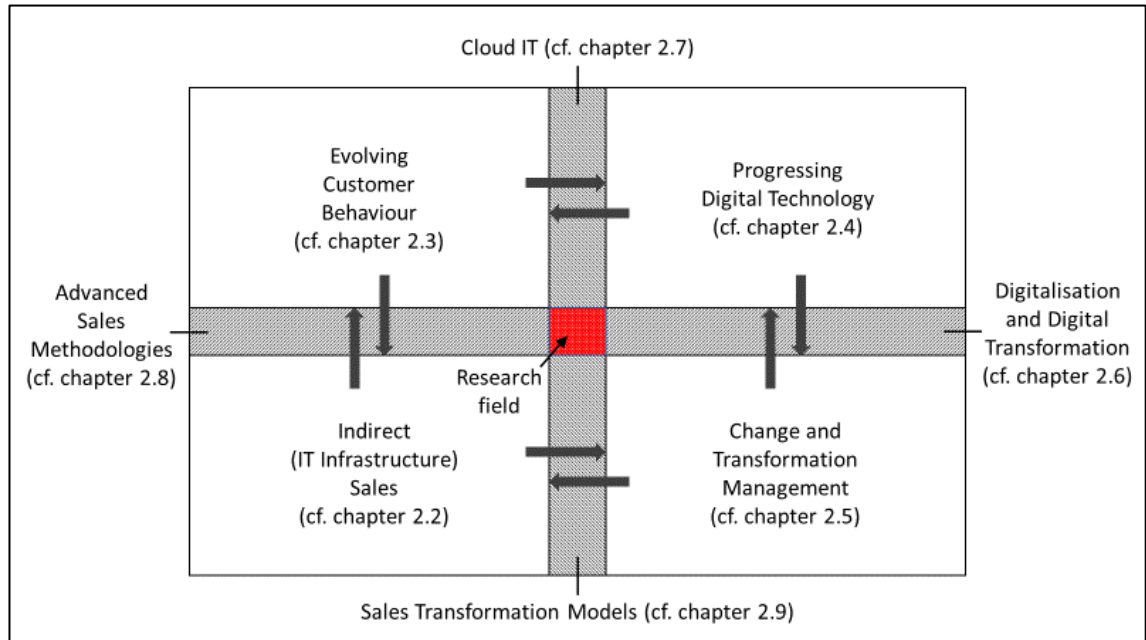


Figure 2: Relevant areas for literature review (own creation)

Consequently, following the consideration of generally relevant questions on change and transformation management, the literature that exists at the interface of change management and digital technology will be examined, i.e. in the area of the resulting digitalisation and digital transformation (cf. Section 2.6). The progressive development of digital technologies also has an impact on the (purchasing) behaviour of customers, which manifests itself mainly in the changing consumption of information technology. These aspects are considered in the section on cloud-based IT (cf. Section 2.7). The potential reactions of vendors to these and other developments in changing customer behaviour are reflected in their efforts to further develop their sales methodology. For this reason, Section 2.8 examines the literature on advanced sales methodologies. Finally, the literature review leads to a summarising presentation of sales transformation models (cf. Section 2.9), before the research requirement is specified in more detail in the subsequent conclusion.

First, however, the following more detailed illustration of the research field

appears to be essential.

2.2 A Structural View on IT Infrastructure Sales Ecosystems

The research field of IT infrastructure sales ecosystems requires a more precise definition and differentiation from other possible research fields before it can be investigated. In the following, reference will be made to scholarly sources through which IT infrastructure sales ecosystems such as those found in Germany can be explained in more detail.

First of all, it appears necessary to define the term *IT infrastructure* in more detail. IT, i.e. Information Technology, can be defined as “the set of non-human resources dedicated to the storage, processing and communication of information, and the way in which these resources are organised into a system capable to perform a set of tasks” (Bakopoulos, 1985, p. 7). The prefix *infra* indicates that such a *structure* is a “foundation”, something “underlying”, which forms the fundamental framework for an activity based on it (OED, 2019c; Merriam-Webster, 2018). An Information Technology (IT) infrastructure, as it is understood for the purposes of this work, therefore forms, together with its hardware (such as servers, storage components and other devices), its software (such as virtualisation software, security software) and the associated network components, the basis for IT services and applications for use in organisations and companies (Soares, Bortoluzzo & Barros, 2012). It supports or enables the internal business processes as well as the external processes with customers and business partners and thus the value creation of a company (Bhattacharya, 2016).

In this thesis, primarily these IT infrastructure vendors, who maintain indirect sales models, are considered. In their classic form, which has been customary in the IT infrastructure industry for decades, the basic structure of such sales models is similar to the schematic representation in Figure 3.

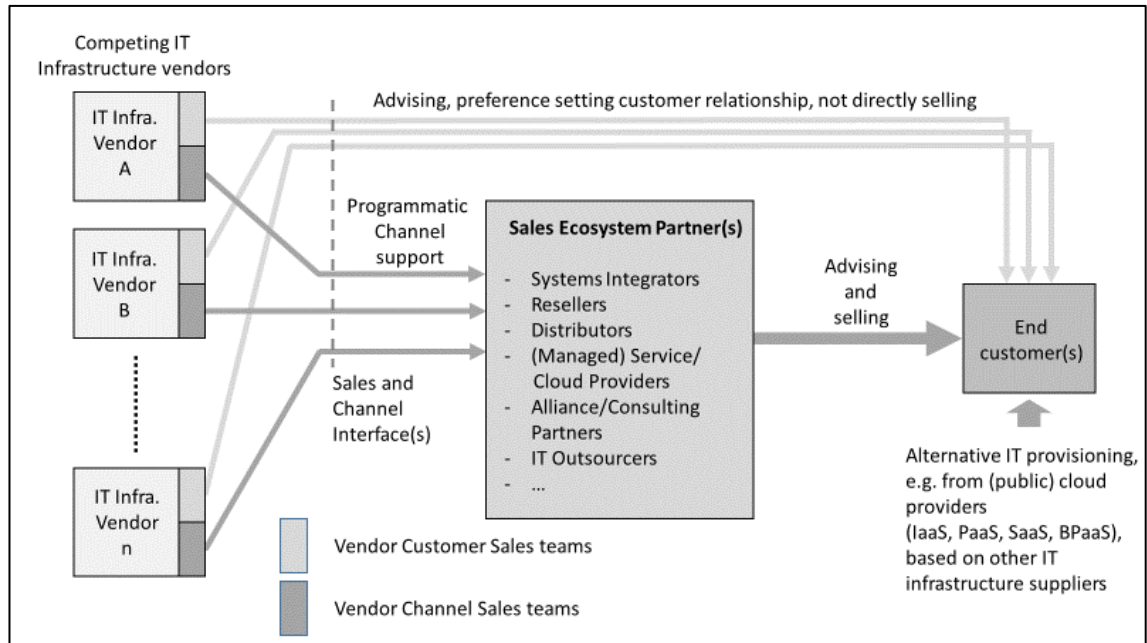


Figure 3: Overview of the core elements of IT infrastructure sales ecosystems (own creation, adapted from Gabriëlsson, Manek Kirpalani & Luostarinen, 2002, p. 76)

Several IT infrastructure manufacturers, here named “A” to “n”, usually compete with each other on the market. An indirect sales model, as defined here, is characterised by the fact that the manufacturers have direct relationships with some of the end customers, usually large customers, but do not directly sell their products to these customers themselves. Rather, these end customer contacts are generally used to convince the relevant customer decision-makers and preparers on a technical or business level of the advantages of the manufacturer’s products and services. In a certain way, this prepares the ground for the sales partners’ sales activities. In practice, this activity is often called “preference setting”. As several manufacturers usually aim to win projects at the same time, the customer can achieve good market insight into the various infrastructure vendors in this way.

In these models, IT infrastructure vendors and their sales partners work together in a target-oriented and coordinated way, ideally in a symbiotic manner. Senyo, Liu and Effah (2019, p. 52/53) use the term “digital business ecosystem” to define such value-adding cooperation in environments “for which digital technology plays a dominant role”. In this sense, a digital business ecosystem creates a

collaborative environment that allows different instances to participate in the value creation process, which in turn builds on information and communication technology (Nachira, Dini & Nicolai, 2007). This concept is an extension of the business ecosystem approach originally introduced by Moore (1993) regarding the relevant aspects of digital technology. Whenever this thesis refers to a sales ecosystem, it refers to such a system of value-creating sales cooperation in which different instances are involved. The factors that determine the success of such sales ecosystems with regard to transformational changes can, according to the understanding on which this study is based, influence the interaction between the ecosystem instances, but can also affect the internal conditions in only one of the instances.

For obvious reasons, the business of such ecosystems is potentially exposed to changes in customer behaviour. This is discussed in more detail below.

2.3 Evolving Customer Behaviour

The changing behaviour of IT infrastructure vendors' customers could have a strong influence on the sales success of both manufacturers and their sales ecosystems. Indeed, the literature review suggests that the implications are manifold and closely related to the need for customers to engage with digital transformation and define a cloud strategy for their own business (cf. Sections 2.6 and 2.7). It appears that the trend towards implementing off-premise public cloud solutions is potentially threatening for vendors. The literature review conducted for the purposes of this thesis has shown that remarkably little scientifically substantiated research has addressed the resulting implications for IT infrastructure vendors. There are, however, a number of professional publications and assessments by large consulting firms on the subject of changing customer (buying) behaviour, which are outlined below. These are then placed in a scholarly literature context in order to make them accessible for further analysis and discussion.

One of these professional publications on the context of changing customer behaviour towards IT vendors and their partners provides indications of massive

changes that are already underway (e.g. Hawkins, 2015). Accordingly, various important sectors of the IT industry, and therefore the IT infrastructure vendors, are currently exposed to various changes which manifest themselves in relation to the research topic primarily in the following four areas:

(1) Trend toward vendor consolidation: Customers are striving to reduce the complexity costs associated with their IT by reducing the number of vendors they work with (Hawkins, 2015, p. 16, p. 29).

(2) Establishment of centralised strategic sourcing departments: Customers aggregate their IT needs at a central, often globally authorised centre to gain strategic purchasing advantages over IT vendors (Hawkins, 2015, p. 23).

(3) Changed customer buying journey: Due to the general availability of IT product- and service-relevant information on the Internet, customers are often in a position to defer the consultation of sales representatives from IT vendors to a much later project stage, which reduces their influence (Hawkins, 2015, p. 27).

(4) Desire for cloud IT, everything-as-a-service and consumption-based models: The availability of (public) cloud-based IT has changed the way customers identify, buy and consume necessary IT services (Hawkins, 2015, p. 18, p. 42).

It might be therefore all the more disturbing from the IT infrastructure vendors' perspective that analysts from leading consulting firms such as Gartner are communicating similar observations to the market. According to Gartner, customers spend less and less time and attention on low-value interactions with vendors and prefer to access their trusted network to get recommendations and information before making purchase decisions (Gartner, 2015).

In particular, aspects (3) and (4) of the above enumeration seem to be important with regard to the transformation of IT infrastructure sales ecosystems. These aspects may have a potentially negative impact on sales success with IT infrastructure customers but may be addressed to some extent by vendors. On the one hand, these issues can be placed in the context of organisational buying behaviour outlined below. On the other hand, they can be examined from the

perspective of equivalence considerations of public cloud offers with those of the on-premise implemented IT infrastructure.

Firstly, with regard to organisational buying behaviour, the professional practitioner publications mentioned above can be placed into the context of different scientific purchasing process models as compared by Juha & Pentti (2008, cf. Table 1). What these models have in common is that they represent essential successive steps in the organisational purchasing process, with different granularities, which concern awareness, consideration and purchase.

Step #	Robinson et al. (1967)	Burger and Cann (1995)	Ghingold and Wilson (1998)	Webster (1965)
(1)	Recognition of a problem and a general solution	Trigger process	Recognition of a problem, need or purchase intention	Problem recognition
(2)	Determination of characteristics and quantity of needed item	Need assessment	Determination of characteristics and quantity needed	Buying responsibility
(3)	Description of characteristics and quantity of needed item	Information search	Precise description of characteristics and quantity of items needed	The search process
(4)	Search for and qualification of potential sources	Vendor selection	Search for and qualification of potential sources	The choice process
(5)	Acquisition of and analysis of suppliers	Proposal evaluation	Vendor interaction and analysis of proposals	-
(6)	Evaluation of proposals and selection of suppliers	Word of mouth evaluation	Evaluation of proposals and selection of supplier	-
(7)	Selection of an order routine	Buying decision	-	-
(8)	Performance feedback evaluation	-	-	-

Table 1: Overview of various examples of selected models for organisational purchasing processes (Source: Juha & Pentti, 2008, p. 254)

According to Hawkins (2015, p. 27) and Gartner (2015), the significant difference to earlier IT purchasing behaviour now results from the tendency, that customers do not involve the vendors by asking them for advice or contacting them later in the course of the purchasing journey. This might have the potential consequence that the manufacturers can often only unfold their sales influence when essential solution-relevant decisions have long since been made by the customer. Whereas in the past, based on Juha & Pentti's (2008) overview in Table 1, vendors could still try to influence purchasing decisions in their favour in the awareness and consideration phases, i.e. during the steps (1) - (3), today they seem to be confronted with *faits accomplis* more often during and after step (4).

Secondly, the potential negative impact of this effect could be amplified by the trend to replace IT infrastructure implementations with public cloud solutions (cf. Section 2.7). To this end, it appears reasonable for vendors seeking to transform their sales ecosystems to consider the concerns customers might have before replacing their on-premise infrastructure with cloud solutions. A model developed by Venters and Whitley (2012) can be used to understand essential equivalence considerations of customers concerning the substitutability of infrastructure offers by externally provided off-premise public cloud solutions. The authors argue that cloud relevant (purchasing) decisions of customers can be evaluated with a so-called "desire framework" (Venters & Whitley, 2012, p. 182), which takes "both business-led and technological considerations" into account. According to these considerations, six technological and three business-oriented postulated customer requirements have to be considered, on the basis of which potential customers of IT infrastructure weigh up their purchasing decisions (cf. Table 2).

In principle, compute services that are not provided on-premise, and in their place (public) services are consumed, raise security-relevant questions with regard to compliance and the safeguarding of access (Rashid, 2015). Closely related to this is the question of the availability of cloud services, which is expected to be guaranteed without interruption (Anderson, Meling, Rasmussen, Vahdat & Marzullo, 2017).

Technological dimensions of cloud desire		Service-oriented/business dimensions of cloud desire	
Security Equivalence	Customers want to take advantage of a technical service that is in security terms at least equivalent to the experience provided by a locally operated server.	Efficiency	Customers want to take advantage from services that help users to be more economically efficient.
Availability Equivalence	Customers want to take advantage of a technical service that is in availability terms at least equivalent to the experience provided by a locally operated server.		
Latency Equivalence	Customers want to take advantage of a technical service that is in latency terms at least equivalent to the experience provided by a locally operated server.	Creativity	Customers want to take advantage from services which aid innovation and creativity.
Variety	Customers want to receive services which provide a level of variety commensurate with the operating environment.		
Abstraction	Customers want non-pertinent complexity to be hidden. That means, that in particular the complexity of managing the underlying IT Infrastructure and software should be abstracted and hidden.	Simplicity	Customers want to take advantage from services which are simple to understand and consume.
Scalability	Customers want to receive a service which is scalable to meet demand.		

Table 2: Technological and business dimensions of cloud desire (own creation, adapted from Venters & Whitley, 2012)

From the end user's point of view, it is expected to be ensured that the applications made available via cloud services have a response time behaviour comparable to that of locally operated servers (Wang, Feng & Cheng, 2018). Cloud services are also suggested to offer a variety in terms of the technical functionality provided that meets the variability of user requirements (Venters & Whitley, 2012). The abstraction of cloud services can be seen, for example, in the implementation of virtual machines at the cloud level and the portability of

applications that can be virtually moved back and forth in a multi-cloud environment (Nguyen, 2014). The scalability of a cloud environment is characterised by the elasticity with which it can respond to fluctuating workload requirements, depending on how strongly users or applications demand it (Trihinas, Pallis & Dikaiakos, 2015).

As a platform for the digital transformation of enterprise business applications, customers evaluate criteria that enable efficiency and creativity while ensuring operational simplicity. Cloud services appear to be potentially suited to realise cost-saving potentials, although the amount of savings depends on the company's IT profile (Williams, 2012; Kozlowski & Gilliland, 2017). Creative potentials can be unleashed in a company by consuming cloud services in "a low friction way" and by allowing certain things to be tried out in an uncomplicated and agile manner without risk (Venters & Whitley, 2012). In this way, companies can gain competitive advantages (Hsu & Lin, 2016). Nevertheless, the simplicity with which cloud services can be consumed must not hide the fact that they can also entail risks that may be masked by cloud abstraction (Neumann, 2014).

As a result of the above considerations, it can be concluded that changes in customer behaviour create both opportunities and risks for the business success of IT infrastructure manufacturers and their sales ecosystem partners. This applies in particular to changed purchasing processes and competition between on-premise and off-premise (cloud-based) offerings. These conditions seem to be as relevant for the intended development of the transformation framework as the progress of digitalisation. The literature related to the latter is examined in more detail below.

2.4 Progressing Digital Technology

The rapid development of digital information and communication technology enables new innovative business models and the digital transformation of enterprises (cf. Section 2.6 and Gassmann, Frankenberger & Csik, 2017). The IT infrastructure of these enterprises forms the platform on which applications for these business models are operated. Therefore, a brief overview and

classification of some of the progressing digital technologies seems to be appropriate.

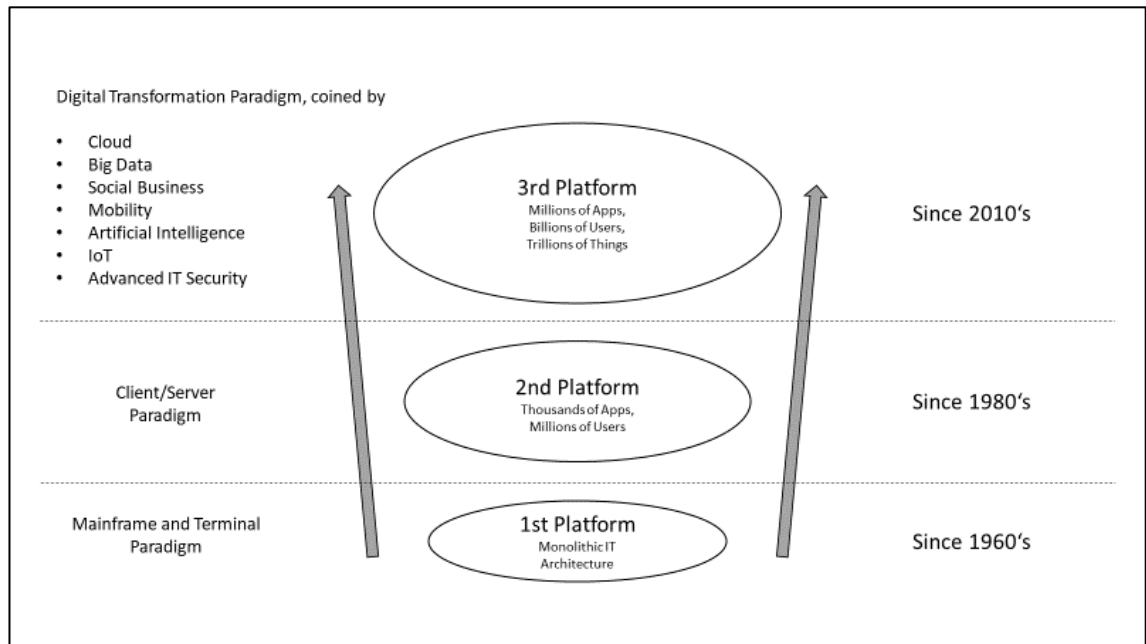


Figure 4: Development of digital technologies in the context of the IDC 3rd Platform Model (own creation, adapted from Gens, 2013)

A frequently used approach in the IT infrastructure industry to classify technological changes is the so-called 3rd platform concept of IDC (Gens, 2013; IDC, 2019), illustrated in Figure 4. In this model, the historical role of information technology in business is contrasted with a new, emerging IT paradigm. According to this concept, the first, host-oriented age of the early 1960s was followed by the so-called client-server-oriented age from the late 1980s onwards, which is characterised by increasing decentralisation (Hallberg, 2014). In these first two stages of the model, IT served mainly to provide systems that supported internal services or contributed to business agility with a certain IT flexibility. However, the third platform assigns a new role to IT, which implies significant IT contributions to *business innovation*. Thus the role of the “3rd platform” is defined as the technological basis of the digital transformation (Gens, 2013). The main elements of this technological platform consist of four components, namely (1) *cloud* technologies, (2) technologies to analyse large amounts of data (*big data*), (3) technologies to support *mobile* applications and (4) *social media* technologies and applications, which are also becoming increasingly important in the B2B

sector.

More recent publications such as Oztemel & Gursev (2020), for example, supplement this view with so-called

- *Cyber Physical Systems*, which serve to integrate physical systems into computing systems and thus contribute further components to industry 4.0 applications (Bergera, Heesa, Braunreuthera & Reinharta, 2016)
- Systems for enabling *machine to machine (M2M) communication*, such as those used for automated central collection of machine states for further processing by software (Biral, Centenaro, Zanella, Vangelista & Zorzi, 2015)
- *Augmented reality* systems that can superimpose physical real-world environments with computer-generated images to create an extended version of reality (Craig, 2013)
- Systems that belong to the so-called *internet-of-things*, which include devices connected to each other via the Internet, buildings, vehicles with their sensors and actuators along with the associated software and electronics (Bouhaï & Saleh, 2017).

This enumeration is not complete, but it does convey the nature of the technological systems that enable the digital transformation of enterprises. Digital technologies, along with strategies, organisational changes, structures, processes and corporate culture to be adapted, are only part of a complex task that companies are suggested to address for the purpose of digital transformation (Matt, Hess & Benlian, 2015; Selander & Jarvenpaa, 2016; Carlo, Lyytinen & Boland, 2012; Karimi & Walter, 2015). IT infrastructure products and services are expected to provide the foundation and platform for their use and therefore for the digital transformation itself.

Figure 5 embeds these terms in an overall context that underlines the foundational character of the IT infrastructure for the advancing digital technology.

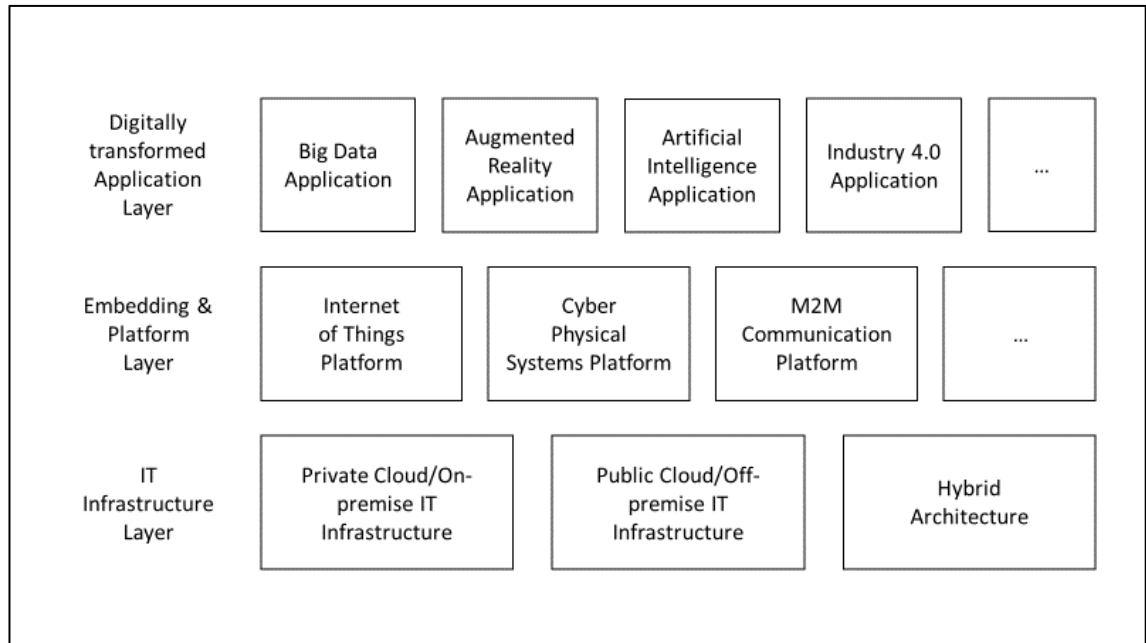


Figure 5: Positioning of technological terms in the context of progressive digitalisation (own creation)

The fundamental implications of advanced digital technologies for IT infrastructure vendors and their sales ecosystems can be illustrated by a closer look at digital business applications, e.g. in the form of a big data analytics use case. Such a use case could be a predictive analytics application for measuring the success of advertising activities in the social media sector (Nichols, 2013). The advantages of such a solution in a digitally-transformed business environment compared to traditional approaches are evident (Reschke, Rennhak & Kraft, 2017). Digital solutions like this imply potential competitive advantages for the customers, as described by Philip (2011). In this concrete case, these may result from the ability to read out previously hidden information from the company's data. Gantz and Reinsel (2011, p. 9) refer to this kind of business impact of digital technologies by defining big data as "a new generation of technologies and architectures, designed to economically extract value from very large volumes of a wide variety of data, by enabling high-velocity capture, discovery and/or analysis."

As a prerequisite, the implementation of such advanced solutions in many cases requires a preceding *transformation of the underlying IT infrastructure*. In this specific example, this could be due to the fact that big data applications have to

deal with much larger amounts of heterogeneous and unstructured data that cannot be easily captured, integrated and stored by traditional data infrastructures (Chong & Shi, 2015). The necessary adjustments at the infrastructure level, in turn, could create business opportunities for IT infrastructure vendors and their sales ecosystem partners.

However, the manufacturers are in competition with public cloud providers in this respect, as various on-premise and off-premise options can be considered for setting up big data solutions like the one mentioned in the example (cf. Section 2.3). Appropriate IT architectures could also be implemented in a mixed form as a hybrid cloud (cf. Section 2.7). Therefore, from the manufacturer's point of view, a successful sales strategy might require a differentiated approach, which considers both advanced digital technology and increased competition.

Nevertheless, it can be concluded that the progressive development of digital technologies offers considerable business opportunities for the manufacturers of IT infrastructures. It, therefore, seems reasonable to consider these aspects during the development of a transformation framework. If the sales and other prerequisites for addressing these opportunities are not yet in place, suitable change management methods are required to bring them about. This is discussed below.

2.5 Change and Transformation Management

A closer look at the question of how IT infrastructure manufacturers can deal with the transformation of their sales ecosystems obviously also requires a prior fundamental review of the current state of research on the topic of *change* or *change and transformation management*.

The literature contains a variety of definitions of these terms, some of which are complementary, others appear contradictory. For the purposes of this study, change can be seen as a constant phenomenon that all organisations are confronted with at both operational and strategic levels (Burnes, 2004; Todnem, 2005). Today, dealing with change is seen as essential to survival in business, environmental and in a societal context (Dunphy, Griffiths & Benn, 2009;

Sackmann, Eggenhofer-Rehart & Friesl, 2009; Kanter, 2008). Change management serves to deal with this phenomenon and can be defined in a business context as “the process of continually renewing an organisation's direction, structure, and capabilities to serve the ever-changing needs of external and internal customers” (Moran & Brightman, 2001, p. 111). In the view of some authors, change management concentrates in particular on the management of transition under special consideration of the human factor in organisations (e.g. Lauer, 2014). Others localise change management methods especially at three points, namely the individuals involved, the organisational structure, and the corporate culture (Staehele, 1999; Kostka & Mönch, 2002). According to the authors, with regard to the individuals, their abilities, roles and behaviour are significant, while cultural conditions are shaped by symbols, existing values and norms, as well as by prevailing basic assumptions. The organisational structure is reflected in the strategy, the procedures, as well as in the resources and technologies used.

Besides, for dealing with change it is essential to identify different types of change based on their distinctive characteristics. An essential differentiation criterion is the rate of occurrence (Todnem, 2005). Various authors use different concepts to distinguish between two essential antipodes, namely incremental and discontinuous change (Balogun & Hope Hailey, 2009; Burnes, 2004; Grundy, 1993; Luecke, 2003; Senior & Swailes, 2016).

Incremental change can be seen as a process of systematic and predictable change (smooth incremental change) or as a change characterised by “periods of relative tranquility punctuated by acceleration in the pace of change” (Senior & Swailes, 2016). Such changes are referred to as “bumpy incremental” changes (Grundy, 1993, p. 25). In contrast, discontinuous change can be defined as change “which is marked by rapid shifts in either strategy, structure or culture, or in all three” (Grundy, 1993, p. 26). Luecke underlines the peculiarity with which discontinuous change is characterised by its character as “single, abrupt shift from the past” (Luecke, 2003, p. 102). With regard to organisations, the final result of the change efforts can, depending on the change character (incremental or

“big bang”, i.e. discontinuous), lead to a realignment or transformation of the initial state (Balogan and Hope Hailey, 2008).

In addition to the rate of occurrence, another classification criterion for change processes is the appearance of the change, namely the question of whether the change is planned or whether it emerges (Todnem, 2005; Bamford and Forrester, 2003). The characterisation of the planned change goes back essentially to Kurt Lewin, who illustrated processes of change in social groups with a three-stage model (Cummings, Bridgman & Brown, 2016). In this model, successful change processes follow a pattern which sequentially goes through the phases of “unfreezing”, “moving” and “freezing”. On this basis, other authors developed supplementary or alternative change frameworks, such as a four-phase model, which is divided into the steps “exploration”, “planning”, “action” and “integration” (Batten & Bullock, 1985). As effective as such models may have been in the past (Bamford and Forrester, 2003), they have been criticised since the early 1980s (Kanter, Stein & Jick, 1992; Burnes, 1996). Todnem (2005) cites three main reasons for this: Firstly, such frameworks based on planned changes are mainly suitable for small-scale and incremental changes, rather than fast-moving changes of a transformative nature (Burnes, 2004). Secondly, organisations are no longer only exposed to stable conditions, but have to prove themselves in a rapidly changing environment, which is also characterised by continuous pressure to change instead of discrete, successive states of change (Burnes, 2004). Thirdly, often more directive approaches to change are required, since it can no longer be assumed that all stakeholders are equally interested in change and its implementation, but that resistance and conflicts often have to be overcome (Todnem, 2005).

The phenomenon of emergent change can be seen in the context of the concept of an organisation as an open system (Wilson, 1992; Senior & Swailes, 2016). This concept can be used to detail how an organisational system seeks to maintain a certain state of equilibrium by balancing the forces driving change with those seeking stability. Accordingly, organisational systems attempt to restore this state of equilibrium in the event of disturbances (Senior & Swailes, 2016). A

system evolving in this way experiences change as an emergent process resulting from experimentation and associated adaptation. In contrast to a change process planned from the top down, emergent changes tend to be driven from the bottom up (Bamford & Forrester, 2003; Burnes, 2004). Kanter et al. (1992) characterised such change processes as so fast that it is difficult for the management level of the organisations to effectively identify, plan and implement such changes as the frameworks of planned change approaches require.

For the purposes of this thesis, it seems appropriate to compare emergent change models in more detail, because the considered change drivers of progressive digitalisation and changing customer behaviour do not represent planned changes. Furthermore, the pronounced dynamics with which public cloud providers are successfully operating in the market (cf. Sections 2.3 and 2.7) does not indicate *incremental* adjustments for IT infrastructure manufacturers, but rather *discontinuous* change processes that affect the business model of numerous IT sales ecosystems (Nieuwenhuis, Ehrenhard & Prause, 2018).

Typical examples of emergent change management models are Kanter et al.'s (1992) *Ten commandments for executing Change*, Luecke's (2003) *Seven steps for managing change and transition*, and Kotter's (2015) *Eight-Steps Process for Successful Organisational Transformation*. The comparison of the three exemplary models, according to Table 3, suggests that the models overlap in some areas, while others seem to be neglected.

Although there are few studies on this, the Kotter model (2015), for example, seems to have become widely used in the business world (e.g. Teixeira, Gregory & Austin, 2017). However, with reference to the model submitted by Kotter (2015), Alas and Sharifi (2002, p. 320) argued that they had found no empirical evidence for some parts of Kotter's model in their own research. Plag (2008, p. 84) sees in Kotter's framework the "essence of Kotter's personal experiences with change processes". There are, therefore, some concerns that Kotter has not sufficiently specified the scientific selection criteria of the eight stages of his transformation model in his work.

Table 3: Comparison of three exemplary selected models for the mgmt. of emergent change (own creation, adapted from Todnem, 2005)

Dimension	Kanter et al.'s (1992) <i>Ten Commandments for Executing Change</i>	Luecke's (2003) <i>Seven Steps for Managing Change and Transition</i>	Kotter's (2015) <i>Eight-Step Process for Successful Organisational Transformation</i>
<i>Analyse</i>	Analyse the organisation and its need for change.	Mobilise energy and commitment through joint identification of business problems and their solution	-
<i>Vision, Mission, Strategy (VMS)</i>	Create a Vision and a common direction	Develop a shared vision of how to organise and manage for competitiveness	Developing a vision and strategy
<i>Framing</i>	Separate from the past	-	-
<i>Prioritising</i>	Create a sense of urgency	-	Establishing a sense of urgency
<i>Leadership</i>	Support a strong leader role	Identify the leadership	-
<i>Leadership</i>	Line up political sponsorship	-	Creating a guiding coalition
<i>Operationalisation</i>	Craft an implementation plan	-	-
<i>Operationalisation</i>	Develop enabling structures	-	Empowering broad-based action
<i>Communication</i>	Communicate, involve people and be honest	-	Communicating the change vision
<i>Institutionalisation</i>	Reinforce and institutionalise change	Institutionalise success through formal policies, systems and structures	Anchoring new approaches in the culture
<i>Motivation</i>	-	-	Generating short term wins
<i>Motivation</i>	-	-	Consolidating gains and producing more change
<i>Rewarding</i>	-	Focus on results, not on activities	-
<i>Leadership and Culture</i>	-	Start change at the periphery, then let it spread to other units without pushing it from the top	-
<i>Operationalisation</i>	-	Monitor and adjust strategies in response to problems in the change process	-

In addition to the criticism of the potential scientific inadequacy of at least one of the models mentioned, however, another aspect appears to be considerably more severe for this study: The mentioned models have in principle a certain *generality* in common, which makes them appear applicable in a multitude of use cases. Concerning the special research problem examined in this thesis, it seems that due to their generic nature, such models need to be adapted and extended for use in the transformation of IT infrastructure sales ecosystems.

This appears all the more important because the changes caused by the advancing digitalisation and "cloudification" (cf. Section 2.7) are of such a transformative nature that they may affect the balance of the partners involved in the IT infrastructure sales ecosystem. The transformative character of these changes is based in particular on the disruptive change drivers that impact customers' business models. This is discussed in the next section.

2.6 Digitalisation and Digital Transformation

In the previous sections, important change drivers that affect the end customers of IT infrastructure manufacturers were examined, such as the advancing digital technology and the changing customer (buying) behaviour. As briefly discussed, the possibility of substituting on-premise IT infrastructure with (public) cloud services can have a negative impact on the business opportunities of manufacturers, which is discussed further in Section 2.7 below. Here, the opportunities and chances associated with technology development will be further highlighted, the exploitation of which also depends on whether vendors achieve relevance for the digital transformation of their customers with their ecosystem.

To this end, it is important to first determine what is meant by digitalisation and digital transformation. Although the term *digitalisation* is frequently used in Germany, it is rarely actually defined (Müller, 2017). The Oxford English Dictionary defines digitalisation as "the adoption or increase in use of digital or

computer technology by an organisation, industry, country, etc.”⁶ (OED, 2019a). The definition of the term *digital transformation* is more ambiguous. Vial (2019) found in 28 sources no less than 23 different definitions of this term, which is very often used in connection with the postulated need for all companies to use digital technologies to adapt their business models to new requirements, in short: to transform (Westerman et al., 2014). Simple versions of the definition of digital transformation emphasise this approach by understanding it as “the use of new digital technologies (social media, mobile, analytics or embedded devices) to enable major business improvements (such as enhancing customer experience, streamlining operations or creating new business models” (Fitzgerald, Kruschwitz, Bonnet & Welch, 2014, p. 2).

Other definitions extend this view by going beyond the technological aspects of the term (e.g. Schallmo, 2018). Demirkan, Spohrer, and Welser (2016, p. 14) define digital transformation as a “profound and accelerating transformation of business activities, processes, competencies, and models to fully leverage the changes and opportunities brought by digital technologies and their impact across society in a strategic and prioritized way”. Going further, Bowersox, Closs, and Drayer (2005, p. 22) define digital business transformation as the “process of reinventing a business to digitize (sic) operations and formulate extended supply chain relationships”. Boueé and Schaible (2015, p. 6) understand the digital transformation in a broader sense as a “continuous networking of all economic sectors and an adaptation to the new conditions of the digital economy”. To complete the overview of exemplary scholarly definitions, Matt et al. (2015, p. 341) identify four key elements of the digital transformation, such as the structural changes that accompany the transformation, financial aspects, changes in value creation, and, of course, the use of technology to achieve goals.

In addition, there are a number of professional definitions by consultancy firms that address aspects of the fundamental change and the need for further

⁶ The term is suggested not to be confused with the term “digitisation” which means “The action or process of digitising; the conversion of analogue data (esp. in later use images, video, and text) into digital form” (OED, 2019b).

development that are driven by new (Internet) technologies. (e.g. Capgemini, 2011, p. 5; PwC, 2013, p. 9).

These and other definitions commonly assign the digital transformation a high importance for the business of the enterprises and at the same time emphasise the importance of new technology as enabler and accelerator in the entrepreneurial added value.

Scientific and professional publications on digital transformation and digitalisation often utilise the term *industry 4.0*. This term refers to a concept which has its origin in Germany and can be defined as “the integration of complex physical machinery and devices with networked sensors and software, used to predict, control and plan for better business and societal outcomes” (Industrial Internet Consortium, 2017, as cited in Maresova et al., 2018). Earlier definitions of the term refer to “a new level of value chain organisation and management across the lifecycle of products” (Kagermann, 2014).

The meaning of the term is closely related to the concept of the *fourth industrial revolution*, which is more common in the Anglo-Saxon language world. Accordingly, the first industrial revolution took place from about 1760 – 1900, when the mechanisation of the industrial world with the help of water power and the steam engine revolutionised. When the mass production of goods gained relevance, which was essentially also based on the broad availability of electricity, a new era was ushered in, which today is referred to as the second industrial revolution of the years around 1900 – 1960. The third industrial revolution from 1960 to 2000 was made possible by electronics and information technology based on computerisation and automation (Syam & Sharma, 2018, p. 136; Shafiq, Sanin, Szczerbicki & Toro, 2015, p. 1147; Prisecaru, 2016, p. 57). Since the 2000s, the so-called fourth industrial revolution has begun in this paradigm, shaped by the so-called cyber-physical systems, which interact with humans or even enable communication between machines without the direct participation of human beings (Marr, 2016).

The importance of the terms digitalisation, digital transformation and industry 4.0

for IT infrastructure manufacturers and their sales ecosystems becomes clear in considering the consequences for their customers. Concrete implementations of advanced digitalisation applications can be found, for example, in the areas of Smart Factory and Manufacturing, Smart Building, Smart Transportation, Smart City and Smart Grid, to name only the most important of a longer list (Lu, 2017).

Official bodies such as the German Federal Ministry of Economics and Energy (BMWI, 2019) define a smart factory, for example, as a production facility that (in contrast to the passive factory components that determined production in the past) now controls the production process under machine coordination with active components such as digital sensors and actuators.

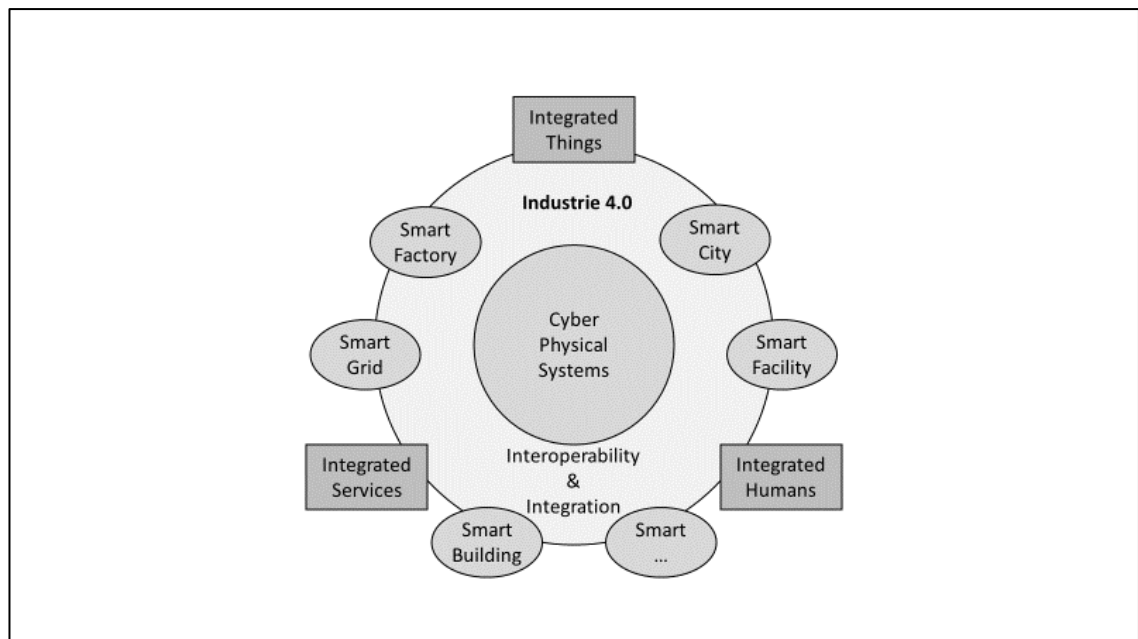


Figure 6: Industry 4.0 Interoperability Framework (own creation, adapted from Lu, 2017, p. 5)

The concept of the smart city refers to the objective of advancing urban development with technological innovations and the use of digital data from residents (Shelton, Zook & Wiig, 2015). Smart transportation systems can provide intelligent added value in transportation in a variety of ways, e.g. digital ticket billing for public transport in megacities (Mrityunjaya, Kumar, Laxmikant, Ali & Kelagadi, 2017). Smart grid technologies are essential components of modern power network architectures for the distribution of renewable energies (Schaefer, Matthiae, Timme & Witthaut, 2015) while smart building systems make formerly

proprietary home automation systems accessible via the Internet (Bhusari, 2014).

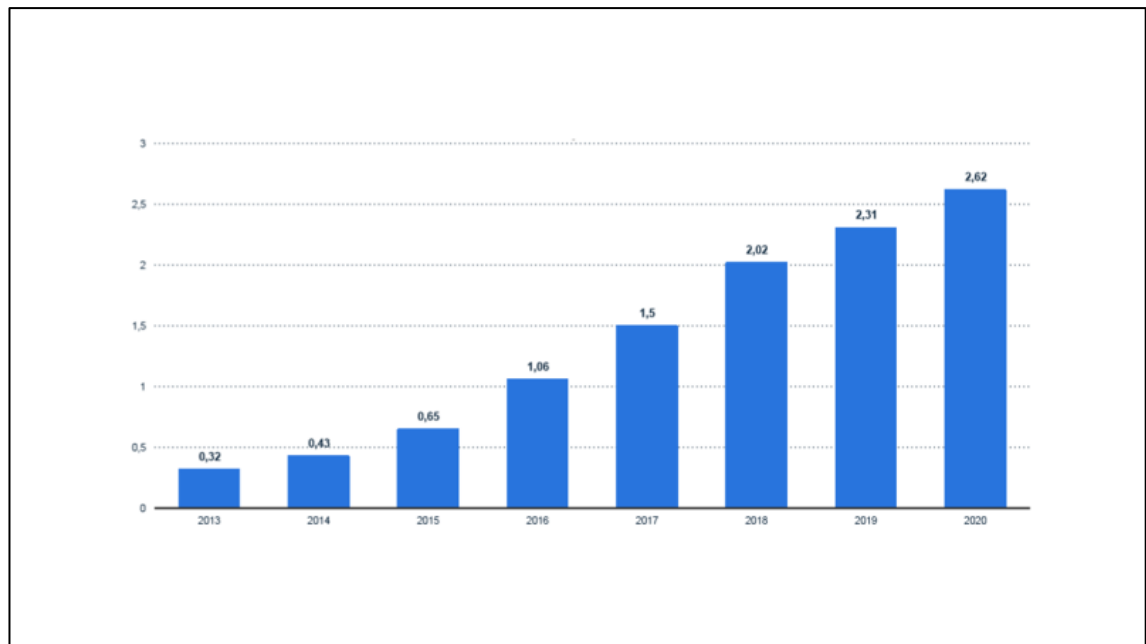


Figure 7: Industry 4.0 investments in Germany in Bln. Euro from 2013 – 2020 (prediction) (Source: Statista, 2018)

These applications lead to considerable business opportunities in Germany, as Figure 7 shows. It can be assumed, that parts of these are addressable for IT infrastructure vendors and their sales partners, since none of the mentioned digital solutions in the field of digital transformation or industry 4.0 is conceivable without an efficiently functioning IT infrastructure providing the platform for it. Therefore, it is suggested that digital transformation offers attractive sales opportunities for IT infrastructure vendors and their sales ecosystems. However, it can be assumed that certain prerequisites need to be fulfilled in order to address them. Exploring these is one of the research objectives in the development of the transformation framework for IT infrastructure manufacturers. As already indicated in Section 2.4, it can be assumed that competing public cloud providers are also interested in tapping into this business potential. For this reason, cloud-based IT solutions will be examined in more detail below.

2.7 Cloud-based Information Technology

The development of a transformation framework for the sales ecosystems of IT infrastructure manufacturers probably cannot succeed without analysing the

phenomenon of cloud information technology (Cloud IT). The idea of cloud IT is closely linked to that of cloud computing. This cloud computing represents an essential concrete manifestation of the advancing digitalisation, which benefits from the availability of on-demand self-services, resource pooling capabilities, broad network access and, in particular, rapid elasticity (Biebl, 2012; Bitkom, 2009; Srivastava, 2014). From the customer's perspective, these advantages associated with the use of cloud technologies have led to cloud computing playing a central role in the discussion on the further development of corporate IT (Venters & Whitley, 2012, p. 179).

The technological origin of the idea of providing computing power as a service that can be obtained via a network infrastructure is not new, but has already emerged in the 1960s (Cafaro & Aloisio, 2011). In fact, today's business development of well-known cloud service providers, such as Amazon Web Services (AWS), is characterised by significant growth in the cloud computing business area, not only in Germany, but worldwide (cf. Figure 8). Wherever public cloud solutions are implemented for and by customers, this is potentially at least in part at the expense of the sales opportunities of traditional IT infrastructure components vendors who previously sold these to the customers for "on-premise" implementation.

As defined by NIST⁷, cloud computing is "a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources" (Mell & Grance, 2011, p. 2). These resources can be provided quickly and flexibly and allocate only a minimum of the company's own effort or require little interaction with a (public) cloud service provider.

⁷ NIST stands for National Institute of Standards and Technology, belonging to U.S. Department of Commerce.

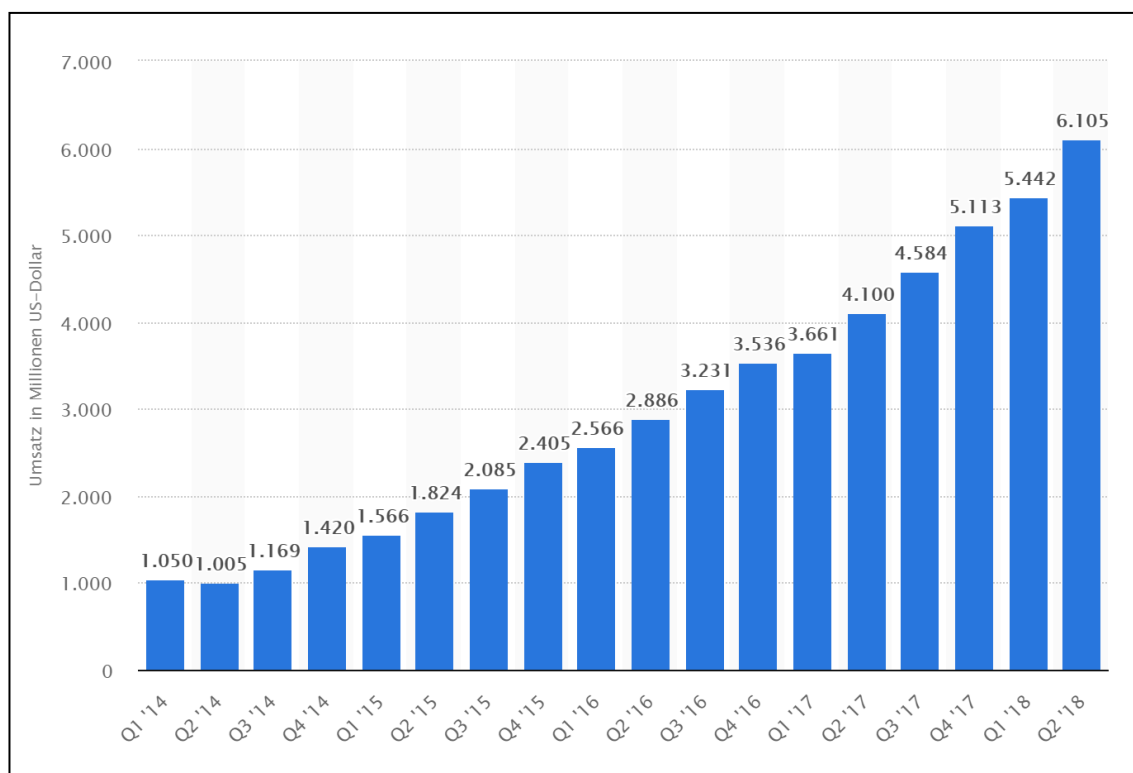


Figure 8: Worldwide Amazon Web Service Cloud Computing revenue in Mio USD from Q1/2014 – Q2/2018 (Source: Statista, 2019)

In addition to the cloud computing characteristics cited above, the NIST model quoted in Mell & Grance (2011) highlights two other aspects of particular importance, namely the so-called *service model* and the *deployment mode*⁸. With reference to the service model, the variants Software as a service (SaaS), Platform as a service (PaaS), Infrastructure as a service (IaaS), are distinguished⁹. Three of the four service models most commonly used in practice can be distinguished in the following essential deployment models¹⁰:

- Private cloud, i.e. it is made available for exclusive use by the organisation or company. They can own, manage and operate the cloud themselves or leave it (in whole or in part) to third parties, whether on-premise or off-premise.

⁸ This distinction is relevant for IT infrastructure sales ecosystem transformations, because the choice of the cloud deployment model determines whether the customer implements an on-premise/private/hybrid model with cloud-based technology or purchases the service of a public cloud provider.

⁹ Cf. Section “Acronyms and key terms used in this study” on p. xvii.

¹⁰ In addition, the NIST Model (Mell & Grance, 2011, p. 3) also incorporates the so-called “Community Cloud”, which is set up for several companies in the form of a “shared private cloud” according to their shared needs.

- Public cloud, i.e. the infrastructure is built on premises of the cloud provider, which can be a business, academic or government organisation, and then offered for general availability.
- Hybrid cloud, i.e. the cloud infrastructure is composed of two or more cloud infrastructures that can belong to different categories (e.g. private and public), which remain independent but are brought together using suitable technology.

These industry standardisations can be complemented by cloud computing definitions that emphasise cloud customer benefits through the option of flexible and elastically changing consumption. Boss, Malladi, Quan, Legregni and Hall (2007) define cloud environments as platforms that dynamically provision, configure, reconfigure and de-provision server capacity – just as the customer needs it. Access to applications can be designed in such a way that customers and business partners can connect to them using PCs and laptops, tablets, smartphones or other mobile computing devices (Cubitt, Hassan & Volkmer, 2011; Iyer & Henderson, 2010; Venters & Whitley, 2012).

From the vast amount of advantages of using cloud technologies as described above, it seems likely that such solutions will remain attractive for companies in the future. These advantages include the possibility of reducing the amount of CAPEX-based expenditures and the use of subscription models, which open up the possibility of using pay-as-you-use models, which is associated with a shift to operating expenditures (OPEX) (Dhar, 2012, p. 668). Furthermore, from the customer's perspective, this can also lead to an optimisation of the use of software licenses and the general optimisation of hardware utilisation (Armbrust et al., 2010).

However, there are reasons to assume that the IT needs of German customers will not be completely covered by public cloud providers. For example, further developed customer-specific outsourcing concepts (Kinnula, Seppanen, Warsta & Vilminko, 2007) or the remaining on-premise operation at customers (also in the form of private/hybrid clouds) will continue to offer attractive business opportunities for IT infrastructure vendors and their sales ecosystem partners. It

is suggested that these can be made accessible if IT infrastructure manufacturers adapt to the evolving conditions and transform their sales ecosystems in order to remain competitive. From a technological perspective, such efforts could benefit from so-called "federal cloud" solutions, that are not only suitable for integrating private and public cloud environments into an overall concept through application portability, but can also create freedom of choice between various external cloud providers (Varghese & Buyya, 2018, p. 851). Similar to IT infrastructure vendors and certain hardware components a few years ago, this could also be seen as the beginning of the commoditisation of cloud providers and their offerings.

The last four sections discussed different types of change drivers that potentially affect IT infrastructure vendor sales ecosystems. The use of advanced sales methodologies and sales transformation models, as illustrated below, could help vendors to respond to these, at least with regard to their own sales force.

2.8 Advanced Sales Methodologies and Skills

As discussed in Section 2.3, the purchasing behaviour of IT customers is subject to rapid change. The resulting consequences with regard to IT infrastructure products are potentially aggravated by the rapidly growing use of public cloud offers. To respond to this, IT infrastructure manufacturers and other providers also question the sales methods and sales competencies that shape the interaction between customers and suppliers to manage this change (Dixon & Adamson, 2011; Borg & Young, 2014). For the purpose of systematising newer approaches to sales, a prior systematic classification of traditional and more modern sales methods is appropriate.

Traditional definitions generally characterise "selling" as "interactive, personal, paid promotional approach between a buyer and seller" (Tanner & Raymond, 2010, p. 222). With increasing demands on the sales process as such, various sales methodologies have developed to date, the first formalisations of which were documented in the late nineteenth century (Inks, Avila & Talbert, 2019, p. 90). In a training manual called "The Primer", the owner of the National Cash Register Corporation (NCR), John H. Patterson, outlined a sales method based

on four steps, i.e. approach, proposition, demonstration and close (Friedman, 1999). He lined out, inter alia, how to deal with customer objections during the sales talk or how to achieve sales closures. Even in these early methodological instructions, the benefits of an approach that does not focus directly on the description of the product to be sold became apparent. Rather, Patterson recommended a procedure that could be associated more with customer- and value-added-oriented consulting in order to achieve sales success. Later papers, published in the 1920s, referenced to such detailed sales concepts, e.g. those referring to *seven steps of selling*, which formed the basis for later publications. (Moncrief & Marshall, 2005).

Since these early methodological approaches to sales procedures, the methodological toolbox has evolved in many ways. According to Inks et al. (2019), many of the more advanced approaches can be classified as problem solving, adaptive selling and consultative selling (Gwinner, 1968; Rackham & DeVincentis, 1999; Saxe & Weitz, 1982; Weitz, Sujan & Sujan, 1986).

The approach of *problem solving* goes back to the idea of the consulting salesperson, who acts on the basis of a good personal relationship with the customer as an extended workbench in order to master challenges (Rackham, 1988). The same author proposed a sales methodology for this purpose, which he called “SPIN” and referred to four key roadmap steps for implementing a strategic sales approach. Within the scope of this model, the salesperson develops his sales strategy sequentially, initially on the basis of situation-related questions for facts and figures (S). This is followed by an exploration of the problems (P) and the negative implications (I) associated with the situation before the actual customer need (N) is worked out.

Such a methodical approach can be supplemented by special sales behaviours that are related to the individual adaptability of sales employees. Spiro and Weitz (1990) first systematised this sales adaptability in a model that comprises 16 success criteria and draws on an earlier definition of Weitz et al. (1986). According to this definition, *adaptive selling* includes “the altering of sales behaviours during a customer interaction or across customer interactions based

on perceived information about the nature of the selling situation” (Weitz et al., 1986, p. 175). In this sense, selling is not only about *what* salespeople say, but also about *how* they say it in order to respond to different situations (Inks et al., 2019; Ingram, LaForge, Avila, Schwepker & Williams, 2017).

The need to create added value during the sales process, which was already indicated in Section 2.3 on changed customer behaviour, corresponds closely with the method of *consultative selling*, which is also referred to as a form of value-related selling (Terho, Haas, Eggert & Ulaga, 2012). To create value, it is necessary to understand the customer’s business in a particularly strong sense in order to help customers achieve their strategic goals (Rackham & DeVincentis, Töytäri, Alejandro, Parvinen, Ollila & Rosendahl, 2011). Graziano & Flanagan (2011, p. 34) stress the importance of a non-manipulative character of the sales approach in the application of the consultative selling method, which focuses exclusively on customer needs and objectives. To this end, salespeople are suggested to work proactively with their customers to help them effectively identify and meet their needs (Castillo & George, 2018, p. 42). In addition, however, they are expected to be also familiar with the client’s relevant business area so that they can develop and recommend individual solutions and not just act as pure product sellers (Liu & Leach, 2001; Numminen et al., 2012).

The aforementioned selling approaches can be supplemented by aspects that have gained special attention in the 1980s and 1990s under the heading of *relationship selling* (Inks et al., 2019, p. 91). Relationship selling has been used by organisations that want to gain competitive advantages by building long-term, well-maintained buyer-seller relationships (Frankwick, Porter & Crosby 2001; Jones, Brown, Zoltners & Weitz, 2005). In the ideal case, this procedure results in a certain degree of trust between the parties involved on the buyer and seller side, which can lead to pronounced customer loyalty (Ball, Simões Coelho & Machás, 2004). Nevertheless, the possibilities for relationship selling are becoming increasingly constrained (Arlı, Bauer & Palmatier, 2018), as rising customer expectations and an increase in administrative activities on both the supplier and the customer side, as well as an increase in the use of e-commerce

platforms, restrict opportunities in this respect (Dixon, Frewer & Kent, 2011; Baumgartner, Hatami & Valdivieso, 2016).

It seems, therefore, logical that newer sales models such as the so-called *challenger sales model* (Dixon & Adamson, 2011) question the relevance of personal relationships in the sales process. Following the authors' analysis, which according to them is based on data from more than six thousand sellers, relationship-oriented sellers appear to be the least efficient. This insight is based on the classification and categorisation of sales behaviour into five sales types. Dixon & Adamson (2011, p. 19-21) first define the profile of the so-called (1) *hard workers* who, as the name of the profile suggests, make more customer visits than others, get up early, finish late, never give up and always “go the extra mile”. The profile of the so-called (2) *lone wolf* is characterised by the fact that employees with this personality are very self-confident, follow their own instincts and are difficult for their managers to control. In the model, the (3) *problem solver* is distinguished by the characteristic of being reliable, detail-oriented and keeping all promises to internal and external stakeholders, thus fulfils post- rather than presales requirements. The so-called (4) *challenger* salesperson is associated with attributes that go hand in hand with a deep understanding of the customer's business and the ability to push the customer into a certain direction. This sometimes creates a certain tension between him and the customer which, according to Dixon & Adamson (2011, p. 22), is beneficial to sales success. However, building up and sustaining such a tension is reluctant on the part of those sales employees who primarily correspond to the profile of the so-called (5) *relationship builder*. These employees invest a great deal of their attention and time in meeting all customer requirements in order to build a very good relationship over the years.

The bridge from this typology of salespeople to sales methodology is formed by Dixon & Adamson's (2011, p. 22) claim that “challenger sales”-oriented

employees are more successful¹¹. According to the model, the success of these sales representatives is, as mentioned above, based on their ability to build up pressure towards the customer and to withstand the resulting tension. In addition, the challenger sales representative in this model distinguishes himself by offensively opening up new perspectives for the customer. Moreover, he knows the value and economic driver of the customer, has very good communicative skills and is not afraid to represent financial arguments to the advantage of his employer. Because of these capabilities (and the resulting superiority over the other sales profiles), the sales model and its associated methodology is referred to as the challenger sales model.

Nevertheless, the challenger sales model is increasingly being critically questioned by newer publications. Rapp, Bachrach, Panagopoulos, and Ogilvie (2014, p. 248) identified a number of conceptual and empirical limitations of the model. Referring to findings by Homburg, Bornemann & Kretzer (2014), they criticise that Dixon and Adamson fundamentally misunderstood the special importance of relationship building in the modern sales process. Furthermore, in a follow-up publication based on the challenger sales framework, Dixon and Adamson conclude that the so-called solution sales approach is obsolete, as customers do not need sales staff from supplier companies because they are skilled enough to develop their own solutions (Adamson, Dixon & Toman, 2012, p. 63). Rapp et al. (2014, p. 249) in turn argue that this view reflects a “fundamental misconception of business reality” that does not correspond to the actual definition of solution sales. In addition, the authors argue that the challenger sales model refers to customer orientation aspects already developed in the 1980s in four of the six attributes listed in the challenger sales model (Saxe & Weitz, 1982). The remaining attributes would also refer to already well-researched selling orientation approaches (Thomas, Soutar & Ryan, 2001). Accordingly, one could agree with James (2013), who found nothing more in the challenger sales model than a “repackacking of old material” (Rapp et al., 2014,

¹¹ The challenger sales model has been adopted by numerous organisations, not limited to IT Infrastructure vendors (Isaac, Abraham, & Richards, 2019), and is therefore being examined in more detail.

p. 251).

What the models presented have in common, despite the partly controversially discussed substance and usefulness for modern sales, seems to be the fact that today's sales employees have to develop more and more into knowledge brokers (Verbeke, Dietz & Verwaal, 2011). On the one hand, customers are becoming better and better informed (cf. Section 2.3 and Sheth & Sharma, 2008) due to ubiquitously available information (also on the subject of IT infrastructure). On the other hand, today's complex solutions can often only be created in a kind of co-creation between supplier and customer that is closely oriented to the customer business and meets very specific requirements (Ramaswamy & Ozcan, 2014; Viio & Grönross, 2014). In addition to in-depth knowledge on the part of the sales employee, this requires in particular the availability of a network of efficient partnerships and alliances in order to successfully create value for the customer (Marcos Cuevas, 2018, p. 202).

Thus, when developing the transformational change framework for sales ecosystems of IT infrastructure manufacturers, it also seems important to critically question sales methodologies applied. This must be distinguished from the application of sales transformation models, within which the provisioning of new sales methodologies can only be one of many forms. These transformation models are discussed in the literature as follows.

2.9 Sales Transformation Models

In recent years, sales requirements have changed so dramatically that the role of the salesforce is suggested to be redefined (Marcos Cuevas, 2018, p. 198). The efforts to prepare sales teams for such disruptive changes can be called sales transformation (Shiver & Perla, 2016).

In the following, four different sales transformation models will be examined in more detail. These were intentionally selected as examples from services offered by consulting companies, professional publications by practitioners, experience reports from transformations already carried out, as well as from the domain which satisfies scientific requirements. Table 4, p. 46 compares these

approaches to one another on the basis of certain dimensions, which are more or less strongly reflected by the models.

Hatami, McLellan, Lun Plotkin & Schulze (2015, p. 1) have proposed a commercial sales and marketing transformation framework based on six core components. Accordingly, it is first important to become clear about the status quo and the target scenario (“Know where you are and where you go”) before beginning transformation efforts. At the beginning of the transformation, it is also essential to form a core team that works together in trust (“Create a transformation team built on trust”). Successful transformations in this model are also based on rapid successes within the first 6 to 12 months (“score quick wins”). It is also important to involve the whole organisation in the transformation process (“Activate the Organisation”). Obstacles, which the involved employees see themselves confronted with, are to be overcome with targeted assistance (“Commit to coaching”). Finally, measuring success through dashboards, defined metrics and continuously captured qualitative trigger points is essential (“hardwire a performance culture”).

Shiver & Perla (2016) emphasise in their publication on *Seven steps to Sales Force Transformation* that sales transformation is not a one-off event, but creates the need to be driven forward sustainably and continuously. They use a model with seven consecutive steps to illustrate what they consider to be an appropriate approach. In the first step, the identification of change motivation, they refer to seven drivers that they consider to be predominant and of which the companies should first become aware. The next step suggested is to develop a transformation vision that sets a target for what is to be achieved in three years, for example. In the third step, the authors suggest the development of an internal value proposition to be communicated. Then, in the fourth to sixth step, the transformation is to be implemented with the help of the required organisational sponsorship, the assignment to the sales managers to lead the change, the created buy-in of the sales teams, and a suitable project plan, which also maps a change roadmap. In the seventh step of this model, it is important to ensure the necessary sustainability of the transformation brought about, by continuing to

measure success, adequate management cadence, and continuous communication.

Smilansky's (2015) reflections on the design of the transformational change process in sales form a simple framework, which gives indications regarding the employees, the processes and the technologies to be involved. First of all, it is particularly important in this model to select the right customers for the implementation of the sales transformation. Once the "most desirable customers" (Smilansky, 2015, p. 44) have been selected, it is suggested to be important to define the team composition according to these customers in such a way that the corporate strategy can be effectively implemented. This strategy is proposed to be also reflected in the incentives, determined in the next step. It is also advantageous in this approach to limit the offer only to what is most valuable to the customer. In order to identify promising projects, it is suggested to promote cooperation between sales and marketing in such a way that numerous high-quality leads are generated. To these, perfectly fitting sales resources are allocated with the help of a so-called bid response team. Finally, the performance of the sales teams can be monitored and tracked in a so-called sales war room in order to achieve the transformation goals (cf. Table 4, p. 46).

Piercy & Lane's (2009a, 2009b) Transformations framework for sales organisations is based on the distinction between the five core components of Involvement, Intelligence, Integration, Internal Marketing and Infrastructure¹². These are supplemented by a further four marginal aspects relating to the aspects of inspiration, influence, integrity and internationality (cf. Figure 9). The authors first point out the *involvement* element of their model and emphasise the importance of inviting sales teams into the development of marketing and business strategy rather than just letting them execute it. This is important in order to avoid a blind spot on the part of management with regard to existing "trends, opportunities and threats" (Piercy & Lane, 2009a, p. 312). The high importance of identifying value-generating business opportunities is reflected in the second

¹² The "five i's" designation of the model used in this thesis, derives as already mentioned in Section 1.1 from the first letter of each of these five core components.

framework element “intelligence”, which underlines the relevance of a precise understanding of real customer problems in the sales organisation and its management.

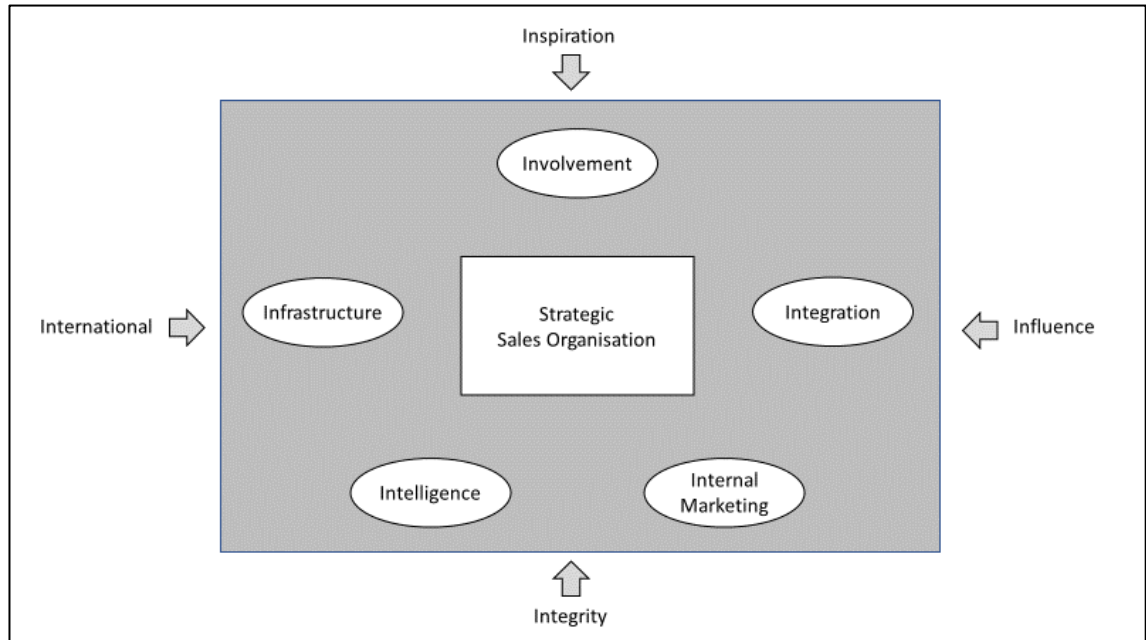


Figure 9: Five i's Model for managing strategic sales organisation transformations (own creation, adapted from Piercy and Lane, 2009a)

McGovern, Court, Quelch & Crawford (2004) emphasised in their study that some large companies paid too little attention to the real challenges of their customers to understand them adequately. Based on this understanding, providers need to create customer value by integrating all aspects of their own strategic change and process management around this customer need. This is reflected in Piercy & Lane's (2009a) Framework Element *integration*. In addition, the model also contains an *internal marketing* element which ensures cross-departmental support for a customer value strategy and the associated “service and relationship promises” (Piercy & Lane, 2009a, p. 316). Finally, *infrastructure* is of particular importance in this model, since modern tasks of the sales organisation that go beyond transactional selling require certain adjustments with regard to the organisational structure, performance measurement, the possibilities for competence building, as well as compensation systems (Shapiro, Slywotsky & Doyle, 1998).

Table 4: Comparison of four exemplary selected sales transformation models and their main focus (own creation)

		Six Steps to transform Sales and Marketing Capabilities	Seven steps to Sales Force Transformation	Seven tenets of Sales Transformation	Five i's Model
Author(s)		Hatami et al. (2015)	Shiver & Perla (2016)	Smilansky (2015)	Piercy & Lane (2009a, 2009b)
Model character		Commercial/professional	Commercial/professional	Commercial/professional	Scientific/peer-reviewed
Model Dimension	Planning	1. Know where you are and where you are going.	2. Creating Your Sales Transformation Vision 5. Building your Sales Transformation Roadmap	-	-
	Organisational setup	2. Create a transformation team built on trust.	6. Implementing your Sales Transformation	2. Configure teams to better align with the strategy 5. Assemble a bid response team 6. Organise a sales "war room"	4. Internal Marketing 5. Infrastructure
	Motivation	3. Score quick wins.	1. Finding your Motivation (Drivers)	7. Provide appropriate incentives that reflect the strategy	(built into inspiration)
	Leadership	4. Activate the organisation. 5. Commit to Coaching	3. Building your Case/Value proposition 4. Creating internal support	-	1. Involvement 6. Inspiration 7. Influence 8. Integrity 9. International
	Culture	6. Hardwire a performance culture.	-	-	-
	Prioritisation	-	7. Ensuring sustainability	1. Focus on the right customers	(built into influence)
	Customer Value Creation	-	-	3. Narrow the offerings to suit customer needs	2. Integration 3. Intelligence
	Tactical focus	-	-	4. Place emphasis on generating quality leads	-
Essence		More than two thirds of traditional commercial transformations fail. Companies need to focus on six key areas to manage successful transformations.	Sales transformation can be managed by focusing on 7 transformation steps, which are based on the levers "perspective", "alignment", "leadership", "sequence", "measurement" and "communication".	Companies should put customer demands first and then adapt their people, processes and technologies to meet transformation needs.	Transformations depend on sales involvement in strategy creation, aligning internal forces through integration and internal marketing, and appropriate infrastructure as well as customer intelligence.
Evidence		Own experience with 100 transformation projects in 5 years, supplemented results of surveys with 2,300 executives.	Not published	Not published	E.g. applied by Malshe et al. (2013) in emerging markets related sales research.

The model is rounded off by the peripheral aspects of (content) *inspiration* (instead of pure feedback and supervision), *influence* (as a necessity of deep sales management engagement with the rest of the organisation), *integrity* (as an obligation to adhere to ethical standards and corporate values), and, finally, *internationality* (in order to be correctly positioned against globalisation trends).

In summary, these exemplary models could complement each other well as they set different priorities. The model of Hatami et al. (2015) appears strategically focused, while Smilansky's (2015) model seems to provide more general tactical operational support. Shiver & Perla's (2016) transformations framework seems to be the most comprehensive from a practical point of view, but it does not provide any scientific underpinning. The latter three models origin from the professional literature, while the model of Piercy & Lane (2009a, 2009b) has a certain scientific foundation (peer-reviewed) and has proven its suitability for application in related research projects, e.g. in Malshe et al. (2013). None of the models should be denied the suitability for use in the respective areas for which they were developed. Nevertheless, each of these models lacks sufficient consideration of the requirements for indirect sales models and their interlocking with the (manufacturer's) own sales teams. Also other models evaluated from the scholarly or professional literature suffer from this deficit. To close this gap for the case of IT infrastructure vendors and their sales ecosystems is the subject of this study.

This consideration leads to the following conclusion of this chapter.

2.10 Conclusion

In this chapter the relevant literature for the research problem examined in this thesis has been reviewed and summarised. The presentation of the structural set-up of indirect sales models in the IT infrastructure segment first gave an overview of the stakeholders involved in the ecosystems. These stakeholders are exposed to certain manifestations of changing customer behaviour. Some of the changes are determined, inter alia, by trends towards IT vendor consolidation, centralised purchasing processes, later inclusion of vendors and partners in the

buying process, as well as a distinct tendency towards subscription-based (public) cloud services. In addition, these developments are associated with the emergence of a large number of evolving digital technologies, which at the same time increase the pressure on customers to digitally transform their business models.

Although the growing customer preference for cloud services may threaten the business success of IT infrastructure manufacturers and their sales ecosystem partners, the development of digital technologies also offers numerous opportunities for these suppliers. To tap into these opportunities, the application of appropriate sales methodologies, change management and sales transformation models seems to be required.

However, the change and transformation models discussed in this review show some inconsistencies and gaps with regard to the expected challenges in the transformation of IT infrastructure sales ecosystems. Moreover, they do not appear granular enough for the specific needs of these systems. The same applies to the application of the most recent sales approaches, such as the challenger sales model, which, according to the results of the literature review, is increasingly being critically questioned.

Overall, the presentations in this chapter showed that there is a significant need for further investigation with regard to the research problem underlying this thesis. In order to provide this research with a good foundation, the next chapter will highlight the methodology and research approach used for this purpose.

Chapter Three – Research Paradigm, Methodology and Design of the Study

3.1 Introduction

The purpose of this study was to explore how multinational IT infrastructure vendors can transform their IT sales ecosystems in Germany, considering industry digitalisation and evolving customer behaviour as change drivers. This chapter first explains the research paradigm in which the study is located and my ontological and epistemological positioning as a researcher. Subsequently, a variety of different research methodologies are evaluated. It is explained why the Ground Theory Methodology approach seemed most appropriate to the investigated problem. After a brief overview of which GTM approaches exist, the research methods applied in the study are explained, which are based on the GTM principles of Corbin & Strauss (2015). The relevant sections provide insights into the theoretical foundations of the data collection, data sampling and data analysis processes applied here. The chapter concludes with a brief summary of the relevant research ethical considerations and a description of the validation of the study by the means of appropriate GTM evaluation criteria.

3.2 Research Paradigm

Scientists are confronted with a wide range of possible research approaches from which to select the ones that are appropriate for their investigation before they begin to explore the phenomena to be studied. This selection essentially determines the basic assumptions applicable to the research to be carried out, which characterise the so-called research paradigm, as well as the research design and the methods to be applied to achieve the research objectives.

A research paradigm can be seen as a "belief system or worldview that guides the investigator, not only in choice of method, but in ontologically and epistemological fundamental ways" (Guba & Lincoln, 1994, p. 105). The term ontology refers here to the question of how reality is perceived (i.e. "how the world is constructed"); the term epistemology is related to the question of how knowledge comes about and which processes of knowledge are conceivable (i.e.

“how knowledge is constructed”) (Orlikowski & Baroudi, 1991, as cited in Urquhart, 2013, p. 57). The philosophical convictions of a researcher on these fundamental questions determine his approach to research problems.

McAuley, Duberley & Johnson (2014, p. 31) highlight the importance of realising "that any scientific endeavor is underpinned by philosophical assumptions about ontology and epistemology". For me personally, in addition to this publication, the following considerations were particularly helpful in the preparation of my research project.

One of the possibilities to become clear about one's own convictions in this regard is the examination of the paradigm model of Burrell and Morgan (1979). Accordingly, a research paradigm can be seen as "a commonality of perspective that binds the work of group of theorists" (Burrell & Morgan, 1979, p. 23).

According to Burrell's and Morgan's (1979) account, the paradigms depicted in Figure 10 are to be regarded as "diametrically opposed" (Urquhart, 2013, p. 58).

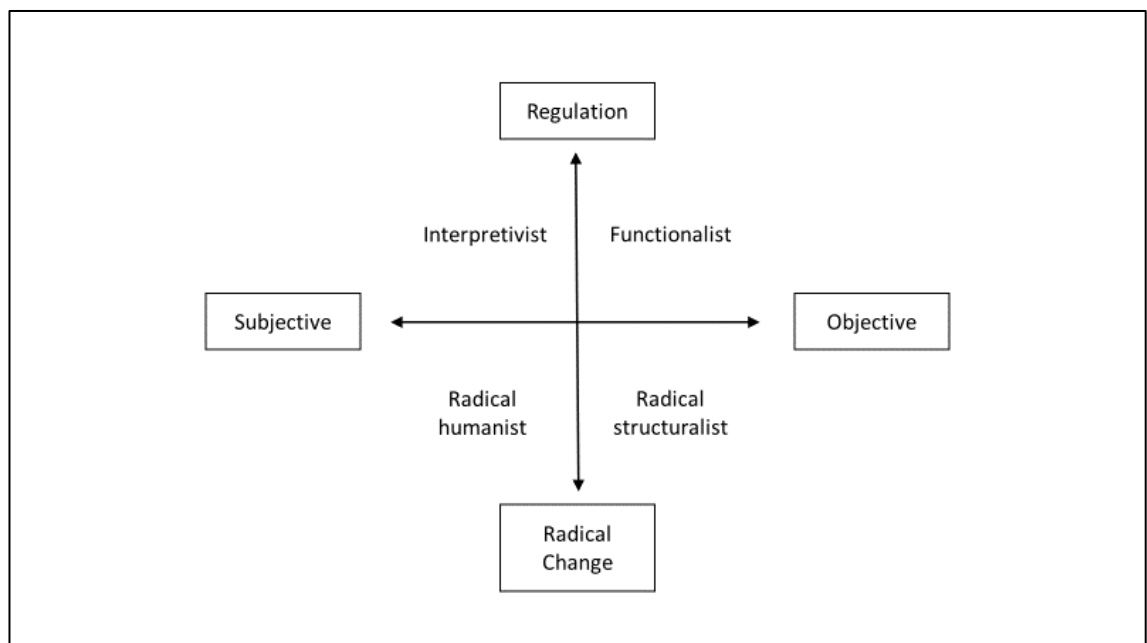


Figure 10: Paradigms of social theory (own creation, adapted from Burrell & Morgan, 1979; Urquhart, 2013)

They differ, for example, in that functionalists strive to give rational explanations for certain social matters using methods derived from the natural sciences (Burrell

& Morgan, 1979, p. 26 et seq.). Radical humanists are characterised in this model by the fact that research in this paradigm attempts to free individuals from social norms that prevent them from unfolding their personal potential (Burrell & Morgan, 1979, p. 32 et seq.). Radical structuralists, on the other hand, focus less on individuals and more on structural relationships within society (Burrell & Morgan, 1979, p. 34 et seq.). Researchers who position themselves in the interpretivist paradigm try to penetrate reality through a subjective analysis by understanding "the very basis and source of social reality" (Burrell & Morgan, 1979, p. 31).

The aforementioned understanding of "interpretivism" is very similar to Orlikowski's and Baroudi's (1991) understanding of the latter. They distinguish three basic philosophical assumptions (cf. Table 5).

Research Philosophy	Ontology	Epistemology
Positivism	Researchers assume an objective and social world that exists independently of humans, can be apprehended, characterised and measured.	Positivist researchers work in a deductive way to discover unilateral, causal relationships. There is a concern with the empirical testability of theories. Hypothesis, based on theory, are tested in the research for verification or falsification.
Interpretivism	Researchers have a presumption of social constructivism, that reality is a social construct and cannot be understood independent of the actors who make that reality.	Interpretative researchers study phenomena within their social settings. Constructs are generally derived from the field by in-depth examination of that field. Researchers aim to construct interpretations of practices and meanings.
Critical	Researchers have the view that social reality is historically constituted and people have the ability to change their social and material circumstances. Their capacity to change is constrained by systems of social domination. Social reality is produced by humans, but also possesses objective realities that dominate human experience.	With respect to knowledge, the epistemological belief of the critical perspective is that knowledge is grounded in social and historical practices. There can be no theory-independent collection of evidence to conclusively prove or disapprove a theory. There is a commitment to a processual view of phenomena.

Table 5: Positivist, interpretivist and critical research paradigms (Source: Adapted from Orlikowski and Baroudi (1991), Urquhart (2013, p. 59))

After intensive study of these and other literature sources to compare a variety of possible research paradigms, it became clear to me that a few years ago I would have called myself a positivist. My first university education as a telecommunications engineer made me familiar with a variety of scientific methods that determined my view of the world at that time. In accordance with the understanding of Hesse (1980) I could have strongly identified myself with the position of a person, who understands reality from an ontological viewpoint as something driven by unchanging natural laws and mechanisms. In this sense, in my younger years I was trained to assume that there is an objective reality that we can understand when we understand the (deterministic) laws by which reality is governed.

However, after my additional studies in economics and due to my many years of experience as the sales director of companies in the IT infrastructure industry, this understanding has evolved and changed towards interpretivism. I attribute this mainly to the fact that my professional work as a sales director required me to adapt to the social circumstances of my employees and customers. It has become clear to me that social reality is always renegotiated between the interacting parties and subjectively interpreted from the individual perspectives. This results in a kind of knowledge which the actors in these social systems (in my case, sales situations with customers or leadership situations with employees, superiors and colleagues) conceptualise anew every day and provide with subjective convictions.

Applied to my role as a researcher in my chosen research field of transformation management of IT infrastructure sales ecosystems, this means that I no longer want to approach the research problem by verifying or falsifying hypotheses. Rather, I would like to understand without making preconceptions what actually happens during the transformation of the mentioned sales ecosystems.

From an ontological point of view, I am convinced that the people acting in such an ecosystem have different views on this ecosystem. For this reason I have recruited the circle of interviewees (cf. Section 3.4.1.1 and 3.4.2) from different groups (i.e. from sales ecosystem partners as well as from manufacturers,

individual contributors as well as managers) in order to learn more about their subjective social realities and the consequences for the involved sales organisations during the transformation process.

From an epistemological point of view, I am interested in how the participants I interviewed attribute importance to their subjective, individual truths and what knowledge they construct from them. During the interviews, I was interested in which conditions determine the success and failure of transformation activities on the part of the vendors. I was particularly interested in perceptions, which are not part of the official communication of the companies, but were possibly discussed between employees "in the coffee kitchen".

Consequently, as a researcher, I classify myself in the models of Burrell & Morgan (1979) and Orlikowski & Baroudi (1991) as an interpretivist with a subjective ontological and epistemological basic attitude, who constructs reality like his research participants. This choice is also based on considerations as formulated by Denzin & Lincoln (2005, p. 24):

"The constructivist paradigm assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and respondent cocreate understandings), and a naturalistic (in the natural world) set of methodological procedures."

This ontological and epistemological position is compatible with qualitative research methodologies, which are briefly examined hereafter.

3.3 Research Methodology

This section describes the research methodology considerations I have made in preparation for the research phase to select the GTM approach according to Corbin & Strauss (2015).

3.3.1 Evaluating different Qualitative Research Methodologies

Section 3.2 illustrated where I locate my epistemological and ontological attitudes and why I considered the use of a constructivist research paradigm appropriate

for the purposes of this study. The research methodology with which the research problem examined in this thesis has been approached is also the result of a well-considered choice.

This choice is based on a comparison of a number of qualitative research methodologies that are generally applicable in this paradigm. The most important qualitative research strategies to be distinguished are narrative research, phenomenology, ethnography, case study and grounded theory methodology (Creswell, 2014). Table 6 contains the main differentiation criteria of the research methodologies listed.

Creswell (2007, p. 55) emphasises that *narrative research* “has many forms”, and that it is “best for capturing the detailed stories or life experiences of a single life or the lives of a small number of individuals”. Researchers following this methodology typically collect stories from the participants and “re-story” them into a framework that makes sense by developing a “narrative about the stories of an individual life”. For obvious reasons, this approach seemed less suitable for the research problem under study.

Bryman and Bell (2015, p. 29) associate the second research approach mentioned in Table 6, the methodology of *phenomenology*, with a “philosophy concerned with how individuals make sense of the world around them”. Gallagher’s (2012, p. 7) definition is similar: “Phenomenology is the study of structures of consciousness as experienced from the first-person point of view.” While individual experiences certainly play a role in the chosen research context, the main objective of this thesis was to develop a transformation framework for sales ecosystems of IT infrastructure vendors for which the phenomenological approach seemed less appropriate.

For similar reasons, the *ethnography* approach did not seem suitable for this research project. Creswell (2014, p. 42) defines ethnography as “a design of inquiry coming from anthropology and sociology in which the researcher studies the shared patterns of behaviours, language, and actions of an intact cultural group in a natural setting over a prolonged period of time.”

Characteristics	Narrative Research	Phenomenology	Ethnography	Case study	Grounded Theory
<i>Focus</i>	Exploring the life of an individual	Understanding the essence of the experience	Describing and interpreting a culture-sharing group	Developing a description and an analysis of a case or multiple cases	Developing a theory grounded in data from the field
<i>Type of problem best suited for design</i>	Needing to tell stories of individual experience	Needing to describe the essence of a lived phenomenon	Describing and interpreting the shared patterns of culture of a group	Providing an in-depth understanding of a case or cases	Grounding a theory in the views of participants
<i>Discipline background</i>	Drawing from humanities including anthropology, literature, history, psychology, and sociology	Drawing from philosophy, psychology, and education	Drawing from anthropology and sociology	Drawing from psychology, law, political science, and medicine	Drawing from sociology
<i>Unit of analysis</i>	Studying one or more individuals	Studying several individuals that have shared the experience	Studying a group that shares the same culture	Studying an event, a programme, an activity, more than one individual	Studying a process, action, or interaction involving many individuals
<i>Data collection forms</i>	Using primarily interviews and documents	Using primarily interviews with individuals, although documents, observations, and art may also be considered	Using primarily observations and interviews, but perhaps collecting other sources during extended time in field	Using multiple sources, such as interviews, observations, documents, artefacts	Using primarily interviews with 20-60 individuals
<i>Data analysis strategy</i>	Analysing data for stories, "restorying", stories, developing themes, often using a chronology	Analysing data for significant statements, meaning units, textural and structural description, description of the "essence"	Analysing data through descriptions of the culture-sharing group; themes about the group	Analysing data through description of the case as well as cross-case themes	Analysing data through open coding, axial coding, selective coding
<i>Written report</i>	Developing a narrative about the stories of an individual's life.	Describing the "essence" of the experience	Describing how a culture-sharing group works	Developing a detailed analysis of one or more cases	Generating a theory illustrated in a figure

Table 6: Key characteristics of five relevant qualitative research methodologies (own creation, adapted and combined from Creswell (2007, p. 78/79))

This characterisation indicated that the approach was not appropriate for the business context examined here.

Since the study was not to be based solely on the data of a comparatively small group of *case studies* of companies in question, but should ideally represent a broader range of the IT infrastructure industry, I also regarded the case study methodology as only partially suitable for achieving the research goals.

In order to develop a transformation framework based on data from the broadest possible field, the *Grounded Theory Methodology* therefore seemed most suitable. This is explained in the following section.

3.3.2 GTM as Methodology of Choice

Grounded Theory Methodology (GTM) is “an approach to the generation of theory out of data.” (Bryman, 2012, p. 387). Grounded Theory uses inductive reasoning, in which researchers look at particular situations and aim to understand what is going on. In this research approach, data is usually gathered from interviews and observations (Bryant & Charmaz, 2007a). In order to achieve the desired depth of understanding related to the research objectives, grounded theory methodology offers a constant comparative method to generate data, using procedures like open, axial and selective coding, theoretical sampling, constant comparison and theoretical saturation (Bryman, 2012, p. 568). Therefore, the approach of grounded theory appeared as the best fit to ensure that the outlined objectives of the research will be achieved.

Grounded theory stands in clear contrast to other, mainly deductively oriented methods of qualitative data analysis (QDA). Hypothetico-deductive approaches in qualitative data analysis require the creation of “clear-cut categories and hypotheses” before data collection (Kelle, 2007). In contrast to this, Glaser and Strauss (1967) proposed an alternative approach which they called “grounded theory” – a methodology to create theory, based on the idea that categories can emerge from the data without preconception. To do that, within grounded theory, researchers use multistage coding techniques to break down data into component parts, i.e. codes flagged with names, and derive higher level concepts and categories, which lead to hypothesis and theories (Bryman & Bell, 2015). To this end, Glaser and Strauss developed an approach, which is “concerned with

generating and plausibly suggesting many categories, properties and hypotheses about general problems” (Glaser & Strauss 1967, p. 104), rather than providing a method for testing hypotheses.

Before researchers can proceed with applying grounded theory as a methodology they need to clarify which GTM version they want to choose, since grounded theory “is not a unified framework”¹³ (Denzin, 2007, p. 454). For the purpose of this research the GTM approach of Strauss and Corbin (1990) and, respectively, Corbin and Strauss (2015) has been chosen as appropriate.

This selection was made after careful consideration of the alternatives, for which a prior critical examination of the positions of the protagonists engaged in the various GTM approaches seemed to be essential. The two main strands, between which a distinction had to be made at first, are the distinct GTM approaches of Glaser and Strauss (Urquhart, 2013, p. 18). The different developments of these approaches can be traced back to a fundamental dispute that arose following the first publication of “Basics of Qualitative Research” by Strauss and Corbin (1990). During this period, Glaser felt compelled to publish a counterstatement to this publication in which he demanded the withdrawal of the work (Glaser, 1992). He justified this on the grounds that, in his opinion, the GTM structure proposed by Strauss and Corbin was too rigid and would make unbiased, emergent conceptualisations more difficult, since the data could not speak for itself (Glaser, 1992, p. 123). In fact, in this first description of their GTM, Strauss and Corbin claimed that GTM analyses would lack “density and precision” if their model was not followed (Strauss & Corbin, 1990, p. 99). In a later publication, Strauss and Corbin presented the paradigm (model) less dogmatically as “nothing more than a perspective taken towards data, another analytic stance” (Strauss & Corbin, 1998, p. 128).

A further scientific controversy occurred around the GTM approach of Charmaz

¹³ Referring to Charmaz (2006, 2014) and Clarke (2005), Denzin (2007) lists multiple GTM versions, i.e. positivist, postpositivist, constructivist, objectivist, postmodern, situational, computer assisted grounded theory. Morse (2009) distinguishes five further GTM versions.

(2006, 2014). Charmaz referred to the pragmatic, interactionist roots of GTM, on which she built her constructivist approach (Krüger & Meyer, 2007). She was critical of both the approaches of Corbin and Strauss (1990, 1996), who used axial coding methods (using the paradigmatic model) and Glaser (1978), who suggested to work with theoretical codes, as these approaches would lead researchers to force their data into “extant categories” (Charmaz, 2008, p. 161). Charmaz (2014, p. 109, p. 138) proposed an initial and a focused coding strategy that is “patently more interpretative, intuitive and impressionistic” than the classic or Straussian GTM approach (Kenny & Fourie, 2015, p.1279). This, in turn, was criticised by Strauss, who argued that Charmaz's constructivist approach was dominated by an emphasis on “descriptive capture” (Glaser, 2002, p.3), which would be rooted in qualitative data analysis (QDA) in a way that denied and blocked the true conceptual nature of Grounded Theory.

This list of differences between the versions of the named proponents of their respective GTM version could be continued with regard to philosophical considerations, questions of the appropriateness of literature reviews prior to data collection, different coding procedures and other questions (Kelle, 2005; Strauss & Corbin, 1990; Glaser, 1992; Glaser & Strauss, 1967). However, having dealt with the differences and similarities of the cited GTM versions, I was able to base the GTM selection of this study on an “informed choice” (Bryant & Charmaz, 2007b, p. 11) without having to refute or confirm the discussed, largely contradictory basic stances.

With regard to the intended practicability of the GTM approach to be selected for this study, a survey by Seidel and Urquhart (2011) cited in Urquhart (2013) proved to be more appropriate. According to this investigation, out of a total of ninety-six GTM-based studies, only seven used the paradigmatic model of Corbin and Strauss. From the small number of these studies, however, the authors found that “causal relationships between categories were more frequently identified and a substantive theory was likely to be built than in the papers not using the paradigm” (Urquhart, 2013, p. 20).

In addition to that, I considered the structural clarity of the coding paradigm

approach of Corbin and Strauss (1990, 1996, 2015) to be most appropriate for the research problem under investigation here. The threefold structure of the underlying coding procedure consists of open, axial and selective coding, which must not be misunderstood as a strict sequential procedure. Instead, it is a flexible approach that allows the researcher to go back and forth, depending on the progress of the data analysis. Furthermore, I appreciated the clarity with which Corbin and Strauss (2015, p. 353 ff.) specify structures to check the methodological consistency of studies as well as their quality and applicability. Finally, the GTM approach of Corbin and Strauss also seemed to me to be particularly suitable because the paradigmatic model allowed for the classification of the multitude of framework conditions to be considered in a structured form into causal, intervening and contextual conditions.

For these reasons, I selected the GTM model of Corbin and Strauss (2015) for this study, and also considered GTM-relevant guidance from other authors, as far as they showed the necessary compatibility with this approach. However, the understanding gained from the critical views on the GTM approach of Corbin and Strauss (1990, 2015) encouraged me to remain vigilant and to take sufficient care not to force the data into schemes without appropriate reflection.

3.4 Research Design

Vaus (2001) argued that a research design is not just a work plan. According to him, the function of a research design is “to ensure that the evidence obtained (from a study) enables us to answer the initial question as unambiguously as possible” (Vaus, 2001, p. 9). In this sense, the research design is different from the research method. Here, the research design is understood as a framework for the research to be carried out, which combines the elements of the applied research method, data collection, data sampling and data analysis in such a way that the research objectives can be achieved (Bryman & Bell, 2015, p. 49). These aspects are discussed below in detail.

3.4.1 Research Methods

According to Bryman & Bell (2015), a research method consists of techniques for

collecting data. This includes the evaluation of potential data sources, the concrete process of data collection (in this study with the help of interviews), their initial processing (here the transcription), as well as the memo writing, which already acts at the interface to the analysis. The following section describes how the data sources for this study were acquired.

3.4.1.1 Data Source Identification Process

The effective identification of the right research participants, i.e. interviewees was fundamental to gain meaningful insight into the research subject. The criteria after which the sample of interviewees were selected were multifold. The key consideration was whether a respondent could provide answers to questions according to the progress of the theoretical sampling process (cf. Section 3.4.2, which also contains a more detailed explanation of how this procedure was concretely applied). Each interview ended with a memo which elaborated the gained insight by this sample, supporting the first analysis of the interview. The interviews were then transcribed and coded and results were put into the context of which codes and concepts had already been gathered in earlier interviews (constant comparison) and in how far this newer interview put the research forward. It was then considered, how and with whom the next interview should ideally be conducted in order to collect data suitable to open questions and aspects as the theory further emerged.

To find relevant participants beside the criteria of theoretical sampling and triangulation (which are reflected in Section 3.4.2), interview candidates were checked before about the duration of their professional career in the research field of IT infrastructure sales ecosystems and regarding the amount of IT infrastructure vendors or ecosystem sales partners they worked for. Furthermore, it was vital to find candidates who had employers with a certain sales partner affinity, i.e. were not merely concentrated on doing direct business with customers without involving ecosystem partners. Eventually, I was interested in getting participants involved who appeared to have a reflective personality and who have made their minds up about what is going on in the industry, rather than just repeating plain marketing stories from their earlier employers.

The probability of collecting data that is highly congruent with the official marketing communication on sales transformation would have been much higher if I had officially approached experts I did not know before. To increase the likelihood for getting meaningful insights I refrained from contacting industry professionals representing their companies, but leveraged my personal network instead. The willingness to trustfully share insights, observations and perceptions about the research subject was increased significantly through interviewing the participants regarding their personal experience they had gained throughout their career, without referring to concrete companies.

Wherever these referrals happened during the interviews by accident, the company names were anonymised (cf. Section 3.4.1.3 about interview transcription). Since only participants were involved in the interview series, who had or have worked for relevant IT infrastructure vendors or their ecosystem sales partners, the gathered data is meaningful for answering the research question and meeting the research objectives as outlined in Section 1.4.

Table 7 gives an overview of the interviewees who shared their views on the research subject. To ensure their anonymity, every participant is identified with a pseudonym as shown in column two. Each of the three sample groups with “Vendor Sales Manager experience”, “Vendor Sales Individual Contributor experience”, i.e. field salespersons, and “Sales Ecosystem Partner experience” is represented by eight professionals who participated, in total twenty-four.

#	Pseudonym	Job Role	# of IT companies worked for last 3 years	# of IT companies worked for last 10 years	Job Role	Vendor Manager experience	Vendor Individual Contributor experience	Sales Ecosystem Partner experience
1	William	Director Sales	1	1	IT Infrastructure Vendor Sales Manager	x		
2	Oliver	Regional Sales Manager	1	3	IT Infrastructure Vendor Sales Manager	x		
3	Jack	Head of presales	3	4	IT Infrastructure Vendor Sales Manager	x		
4	George	Head of presales	1	1	IT Infrastructure Vendor Sales Manager	x		
5	Harry	Former Account Executive	2	2	IT Infrastructure Vendor Sales Individual Contributor		x	
6	Jacob	Partner Account Manager	1	3	IT Infrastructure Vendor Sales Individual Contributor		x	
7	Charly	Account Manager	2	3	IT Infrastructure Vendor Sales Individual Contributor		x	
8	Sophie	Director Channel	1	1	IT Infrastructure Vendor Sales Manager	x		
9	James	Account Manager	3	4	IT Infrastructure Vendor Sales Individual Contributor		x	
10	Noah	Account Manager	3	4	IT Infrastructure Vendor Sales Individual Contributor		x	
11	Alfie	Account Manager	3	5	IT Infrastructure Sales Ecosystem Partner			x
12	Joshua	VP Sales	2	2	IT Infrastructure Vendor Sales Manager	x		
13	Ethan	Account Manager	3	4	IT Infrastructure Vendor Sales Individual Contributor		x	
15	Henry	Alliance Manager	1	1	IT Infrastructure Sales Ecosystem Partner			x
14	Archie	Account Manager	1	1	IT Infrastructure Vendor Sales Individual Contributor		x	
16	Joseph	Head of Channel	2	4	IT Infrastructure Sales Ecosystem Partner			x
17	Daniel	Alliance Manager	1	1	IT Infrastructure Sales Ecosystem Partner			x
18	Samuel	VP Sales	2	2	IT Infrastructure Sales Ecosystem Partner			x
19	Alexander	Account Manager	3	4	IT Infrastructure Vendor Sales Individual Contributor		x	
20	Max	GM Sales	2	3	IT Infrastructure Vendor Sales Manager	x		
21	Lucas	Director	2	4	IT Infrastructure Sales Ecosystem Partner			x
22	Oscar	SVP Sales	2	2	IT Infrastructure Sales Ecosystem Partner			x
23	Leo	Regional Sales Manager	3	4	IT Infrastructure Vendor Sales Manager	x		
24	Benjamin	Account Manager	1	2	IT Infrastructure Sales Ecosystem Partner			x
		Perspectives:	46	65		8	8	8

Table 7: List of interviewees/sample group with anonymised names, job roles and various experience indicators (own creation)

The interviews have been conducted in a timeframe from January 2018 until October 2018. To indicate the wealth of experience for each participant, the amount of individual positions held at different employers during the last three and ten years, respectively, is stated. Data collection with the participants identified in this way was carried out through interviews as described below.

3.4.1.2 Data Collection with Interviews

Corbin & Strauss (2015, p. 37) distinguish three types of interviews: Unstructured, semi-structured and structured interviews. As the name suggests, unstructured interviews do not follow a pre-structured guideline. This is another reason why they are seen as the variant that allows the deepest insights into a research subject and is therefore well suited for theory building (Corbin & Morse, 2003). On the other hand, conducting these types of interviews can be challenging because they can unfold a distinct dynamic, which the researcher may counter by setting the main topics of the interview (Corbin & Strauss, 2015, p. 38). More easily manageable appear the structured interviews that follow an interview guide that presents each participant with the same questions (Bryman & Bell, 2015, p. 211). However, this form of interview appeared to be too one-dimensional to me and, therefore, only partially suitable for the research objectives pursued here. For the purposes of this study, an adequate middle course between the two approaches was to conduct semi-structured interviews that did not work with the same set of questions but covered certain topics, thus allowing for a certain dynamic in the conversation (Corbin & Strauss, 2015, p. 39; Flick, 2014, p. 214). This approach has therefore been applied in this study.

To this end, without adopting a preconceived theoretical framework (in accordance with the recommendations of Glaser & Strauss, 1967), I designed initial questions. I first tried out their practicability and usefulness in relation to the research objectives in pilot interviews. The developed questions turned out to be appropriate. On the one hand, these questions were constantly refined in the course of the interviews. On the other hand, the question set was constantly changed and supplemented in the course of the twenty-four interviews in line with the principles of theoretical sampling (Appendix 8.2 contains a list of some of the

questions asked in the course of the interviews).

During the interviews, each participant was given the opportunity to answer the questions asked as well as to make comments that were not originally correlated with my original intended scope of questions. In this respect, all interviews were so open and flexible that the interviewees were able to describe all aspects that they felt were relevant to the research problem. In order to make this possible, at the beginning of each interview, every interviewee was again informed about the objectives associated with the interview. Depending on the interview situation, I then asked questions that were either completely open (although they belonged to a previously defined relevant topic), or served to question possible explanatory patterns (that evolved during the interview series, also as a result of reflection by means of memos). Where it was appropriate, I also formulated questions in a confrontational way if I wanted to critically question the explanatory patterns of the interviewees once again (cf. Flick, 2014, p. 219).

Each of the interviews was concluded with a memo prepared within a few days, which was used in the data sampling process (cf. Section 3.4.2). At the same time, the transcription of the interviews conducted by myself took place, which will be reported on in the next section.

3.4.1.3 Interview Transcription

In accordance with the informed consent letter assurances about participant anonymity and confidentiality of every word spoken (adapted from King, 2010, p. 114, cf. Section 8.1), recordings have been made with an Olympus LS-P2 dictation machine, which was exclusively used for my research purposes. Recorded interviews were transmitted onto my PC in encrypted¹⁴ form on the same day of the interview. In most cases, I started right afterwards with the required transcription, i.e. textualisation of the recordings.

To prepare and support the data analysis in a best possible manner the

¹⁴ I used AxCrypt with 256 bit AES encryption which is also used by U.S. Government to protect secrets.

transcription of every interview has been carried out by myself. This procedure was quite time consuming, but ensured that I remembered core statements and conversation climate of any interview done during the analysis phase of the research.

Textualisation of the interviews happened following the transcription rules of Kuckartz (2016, p. 167) in German language. For this purpose, the transcription software “f4transcript” was used. The software assigned line numbers to each interview statement, which were later transferred into the analysis software MAXQDA and which are also added to each quotation in this thesis for reference purposes. The interoperability of the software used has allowed me to listen to interview statements during any phase of the data analysis.

During this data analysis, I used the memos prepared after each interview and during further analysis as described hereafter.

3.4.1.4 Memo writing and Constant Comparison

Writing memos belongs to the fundamental processes of a grounded theory research project. It helps “to raise the data to a conceptual level” (Holton, 2007, p. 281). Memos help the researcher to “engage in and record intellectual conversations with themselves about the data” (Lempert, 2007, p. 249). As narrative tools for idea development and exploration of research sceneries, memos are used to capture analytical progress, also with the aim to direct further data collection and analysis.

Memos can be used in different stages of research for the purpose of opening data exploration, identifying or developing the properties/dimensions/concepts/categories, making comparisons, exploring relationships among conditions/actions/consequences and, finally, to develop the storyline (Corbin & Strauss, 2015, p. 117). In order to make use of these advantages, memo writing techniques were consistently applied in this study. An example memo can be found in the appendix (cf. Section 8.3).

Another important characteristic of the grounded theory methodology is the

concept of continuous comparison. This concept was first published by Glaser (1965) and later introduced into the foundational work about grounded theory in Glaser & Strauss (1967). It combines “systematic data collection, coding and analysis with theoretical sampling in order to generate theory that is integrated, close to the data, and expressed in a form clear enough for further testing” (Conrad, Neumann & Haworth, 1993, p. 280). According to Glaser & Strauss (1967), constant comparative proceeding within grounded theory consists of four basic stages. They suggest “(1) Comparing incidents applicable to each category, (2) Integrating categories and their properties, (3) Delimiting the theory and (4) Writing the theory” (Glaser & Strauss, 1967, p. 105). This feature of their Grounded Theory Methodology, which turned out to be compatible with the GTM principles of Corbin & Strauss (1996, 2015), “should be used to guide ongoing data collection, as well as data analysis, and be driven by the needs of the developing theory.” (Vasconcelos, Sen, Rosa & Ellis, 2012, p. 121). In order to ensure that the results developed in this thesis are actually based on the application of these GTM principles and do not originate from simple induction, the concept of constant comparison has been rigorously applied in this study.

3.4.2 Data Sampling Process and Thoughts about Triangulation

According to Urquhart (2013, p. 64), theoretical sampling is one of the key strategies for building grounded theories. Simple sampling strategies, for example surveys with certain groups of participants, attempt to identify sets of data that are supposed to represent a broad population as a kind of microcosm (Bryman & Bell, 2015, p. 12). The principles of theoretical sampling, which are relevant in Grounded Theory Methodology, and which originate from Glaser & Strauss (1967), are more complex. In the course of a research project, these principles raise questions aimed at determining which (participant) groups should be addressed next in the data collection, or for what theoretical reason (Urquhart, 2013). Glaser and Strauss originally defined theoretical sampling as “the process of data collection for generating theory, whereby the analyst jointly collects, codes and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges” (Glaser & Strauss, 1967, p.

45).

Conforming to Corbin & Strauss (2015), the decisive factors for these decisions are the concepts that are sampled and not the participants. Nevertheless, the participants play an important role, because they are the source of the collected “data from places, people, and events that will maximise opportunities to develop concepts in terms of their properties and dimensions” (Corbin & Strauss, 2015, p. 134). This process has to be repeated considering the feasibility of a research project until the researcher comes to the conclusion that the “major categories demonstrate specificity, are dense in terms of properties, show dimensional variation and are well integrated” (Corbin & Strauss, 2015, p. 141).

The concrete theoretical sampling approach pursued in the conceptualisation process of this study can be illustrated with the following example. The first interviews indicated behaviour patterns on the part of the vendors which, after initial (memo) analysis and critical reflection could be designated with the open code “pseudo change management”¹⁵. When considering the identified follow-up questions after this and further interviews, possible structural causes for such observations became apparent. These manifested themselves, inter alia, in the form of certain change obstacles, individual attitudes, insufficiently used tools for managing change processes and a lack of sustainability in the interaction with partners (cf. code overview in Appendix 8.4). The sequence of further questions to the text and to further interviewees in the form of a hermeneutic cycle¹⁶ provided a subsequent, more profound understanding of the data collected during this analysis phase, resulting in the open category “Transformational Change Management and Governance”. This category referenced to essential dimensions and properties, indicating the relevance of transformation

¹⁵ According to the perceptions of individual participants, some sales managers behaved in some instances towards their (senior) management as if they were actually pursuing transformation activities in areas related to digitalisation. In fact, however, they concentrated primarily on their existing transactional day-to-day business, as section four on the findings of this study will show.

¹⁶ This process followed the theoretical sampling guideline formulated by Glaser & Strauss (1967, p. 64) to ask “what groups or subgroups” for “what theoretical purpose” should be addressed next.

management institutionalisation.

During the further axial coding process, the continued theoretical sampling in the described manner revealed various cross-references to other open categories, such as the open category of “Business Cadence and Reporting”, which showed commonalities in the overemphasis of transactional business on the part of the manufacturers. These and other conceptualisations led to the main categories presented in Section 6.2. At that time, the temporary draft of a core category referred to the general relevance of “governance”, which guided the further theoretical sampling. However, the continued critical reflection, constant comparison and targeted questioning, revealed that further developed conceptualisations better supported theory building¹⁷ for the concrete case of this study.

Within the scope of theoretical sampling, it was equally important to delimit the emerging theory. Thus, after critical reflection, conscious decisions were made not to follow up on some of the participants' statements. For example, one participant criticised the system of capitalism very fundamentally in connection with the sales ecosystems studied. As interesting as his train of thought seemed, after careful reflection, it was considered not to be conducive in view of the research objectives underlying the study and was therefore not pursued further. Following the above-mentioned saturation criteria of Corbin and Strauss (2015, p. 141), the theoretical sampling process was finalised when five main categories and a core category with three essential sub-elements had evolved.

In addition to the above, the question of who should be interviewed next, which had to be answered repeatedly during the sampling, was also influenced by thoughts on possible triangulation. However, the aspect of triangulation has been controversially discussed among researchers regarding its applicability to GTM studies in a constructivist paradigm (Urquhart, 2013, p. 61). Orlikowski and Baroudi (1991) argue that researchers lack in this paradigm the point of reference

¹⁷ The outcome of this process should not be pre-empted at this point; it concerns the necessary balance of tactical-operational and strategic goal pursuit (cf. Section 6.2.6).

of reality to which one can refer in a triangulation from a positivist worldview. Urquhart outlines a way out of this possible dilemma by referring to a “gentler and kinder” version of “triangulation”, which she calls “corroboration” (Urquhart, 2013, p. 62), justifying in particular the meaningfulness of the application of different methods.

Thus, in the sense of the question of whether triangulation can be usefully applied to this study or not, a bridge can be built to the multiple methods of triangulation that are basically at disposal. Denzin (2009) distinguishes four generic forms of triangulation, which are data-, investigator-, theory- and methodological-oriented triangulation¹⁸. Taking into account the above concerns regarding the applicability of triangulation techniques and to balance the research effort from a feasibility perspective, only data triangulation has been used in this study. Data triangulation considers different perspectives on the same phenomena, which is here transformational change management in IT infrastructure sales ecosystems. These ecosystem perspectives can be reasonably represented by three homogenous participant groups. For this reason, in addition to taking theoretical sampling procedures into account when selecting the participants, the two criteria described below were also considered.

Firstly, the data sampling considered a distinction between the groups of IT infrastructure vendors on one side and the group of ecosystem sales partners involved on the other. This approach appeared to be reasonable, since both groups, inter alia, operate on different power levels within the ecosystem for a number of reasons. IT infrastructure vendors define product and services portfolios, partner programmes, discount schemes and support structures. Therefore, these vendors have traditionally occupied powerful positions within the ecosystems, to which sales partners needed to adapt themselves¹⁹. Because of that, the interviewee selection considered whether a potential candidate collected the bulk of his professional experience on the vendor- or on the partner-side.

¹⁸ Flick (2014, p. 444 et seq.) describes the different approaches in detail.

¹⁹ The research investigated also in how far these sales ecosystem power structures may have changed (cf. Sections 4.3 and 5.3).

Secondly, the data sampling took into account whether a participant made experiences in vendor sales team leadership roles or if he/she was mainly an individual contributor within one or more IT infrastructure field sales/channel teams. This distinction appears to be reasonable since managers in a sales organisation typically have at least partially the opportunity to force in business their personal notions about the research subject of transformational change. Therefore, managers were expected to have different perspectives compared to those with execution responsibilities only. However, this distinction has been applied to the vendor sales teams only for the following two reasons. On the one hand the research project needed to be feasible within a defined portion of time. On the other hand, the research objectives cover particularly *vendor-driven* (not: partner-driven) transformational change management frameworks and contextual conditions. Hence, an overweight has been laid on the understanding of *vendor perspectives* and the dynamics between management strategy and sales staff execution within the vendor. Related insights gained were compared with the ecosystem sales partner view as a respondent to the vendor driven initiatives.

The above considerations determined the selection of research participants and the questions they were asked. The data obtained were analysed as explained in the next section.

3.4.3 Data Analysis

In the following, the methodological principles of the GTM analysis procedures and their concrete application for the purpose of this study are presented.

3.4.3.1 Theoretical Background of Coding Procedures

The coding of data belongs to the most elementary processes in grounded theory (Flick, 2014, p. 402). It is the vital first step of grounded theory in the process of breaking down collected data to enable analysis, comparison, conceptualisation and categorisation, e.g. of transcribed texts and/or fieldnotes (Corbin & Strauss, 1990; Urquhart, 2013). As the “core process in grounded theory methodology” (Bryant & Charmaz, 2007a, p. 265), it aims in giving (code) labels to “component

parts” of the data “that seem to be of potential theoretical significance and/or that appear to be particularly salient within the social worlds (..) being studied” (Bryman & Bell, 2015, p. 586). Grounded theorists create qualitative codes, depending on “what he or she sees in the data” rather than applying preconceived categories or codes to the data (Bryant & Charmaz, 2007a, p. 605). The coding process results in a set of codes, categories and concepts, working as a fundament for grounded theory development.

As outlined in Section 3.3.2, for the purposes of this thesis I followed the grounded theory methodology principles proposed by Corbin and Strauss (2015). Their methodology distinguishes between open, axial and selective coding.

Open coding can be employed in different degrees of detail (Flick, 2014). Source data like texts may be coded “line-by-line, sentence-by-sentence, or paragraph-by paragraph” (Flick, 2014, p. 406). In practice, even whole texts can be tagged with a code, depending on the research question and personal style of the researcher. During the course of open coding in grounded theory method, concepts are identified as a collection of codes and developed in terms of their properties and dimensions (Corbin & Strauss, 1996, p. 50). Concepts represent an “interpreted meaning of data”, which allow the researcher to group “raw data” with other “raw data” to find common meanings and characteristics (Corbin & Strauss, 2015, p. 220). These concepts are then grouped into categories around discovered phenomena that are recognised as significant to the research question and objectives. Code notes and a multitude of memos containing thoughts and observations on the material (Flick, 2014, p. 406) complement the codes, concepts and categories attached to the text.

Once concepts and subcategories have been derived during the process of open coding, the procedure of axial coding relates subcategories to categories. Analogue to open coding this is achieved by the means of comparisons and asking questions to the data in an inductive and deductive way both involving several steps (Corbin & Strauss, 1996, 2015). Successful axial coding explores the relationships between categories to “explain what is going on” (Corbin & Strauss, 2015, p. 344) and enables the facilitation of the discovery or establishing

of structures of “relations between phenomena, between concepts and between categories” (Flick, 2014, p. 408).

Compared to open coding, the process of axial coding is more formal. For the purpose of identifying and classifying connections between substantive categories, Corbin and Strauss (2015, p. 156 et seq., 1996, p. 78 et seq.) suggest a so called coding paradigm model, analogue to Figure 11. The model considers two axes: The horizontal one links causal conditions, consequences and phenomena, the vertical one connects the latter with contexts and intervening conditions with strategies. (Flick, 2014, p. 408). Under the umbrella of the phenomenon, causal conditions force the actors to apply the identified strategies, which leads to certain consequences. Intervening conditions represent the general (e.g. cultural and technological) pre-conditions for the applied strategies, context variables are special frame conditions and circumstances for the acting individuals (Corbin & Strauss, 2015, p. 155).

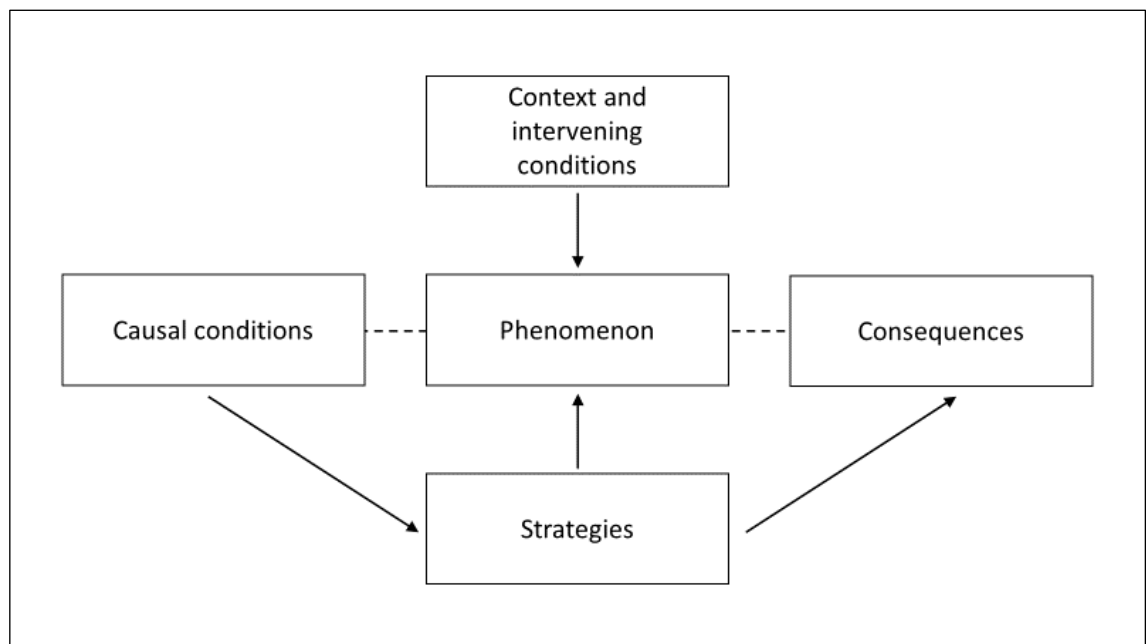


Figure 11: Coding Paradigm analogue to Corbin & Strauss (1996, p. 78 et seq., 2015, p. 156 et seq., own creation)

To apply the paradigm model, researchers may allocate the identified concepts from open coding into the named classifications as “(1) phenomenon for this category; (2) as the context or conditions for other categories; or (3) as a consequence.” (Flick, 2014, p. 408). Axial coding results in the selection of

categories with highest relevance to the research question and an elaboration of these in the outlined way. The efforts of axial coding lead to the next step of the coding exercise, which is selective coding.

Selective coding refers to the process of identifying and choosing the core category and the systematic connection of this core category with other categories, the validation of these relationships and the identification of categories which need further refinement and development (Corbin & Strauss, 1996, p. 94). This step “continues the axial coding at a higher level of abstraction” (Flick, 2014, p. 408).

The next section explains how the coding procedures were actually applied in this study.

3.4.3.2 Application of the Coding Procedures

With the described coding procedures, which characterise the GTM approach of Corbin and Strauss (2015), the results of the study presented in Chapters 4, 5 and 6 were achieved. The following illustrates how I proceeded:

A) Starting with Pencil Coding

The data analysis was initially started without computer support on a "paper and pencil" basis. I printed out the transcripts and read them several times to get a better overview. For the first open coding attempts I used line by line coding procedures. However, it did not take long before I noticed that this approach led to an almost unmanageable number of codings. Therefore, in a second run, I tried to recognise conceptual meanings and connections at higher layers more on a sentence- and section-level. This approach was more effective, as I could see from the still high, but, compared to before, lower number of resulting codings and their recurrence in further interviews. Some sentences and sections were also provided with several codings simultaneously, since their conceptual meaning corresponded to different aspects at the same time.

In a parallel test run with the QDA application MAXQDA, however, I found that the analysis was more granular and manageable with the help of a computer and

that particularly recurring meanings in the transcripts were easier to recognise. For this reason, I completely changed the evaluation of the transcripts from the fourth interview to the computer-supported form and thus achieved good results.

B) Assigning Open Codes

The first step of the data analysis carried out here was the conceptualisation of the data as depicted by Corbin and Strauss (1996, p. 43 et seq.). This means that in the data to be analysed, in this case the interview transcripts, research-relevant descriptions of the participants were identified with terms that represent certain contexts and phenomena. These descriptions could be in the form of words, sentences or sections. For example, when William outlined how he feels about the introduction of overlay sales functions in the face of changing markets by saying

“Well, that’s because, of course, using an overlay function is an evasive manoeuvre, a cowardice manoeuvre at the top management level.”,

(William, Director Sales, IT infrastructure vendor, line 110)

I applied initially the open codes “Vendor Executive skills”, “Pseudo Change Management” and later “Overlay sales”. These were added to the statement by the means of the MAXQDA application, which allowed me to further work with codings and codes in a computer aided manner. The process of assigning codings and codes was supported by reflective questions, which I asked to myself about each unit of the text, such as “What is that?”, “What does it represent?”, “Why does this process happen?”, “Who interacts with whom?” Every further description in the texts was compared with earlier ones, so that comparable phenomena were given the same name (cf. Corbin & Strauss, 1996, p. 45). The code “Overlay sales”, for example, was only assigned later after further review of the material, when it became apparent that other interview participants also talked about such forms of organisation.

A total of 173 open codes were defined during this process, covering the twenty-four interviews analysed, for which 3442 codings were assigned during the initial

analysis.

C) Working with Open Categories

In order to continue with the analysis of the data and to further investigate the set of identified phenomena, the open codes were grouped into so-called open categories. This grouping was initially provisional and was revised several times as it became clear in the course of working with the data that other groupings made more sense. The result of this iterative process, carried out in accordance with the recommendations of Corbin and Strauss (1996, p. 47, 2015), consists of thirty-three found open categories, which are presented in Table 15 in Section 6.2.7, and in more detail in Table 18, together with the open codings, in Appendix 8.4. The names of the open categories are more abstract than those of the assigned open codes. Furthermore, the open categories summarise these open codes into concepts of higher conceptual strength and represent phenomena at a higher level that can be further analysed and correlated.

The further analysis of the data and the development of categories was carried out using the method of the so-called “dimensionalisation” as outlined in Corbin & Strauss (1996, p. 50 et seq.) with reference to “properties” and “dimensions”. In this sense, properties are “characteristics” of a category. Dimensions capture the expression of this property or its arrangement on a continuum. The properties and dimensions of the thirty-three open categories discussed in Section 4.2 were systematically developed in the following analysis phase. This was also done in order to work out relationships between the categories and the axial and core categories identified later. The results of this analysis step are summarised with the help of figures as it is shown in the related Section 4.2. In addition, relevant quotes from the interview participants are listed there, which serve to underpin the concepts found. With each of the analysis steps carried out, I have examined in more detail relevant aspects for answering the research question presented in Section 1.4 and for achieving the research objectives listed there.

D) Deriving the Axial Categories

With the procedure of axial coding, researchers who follow the principles of GTM

by Corbin and Strauss (1996, 2015) want to further specify categories (or phenomena) in relation to the conditions that cause the phenomenon. This takes into account the context in which the phenomenon is embedded and the action strategies the participants pursue in order to deal with the phenomenon. This leads to consequences as a result of these action strategies (Corbin & Strauss, 1996, p. 76). Useful for this purpose is the so-called “paradigmatic model” (Corbin & Strauss, 1996, p. 78, 2015, p. 156). The paradigmatic model provides a practical research framework for a “multitude of concrete theoretical developments” on an abstract level (Breuer, 2010, p. 86). According to Corbin and Strauss, the categories found in earlier analysis phases can be systematically related to each other in a certain way when applying this model. For this purpose, so-called “causal conditions” are identified which lead to the “occurrence or development of a phenomenon” (Corbin & Strauss, 1996, p. 79). This phenomenon takes place in a certain context that belongs to this phenomenon as well as under certain “broad and general conditions”, called intervening conditions (Corbin & Strauss, 1996, p. 82). These have an impact on the strategies used by the subjects involved. The strategies reflect the causal conditions and intend to deal with the phenomenon in a purposeful manner. The actions performed or, if applicable, not performed, which is suggested also to be taken into account, in turn lead to certain consequences.

The axial coding process applied in this thesis has resulted in the five main categories presented in Sections 6.2.1 to 6.2.5. The results of this analysis were the basis for the next and final coding step, that of selective coding (Corbin & Strauss, 1996, p. 95), which leads to the core category.

E) Evolving the Core Category

A core category is a category around which all other categories can be integrated. It is the central phenomenon identified respectively evolved in the study and is the result of the selective coding process (Corbin & Strauss, 1996, p. 94). The selection of the core category is done by systematically correlating the core category with other categories. In the process of perfecting the core category, the other categories are also further detailed and refined (Corbin & Strauss, 2015, p.

187 et seq.). The core category should be “a concept that is sufficiently broad and abstract that summarises in a few words the main idea expressed in the study” (Corbin & Strauss, 2015, p. 187). Strauss (1987, p. 36) formulated further criteria by the fulfilment of which a core category can qualify and which concern, inter alia, its abstractness, frequency, logic, consistency and general validity. The core category developed within the scope of this thesis (cf. Section 6.2.6) fulfils these criteria.

The discussed considerations on the research paradigm, methodology and design are similarly important for the understanding of the thesis results as the presentation of important research ethical considerations and the validation of the outcomes. This will be discussed in the following.

3.5 Ethical Considerations

Researchers who involve human participants in their study have to particularly consider potential ethical and legal issues, which might arise. This study involved interviewees who were asked about their professional experience during their careers in the context of transformational change in IT infrastructure sales ecosystems. To anticipate and mitigate any relevant ethical risks to the interviewees, the Sheffield Hallam University Research Ethics Policy and Procedures (SHU, 2017) were strictly considered.

The research project had been signed off by the University’s Research Ethics committee before data collection started. Within the approval process, anticipated beneficence, non-maleficence and integrity of the research project have been evaluated. Before interviews started, the participants have been informed about all relevant research project characteristics by the means of an adequate informed consent letter and asked for agreement (cf. Appendix 8.1 with reference to the informed consent letter). Data confidentiality and anonymity of the participants have been ensured by adequate data handling measures. Potential issues of researcher impartiality have been checked and do not exist.

Compliance with the ethics standards described also has some significance for the considerations set out below regarding the validity of the study and its quality.

3.6 Issues of Validation and GTM Evaluative Criteria

Perspectives regarding the relevance of validation and evaluation in qualitative research are multifold (Creswell, 2007, p. 203). LeCompte and Goetz (1982) for example list various criteria for validation purposes, such as internal validity, external validity, reliability and objectivity. Lincoln and Guba (1985) refer for the same reason to terms like credibility, transferability, dependability and confirmability. This indicates that qualitative researchers have “divergent opinions regarding the choice of evaluation criteria” (Willig, 2001, as cited in Mandal, 2018, p. 592). For the validation and assessment of the quality of this study, Creswell's position on the definition of validation, validation strategies and his reference to the Corbin and Strauss criteria for assessing the quality of a grounded theory study seems appropriate (Creswell, 2007, p. 216).

Therefore, during this study the further developed checkpoints proposed by Corbin and Strauss (2015, p. 350 et seq.) to ensure the quality, applicability and methodological consistency of a GTM study were considered, documented and presented in a comprehensible manner in the appendix of this thesis²⁰. This approach is in line with Corbin and Strauss (1990, 1996), who argue that the criteria of good science should be maintained when assessing the quality of GTM studies, but should be redefined to reflect the reality of qualitative research and the complexity of social phenomena. Table 8 gives an idea of the criteria met, as presented in more detail in Appendix 8.8 dedicated to this purpose.

²⁰ The detail of this representation requires it to be listed in the appendix of this thesis and not in the main text (cf. Section 8.8).

	Research process	Empirical grounding of findings
Criterion #1	How was the original sample selected?	Are concepts generated?
Criterion #2	What major categories emerged?	Are the concepts systematically related?
Criterion #3	What were some of the events, incidents, actions, and so on, that indicated some of these major categories?	Are there many conceptual linkages and are the categories well developed? Do the categories have conceptual density?
Criterion #4	On the basis of what categories did theoretical sampling proceed? How representative did these categories prove to be?	Is there much variation built into the theory?
Criterion #5	What were some hypotheses pertaining to relations among categories?	Are the broader conditions that affect the phenomenon under study built into its explanation?
Criterion #6	Were there instances when hypotheses did not hold up against what was actually seen?	Has "process" been taken into account?
Criterion #7	How and why was the core category selected?	Do the theoretical findings seem significant and to what extent?

Table 8: Grounded Theory Evaluative Criteria (Source: Corbin & Strauss, 1990, p. 16-19)

With this, the explanations of this chapter can be summarised in the following conclusion.

3.7 Conclusion

This chapter discussed the research paradigm, methodology and design of the study. To this end, my epistemological and ontological foundations as a researcher were first evaluated before the project could be embedded in a qualitative research framework. I explained why I came to the conclusion that the research topic of IT infrastructure sales ecosystem transformation could best be approached with the GTM framework of Corbin and Strauss (2015).

Furthermore, it was explained how the data collection was carried out and which details of the different coding procedures were considered in the data analysis. A brief discussion of relevant research ethical considerations and the validity of this GTM study concluded the chapter.

The next chapter contains a detailed presentation and discussion of the research participants' perceptions about which influencing factors should be taken into account in the transformation of the ecosystems under investigation and how these ecosystems may have changed structurally.

Chapter Four – Presentation and Discussion of Research Participants’ Perceptions

4.1 Introduction

This thesis has revealed substantial results regarding the question, which influencing factors should be considered when transforming IT infrastructure sales ecosystems. These results emerged from the essence of the survey of twenty-four interview participants, who shared with me their long-term observations and experiences made during their professional work with vendors and ecosystem partners. In the following, various individual aspects are initially worked out from the data material obtained during the interviews, using the GTM methodology described in the last chapter. Thereby transformation-relevant details become visible, which can be assigned to the areas of market changes, evolving customer requirements, manufacturer-internal change issues, channel-related challenges, and other aspects.

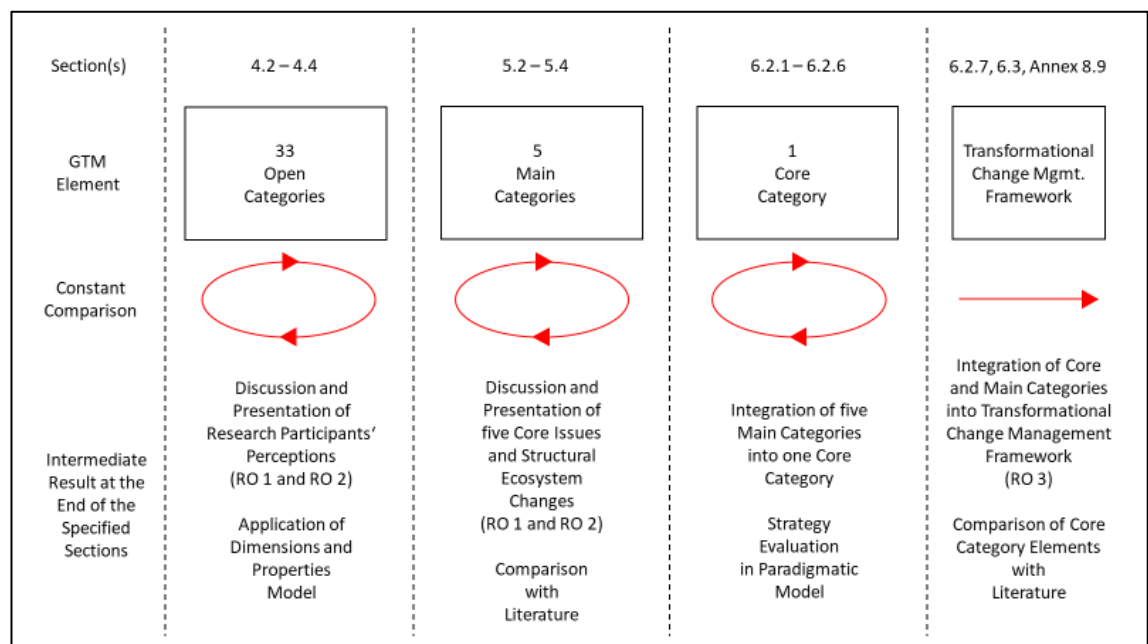


Figure 12: Structuring of the presentation and discussion Chapters 4, 5 and 6 on the way to modelling the transformation framework (own creation)

The presentation and discussion of the research participants' perceptions in this chapter focuses on the collected data, the essence of which is compared with the literature in the following Chapters 5 and 6.

The individual analysis steps shown in Figure 12 combine various methodological GTM elements for the analysis and interpretation of the data obtained. For reasons of verifiability, all citations in this chapter are labelled to indicate the position of the quoted respondent and the exact passage in the interview²¹. The analysis presented in this chapter leads to thirty-three open categories that evolved using the open coding procedures presented in Section 3.4.3.2. The findings discussed form the basis for the development of the transformation framework, which is derived in Chapter 6. The discussion begins with the discoveries on research participants' perceptions relating to research objective 1.

4.2 Field Perceptions about Transformational Change in Indirect Sales of IT Infrastructures

4.2.1 Overview

Research objective 1 aims to identify influencing factors, which should be considered in order to manage transformational change processes in IT infrastructure sales ecosystems induced by progressive digitalisation and changed customer behaviour.

The findings of the interviews suggest that manufacturers' transformation efforts may fail due to a number of factors if they are not taken into account. The presentation and discussion starts with the perceptions that can be attributed to the changing IT infrastructure market.

4.2.2 Perceptions about the Changing IT Infrastructure Market

The interview results provide support for the notion that the IT infrastructure market is undergoing significant change. The most important findings in this regard can be presented as follows.

²¹ In the following, specific terms are used in the presentation and discussion of the findings to indicate the proportion of the twenty-four respondents who expressed themselves in the described sense. The term "a few" refers to less than five participants who responded to questions in the explained sense. The words "some" or "a subset of" indicate groups of up to eight, "many", "considerable" or "significant" point to half of the participants or less, the terms "most" and "majority" mark more than twelve participants who expressed the corresponding understanding.

4.2.2.1 General Market Transition

The literature review in Chapter 2 discusses some of the change drivers underlying this study, namely the ongoing digitalisation and changing customer behaviour. All of the interviewed individuals are or were confronted with these change drivers in their professional roles. It was therefore interesting to learn more about their perception of the resulting changes in market conditions in order to create a sustainable basis for further questions during the interviews.

Category	Property	Dimension	
General Market Transition	Technology evolution	Preserving	Progressing
	IT infrastructure vendor differentiation opportunities	Declining	Growing
	Options for IT infrastructure demand aggregation	Unchanged	Increasing
	Degree of change partner landscape	Low	High

Figure 13: Open category “General Market Transition” – Properties and dimensions (own creation)

The majority of the interviewee’s observations and experiences can be assigned to one of the following four categories:

- Progressive technology evolution
- Fewer opportunities for competitive differentiation and ongoing manufacturer consolidation due to product commoditisation
- Aggregation of customer demand by public cloud offerings and outsourcers
- High dynamics of the partner landscape

The IT infrastructure market thus seems to be influenced by a dynamic whose

properties and dimensions can be evaluated as shown in Figure 13. The majority of the respondents were convinced that manufacturers and sales ecosystem partners are confronted with significant challenges as a result of ongoing digitalisation and changes in customer behaviour. As Jack said:

“There are lots of examples, (...) especially in the IT industry, of companies that have not adapted. You just have to keep this smartphone in mind and think that all this smartphone hype started with Blackberry, yeah? So, a company that has basically brought this product to market has disappeared within a few years because it has not managed to adapt to the market.”

(Jack, Head of Presales, IT infrastructure vendor, line 99)

As the interviews suggest, these challenges can be attributed to various possible causes. This can be outlined as follows.

a) Technological evolution

The majority of interviewees emphasised the importance of cloud services as an essential element of ongoing digitalisation. The emergence of cloud-based services was seen as a recurring phase in the successive centralisation and decentralisation of IT services over the years. The progressive use of public cloud solutions also potentially leads to an aggregation of market demand in the hands of a few cloud providers. This appears to be relevant for IT infrastructure vendors, as centralisation of IT service delivery may be associated with a concentration of buying power and limit the ability to serve many customers individually. On the other hand, new technological developments could cause the pendulum to swing in the opposite, decentralised direction, creating new market opportunities for IT infrastructure manufacturers. For example, the emerging development of “edge computing”, which involves the provision of computing resources in the periphery, i.e. on the customer side, and thus close to the use of services, could offer such new market opportunities for IT infrastructure manufacturers and their partners.

“A special topic, which now, in the end, also completely mixes up the infrastructure market (is) (...) edge-computing. This will change the world dramatically. You went from mainframe to client-server. From client-server back centralised to cloud. And now comes the decentralised cloud, which is virtually fog-computing, edge-computing, whatever you might want to call it, now, as it happens, within the framework of IoT, within the framework of Industry 4.0. (...) And that will change the world massively.”

(Lucas, Director Cloud, Sales ecosystem partner, line 194)

This perception could be seen as an indication that significant business opportunities remain for IT infrastructure manufacturers and their partners despite the rapid development of public cloud services (cf. Section 2.7).

b) Competitive differentiation and vendor consolidation

Many of the respondents considered that the increasing product commoditisation makes it more difficult for IT infrastructure vendors to differentiate themselves from their competitors. Some participants pointed out that, in their view, customer-relevant innovations would only take place “in the cloud” anyway. Other interviewees also pointed out the challenge of the increasingly difficult competitive differentiation:

“There will be (only) a few left, ok? Which will then, let’s say, compete for prices. And the only way they can survive is through innovations, let’s say through acquisitions. There will be more losses, there will be many big names, (which) will disappear. We’ve already seen it.”

(Alexander, Account Manager, IT infrastructure vendor, lines 7, 21)

Circumstances such as these indicate that manufacturers and partners have to increasingly differentiate themselves through measures other than pure product and feature positioning.

c) Demand aggregation through cloud providers and outsourcing offers

Another important aspect for the definition of sales transformation strategies at

manufacturers and in partner sales seems to be that cloud providers and outsourcers can bundle market demands that could previously be directly addressed by the sales ecosystem at customers. By aggregating this market demand, these suppliers could gain a potentially stronger (negotiating) position in relation to the manufacturers. In this context, some interviewees recognised a different positioning of the vendors associated with consequences for vendor sales teams. As Daniel put it:

“Because they will then generate just as much turnover with the big cloud partners. But they will then only have a few cloud partners and no mass of end customers to serve them. And thus, of course, with this staff (which they have today) they can no longer work with.”

(Daniel, Alliance Manager, Sales ecosystem partner, line 42)

Similar situations could come up where customers work with outsourcers who contract services based on Service Level Agreements (SLAs) without specifying the infrastructure vendor, with whose products the services are provided. This puts outsourcers in a favourable negotiating position with the manufacturer. Here, too, already engaged manufacturers and their sales partners are potentially being driven out of the business, which was formerly controlled by them:

“Global outsourcers negotiate the offer with the customer in advance, conclude the deal and then look for appropriate manufacturers who then build up the infrastructure at the given price framework parameter, so to speak.”

(Sophie, Director Channel, IT infrastructure vendor, line 56)

It is therefore suggested that, on the one hand, manufacturers should increasingly focus on sales support for outsourcing and cloud providers. They could then benefit from such developments if they know how to manage the emerging outsourcer-related sales ecosystems to their advantage. This, in turn, will probably require new competencies in their sales teams and, if necessary, organisational adjustments in their organisational structure.

d) Dynamics in the partner landscape

The views on the existing Sales ecosystem partner landscape of the IT infrastructure vendors and its appropriate further development were multifold among the surveyed research participants. Some of them doubted that in times of commoditised products, sales partners are even needed if these products can be sold directly to customers via intelligent Internet platforms. Others saw a potential advantage for service providers in the future, because once they had established their own partner ecosystems, they could develop holistic offerings with hardware and software integration, potentially reducing complexity on the customer side. However, many participants agreed that partners need to change and evolve and that their future sales success depends on their ability to deliver higher quality services that go beyond mere trade in infrastructure components.

“The resellers either develop into value suppliers. Yeah? Or they will disappear.”

(Lucas, Director Cloud, Sales ecosystem partner, line 212)

“I think the partner landscape is changing right now. From the previous channel partners more in the direction of alliance and provider partners who are more application-oriented, who may be closer in the more modern topics than bare metal and previous business. So, we see certain structural changes. (...) And I think the existing channel partners who have previously made box-moving and sales will have problems. (...) And will be less.”

(Oliver, Regional Sales Manager, IT infrastructure vendor, line 97)

In view of this development, it could be reasonable for IT infrastructure manufacturers to take care of proactively developing existing partners, finding new partners with advanced digitalisation competence and promoting cooperation with partners beyond the tactical-operational level.

In summary, the results of the interviews suggest that market dynamics seem to be forcing manufacturers and their partners to adapt to the new conditions,

especially in connection with increasing product commoditisation and the emergence of public cloud offerings. The close connection with ongoing digitalisation and evolving customer behaviour will be discussed in the next two sections.

4.2.2.2 Progressing Digitalisation

In view of ongoing digitalisation, it seemed interesting to find out what importance research participants attached to this phenomenon and what consequences this could have for infrastructure vendors and their sales partners.

Category	Property	Dimension	
Progressing Digitalisation	Meaning of digitalisation	Unambiguous	←————→ Ambiguous
	Consequences for infrastructure business	Fatal	←————→ Transforming
	Level of sales success factors	Technological	←————→ Relating to customer business

Figure 14: Open category “Progressing Digitalisation” – Properties and dimensions (own creation)

The interviews revealed that even among the experienced professionals interviewed there is no common understanding of the term digitalisation, although many often talk about it. Some did not consider the term new, but many participants associated it with cloud technologies. Benjamin commented:

“Digitalisation has been taking place since Konrad Zuse. Yes, and since the use of the mainframe, at the latest, there has been a digitalisation. So, a bank statement somewhere electronically or printed on paper, that has taken place a long time ago. I believe that the decisive change in recent years has been caused by the fact that IT is no longer seen merely as a

cost driver. It is really seen as added value for the company.”

(Benjamin, Account Manager, Sales ecosystem partner, line 6)

Harry and Charly immediately linked to digital transformation and cloud technologies:

“So, digitalisation today, which then leads to digital transformation, is the multitude of technologies (...). Cloud is changing all IT as we have known it for fifty years. Then all the big data technologies were added, today they are called ‘Machine Learning’ or ‘Artificial Intelligence’. (...) Everything is changing. And everyone has to respond.”

(Harry, Account Executive, IT infrastructure vendor, line 8)

Charly emphasised the potential consequences for vendors:

“...you may have a stable hardware business today, and your customers may be moving their production to a cloud somewhere where you’re not the supplier.”

(Charly, Account Manager, IT infrastructure vendor, line 52)

Others, like George, concluded from this that vendors would need to make changes:

“...an IT manufacturer also has to answer the question of what he wants to do business with in the future. Even under the assumptions of the change in digitalisation. So, are there any new business areas? Do I have to develop, extend, change existing ones?”

(George, Head of Presales, IT infrastructure vendor, line 89)

In practice, as the comments of other respondents have shown, there are already noticeable negative effects on the business success of some vendors and their

partners, although these appear to be still limited:

“I tried to keep the so-called run rate business going. So that is ‘box selling’. Because with all digitalisation issues, which undoubtedly happen strongly, there is still a certain business that will come anyway. And with this run rate business ultimately, which is in declining mode, yes, in declining mode, but with this business (we are) basically still at least halfway to meet the goals.”

(Joshua, VP Sales, IT infrastructure vendor, line 23)

In order to counteract such possible negative consequences for the IT infrastructure business, some participants emphasised the importance of dealing with customer business units, rather than the IT departments only, to gain advantages from progressing digitalisation. For some, this seemed to be a long way off. As Alfie put it:

“Well, that’s a big problem. Because a manufacturer’s sales department does not necessarily deal with the issues that really concern the customer. Namely, the business case, the applications and what is necessary to lead the customer to success.”

(Alfie, Account Manager, Sales ecosystem partner, line 28)

In summary, these results indicate that the understanding of digitalisation seems to be heterogeneous even in the professional domain. Digitalisation often appears to be closely linked to the progress of cloud technologies. The interview results suggest that vendors may need to make significant efforts to ensure that their sales teams can keep up with the demands of the ongoing digitalisation process. These requirements are linked to certain customer expectations, which are discussed in more detail in the next section.

4.2.2.3 Evolving Customer Expectations and Behaviour

As pointed out in Section 2.3, there is reference in the literature indicating that customers of IT infrastructure manufacturers have continued to change their

purchasing behaviour in recent years. For this reason, this change driver was already taken into account in the formulation of the research question, in addition to the progressing digitalisation. Of interest, however, was how the interview participants perceived the degree of change in this respect and how the evolved customer behaviour manifested itself in their daily sales work.

Category	Property	Dimension	
Evolving Customer Expectations and Behaviour	Business orientation	Vague	←————→ Profound
	Digitalisation relevance	Low	←————→ High
	Sourcing preference	CAPEX oriented	←————→ OPEX oriented

Figure 15: Open category “Evolving Customer Expectations and Behaviour” – Properties and dimensions (own creation)

First of all, the survey seems to confirm that customers are much better informed about IT infrastructure products today than in the past. They use generally accessible sources of information, e.g. from the internet, and seem to be more confident and demanding towards the sales staff of the vendors. Max said:

“And the big challenge is simple, the flood of information that customers simply have. (...) They’re so trained, they got so much information, right? They go first, before they sit down with us at the table, they go on the internet and just get some more information (...). And confront you with competitive information. (...). So these topics are completely different than before.”

(Max, General Manager, IT infrastructure vendor, line 36)

This potentially poses a challenge for both manufacturer and partner sales, as they need to be better prepared to survive in dialogue with customers:

“The customers are extremely clever. What is also good. They are very good, very enlightened, and sometimes know the manufacturer’s products better than the salesperson himself.”

(Alfie, Account Manager, Sales ecosystem partner, line 30)

Beside this development which strengthens the customer position, customers have a new need for information that goes beyond product information. In this context, questions about the integration of the existing own IT infrastructure with cloud solutions as well as other aspects of digitalisation seem to be relevant:

“Such a client expects comprehensive advice. He wants to be informed by the partner what possibilities he has to operate or provide his infrastructure. (...) And here the partner, seller or consultant simply has to be able to present the aspects of his own infrastructure as well as to integrate cloud services. (...) From a wide variety of cloud services in conjunction with its own infrastructure.”

(Leo, Regional Sales Manager, IT infrastructure vendor, line 252)

Furthermore, the replacement of capital-binding, less flexible CAPEX investment models with consumption-based OPEX models appears to play a particular role for customers. This means that clients are less willing to deal with

“...features and functions, is it fast, is it slow, is it cheap, is it expensive. But the question that customers now have when it comes to digitalisation is: ‘How does your solution fit into our business case? How does your solution fit into our applications? Can your solution be used for cloud technologies? Can we also consume this as a service? We no longer want to buy and operate it only as asset, i.e. as merchandise. We want to free ourselves from this responsibility.’”

(Alfie, Account Manager, Sales ecosystem partner, line 26)

Overall, most of the respondents identified a high pressure on their customers to adapt, which also appears to be due to the progressing digitalisation. This

pressure requires a high level of attention from customers' IT managers, who now seem to be able to invest less time in supposedly simple IT infrastructure projects and instead have to deal with IT support for higher-value digital business models. The use of external public cloud offers, which increasingly question the necessity of an own infrastructure, appears attractive in this respect. The interviews suggested that IT infrastructure manufacturers and their sales partners should adapt more to this scenario. This could pay off, as modern, more advanced digital infrastructure environments do not necessarily have to be served by cloud providers. Rather, they can also be implemented with cloud operating models under customer responsibility on the customer side.

As the survey of the participants indicates, customers have requirements that go beyond technological requirements and that IT infrastructure manufacturers are expected to meet in the course of ongoing digitalisation. These needs will be examined in more detail below.

4.2.3 Perceptions about Customer Requirements on IT Infrastructure Sales Ecosystems

The interview results concretise the changed customer behaviour examined in the literature review with regard to the transformation of sales ecosystems as follows.

4.2.3.1 Business Value Creation

It seems obvious that the added value of IT infrastructure solutions can be better argued the more a concrete business value for the customer can be proven in the sales process. In this regard, the respondents on the whole pointed to a number of existing dependencies in connection with ongoing digitalisation.

First of all, IT infrastructure manufacturers and sales ecosystem partners appear to be dealing with customers at different levels of maturity with regard to digitalisation. Many of these customers seem to be currently in a discovery phase regarding their digitalisation strategy, as Alfie said:

“Digitalisation is in a state of flux, it hasn’t ended yet. Most of the customers, or almost all, which I have dealt with, are still in a kind of finding phase.”

(Alfie, Account Manager, Sales ecosystem partner, line 18)

Business Value Creation	Customer digital maturity level	Looking for orientation	←————→	Well educated
	Customer intimacy	Superficial	←————→	In-depth
	Organisational continuity	Low	←————→	High
	Business value	Pure cost saving	←————→	Business enablement
	Value creation	Vendor driven	←————→	Sales ecosystem driven
	Solution development	SW-/HW-centric	←————→	Holistic
	Vendor’s relevance to the customer	Supplier	←————→	Business Partner

Figure 16: Open Category “Business Value Creation” – Properties and dimensions (own creation)

Other customers, in contrast, show a high degree of maturity with regard to digitalisation and associated IT infrastructure issues, as Sophie reported:

“Well, today’s customers are so mature, that they can set priorities on their own.”

(Sophie, Director Channel, IT infrastructure vendor, line 58)

These are the customers for whom IT infrastructure manufacturers are unlikely to be able to deliver added value through special technical advice. Nevertheless, they could gain more strategic relevance for these customers if they were prepared to argue about digitalisation-related added business value on the sales

side.

In summary, the majority of respondents indicated that customers seem to appreciate four conditions that can be advantageously fulfilled for business value creation through IT infrastructure sales ecosystems, based on their individual level of maturity:

(1) *Knowledge about the customer*: Fundamental prerequisite of any business value creation for these customers seems to be an in-depth knowledge about their business, revenue-sources and clients:

“The Account Manager (...) should know the annual report of his customer in any case. He needs to know key drivers, not only from the customer perspective, but from the entire industry. He should be competent in transferring infrastructure into value and he should be able to realise changes, so that he can make his customer aware about it and discuss them.”

(Ethan, Account Manager, IT infrastructure vendor, line 92)

(2) *Improved continuity in personal coverage*: To gain and maintain in-depth knowledge about a customer, a certain grade of continuity has been reported to be helpful, also to continuously increase customer loyalty to vendors and their partners. However, there were observations which referred to increased discontinuity:

“Nowadays, continuity isn’t any longer a strength of many companies. When I do know that I need to deal with another sales guy next year, I don’t know if I should do business with them. Loyalty does not necessarily pay back.”

(Benjamin, Account Manager, Sales ecosystem partner, line 168)

(3) *Business value contribution in various other dimensions*: It appears, that many customers expect IT infrastructure vendor contribution ideally to all aspects of risk mitigation (e.g. in terms of compliance requirements), Business enablement (e.g.

in terms of revenue growth) and cost optimisation (e.g. with regards to OPEX/CAPEX demands). Even though costs continue to play a major role, differentiation of vendors and sales partners potentially benefits from contributing to customer business model transformation and risk mitigation:

“In former times we talked mainly about cost (...) today we talk about business demand generation.”

(Max, General Manager, IT infrastructure vendor, line 8)

“When we go into cloud, careful consideration is required: Under what circumstances can we do that, which legal framework applies?”

(Archie, Account Manager, IT infrastructure vendor, line 82)

(4) *Ecosystem involvement*: Since digital solutions need competency on each level of the solution stack, value creation seems to heavily depend on the involvement of the whole set of ecosystem partners required, for example in cases like Harry talked about:

“How can insurance companies deal with fraud? My partner delivered crucial contributions, because he had insight into the business, which we as a infrastructure vendor did not have.”

(Harry, Account Executive, IT infrastructure vendor, line 94)

Overall, it appears that if IT infrastructure vendors, together with their sales partners, succeed in structuring their customer relationship according to the aforementioned business value criteria, they can potentially increase their strategic relevance instead of remaining with a pure supplier status. Such added value seems to require a certain amount of inspiration towards the customer on new topics that are relevant to him/her. The requirements in this context can be summarised as follows.

4.2.3.2 Customer Digitalisation Inspiration

IT infrastructure manufacturers seem to be increasingly confronted with the

phenomenon that many of their products become largely comparable and thus often interchangeable between different suppliers (cf. Section 2.4). In order to convince customers of the uniqueness of their products and services, it therefore seems important in times of progressive digitalisation to actively influence the customer and market perception of their offers in a different context with inspiring messages about their added value.

Category	Property	Dimension	
Customer Digitalisation Inspiration	Market perception and company image	Unchanged	←————→ Rebranded
	Marketing	Traditional	←————→ Digital

Figure 17: Open category “Customer Digitalisation Inspiration” – Properties and dimensions (own creation)

First and foremost, it seems to be important not to assume that the customer already knows how the manufacturer’s product and service portfolio has developed.

“You can’t expect customers to know what you’re doing in the field of digitalisation. That might still work if you’re a completely new provider. But let’s say you are a supplier who has been on the market for twenty years now. Then you’re known for something. And, you can’t expect the customers to know you’ve adapted to the new world.”

(Charly, Account Manager, IT infrastructure vendor, line 328)

In addition to traditional marketing methods, vendors seem to increasingly use new media to inspire their customers as digitalisation progresses.

“The new business is being pushed a little more by Twitter, social media, press releases and so on and by the news from management.”

(Oliver, Regional Sales Manager, IT infrastructure vendor, line 67)

Besides all the benefits in terms of cost, speed, usability, perceived modernity

and the enormous number of potential addressees, this type of customer inspiration also seems to entail certain risks. With a view to possible internal disadvantages, this primarily affects the employees themselves, because some sales employees, who are expected to use modern means of communication, do not feel comfortable with it without adequate preparation, as James said:

“Currently, every account manager has to create a Twitter profile, whether he likes it or not, and whether it suits his personality or not. To tweet clever things. To all customers who then have to be invited somewhere on his Twitter profile. It’s not authentic either! It doesn’t fit!”

(James, Account Manager, IT infrastructure vendor, line 10)

With regard to external risks, the content and quality of the messages communicated to the social media audience seems to play a greater role, which may require focused preparation. This also appears to apply to partners.

“We do not follow a ‘scattergun approach’ (...) I don’t know, what are we actually trying to say? It is extremely important to know what is the message you give to a customer.”

(Alfie, Account Manager, Sales ecosystem partner, line 50)

Therefore, potential uncontrolled growth in corporate communications by sales staff could be countered by providing adequate material, provided centrally by corporate marketing. In addition, it has been suggested to provide training for sales staff on how to effectively position such messages to achieve the goal of customer inspiration about their own portfolio and its uses.

According to the results of the study, the necessary customer inspiration on digitalisation-relevant topics from the vendors should not be limited to social media use. Rather, it is more likely to play an exposed role in every, above all personal, customer contact. This potentially also serves to build up a special quality in customer relations, which is discussed in the next section.

4.2.3.3 Trusted Digitalisation Advisorship

For obvious reasons, manufacturers of IT infrastructure seem to be interested in good, long-term customer relationships that help them keep their competitors at a distance. The desire for long-term relationships is linked to the aim of not only having a tactical supplier relationship with the customer, but also being able to support the customer on his strategically important path into the digital future and to gain relevance. Manufacturers who successfully accompany their customers on the digital journey with their partners seem to be supplier and strategic advisor in one.

Category	Property	Dimension	
Trusted Digitalisation Advisorship	Vendor trusted advisorship	Weak	Strong
	Partner trusted advisorship	Weak	Strong

Figure 18: Open category “Trusted Digitalisation Advisorship” – Properties and dimensions (own creation)

The basic prerequisite for accompanying the customer into such a digital future in this way seems to be the trust that the customer places in the vendor and its partners as a result of the sales efforts of the ecosystem. Noah commented:

“And that’s the point: Trust. If there is no trust, nothing happens. Well, that means I have to earn my trust first. I have to show it that I deserve it, too. Then the products (...) must also be trustworthy. (...) And I think (...) it must not be this, yes, this American ‘Chaka-chaka’ mentality. Well, nobody likes this exaggerated marketing.”

(Noah, Account Manager, IT infrastructure vendor, line 30)

These and other statements by a few respondents suggest that at least two forms of *trust* need to be distinguished, namely the trust between companies on an organisational level and the personal trust between the people involved. As the interviews suggest, if the trust requirements are met in both respects, something

can emerge between customers and the vendor, respectively the sales ecosystem, that some interviewees called *trusted advisorship*.

This term, which refers to a special quality of a relationship with a customer, seems to be popular in IT infrastructure sales. In the context of digital transformation and the associated transformational change measures, the term trusted advisor can have a special meaning. It appears that this special quality of cooperation with the customer ideally extends not only to traditional IT departments but also to new buying centres in the customer's digital business areas. Max expected efforts from his system engineers (SEs) in this regard:

“So right now I’m in discussion in a technical area with our SEs. (...) They always try to get such a trusted advisor status. Okay? But we want to sell higher. So not the trusted advisor status with an infrastructure man. (We want...) really someone who might be handling data.”

(Max, General Manager, IT infrastructure vendor, line 62)

Of course, such relationships seem to be also desired between sales ecosystem partners and customers. Often this kind of trust appears to be the result of intensive cooperation with certain business areas of the customers. However, in a decentrally organised country like Germany with several urban hubs, regional proximity seems even more important. These regionally based, good relationships are often observed with smaller partners, as Joseph reported:

“So first of all you have to say that the smaller partner is of course an extreme ‘trusted advisor’ (...) The guys are doing the overall development for the area ‘XY’ from a big manufacturer we know (...). And what distinguished them was their proximity to the company.”

(Joseph, Head of Channel, Sales ecosystem partner, line 130)

For a successful transformation of IT infrastructure sales ecosystems, it could be concluded from these observations that both vendors and partners are required to make considerable efforts to gain and keep the trust of their customers. This

most likely includes not only fulfilling the customer requirements outlined in Section 4.2.3, but also regional proximity (at least of the sales partners) to the customer and the ability to build and maintain trust through digitalisation-related capabilities.

These and other considerations discussed in the previous sections determine the conditions with which manufacturers have to cope, as the next section explains.

4.2.4 Perceptions about Vendor’s Internal Transformational Change Issues

According to the majority of the participants, the success of transformational change measures in IT infrastructure sales ecosystems depends strongly on the adaptability of the manufacturer. The most important findings in this regard can be presented and discussed as follows.

4.2.4.1 Business Strategy

The term strategy can be defined as the fundamental basis for a company to achieve its long-term goals (Gabler, 2019): It makes statements on the scope of the company’s activities, the resources of the organisation and the associated capabilities to achieve its strategic goals, the competitive advantages of the company and the synergies that can arise from strategic decisions.

Category	Property	Dimension
Business Strategy	Character of business strategy	Muddling-through \longleftrightarrow Well defined

Figure 19: Open category “Business Strategy” – Properties and dimensions (own creation)

Due to the discussed change drivers, the business field of IT infrastructure vendors seems to be changing fundamentally. Accordingly, strategy adjustments are proposed, which must first be identified, formulated and implemented in concrete terms. However, the perception of the manufacturer's existing ability to

adapt to redefined business strategies was heterogeneous among the participants. This applies in particular to the adjustments with regard to the sales organisation.

In some cases, adjustment of business strategies appears to be made more difficult by the fact that the pressure on the vendors of IT infrastructures is not yet high enough. Depending on the technology, traditional business fields show lower growth rates, but still contribute to positive contribution margins overall. Although change drivers are perceived in the market, they are not always addressed in the form of a changed business strategy. Instead, sales seem to often still focus tactically and operationally on achieving the quarterly targets. Joshua expressed his concerns:

“Yes, and that will not be solved. This may also have to do with the fact that many stock exchange listed companies have to deliver their figures. And have no answer to the problem and just let it go. According to the motto ‘Somehow it will be solved’. So I miss the strategy. And that becomes the problem of the individual.”

(Joshua, VP Sales, IT infrastructure vendor, line 15)

Some interviewee observations regarding the adaptation of sales-relevant strategies in the conflicting area between day-to-day business and the long-term adjustment of business models rather point to a “muddling through” approach, in which possible strategic deficits are covered with activity:

“And here we are again at the point: I have never seen a company that really tries to understand this strategically in the long term. I’ve only ever seen companies that notice a hype somewhere, think they have to jump on it, and then turn it all around within the next three months. And that just won’t work.”

(James, Account Manager, IT infrastructure vendor, line 26)

Other participant perceptions appeared to be more differentiated and pointed out

that vendors have very well recognised which changes are taking place in the market. However, corresponding reactions are suggested not to be limited to pure adjustments in sales, but also include portfolio adjustments, which meet the increasing relevance of cloud solutions for customers.

“The core business continues to be in focus, also in terms of volume, because that is where revenues are generated. But all of the manufacturers are also developing further. All vendors realise that if they want to survive in the long term and generate added value, they need to get into the cloud, into the application topics. And so things just happen that one adapts to hybrid models.”

(Daniel, Alliance Manager, Sales ecosystem partner, line 34)

Overall, however, the picture is heterogeneous regarding the extent to which vendors have adapted their sales strategies to the new developments. It therefore seems appropriate for the vendors, to jointly define and implement strategies with the sales ecosystem partners regarding the products, services and combined sales capacities. To this end, it appears reasonable to take into account what added value for customers can be achieved in order to develop competitive advantages and synergy potentials.

The implementation of adapted strategies of this kind also requires adequate management and leadership. This is discussed in the next section.

4.2.4.2 Management & Leadership

Theoretical models of relevant (sales) management methods and leadership are well documented in the literature (e.g. Cravens, Le Meunier-FitzHugh & Piercy, 2012), which is why no further emphasis is placed on these aspects in this section. However, three further factors that emerged in the interviews are presented here and deserve to be emphasised because of their possible special relevance in the research context investigated here. These aspects include possible (1) overemphasis on sales numbers management, (2) focus of management on themselves and their own position rather than on what is

important to the company, and (3) the potential existence of informal leadership relationships as a result of unwritten company laws.

First of all, it can be noted again that managers, especially of American IT infrastructure companies, seem to think and act quite often in a quarter-driven manner. This is also associated with a pronounced sales number orientation, fixed in the short term.

Category	Property	Dimension	
Management and Leadership	Management focus	Transactional, sales numbers related	←————→ Transformational
	Management focus	Self-centered	←————→ Company-centered
	Leadership influence	Informal	←————→ Formal

Figure 20: Open category “Management and Leadership” – Properties and dimensions (own creation)

From the point of view of the majority of interviewees asked, this can undermine the comprehensive management of all other aspects relevant in the context of transformational change, and promote an approach reduced to “number management” in particular. Archie commented:

“There are certainly companies where (...) good managers are available who take care of this. Unfortunately, I do not see it that way, especially not in our American company. Managers here are rather number-driven, and less, let me say, people managers who pay attention to the development of their teams and their employees.”

(Archie, Account Manager, IT infrastructure vendor, line 149)

The more difficult the market conditions and thus the challenges to achieve targets become, the more pronounced the *number pressure* on sales staff seems to be. The interview results suggest that this can have counterproductive effects.

This could be particularly true if managers switch to *micro-management* and leave employees less room for their own actions without reporting on each of their steps:

“American companies (...) tell their employees how many customer visits they have to make per week. If you don’t do two a day, you’re bad. (...) Which is of course complete nonsense, ok? Because, (...) with one customer visit I can theoretically make my annual goal. And chasing customers is simply counterproductive. But these small mechanisms are applied that simply exert control and pressure.”

(Jack, Head of Presales, IT infrastructure vendor, line 165)

Secondly, the accelerating speed of business in the IT infrastructure industry, declining margins, staff reductions and rising customer expectations seems to lead to an increasingly complex internal business. As a smaller group of participants reported, this can result in managers primarily taking care of their own reporting to senior management, being busy with self-organisation or for other reasons letting their personal contact with their team members be weakened. In this context, managers could take more care to avoid situations like Ethan talked about:

“So this is another management issue, the time to deal intensively with the employees. (...) We spend a lot of time for internal meetings, Excel up and down, close-the-gap plans and, and, and, and...! And by far too little to take the time to sit down with the sales staff and say ‘Hey, what’s happening? Why is that? Where can I help? What about you personally? How do you feel?’ (...) And this is being done by far too little.”

(Ethan, Account Manager, IT infrastructure vendor, line 152)

Thirdly, the importance of informal management structures was occasionally pointed out during the interviews. As a result, very successful account managers seem to have informal influence if they make a significant contribution to the sales result measured against their current goals. William imitated the conversation he

observed between a first line manager and the account manager in a situation where the account manager pointed to his power:

“Eh, comrade, 60 percent of your success (points to himself) (...) comes from me! If you don't have it, you're gone. Are we clear that this is the situation?’ (...) Usually the relationship between the first line manager and such a twelve-pounder (note: synonym for a particularly successful account manager) is very split. The real leader in this team is usually not the manager! It's him! And when he sits in a meeting and says, ‘Ochhoa, interesting!’ (plays ironic statement, laughs), then everyone looks at him, and then he (the manager) doesn't need to talk anymore.”

(William, Director Sales, IT infrastructure vendor 114, 146)

In the context of transformational change management at IT infrastructure manufacturers, three potential conclusions may be drawn from the above-mentioned exceptional management-related situations: Firstly, the companies, vendors or partners could be advised to ensure that managers receive the necessary support from senior management, even in times when targets are not met. This in turn could encourage these managers to support their teams in a similar way. Secondly, managers may be able to use informal leadership relationships to establish successful salespeople as role models for others (cf. Section 4.2.4.10 on change encouragement). Thirdly, it is suggested that managers should spend more time with their teams, refrain from too much reporting and generally allow more room for personal interaction with their staff.

Following such recommendations could be in vain if it is not clear to the sales organisation which (new) requirements it has to meet. This is the subject of the next section.

4.2.4.3 Raising the Bar

Multi-level selling has been used for decades by IT vendors' sales organisations and their ecosystem partners to increase the probability of winning complex IT infrastructure sales campaigns for large enterprises. Such approaches involve as

many responsible persons on the customer side as possible at all relevant levels. The group of these decision-makers and preparers was often referred to as *buying centre* in the interviews.

Effective application of multi-level sales methods appears to have become increasingly important during progressing digitalisation, since the composition of the buying centre has shifted. To become relevant to *new* buying centres shaped by intensified consideration of *business* needs, rather than only *technical* requirements, salespersons should have a sound customer business knowledge, as some of the interviewees pointed out. It appeared useful to them if these salespersons were also in strong command of the relevant customer *business terminology*.

Category	Property	Dimension	
Raising the Bar	Buying centre persons involved	IT staff	Customer business units
	Sales focus	Product	Business solution
	Sales story line	Fear, uncertainty and doubt (FUD) oriented	Customer challenging

Figure 21: Open Category “Raising the Bar” – Properties and dimensions (own creation)

The category *raising the bar* has been defined to indicate such increased demands on sales staff and the associated need for vendors to define and communicate new standards during transformation. Key points in this regard are suggested to include the aforementioned interaction with expanded buying centres, the focus on the business impact of the IT infrastructure products to be sold, and the avoidance of fear, uncertainty and doubt sales strategies.

In the overall view, the interviewees were in favour of a balance between certain sales competencies. On the one hand, most participants emphasised the increased need for sales contacts to the customer business areas, which are less concerned with IT and more with the actual customer business. As Henry said:

“Successful Account Managers won’t be technicians, but people, who have the courage to talk with the customer about his core business. That implies to open new contacts within the customer.”

(Henry, Alliance Manager, Sales ecosystem partner, line 222)

At the same time, sales employees are suggested not to neglect their core competencies either, to which Oscar referred:

“On the other hand, despite all relevance of business-oriented sales models, technical sales staff is seen as highly valuable since technical consultants and preseller are quite often better salespersons than strategic relationship sellers.”

(Oscar, SVP Sales, Sales ecosystem partner, line 30)

Despite all the importance of this core competence, access to customers' contact persons who are not directly involved in IT still seems to be too limited in many cases, as Joseph remarked:

“Today’s salespeople still talk to IT people, who know infrastructure. When you ask top sales guys, who have 120, 130 % goal-achievement: ‘Ok, who do you talk to at the customer about the topic digital transformation?’, the answer is: ‘Eh, I talk to the IT Manager.’”

(Joseph, Head of Channel, Sales ecosystem partner, line 26)

As discussed in the literature review in Section 2.8, Dixon and Adamson's (2011) challenger sales model is widely used in the IT industry, but is also controversially discussed. Lucas' statement, however, resembles some of its core assumptions:

“Well, even if we asked the customer, what his needs were, he might not be able to tell us. If I had asked a hundred years ago an owner of a horse-drawn carriage what he needs, he had talked about faster horses. But a car would not have come to his mind.”

(Lucas, Director Cloud, Sales ecosystem partner, line 126)

However, applying such a *challenger sales approach* is likely to need in-depth knowledge about the customer and more than being able to talk about own products and services. Oscar described his own negative experiences with vendors from the partner's point of view as follows:

“In reality we see quite often a classical product sale. (...) I go out with a vendor to a customer. And he presents his thirty-seven thousand standard slides. (...) That must be considered also by an infrastructure vendor: It is not sufficient just to pitch features and products.”

(Oscar, SVP Sales, Sales ecosystem partner, line 18, 146, 154)

Rather than trying to help customers in achieving their business goals, it turned out that some IT infrastructure sales staff argues in terms of potential threats:

“On the other hand, as a market leader I have lots of things to lose and need to make sure that I protect my current business. By delaying other topics, e.g. the theme of cloud. I can do that by enhancing my product features (...), but also by increasing uncertainty at the customer. Because, if data goes into the cloud it can happen that this data will be misused.”

(Leo, Regional Sales Manager, IT infrastructure vendor, lines 32-34)

In summary, the aforementioned conditions seem to lead to a new quality of required sales competence, which includes more courage and ability to address new customer contacts, the ability to argue on business impact level, and the conscious questioning of existing customer perspectives. To accomplish this, the interviews suggest that the right attitude on the part of the employees may also be required, as shown in the next section.

4.2.4.4 Fundamental Sales Attitude

As the interviews indicate, the personal attitudes and behaviour of the sales staff seem to play an important role with regard to the vendors' adaptability to new sales requirements. The promotion of entrepreneurial spirit, flexibility and personal agility at the individual contributor and sales management level appears

to be important if employees are to do their jobs with the right attitude. However, personal work attitudes of sales employees seem to be influenced to a large extent by the corporate culture surrounding them. Some major infrastructure manufacturers in particular still seem to operate their business on the basis of a "command and control" management culture, which is based on hierarchical models in conjunction with fixed processes. This is also indicated by descriptions as given in Section 4.2.4.13 about sales reporting and cadence.

Category	Property	Dimension
Fundamental Sales Attitude	Sales teams mindset	<div style="display: flex; justify-content: space-between; align-items: center;"> "Command and Control" oriented ←→ Agile and less hierarchical </div>

Figure 22: Open Category "Fundamental Sales Attitude" – Properties and dimensions (own creation)

When interviewing some respondents, it became apparent that there seems to be a particular appreciation for independence and agility at team level. Agility was understood in this context as the ability to react quickly and flexibly to changing conditions. When these respondents talked about it, the term had a positive connotation, but in practice it seemed to collide with the existing management conditions at vendors and partners. Some participants outlined examples of how they nevertheless applied such flexible working principles on their own initiative and what motivated them to do so.

This seems to require a special entrepreneurial attitude and flexibility on the part of the sales staff, as digitalisation is dissolving traditional forms of organisation and calling old ways of thinking into question, as some interviewees reported. In this context, "agility" is expected not only from the newly created IT infrastructure, but also from the sales staff, who are expected to acquire new skills in a gradual learning process and learn from their mistakes:

"Now maybe a company in this cloud and agile world has to apply (it) to itself, right?"

(Oliver, Regional Sales Manager, IT infrastructure vendor, line 83)

Personal adaptability and the willingness to learn quickly seemed important to Samuel:

“But you're going into completely new terrain. You go out to the open sea with waves. And the first thing that happens, you are shaken up enormously. Because many things don't work, of course. (...) And you have to be ready to learn quickly. And you have to quickly get recommendations for action out of these learnings.”

(Samuel, VP Sales, Sales ecosystem partner, line 120)

In order not to have to wait for conducive conditions affecting the whole company, a few first line managers reported that they had tried to apply these conditions locally to their teams on their own. They found it helpful to simply try out new sales approaches and gradually move away from traditional requirements, such as aligning strategic sales work with a previously created holistic account plan:

“The question is, how do they work together then? Do the projects run for more than three months, which are then never applied, or do you give a framework and say ‘Look, we must have one day smaller work packages ready.’ (...) Why don't we just do this and that, ok? Or give it a try, okay?”

(Oliver, Regional Sales Manager, IT infrastructure vendor, lines 281, 297)

However, there have only been isolated reports on such practices, which could be due to the fact that, in the case of larger IT infrastructure manufacturers, more conventionally-minded approaches still seem to be appropriate. At least the description of one participant, who represented the view of a smaller partner company, suggests that promoting agile practices and employee attitudes might be easier for smaller, less hierarchical companies. Alfie believed that this was related to the question of whether companies could “let things go:”:

“So, here we are to the question of how much control and how much trust a company can bear. Corporations have more "command and control" as a principle. In our (...) case we have a very small agile troop, with a very

high level of trust. With a very high degree of personal responsibility.”

(Alfie, Account Manager, Sales ecosystem partner, line 190)

It seems that greater degrees of freedom could encourage not only manufacturers' employees to develop a more entrepreneurial, risk-taking attitude, but also their partners:

“We're talking about the fact that you have to react agilely to new market requirements. (...) And if you (...) have great degrees of freedom and are especially agile, then your partner simply feels that you can go to the limit.”

(Charly, Account Manager, IT infrastructure vendor, lines 175, 262)

The change efforts of the manufacturers to adapt their sales teams and those of their sales ecosystem partners to the new requirements of digitalisation may therefore require special attention to the basic attitude of the employees and the promotion of their personal agility. Manufacturers and partners can endeavour to create the conditions for this, for example through appropriate management methods and the support of the appropriate corporate culture. Moreover, all aspects related to trust and empowerment seem to play a special role (cf. Section 4.2.4.11).

Of course, promoting the right attitude also depends on effective internal communication. What this could imply is explained in the next section.

4.2.4.5 Internal Communication

The interviews confirm the significance of internal communication in the context of effective transformational change management, as highlighted in the literature review (cf. Section 2.5, Table 3). In addition, they also indicate which relevant aspects are of particular importance in the transformation of the sales ecosystems examined in this study.

Internal communication, as far as it is meant here, is primarily about communicating change measures and goals in a targeted manner for all those

involved in the company.

Category	Property	Dimension
Internal Communication	Quality of internal communication	Just notifying ←————→ Motivating and explaining

Figure 23: Open category “Internal Communication” – Properties and dimensions (own creation)

In order to achieve these goals, internal communication is suggested to be carried out in a way that sensitises people to the drivers of transformational change, informs them about relevant details and encourages or motivates all those involved to take action. Harry alluded to how it should not be done:

“And not just say 'Here, (...) the company has decided, this is our strategy'. I don't think that's enough.”

(Harry, Account Executive, IT infrastructure vendor, line 144)

In line with this, some other respondents like Samuel pointed out how important it is in this type of communication to convey the meaning, sense and implications of transformation:

“That's a lot of communication, ok? So that you really explain to the whole organisation that this is a good thing. That shows the opportunities that this development, for example digitalisation, offers all of us. Ok? That, of course, we have to develop further and that, of course, also seen from old business fields, ok, changes into the new business fields are necessary.”

(Samuel, VP Sales, Sales ecosystem partner, line 104)

Good internal communication therefore not only seems to anticipate employees' needs for transparency about the factors that trigger change, but also focuses on the individual benefits that will accrue to each individual once the challenges have been overcome (cf. Section 4.2.4.10 on change encouragement). It is suggested that this communication should not be limited to generalisations, but should take into account possible individual concerns and fears in connection with ecosystem

transformation. Ideally, this communication will cause the employee to feel that the upcoming changes do not pose a threat to him or her, but offer him or her the opportunity to become part of a journey of personal change that promises personal benefits for the future.

These advantages are suggested not to be of a purely monetary nature, as it seems to be often the case in sales:

“One didn't make it, one awarded goals, but failed to tell the people the story behind it.”

(Joshua, VP Sales, IT infrastructure vendor, line 131)

Rather, it is suggested that transformation-related messages be communicated in a comprehensible way, containing information on the reasons for the change, the added value for all stakeholders associated with it and the risks that make transformation indispensable:

“So the benefit, either the added value or the danger of a situation. (...) I want to understand 'why' first, and then I act. I won't run, just because somebody says 'Ok, you will get 500 Euros more'. (...) That's not the driver for me, is it? But for me it's more this (...) 'Aha, I got it', so that it has a higher meaning, ok?”

(Sophie, Director Channel, IT infrastructure vendor, lines 168, 170)

Good internal communication can thus, provided it is carried out regularly, not only motivate people on a higher, sense-making level. It can also create a reference point for sales employees to determine their own position in relation to the transformation targets. Achieving these goals also seems to require an effective adaptation of the organisational setting, as shown in the next section.

4.2.4.6 Organisational Readiness

The interviews conducted suggest that the change drivers observed in the market also require organisational adjustment efforts on the part of the vendors.

In particular, a considerable amount of participants pointed out what they thought were necessary modifications in the definition of sales roles and three different aspects related to the goal setting of sales employees. These aspects relate to the focus of the goals, the necessity of long-term orientation and the comparison with corresponding goal settings of the sales ecosystem partners.

Category	Property	Dimension	
Organisational Readiness	Sales role definition	Traditional	Progressive
	Goaling focus	Purely product-. i.e. "box"-based	Additionally service-based
	Goaling horizon	Tactically short- term oriented	Strategically long-term oriented
	Goaling alignment with partners	Weak	Strong

Figure 24: Open category "Organisational Readiness" – Properties and dimensions (own creation)

When asked about role descriptions and responsibilities, the respondents as a whole expressed various wishes and ideas, e.g. relating to the availability of a bid management at the manufacturer. These ideas concerned also the introduction of sales quota-free business development teams and sales staff who can not only chase the achievement of their sales targets, but can also effectively and competently advise customers on digitalisation topics. This led to a proposal from Alfie which refers to a yet to be created *hybrid* sales function in the sense of a bridge builder between infrastructure issues and their business value in digitalisation initiatives:

"My perception is that we actually need a new role that is with the customer. I call it that now, how do I call it, there is no name for it yet, but, one, maybe a hybrid. A hybrid sales. A person capable of combining technology and commerce."

(Alfie, Account Manager, Sales ecosystem partner, line 52)

In addition, some respondents pointed out that the goal-setting systems for sales personnel had to be adapted in several respects. The first aspect they suggested to be worth considering relates to customers who increasingly expect IT infrastructure offerings that include subscription-based pricing, which takes into account individual consumption. In addition to suitable price and licensing agreements, this might require the adaptation of sales compensation goal sheets for sales employees, who often remain in traditional models:

“A huge problem, for example, is that the commission models in sales, a relatively large part of the salary is determined by the sales success, that they are still aligned with regards to the ‘box’-business. But on the other hand the manufacturers try to go to market with cloud services or with consumption-based models. Therefore, they cause conflicts of interest in the sales team.”

(Joshua, VP Sales, IT infrastructure vendor, line 13)

A second important aspect with regard to the goals of the sales representatives relates to the perception that most IT infrastructure vendors are strongly quarterly driven (cf. Section 4.2.4.13). This seems to be also reflected in the target setting. The associated short-term orientation seems to contradict the requirements of demanding digitalisation projects with longer preparation and project durations.

Joseph illustrated this as follows:

“It takes two years to make the run through the whole sales cycle. And I think you have to address it and think, let’s go away from the pure quarter thinking. (...) Of course, you can have people thinking about the current (business) only. You have to bring your sales per quarter. But you need overlay staff (...) who practically do the add-on business for the regular account managers, and a goal, which is designed for one or two or three years.”

(Joseph, Head of Channel, Sales ecosystem partner, line 166)

A third aspect of potentially necessary adjustments relates to incentive models of IT infrastructure manufacturers and their sales partners, which are not always synchronous. Henry had a clear view on that:

“Of course it is nice when the manufacturer's account manager is correctly goaled. That means, that he is goaled on the right topics. (...) The main issue in sales is that people run after the money. One needs to direct them in the right way. (...) And ideally, the partner and the manufacturer are similarly directed. (...) This should be synchronous.”

(Henry, Alliance Manager, Sales ecosystem partner, lines 178-182)

In a further detailing of the aforementioned key aspects of the IT infrastructure manufacturer goaling, a considerable amount of interviewees reported on issues and thoughts regarding (1) the relevance of qualitative goals, which can be used for example by means of MBOs for rewarding achievements of strategically relevant digitalisation sales targets, which do not (yet) have measurable effects in quantitative terms; (2) “breathing quotas” which can be changed during the year, and (3) avoidance of internal competitive situations between vendor sales staff due to incorrect goaling, not considering required prior alignment of individual goals.

Overall, the findings presented indicate that it could be advantageous for vendors in the transformation process to go beyond the classic role of sales staff. Newly defined sales roles and the goal setting for sales representatives could take into account quality aspects of sales-related customer interaction and a stronger long-term orientation. Furthermore, the findings indicate that an extensive synchronisation of the goal setting with that of the partners can be beneficial.

From an organisational perspective, adjustments seem to require modifications not only in terms of roles and objectives, but also in the underlying processes, as will be shown below.

4.2.4.7 Agile Process Development

As in every industry, business processes play an important role as well in the

sales of IT infrastructures. Since both external parties (i.e. the sales partners) and internal parties (i.e. vendor sales/channel teams) are involved in the indirect sales model, the design of seamless processes appears to be more complex than in direct sales organisations.

Category	Property	Dimension		
Agile Process Development	Process speed	Low	←————→	High
	Process acceptance	Weak	←————→	Distinct
	Process effectiveness	Low	←————→	High

Figure 25: Open category “Agile Process Development” – Properties and dimensions (own creation)

The most important core processes in sales include the coordination processes between the internal/external sales teams in the presales phase as well as the discount approvals for the partners. Customer expectations seem to have increased in many respects (cf. Section 2.3 and 4.2.2.3), which is why the acceleration, effectiveness and also the general acceptance of the processes between the sales partners in the ecosystem and the vendor seem to be crucial for sales success.

It appears that due to cost saving processes at the manufacturers, some back-office support services for sales staff have been eliminated, e.g. for travel bookings. Today, sales staff at suppliers often use self-service portals for this purpose. The time required to use these portals often seems to exceed the effort that used to be required before the travel agency services were shut down for the sales employees in order to save costs. According to some participants, this is a representative example of how supposed process simplifications (in this case the introduction of a self-service portal) can lead to the opposite of what is intended. From the perspective of opportunity costs, the time now required for such activities is missing for other sales activities that could generate more value. In the same context, Archie criticised the process complexity in the collection of

sales relevant information:

“If I look back, I believe there is still potential to streamline processes. (...) I still spend time with things for issues, which I must do to reach my targets, but I actually should not be obliged to do. In other words, because processes are not right, for example to get access to information.”

(Archie, Account Manager, IT infrastructure vendor, line 208)

Harry alluded to internal reporting processes that cost him time that he could use more productively elsewhere:

“That’s too complex. I cannot afford to spend hours to maintain things, which don’t help me. (...) I believe, process management does not fit into the world of today, also, because employees dislike to follow mandatory processes. (...) They got used to work autonomously.”

(Harry, Account Executive, IT infrastructure vendor, lines 190, 218)

With regard to the interaction between manufacturers and their partners or customers, process speed and simplicity also seem to be of great importance in terms of customer interaction, as James pointed out:

“Today’s customers don’t wait for a week for an offer. After two days waiting they have offers from two competitors. And if the third offer doesn’t arrive on day 4, they carry on. That has become by far faster.”

(James, Account Manager, IT infrastructure vendor, line 119)

Centralised approval processes, characterised by the desire for superior control, no longer seem to be appropriate, as Alfie remarked:

“That had to (...) be escalated up the global Management, which took easily a week, sometimes even two weeks, until you get a decision. That means, you lose a lot of time.”

(Alfie, Account Manager, Sales ecosystem partner, line 190)

Some participants identified paradoxical contradictions between the claim communicated by the vendors to be able to help their customers with further digitalisation and their own inability to streamline or speed up their processes through the consistent use of digital platforms:

“These are all things, which could be perfectly handled via digital platforms. But one refrains from doing it. Instead, they put (sales) persons in between. They need to do all of that manually.”

(Alfie, Account Manager, Sales ecosystem partner, line 126)

“I think it is indispensable, that one has a shared (customer) list (...), which one needs to send back and forth. (...) It should be somewhere in the cloud. Then, one could fantastically work via salesforce.”

(Jacob, Partner Account Manager, IT infrastructure vendor, line 311)

In summary, it can be said that the most extensive efforts to transform the sales force can apparently be slowed down if processes cannot keep pace.

There also seems to be a relevant connection between agile process development and software tools, as discussed in the following section.

4.2.4.8 Software Tools

The availability of new digital technologies seems to have constantly expanded the application of software tools in sales. As it turned out during the interview phase, there are hardly any sales ecosystem relevant companies that have not at least started to organise their sales forecast-, lead management- and CRM-processes with cloud-based applications such as *salesforce.com*. Also, internal cooperation and interaction with sales ecosystem partners have been enhanced with the help of modern video communication and virtual cloud collaboration rooms, which seems to imply a massive increase in efficiency and cooperation speed.

Furthermore, the availability of digital training platforms seems to facilitate the

acquisition of relevant sales knowledge and methodological skill for both partners and IT infrastructure sales staff. Recent developments in the field of big data and artificial intelligence seem to allow the individual judging of the individual forecasting behaviour of employees in such a way that the respective manager is provided with computer-aided information to improve forecast accuracy on his level.

Category	Property	Dimension	
Software Tools	Sales management fundament	Based on personal communication	Based on centralised SW-Tools
	CRM software tool penetration rate	Low	High
	Grade of collaboration virtualisation	Limited	Extensive

Figure 26: Open category “Software Tools” – Properties and dimensions (own creation)

The possibilities given by virtual collaboration and customer interaction are valued because they are more effective and time-saving:

“When I am looking at my personal daily work today, I am doing four, five meetings today. In earlier times, I might have made this amount of meetings during the whole week (...). Not to mention travel times, which were also time-consuming.”

(Daniel, Alliance Manager, Sales ecosystem partner, line 74)

Also from the customer's point of view, the use of modern communication systems for information on IT infrastructure offers is attractive:

“My customers say: ‘Before you visit me in my office, let's do a video

conference first so that I don't have to invest so much time.”

(Max, General Manager, IT infrastructure vendor, line 24)

On the other hand, some interview participants also reported on some concerns they had about the increasingly widespread use of software tools in the sales of IT infrastructures. These concerns were particularly located in the area of the decline of personal interaction and trust between employees and managers, increasing employee control, higher allocation of attention to internal processes, and a certain proliferation of tools and communication options. Ethan expressed the following concerns:

“What I experience and see today, is that through this transparency, whether it is salesforce.com, and whatever is interpreted into these tools, that we more and more move away from from a team trust base, down to a ‘first of all: I trust no one, except salesforce.com’-attitude. And if there's something that is wrongly entered into salesforce.com, or not exactly to the point I want to know – I distrust. And that is, unfortunately, a bit of the trend I am experiencing at the moment. We say ‘let's rely on the tools and no longer on the people, on the organisation, on the middle management.’ And that is actually a pity!”

(Ethan, Account Manager, IT infrastructure vendor, line 78)

Other participants emphasised the potential risks for companies that could arise from a lack of critical distance to the software tools used, as Joshua pointed out:

“Quality management does not work. The importance is not conveyed to the people. And the worst thing is, that the management works with the data entered. And then the management deals with it, with this garbage, that was entered there. And based on this, on the basis of this garbage, they try to make sales planning, yes? This is actually a piece from the

madhouse, isn't it?"

(Joshua, VP Sales, IT infrastructure vendor, line 139)

Finally, some participants stressed potential disadvantages associated with the availability of different communication tools that can be used for sales coordination and partner interaction. Alexander was pretty clear on that:

"And then, there (...) (are) a lot of channels being used to communicate in parallel and at the same time, ok? Well, in case you cannot reach somebody. (...) Then you will receive an email. Then, a second email. And then another WhatsApp message. And then an SMS. Then you might be contacted in social media. (...) Then the phone rings. Then someone else calls you with Skype. Some use Skype with video, others say 'Wait, I don't hear you'. (...) These are examples, which end in technology disasters. (...) What keeps me away from the actual work."

(Alexander, Account Manager, IT infrastructure vendor, lines 59, 65)

It appears, therefore, to be reasonable that companies that are increasingly using software tools to manage their sales business ensure that the necessary personal contact between employees is not undermined and that communication remains simple. In addition, despite all the advantages associated with reports from sales management tools, for example, it is important to always critically reflect whether and to what extent the data stored there represent a balanced and accurate reflection of reality.

Beyond such technically oriented concerns, human factors seem to play a particularly important role in the definition and implementation of transformational change measures. This may be especially true for the possible reaction of employees to transformational change measures, which is discussed below.

4.2.4.9 Sales Employee Reactions to Transformational Change

The consideration of the personal reactions of the sales staff to change measures of the manufacturers seems to be an important success factor for the implementation of such measures.

In the indirect sales model, it appears to be an even more demanding challenge for manufacturers to consider not only the reactions and actions of their own employees in change initiatives, but also those of the sales employees of the partners in the sales ecosystem. Different personal needs and sometimes also fears seem to play a role here. These are suggested to be taken into account so that change measures can be successfully implemented.

Category	Property	Dimension	
Sales Employee Reactions to Transformational Change	Personal needs	Non-monetary	←————→ Monetary
	Relevance of personal fear	Low	←————→ High
	Variety of possible reactions	Uniform	←————→ Multifaceted

Figure 27: Open category “Sales Employee Reactions to Transformational Change” – Properties and dimensions (own creation)

The interviews carried out suggest that there may be at least two kind of “truths” in many manufacturers’ sales teams about the value and role of change: the open and the hidden truth. On the open stage there seems to be often talk about the high value of transformational change. In a way, IT infrastructure manufacturers also live from this desire for change, which is one of the reasons why customers invest in new products and services. For individual employees in this system, change can nevertheless be threatening:

“Change is not necessarily a good thing, right? It’s always so popular to sell: ‘Change is good in any case!’ Keyword ‘adapting to change’. But it’s not! It’s not for everyone! Because there are, of course, people who for

various reasons do not want this. And they can be legitimate, right? (...) Where does this change benefit me personally? Because in his innermost heart, when a major change comes to me, everyone knows that it could be dangerous for him. Professionally. Right?"

(Jack, Head of Presales, IT infrastructure vendor, lines 31, 39, 87)

Based on the personal perception and interpretation of the change, sales representatives seem to consciously or unconsciously decide on one or more coping strategies to deal with the situation.

Some salespeople see change, such as the opportunity to market new technologies, as an opportunity, as Harry does:

"I can't even talk about threats because I don't usually see them. I only see the opportunities and the chances in the many acquisitions, the many new technologies that could be seen in connection with the existing markets. And I have already seen all this combined as an opportunity to offer completely new solutions on the market."

(Harry, Account Executive, IT infrastructure vendor, line 54)

Others might take comparable situations as an opportunity to ask themselves to what extent, in view of their advanced professional biographies, they want to actively contribute to change at all:

"Yes, in a way it is also resignation. People are innerly resigning. And depending on their age, I'll say, if people are fifty plus, I say, yes, then one is more likely to talk about the end of working life."

(Alexander, Account Manager, IT infrastructure vendor, line 117)

The range of possible reactions also arises against the background that some sales employees have become accustomed to success in their profession over decades and are suddenly confronted with a new situation in which they have to prove themselves anew:

“If you have been very successful with a company for ten, seventeen, fifteen, twenty years, and then the themes come up now, when one says: ‘I sell a cloud, I sell a service from the cloud. And not any longer a license or a piece of product.’ This is a very difficult matter at the moment.”

(Ethan, Account Manager, IT infrastructure vendor, line 132)

These examples of possible change reactions do not claim to be exhaustive. They are reported with the intention to give an indication of the important aspect of considering human reactions to change without which the implementation of transformational change measures can fail. Furthermore, when defining change measures, it also seems important not to think only about the monetary needs of employees, as is often the case with salespeople. Managers seem to need some knowledge about the entire human spectrum of personal reactions to change and how to act accordingly. In this regard, encouraging change also seems to play an important role, as discussed in the next section.

4.2.4.10 Change Encouragement

As discussed in the previous section, the consideration of human behaviour in response to changing environments plays a key role in successful transformational change management. To overcome resistance in this respect, in addition to expanding technical competence (cf. Section 4.2.4.12), encouragement of change on the part of management appears to be of particular relevance.

Category	Property	Dimension	
Change Encouragement	Change enforcement	Driven by tools	Driven by individuals
	Mgmt. involvement	Passenger	Role model

Figure 28: Open category “Change Encouragement” – Properties and dimensions (own creation)

First and foremost, the interview results suggest that it is the task of the

manufacturer's sales management to communicate proactively about the advantages associated with the change (cf. Section 4.2.4.5). It seems to be, that personal implications (rather than those associated with the professional role only) and the way of communication (empowering vs. threatening) are important:

“Unfortunately, there are only a few who have understood, at least to my experience, that one has to present change as something positive to get through with it. You have to motivate people with the *personal* advantages they could gain, right?”

(Jack, Head of Presales, IT infrastructure vendor, line 47)

In addition, the personal relationship between managers and their employees can also play a role if what has been learned is to be applied in an environment that is initially unfamiliar to the employees:

“Qualification and encouragement both is required, sometimes also holding hands, to make sure they dare.”

(William, Director Sales, IT infrastructure vendor, line 126)

Whether and to what extent sales employees dare to move in the face of change impulses, regardless of whether they are managers or individual employees, also seems to depend on the way they are addressed. IT infrastructure vendors sometimes seem to tend to force the implementation of transformational change measures with software support (cf. Section 4.2.4.8), also because they want to make them measurable. Here the right balance appears to be important to avoid losing the "emotional buy-in" of the employees. As James put it:

“One of my former employers really carried it too far. They decided on top management level that the sales teams needed a (...) repositioning. Hence, they introduced a (change) tool: All sales reps needed to make so and so many customer appointments and needed to report (about it) centrally in the tool, what meant a bypass of all management levels in between. That is not individual anymore, that is just numbers, people (...)

like amazon (laughing).”

(James, Account Manager, IT infrastructure vendor, line 50)

In contrast, the personal involvement of management, up to and including the role model function for change, can create a high degree of acceptance and encouragement for change. Jack spoke enthusiastically of one of his former senior managers who met this idea of a motivating and encouraging role model for transformation:

“He was a person, a human, who has lived up to all of that (...), who exactly put it into practice (...). And he was a guy on management board level! An extremely good move!”

(Jack, Head of Presales, IT infrastructure vendor, line 47)

Based on the experiences reported by participants with encouraging factors related to transformational change measures, it can be said that managers seem to be expected to be role models for the changes they want to make. In addition, the personal contact between the sales individuals is suggested not to be completely replaced by tools. In particular, motivating speeches could focus more on the advantages for the employee and not only on those for the company. In addition, the trust and empowerment placed in employees also appears to be closely linked to the encouragement to change, as reported in the next section.

4.2.4.11 Trust and Empowerment

At first glance, the importance of trust in employees and their empowerment seem trivial and as if they do not need any further consideration. In the course of the interviews, however, it turned out that the focused consideration of these two aspects seem to be of particular importance in practice and can have a decisive influence on the success and failure of transformational change measures.

Category	Property	Dimension	
Trust and Empowerment	Climate of confidence	Weak	Strong
	Grade of empowerment	Low	High

Figure 29: Open category “Trust and Empowerment” – Properties and dimensions (own creation)

The special circumstances that transformational changes bring with them can tend to unsettle sales staff, as in some projects they enter unknown territory and explore new digitalisation-related sales opportunities. In order to overcome this uncertainty, the relationship to the direct superior seems to be important. Confidence placed in an employee could be shown here by empowerment and the granting of freedom degrees, which give the employee the feeling of being able to control the situation and assign responsibility for projects to him:

“In my role as strategic account manager, I have to say clearly that I was fortunate enough to have a boss who passed on the trust to me from the very beginning. He said 'Do things, do them right. And if you need anything, please involve me.' And I think that was the only way for me to win and execute such large projects with an infrastructure manufacturer.”

(Ethan, Account Manager, IT infrastructure vendor, line 72)

However, it might not be easy for managers to support their employees in this way for a number of reasons. Firstly, it might require a special attitude and character strength on the part of the managers to let things go and to delegate tasks responsibly. It might require an attitude that could be characterised as a “personal backbone”. This is because the managers themselves are under pressure from their superiors to achieve the desired sales results. In Section 4.2.4.2, this aspect is dealt with separately. Secondly, in times of unachieved sales targets, IT infrastructure vendors seem to tend to switch to a control and reporting mode that demands significant effort from employees and is perceived as the opposite of trust and empowerment (cf. Section 4.2.4.13). When asked

about the consequences of, for example, the introduction of a software tool that centrally recorded the number of customer visits by sales staff, James summarised this situation as follows:

“It's a bit of a vote of no confidence. From my point of view it also destroys a bit the relationship between me and my management. If I need (to fill out) the report, then why do I need my manager? Okay? And on the other hand: You are just extremely controlled. (...) You just can't control people like that in sales. Yeah, I mean, what happens? I no longer do what I think is necessary to maintain my commitment to my management. (...) I do what is necessary to getting these dates. (...) It has, in my view, produced pretty much what one expected at the beginning. People have just entered something.(...) It might have been necessary to do other things (instead).”

(James, Account Manager, IT infrastructure vendor, lines 56, 60)

Benjamin, who observed similar phenomena in connection with decreasing trust in employees and partners, attributed this to upcoming pressure in an increasingly challenging, less successful business environment:

“Why is that? I think it's the pressure again in the end. So if the pressure's big enough, I do something against my own principles. Yes? So, I eat healthy every day. And suddenly, the fridge is empty and there's only one bag of chips left and I'm hungry. Then I go against my principles and (laughs) grab the bag of chips. Yeah, well, that concerns the pyramid of needs, right? You'd have to analyse them carefully (laughs).”

(Benjamin, Account Manager, Sales ecosystem partner, line 201)

Overall, trust and empowerment within the manufacturers' sales organisations as well as towards the partners of the sales ecosystems seem to be a prerequisite for employees to feel valued. It seems, that this feeling can motivate and release energies that are conducive to the positive course of transformational change measures. Trust withdrawal and over-reporting (cf. Section 4.2.4.13), on the other hand, can undermine the basis of a motivated, independently driven approach on

the way to new goals. Both aspects, trust and empowerment, cannot be taken for granted, as they might be exposed to particular threats in times of change and lack of business success.

Another aspect that seemed just as important became apparent during the study, namely that of skill development, as explained below.

4.2.4.12 Skill Development

Due to the dynamic nature of the IT infrastructure industry, training of the sales force of manufacturers and their partners has always been essential. In addition to sales-related soft skills, these training courses usually also convey new information about product developments and portfolio expansions. In view of the transformational change drivers that infrastructure vendors have to deal with in the course of increasing digitalisation and changing customer expectations, further skills seem to be required in addition. The interviews suggest which competencies are concerned and which methods seem appropriate for their acquisition.

Category	Property	Dimension	
Skill Development	Training focus	Product and service related	↔ Digitalisation and sales method related
	Participant bandwidth	Individual contributor focused	↔ Focused on all hierarchy levels

Figure 30: Open category “Skill Development” – Properties and dimensions (own creation)

According to the perception of a subset of the interviewees, this initially concerns the content part of the digital customer transformation and the necessity to present oneself as relevant for the customer from the manufacturer's point of view. Talking about this Oliver said:

“So this, however, transformative presentation. (...) How can I inspire the customer, let’s say, to introduce digitalisation with the help of our services

and products. How do I do that, how do I prepare that?”

(Oliver, Regional Sales Manager, IT infrastructure vendor, line 269)

However, it seems that some of the approaches used to date to provide employees with the relevant knowledge and the necessary methodological competence do not necessarily lead to the desired result. The range of critical assessments of the respondents asked in this context varied from fatalism to a certain dissatisfaction with the observed actionism of some manufacturers:

“And the tsunami is coming. Or the asteroid comes, okay, from a dinosaur's point of view. And we must be prepared to deal with new issues. There's no training for that! I have never seen one offered by a vendor.”

(Joshua, VP Sales, IT infrastructure vendor, line 129)

“I sense the will to do this. And an inability, due to not thinking strategically enough. (...) The idea comes up somewhere ‘We have to do something.’ Then it goes down, some second line managers let an assistant select a suitable course, a training. The salespeople then have to go into this training and it is expected that after having done this expensive course, where the salespeople all have to come together somewhere for four days, that there is now a behavioural change, and the account managers will sell in a different way in the future. One forgets here that one is dealing with individuals that one doesn't just get changed within four days.”

(James, Account Manager, IT infrastructure vendor, line 18)

In view of the potential difficulties associated with teaching content and methods against the background of digitalisation, many vendors seem to rely on so-called *whiteboard training* for employee development. As some interviewees reported, for preparing that, prefabricated storylines of a few minutes in length have to be combined with core messages that are assumed to increase customer perception of the attractiveness of the vendor in the digitalisation environment. The employees are expected to acquire this storyline in preparation for the training event and reproduce it in an examination situation as part of an artificially

recreated customer presentation. Auditors, who were previously appointed from the colleague and management circle, then attest them sufficient preparation for their sales job. This method seems in some way to have reached its limits, as Ethan said:

“We're just going to whiteboard everything now! And I don't know how many whiteboard trainings there were for any topic. Whether it was cloud, cloud transformations, (...) software-as-a-service, or, or, or, or. Everyone started giving whiteboards (looking for words), yeah. (...) We have so many individualists down there in the sales organisation, where one has to cluster a little more clearly, who from my troupe is suitable for what and can do what best. And unfortunately, these organisations do not yet make this connection.”

(Ethan, Account Manager, IT infrastructure vendor, line 100)

Instead, workshops with rich content are preferred by some participants, which also convey the necessary details for the sales work, as Joshua noted:

“No frontal instruction in the sense of "I'll tell you how it works"! Rather, actively bring these people into (...) workshops, and that is the important thing, to show a journey, from today, or yesterday (laughs). (...) I think a lot of vendors just missed the deadline, too, yeah? How do I get an on-premise model into a hybrid model, into a cloud model. How do I get an on-prem model into a recurring-revenue model, et cetera. So, and that's the way to go.”

(Joshua, VP Sales, IT infrastructure vendor, line 75)

Moreover, it seems important to train the qualification of the employees not only with the help of unidirectional web tools to foster the ability to reproduce pre-defined marketing messages. Rather, some participants wished for participatory forms of learning that also allow sales individuals to share personal experience. It was also suggested that possible qualification deficits should not be located exclusively at the level of individual employees or at lower management levels.

Rather, the integration of upper management in further training measures such as training and personal coaching, e.g. with regard to successful transformational change management, could open up enormous potential for scaling, as some interviewees alluded. Such training could also establish sensitivity at a higher management level for the potentially fatal effect of a business cadence that is only focused on the short term, instead of concentrating on strategic success potential in the long term as described below.

4.2.4.13 Business Cadence and Reporting

Business cadence can be understood as the regular sequence of activities used by sales managers to manage their business. These include, for example, forecast calls, which take place in certain weekly, monthly and quarterly rhythms; and review events in which account managers report to (senior) sales management on the progress of their projects and the like. In order to accompany transformational changes with reference to advancing digitalisation, their progress is suggested to be integrated into the business cadence. According to the observations of some respondents, this seems to be rarely the case.

Category	Property	Dimension	
Business Cadence and Reporting	Management focus	Quarter-oriented/ short term	Non-Quarter-oriented/ long term
	Time expenditure for reporting purposes	Little	High

Figure 31: Open category “Business Cadence and Reporting” – Properties and dimensions (own creation)

One of the biggest challenges appears to be the structuring of the business cadence and the internal reporting in such a way that an adequate balance is found between the control of the daily business and the long-term transformational change initiatives. However, the cadence focus for sales staff is often on regular reporting on current sales figures. This can lead to a stronger focus on day-to-day business at the expense of long-term change initiatives, as

Ethan emphasised:

“There is one forecast call every week and then there is an intensive one every month, and there is a quarterly review meeting every three months. When I say 'I am a solution provider' as an infrastructure manufacturer, then one would really have to talk about what a solution is in these calls and meetings. But to this day, the only question asked in these meetings is: 'How much do we sell of A, B, C and D?'. This has nothing to do with change!”

(Ethan, Account Manager, IT infrastructure vendor, line 156)

Another potential issue in connection with the business cadence that emerged during the interview phase seems to be the high amount of time sales staff often have to spend on internal reporting. It seems obvious that time spent by salespeople in this area might be missing as active sales time and thus less time could be available for accelerating change initiatives. Alfie illustrated this potential issue as follows:

“Another big manufacturer: I also know a sales representative who is responsible for a big corporation. He says he spends thirty percent of his time perhaps with the customer and seventy percent forecasting. So forecasting in the sense of reporting! Inside! Inside! If we look at this ratio, something is wrong!”

(Alfie, Account Manager, Sales ecosystem partner, line 84)

This potential misdevelopment, which seems to become more significant and pronounced the worse the sales figures become, does not only affect individual employees but can also extend to the management:

“So, there is, of course weekly, always the Monday morning, the so-called forecast call. Then the current forecast is discussed with the team. It is then reported up. (...) This is hierarchical. The account manager participates in a call, the manager participates in this call and in the next

call with the higher management. And so on. That means, in principle, at least the upper management is busy all Monday with calls.”

(Joshua, VP Sales, IT infrastructure vendor, line 149)

These statements suggest that, at least in some cases, the internal reporting system, which (according to the business cadence principle) requires every sales employee at an IT infrastructure vendor, leads to a considerable amount of effort, which primarily serves tactical-operational goals and less strategic objectives. Proactively identifying and preventing such negative effects could be a task for institutionalised transformational change management. This will be discussed in more detail in the next section.

4.2.4.14 Transformational Change Management Governance

The interviews indicate that sales employees of IT infrastructure vendors, including their management, seem to be caught in a conflict between tactically operational and strategically relevant actions. On one hand, they appear to be exposed to discontinuously changing conditions in their business field and the associated need for transformational change. On the other hand, they have to achieve demanding sales targets that seem to require almost their full attention in day-to-day business.

Category	Property	Dimension	
Transformational Change Management and Governance	Degree of actual vendor change management implementation	Low	High
	Form of transformational change management implementation	Embedded in sales line functions	Guided by dedicated change managers

Figure 32: Open category “Transformational Change Management Governance” (own creation)

As a result, the strategic change objectives often do not seem to be achieved. The sales organisation may then remain in the status quo, as William said:

“And so these companies all get stuck with their bread and butter business, their cash cows. And the top sellers in particular are filling their bags with products from the ‘stone age’.”

(William, Director Sales, IT infrastructure vendor, line 38)

There seem to be several reasons why situations like the one William referred to can occur. According to the results of the interviews, one of these reasons could be that many infrastructure manufacturers do not focus enough on the establishment of a suitable transformational change management.

The situations observed by the respondents in this respect are heterogeneous. A considerable proportion of those surveyed could not identify any concrete, intended efforts by the vendors to prepare their sales teams for upcoming changes with explicit transformation management:

“Not noticed.”

(Benjamin, Account Manager, Sales ecosystem partner, line 125)

“It is then said from above, we are now doing a programme, there is a Change Manager. He then writes emails.”

(James, Account Manager, IT infrastructure vendor, line 171)

“So, as a rule, there is no such thing as a change representative (...) and the HR department doesn't do anything about it either. (...) From this point of view, top management is required.”

(Samuel, VP Sales, Sales ecosystem partner, line 107)

However, there were also some participants who reported on more distinctive approaches to dealing with transformational change through institutionalised change management in the vendor organisation. Charly and Sophie made some

observations in this regard:

“At my last employer, they installed a change moderator in every country who explained to the employees why the company is doing something to cope with the change.”

(Charly, Account Manager, IT infrastructure vendor, line 64)

“A CDO, on corporate level. The one who is driving this transformation forward and thus exerting massive influence in every single area of the company. (...) (Who) not only (gives) impulses, but (...) he sits at the board table, reports directly to our CEO and influences "from the top" into the individual areas. But of course we also have a member of his staff in the individual regions, be it EMEA, who works from the bottom up, so to speak. (...) Well, they really work on all layers, and that works so far, so quite well.”

(Sophie, Director Channel, IT infrastructure vendor, lines 190, 192, 194)

From the experiences shared during the interviews, it could be concluded that IT infrastructure vendors might benefit from enhanced and institutionalised change management to guide the transformation of their sales ecosystems. In the overall view, the results of this study suggest that the full range of action strategies required for the transformation of IT infrastructure sales ecosystems require synchronisation and dedicated management. Such institutionalisation may consist of integrating own departments and functions into the organisation which are concerned with driving transformational change in the vendor sales organisation and working with partners. Some vendors still seem to be focusing on entrusting their line management with change management tasks. Where such an approach does not work, it is highly likely to be affected by the personal prioritisation of sales individuals, which in day-to-day business often solve tactical operational problems rather than long-term strategic ones.

Sales staff participation and commitment seems to be a related success factor in these regards. This will be discussed in the next section.

4.2.4.15 Sales Staff Participation and Commitment

The success of transformative change measures at IT infrastructure vendors seems to depend to a large extent on the personal commitment of the sales staff. The interview results suggest, that such personal involvement of sales staff can be influenced advantageously by impactful internal communication (cf. Section 4.2.4.5) and transformational change related encouragement (cf. Section 4.2.4.10). In order to increase the degree of this emotional involvement, it seems beneficial for vendors to offer opportunities to influence transformational change measures.

Category	Property	Dimension	
Sales Staff Participation and Commitment	Sales staff sovereignty	Assimilated	←————→ Non-conform
	Mode of participation	Passenger	←————→ Driver

Figure 33: Open category “Sales Staff Participation and Commitment” – Properties and dimensions (own creation)

Furthermore, managers might have another strong influence on the degree of personal identification through the way in which they deal individually with change requirements as role models. The interview results suggest that managers who tend towards uncritical conformity with company guidelines generate less emotional loyalty among employees than those who also represent their own positions and assert them with the team.

One of the ways to involve employees in the change programme seems to be to let them participate in the development of localised Vision, Mission and Strategy (VMS) frameworks for the team. It appears, that companies develop such VMS for the company often as a whole in a top-down approach. A model for increasing the emotional involvement and identification of the sales employees could be to develop suitable “bottom-up” VMS with the team, as Max said:

“And that (...) vision and mission, the most important thing, that they are worked out together (...), okay? (...) If that is given by somebody else, it will never be implemented. Because the employees do not live in this mission and vision! Ok? They have to be able to live and experience it for themselves. Therefore (...) you have to build it yourself (...). It's very important!”

(Max, General Manager, IT infrastructure vendor, line 120)

An attempt of this kind would go beyond other approaches, such as those that use web tools to query information about the perception of employees in the change environment before and during the implementation of transformation measures. Approaches to increase personal participation in transformations seem to need a “personal touch”; it appears they cannot be implemented well using tools. Some participants reported on their involvement in change measures via web tools that failed to achieve the intended goals. As James put it:

“Really, no one is allowed to work for three days and you have to put your crazy ideas into the tools, and things like that. But this is then again organised from above, pushed through. You do a task, you're not part of anything. You're answering a poll.”

(James, Account Manager, IT infrastructure vendor, line 171)

On the one hand, managers must, of course, fulfil their obligations to the company; on the other hand, they seem to benefit from a pronounced ability to critically question the feasibility of certain measures in the area of their local responsibility and to enforce adjustments:

“Of course, it takes a little standing to say, ‘That's nonsense, I'll do it differently!’”

(Harry, Account Executive, IT infrastructure vendor, 288)

According to that feedback, managers sometimes seem to be required to stand in front of the team and, with the strength of their professionalism towards the

upper management, ask for patience to wait for the results during the course of implementing changes:

“And when the middle manager is already nervously drumming his fingers behind him, but the manager believes that what his team is doing is right, and that you just have to give the team time now, he just has to put himself in front of them a bit and sell the plan upwards. And make it clear that you just have to go through with it for a while.”

(Charly, Account Manager, IT infrastructure vendor, line 253)

With such an approach, managers can potentially create a “sense of togetherness” in their teams, which can spur the team on to special achievements. In the ideal case, individual employees in their change-related efforts will no longer just keep a promise to the company only, but also a personal one to their manager, whom they do not want to disappoint. In this way, employees could be inspired to leave their comfort zone, where they have established themselves as “passengers” and not as “drivers”, and actively force the transformational change process instead, as some interviews suggest.

While the findings presented in this section relate more to the internal situation of the vendor in the transformation process of the sales ecosystem, the following section deals with the vendor-external influencing factors.

4.2.5 Perceptions about Partner-relevant Transformational Change Issues

In addition to the influencing factors described above, which are particularly relevant for internal manufacturer concerns, partner-related aspects are also essential for successful transformation, as the interviews indicate. The following sections provide a detailed insight.

4.2.5.1 Sales Ecosystem Partner Expectations

In indirect sales of IT infrastructures, both vendors and partners choose with whom they collaborate when selling to end customers. For obvious reasons, the

product and service characteristics of the vendors and the degree to which customer needs are met play an important role when a partner selects one or more competing vendors for a particular customer project (cf. Section 2.2).

However, the way in which a manufacturer cooperates with the sales partner also seems to be decisive for this selection. Vendors that meet or exceed partner expectations could differentiate themselves better from others. This seems to become increasingly important in the light of rising product commoditisation and digitalisation, as the interviews suggest.

Category	Property	Dimension	
Sales Ecosystem Partner Expectations	Vendor partner choice	Opportunistic	←————→ Strategic
	Collaboration style	Neglectful	←————→ Appreciative
	Partner related procedures and processes	Manual	←————→ Digital and automated

Figure 34: Open category “Sales Ecosystem Partner Expectations” – Properties and dimensions (own creation)

In addition to a number of basic expectations placed on vendors that were mentioned by respondents, some partners seem to value infrastructure vendors that meet a number of more specific demands. These relate for example to the manufacturers' concentration on large, efficient partners, the conversion of inflexible, “box-based” price structures to consumption-oriented subscription models and to complexity reduction of manufacturers' business processes.

As Oscar, an SVP Sales of an ecosystem partner, noted, some partners do not want to address the markets in a mass with a hundred other partners. Instead, it is proposed that vendors endeavour to address

“an existing room for improvement, which is that vendors should have a stronger focus on the biggest partners to do the ‘strategic journey’ with. A few partners only. (...) Which partner is in a position to stand this strategic

journey? (...) It is necessary, that traditional vendor account managers intensify their collaboration with partners, which can do more than just delivering hardware.”

(Daniel, Alliance Manager, Sales ecosystem partner, line 18)

As indicated above, the availability of consumption-based models seems to play a key role in view of advancing digitalisation, instead of classical, customer capital-binding purchase solutions (cf. Section 4.2.2.2). In particular, however, vendors who are used to selling their products without consumption-based pricing models seem to be inclined to try to delegate the economic risk of the offer to partners:

“I believe, something must change in this digitalisation area of OPEX driven models, which are sold via partners. (...) They (the vendors in a certain project) didn't want to accept the terms and conditions. And looked for a fulfilment partner to take the risk.”

(Oscar, SVP Sales, Sales ecosystem partner, line 269)

Some partners, therefore, seem to expect vendors to integrate service and subscription models into their pricing structures that can be calculated and offered on a pay-per-use basis without delegating the commercial risk to the partners. Thus, with a view to the transformation of the sales ecosystems, it might also be necessary to adapt the goal-setting schemes and synchronise them with the partners (cf. also Henry's comment, reported in Section 4.2.4.6).

Moreover, some interviewees who primarily represented the partner view complained about the complexity of doing business with large infrastructure vendors. This seems to be a paradox insofar as these manufacturers communicate offensively to the market about the advantages of progressive digitalisation, but still appear to operate many processes manually themselves instead of replacing them with adequately functioning process and information platforms:

“These are all topics, which could perfectly be covered by means of digital platforms. But they don’t, they have sales staff who does all of it manually. (...) (Instead,) I plead for digital sales platforms providing all information in a best documented way, so that every partner can deal with it. And in case of any question he can contact a service centre, staffed with super trained individuals, able to answer any question.”

(Alfie, Account Manager, Sales ecosystem partner, lines 126, 134)

Overall, manufacturers seem to benefit from more strategic partner choices, more equal and respectful collaboration with their partners, greater support to partners in meeting market needs with regard to consumption-based service models, and process simplification to allow partners to focus as much as possible on their customer business.

But vendors also seem to have certain expectations of their partners, as outlined below.

4.2.5.2 Vendor’s Ecosystem Expectations

For obvious reasons, IT infrastructure manufacturers are in many ways dependent on the sales-relevant contributions of their partners in the indirect sales model. This seems to be particularly relevant against the background of the increased demands on these sales ecosystems in the course of progressive digitalisation, as the interview data suggests. Therefore, manufacturers have also certain expectations of their sales ecosystem partners.

The vendor expectations of partners identified during the interviews are particularly relevant with regard to the following three focal points.

According to that, vendors expect from their sales partners:

- an entrepreneurial, not risk-averse partner sales approach together with the manufacturer for the sale of new digital technologies, instead of an opportunistic attitude, which concentrates on mitigating business risks

- the availability of integrated, customer-oriented sales capabilities with specialist knowledge and vertical solution oriented approach, where appropriate
- distinctive, resilient partner customer access at all relevant technical and digital business-oriented levels

Category	Property	Dimension	
Vendor Ecosystem Expectations	Partner sales approach regarding digitalisation	Technology focused	↔ Holistically customer business focused
	Partner sales attitude	Opportunistic	↔ Entrepreneurial, risk-taking attitude
	Sales and implementation competence	Self-centred	↔ Ecosystem-centred

Figure 35: Open category “Vendor Ecosystem Expectations” – Properties and dimensions (own creation)

With regard to the first point, it appears problematic if partners are too hesitant in marketing new products relevant to digitalisation. William, who seemed to have a broad overview of the market situation, made the following comments:

“The partner only really jumps on topics at full speed if they are already running! (...) So, for example, if you are the manufacturer of a hype product, ‘super horny, superchaka’, which the customer is already actively asking for because it is simply awesome, because it benefits him, every partner jumps on it and says 'Buoah, give it to me! Full speed ahead!' But if you as a manufacturer come to such a partner and say: 'Ey, I have a new topic here, that is very cool, that will take off in the future!' Then he says, 'How much of it have you already sold?'”

(William, Director Sales, IT infrastructure vendor, line 180)

Secondly, the partner's entrepreneurial decision alone to include certain digitalisation-relevant infrastructure products of the manufacturers in its own partner solution portfolio (cf. Section 4.2.5.5) doesn't seem to be sufficient. Rather, it seems that the partner has to ensure also business-oriented sales advice on the use of these new digital technologies in accordance with the vendor's expectations. Although the vendor trains its own sales teams and the partners in this direction, it seems to be the responsibility of the sales partners to apply this sales competence in concrete sales campaigns.

“So, it's not a classic battle play, where I go from the solutions to the added value, about the price with a battle card to the customer. Rather than that, I have to adapt to the customer now, in terms of content. In order to meet this need, this requirement so cleanly in the end and then bring him a more or less tailor-made solution or approaches to a solution.”

(George, Head of Presales, IT infrastructure vendor, line 155)

Such tailor-made solutions often exceed the capabilities of a single partner. For this reason, in addition to the above-mentioned manufacturer expectations, it appears to be necessary for the partners to show a pronounced openness for cooperation with other sales ecosystem partners, as some interviewees stated.

Thirdly, sales ecosystem partners also seem to need the necessary customer access that goes beyond the purely technical level. Large customers have significantly more contact persons relevant to the sales process than the manufacturer alone can handle. Therefore, in the indirect sales model, the vendor seems to expect the partner to follow a coordinated sales approach in order to develop sales synergies. This seems important because partners have important access to customers, as Daniel implied:

“So, the crucial thing is that we have the access. We accompany the customer on the journey from the modernisation of the IT or infrastructure to the business application, or to release it into the cloud applications. We are the ones who accompany him accordingly. (...) And here, too, we are

positioned in such a way that we can serve our customers in the best possible way.”

(Daniel, Alliance Manager, Sales ecosystem partner, line 8)

In summary, it is suggested that partners who want to work effectively with IT infrastructure vendors during sales ecosystem transformation not only place demands in their direction but also strive to meet vendors’ expectations. Such efforts might be also helpful in the coordination of the joint go-to-market, as will become clear below.

4.2.5.3 Go-to-Market Redefinition

As outlined in Section 2.2, the sales ecosystem with which manufacturers cooperate to serve IT infrastructure end customers consists primarily of service providers, system integrators, distributors and resellers. The latter are often smaller companies with less comprehensive solution competence but with a beneficial local proximity to customers. The interview results suggest that this system needs to be adapted and possibly extended.

Category	Property	Dimension	
Go-to-Market Redefinition	Market evolution	Static	Dynamic
	Relevance of new partners for digitalisation projects	Decreasing	Increasing

Figure 36: Open category “Go-to-Market Redefinition” – Properties and dimensions (own creation)

The classical composition of partner companies, one could also call it vertical IT infrastructure sales ecosystem (cf. Section 5.3), has been characterised by a certain static, which simplifies the product sales for manufacturers, as well as making it controllable and influenceable. Due to the change drivers in the market discussed, however, there seems to be a certain dynamic to which manufacturers are suggested to adapt. Sophie’s view on that was as follows:

“I believe, that the traditional construct, which has lasted now for decades, to sell via service providers managed services or, by far more, to sell solutions via the traditional system integrator/reseller to the end customers, these ways are still there, but decline more and more.”

(Sophie, Director Channel, IT infrastructure vendor, line 44)

As a result, vendors' salespeople potentially lose the control they had been able to use to their advantage in sales campaigns and are now supposed to manage emerging sales channels to achieve their goals. This can be seen, for example, in outsourcing projects or in the general support of digitalisation projects. Joshua identified the increasing range of solutions for customers, also through (public) cloud providers, as possible reasons for this:

“We are also talking about accompanying customers in this path of digitalisation, or classical do-it-yourself in the subject of digitalisation, outsourcing, outtasking. So, we talk about on-premise business, hybrid business, cloud-business. It's all part of it.”

(Joshua, VP Sales, IT infrastructure vendor, line 29)

Among the relevant companies with which the manufacturers could enter into a new quality of cooperation are companies that have a special relevance for digitalisation. These include, for example, outsourcers, consulting firms that can contribute application and digital business process competencies to projects, software houses and even (public) cloud providers. However, this group potentially also includes at least some of the existing partners, who now require supplementary support of a different kind from the manufacturer if they intend to adapt to the changed market conditions. This could include, for example, a system integrator with whom the manufacturer has worked in the past to sell on-premise solutions to customers and which now wants to implement and market public cloud solutions for such customers.

As a consequence of the above-mentioned circumstances, it is suggested that manufacturers not only take care of changing the quality of their cooperation with

existing partners, but also evaluate the type and structure of their go-to-market approach with new partners. This might be a challenging task, as the ongoing business, which is still largely served by traditional partners, does not allow for neglect. In order to avoid that, programmatic partner governance seems to be beneficial, as will be shown hereafter.

4.2.5.4 Programmatic Governance

As some interviews indicated, cooperation between IT infrastructure vendors and their sales ecosystem partners often appears to be driven by tactical-operational and sometimes event-driven interaction. Structured partner programmes provide general orientation for sales collaboration. Typically, vendors define general partner programmes that define the basic framework for all partners with which they cooperate. Beyond these fundamental conditions, manufacturers can cooperate with certain partners in different areas in a special and more focused way, which can be structured by a so-called programmatic governance model. With regard to digitalisation projects with customers, a cooperation supported by such a governance could be suitable to increase the position of the manufacturer from a simple supplier to a strategic level with the partner.

Category	Property	Dimension	
Programmatic Governance	Partnership status	Supplier	Strategic
	Engagement mode	Tactical, on-demand	Programmatic
	Type of vendor/sales partner collaboration	Unstructured	Structured

Figure 37: Open Category “Programmatic Governance” – Properties and dimensions (own creation)

As the interview results suggest, a special partner support, which goes beyond the tactical-operative area, can however be costly and resource intensive and may often only achieve results which justify the effort after a longer period of time.

That might be the reason why some vendors hesitate to implement such models. For example, research participant Max did not see a strong need to introduce programmes that go beyond basic channel work. Instead, he preferred to support his partner more tactically and operationally:

“That's what I did on the first day I took office, I changed this programmatic approach (laughs). To a sales organisation. Because the programmatic approach, that is available (and important) at some point: I'll explain what our channel model is. (...) That's it. It's relatively simple.”

(Max, General Manager, IT infrastructure vendor, line 98)

Many participants, however, appreciated the introduction of a more programmatic approach in order to make collaboration with partners more strategic and holistic in a world of complex digitalisation projects with customers.

This was particularly the case if the interviewees had gathered their experience mainly with partners or preferred to emphasise the partner point of view for other reasons. From a governance benefit perspective, the regularity of manufacturer contacts and the depth of the coordination in partnership seems to play a particularly important role. Sporadic contact maintenance, especially at the end of the quarter, was criticised:

“Living partnership means to me that it is not only a unidirectional partnership. Very often, it's still like this, to see one of the weak points of many partner models, I only get calls from the partner at the end of the quarter.”

(Oscar, SVP Sales, Sales ecosystem partner, line 82)

The more comprehensive and complex the manufacturer's portfolio is, the more pronounced the willingness to provide more extensive partner support also seems to be appropriate from the vendor's point of view:

“You need a stable, substantial programme. Everything else is best-effort mode and is completely unplannable. (...) This naturally includes, (...)”

portfolio management, i.e. joint (...) market analysis. Then there is a portfolio strategy, i.e. to which solutions, if necessary also products?”

(Joshua, VP Sales, IT infrastructure vendor, line 29)

The comments of most respondents in this respect essentially indicate that partner governance can be an important element that structures the cooperation between IT infrastructure vendors and sales partners. During the interviews, possible components of such partner governance were mentioned. Elements like “Partner portfolio development”, “Field sales alignment”, “Partner enablement” and “Partner inspiration” seem to be of particularly exposed importance for the vendor's transformational change initiatives. Therefore, these aspects require a deeper examination, which is carried out in the following Sections 4.2.5.5, 4.2.5.6, 4.2.5.7 and 4.2.5.8.

4.2.5.5 Partner Portfolio Development

IT infrastructure vendors in indirect sales ecosystems seem to be particularly dependent on the portfolio decisions of their partners. The partners decide which manufacturers they work with and design their cloud, managed service, system integration and resale portfolios accordingly.

Category	Property	Dimension	
Partner Portfolio Development	Partner portfolio strategy	(Few) product partner driven	Multi-service partner driven
	Portfolio orientation	Resale/managed Service focused	Cloud focused
	In-depth solution competence	XaaS driven	Digital/vertical business solution driven

Figure 38: Open category “Partner Portfolio Development” – Properties and dimensions (own creation)

As discussed in Section 2.2, vendors have business relationships with system integrators, service providers, distributors and resellers from a sales perspective.

Although the business models of these channel partners differ from each other, they seem to share a dependency on conscious portfolio decisions before working with IT infrastructure vendors. The influence of IT infrastructure vendors on this portfolio decision can therefore be crucial in times of advancing digitalisation and changing market conditions, as some interviews suggested.

Since market conditions are changing (cf. Section 4.2.2) in the course of digitalisation and in view of new vendors questioning classic legacy products, manufacturers seem to need to increasingly assert themselves against (new) competitors in terms of partner portfolio composition. According to Joshua, tactical-operative cooperation limited to sales does not seem to be enough:

“A mutually agreed portfolio management definitely belongs to a common programmatic work.”

(Joshua, VP Sales, IT infrastructure vendor, line 29)

In these portfolio-relevant partner decisions, the increasing relevance of cloud offerings seems to play a particularly important role, because these offerings drive new consumption models and service based offerings in the IT market. IT infrastructure manufacturers appear to be in competition with (public) cloud providers at the partner level. Cloud solutions are playing an increasingly important role for customers, and partners appear to be taking this into account:

“A customer expects comprehensive advice. Partners must demonstrate the options to build or provide IT infrastructure. Thus the partner, as seller or consultant, must be in a position to present the aspects of infrastructure ownership as well as the ones of cloud services. Because there will certainly be not a single customer, who relies on his own infrastructure only to provide his applications. Rather than that, it will definitely be a combination from various offers. From cloud services in varying degrees, in connection with own infrastructure.”

(Leo, Regional Sales Manager, IT infrastructure vendor, line 254)

This kind of partner independence from IT infrastructure manufacturer interests seems to be important, as they and their value creation seem to be questioned in the cloud IT age by the customers themselves, as Ethan believes:

“First and foremost and with regards to the cloud concepts, many partners are wondering what their value add contribution can be. Because, within the cloud paradigm, I as a customer don’t continue to optimise my computing, networking or storage environment or supplement another software. Instead, I ask, what kind of service with which kind of software on top of it do I need for what. In this situation, the partner hasn’t any influence or value add any more.”

(Ethan, Account Manager, IT infrastructure vendor, line 122)

This market transition leads potentially to uncertainty and dynamics on the partner side to adapt their portfolio to future needs:

“Partners are extremely nervous. Many of them try, and ‘IT-Partner-8’ is a good example, to make themselves independent from vendors with own cloud services and transformation services. But, many others haven’t an answer and they expect advice from the vendors.”

(Joshua, VP Sales, IT infrastructure vendor, line 81)

As a consequence, it is suggested that IT infrastructure manufacturers are no longer only interested in achieving a favourable partner portfolio position in the integration and resale business (if this is the case), but also in actively supporting the partners in building a (cloud) portfolio suitable for digitalisation.

It seems obvious that the marketing of such a combined portfolio should be optimally tailored to the specific business application needs of the customers. This probably also requires effective sales coordination between the manufacturer and partner, which is discussed in the next section.

4.2.5.6 Field Sales Alignment

The coordination between the sales teams of manufacturers and partners, also known as “Field Sales Alignment”, seems to be one of the most important measures within an indirect sales model. IT infrastructure vendors typically operate two sales organisations that work closely together, but have different orientations: An end customer-focused sales organisation, which aims to establish preferences with the end customer so that the latter buys the IT manufacturer's products from the indirect sales partner, and an organisation that supports the sales partner itself. The partner in turn maintains its own sales teams that address the end customer. In terms of meeting customer expectations, the interviews indicate that coordination at this level is important for the sales ecosystem, especially during its transformation.

Category	Property	Dimension	
Field Sales Alignment	Touch points between sales teams	Few	←————→ Many
	Collaboration quality	Purely transactional	←————→ Strategically inspiring
	Integration in partner governance	Weak	←————→ Strong

Figure 39: Open category “Field Sales Alignment” – Properties and dimensions (own creation)

The alignment of this cooperation seems to be at least in the beginning of a partnership the responsibility of the manufacturer partner sales teams, at least until an independently functioning collaboration has been established between the vendor’s end customer sales teams and the partner.

“First thing a Partner Account Manager needs to do is to build a relationship network with the field sales teams of the partner. (...) In the beginning, he must show how to ‘make goals’ at the customer. (...) Later,

he can pull back himself and focus on training and support.”

(Samuel, VP Sales, Sales ecosystem partner, lines 75-78)

The alignment of the sales force between manufacturers and sales partners appears to be of increasing importance, as with the increasing pressure from cloud providers, market weightings have potentially shifted to the detriment of vendors. In extreme cases, market leaders in the IT infrastructure industry could previously afford to have much of the sales work done by competing partners and wait until they finally got the order. It appears that this situation has changed fundamentally and requires a stronger commitment of the manufacturers to the sales process and the associated coordination with the partner. Jacob provided some insight:

“When I think about about channel and about the question, why vendors want to have a channel, then, let me exaggerate a bit, it is for the purpose that (they) can spend time in (their) garden relaxing and wait for the fax with the order (...) and the partner does everything on his own. (...) That’s certainly not realistic any more in a world, which is getting more and more complex.”

(Jacob, Partner Account Manager, IT infrastructure vendor, lines 10-12)

The effectiveness of field sales alignment seems to be measured in the end by the sales growth achieved by the manufacturer and partner sales teams. In practice, this growth will not only benefit from the number of “touch points” between teams, but also from the strategic quality of joint sales initiatives.

However, as the survey revealed, coordination between partner and sales teams can only fall on fertile ground if the manufacturer has previously qualified the partner's sales employees accordingly. This type of empowerment is part of what can be called partner enablement.

4.2.5.7 Partner Enablement

In indirect sales models manufacturers interact with customers with the objective

of “preference setting” in competition to other vendors and/or solution providers (cf. Section 2.2). In so far, the manufacturer paves the way for its own sales partners against the competition through direct customer contact, without literally selling to the customer. The latter is done by ecosystems partners, which develop the required solution architecture, create commercial offers and conclude contracts with the customer and, finally, implement the solution. In order to enable partners to achieve this in the manufacturer's interest, enablement measures are pursued that put the partner in a qualified and competent position. These activities are summarised under the term “Partner Enablement”.

Category	Property	Dimension	
Partner Enablement	Enablement format	Printed training documents	↔ Physically and personally
	Target audience	Small partners	↔ Large partners
	Training content	Knowledge focused	↔ Sales method focused

Figure 40: Open category “Partner Enablement” – Properties and dimensions (own creation)

The survey of the interviewees revealed that modern digital solutions might require a special degree of sales competence and technical know-how to be conveyed or demanded by the IT infrastructure manufacturer. Not all partners seem to be sufficiently well prepared for these new requirements, as Joshua remarked:

“What I see is: The partners have been in an ecological niche for many years. They have invested too little into the future. Apart from a relatively small set of partners, the partner landscape in Germany is not ready to make this digital transformation.”

(Joshua, VP Sales, IT infrastructure vendor, line 81)

The bandwidth of required competencies identified to address the needs of this digital transformation seems to range from sales capabilities to technical and

business-oriented knowledge:

“This is not about pure product training, it goes beyond. Of course cloud topics, digitalisation and so on and so forth.”

(Archie, Account Manager, IT infrastructure vendor, line 128)

Nevertheless, despite all the focus on new and modern digitalisation requirements, the expansion of competence on the part of the partners still seems to require technological “foundations” such as correct product configurations in customer implementations. Jacob emphasised this topic:

“In the area of project business, of course, I see the challenge, which is of course then arbitrarily complex, it can be, up to the fact that the partner, that the channel partners do not even know, what exactly must be configured to meet the demands, or to meet the customer's requirements.”

(Jacob, Partner Account Manager, IT infrastructure vendor, line 16)

As the interviews indicate, effective partner enablement, however, is not limited to the transfer of technological, infrastructure-product-oriented knowledge. Instead, it also helps the partner to face new sales methodological requirements. Therefore, to provide partners with added value in the development of their sales capabilities, various manufacturers seem to offer enablement measures, which include classic elements such as brochures and one-pagers, online trainings as well as virtual or physical personal meetings. Some participants reported on additional activities in order to guide the partner in the specific sales situation with the customer. Max reported on special enablement support for partners:

“(...) call-out dates for example, sit down with the channel account manager or regional sales reps, and make call-out dates, together with the partner. And say ‘Look at this, today we'll make fifteen to twenty leads just for you. We're going to sit down together, I will make the first two calls and then you can do that, too. And then we get twenty to twenty-five appoint-

ments today. And they are all protected for you!”

(Max, General Manager, IT infrastructure vendor, line 98)

The channel teams of the manufacturers seem not only to have the programmatic task of organising the basic cooperation between the manufacturer and the partner, but also of getting involved in customer projects and guiding the partner in digitalisation projects with new products.

“Yes, and that goes all the way down to the customer. In the beginning, he (the vendor channel account manager) will have to stand on the front, eh, as a striker, and will have to show how to shoot a goal. And then, when the (partner) salesman slowly learns, how to score a goal from this position, he can step back a bit and concentrate on training and supporting (the partner).”

(Samuel, VP Sales, Sales ecosystem partner, line 78)

In order to fulfil this task in times of increasing digitalisation, a broad knowledge appears to be required which goes beyond the product world of the manufacturer and includes the developing system landscape of the customer.

“We are bridge builders. And your people need to act more like consultants at the customer. But in order to be able to act like a consultant with the customer, you need (to have) the necessary knowledge. And it is not enough, just to know how your product works. You also need to know how other products work and you need to know what role does your product have in a digital environment at the customer. And that is where lot of people fail.”

(Alfie, Account Manager, Sales ecosystem partner, line 52)

All in all, it seems that during the transformation of its sales ecosystems, the manufacturer has the responsibility of contributing to preparing its partners for the current and future requirements of progressing digitalisation. To do this, it also seems necessary to inspire the partners for new digital business opportunities.

This will be discussed in more detail in the next section.

4.2.5.8 Partner Inspiration

Section 4.2.3.2 highlights that the sales activities of vendors can benefit from getting customers excited about digital solutions and their products. In order to inspire as many customers as possible to use new infrastructure technologies, it appears necessary, also for reasons of scaling, to motivate and inspire the partners' sales teams. These, in turn, can then influence customers just as successfully in the interests of the vendor.

Category	Property	Dimension
Partner Inspiration	IT Infrastructure vendor attitude	Market follower ← → Thought leader
	Direction of vendor-driven inspiration	Bottom-up ← → Top-down
	IT infrastructure vendor expectations of partners	Unjustified and unfounded ← → Inspired and authentically motivated

Figure 41: Open category “Partner inspiration” – Properties and dimensions (own creation)

As a result of the interviews, it can be concluded that effective partner inspiration might not be limited to the mere exchange of sales information, but can also serve to support partners in designing their portfolio of managed services and cloud solutions (cf. Section 4.2.5.5). The sales inspiration for partner sales can begin with a motivating approach by the sales account managers of the IT infrastructure vendors:

“So I have a very big account where I'm regularly in review calls (...) And then I notice how the account manager of the manufacturer talks about what he discusses with the customer all the time. And I notice that he draws the customer's attention to topics that the customer has not yet

thought of. And every time he (does) that, (laughs) then you can feel (.) eh, he is proud of that (...). And, and we as a (partner) organisation are challenged then. Because our account manager is also participating in the call. If he can't do anything with it in this situation, then he appears to be 'old'. He'll get somehow dragged."

(Henry, Alliance Manager, Sales ecosystem partner, line 82)

It seems, that partner inspiration can be established, as in this case, in a "bottom-up" manner, i.e. between the sales employees involved on the part of the manufacturer and the partner, or as a result of a targeted approach (e.g. with CIO circles or joint customer events) and in this sense "top-down". As Archie put it:

"This means that we are already taking all our partners with us on the training side. So, (...) if the partner wants, he can participate accordingly with us. Can get the information from us. In other words, he can participate in these processes. And we also advertise this enormously and permanently invite all partners to these things. In order to be aware of this change and of course we also have an interest in inspiring as many partners as possible for our solutions."

(Archie, Account Manager, IT infrastructure vendor, line 122)

Such inspirational measures unfold an external effect in the direction of the customer, but can ideally also have an inwardly unfolding, sense-giving effect. It seems, that partner sales representatives want to be proud to be able to offer and sell good manufacturer products and to incorporate thought leadership in certain areas relevant to digitalisation. In this context, sense-making was important to George:

"The common goal and the governance, a very important issue to ensure that it is not just limited to achieving 'global-galactic' goals only. Like: 'I want to grow thirty million, and no one knows why!'"

(George, Head of Presales, IT infrastructure vendor, line 201)

Partner inspiration can thus contribute to the acceptance of common goals down

to the employee level and help achieve acceptance and appreciation of the infrastructure manufacturer through personal conviction.

In addition to the findings on influencing factors from a market-, customer-, manufacturer- and partner-perspective presented in the last four sections, there are a few others of a more general nature. These are examined below.

4.2.6 Perceptions about further relevant Parameters in the Digitalisation Context

In addition to the market-, customer-, manufacturer- and partner-perspectives presented in the last four sections, the interviews also provided insights into topics that cannot be assigned so clearly because they affect all sales ecosystem instances in general. These include culture and values related feedback as well as feedback concerning shareholders, regional (cultural) differences or legal issues.

4.2.6.1 Culture and Values

From the standpoint of some of the interviewees, the general conditions for transformation, resulting from the corporate culture or identified core values of the companies involved, seem to be particularly relevant. Of all feedback, three aspects were considered particularly relevant: Namely (1) a partially perceived erosion of corporate values, inside and in dealing with customers, (2) the importance of a certain degree of fault tolerance and (3) the desire for a pronounced diversity as part of the corporate culture. Corporate values such as integrity, passion, willingness to take risks and customer orientation, to name just a few examples, came up frequently during the interviews. They seem to provide orientation and serve as guidelines for what is expected of a good “corporate citizen”.

It would probably go too far to doubt that IT infrastructure companies actually live up to their identified corporate values, both internally and externally.

Category	Property	Dimension	
Culture and Values	Value conceptions	Stable	↔ In motion
	Relevance of fault tolerance	Low	↔ High
	Significance of diversity	Low	↔ High

Figure 42: Open category “Culture and Values” – Properties and dimensions (own creation)

Nevertheless, in the course of the interviews, very experienced senior managers in particular brought to light critical comments regarding a possible difference between communicated and actually lived values, and deplored a general decline in corporate values and customer orientation.

“This is due to globalisation and the Americanisation of business. This has brought growth and a lot of prospering business, but a decline in values. (...) What extends across all (...) fields is the lie. And what I would wish for (...) is honesty. Honesty on the part of the end customer, who is increasingly dishonest with suppliers, manufacturers and partners. (...) Trying to gain economic advantages with tricks that make people run against each other, God knows what. Partly with unfair means, of course often driven from purchasing. (...) Also because in the past, of course, you were also often cheated by manufacturers and others. Well, companies like ‘IT-Vendor-4’, for example, have destroyed a lot from my point of view. (...) That’s where the (customers) defend themselves and become dishonest as a result. (...) There’s no honesty. The partner, system immanent, he must move like a whore, because the manufacturers usually dominate. And the partner just has to see how he gets along. He’s the ‘poorest pig’ in the game (...). None of this is good business anymore.”

(William, Director Sales, IT infrastructure vendor, lines 310, 312)

It goes without saying that such constellations represent extremely unfavourable

prerequisites for a basis of trust to be used as foundation for every digitalisation project, both from the partner's and the customer's point of view (cf. Section 4.2.4.11).

In addition, many salespeople seem also concerned about their reputation inside and outside the company for other reasons. As a result they seem to shy away from failure. Some of them seem to leave their comfort zone only if they can expect that failures and errors will be tolerated to a reasonable extent. This seems to apply to both manufacturers and partners:

“But that, this culture of failure must be incorporated into this change. Because mistakes will happen in such transformations.”

(Oscar, SVP Sales, Sales ecosystem partner, line 359)

The interviews suggest, that fault tolerance in the company can lead to employees taking more risks and to less internal resistance, which can be a potential hindrance to overcoming their own comfort zone. Companies are suggested to be aware that mistakes can occur when addressing new products and services in the digitalisation field, which they should not blame on the employees. Charly had a nice analogy in this regard:

“So my favourite comparison is: You'll be sent to the driving test at black ice. Okay? It's got to be okay, then, that you're throwing around a little, that you're nervous, that you miss a sign or something. Why do you send someone to the driving test if there's a snowstorm? Actually, you can't let him fail. You'll be lucky if he is willing to do the job.”

(Charly, Account Manager, IT infrastructure vendor, line 223)

Finally, the composition of sales teams based on the principles of diversity apparently plays a special role for IT infrastructure vendors and their partners. A corporate culture of diversity creates space for different talents and skills, which can complement each other positively in the transformational change process. In this context, too, the combination of many years of experience and young

dynamism seems reasonable. Lucas referred to personal experience in this regard:

“And on the other hand, fifty-four-year-olds. (...) (They) could learn from each other. One has brought efficiency and new methods. The other has brought effectiveness. (...) Only the mix does it.”

(Lucas, Director Cloud, Sales ecosystem partner, lines 144, 152)

In summary, it can be stated that vendors could benefit from a regular and critical review whether and to what extent the corporate values they consider important are actually taken into account and filled with life in practical interaction with customers and partners, but also between managers, employees and colleagues. A climate of fault tolerance seems to help employees to overcome their personal comfort zone, just as inhomogeneously staffed teams apparently are most likely able to bring necessary skills to digitalisation projects. The aspect of fault tolerance in particular can also have a positive effect on the degree of personal commitment that every sales employee brings to the change processes (cf. Section 4.2.4.15).

These cultures and values within the vendor sales organisation could also be impacted by the dynamics of shareholder interests, as the next section will show.

4.2.6.2 Dynamics of Shareholder and Sales Staff Interests

Many of the market leading IT infrastructure vendors are stock exchange listed companies. In many respects, it seems logical that shareholders and sales staff have largely the same interests. In terms of sales, both groups are most likely interested in achieving their goals or exceeding expectations. Both groups are likely to pursue the goal of achieving high margins. Both groups are probably guided by the extent to which they succeed in gaining market share over competitors in order to achieve greater market relevance. These fundamental common goals have most likely not changed much even in times of progressive digitalisation.

Category	Property	Dimension	
Dynamics of Shareholder and Sales Staff Interests	IT Infrastructure vendor concerns	Stakeholder focused	Shareholder focused
	Relevance of working life and monetary remuneration for young and old	Decreasing	Increasing

Figure 43: Open category “Dynamics of Shareholder and Sales Staff Interests” – Properties and dimensions (own creation)

However, the results of the interviews reveal a possible divergence between the two groups. Even in times of consolidating markets, it seems plausible to assume that shareholders expect solid sales growth and stable margins. Sales staff, on the other hand, are at the same time exposed to increasingly difficult market conditions, to which manufacturers often try to react by cutting costs. This tends to lead to the potential for conflict, which can also have an impact on the realisation of long-term strategic transformation objectives in the sales ecosystem, as Benjamin pointed out:

“Well, the shareholders always want more return on their investment. And of course this creates more and more pressure from year to year. More and more pressure means more and more communication. More and more communication does not mean focusing (...). And that's how I got to know the last few years extremely well that the companies are not concentrating enough on the tasks of the future.”

(Benjamin, Account Manager, Sales ecosystem partner, line 146)

Other interviewees, such as Archie, stressed the potential consequences of increasing revenue expectations in combination with cost savings:

“The question that arises is, what is success in the end? What I realise is that people are getting more and more exhausted. Because the loads are constantly increasing. That there are more cases of illness, that there are

things like burn-out (...). However, I would say that this has, of course, probably created financial success at the expense of these health factors, motivating factors, ok? So the question is, (...) does the system collapse at some point? (...) The reason is (...) that the same work or more work should ideally be done with fewer and fewer people. (...) 'IT vendor-16' has laid off ten thousand people. We've laid off 10,000 people. (...) But these people weren't bored before, the people who are no longer on board, right?"

(Archie, Account Manager, IT infrastructure vendor, lines 180, 182, 188)

Some older interviewees who have been active in the IT infrastructure industry for a longer period of time seemed to have become accustomed to these effects if they are still active in the related roles at all. During the interviews some of them compared themselves with the younger generation. They proudly referred to their own employment biographies, the money they earned in times of booming technology stock markets, the importance of large company cars and that the price they paid was often an inadequate work-life balance. However, they observed that parts of the younger generation (some of the respondents called them "millennials") are trying to escape these mechanisms and set different priorities. Alexander tried to explain the situation with an example from his private life, which he found characteristic of the overall situation:

"Yes, (...) it is also connected (...) with the generation, I don't know, is it generation X or Y? (...) I can tell by my own son. It's just the generation, (...) He doesn't care about cars. (...) Perhaps at his age, I would have liked to buy a BMW 3. Ok? With full equipment! He doesn't care. He tells me concretely, and this is this generation: 'I would rather go on a world tour. I want to go to Asia. I want to see the USA.' (...) These are different values. Ok? He doesn't want to work overtime anymore. He looks at it for a while and says 'What kind of machinery is this? I won't be broken here.' Ok? It is a mind change of the next generation."

(Alexander, Account Manager, IT infrastructure vendor, lines 32, 35)

For manufacturers of IT infrastructures, such descriptions could provide important insights relevant for the recruitment of new, young talents. This could be of great importance for the transformation of their ecosystems, since ongoing digitalisation requires new skills, especially from younger, well-educated salespeople. Strategies to transform the sales ecosystem could benefit from addressing these key HR issues and implementing measures to attract and retain young talent, despite the constraints possibly imposed by shareholders.

Rather independent of these considerations is the examination of possible regional differences in the transformation process, which is what is examined hereafter.

4.2.6.3 Consideration of Regional Differences

Apparently, global IT infrastructure vendors tend to streamline and standardise their global sales strategy, sales organisation and process definition. This includes in particular their sales ecosystem partner programmatic, the go-to-market definition and the structure of their general sales initiatives. This seems plausible, as globally uniform standards can help to reduce internal complexity costs. Nevertheless, the interviews revealed that it seems important to find the right balance between the necessary standardisation of a globally uniform market presence and the consideration of important local circumstances, which affect the sales perspective of progressive digitalisation and developing customer demands.

Category	Property	Dimension
Consideration of Regional Differences	Sales strategy rollout	Locally adapted ↔ Globally standardised

Figure 44: Open category “Consideration of Regional Differences” – Properties and dimensions (own creation)

Some of the interview participants reported experiences that indicate that the management at the headquarters of US American vendors of IT infrastructures often does not take sufficient account of local German conditions in this respect.

This refers, for example, to the need to adapt sales strategies and initiative plans developed by U.S. based headquarters to local circumstances.

“Which (...) never fits. No matter which country, which never fits and can never fit, because it usually comes from US-style environments. (...) Germany functions completely differently as an area state. It works completely different!”

(William, Director Sales, IT infrastructure vendor, line 64)

This does not seem to be an isolated opinion, as other participants reported similar experiences:

“The idea behind it, which, let's say, was broken down from the top, (from) Corporate, was actually not so bad. But one big mistake is to believe, and unfortunately (...) large corporations always make this mistake, to think that what works well in America also works in Europe as a whole”.

(Noah, Account Manager, IT infrastructure vendor, line 26)

Even at the highest EMEA management level, as James emphasises, such influence over the US headquarters seems to be limited:

“I've never seen a company saying 'Look, Mr. EMEA VP, it's up to you! (...) If you say (just as an example) you also want to do direct business here, not just (pure) partner business, then that's how it will be done!'. I've never seen it.”

(James, Account Manager, IT infrastructure vendor, line 139)

As a consequence, in order to achieve the goals of transformative change processes in the context of advancing digitalisation, it seems advisable to critically question the balance between a total independence of local decisions as one extreme and an unreflected implementation of US guidelines as another. Local salespeople seem to know their markets best and therefore seem to be able to act more independently within a broader scale.

Also, legal and compliance issues may differ from region to region but are also of general relevance, which is now being considered.

4.2.6.4 Legal and Compliance

The last aspect to be mentioned here, which appears relevant to the research topic from the perspective of a few participants, concerns the field of legal and compliance. In the context of progressive digitalisation and the resulting frequent use of public-cloud technologies, special regulatory conditions have to be considered from the customer's point of view in Germany. These regulate, inter alia, the protection of personal data²². It appears that the sales employees of IT infrastructure vendors are expected to be familiar with these regulations in order to be able to adequately advise their customers on the use of such technologies at a business level. In addition, special regulations seem to be relevant in the handling of personal data of customers between manufacturers and sales partners.

Category	Property	Dimension	
Legal and Compliance	Sales relevance of L&C issues	Negligible	←————→ Differentiating
	Partner collaboration relevance of L&C issues	Unimportant	←————→ Essential

Figure 45: Open category “Legal and Compliance” – Properties and dimensions (own creation)

For these two reasons, knowledge of and compliance with the relevant rules is considered important also during sales ecosystem transformation.

The interview results indicate that legal and data protection considerations can at least partially prevent customers from transferring sensitive data into the public cloud. The more data and applications are stored using the company's on-premise IT infrastructure, the greater the business opportunities for its vendors

²² Dewar (2017) provides a detailed overview.

remain. Compliance and data security considerations can be decisive in this context, as George remarked:

“I believe (...) that companies are still very, very cautious about digitalisation. Especially when it comes to global solutions available in the cloud, when it comes to privacy and security. And all parties involved in this situation have to deal with legal and technical measures in order to be able to offer solutions at all.”

(George, Head of Presales, IT infrastructure vendor, lines 11, 117)

Advising customers in this respect could help vendors and their partners to become part of the strategic IT infrastructure evaluation processes. This could enable them to keep large parts of their customers' infrastructure "on-premise" and thus protect their sales potential. The success of such an approach could depend on what these customers actually pursue when they move into the cloud and how progressive they behave:

“This is a large global customer from the chemical sector, which one would say is a conservative customer. He's not ready to put his data in the cloud. He's reluctant to digitalise. He's very concerned about privacy.”

(Henry, Alliance Manager, Sales ecosystem partner, line 86)

For these reasons, it seems advisable for IT infrastructure manufacturers to provide adequate sales training on legal and data protection issues as part of their sales transformation processes.

But it is not only customers who have to adhere to certain compliance rules when storing personal data. Manufacturers and their sales ecosystem partners also have to obey certain rules that have been made stricter. The General Data Protection Regulation (GDPR), which came into force in Germany on May 25th 2018 in the form of the “Datenschutz-Grundverordnung” (DS-GVO)²³, regulates, inter alia, the handling of personal data, including that of customers. Customers

²³ Cf. BMWI (2020)

now have a right to deletion and information regarding these data, as well as a right to appropriate technical measures for their protection. Furthermore, the data may not be allowed to be transferred between sales partners and vendors without further agreement, no matter how useful this may be for the sales process. Any misuse of data in this respect may be subject to high fines.

For IT infrastructure manufacturers and their sales partners, this means that they have to take special care to comply with GDPR regulations as part of their joint sales campaigns for digitalisation projects with customers. This might especially apply to data that is processed in CRM tools, which may only be shared with each other under special conditions.

“So, ideally, we use collaboration technologies such as 'Communication Tool 2' as a common meeting platform and video platform. And use accordingly also further CRM tools, ideally together. Just to coordinate the projects. But that's usually not that easy, because there are data protection issues behind it. (...) When it comes to customer data and joint projects, this is relatively difficult from a legal and technological point of view.”

(Samuel, VP Sales, Sales ecosystem partner, line 96)

It is therefore suggested that IT infrastructure vendors inform sales staff about the mandatory legal requirements for both the sales process with the customer and the interaction with the partner, and restrict it according to law, even if data exchange would be beneficial in sales transformation and related projects.

The discussion and presentation of the research participants' perceptions (Sections 4.2.2 to 4.2.6) in relation to research objectives 1 of this thesis ends here. Before these are summarised in Section 4.4 in preparation for further in-depth discussion, the data collected will be examined below with regard to research objective 2.

4.3 Structural Changes of IT Infrastructure Sales Ecosystems

The second research objective of this study is to examine the extent to which the sales ecosystems of IT infrastructure vendors are changing structurally as such.

As the interview results indicate, some of the influencing factors presented in the previous sections do indeed appear to be associated with structural changes, the characteristics and possible causes of which are discussed below. Figure 46 gives an overview of the essence of the participants' observations in this regard that seem particularly relevant.

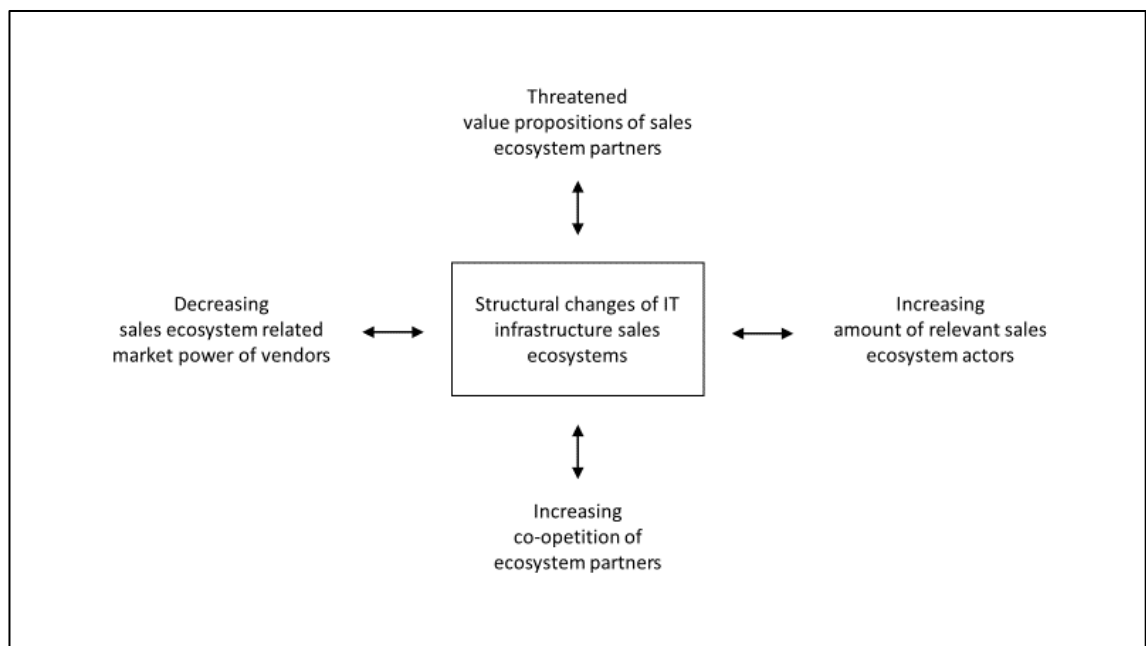


Figure 46: Relevant observations on the possible effects of structural changes of IT infrastructure sales ecosystems (own creation)

First and foremost, the research results suggest that the sovereignty and market power of IT infrastructure manufacturers in their sales ecosystems might be affected as a result of market changes and new sales channels.

“Completely new channels are emerging (...). How should I say, the sovereignty, responsibility and ownership that the end customer account manager at the vendor had until now to sell through one or two or three preferred system integrators solutions into the customer, that comes to an end!”

(Sophie, Director Channel, IT infrastructure vendor, line 44)

As one of the main reasons for this development, the findings indicate that the way in which customers consume IT during their digital transformation measures is creating new supply channels for IT infrastructure or services replacing it.

Samuel underlined that public cloud offerings have become highly relevant to customers and represent new IT supply channels for them. From the customer's point of view, the infrastructure sales ecosystem is, therefore, expanding structurally in this form in a way that can exclude traditional infrastructure manufacturers:

“As usual, we are certainly two or three years behind international progress here in Germany, a bit laggard. But now I'm realising that the whole public cloud issue I'm responsible for is a fundamental issue for every customer.”

(Samuel, VP Sales, Sales ecosystem partner, line 6)

As the study revealed, one of the resulting consequences for vendors might be that they have to adapt their offerings to the cloud-experience standards that have been established on the market. Some interview participants believed that despite this structural change in the IT supply channels, not all workloads will be transferred to the public cloud. Consequently, it would be up to vendors to work with customers and partners to determine the balance between “off-premise” and “on-premise” workloads. Max specified this context as follows:

“So it will always have this hybrid state. (...) I put things out in the public cloud. But I also have things in my data centre. It is important that the interfaces are there. That the different cloud forms understand each other so I can move data.”

(Max, General Manager, IT infrastructure vendor, line 52)

A second structural change in IT infrastructure sales ecosystems could stem from the vendors themselves competing with their traditional ecosystem partners by bringing cloud and managed service offerings directly to market. This may result in potential competition between partners who previously worked exclusively in a complementary way. A third essential aspect, namely the necessary further development of the partner value proposition in the ecosystem, seems to be closely related to this.

Joshua gave an example:

“And the partners are extremely nervous. (...) There is for example ‘IT-Partner-8’, that is a good example. They try it now of course with their own cloud services, (...) with own transformation services to make themselves independent from vendors (...). But what does the vendor do? The vendor cannibalises the partner model by entering the so-called recurring revenue models itself. (...) The vendor sells switches, router, on a pro-port-pay-what-you-use monthly basis. (...) And the customer only pays for what he really consumes.”

(Joshua, VP Sales, IT infrastructure vendor, line 81)

This development could result in the consequence that the mere "division of labour" in the sales ecosystem of the type "the manufacturer produces, the system integrator assembles various products to form individual customer solutions, the reseller/distributor resells less complex products" may be increasingly dissolved.

Finally, the interviews suggest that in the complex environment of customer business digitalisation, certain consulting and integration services might be required that might not be provided by traditional IT infrastructure sales ecosystem partners. For this reason, the ecosystems appear to expand by new, relevant market participants, which may have to be taken into account in the go-to-market definition by the manufacturers (cf. Section 4.2.5.3).

As a consequence of the aforementioned exemplary developments reported by the interviewees, the sales ecosystems for IT infrastructures seem to change in a way that forces each of the old and new market participants to compete with each other. This also seems to apply to those who used to operate in the market in a complementary manner. The resulting expansion of choice for customers appears to lead to an even better market position for them in their role as IT infrastructure buyers. This in turn could accelerate the need for vendors to transform themselves and their sales ecosystems as discussed in more detail in Section 5.3.

The following conclusion summarises the multitude of the above-mentioned findings in relation to research objectives 1 and 2.

4.4 Conclusion

In this chapter, the main perceptions of the research participants regarding their observations and experiences on important aspects of IT infrastructure sales ecosystem transformations were presented and discussed. A detailed examination of the data revealed a vast amount of factors that seem to be important for the transformation. These could be assigned mainly to the areas of the changing IT infrastructure market, changing customer requirements, internal vendor transformation aspects, and requirements from the perspective of sales partners. In addition, the last section unveiled relevant perceptions of important structural ecosystem changes and their possible consequences for transformation.

Accordingly, one of the most important conditions for the transformation seems to be that the revenue potential of IT infrastructure vendors and their sales partners is increasingly impacted by the offerings of public cloud providers. A potential way to counter the risk of substitution of vendors' infrastructure solutions by public cloud providers could be to address customers in a differentiated way by the means of a transformed sales ecosystem. From an end customer view, the aspects of business value creation and digitalisation-related inspiration seem to play an important role for building trusted customer relationships. To this end, the findings suggest that vendors may need to better implement adequate business strategies within an adapted management and leadership paradigm, appropriate for transformation.

Furthermore, it seems imperative for the manufacturer's senior management to set new standards for effective sales behaviour, also by using adequate internal communication strategies. Influencing the basic attitude of the sales staff could help to ensure the necessary organisational transformation readiness on the vendor side. Moreover, the findings suggest with regard to sales employees, that aspects must be taken into account concerning their individual reaction to change

measures, the encouragement of change on the part of management, the trust placed in employees and the empowerment given to them to increase their commitments, as well as their purposeful skill development. In addition to that, the effects of transformation measures in the sales ecosystem also seem to depend on the adaptation of internal processes to the requirements of an accelerated, digitalised business world. Further aspects regarding the appropriate use of software tools, the right level of internal reporting, and the institutionalisation of transformational change management complete these vendor-related insights.

From the partner perspective of sales ecosystem transformation, the findings indicate a high importance of an appropriate partner governance, which includes aspects of partner portfolio developments, partner enablements, partner inspiration on digitalisation topics, as well as a corresponding field sales alignment between vendors and partners. The identified structural changes in the ecosystem underline the potential need for a proactive transformation approach, to be carried out by manufacturers, which is discussed in more detail in Section 5.3.

According to the aforementioned intermediate results of this study, the success of the sales ecosystem transformation of IT infrastructure vendors seems to be significantly influenced by an adequate consideration of the following core issues, which correlate to the five main categories, outlined in Chapter 5:

1. **Changing customer requirements:** Vendors that create added value for their customers in the digital transformation of the customer business models can potentially differentiate themselves better in the sales process in competition with other vendors or cloud providers (cf. Sections 4.2.2.2, 4.2.2.3, 4.2.3.1, 4.2.3.2 and 4.2.3.3).
2. **Vendor sales team transformation:** Vendors that intend to offer this type of added value through their sales teams may first need to develop the capabilities of their own sales teams and the skills associated with digitalisation (cf. Sections 4.2.2.1, 4.2.4.1, 4.2.4.2, 4.2.4.3, 4.2.4.4 and

4.2.4.5).

3. **Channel development:** Digitalisation projects seem to require comprehensive, multi-faceted solution competencies that potentially exceed the capabilities of traditional IT infrastructure sales ecosystems and therefore need to be further developed and expanded (cf. Sections 4.2.5.3, 4.2.5.4, 4.2.5.5, 4.2.5.6, 4.2.5.7, 4.2.5.8 and 4.3).
4. **Sales individuals as humans:** Transformation success may depend on considering the personal motives, needs and objectives of the individuals in vendor sales teams in view of the specific transformation-related requirements (cf. Sections 4.2.4.9, 4.2.4.10, 4.2.4.11, 4.2.4.12 and 4.2.4.15).
5. **Organisational agility:** Market changes appear to force vendors to adapt their organisational structure and processes to meet new demands in terms of transformation management, transaction speed and flexibility (cf. Sections 4.2.2.1, 4.2.4.6, 4.2.4.7, 4.2.4.8, 4.2.4.13 and 4.2.4.14).

These core issues are discussed in detail in the following chapter. The transformation framework outlined in Chapter 6 considers possible strategies on the part of the manufacturers to cope with the identified core issues.

Chapter Five – Discussion of Core Transformation Issues and Structural Ecosystem Changes

5.1 Introduction

The presentations of the last chapter revealed a wide range of perceptions about relevant factors influencing the IT infrastructure sales ecosystem transformation, which the research participants shared during the interview phase. These factors have been condensed for further analysis in the form of five core issues. The consideration of these core issues seems to have a decisive influence on the success or failure of IT infrastructure sales ecosystem transformations²⁴.

In this chapter, these core issues as well as structural changes in the examined sales ecosystems are further discussed in depth, which serves to fulfil research objectives 1 and 2. This is done by taking into account the data obtained in the interviews as well as relevant literature in the respective context. It is worked out how important the consideration of digitalisation aspects is in the sales differentiation on the part of the infrastructure vendors, but also the necessity of transforming their own sales teams. It seems, that the effect of this can only unfold if, at the same time, efforts are made to further develop the sales ecosystem and expand it to include new strategic alliance partners. The success of such measures also seems to depend on the consideration of individual employee needs, as well as on the adequate adaptation of organisational and procedural conditions. The discussion leads to an in-depth examination of relevant structural changes of the sales ecosystem, which set the scene for the conception of a transformation model. All elaborations are based on a thorough reference to the data collected (where appropriate, with reference to the relevant sections of this thesis) and their embedding in the relevant literature.

²⁴ It seems worth mentioning that the linear presentation of the research findings in this thesis differs from the more complex conceptualisation process applied during GTM data collection and analysis. Thus, important aspects of the aforementioned core issues, which for reasons of comprehensibility were already presented in the conclusion of the last chapter, actually originate from the axial coding process according to Corbin & Strauss (2015), as described in Sections 3.4.3 and 6.2.1 to 6.2.5.

5.2 Core Issues for the Transformation Management of IT Infrastructure Sales Ecosystems

Based on the insights gained in Chapter 4, the following sections focus on a deeper analysis of the five core issues identified. The discussion begins with the aspect of changing customer requirements, which could offer further differentiation opportunities for vendors to prevent a loss of strategic relevance in a market of commoditised IT Infrastructure products and services (cf. Section 5.2.1). On this basis it can be examined which necessities arise thereof for the transformation of manufacturer sales (cf. Section 5.2.2). These are closely related to the partner alliances in the digitalisation environment which are suggested to be further developed and expanded during the transformation process (cf. Section 5.2.3). Sales ecosystem transformations also take place against the background of the human needs of the sales individuals involved, which require closer discussion (cf. Section 5.2.4) before essential components of the digitalisation-related organisational and process transformation will be discussed (cf. Section 5.2.5).

5.2.1 Core Issue #1 – Customer Sales Consulting on Digital Transformation as a Differentiation Opportunity

The findings of this thesis suggest that ongoing digitalisation entails particular risks and opportunities for the manufacturers of IT infrastructure solutions (cf. Section 4.2.2). Transparency about these risks and opportunities could give vendors (and also partners) an important orientation when defining transformational change measures in the sales ecosystem. Therefore, the identified dependencies are examined in more detail below.

The implementation of workflows and business processes has, since the beginning of the computer age, been largely based on IT infrastructure products, which form the foundation for the use of software applications (Rogerson, 2015). Particularly since the beginning of the Internet-focused client/server age, manufacturers of such products have often claimed to be able to contribute to the competitive advantage of their customers with the innovative power of their products (Carr, 2003). They also used this supposed position to gain strategic

sales advantages. However, a declining innovation rate in the area of “on-premise” used IT infrastructure products (cf. Section 4.2.2.1) could threaten the strategic relevance of infrastructure vendors for their customers.

As the findings indicate, customers who are concerned with digitalisation and transformation of their business models often seem to think that IT infrastructure products are comparable and interchangeable, i.e. commoditised. This appears consistent with research results which suggest that internal customer IT departments today are in competition with external (public) cloud providers. Based on their offers, the IT infrastructure to be implemented on-premise at the customer can potentially be reduced to a minimum, since cloud providers can offer the necessary infrastructures, platforms and software as a service (Ross & Blumenstein, 2013). This competition between internal and external service provision potentially shifts the focus of customer attention. When evaluating various infrastructure offerings, one of the key questions seems to be whether, and to what extent, IT infrastructure products are purchased and implemented by the customer at all and how they can be integrated with cloud offerings (cf. Section 4.2.2.3).

Overall, these developments could therefore become a risk for those IT infrastructure manufacturers who do not adapt to the developments. The effect could be aggravated by the tendency that IT departments within customer organisations seem to be increasingly expected from their senior management to make measurable contributions to success in the digitalised customer business environment instead of selecting the supposedly best hardware (Gartner, 2020). As a result, IT infrastructure manufacturers and their sales partners are potentially losing relevance (cf. Section 4.2.2.2).

On the other hand, the findings of this thesis indicate that vendors can also take advantage of the digitalisation drivers in terms of sales if they can adapt their sales ecosystems. Such opportunities may arise because customers differ in terms of their ability to deal with the consequences and necessities of digitalisation and accordingly expect individually tailored sales advice (cf. Section 4.2.2.3). A participant, representing a significant number of other interview

participants, pointed out the resulting opportunity for manufacturers, but also for partners, as follows:

“Because this digitalisation is so disruptive! ‘Disruptive’ means that customer decision cycles change because customers are sorting themselves out, because they also do not yet know exactly what they want, where they want to go. And they actually have the expectation (...) that when I stand as a salesman with the customer, that they then also receive concrete recommendations from us as salesmen. Suggestions, which are resilient, how they should align themselves. Well, I've seen this very often that customers actually have expectations, or come to me quite specifically with the question 'Tell us what we should do!'“

(Alfie, Account Manager, Sales ecosystem partner, line 70)

Therefore, it seems plausible that vendors and ecosystem partners can generate competitive advantages if they can demonstrate to their customers in the sales process how they can use their products and solutions to shape the digital transformation of the customers' business. This might require, for example, sales efforts to address new buying centres at the customer, which have budgets that are not originally allocated to the IT area, but can nevertheless be used to build IT infrastructure to support business applications (cf. Sections 4.2.3.3 and 4.2.4.3). By addressing such customers holistically from the IT department through to the business process level, vendors and their partners could meet customer expectations to be fully informed about the business value of their products and thus bridge the gap between technology and its use in the digital business environment (cf. Section 4.2.4.3).

Such a customer-oriented approach on the part of manufacturers and partners could increase the strategic relevance of the sales ecosystem for the end customer by establishing a “Trusted Advisorship” for digital transformation (cf. Section 4.2.3.3). This could result from the digitalisation competence of the vendors in relation to the customer's business and from the technological thought leadership role of the manufacturer and its partners. Purely transaction-oriented

supplier-customer relationships could then possibly develop into a transformation-oriented strategic business partnership that secures the position and business of the vendor and its sales partners with the customer in the long term.

However, approaches like these to maintain or build up the strategic relevance of the sales ecosystem for customers seem to depend on the fulfilment of prerequisites. As pointed out, such an approach would require serving both areas of competence, the technological and the customer business oriented one, the latter requiring a deep knowledge of the customer business. This kind of customer insight does not mean a superficial, generic understanding of a customer. Rather, it means a truly deep understanding of the customer's business, enabling the sales force to be a useful digitalisation advisor in the sense of the products they sell (cf. Section 4.2.3.1 and 4.2.4.12).

As a result, potentially at least two necessities might arise from the above-mentioned issues. On the one hand, in an indirect sales model it appears reasonable to enable the participating sales partners to cope with the above-mentioned challenges together with the vendor, or to expand the sales ecosystem as a whole (cf. Section 5.2.3). On the other hand, there is considerable probability that this will result in a number of challenges in transforming the manufacturer's own sales force (cf. next Section 5.2.2). Principally, both ecosystem parties involved in the sales process, the vendor as well as the partner, are faced with the challenge of differentiating themselves from the competition by providing particular added value to customers during this process (Leimbach, 2012). In the concrete case of the examined sales ecosystems, the fewer the options for the differentiation through the offered products, the more important the differentiation through exceptional sales consulting seems to be – in this case regarding the digital transformation of the customer business (cf. Section 4.2.2.3).

At a higher level, the value of digitalisation-related sales consulting, and thus the importance of this sales differentiation possibility, can also be argued in the dimension of *IT business value*. In the literature, the definition of the term IT business value refers to the impact that IT has on organisational performance,

including increased productivity, higher profitability, diminished costs, competitive advantage, inventory reductions and others with customers (Bhattacharya, 2016, p. 21). In concrete terms, IT supports customers in being innovative and making strategic decisions (Sambamurthy and Zmud, 1994; Mooney, Gurbaxani & Kraemer, 1996; Weill & Broadbent, 1998; Tallon, Kraemer & Gurbaxani, 2000; Applegate, McFarlan & McKenney, 1996; Bhattacharya, 2016).

Therefore, in times of progressing digitalisation, digital transformation is likely to become a strategic element for customers, because one of its main subjects is the adoption of disruptive technologies “to increase productivity, value creation, and the social welfare” (Ebert & Duarte, 2018, p. 16). Thus, it can be concluded that IT infrastructure vendors who want to support their customers in digital transformation have probably chosen an area that is of significant relevance to their customers. However, there has been little research to date on how IT infrastructure vendors can transform their sales ecosystems to differentiate themselves by adding value to the digital transformation of their customers.

The portrayed opportunities and risks in dealing with customers in sales form the scenario and the general conditions against which the transformation of the manufacturer's sales teams have to change. These correspond directly with the first submodel of the transformation framework described in Section 6.2.1. First, however, the necessities resulting from the above considerations for the transformation of the vendor sales force are discussed, as also suggested by the core topic #2.

5.2.2 Core Issue #2 – The Need to Transform IT Infrastructure Vendor Sales

As the previous considerations illustrate, the results of this study indicate that one approach to sales differentiation for IT infrastructure manufacturers might be to collaborate with their sales ecosystem partners to accompany customers on their way to digital transformation. However, this seems to necessitate preparations requiring the transformation of their own sales organisation. As the interview results suggest, this includes the definition and implementation of a suitable

business strategy (cf. Section 4.2.4.1), the implementation of appropriate management and leadership guidelines (cf. Section 4.2.4.2), the definition and communication of a vision for new sales standards oriented towards progressive digitalisation (cf. Section 4.2.4.3), and the promotion of an agile and flexible mindset among sales employees (cf. Section 4.2.4.4). A desirable result of the transformation seems to be to enter into effective sales discussions with the right contacts on the customer side who have an influence on the customer's digitalisation strategy.

“Transformation means also, that customer responsibility areas move. Formerly, if there were any talks at all, one talked to the Director IT or to the CIO. Today we have a Chief Digital Officer or a Chief Marketing Officer in charge. To whom the vendor hasn't any access.”

(Joshua, VP Sales, IT infrastructure vendor, line 115)

This appears to require some preparation and the fulfilment of further conditions.

First, the interview results suggest that the definition of business strategies in connection with advancing digitalisation requires a critical reflection and localisation of its contents by the local German vendor management. It does not seem sufficient to simply pass on transformation-related sales strategies and initiatives developed at the manufacturer's US or British headquarters to the German organisation for pure implementation, as the local conditions in Germany may undermine its effect (cf. Section 4.2.6.3). To enable this, local (German) sales managers seem to need appropriate personal and strategic skills to demand or actually implement the required local adjustments at the level of business strategy to corporate headquarters.

In this respect, this study confirms the importance of considering national culture for international business operations (Jain, Khalil, Nhat-Hanh Le & Ming-Sung Cheng, 2012), which was formerly been examined under the concept of “glocalisation” (e.g. Wu, 2008, p. 69).

Furthermore, the study shows that employees in sales departments of IT

infrastructure vendors are likely to prefer a holistic, transformative management style instead of a transactional management approach based on so-called micromanagement (cf. Section 4.2.4.2). Management and leadership approaches that are characterised by “command and control” do not seem to be conducive. In the best case, sales executives give their employees enough leeway to have sufficient active sales time in customer digitalisation projects instead of using this time for excessive internal reporting, reviews and system updating, e.g. for forecasts. In the ideal case the management could concentrate on customer-relevant topics and not allow inwardly directed activities prevail, which serve primarily their own positioning within the sales organisation.

The positive implication of a transformational versus a transactional management style in sales has been proven in numerous studies (Dünnweber & Fortmüller, 2017; Shannahan, K., Shannahan, R. & Bush, 2013; Smith, Andras & Rosenbloom, 2012; Schwepker & Good, 2010; MacKenzie, Podsakoff & Rich, 2001). This study provides concrete indications in the form of which a transformational management style can positively unfold in the further development of the sales ecosystems considered here (cf. Sections 6.2.2, 6.2.4). In addition, the use of informal leadership relationships within manufacturers' sales organisations appears to be underrepresented. In reviewing the literature, no evidence for this possible approach during transformation has been found.

Going further, the study suggests that vendors may stick to old, more transactional selling habits if the vendor's management does not set new standards and expectations and regularly reviews adherence to them. An essential element of such new sales standards could be the addressing of extended buying centres, including customer business units. In order to address these business units, the sales staff is suggested to build up a strong (industry-specific) know-how in the customer business. The concept of buying centres is well documented in the literature and distinguishes the influence of users, decision makers and buyers in the sales process. (Töllner, Blut & Holzmüller, 2011; Johnston & Lewin, 1996). This study confirms that the users of IT, i.e. the business units, are of increasing importance during the sales process in the

context examined here (cf. Section 4.2.4.3).

The findings suggest furthermore, that successful coping with change factors in the digitalisation environment ultimately also requires an appropriate entrepreneurial personal attitude on the part of the employees of the vendors and their ecosystem partners (cf. Section 4.2.4.4). Some interview participants found attitudes and approaches associated with the terms *personal agility* and *mental flexibility* to be advantageous. This personal agility seems to make it easier for employees to identify independently which technical and methodological competencies are required to operate successfully in sales. Aspects of agility are discussed in the literature in connection with software development, as recently in Senge and von Ameln (2019, p. 125), who underlined the importance of small steps and continuous questioning of one's own impact. The findings of this study indicate that successful salespeople and managers also follow the principles of *trial & error*, experimenting with new sales approaches without being explicitly challenged by their management, and learning to react quickly and effectively to new situations. IT infrastructure vendors could promote an appropriate mindset among their employees in this regard by creating a supportive corporate culture and applying appropriate management methods based on fault tolerance, trust and adequate employee empowerment (cf. Section 4.2.4.11).

Such approaches to transform the vendor's own sales force to meet new requirements have certain consequences. In the same way that customer interaction requires product-oriented and digitalisation-relevant issues to be covered at the same time, sales staff is suggested to focus on both short-term and long-term business success. This possible balancing act between tactically operative, short-term activities that have a direct impact on quarterly sales success and those that have a long-term strategic influence on customers' digitalisation progress seems to be one of the main issues of sales ecosystem transformation (cf. Section 6.2.6). Employees seem to find it difficult, also due to the requirements of their management, to make adequate contributions in both directions.

The discussed issues in the transformation of the internal vendor sales team

correspond with the second submodel of the transformation framework described in Section 6.2.2. First, however, it is evaluated which considerations are important with regard to core issue #3 for the channel development, i.e. transformation of the partner landscape.

5.2.3 Core Issue #3 – The Importance of Enhanced Partner Alliances with Digitalisation Capabilities

As noted in the discussion on core issue #1 and in the literature review, a significant amount of customers of IT infrastructure vendors seem to be confronted with the challenge of digitally transforming their business models to remain competitive (Rachinger, Rauter, Müller, Vorraber & Schirgi, 2019). Besides the risks, the resulting chances and opportunities for IT infrastructure vendors appear to be an important guideline for the transformation of their sales ecosystems. The discussion of core issue #2 has revealed which internal manufacturer transformation issues may be important in this regard.

However, the scope and variety of digital transformations that encompass customers' business models, processes, technologies and organisational structures (BMW, 2017) may exceed the sales capabilities of IT infrastructure vendors alone. Interviewees, who described experiences and observations from the perspectives of the vendors during the survey, therefore expressed the expectation that sales ecosystem partners, in particular, contribute added value to the ecosystem (cf. Section 4.2.5.2), to make it successful as a whole.

According to the perception of some of the survey participants, however, existing partners with which manufacturers have achieved their business objectives in the past often appear not to be prepared in view of this expectation.

“We're going to see dinosaurs die off in the next few years. Many partners will simply disappear from the landscape because they do not have the global reach, because they do not have the intellectual property, because they simply miss the transformation, even if they have potential resources.”

(Joshua, VP Sales, IT infrastructure vendor, line 99)

In the course of the study it therefore appeared interesting to examine how manufacturers should deal with these issues during the transformation of their sales ecosystems. From the results of the related interviews, conclusions can be drawn that are related to two main areas.

Firstly, the relevant findings in this regard concern the question of how manufacturers can use their partner-related transformation efforts to improve the results and the quality of cooperation with their existing partners on a strategic and operational level. The results of the survey seem to confirm that the basic structures of so-called partner governance are still valid in times of progressive digitalisation and changing customer behaviour (cf. Section 4.2.5.4). However, it expressly does not follow from this that the manufacturers pay sufficient attention to these principles. Rather, the opposite often seems to be the case, which can be deduced from the numerous descriptions of the vendors' extensive tactical-operational, quarterly-driven business focus at the expense of a programmatic approach (cf. interview statement p. 149).

For the transformation of ecosystems, however, it seems to be essential to programmatically influence the development of the partner portfolio (cf. Section 4.2.5.5) in favour of the manufacturers within the framework of sustainable partner governance. Furthermore, such a governance could also include, for example, bringing about an effective division of labour with the partners at the working level, i.e. between the sales representatives of the manufacturer and the partner. The increasing commoditisation of IT infrastructure products enables partners to choose from a larger number of comparable products from different vendors. It therefore seems appropriate to promote the personal connection between the vendor and partner sales where the product decision is made. It appears reasonable for this to take place as close to the customer as possible (i.e. regionally), or in the case of product evaluation by experts in partner's systems engineering or in partner sales (cf. Section 4.2.3.3). In this respect, the study also suggests that the transformation goals of the manufacturers are supported by inspiring the sales staff of the partners with regard to digitalisation topics (cf. Section 4.2.5.8) and by implementing a target-oriented partner

enablement (cf. Section 4.2.5.7).

The aspects identified in the study concerning the necessary qualification of the existing partner landscape and the promotion of personal relationships between vendors and partners within the governance framework go beyond existing literature in their level of detail. Bairstow & Young (2012) point out the fundamental importance of effective partner management in indirect sales channels and their high relevance for the business success of manufacturers. To control joint activities, Storey and Kocabasoglu-Hillmer (2013) define governance mechanisms as those that regulate or influence the behaviour of (partner) organisations. The scientific field of governance theory distinguishes between formal and informal governance mechanisms (Gilliland, Bello & Gundlach, 2010). Formal governance mechanisms support the control of actors by setting goals and measuring performance. Informal governance mechanisms focus on the dynamics of relationships between actors and promote joint value creation through interaction (Burkert, Ivens & Shan, 2012). The results of this work are in line with these research findings, but they do specify the extent to which partner governance can contribute to mastering the transformation tasks in the concrete case of IT infrastructure sales ecosystems. Section 6.2.3 takes up this aspect in the presentation of action strategies.

Secondly, further findings relate to the expansion of the existing ecosystem with new sales partners in order to keep pace with the digitalisation requirements of their customers and to complement the capabilities of manufacturer sales (cf. Section 4.2.5.3). The question with *which partners* the ecosystem should be complemented is discussed in Section 5.3 and, to avoid redundancies, deferred here. In addition to that, the study has provided some findings to the second question of *what value contributions* are to be made, i.e. what concrete competencies these additional partners should provide.

These mainly required additional capabilities in advanced sales ecosystems can be assigned to three main groups:

- (i) In terms of sales methodology and from a multi-level selling perspective, additional partners should, inter alia, complement the vendor's access to expanded buying centres on the customer side. As mentioned above, in particular these customer business units, which have digitalisation-relevant budgets or are in charge of the overall digitalisation and cloud strategy of the customer, appear relevant.
- (ii) From a technical point of view, many interview participants identified in particular software-related partner competencies as essential components to build an argumentative bridge between infrastructure hardware and business application. Examples of this, mentioned in the interview phase, included data processing in production lines or the field of cybersecurity, for which manufacturers alone did not appear to be well enough positioned.
- (iii) Finally, as the findings suggest, such partners are needed who understand how to integrate the products and services of IT infrastructure vendors holistically into cloud-based digital business solutions as required by customers.

These findings coincide in part with more extensive investigations into the core issues to be covered in digital transformations. Legner et al. (2017, p. 303) list "digital security and compliance" and "process digitization (sic)" as "key areas" for digital transformations, but supplement these with "business model innovation", "IT architecture transformation" and "digital platform management". These areas typically exceed the competencies of sales teams of IT infrastructure manufacturers, as the findings indicate. However, their coverage appears necessary if the claim is to be met that IT infrastructure products can credibly fulfil digitalisation requirements. The expansion of the sales ecosystem can serve to achieve this.

The discussed elements of the further development of the existing partner network and its expansion correspond to the third submodel of the transformation framework described in Section 6.2.3.

In the following, corresponding to the identified core issue #4, the role of including individual interests and motives of sales employees is examined. Their contribution to sales ecosystem transformation success can apparently not be guaranteed by mere salary payments.

5.2.4 Core Issue #4 – The Sales Individual in the Tension Field of Transformational Change

According to the interview data, the extent to which IT infrastructure manufacturers support their employees in a personal way during the transformation seems to play a key role in the success of the transformation of the IT infrastructure sales ecosystem. In addition to effective digitalisation-related training, the results of the study specifically indicate that, above all, it is the individual reactions of employees to the change, the promotion of their willingness to transform by the manufacturers, the trust placed in them and their empowerment that can have a significant effect on transformation success (cf. Sections 4.2.4.12, 4.2.4.9, 4.2.4.10 and 4.2.4.11). Other studies in comparable research fields came to similar conclusions. One of these studies has identified “a lack of recognition, that change is needed”, “limited motivation for changes”, and a “shortage of capability to make change happen” as major barriers to change success (Allcock, Dormon, Taunt & Dixon, 2015, p. 12). However, research on how these factors affect IT infrastructure manufacturers and how they can be countered in their sales ecosystems is rare.

With regard to the individual reaction to the need for change on the part of individual sales employees, the vendor's sales management appears to have a particular responsibility. It is known in the scientific literature that the possible reasons for change resistance on the part of employees are manifold. For example, employees are more likely to hinder change if they feel they need to critically scrutinise management motives (Grama & Todericiu, 2016, p. 50).

According to Vakola (2016), possible reactions of employees range from passive resistance (by subtle behaviours) and active resistance (by overt behaviours) to passive support (by making a minimum effort to support the change) and active support (by going above what is formally required).

To deal with these issues, the results of this study indicate that when transforming the IT infrastructure sales ecosystems, management should be able to react appropriately to the heterogeneity of the possible reactions of their own sales staff, regardless of the reasons for such reactions (cf. Section 4.2.4.9). It is suggested that sales management should make a special effort to ensure that employees perceive change not as a threat but as an opportunity. In order to positively influence transformation processes, the managers involved could offer individual help in overcoming personal comfort zones, which vary from employee to employee, as the interviews suggest (cf. Section 4.2.4.15). Limiting effects of personal comfort zones sometimes seem to result from a long employment with the same manufacturer, a higher age or a lack of mental and personal agility (cf. Section 4.2.4.9). Some manufacturers seem to prepare their managers for upcoming transformations by familiarising them with basic psychological knowledge about possible human reactions to change. This competence potentially enables managers to react in a differentiated way to their employees. Even employees without leadership responsibility could benefit from such an understanding of their own reactions, as some interview results showed.

In order to overcome possible resistance of sales staff to transformational change measures, the personal and visible commitment of managers to the changes also appears to be indispensable (cf. Section 4.2.4.10). Attempts to centralise interaction with employees, e.g. by controlling transformative change initiatives with the help of software tools, are potentially counterproductive (cf. Section 4.2.4.8). In the sales segments affected by the change, it is often those managers who take on a visible role model function and play a formative, leading role in the change initiatives that gain a higher reputation. This effect may be enhanced if they adequately communicate the personal benefits for employees associated with the transformation (cf. Section 4.2.4.5).

In addition, vendors' sales staff seem to value the trust, support and freedom to act independently. There is considerable evidence in the literature that trust in management can maintain employee support for change initiatives particularly in times of uncertainty (Vakola, 2016; Kalyal & Sverke, 2010; Albrecht & Travaglione, 2003). Surprisingly, however, the study revealed some examples of how, in some IT infrastructure vendors, too little trust and too little leeway for employees can impair their willingness to change and performance (cf. Section 4.2.4.11).

“With regards to the trust (...) I have to say, for the most part, no, it has broken very, very much! It didn't do anything good. And it didn't bring the numbers up in any way.”

(James, Account Manager, IT infrastructure vendor, line 60)

A lack of trust in the direction of employees also appears to manifest itself in an overemphasis on reporting (cf. Section 4.2.4.13).

Furthermore, ongoing digitalisation seems to require the development of special technical skills of the manufacturers' sales staff. The results of this study indicate that successful competence development measures should not only focus on product and service features, but also on the ability of employees to build an argumentative bridge between the products/services and the application scenarios/business applications in which they are used in the sales process. Dikert, Paasivaara, and Lassenius (2016, p. 96) pointed out that a lack of investment in training measures can seriously jeopardise transformation successes. In connection with skill development through training, however, this study does not point to a lack of investment in training, but rather to improvement potentials with regard to its concrete implementation and content (cf. Section 4.2.4.12). Moreover, according to the results of the study, the professional and methodological competence development ideally covers all hierarchical levels of the vendor. The higher management levels potentially benefit from the acquisition of competencies in connection with the definition and synchronisation of cross-company transformational change measures. These competencies often seem

to be insufficiently developed even on the side of the upper sales management (cf. Section 4.2.4.14).

As a consequence of the above considerations, it is suggested that employees should not be seen as an “anonymous mass” when defining and implementing transformation change measures in the IT infrastructure sales ecosystem. Rather, it seems appropriate that IT infrastructure vendors take their emotions, personal views, needs and goals into account from the beginning of each ecosystem transformation measure.

The high relevance of the personal, emotional needs of employees in change processes, especially in learning processes caused by transformation, is documented in the scientific literature (e.g. Antanacopoulou & Gabriel, 2001). The related responsibility of sales management for the competent handling of employees' emotions and the resulting needs, as suggested by this study, also coincides with the findings of other researchers. These point out that well-managed emotional dynamics at the organisational level can support the realisation of radical changes if they “acknowledge, recognise, monitor, (...) and attend to its members' emotions” (Huy, 1999, p. 325). However, other researchers have also recognised that there seems to be a need for more research into the emotional skills available to successfully manage change processes (Dhingra & Punia, 2016). This thesis addresses this potential research gap with regard to the case of IT infrastructure sales ecosystems investigated here. The above discussion of employee-related success factors for the transformation process shows the importance of a sensitive manufacturer approach in this area. The findings correspond to the action strategies described in Section 6.2.4 in the fourth submodel of the transformation framework.

Based on the fifth and final core issue identified in Section 4.4, the relevance of process and organisational adjustments for the transformation of IT infrastructure sales ecosystems is discussed hereafter.

5.2.5 Core Issue #5 – The Relevance of Agile and Broad-based Vendor Transformation

A holistic view of the core issues evaluated so far reveals that the successful transformation of IT infrastructure sales ecosystems is likely to require the consideration of further aspects. These aspects can be assigned to the areas of organisational adjustments within manufacturer sales (cf. Section 4.2.4.6), the necessary process adaptation to digitalisation requirements (cf. Section 4.2.4.7), further developed software tools (cf. Section 4.2.4.8), business cadence and reporting (cf. Section 4.2.4.13), as well as transformational change management governance (cf. Section 4.2.4.14). For the transformation of the sales ecosystems examined here, it appears to be essential not to neglect any of the areas mentioned and to act both flexibly and fast²⁵.

The perceptions of the research participants can first of all be interpreted in such a way that essentially three aspects have to be taken into account when manufacturers adapt their *organisation* to the change drivers considered here. These aspects include (1) the enlargements of sales role responsibilities, (2) the formulation of sales targets in an extended time and content dimension (instead of a purely quarterly bound numerical arithmetic) and (3) the target synchronisation with sales ecosystem partners.

As a concrete example, the results suggest that vendors could benefit from the introduction of a new function in a form of a so-called “hybrid” salesperson (cf. Section 4.2.4.6). The hybrid character of such a sales role, which could also be described as a “transformation consultant”, results from its responsibilities not only for product sales, but also for the vendor sales team's contribution to the digitalisation of the customer business. Such contributions could be measured in the form of annual MBOs instead of a purely figure-based quarterly. In order to

²⁵ The concept of agility played a particular role in the participants' descriptions relating to these areas. In literature, the term is defined in the manifestation of organisational agility, a “means of responding to rapid environmental challenges” (Alavi, Abd. Wahab, Muhamad, & Arbab Shirani (2014, p. 6273). Kuusisto (2017, p. 343) describes business process agility as the “ease and speed at which companies can adapt their business processes”.

avoid conflicts of interest with partners, it seems appropriate to synchronise these goals, which are geared towards digitalisation consultancy, with those of the partner companies (e.g. in the context of partner governance, cf. Section 4.2.5.4).

Some of these considerations can be categorised in schemes already discussed in the literature. Poon Teng Fatt (2000, p. 28) distinguishes four dimensions of evaluation criteria for salespersons, which refer to (1) behaviour/activity (qualitative), (2) professional/technical (qualitative), (3) results-based (quantitative), and (4) profitability-based (quantitative) criteria groups. Current evaluation criteria used by vendors seem to mainly use goals that belong to category (3). In order to realise the suggested adaptation of sales approaches (cf. Section 6.2.2), the group of evaluation criteria could be extended, for example, to include those that consider modern co-creation approaches in cooperation with customers and partners (Mohanty, 2017; Ramaswamy & Ozcan, 2014).

Moreover, increasing customer requirements with regard to the *speed of business processes* appear to be of serious significance. New competitors from the public cloud segment, which take less than a day to approve discounts or deal registrations with partners, appear to put traditional vendors under pressure in this regard (cf. Section 4.2.4.7). Partners and customers, therefore, seem to increasingly demand digital platforms that deliver relevant information in the sales process as fast as possible. In order to fulfil their purpose, it appears reasonable to link the externally oriented platforms with fast internal workflows that enable the sales partners to coordinate the purchasing activities of customers with the manufacturers. To this end, Storey and Kocabasoglu-Hillmer (2013, p. 862) favour the introduction of “Partner Relationship Management” systems in order to eliminate delays in face-to-face communication to control cooperation in partner networks. Further developed partner portals, such as those evaluated in the professional literature, for example by Bech (2015, p. 74), seem appropriate. The research results of this thesis support the consideration of this necessity in the transformation of IT infrastructure sales ecosystems.

Going further, the interview results indicate, that accelerated partner lead

management and CRM processes of this kind could be complemented by additional *software tools*. These tools could enable the establishment of virtual project rooms and communication channels for internal and external interaction and coordination. Employees in today's competitive environments can benefit from computer-mediated communications in terms of job performance and satisfaction (Zhang, Sun, Yang & Wang, 2018; Robertson & Kee, 2017; Kwahk & Park, 2016; Ajjan, Hartshorne, Cao & Rodriguez, 2014). However, the findings of this study refer to the potential risk, that a proliferation of software and communication tools can also hinder professional collaboration, which is rarely reported in the literature (cf. Section 4.2.4.8).

One of the clearest discrepancies between participant observation and participant recommendation became apparent with the interview questions on *reporting intensity* (cf. Section 4.2.4.13). The classic business cadence, which typically manifests itself in the form of regular reviews and conference calls, i.e. per week, per month and per quarter, often seems to overemphasise current quarterly business at the expense of long-term transformative change initiatives. In many cases, the effort required for internal reporting by IT infrastructure vendors generally appears to be very high. This seems to affect employees at all individual contribution and management levels of the vendors, who thus have to cope with a high internal workload. Surprisingly, the reporting load seems to be so excessive in some cases that employees feel that they are not sufficiently trusted (cf. Section 4.2.4.11). This is an important link to core issue #4 (cf. Section 5.2.4), which is related to employee needs and does not seem to be sufficiently taken into account by at least some manufacturers. This possible negative consequence of very pronounced reporting is currently not discussed in the scientific literature.

Finally, the results of the study indicate that the implementation of a deliberately controlled *transformational change management* by IT infrastructure vendors according to a strategic transformation plan is often insufficient or at least inconsistent.

Lucas commented:

“I see a tactical approach almost everywhere. (...) At one or two, which I know, there also seems to be a strategic one behind it. But as a rule, it's always tactical. And I believe that any tactical measures will help, but will not ensure the survival of these companies.”

(Lucas, Director Cloud, Sales ecosystem partner, line 97)

Only a few vendors seem to have implemented institutionalised forms of transformation management (cf. Section 4.2.4.14), and if so, then only rudimentarily. These structures include, for example, the implementation of change agents in sales. In one case, the establishment of a separate staff unit under the leadership of a Chief Digitalisation Officer was also reported, who is responsible for driving the transformative changes in vendor sales. However, a large number of vendors seem to trust that the respective managers in the line functions of the sales hierarchy can carry out the necessary transformation management in parallel to their sales tasks. In the competition between sales tasks and change management activities, however, this approach often seems to result in the managers involved focusing more on short-term, tactical operational business than on long-term transformation initiatives. This can lead to a serious risk that the focus on necessary transformational change measures may be completely lost.

It seems obvious that vendors could mitigate this risk if, for example, they were to implement a transformation programme management system that would coordinate related activities, such as described in Saliunas (2007). However, the literature does not report on the apparent inadequate institutionalisation of transformation management at IT infrastructure manufacturer sales ecosystems.

This and all the other aspects mentioned are taken up in the evaluation of possible action strategies in Section 6.2.5 in the development of the fifth submodel of the transformation framework.

However, before describing how this framework has developed in the course of

further categorisations based on the Grounded Theory Methodology according to Corbin & Strauss (2015), the findings on structural changes of IT infrastructure sales ecosystems presented in Section 4.3 are discussed below.

5.3 The Impact of Structural Changes of IT Infrastructure Sales Ecosystems

The above discussion of the five core issues with relevance to the transformation of IT infrastructure sales ecosystems has revealed scope for action that manufacturers can use to maintain their competitiveness when transforming their sales ecosystems. This transformation seems to take place against the background of fundamental market shifts and associated structural changes in those ecosystems. In Section 4.3, participant perceptions were discussed in this regard, which point to a number of possible structural sales ecosystem changes. Tendencies were reported that question the value proposition of existing partners in the traditional sales ecosystem. Furthermore, there were reports indicating that established sales ecosystem partners could increasingly compete with manufacturers and vice versa. In addition, some of the new (public cloud) providers appear to be able to substitute the manufacturers' offerings and thus exclude them in part from the ecosystems that the vendors previously dominated. Dealing with these possible changes and taking advantage of the opportunities and minimising the risks that might arise from them requires an appropriate positioning of the vendor. This will be discussed in more detail below.

As the findings suggest, IT infrastructure vendors have played an exposed role in traditional indirect IT infrastructure sales systems, parts of which they still hold. They purchase hardware components such as CPUs, memory, hard disks and other components from component manufacturers and assemble these into IT infrastructure products such as routers, switches, storage systems, servers, and the like.

The distribution of the products in these models is characterised by a certain top-down oriented one-dimensionality. Such a rather *closed* “vertical network” (Storey, Kocabasoglu-Hillmer, Roden & Ko., 2018, p. 1709) consists of IT infrastructure product manufacturers and sales partners, such as system

integrators and service providers, which source the products directly from the vendor²⁶.

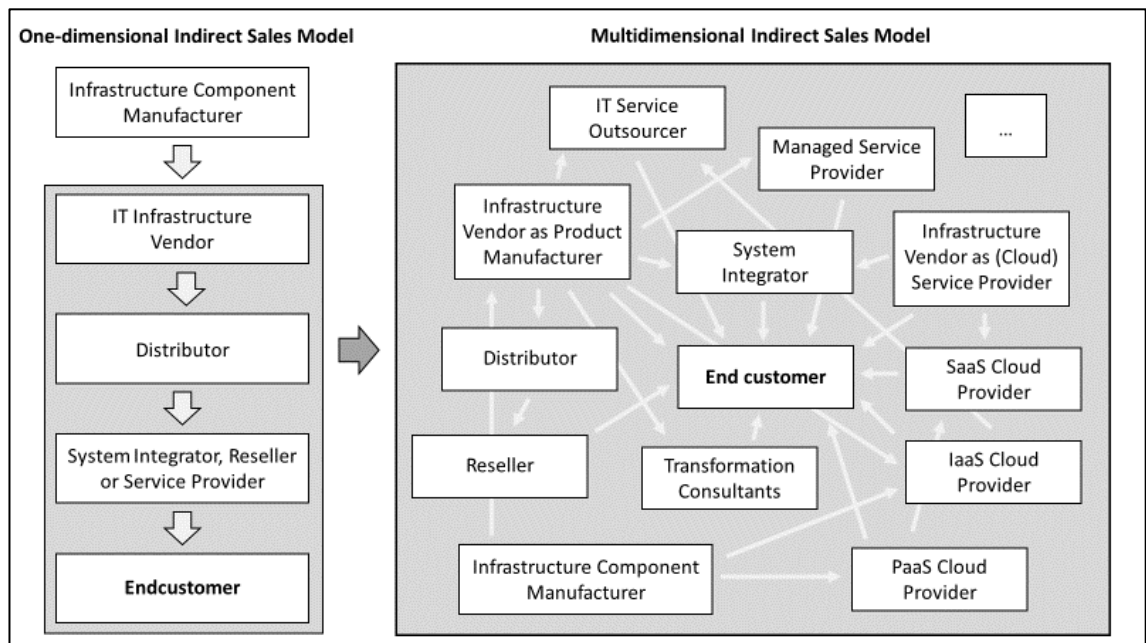


Figure 47: Evolution of IT Infrastructure Sales Ecosystems (own creation)

Other partners, like resellers, use the logistics and warehousing capacities of distributors (Balocco, Ghezzi, Rangone & Toletti, 2012, p. 6). In such an indirect sales model, not only the partner but also the manufacturer is in direct contact with (end) customers. However, this is done mainly for the purpose of influencing the customer parallel to the partner in such a way that the customer makes his product selection in favour of the vendor (cf. Section 2.2).

The findings indicate, that such a system implies numerous advantages for the manufacturer, since the vendor's product offerings are at the top of the value chain (cf. Section 4.3). This allows the vendor, within certain limits, to influence the choice of products and partners for the end customer (cf. Section 2.2). With this approach, IT infrastructure manufacturers have in the past achieved a strong market position in relation to their customers, but also within the sales ecosystem relative to their partners (cf. Section 4.2.5.3). In their pure form, such ecosystems are closed systems in which sales partners must qualify by certification, i.e. by

²⁶ Partners in a vertical network provide outputs at different stages of the same value chain.

meeting criteria defined by the vendor partner programmes (Storey et al., 2018; Graffin & Ward, 2010). The left hand side of Figure 47 graphically illustrates this closed one-dimensional structural relationship and the associated powerful vendor position associated.

However, the results of this study indicate that numerous new players have established themselves on the market as a result of ongoing digitalisation and the need to digitally transform the customer business (cf. Sections 2.6 and 4.2.2.2). The group of traditional vertical sales networks of vendors is supplemented in particular by cloud providers (with IaaS, PaaS, SaaS and BaaS offerings) and consulting firms that help customers to cope with the complexity of digital transformation and the freedom of choice in IT (infrastructure) sourcing (cf. Section 4.2.2.1).

These structural changes can be interpreted in such a way that the classical, closed, one-dimensional, vertical partner network of vendors potentially develops into a more *open* and *multidimensional* sales ecosystem, which requires horizontal cooperation with various partners (cf. right hand side of Figure 47), centred on the end customer.

Partners that pursue horizontal cooperation strategies to achieve common goals also compete with each other (Hassan, Chrisman & Mohamed, 2010; Gabler, 2002). Recent research, such as that of Byun, Sung & Park (2018), suggests that ICT providers establish collaborations in this form of strategic alliances and seek to co-evolve with them in open ecosystems. It is suggested that Strategic alliances generally help to increase the competitiveness of participating firms by providing resources that exceed the firms' capabilities alone (Dyer & Singh, 1998). This may also apply if the alliance partners involved work together within the scope of this strategic alliance in the form of a “co-opetition” (Gnyawali, He & Madhavan, 2006, p. 508).

Applied to the concrete case of IT infrastructure sales ecosystem transformation, it is accordingly proposed that manufacturers make efforts to proactively develop and expand the existing vertical sales network (“sell-through” partners) to meet

the demands of increasing digitalisation and changing customer behaviour (cf. Sections 4.2.5.5, 4.2.5.7 and 4.2.5.8). In parallel, they could expand their ecosystem with horizontal partners whose complementary services help them to position their products (“sell-with”) in the context of digital customer business transformation. These could, for example, be services from newly acquired consulting partners, software firms, or providers from the public cloud sector, which are co-opetitive with the vendor in the sense mentioned above. Furthermore, it is conceivable to build up existing or new partners as cloud providers, also in the form of a “co-opetition” model, and to sell the IT infrastructure products to the partners rather than to the customers. These partners could in turn use these products to implement managed services or cloud services and thus aggregate market demand in the sense of the vendors (“sell-to”). Finally, according to the observations of a few interview participants, the manufacturers could continue the initiatives that have already been launched to some extent to market their own public cloud offers directly to the end customer, bypassing the sales ecosystems.

These findings about the structural changes in the sales ecosystem of the IT infrastructure caused by the underlying drivers of change were taken into account in the development of the transformation framework. This manifests itself especially in the building of digital partner alliances (cf. Section 6.2.3), and in the holistic consideration of customer needs in digital transformation (cf. Section 6.2.1).

5.4 Conclusion

In this chapter, the analysis of the obtained data on important influencing factors of the IT infrastructure sales ecosystems and associated structural changes has been further deepened. For this purpose, the detailed discussion concentrated on the identified five core issues, which evolved during the in-depth analysis (cf. Section 4.4). A further literature comparison revealed which of the insights on sales ecosystem transformation found in this study have not yet been thoroughly investigated in this form.

As a result, it is suggested that IT infrastructure manufacturers should strive for special forms of cooperation with customers within the transformation efforts of their sales ecosystems. This appears to require specially adapted transformation strategies to first adapt their own sales force to the changed market conditions. As the in-depth analysis indicates, these strategies should be accompanied by corresponding activities to expand the vertical value chain model of classical distribution systems by horizontal partners. Moreover, it seems that equally dedicated action strategies are required to meet the individual needs of the sales staff during the transformation. It seems important not to address any of these fields of action in isolation, but rather together and in combination with activities that modernise the manufacturer's process world and internal organisation.

In the next chapter, the development of the transformation framework is presented, which serves to fulfil the third research objective of this thesis. For this purpose, the suggested action strategies, as explained above, are evaluated using the paradigmatic GTM model of Corbin and Strauss (1996, 2015).

Chapter Six – Development of a Transformation Framework for IT Infrastructure Sales Ecosystems

6.1 Introduction

At the end of the previous chapter, it was suggested that IT infrastructure vendors should follow a number of not yet further specified action strategies to meet the challenges associated with sales ecosystem transformation. In order to specify these strategies, this chapter analyses the data in more detail in accordance with Corbin's and Strauss's (2015) GTM principles, as outlined in Section 3.4.3. The five *main categories*, which evolved in the course of advanced data analysis, correspond to the core ecosystem transformation issues discussed in Chapter 5. During this procedure, the strategies for action have also been examined and compared with the literature, as outlined below.

In the further course of the chapter it is illustrated which *core category* evolved from the data during in-depth analysis. This core category represents the heart of the analysis of this thesis. Its elements of trust, empowerment and ambidexterity can be understood as a kind of glue, with which the core category represents and holds together all essential findings of this thesis.

The analysis leads to the "A.C.T.I.V.A.T.E." transformation framework or IT infrastructure sales ecosystems, developed in accordance with the third research objective. Each of the eight letters of this designation represents an essential aspect of the model.

The chapter concludes with a literature comparison of the core components of the framework.

6.2 Development of a Transformation Framework

A central element in the application of Corbin's and Strauss's (2015) paradigmatic model is the differentiation of action strategies, causal and intervening conditions, as well as resulting consequences and context variables for each main category. For reasons of clarity and improved readability, parts of these criteria are only

briefly referred to in the relevant Sections 6.2.1 to 6.2.5, but fully detailed in appropriate depth in Appendix 8.5 in the form of a general overview.

The development of the sales transformation framework begins where sales considerations always are suggested to start: with the customer.

6.2.1 Establishing Customer Digitalisation Companionship

For obvious reasons, the success of any transformational change measure in the sales of an IT infrastructure vendor appears to be closely linked to the effect on the end customer and its purchasing decisions. The discussion of the identified core issue #1 (cf. Section 5.2.1) therefore suggests that IT infrastructure manufacturers should contribute their added value to digital customer transformation in the sales process in order to successfully transform their sales ecosystems so that they can differentiate themselves in competition with other manufacturers or cloud providers. On the one hand, this is due to decreasing amount of differentiation factors of IT infrastructure products under high commoditisation pressure and a decreasing innovation rate (cf. Section 4.2.2.1). On the other hand, many end customers seem to be under high pressure to deal with new digital technologies within the scope of the digital transformation of their core business (Ebert & Duarte, 2018). When developing a transformation framework for IT infrastructure sales ecosystems, it therefore appears reasonable to evaluate strategies that allow the vendor and its partners to position themselves strategically in this regard.

One of the ideas that many interview participants referred to when they described particularly good and strategically important customer relationships from a sales perspective is the concept of the so-called “Trusted Advisor” (cf. Section 4.2.3.3). In the scientific context a trusted advisor is understood as someone who “develops an in-depth understanding of an individual customer’s business, (...) provides unbiased recommendations (...) participates in both the formulation and the implementation of a solution to a customer’s problem, not just the implementation of the customer’s solution to his or her problem” (Neu & Brown, 2005, p. 9). In such a partner-like relationship, the sales employee has the role

of creating value for both sides, for the buyer as well as for the seller (Neu, Gonzales & Pass, 2011, p. 239). In its ideal form, this is done by not only meeting customer needs, but anticipating them fully, as discussed in professional literature (e.g. Britt, 2018, p. 27).

Transferred to the conditions in an IT infrastructure sales ecosystem, the trusted advisor concept could be used to substantiate the demand to advise customers beyond purely technological and product-oriented aspects. An appropriate approach in this regard could then for example cover elements such as a very deep understanding of the end customer business, the mapping of certain CAPEX- or OPEX-oriented sourcing (i.e. subscription model oriented) preferences, the comparison of the vendor's offerings with (alternative) public cloud solutions, IT security issues and other criteria that might be important for the customer's digital transformation (cf. Section 4.2.3). Potential addressees of advanced sales initiatives could be both the business units of the customers, which are responsible for the digital transformation at the business level, and the customers' IT departments, which have to facilitate these adjustments from the perspective of the IT infrastructure (cf. Section 4.2.4.3).

In this respect, the transformation of an IT infrastructure manufacturer's sales ecosystem could be described as effective if the manufacturer succeeds in gaining a strategically important role with its customers that positively influences the purchasing process of IT infrastructure products in their interests. Such a quality in the cooperation with the customers brought about by the manufacturer's sales ecosystem could be called a "Customer Digitalisation Companionship" to characterise the special strategic quality with which the manufacturer distinguishes itself from others.

The analysis of the interview results suggest that the open categories "Trusted Digitalisation Advisorship", "Customer Digitalisation Inspiration" and "Business Value Creation" could be combined into one main category, which could be called "Establishing Customer Digitalisation Companionship" (cf. Figure 48). In order to achieve a strategic position of this kind with the end customer, the application of various action strategies, which can be assigned to the open categories

mentioned above, seems to be reasonable. Table 9 contains a selection of such strategies, some of which can be exemplified as follows.

With regards to *customer digitalisation inspiration*, interview results indicate that end customers, served by the IT infrastructure sales ecosystem, appreciate provisioning of ideas related to their path of digital transformation in order to get an impression of the right digitalisation strategy (cf. Section 4.2.3.2). An essential sales differentiation strategy for vendors could therefore aim at being classified by these customers as relevant in the digitalisation environment with their technological and transformational thought leadership.

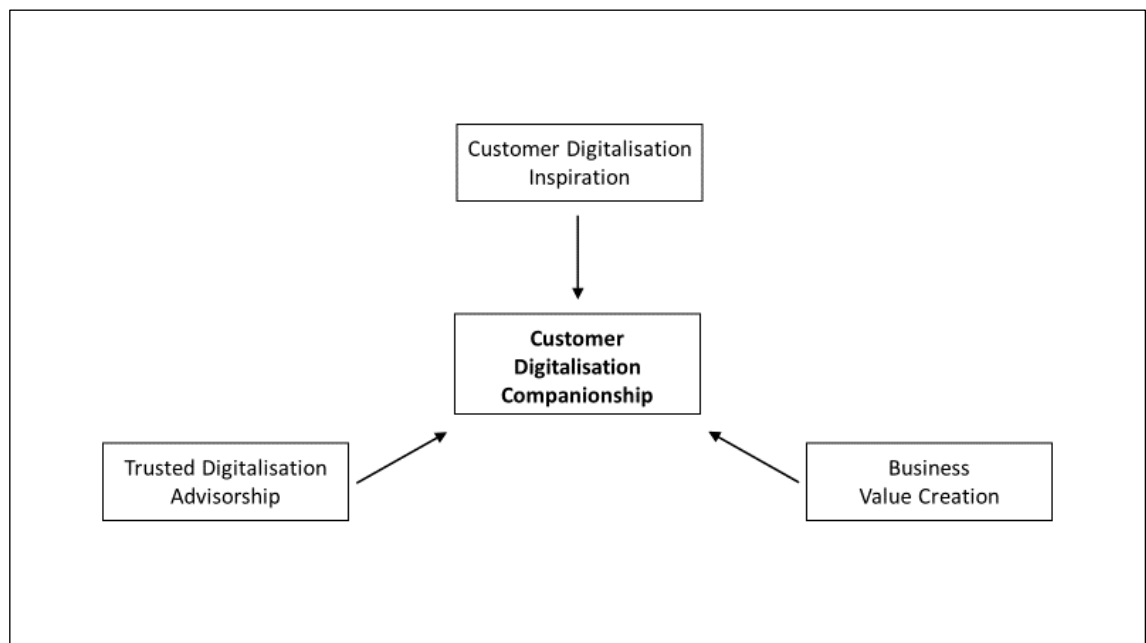


Figure 48: Composition of Main Category “Establishing Customer Digitalisation Companionship” (own creation)

However, customers who for many years have perceived market-dominating IT infrastructure manufacturers as leaders in areas such as computers (servers), network and storage technology may not automatically associate them with special competence in current digitalisation issues. Inspiring manufacturer communication could therefore advantageously concentrate on a cautious rebranding that underpins their digitalisation competencies on the basis of traditional technology fields. In this competition for customer attention, the use of modern social media channels such as LinkedIn, Twitter and Facebook could be carefully combined with sales initiatives. According to participant feedback,

however, it seems to be important not to lead such communication in an inflationary manner. Furthermore, it was recommended to delegate it only to employees who are proficient in dealing with such media, which complies with existing research and professional literature (Power, 2015; Dodaro, 2018).

From a *business value creation* perspective, advanced sales strategies could aim at building a special understanding of the customer's business first before contributing to resulting digitalisation strategies for the customer business (cf. Section 4.2.4.3). The findings suggest that these strategies should always take into account vendor contributions to possible cost savings, revenue increases, risk mitigation and general customer agility in the digital environment (cf. Sections 4.2.3.1 and 4.2.6.4). This also includes the involvement of a partner network previously set up by the vendor, which is able to offer digital customer solutions holistically, in a simple and coordinated manner, instead of leaving the sometimes complex infrastructure product integration to the customer (cf. Section 4.2.5.6). These strategies could benefit from the consideration of modern co-creation principles that proactively involve both the customer and the sales ecosystem (cf. Section 6.2.3) in the generation of the digitalisation value (Mohanty, 2017; Ramaswamy & Ozcan, 2014).

These strategies could finally contribute to obtaining *trusted advisorship status* in digitalisation issues through business value creation and digitalisation inspiration (cf. Section 4.2.3) which fits into the scientifically substantiated context of value based selling. In contrast to product and solution selling, value based selling can be regarded as “understanding and improving the customer’s business in a proactive manner” (Töytäri et al., 2011, p. 494). As more recent research shows, suppliers often still have difficulties in translating the value of their offerings into fact-based value propositions (Luotola, Hellström, Gustafsson & Perminova-Harikoski, 2017, p. 59).

	Submodel I – Customer Digitalisation Companionship		
<i>Causal Condition</i>	Progressing Digitalisation (cf. Section 4.2.2.2)		
<i>Main Category / Phenomenon</i>	Establishing Customer Digitalisation Companionship		
<i>Context</i>	Evolving Customer Behaviour (cf. Sections 2.3 and 4.2.2.3)		
<i>Lower Category</i>	Customer Digitalisation Inspiration (cf. Section 4.2.3.2)	Business Value Creation (cf. Section 4.2.3.1)	Trusted Digitalisation Advisorship (cf. Section 4.2.3.3)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> • Positioning of the vendor added value in digitalisation issues • Proactive customer information on new infrastructural capabilities in the context of digitalisation • Efficient use of social media tools to build a "digitalisation brand" • Interlocking of marketing communication with manufacturer sales competencies, strategic manufacturer sales initiatives and tactical operational approach of the participating sales ecosystem partners 	<ul style="list-style-type: none"> • Building knowledge about the customer and its digitalisation business needs • Supporting customer cost savings and customer revenue growth • Supporting customers in risk mitigation in the development of new digital business platforms • Managing a comprehensive partner ecosystem to provide holistic digitalisation solutions • Providing guidance on content in an increasingly complex digitalisation environment for customers • Support for the development of "digital agility" 	<ul style="list-style-type: none"> • Developing sales staff to build trustworthy customer relationships • Selection and support of suitable sales partners to build digital customer solutions in co-creation manner • Participating in comprehensive blueprint creation for customer digital transformation • Acting as innovative and predictable business partner in the digital business environment • Investing in digitalisation know-how of the own sales team and that of the partners
<i>Consequence</i>	Development of a strategically important vendor position, positively influencing the IT infrastructure procurement process		
<i>Intervening Conditions</i>	Various, e.g. Legal and Compliance (cf. Section 4.2.6.4), General Market Transition (cf. Section 4.2.2.1), more in Tables 19, 20, 21 in Appendix 8.5		

Table 9: Submodel I – Establishing Customer Digitalisation Companionship (own creation)

Also for this reason, it seems appropriate to include the main category “Establishing Customer Digitalisation Companionship” along with the necessary

action strategies as an essential element of the transformation framework. Table 9 summarises the relationships shown around this main category as a paradigmatic partial model. In the next step, this first partial model is supplemented by the second of a total of five partial models, which reflects the necessity of transforming the manufacturer's internal sales approach.

6.2.2 Transforming Vendor Sales Approach

The previous section illustrated, inter alia, certain action strategies with customers in the area of digital transformation as some of the important elements of IT infrastructure sales ecosystem transformation. In order to achieve related objectives, it appears reasonable, in line with the considerations on core issue #2 (cf. Section 5.2.2), that IT infrastructure manufacturers also further develop their own sales teams. This requirement takes into account the statements of some interview participants, according to which successful sales staff at vendors have in the past distinguished themselves primarily through effective and efficient processing of *transaction* business. However, a promising *transformational* addressing of expanded buying centres today, as they seem to be gaining in importance in the course of progressive digitalisation (cf. Section 4.2.4.3), requires preparation and expansion of sales competence. Also in view of the increasingly complex competition with cloud providers and other, newer market participants in the sales ecosystem (cf. Sections 4.3 and 5.3), the transformation of the vendor sales approach seems appropriate and necessary.

As mentioned in the literature review (cf. Section 2.9), there is some research available in this regard (Shiver & Perla, 2016; Hatami et al., 2015; Smilansky, 2015; LaForge, Ingram & Cravens, 2009; Piercy & Lane, 2005), but it does not reflect the specific context of IT infrastructure vendors and their sales ecosystems. The strategies evaluated below therefore mainly origin from the findings of this thesis.

The evolved main category “Transforming Vendor Sales Approach” comprises the open categories “Business Strategy”, “Management and Leadership”, “Raising the bar”, “Fundamental Sales Attitude”, and “Internal Communication”.

Figure 49 illustrates this graphically.

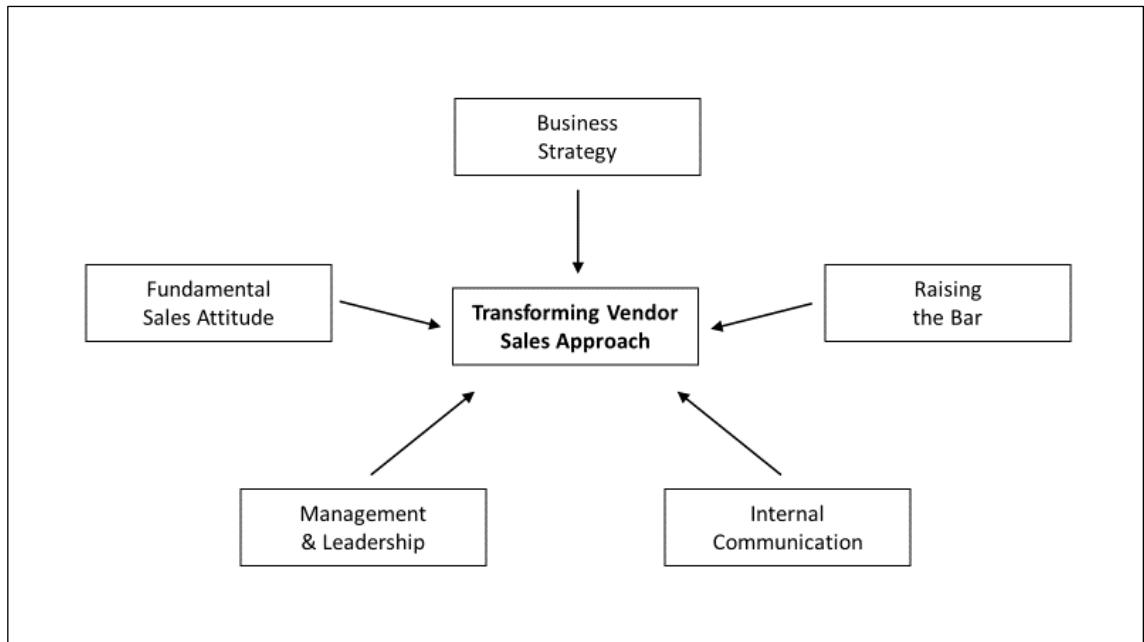


Figure 49: Composition of Main Category “Transforming Vendor Sales Approach” (own creation)

In order to achieve the goal of a high-performance manufacturer sales organisation that can successfully meet the customers’ digitalisation requirements and thus increases its own sales success, various strategies appear to be feasible. Table 10 contains a selection of such strategies.

A key influencing factor for the success of such transformation measures, which focus on the internal sales of the vendor, is first of all an individual (country-specific, i.e. in this case Germany-related) *strategy definition* (cf. Section 4.2.4.1), which includes all relevant business and organisational areas (Abramson & Lawrence, 2001). The findings of the interviews indicate that the business strategy for transformation in the examined context seems less lacking in definition than in country-specific adaptation and implementation (cf. Section 5.2.2). The pressure of tactical operational necessity on manufacturers' employees to achieve short-term sales targets seems to make it more difficult for them to implement newly developed business strategies seriously and purposefully. From the perspective of many interview participants, it therefore appears that a significant amount of vendors are not pursuing a sustainable transformation strategy. Consequently, it seems to be important to leave the field

of “muddling through” activities and concentrate on the consistent implementation of activities recognised as strategically important in a sustainable way and with the participation of all hierarchical levels, even if the balancing act with daily business is difficult (cf. Section 4.2.4.13).

Overcoming this challenge is a *management and leadership task* (cf. Section 4.2.4.2). The heads of the manufacturer sales teams involved have the task of giving the employees orientation in order to find the right balance between tactical-operational action and strategic, long-term sales work, which is important according to the interview results. As the findings suggest, at best they give employees the necessary freedom to deal with digitalisation issues and position them with the customer, even if this does not directly lead to sales success in the same quarter. In addition, management seems to implicitly determine the priority agenda of employees through the way in which they ask their teams questions in individual and team assessments and through what they praise and criticise. Successful action strategies seem to take this into account and encourage employees to self-reflect on their own positioning on the transformational path of change.

The concept of “*raising the bar*” (cf. Section 4.2.4.3) identified during the open categorisation process already suggests that it might be the management's task to define which qualities and skills a salesperson should well master and thus develop. Consciously defining a “sales ideal” for the future could serve the need to guide employees and help them determine which technical, methodological and personal skills they should develop to meet expectations. In addition, such a benchmark would give lower and middle management the opportunity to measure the success of their personnel development and critically question whether their teams are on the right track and how far they have progressed.

Strategies with a view to the *inner attitudes* of the sales staff adapted to the need for transformational change seem to focus at best on promoting a basic entrepreneurial attitude, as the findings suggest (cf. Section 4.2.4.4). The rapidly-changing market for IT infrastructures apparently requires a high degree of motivation, willingness to change, personal dynamics as well as a pronounced

determination for further development. Some of the older vendor sales employees questioned in the interviews had been used to achieving their goals through transaction effectiveness for many years. They pointed out that a certain personal agility and individual entrepreneurship within the manufacturer's organisation has been necessary to adapt to changes. The personal attitude required for this might not be achievable through classic leadership relationships with the character of "command and control". In this sense, strategies aimed at promoting personal entrepreneurship in the manufacturing company seem to benefit from the trust and empowerment placed in the employees, which is consistent with most recent literature (e.g. de Waal, 2018). The study has also shown that taking care about the personal attitude among sales employees can help overcoming possible change resistance (Grama & Todericiu, 2016, p. 48 et seq.).

This kind of "care" during transformation change apparently relies on suitable *internal communication* approaches in order to achieve a positive impact (cf. Section 4.2.4.5, Dikert et al., p. 102; Fernandez & Rainey, 2006, p. 169). For example, the communication of early transformation successes that have already been achieved in individual teams as part of the transition could set new standards that other sales teams could emulate and adopt. In this way, internal communication multiplies what works. The interview results suggest that, in addition to the positive customer effects associated with the transformation successes, internal communication should also focus on the individual benefits for the employees. These benefits do not necessarily have to be of a monetary nature, but could take the form of special recognitions for performance and not just for the result achieved.

Submodel II – Transforming Vendor Sales			
<i>Causal Condition</i>	Progressing Digitalisation (cf. Section 4.2.2.2)		
<i>Main Category / Phenomenon</i>	Transforming IT Infrastructure Vendor Sales Approach		
<i>Context</i>	General Market Transition (cf. Section 4.2.2.1) and Evolving Customer Behaviour (cf. Section 4.2.2.3)		
<i>Lower Category</i>	Raising the Bar (cf. Section 4.2.4.3)	Fundamental Sales Attitude (cf. Section 4.2.4.4)	Business Strategy (cf. Section 4.2.4.1)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> • Setting new standards in building new types of customer relationships • Addressing new buying centers in multi-level sales • Building stronger argumentation with business value • Maintaining existing technical core competencies • Promoting individualised customer sales approaches instead of standardised "sales pitches" 	<ul style="list-style-type: none"> • Promoting personal entrepreneurship within the company • Promoting and recognition a pronounced willingness to learn • Promoting personal accountability, ownership and responsibility • Placing trust in sales teams and individuals • Praising incremental approaches ("slice the elephant" strategies) 	<ul style="list-style-type: none"> • Implementing strategy development, formulation and execution on an equal footing • Leaving the "muddling through" zone, even if the identified success strategies do not pay immediately off/ do not succeed in business in the short term • Achieving stringency and sustainability in strategy implementation
<i>Lower Category</i>	Internal Communication (cf. Section 4.2.4.5)		Management and Leadership (cf. Section 4.2.4.2)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> • Regularly motivating and inspiring communication • Addressing both the customer benefit resulting from transformational change and the personal benefits for the sales employees • Sense-giving of change measures in the context of sales ecosystem transformation 		<ul style="list-style-type: none"> • Overcoming "Command and Control" Leadership Structures • Creating freedom and time flexibility for strategic work with customers • Achieving a balance between tactical-operational action and strategic sales work • Encouraging self-reflection and personal development in a digital environment
<i>Consequence</i>	Performant manufacturer sales teams that can successfully meet new requirements regarding digitalisation and sales differentiation		
<i>Intervening Conditions</i>	Various, e.g. Legal and Compliance (cf. Section 4.2.6.4), Consideration of Regional Differences (cf. Section 4.2.6.3), more in Tables 19, 20, 21 in Appendix 8.5		

Table 10: Submodel II – Transforming IT Infrastructure Vendor Sales (own creation)

Table 10 summarises a choice of possible strategies as discussed around the main category “Transforming IT Infrastructure Vendor Sales” and puts them into the context of Corbin’s & Strauss’s (1996, 2015) paradigmatic partial model.

This second partial model is supplemented by the third of a total of five partial models, which reflects the necessity of building digital partner alliances during the transformation process.

6.2.3 Building Digital Partner Alliances

Successful sales ecosystem transformations of IT infrastructure manufacturers are suggested to require, as described in the previous section, the transformation of the vendor's own sales teams. As the findings indicate, in an indirect sales model, the more profound the market changes are, the more important the effectiveness of the transformation of the partner landscape becomes. The discussion of core issue #3 (cf. Section 5.2.3) and the deeper examination of structural ecosystem changes (cf. Section 5.3) revealed that IT infrastructure vendors ideally concentrate both on transforming the existing partner landscape, and also on expanding it with partners who provide additional competencies regarding digitalisation and customer business transformation. Additional digitalisation-, software-, cloud- and specialised sales-expertise provided by partners (cf. Section 5.2.3) could cover areas that the vendor is unable to serve and thus have a synergy effect on IT infrastructure-related sales campaigns to the benefit of the vendor.

For this purpose, it is suggested to combine the development and expansion of the existing sales ecosystems in a programmatic manner. Such a programmatic approach could combine action strategies corresponding to the open categories, which aim in adapting the vendor “Go-To-Market” approaches and establishing “Programmatic Governance”. Programmatic governance could be used to coordinate the development of the vendor-related “Partner Portfolio”, the required “Field Sales Alignments”, suitable “Partner Enablement” and, finally, some technological “Partner Inspiration” by the IT infrastructure vendors with regard to newly emerging digitalisation trends. Each of these sub-concepts can be

understood as an essential component of the main category “Building Digital Partner Alliances” (cf. Figure 50). This main category integrates strategies to build horizontal partnerships complementing existing further developed vertical IT infrastructure sales partner networks, as discussed in Section 5.3.

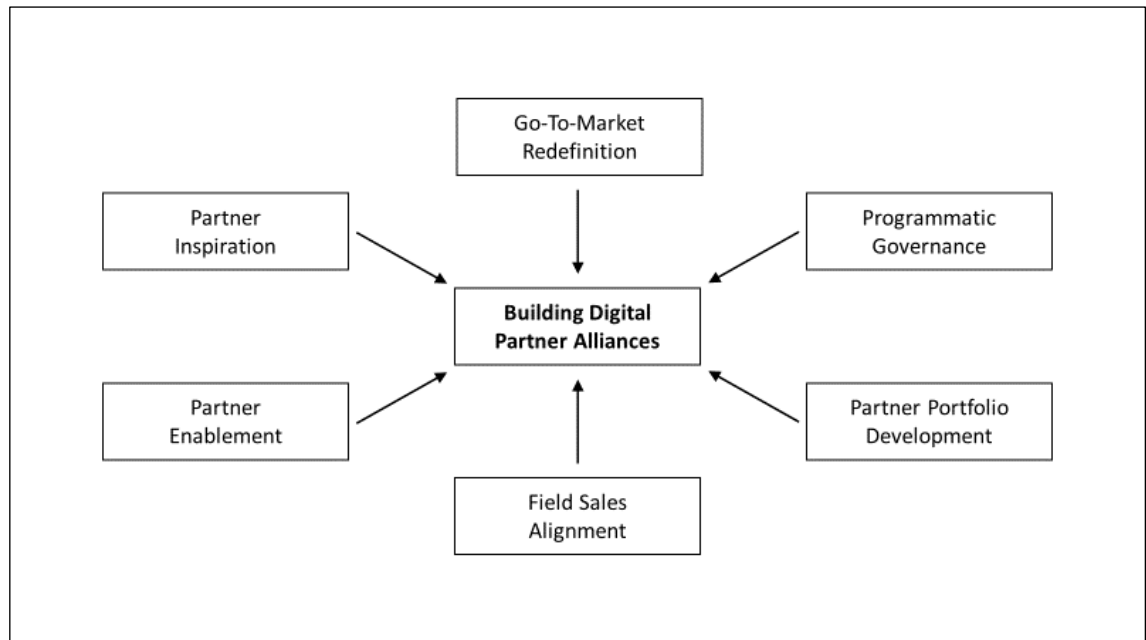


Figure 50: Composition of Main Category “Building Digital Partner Alliances” (own creation)

For the successful formation of digital partner alliances, concrete action strategies evolved during the data analysis. These are described in more detail below.

The design and installation of complex IT infrastructure solutions is typically done with the help of value adding partners (Kalyanam & Brar, 2009). The results of this study suggest to adapt the value adding capabilities of sales ecosystems to the requirements of increasing digitalisation and new customer demands. This approach is reflected in the action strategies that are summarised under the heading “*Go-To-Market Redefinition*” (cf. Section 4.2.5.3). The vertical character of the indirect sales system (in which vendors work together with resellers, system integrators, service providers and outsourcers at various stages of the same value chain) seems to be usefully complemented by horizontal partners

according to the results of this study²⁷. For such partnerships it appears particularly reasonable to form strategic alliances especially with consulting firms that can complement the existing partner network with their digitalisation expertise. Generally, strategic alliances contribute mutually to competitiveness of the involved partners with external resources where own resources cannot provide it (Hassan et al., 2010, p. 240). It seems obvious that even with the best possible implementation of internal transformation approaches, manufacturers' sales teams cannot replace business model digitalisation consultants (cf. Section 5.2.3). However, the necessary complement to these competencies in the transformation of IT infrastructure sales ecosystems could be provided by partners that need to be acquired and integrated into the sales processes, and therefore into the ecosystem. Supplementary to this, platforms for the sale of infrastructure products requiring less advice could be implemented, as suggested by some participants. Such a measure could help to reduce cost of sales and allow the sales force to concentrate fully on the more demanding core business.

For strategies that serve *programmatically partner governance*, the results of this study suggest that they form a kind of umbrella for all goals, initiatives and measures agreed between manufacturers and partners (cf. Section 4.2.5.4). In the literature, partner governance mechanisms are understood as measures by which manufacturers align partner activities with their goals (Storey et al., 2018; Heide, 1994). In the professional literature, there are numerous publications with recommendations on how to organise such a partner governance (e.g. Bech, 2015; Klimke, 2015). The results of this study emphasise the importance of mutual management sponsorship for the partnership, defining joint transformation goals, defining a holistic growth plan in new technology areas and regularly reviewing its achievement, as well as managing all relevant sales activities in line with the agreed goals (cf. Table 11).

Action strategies aimed at the joint development of an *expanded partner portfolio* focused on digitalisation potentially benefit from the technological thought leadership of the manufacturer (cf. Section 4.2.5.8). Such an expansion of the

²⁷ To avoid redundant descriptions, please refer to the illustrations in Section 5.3.

partner portfolio could, for example, include the development and offering of partner-driven cloud offerings based on the manufacturer's products that can compete with the services of the large public cloud providers. The joint activities could also be aimed at developing and offering solutions for special customer scenarios or at modifying the existing partner portfolio in a way that it better fits the digitalisation-relevant application requirements of the customers. Approaches of this kind appear to be related to organisational ambidexterity since they are concerned with exploiting existing and exploring new business opportunities (cf. Section 6.2.6). Concretely, they aim to combine exploitative strategies of the existing portfolio with explorative innovation approaches, for example with public cloud offerings of the partner (Popadic, Pucko & Cerne, 2016, p. 293).

The *field sales alignment* strategies are designed to synchronise the activities of the sales teams of manufacturers and partners at the (local) level of sales representatives (cf. Section 4.2.5.6). The activities initiated between the teams could include aspects such as joint sales planning and the coordination of concrete, project-related sales campaigns towards the customers. In particular, the results of this study suggest that, ideally, a personal relationship is established between the manufacturers' sales teams and the partners. This could have a favourable influence on the partners' supplier preference in the interest of the vendors (cf. Section 4.2.5.6). However, there is little evidence in the literature of the importance of these strategies.

Going further, it seems that partners who want to position digitalisation solutions on the market with and for the manufacturer expect corresponding competence and training from the vendor. Traditionally, *partner enablement* strategies (cf. Section 4.2.5.7) appear to be primarily linked to technical aspects of the infrastructure products to be sold. The argumentative positioning of the added value of these products in digitalisation solutions is becoming increasingly relevant in the opinion of the majority of participants. Therefore, it is suggested that manufacturers should better support their partners in this respect. Furthermore, the interview results suggest that classical classroom training and physical updates for different target groups within the partner (e.g. with sales

departments, solution architect teams and the management involved) are successively replaced by online training in virtualised collaboration rooms. Virtual training appears to be often used for reasons of “productivity, cost efficiency and adaptability” (Pace, 2013, p. 64). Nevertheless, participants occasionally emphasised the importance of personal contact with partners, in particular at transformation-relevant sales enablement events.

Finally, in digital partner alliances it seems to be important to convince partners of the significance of new sales campaigns with which manufacturers want to approach customers (cf. Section 4.2.3.2). This appears all the more relevant, since in indirect sales systems, vendors do not have formal control mechanisms to move partners in a certain direction. The aspect of thought leadership, which frequently came up in the interviews, could contribute to fill this gap. McCrimmon (2005, p. 1067) understands thought leadership as “the promotion of new ideas, whether by example, logical argument, factual demonstration or inspiring appeal”. Therefore, an essential strategic element for building digital partner alliances could be based on this type of *bidirectional inspiration* between manufacturers and sales ecosystem partners (cf. Section 4.2.5.8).

Table 11 shows the connection between the mentioned strategy fields with regard to causal conditions, context variables, intervening conditions, as well as the intended consequence for the formation of the main category “Building Digital Partner Alliances”.

Submodel III – Building Digital Partner Alliances			
<i>Causal Condition</i>	Progressing Digitalisation (cf. Section 4.2.2.2)		
<i>Main Category / Phenomenon</i>	Building Digital Partner Alliances		
<i>Context</i>	Sales Ecosystem Partner Expectations (cf. Section 4.2.5.1) Vendor's Ecosystems Expectations (cf. Section 4.2.5.2)		
<i>Lower Category</i>	Go-To-Market Redefinition (cf. Section 4.2.5.3)	Programmatic Governance (cf. Section 4.2.5.4)	Partner Portfolio Development (cf. Section 4.2.5.5)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> Evaluating new routes to market/partnermix Expanding the sales ecosystem with horizontal partners with special competencies in the areas of Software, Cloud, Consulting and specialty sales Creating sales platforms for commoditised products Building direct sale cloud-based/XaaS-offerings 	<ul style="list-style-type: none"> Establishing Executive/Sen. Mgmt. sponsorship Defining holistic growth plan and regularly tracking of execution Aligning portfolio management Defining mutually agreed sales initiatives Establishing field sales support and alignment Coordinate transformational change measures 	<ul style="list-style-type: none"> Helping partners in specialisation Jointly developing customised digital solutions Jointly developing digital portfolio enhancements Establishing consumption-based cloud and XaaS-offerings, based on the vendor's products
<i>Lower Category</i>	Field Sales Alignment (cf. Section 4.2.5.6)	Partner Enablement (cf. Section 4.2.5.7)	Partner Inspiration (cf. Section 4.2.5.8)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> Executing common account potential analysis Sharing/executing regional/vertical business planning Doing account alignment Establishing personal peer-to-peer relationships 	<ul style="list-style-type: none"> Enhancing technical partner skills Improving sales methodology skills Build digitalisation competence Executing combined vendor/partner trainings, QBRs, customer calls/meetings 	<ul style="list-style-type: none"> Sharing thought leadership about digital solutions Bridging the gap between technology and business use Bidirectional inspiring between vendor and partner
<i>Consequence</i>	Efficient sales ecosystem that meets new digitalisation related market requirements and customer expectations		
<i>Intervening Conditions</i>	Various, e.g. Evolving Customer Behaviour (cf. Section 4.2.2.3), General Market Transition (cf. Section 4.2.2.1), Legal/Compliance conditions (cf. Section 4.2.6.4), more in Tables 19, 20, 21 in Appendix 8.5		

Table 11: Submodel III – Building Digital Partner Alliances (own creation)

This third submodel is supplemented by the fourth of a total of five submodels, which reflects the need to pay special attention to sales staff's personal needs during the transformation of the IT infrastructure sales ecosystem.

6.2.4 Taking Care about Sales Individuals

The progressing digitalisation potentially also exposes the sales staff of the IT infrastructure manufacturers themselves as persons to considerable pressure to change. As a result of the discussion of core issue #4 (cf. Section 5.2.4) it is suggested that IT infrastructure vendors consider their personal motives, needs and ambitions when transforming their sales ecosystems in view of the special transformation-related requirements imposed on sales staff. The findings indicate that transformational change drivers for vendors seem to fuel uncertainties and sometimes anxieties among vendors' sales employees, and possibly partners as well (cf. Section 4.2.4.9).

In the literature, it is discussed that a certain degree of concern and anxiety among those involved in change might be helpful in initiating change processes, since they have to build up discomfort with existing conditions during the unfreezing process (cf. Section 2.5 and Osentoski, 2015). However, such anxiety can also cause change resistance when it turns into learning anxiety, the perceived threat of loss, or when the individuals feel they will lose their self-esteem or identity when they engage in the change process (Paterson & Cary, 2002; Schein, 1996; Kanter, 1985). In this context, also the manufacturer's corporate culture and the stringency with which corporate values are filled with life in reality seem to have a decisive influence on the degree of this personal willingness to change (cf. Section 4.2.6.1). The interviews suggest that manufacturers are not always aware of these possible effects, or do not care enough about this aspect, although it can threaten the transformation success of their sales ecosystems. The analysis of the data collected therefore indicates that the transformation framework to be developed should reflect this concern appropriately.

In the course of the data analysis, these considerations evolved into the main

category “Taking Care about Sales Individuals” (cf. Figure 51). This main category focuses on salespeople as individuals and takes into account the finding that in addition to appropriate skill development (cf. Section 4.2.4.12), sales staff should be encouraged to proactively and openly address personal changes in the required sales ecosystem transformation context (cf. Section 4.2.4.10). The manufacturers seem well advised to also consider different individual personal behaviour patterns of their employees (reaction of the sales staff to transformational changes, cf. Section 4.2.4.9) in order to promote their participation in change measures in the best possible way for the company (employee participation and commitment, cf. Section 4.2.4.15). Furthermore, the interview results indicate that trust and empowerment (cf. Section 4.2.4.11), which are given to employees by management, are of particular importance as a source of energy for the implementation of transformational change measures.

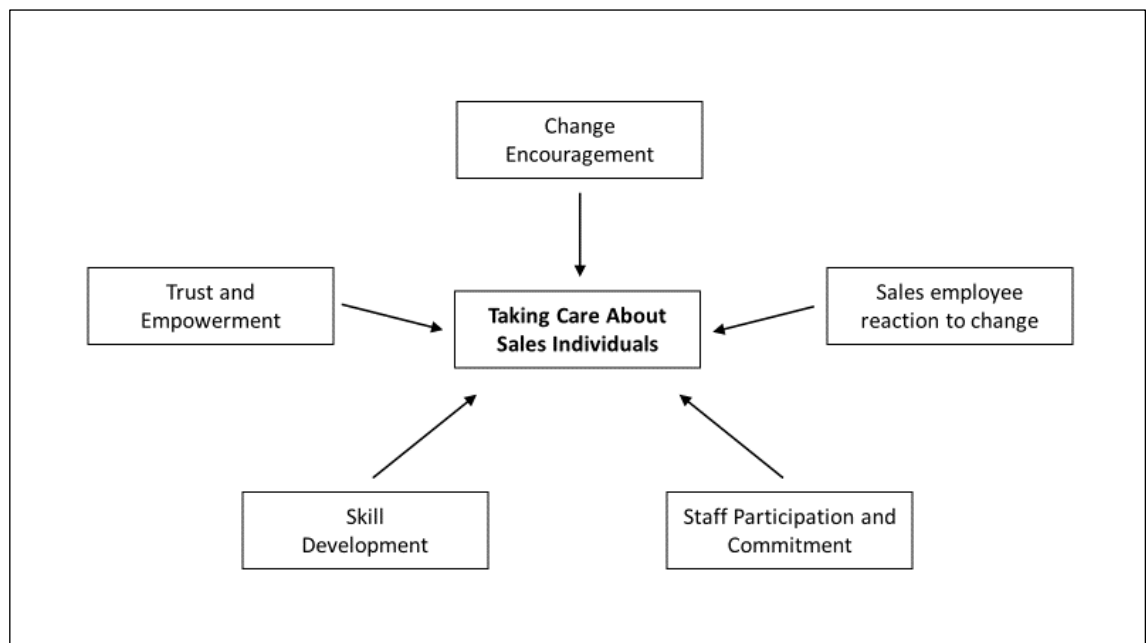


Figure 51: Composition of Main Category “Taking Care about Sales Individuals” (own creation)

Each of these aspects could be served by specific strategies subsumed in the above-mentioned main category. These strategies can, inter alia, contribute to promoting the sales employees' transformation readiness.

The data suggests, that with regard to *change encouragement*, it is important to communicate the purpose of transformation projects and possible personal

benefits for employees. Such benefits could focus on the personal opportunities and development potential of staff, to achieve the best impact. Furthermore, it seems important to give some confidence to people dealing with uncertainty in a changing sales and customer environment. Sales managers who set a good example themselves by implementing transformation measures as a role model can contribute to these efforts. The findings also suggest that personal contact between management and employees is a key factor in establishing a personal buy-in for sales teams (cf. Sections 4.2.4.10 and 4.2.4.5), rather than the overweighting of virtual communication and CRM tools (cf. Section 4.2.4.8).

Moreover, the consideration of the heterogeneity of human *reactions to change* on the part of management appears to be decisive for transformation success. When considering such reactions, the aspect of change resistance plays an important role in the literature (e.g. Grama & Todericiu, 2016). The findings of this thesis suggest to put sales management in a position to adequately assess the reaction of each individual employee to changes and to influence their behaviour in a targeted manner. It is, therefore, proposed to promote and train managers for this purpose. The tolerant acceptance of different but equal personal ways of dealing with transformational change by employees seems to be an important prerequisite in this respect which also affects the level of individual *participation and the personal commitment* (cf. Sections 4.2.4.9 and 4.2.4.15).

Other studies have already emphasised that the sales value creation of digitally transformed offers requires the *skill development* of sales staff (e.g. Singh et al., 2019, p. 8). This study details that skill development and training is relevant at all levels of the manufacturer's sales hierarchy. This includes the technical and customer business-oriented development of knowledge about the success factors of progressive digitalisation in specific industries, in order to build argumentative bridges from technology to customer business and deliver value contributions to digital customer transformation (cf. Section 4.2.4.12). In view of the suggested need for an entrepreneurial attitude on the part of the sales staff (cf. Section 6.2.2), it seems consistent to foster the sales individuals' skills in this respect as well. As a result of a comprehensive literature review conducted by

other authors, a consensus has been found that “high levels of entrepreneurship skills are associated with competence in the process of opportunity identification (and/or creation), the ability to capitalise on identified opportunities and a range of skills associated with developing and implementing business plans to enable such opportunities to be realised.” (Johnson, Mukhuty, Fletcher, Snowden & Williams, 2015, p. 19). Such skills appear equally relevant in the context of addressing business opportunities in the digitalisation field and should therefore be given a special focus in professional skill development at vendors.

The greater the pressure on manufacturers to change, the more pronounced the tendency appears to be to measure the success of business initiatives from a central point and to increase the frequency of reviews (cf. Sections 4.2.4.8 and 4.2.4.13). However, the interviews suggest that sales employees often perceive central tracking and frequent reviews as the opposite of what they want, which is delegation of responsibility, as well as *trust and empowerment* (cf. Section 4.2.4.11). Numerous studies suggest that it is beneficial for the change readiness of employees if they perceive their management as trustworthy (e.g. Vakola, 2014, p. 203). There is little evidence in the literature that this can also apply in reverse, as this thesis suggests.

As the findings indicate, strategies in this regard advantageously focus on avoiding over-control of employees and giving them the freedom to manage their responsibilities in an entrepreneurial manner with a certain degree of leeway. There are some studies which indicate that employees who can act with greater autonomy²⁸ experience themselves as the initiators of their own behaviour (Deci & Ryan, 1987, p. 1025, as cited in Eisenberger, Rhoades & Cameron, 1999) and act potentially with more enthusiasm and energy (Eisenberger et al., 1999, p. 1034). Furthermore, according to the results of the surveys, there seems to be a close connection between the degree of trust and empowerment towards the employees and the degree of their personal commitment to change.

²⁸ Eisenberger & Rhoades (2002, p. 700) define autonomy as “employees’ perceived control over how they carry out their job, including scheduling, work procedures, and task variety.”

Submodel IV – Taking Care About Sales Individuals			
<i>Causal Condition</i>	Progressing Digitalisation (cf. Section 4.2.2.2)		
<i>Main Category / Phenomenon</i>	Taking Care about Sales Individuals		
<i>Context</i>	Culture and Values (cf. Section 4.2.6.1)		
<i>Lower Category</i>	Change Encouragement (cf. Section 4.2.4.10)	Sales Employee Reaction to Transformational Change (cf. Section 4.2.4.9)	Sales Staff Participation and Commitment (cf. Section 4.2.4.15)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> Communicating change benefits, also personal ones for the sales employees Creating a healthy working environment and personal well-being Causing emotional “buy-in” Living a role model function as a manager and change agent Promoting the personal bond between managers and employees 	<ul style="list-style-type: none"> Educating managers about heterogeneous change-related personality profiles Applying advanced change related management skills with sales staff Knowing and addressing possible “hidden” agendas of employees and other potential change obstacles Appreciating and tolerating different approaches to transformative change 	<ul style="list-style-type: none"> Promoting the right balance between internal vendor (process) conformity and entrepreneurship on the part of employees Giving meaning instead of just demanding compliance with the initiatives and plans Creating opportunities for identification with the leadership and goals of the organisation.
<i>Lower Category</i>	Skill Development (cf. Section 4.2.4.12)	Trust and Empowerment (cf. Section 4.2.4.11)	
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> Promoting industry know-how, digitalisation know-how and adapted sales method competence Sensitising all employees, especially management, to the psychological processes involved in dealing with change 	<ul style="list-style-type: none"> Promoting a climate of confidence, trust and entrepreneurial empowerment Avoiding of “over-control” of employees when fulfilling change initiatives Granting personal degrees of freedom 	
<i>Consequence</i>	Motivated and skilled sales employees who support and drive transformational change proactively		
<i>Intervening Conditions</i>	Various, e.g. Customer Behaviour (cf. Section 4.2.2.3), General Market Transition (cf. Section 4.2.2.1), Dynamics of Shareholder and Sales Staff Interests (cf. Section 4.2.6.2), more in Tables 19, 20, 21 in Appendix 8.5		

Table 12: Submodel IV – Taking Care about Sales Individuals (own creation)

Granting more discretion to decentralised sales units, e.g. for the approval of deal

discounts in digitalisation projects, without having to make use of the centralised, sometimes slow approval bureaucracy, could foster entrepreneurial spirit and an inspiring, stimulating sense of independence within the sales organisation, as some interviews suggested.

Table 12 summarises the strategies described in the paradigmatic model.

This fourth submodel is supplemented by the fifth and last of a total of five submodels, which reflects the need to redefine transactions, sales organisations and procedures during transformation.

6.2.5 Redefining Transactions, Sales Organisation and Procedures

The results of the data analysis suggest that important organisational and procedural aspects should be taken into account in the transformation of IT infrastructure sales ecosystems (cf. Section 5.2.5). These relate to the vendor interaction with customers as well as to the manufacturer's cooperation with partners in the sales ecosystem. The discussion of core issue #5 concretises this with the suggestion that IT infrastructure manufacturers should adapt their structural and process organisation in view of new market requirements regarding transaction speed and procedural flexibility of the vendors.

As several studies indicate, advancing digitalisation offers new business opportunities for companies, but also forces them to face the changed rules of business with regard to the acceleration of business processes and organisational adjustments (Denner, Püschel & Röglinger, 2018; Matt et al., 2015; Turber & Smiela, 2014). This study revealed that IT infrastructure manufacturers seem to be similarly impacted by these effects. For this reason, the fifth and last of the main categories, covers the emerged concepts (cf. Section 4.2) of “Organisational Readiness”, “Agile Process Development”, “Software Tools”, “Business Cadence and Reporting” and “Transformational Change Management Governance” under the heading “Redefining Transactions, Sales Organisation and Processes”, as illustrated in Figure 52.

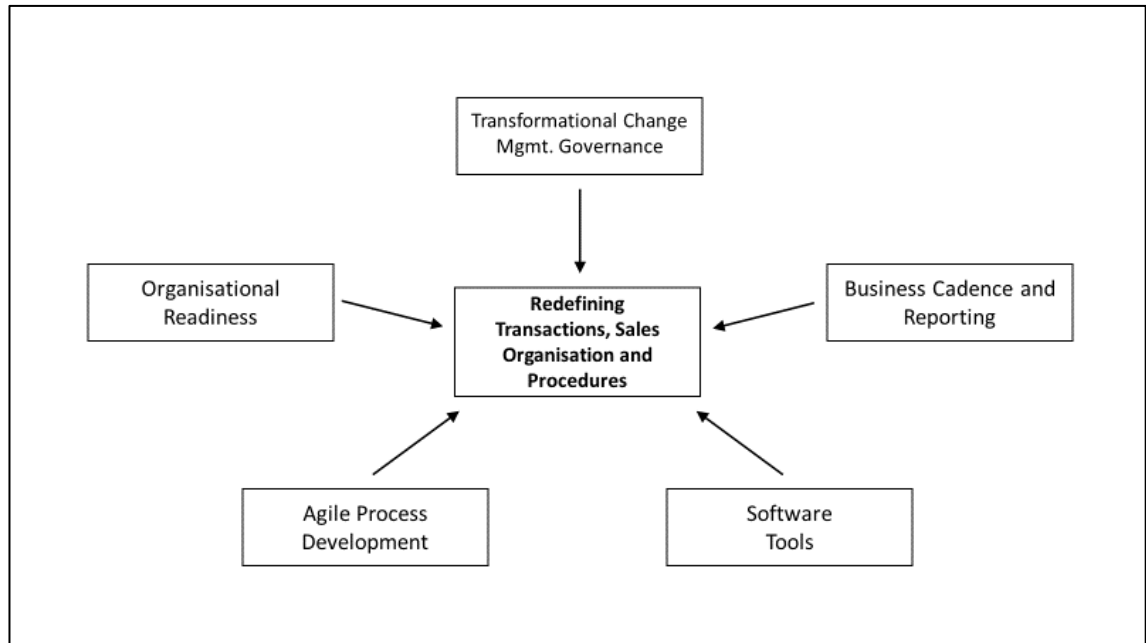


Figure 52: Composition of Main Category “Redefining Transaction, Sales Organisation and Procedures” (own creation)

Like the submodels previously discussed, appropriate action strategies can also be identified for this main category. A choice of these can be described as follows.

From the perspective of the action strategies to be applied in the transformation process, the *institutionalisation of transformation management* seems to be of particular importance (cf. Section 4.2.4.14). In the literature, reference is made to the advantages associated with the implementation of a “transformation management office” (de Waal, 2018, p. 380), which coordinates the relevant activities (Saliunas, 2007). Similarly, according to the results of this study, a role anchored in the sales organisation could synchronise all transformation-related activities of the sales ecosystem. Such a role could be assigned to a Sales Chief Digitalisation Officer (Sales CDO) who works with change agents in the line organisation and reports directly to senior management. A transformation management implemented in this way, which focuses entirely on the required change management with a Sales CDO at the top, could effectively coordinate the necessary changes ecosystem-wide, i.e. across internal and external company boundaries. Such an approach could mitigate the risk that the implementation of transformation-related initiatives suffers in the competition of

priorities with day-to-day business²⁹.

In addition, the study's results indicate that manufacturers of IT infrastructures should strive to achieve an appropriate balance between the costs and benefits of *internal reporting* in order to give employees sufficient leeway and time for customer acquisition in the digitalisation context (cf. Section 4.2.4.13). The existing literature rarely reports in this form on the results that were uncovered during the study with regard to possibly too intensive internal reporting at the expense of focusing on transformation initiatives.

Going further, the data analysis revealed the advantages associated with *software tools*, which enable “virtual project rooms” and collaboration platforms. With these, sales-relevant information could be effectively exchanged internally and with partners (within certain legal limits). However, in some cases, the introduction of video and audio conferencing systems, for example, seems to have led to sales staff being available practically anywhere and at any time, and thus accessible to their superiors. Existing studies indicate that the digitalisation of the workplace may result in overwork for employees and increased stress (Thiemann & Kozica, 2019). Other authors point out that new workplace technologies and collaboration tools can reduce the intensity of social interaction, endanger employee health and reduce the quality of collaboration (Cross & Gray, 2013). In view of this, the findings of this study suggest that vendors should protect the regeneration phases of employees during sales ecosystem transformation and find an appropriate balance in the use of software tools. In addition, measures that promote personal exchange between employees instead of completely shifting the sales-relevant communication in the sales ecosystem to software platforms and telecommunication tools appear to be appropriate.

Moreover, the results indicate that action strategies to increase the speed of business processes (along the chain of sales opportunity identification and tracking, quotation generation, forecasting, special approval, bidding and order

²⁹ These considerations point to the potential relevance of the concept of ambidexterity (structural versus contextual ambidexterity) to this situation, which is discussed in Section 6.2.6 and Appendix 8.7 of this thesis.

acceptance) could be indispensable in the transformation of sales ecosystems (cf. Section 4.2.4.7). The discussion of core issue #4 (cf. Section 5.2.4) referred to the term *business process agility* (Yang, Wang, L., Wang, Y., Nevo, Jin & Chow, 2014), which is suggested to be an important mediator “in how digital capabilities are enabling rapid business process actions” (Kuusisto, 2017, p. 344). In view of the increasing demands on the speed of business processes and the need to reduce the complexity of transactions, the findings show that data exchange platforms of sales ecosystems should be accelerated and the associated responsibilities placed in the hands of dedicated managers.

With regard to aspects of *organisational structure* and role definition, the implementation of a so-called overlay- or specialty-sales organisation for new products with digitalisation relevance seems to be one of the most frequently used strategies within IT vendors (cf. Section 4.2.4.6). These are sales roles that act as incubators and accelerators for certain technology areas (Care & Bohlig, 2014, p. 306) that exceed the capacities of standard sales. However, the results of this study suggest that the sales of innovative, digitalisation-relevant products should not be delegated to specialist sellers. This strategy could prevent a kind of alibi-transformation within the sales teams of the vendors. The data analysis revealed a certain risk that the need for change could be delegated to higher-level sales departments, while the core sales team could avoid transformation if responsibilities are not clearly assigned to the core sales team (cf. Section 4.2.4.14).

Finally, it can be concluded from the data, that when designing compensation systems and sales targets for salespeople, more consideration should be given to long-term objectives. This could be promoted through the use of sales MBOs, suitable targets in product areas relevant to digitalisation and a corresponding synchronisation of objectives with partner activities (cf. Section 4.2.4.14). Public cloud offerings are essentially based on usage-dependent, subscription-based pricing (Ionescu, Ionescu & Tudoran, 2013; Garg, Versteeg & Buyyaa, 2013). This seems to raise customer expectations of being able to use IT infrastructure products also on the basis of such pricing models (cf. Section 4.2.2.3).

Submodel V – Redefining Transactions, Sales Organisation and Procedures			
<i>Causal Condition</i>	Progressing Digitalisation (cf. Section 4.2.2.2)		
<i>Main Category / Phenomenon</i>	Redefining Transaction, Sales Organisation and Procedures		
<i>Context</i>	Evolving Customer Behaviour (cf. Section 4.2.2.3), Sales Ecosystem Partner Expectations (cf. Section 4.2.5.1), Vendor's Sales Ecosystem expectations (cf. Section 4.2.5.2)		
<i>Lower Category</i>	Transformational Change Management Governance (cf. Section 4.2.4.14)	Software Tools (cf. Section 4.2.4.8)	Business Cadence and Reporting (cf. Section 4.2.4.13)
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> • Institutionalising transformational change management in the vendor sales organisation as a staff function • Implementing the function of a Sales CDO • Establishment of change agents in the line organization • Training of all executives and selected ICs in change mgmt. 	<ul style="list-style-type: none"> • Standardising internal/external communication platforms to prevent uncontrolled tool proliferation • Avoiding tool-centric change management • Creating an appropriate balance between virtual and face-to-face communication 	<ul style="list-style-type: none"> • Establishing a weekly, monthly, quarterly sales cadence, which maintains the balance between reporting and customer sales orientation, as well as making long-term and short-term initiatives equally manageable • Avoiding over-reporting • Putting transformation targets on the business cadence agenda
<i>Lower Category</i>	Organisational Readiness (cf. Section 4.2.4.6)	Agile Process Development (cf. Section 4.2.4.7)	
<i>Choice of Strategies</i>	<ul style="list-style-type: none"> • Creating a balance of short-term/long-term activities through appropriate goal setting via MBOs • Synchronising the goaling approaches between vendors and sales ecosystem partners, where possible/appropriate • Establishing OPEX-oriented/consumption-based goaling approaches • Avoiding overlay and specialty sales roles for products relevant to digitalisation, keep core sales staff involved 	<ul style="list-style-type: none"> • Merging of eligible internal and partner-oriented processes on one platform, which integrates all sales-relevant procedures • Introducing “Digital Process Owners” who can be easily approached by the sales department and who take care of the improvement and acceleration of business processes wherever necessary. • Expanding partner information platforms to avoid delays in standard enquiries 	
<i>Consequence</i>	Agile and scalable sales organisation and process environment		
<i>Most relevant intervening condition(s)</i>	Dynamics of Shareholder and Sales Staff Interests (cf. Section 4.2.6.2), Culture and Values (cf. Section 4.2.6.1), General Market Transition (cf. Section 4.2.2.1), Legal and Compliance (cf. Section 4.2.6.4)		

Table 13: Submodel V – Redefining Transactions, Sales Organisation and Processes (own creation)

Vendors seem to be therefore under considerable pressure to revise their business models accordingly (Johnson & Euchner, 2018; Tzuo & Weisert, 2018; Wood, Hewlin & Lah, 2011). After their introduction, such models would need to be adequately reflected in the incentive system for the sales employees and, if applicable, for the sales ecosystem partners, as indicated by some interviewees.

Table 13 shows the dependencies and the associated action strategies in the paradigmatic model for supporting an "agile and scalable sales organisation and process environment" for the purpose of effectively transforming the sales ecosystem.

As outlined at the beginning of the chapter, a vast amount of intervening and causal conditions, as well as consequences and contexts were taken into account while developing the submodels with the paradigmatic model as presented. The related illustration can be found in Appendix 8.5.

6.2.6 The Core Category

The wealth of reports from the interview participants on their experiences and observations relevant to the research question highlights numerous aspects that appear essential for the transformation of IT infrastructure sales ecosystems. This is also reflected in the number of open categories found, which show a multitude of interdependencies and connections. These were identified, deeply analysed and elaborated in detail in the last chapters. If one wonders, as Corbin and Strauss (1996, p. 94 ff.) have suggested, what the "main story" in the data examined could consist of and what the central phenomenon is that integrates the categories found, the following relationships emerge. This approach leads to the identification of the core category and thus to the last missing element and heart of the intended transformation framework, which corresponds to research objective 3 of this thesis.

The interviewees selected according to the criteria outlined in Section 3.4.1.1 have contributed from different perspectives to answering the research question and to achieving the research objectives. The perspectives of both vendors and partners were considered. Furthermore, employees with and without managerial

responsibility were interviewed. The in-depth analysis of the data material obtained has revealed that three different aspects seem to play a particularly significant role in answering the question of how IT infrastructure manufacturers can successfully manage transformative changes in their sales ecosystem, which are trust, empowerment and ambidexterity.

Trust can be defined as “a psychological state comprising the attention to accept vulnerability based upon positive expectations of the intentions or behaviours of another” (Rousseau, Sitkin, Burt & Camerer, 1998, p. 395). With regard to the acting persons, it seems relevant that persons who accept such vulnerability are indeed trustworthy (Michaelis, Stegmaier & Sonntag, 2009; Mishra, 1996; Mayer, Davis & Schoorman, 1995; Sitkin & Roth, 1993). According to the authors, this trustworthiness is an essential prerequisite for organisation members to be willing to accept the upcoming changes. Beyond that, the risks that employees are prepared to take during change depend to a large extent on the degree to which they trust their leaders (Huy, 2002). According to the literature, four trust-related beliefs can be identified that help determine the willingness of employees to accept organisational change and to play a key role in the change process. These are (1) the conviction that others (i.e. their managers) stand by their word and fulfil their obligations, (2) the expectation that others communicate openly and honestly, (3) the expectation that others who lead the change process are actually capable of doing so, and (4) the belief that the managers also seriously consider the interests and needs of the (subordinated) participants in the change process (Loon & Wong, 2018, p. 1057).

According to the aforementioned results of this study the importance of these interrelationships does not always seem to be taken into account by the involved stakeholders in the transformation of IT infrastructure sales ecosystems. This seems to apply to the vendor's dealings with customers, the interaction between vendors and partners, as well as within the vendor between sales management and individual sales team members.

Firstly, the study suggests that trust seems to play a particularly prominent role in dealing with customers. However, it also identifies possible issues in this

context. Some of the interviewees' descriptions indicate that at least a few vendors do not always seem to take the honesty that is essential for building trust so seriously when it comes to gaining their own advantages (cf. Section 4.2.6.1). This may not be representative for the whole industry, but certainly requires particular attention during transformative change processes that are characterised by uncertainties and imponderables. This could be all the more relevant since the position of a trusted advisor for digitalisation issues, which manufacturers could strive for in order to differentiate themselves, most likely requires a sound, ethically correct and honest sales behaviour in this sense.

Secondly, as far as the interaction between vendors and partners is concerned, the trust between both seems to be potentially endangered in the sales ecosystem transformation often due to different interests. The study results indicate that manufacturers are increasingly competing with partner companies to offer managed services or cloud-based products directly to customers, bypassing the partners. Direct customer contact parallel to the partner, as pursued by vendors for the purpose of preference setting on the customer side, appears suspicious to some partners because it is beyond their control. In order to increase their own sales opportunities, as the interviews showed, manufacturers also involve several partners at the same time in many projects, although some partners want exclusivity (cf. Section 4.2.5.1). Partners, in turn, often seem to simultaneously engage several competing vendors in digitalisation-relevant customer projects to underpin their independence from manufacturers. It seems obvious that such approaches, no matter how common in the market, can undermine rather than promote trust between vendors and partners.

In view of these potentially challenging situations, it is suggested that both vendors and partners take care to maintain their trust-based relationship. For this purpose, manufacturers and partners could commit to strategic goals at the management level as suggested and trust each other and act together under the umbrella of an appropriate partner governance (cf. Section 4.2.5.4). This would not necessarily imply acting together all the time. However, it would mean acting in a stringent, transparent and predictable manner, and respecting mutual

interests and expectations as illustrated above (cf. Sections 4.2.5.1 and 4.2.5.2).

Thirdly, in view of the importance of trust between the manufacturer's sales management and individual team members, the encouragement to change (cf Section 4.2.4.10) and the necessary strengthening of self-confidence at the employee level seems to be extraordinarily impactful for successful ecosystem transformation efforts. Self-confidence is of course different from employee to employee, but could be positively influenced individually by the vendor's sales management. Management's trust in the sales staff appears to have a positive effect in that it can give employees a feeling of appreciation for their own work and performance and encourage them to take individual risks when they leave their own comfort zone on change paths. Noah gave an example:

“My manager and his manager, both of them, came to me over and over again and said to me 'Noah, we're behind you!' Because they knew I had two giant deals in front of me. And I wasn't sure I could win them both. And just to get this feeling and to get it from the manager 'We support you, we don't leave you out in the cold rain, we stand behind you'. Well, that inspired me without a limit! That's just the best job I've ever done.”

(Noah, Account Manager, IT infrastructure vendor, line 22)

From the above considerations it can be deduced that trust in each of the dimensions mentioned between vendors, customers, partners and employees seems to be an essential prerequisite for achieving transformational change goals in IT Infrastructure sales ecosystems.

Furthermore, the in-depth analysis of the data suggests that the **empowerment** of employees and partners during the ecosystem transformation is of great relevance. The study indicates that transformation successes are more likely to occur when more attention is paid to sales employees' personal needs. This finding seems to be consistent with the existing literature, which suggests that employee empowerment can be useful in any change process because it can increase the success probability of change processes by turning individuals

participating in the process into “partners” (Rothermel & Lamarsh, 2012, p. 17). In fact, personal empowerment of an employee appears to be a key factor in achieving an organisation's strategic goals, as it leads employees to trust their own abilities and take the initiative (Ay, Karakaya & Yilmaz, 2015, p. 29).

More detailed empowerment definitions consider psychological aspects, which also correspond to the results of the deeper data analysis of this thesis. These definitions include four essential dimensions that are important in addressing employees so that they actually feel empowered: meaningfulness, competence, self-determination and personal impact (Spreitzer, 1995). Thomas and Velthouse (1990) suggest that *meaning* arises from the value that an employee attaches to a work purpose or goal against the background of his/her own ideals and standards. With regard to the transformation of IT infrastructure sales ecosystems, this study seems to confirm this aspect, supplemented by the need to communicate meaning appropriately and regularly (cf. Section 4.2.4.5). This also applies to the aspect of skill development (cf. Section 4.2.4.12), because employees feel *competent* when they are convinced that they can carry out tasks with the necessary skills (Gist, 1987). The importance of a positive entrepreneurial attitude identified in the discussion of core issue #2 on manufacturer sales team transformation (cf. Section 5.2.2) corresponds to the scientific definition of self-determination. Accordingly, the aspect of *Self-determination* can be successfully served if employees feel that they have a certain autonomy in their (self-) regulation and in initiating and continuing certain behaviours (Deci, Connel & Ryan, 1989). Finally, employees also measure their degree of empowerment by the extent to which they can *generate an impact*, i.e. how they can actually influence the emergence of strategic, administrative or operational results (Ashfort, 1989) – an aspect that seems closely correlated with the form of sales staff participation and commitment at the employee level (cf. Section 4.2.4.15). Analogous considerations apply to the empowerment of partners, which from the manufacturer's point of view are also involved as actors in the transformation of the ecosystem, albeit across company boundaries.

As a result, empowerment, in its importance as the second core category element

of this thesis, can therefore be understood as a reminder that successful ecosystem transformations convey meaning, promote competencies, grant autonomy and create platforms for personal impact among employees and partners.

Finally, another aspect evolved during the in-depth data analysis that seems crucial for the success of transformational change management in the sales ecosystem. This third integrating and therefore in the core category reflected element is the aspect of **ambidexterity**.

As long as IT infrastructure vendors do not just enter the market as start-ups, they seem to have to meet two requirements: (1) to maintain and protect their current (legacy) business and (2) to identify and work on the potential for future business growth with new products that meet changing customer requirements and digitalisation needs. The concept of ambidexterity addresses this issue.

Different definitions of the term ambidexterity exist in various scientific contexts. In medical neuroscience, for example, ambidexterity is referred to when it comes to an individual's ability to use both hands with equal ease (Rothaermel & Alexandre, 2009; Lubatkin, Simsek, Ling & Veiga, 2006). Duncan's (1976) definition of ambidexterity references to the ability of a company to cope with the tensions and contradictory requirements of different tasks and to bring them into line. Tushman & O'Reilly (1996, p. 24) define ambidexterity as "the ability to simultaneously pursue both incremental and discontinuous innovation and change" resulting from "hosting multiple contradictory structures, processes, and cultures within the same firm". Levinthal & March (1993, p. 105) underline the importance of ambidexterity as the ability of an organisation to "engage in enough exploitation to ensure the organisation's current viability and to engage in enough exploration to ensure future viability".

The latter definition corresponds particularly well with descriptions by some interviewees, who reported on the difficulties of reconciling the demands of progressive digitalisation and changing customer behaviour with the management of the daily tasks of the tactical-operational sales business. For

them, it seemed to be a particular challenge for many salespeople to establish and maintain a balance between both areas³⁰. As Harry put it:

“The American system is not designed to implement such innovations immediately. So, you still have to sell the existing products and meet quarterly targets! And this can only be done to a limited extent by relying on new products. (...) This is, of course, a balancing act that you have to do. But, the quarterly pressure has probably led to this.”

(Harry, Account Executive, IT infrastructure vendor, line 28)

The potential difficulties encountered in combining exploitative and explorative elements in daily sales work reveal themselves in many different ways, both within the manufacturer and in cooperation with partners and customers. Often reference was made in this respect to a too pronounced quarterly orientation and the short-term focus associated with it, in order to draw attention to consequences that are hindering the transformation of ecosystems.

Based on the above outlined considerations regarding the named three key aspects of transformational change in IT infrastructure sales ecosystems, the following core category evolved:

“Promoting transformational change in IT infrastructure sales ecosystems through trust, empowerment and ambidexterity. “

This core category combines the essential findings of this study and is suitable for integrating all other categories around it as a central phenomenon, as Corbin and Strauss (2015) require for a good core category (cf. Section 3.4.3).

The process of selecting the core category was carried out by taking into account the systematic relationships between the core category and other categories as proposed by Corbin & Strauss (1996, p. 94 et seq., 2015, p. 188 et seq.). The repeated validation of these relationships and the addition/modification of

³⁰ Appendix 8.7 examines this relationship in more detail, particularly with regard to its classification in the concepts of structural and contextual ambidexterity.

categories took place in a reciprocal, recurring process. This process was not finalised until the core category appeared coherent.

Table 14 provides an exemplary insight into a partial outcome of this process, during which the three elements of the core category were related to the main categories. This was done assuming different intensity degrees of their individual character from “low” to “high”.

Table 14: Important characteristics of the relationship between the elements of the core category and the main categories, depending on their intensity (own creation)

	Ambidexterity		Trust		Empowerment	
	Low	High	Low	High	Low	High
Building Digital Partner Alliances	Single-dimensional focus on day-to-day transactional business with existing products	Strong balance between transactional and transformational (digitalisation) business	Tactical-operational cooperation with strict rules in the vendor partner programs	Equal cooperation at all levels between manufacturer and sales ecosystem partner	Partner seen as "extended workbench" of the manufacturer	Strategic empowerment of the sales ecosystem partner and increase of its market relevance
Establishing Customer Digitalisation Companionship	Purchase-driven customer engagement, often in commoditised product areas only	Customer added value driven, future-oriented sales approach paired with adequate transaction and transformation orientation	Tactical-operative sales approach, information hiding towards the customer	Strong participation of the customer in the thought leadership of the vendor for the design of his digital transformation.	Tactical operational sales procedure, reduced to the sales transaction	Strategic participation in the transformation of the customer business to ensure its continued existence and expansion
Redefining Transactions, Sales Organisation and Procedures	Legacy product-driven organisational, process, and goal alignment	Complementary organisational, process, and goal alignment to legacy and newly introduced digitalisation-relevant products	Emphasis on monetary-driven goals to achieve change objectives	Confidence in the assessments of the field sales teams, e.g. when evaluating approval requests	Central management of process approvals, primarily in the US-based headquarters of manufacturers	Advanced delegation of decentralised approval authorisation in the sales process
Taking Care About Sales Individuals	Less pronounced interest in employees, one-sided focus on sales productivity	Strong sense of responsibility for employees and their (social) needs	Strong "Command & Control" orientation in people management	Holistic leadership with an emphasis on a transformational, trusting leadership style	View of employees as executive bodies with tight regulations	View of employees as "entrepreneurs within the company".
Transforming Vendor Sales Approach	Little pronounced change orientation, focus on day-to-day transactional business in legacy product areas	Strong commitment to change that opens up future potential on an equal basis with day-to-day sales business.	Sales employees are closely monitored during the change process	Progress of change among employees is reviewed at regular, but longer intervals.	Employees act with little room for manoeuvre	Employees have ample room for manoeuvre in the transformation process and act entrepreneurially.

Therewith all relevant considerations are presented, which have led to the development of the transformation model for IT infrastructure sales ecosystems in accordance with the third research objectives of this thesis³¹. The model is therefore described below in a summarising manner, which also enables its applicability in practice.

6.2.7 The “A.C.T.I.V.A.T.E.” Framework as Transformational Change Management Model for IT Infrastructure Sales Ecosystems

In the previous sections it has been shown how the five main categories correspond to the findings of the study and how the core category integrates them. For each of these main categories, a partial model has been developed in the Sections 6.2.1 to 6.2.5, which also specifies the dependencies of these categories with the respective context, the intervening conditions, as well as with the specific characteristics of the causal conditions (cf. Table 19, Table 20 and Table 21 in Appendix 8.5). Furthermore, in each of these partial models essential coping strategies for the main categories mentioned were identified.

The integrating character of the developed transformation framework can be represented in four different ways, which are explained in the following.

The **first** form, in which the developed transformation framework for IT infrastructure sales ecosystems can be outlined, puts emphasis on the evolved open, main and core categories. This depiction underlines the methodological approach employed during its creation. Therefore, Table 15 gives an overview of the conceptualisation of the open categories into the five main categories.

This summarising presentation also contains the core category which integrates the five main categories. According to the definition of Corbin and Strauss (2015, p. 187), the core category is a concept that is “sufficiently broad and abstract”, summarising the “main ideas expressed in the study” in a few words. The core category found here combines the core elements of trust, empowerment and

³¹ Appendix 8.5 and 8.6 contain in-depth considerations of the contexts, causal and intervening conditions for the main categories found, as well as the dependencies and relationships between the main categories.

ambidexterity that are highly essential for the success of transformational change measures. Different manifestations of these three core elements draw a red line through the five main categories and the entire study.

Open Categories	Main Categories	Core Category
Customer Digitalisation Inspiration	Establishing Customer Digitalisation Companionships	Promoting Transformational Change in IT Infrastructure Sales Ecosystems through Trust, Empowerment and Ambidexterity
Business Value Creation		
Trusted Digitalisation Advisorship		
Business Strategy	Transforming Vendor Sales Approach	
Raising the Bar		
Internal Communication		
Management and Leadership		
Fundamental Sales Attitude	Building Digital Partner Alliances	
GoToMarket Redefinition		
Programmatic Governance		
Partner Portfolio Development		
Field Sales Alignment		
Partner Enablement	Taking Care about Sales Individuals	
Partner Inspiration		
Change Encouragement		
Sales Employee Reaction to Change		
Staff Participation and Commitment		
Skill Development	Redefining Transactions, Sales Organisation and Procedures	
Trust and Empowerment		
Transformational Change Management Governance		
Business Cadence and Reporting		
Software Tools		
Agile Process Development		
Organisational Readiness		

Table 15: Overview of Open, Main and Core Categories (own creation)

The **second** form, in which the developed framework can be depicted is a simplified graphical visualisation with reference to the paradigmatic model of Corbin & Strauss (1996). The importance of the main category "Transforming Vendor Sales Approach" for the other four main categories and the numerous links to them are underlined in this diagram by a prominent position, while the significance of the core category remains unchanged. The transformation of the sales ecosystems for IT infrastructure takes place against the general, contextual background of mutual vendor and partner expectations, the constantly changing

general market conditions, various legal parameters, as well as, and this is of particular importance, the environmental variables resulting from the corporate culture and the existing (not only the communicated) corporate values. Figure 53 contains the graphical representation of the theoretical integration carried out in this manner.

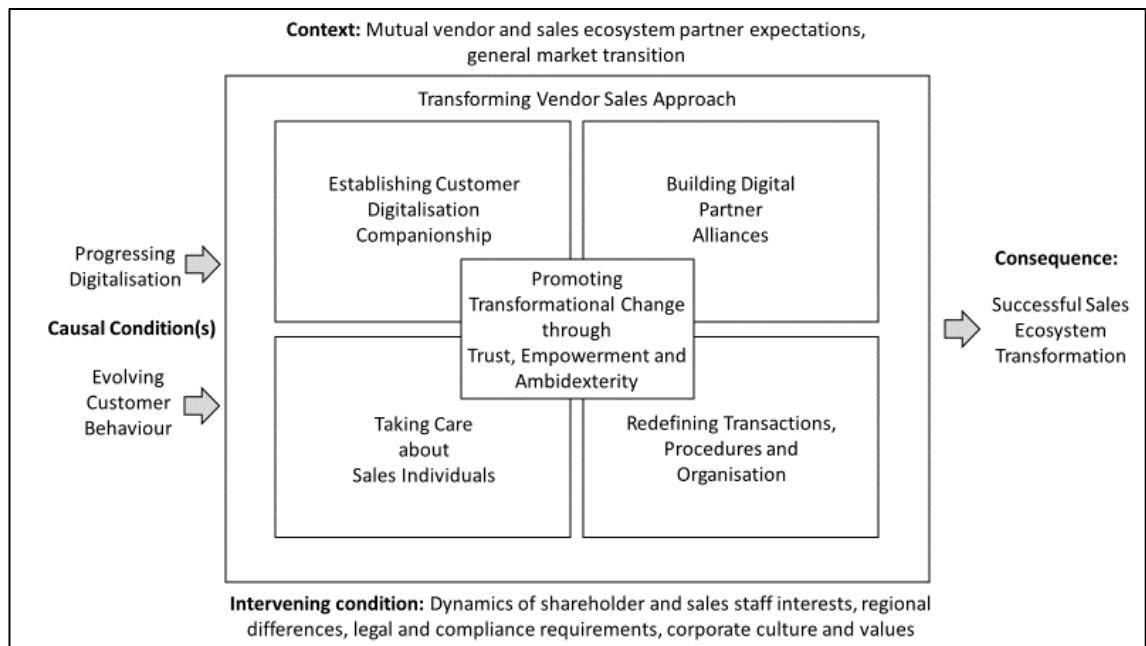


Figure 53: Transformational Change Management Framework for IT Infrastructure Sales Ecosystems, visualised as paradigmatic model (own creation)

The **third** form, in which the developed framework can be illustrated puts emphasis on the details of the evolved partial models I – V (cf. Sections 6.2.1 - 6.2.5), which are combined to form the transformation framework including the action strategies considered (cf. Figure 54).

It seems worth mentioning that the main categories found, which are

- Establishing Customer Digital Companionship
- Transforming Vendor Sales Approach
- Building Digital Partner Alliances
- Taking Care About Sales Individuals
- Redefining Transactions, Sales Organisation and Procedures

can be regarded as action strategy representatives as described in Sections 6.2.1 to 6.2.5.

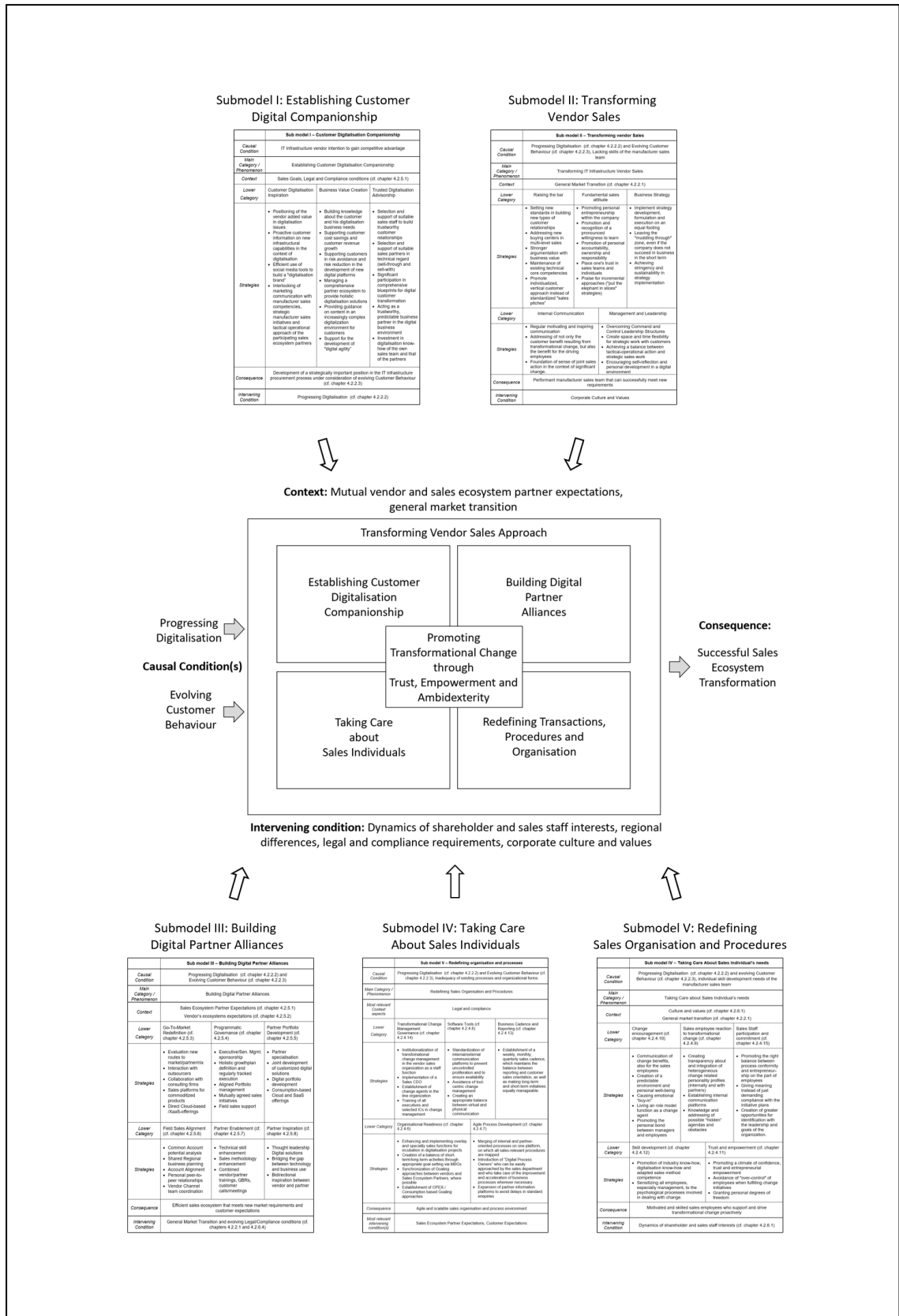


Figure 54: The "A.C.T.I.V.A.T.E." IT Infrastructure Sales Ecosystem Transformation Framework and its five submodels (symbolic representation, own creation)

Furthermore, it seems essential for the success of the ecosystem transformation processes to simultaneously address *each* of these categories during sales ecosystem transformation, because there numerous interdependencies between them have been identified.

The **fourth and final** form, in which the developed framework can be represented, uses the emphasis of a memorable name for the model. The naming of the model can facilitate practical use by making its individual components easier to remember. This is for example the case for the five i's model for sales transformation developed by Pierce and Lane (2009a, 2009b), as described in Section 2.9. A peculiarity of the framework of Piercy and Lane is the conciseness and memorability of the model proposed by them, which in itself is connected with the naming of the construct (Five i's stands for "Intelligence", "Integration", "Internal Marketing", "Involvement" and "Infrastructure").



Figure 55: The "A.C.T.I.V.A.T.E." Framework for Managing Transformational Change in IT Infrastructure Sales Ecosystems (own creation)

The name of the model developed here was intended to be as concise and memorable as the model of Piercy and Lane (2009a, 2009b). It is therefore referred to as the "A.C.T.I.V.A.T.E." model on the basis of the essential elements of the identified main and core categories. Figure 55 shows what this term stands for. For practitioners in the IT infrastructure industry, this terminology could

facilitate the use of the model as further explained in Section 7.3 and 7.4.).

To substantiate the distinctive character of the “A.C.T.I.V.A.T.E.” transformation framework, it is hereafter compared in detail with the transformation models already analysed in the literature review (cf. Sections 2.5 and 2.9) and with another more general model.

6.3 Comparison of the “A.C.T.I.V.A.T.E.” Framework with the Literature

The previous sections have outlined the scope, components and specifics of the “A.C.T.I.V.A.T.E.” framework for managing transformational change in IT infrastructure sales ecosystems. Compared to the transformation models known in the literature, this model is provided with particular characteristics and extensions. Especially, the “A.C.T.I.V.A.T.E.” model encourages IT infrastructure manufacturers to critically question existing patterns of thought and to approach transformational change processes in a new, more differentiated way. In addition, it extends existing transformation models, inter alia, with regard to partner-oriented strategies that are particularly relevant for sales ecosystems. Finally, it demonstrates a pronounced granularity, which provides vendors and partners with significantly more concrete support in managing the transformation processes. These special characteristics of the model can be illustrated in a direct comparison with the literature.

Table 16 allows such a comparison of existing transformation models with the transformation framework developed in this thesis. Its key elements are listed in the first two columns of this table in the form of main categories, open categories and core category components integrated into the “A.C.T.I.V.A.T.E.” model. Correspondingly, the third column of the table lists the dimensions of the professional models of Shiver & Perla (2016), Smilansky (2015) and Hatami et al. (2015), which were already discussed in the literature review (cf. Section 2.9, Table 4). Column four compares these elements in the same way with the main elements of the scientifically based five i’s model by Piercy and Lane (2009a, 2009b).

Main Categories A.C.T.I.V.A.T.E. Model	Open Categories A.C.T.I.V.A.T.E. Model	Professional Models, Shiver & Perla (2016), Hatami et al. (2015), Smilansky (2015)	Peer-reviewed Five I's Model Piercy & Lane (2009a, 2009b)	Literature Review Transformation Success Factors (de Waal, 2018, p. 380)
Establishing Customer Digitalisation Companionships	Customer Digitalisation Inspiration	-	Inspiration	-
	Business Value Creation	Customer Value Creation	Integration, Intelligence	-
	Trusted Digit. Advisorship	-	Intelligence	-
Transforming Vendor Sales Approach	Business Strategy	Planning	Involvement	Vision/Strategy/Goals
	Raising the Bar	-	-	-
	Internal Communication	-	Internal Marketing	Communicate Need
	Management and Leadership	Leadership	Involvement, Inspiration, Influence, Integrity, International	Ensure Mgmt. Commitment
	Fund. Sales Attitude	-	-	-
Building Digital Partner Alliances	GoToMarket Redefinition	-	-	-
	Progr. Governance	-	-	Get Partner support
	Partner Portfolio Dev.	-	-	-
	Field Sales Alignment	-	-	-
	Partner Enablement	-	-	-
	Partner Inspiration	-	Inspiration	-
Taking Care about Sales Individuals	Change Encouragement	Motivation	(built into) Inspiration	Give autonomy
	Empl. Change Reaction	-	-	-
	Participation/Commitment	-	-	Ensure Participation
	Skill Development	-	-	Train People
	Trust and Empowerment	-	(partly) Integrity	-
Redefining Transactions, Procedures and Organisation	Transformational Change Management Governance	Prioritisation	Influence	Feedback, holistic approach, resources, transformation office
	Cadence & Reporting	-	-	-
	Software Tools	-	Infrastructure	Data driven approach
	Agile Process Dev.	-	Infrastructure	Use agile approach
	Organisational Readiness	Organisational Setup	Internal Marketing, Infrastructure	Apply requirements management
Maintaining Ambidextrous Governance	(Core Category Element)	-	-	Have discipline
Promoting a Culture of Trust in the Ecosystem	(Core Category Element)	Culture	(partly) Integrity	Give autonomy
Empowering Sales Teams	(Core Category Element)	-	(partly) Involvement	Do things differently

Table 16: Comparison of the “A.C.T.I.V.A.T.E.” Transformation Framework with other models documented in the literature (own creation)

To complete the comparison, a matching of the success factors of “large-scale organisational transformations” (de Waal, 2018, p. 380) was also carried out. These factors are not limited to the transformation of sales organisations but are of a general nature. The study by De Waal (2018) summarises a large number of research papers in the form of a literature review, which simplifies the comparison.

First of all, the comparison illustrates that the “A.C.T.I.V.A.T.E.” framework extends the range of factors to be considered in relation to the existing models. This is particularly the case with regard to those aspects that affect the needs of the individuals involved in the transformation process, whether at the vendor or the partner. In particular, the model encourages manufacturers to become aware of the importance of the aspect of empowerment in a differentiated form (cf. Section 6.2.6). Employees are more likely to evolve from passive participants to active co-creators of the transformation processes if they are given the necessary competence for digitalisation issues, a strong understanding of the significance of their activities, and room for autonomy and impact unfolding. Other models, if they consider the aspect at all, address only partial aspects of this important influencing factor. For example, Piercy and Lane's five i's model (2009a, 2009b), with its core element of “involvement”, encourages, among other things, sales to participate in the strategic orientation of the company. According to the results of this study, however, there are more specific requirements for the transformation of IT infrastructure sales ecosystems. These concern not only the participation in strategy definition but also the decentralised delegation of responsibilities in the sales and transformation process. Other models, such as de Waal's (2018) study, remain similarly too general with regard to this aspect.

According to the findings of this study, the aspect of empowerment is closely related to a second core aspect of the “A.C.T.I.V.A.T.E.” model, namely that of trust. Like no other existing transformation model emphasises the importance of empowerment in the form documented here, the positive effect of trust on transformation processes is underrepresented in other studies. The “A.C.T.I.V.A.T.E.” model takes into account the risk that in times of dynamic

technological change, in which progressive digitalisation challenges the classic vertically oriented sales ecosystems and existing customer business models, employees at the manufacturer and at the partner, but also customers, are potentially unsettled. The study has shown that such uncertainty, which could be detrimental to transformation success, can be countered by manufacturers building and maintaining trust in their cooperation with customers, partners, and sales employees. The findings of this study suggest that this supposedly trivial aspect offers significant potential for improvement in practice. For example, the consistent unity between communication and execution, the maintenance of a benevolent, value-based (fault-tolerant) corporate culture, as well as the confidence in the abilities of employees and partners (without implementing “command & control” mechanisms) characterise the extent to which manufacturers meet this aspect. The comparison with the other models considered shows that the aspect of trust in its importance for transformation success is taken up there only quite generically.

Another distinctive property of the “A.C.T.I.V.A.T.E.” framework is that the aspect of ambidexterity rarely plays a similarly exposed role in any of the comparable studies cited. The results of this thesis suggest widespread difficulties on the part of manufacturers and partners to simultaneously serve the requirements of existing and future business that is more strongly oriented towards digital transformation aspects. Transformation processes in IT infrastructure sales ecosystems, however, make it necessary to deal with the existing contradictions of the existing (legacy) and future business. The difficulties involved, e.g. with regard to setting goals for employees, the appropriate organisation of the business cadence and the organisational setup, are only partially addressed, if at all, by other studies in this research field.

Moreover, the comparison with existing studies in the literature suggests that the “A.C.T.I.V.A.T.E.” model can make a more granular contribution to a better understanding of the specifics associated with the transformation of IT infrastructure sales ecosystems. This applies to all parts of the model with regard to the establishment of customer relationships, the transformation of

manufacturer sales, the special consideration of employee needs during the transformation, and the inclusion of questions regarding processes and organisation that need to be adapted. The expansion of the existing literature is also evident with regard to the formation of digital partner alliances, which can make significant contributions to successful ecosystem transformation, e.g. with suitable governance models and proactive partner portfolio management supported by the manufacturers.

Furthermore, in contrast to the professional models of Hatami et al. (2015), Shiver & Perla (2016) and Smilansky (2015), the scientifically-based approach used in the development of the “A.C.T.I.V.A.T.E.” model in this thesis meets important validation criteria (cf. Sections 3.6 and 8.8). Finally, the “A.C.T.I.V.A.T.E.” model offers practical advantages, as it allows IT infrastructure vendors to determine their individual level of maturity with regard to the transformation with the help of the developed self-assessment model (cf. Section 8.9). This approach can be employed in order to make purposeful use of the recommendations of this thesis (cf. Section 7.3).

6.4 Conclusion

As the in-depth data analysis in this chapter has revealed, the successful transformation of the IT infrastructure sales ecosystem depends primarily on the manufacturer’s ability to successfully differentiate the sales efforts of its ecosystems at the customers through establishing strategic collaboration. In order to enable such collaboration, the transformative development of vendor sales seems to be crucial. On the other hand, the formation and further development of digital alliance partners in the indirect sales model appears also as indispensable. As the results indicate, there seems to be a latent risk that sales employees might be intellectually and emotionally lost on the transformational path of change and that their technical and methodological competence could not be sufficiently enforced. In addition, the sales organisation and process design of manufacturers might require critical reflection in order to meet the requirements of the developing digital world and the increasing demands of customers for process speed, agility and result quality.

In consideration of these potential challenges, in this chapter a transformation framework was developed, which manufacturers can use to transform their ecosystems with regard to the above-mentioned concerns. This framework, referred to as the “A.C.T.I.V.A.T.E.” model, integrates the suggested action strategies, which belong to the evolved main categories (1) Establishing Customer Digitalisation Companionship, (2) Transforming Vendor Sales Approach, (3) Building Digital Partner Alliances, (3) Taking Care About Sales Individuals and (5) Redefining Transactions, Sales Organisation and Procedures. Beyond these five strategic fields of action, the model is complemented with the three main aspects of the core category *trust*, *empowerment* and *ambidexterity*, which seem to be of significant importance in each of the aforementioned categories.

As a comparison of the developed “A.C.T.I.V.A.T.E.” model with the literature has shown, it addresses important aspects of the transformation of IT infrastructure sales ecosystems that seem to go beyond existing literature. Nevertheless, it is important to emphasise that the way in which the collected data was analysed in this thesis is only one of multiple ways to interpret the data (Corbin & Strauss, 2015, p. 67).

The next chapter is primarily concerned with the summary of the study and recommendations that can be made on the basis of its results, including a presentation of the contributions to knowledge and professional practice.

Chapter Seven – Conclusion

7.1 Introduction

In this chapter the most important results of this study are summarised and a conclusion is drawn. The summary of the study's main research findings is structurally based on the three research objectives as specified in Section 1.4. This section is followed by a summary of the thesis' contribution to practice, which also contains the recommendations derived from the findings. Hereafter, this presentation is supplemented by an illustration of the evolved contributions to knowledge. Like all scholarly work, this thesis is subject to certain limitations, which are explained before recommendations for further research on the examined topic are given. The thesis concludes with a personal reflection.

7.2 Summary of Main Research Findings

This study has aimed to improve the understanding of the effects of progressing digitalisation and changing customer behaviour on the sales ecosystems of IT infrastructures vendors and to provide them with a transformation framework for managing this change.

The literature review carried out to support this thesis has shown that existing research provides only partial insight into relevant aspects in this regard (cf. Chapter 2). This thesis has addressed this gap and contributed to its closure based on a grounded theory methodology research approach. The research objectives formulated in Section 1.4 were pursued and achieved. Table 17 provides an overview of the main findings of this thesis.

The first two research objectives aimed at identifying which influencing factors should be considered to manage transformational change processes in IT infrastructure sales ecosystems and to explore the extent to which these systems are changing structurally. The insights provided by the research participants revealed a wealth of possible issues that IT infrastructure manufacturers potentially face when transforming their sales ecosystems.

<p>Research objective (RO) 1: Investigate which influencing factors should be considered from the perspective of IT infrastructure manufacturers field sales staff, their (senior) managers and involved sales ecosystem partners in order to manage transformational change processes in IT infrastructure sales ecosystems in connection with progressive digitalisation and changed customer behaviour.</p>	
<p>Main findings RO 1: Sales ecosystem transformation appears to be impacted by the following key influencing factors and core issues</p>	
<ul style="list-style-type: none"> • General Market Transition • Progressing Digitalisation • Evolving Customer Expectations • Business Value Creation • Digitalisation Inspiration • Trusted Digitalisation Advisorship • Business Strategy • Management & Leadership • Raising the Bar • Fundamental Sales Attitude • Internal Communication 	<ul style="list-style-type: none"> • Organisational Readiness • Agile Process Development • Software Tools • Employee Reactions to Change • Change Encouragement • Trust and Empowerment • Skill Development • Business Cadence and Reporting • Transform. Change Mgmt. • Participation and Commitment • Partner Expectations
<ul style="list-style-type: none"> • Vendor Expectations • Go-To-Ma Redefinition • Programmatic Governance • Partner Portfolio Development • Field Sales Alignment • Partner Enablement • Partner Inspiration • Culture and Values • Shareholder and Sales Staff Interests • Regional Differences • Legal and Compliance 	
<p>Core issues influencing IT infrastructure sales ecosystem transformation:</p>	<ul style="list-style-type: none"> • Customer Sales Consulting on Digital Transformation as a Differentiation Opportunity • Need to Transform IT Infrastructure Vendor Sales • Importance of Enhanced Partner Alliances with Digitalisation Capabilities • Sales Individuals in the Tension Field of Transformational Change • Relevance of Agile and Broad-based Vendor Transformation
<p>Research objective (RO) 2: Explore the extent to which IT infrastructure sales ecosystems are changing structurally as a result of the underlying drivers of change.</p>	
<p>Main findings RO 2: IT infrastructure sales ecosystems are subject to dynamic structural changes.</p>	
	<ul style="list-style-type: none"> • Evolution from one-dimensional to multi-dimensional indirect sales model • Increasing importance of horizontal extensions of the vertical sales ecosystem • Growing importance of public cloud providers • Hybrid IT infrastructure deployment and service models, influenced by public cloud offerings • Dynamic changes in value propositions and market power structures on the part of the ecosystem parties involved.
<p>Research objective (RO) 3: Develop a framework that can be used by IT infrastructure vendors to manage the transformational changes induced by these drivers in the indirect sales model, taking into account the results found.</p>	
<p>Main findings RO 3: In order to cope with the effects of industry digitalisation and changing customer demands as change drivers, it is suggested that multinational IT infrastructure vendors can effectively transform their sales ecosystems in Germany, by taking into account the above mentioned influencing factors/core issues/identified structural ecosystem changes and applying the recommendations of the A.C.T.I.V.A.T.E. transformation framework.</p>	
	<p>A.C.T.I.V.A.T.E. Transformation Framework:</p> <ul style="list-style-type: none"> • Building Digital Partner Alliances • Establishing Customer Digitalisation Companionships • Redefining Transactions, Procedures and Organisation • Taking Care about Sales Individuals • Transforming Vendor Sales • Maintaining Ambidextrous Governance • Promoting a Culture of Trust in the Ecosystem • Empowering Sales Teams

Table 17: Overview of Main Findings (with schematic representation of Figure 47, p. 200, and Figure 54, p. 243, own creation)

These issues could be categorised into the areas of market changes, customer expectations, manufacturer-internal and directly ecosystem-related (external) transformation issues, as well as other issues that reflect e.g. regional differences and particular cultural aspects. The findings indicate, inter alia, that vendors have significant opportunities to differentiate themselves in terms of sales by accompanying customers on their individual digital transformation journey by providing value-added advice. In order to take advantage of these opportunities, significant adaptations of the vendor's own sales organisations as well as the expansion and further development of the existing partner landscape are suggested to be required. The study has revealed that thirty-three individual subcategories appear to be relevant to sales ecosystem transformation. An in-depth analysis of the collected data has revealed, that the consideration of five core issues and certain structural sales ecosystem changes seems to have significant influence on transformation success. According to these insights, IT infrastructure vendors transforming their sales ecosystems are suggested to particularly focus on

- gaining strategic relevance for their customers by contributing their added value to customer digital transformation in the sales process in order to differentiate themselves in competition with other vendors and public cloud providers
- preparing for improved customer interaction by developing their own sales regarding digitalisation-related sales skills and further competencies
- transforming the existing partner ecosystem and expanding it with horizontal alliance partners which enrich the existing partner landscape with specialised digitalisation and consulting competencies
- considering the personal motives, needs and objectives of the vendor sales force in view of the specific transformation-related motivation of the sales individuals as humans
- adapting their organisational structure and processes in view of new market requirements regarding transformation management, transaction speed and flexibility of suppliers.

In accordance with the third research objective, a central concern of this thesis was to develop a framework that can be used by IT infrastructure vendors to transform their sales ecosystems. This model was successfully developed and has been named “A.C.T.I.V.A.T.E.” transformation framework, inspired by the names of its submodels and core categories evolved during the GTM-based data analysis. This model reflects the five focus areas mentioned above, as well as the particular importance of the aspects ambidexterity, trust and empowerment for each of the submodels and thus for the success of the entire transformation.

The model takes into account possible action strategies for achieving the transformation goals. These strategies were critically questioned in this thesis against the background of the identified causal, contextual and intervening conditions during transformation.

In addition, the framework contains a self-assessment model that helps IT infrastructure manufacturers to gain clarity about the maturity level of their own sales ecosystem based on the developed criteria. This model represents a contribution to practice, which is discussed in the next section.

7.3 Contribution to Professional Practice

As can be seen from the description of the main findings in the last section, numerous criteria, affecting the transformation success of IT infrastructure sales ecosystems were identified within the scope of this study. IT infrastructure vendors are suggested to take these into account when working with their partners to adapt to transformational market changes. In particular, it has become clear that one of the main challenges for manufacturers is to promote transformational change in parallel with their daily business. In this context, the potential importance of considering ambidexterity concepts (which are discussed in Section 6.2.6 and in more detail in Appendix 8.7) became apparent. Furthermore, the study points out the potentially high importance of promoting mutual trust in the ecosystem and of taking into account the importance of fostering entrepreneurial spirit among sales employees through empowerment. Moreover, the study indicates that, most likely, only a simultaneous and

coordinated consideration of *all* influencing factors identified in the model can sufficiently provide the success of transformation. In concrete terms, this means that, for example, the best possible implementation of sales transformation measures in internal manufacturer sales cannot ensure the success of the entire transformation if the ecosystem is not expanded in parallel with partners who are competent in demanding digitalisation issues.

Therefore, the “A.C.T.I.V.A.T.E.” transformation framework contains a self-assessment model, which enables vendors to determine their own level of maturity in coping with the change requirements. This self-assessment model (cf. Appendix 8.9), allows manufacturers to determine the status quo of their capabilities in each of the suggested dimensions relevant to transformation success. The model provides a granular self-assessment of the vendor itself, as well as the joint assessment of the vendor with its sales ecosystem partner, in order to evaluate the quality and future viability of the collaboration within the sales ecosystem. Depending on the evaluation of the vendor's maturity level (which can reach four levels in the model, ranging from “very high” to “unsatisfactory”), the manufacturer and its partner can use the following recommendations and/or the action strategies outlined in Section 6.2.

In principle, the “A.C.T.I.V.A.T.E.” Transformation Management Framework is not only suitable for vendors and partners alone, but also for consulting firms that want to support vendors and their sales ecosystem partners in the implementation of change initiatives.

However, the potential benefits of the transformation framework developed in this thesis and the findings uncovered are not limited to manufacturers, sales ecosystem partners and possibly involved consulting firms. Rather, the results of this thesis can help IT infrastructure vendors to work with their sales partners in such an effective and beneficial way that their customers are more likely to successfully master the digital transformation of their own business.

In order to achieve the objectives of transformational change efforts in sales ecosystems, it is therefore useful to apply the suggested strategies implied in the

“A.C.T.I.V.A.T.E.” model (cf. Section 6.2), based on the individual situation of the ecosystem. However, from the data analysis that substantiates the “A.C.T.I.V.A.T.E.” model, concrete recommendations can also be derived, which concern the three relevant areas for the sales ecosystem transformation, i.e. the customer, the partner and the vendor itself.

In accordance with the generic structure of an IT infrastructure sales ecosystem, as illustrated in Section 2.2 at the beginning of this thesis, these areas are (a) the sales interface of the manufacturers to the customers, (b) the internal influencing factors within the vendor regarding the vendor sales force, (c) the transformation of existing sales ecosystem partners and the expansion of it with horizontal alliance partners. The following recommendations contain suggestions which, depending on the maturity level in certain areas, may be more or less significant for the individual case of the respective manufacturer and the concrete status quo of the associated sales ecosystem.

(a) Recommendations for sales transformation regarding the (end) customer interface of the sales ecosystem

Considering the underlying change drivers, it is suggested that IT infrastructure vendors work with their partners in the sales ecosystem to change the customer interaction in the sales process and

(i) differentiate themselves by offering business benefits to customers and by encouraging them to use the infrastructure technologies they offer on their individual path of digital transformation.

(ii) provide sales resources with the qualification required for this purpose, i.e. with particular expertise regarding customer business digital transformation.

(iii) offer a suitable network of competent sales ecosystem partners in the presales phase for individual digital solution development.

(iv) refrain from unsettling customers with regard to the use of public cloud technologies in order to protect the installed IT infrastructure base on customer

premise (e.g. through inappropriate emphasis of potential security issues).

(v) work effectively and focused on the development of a “trusted digital advisorship” between the vendor, the partner and the customer, which creates transformation added value from the customer's point of view.

(b) Recommendations for sales transformation with regard to the vendor internal influencing factors of the sales ecosystem

Considering the underlying change drivers, it is suggested that IT infrastructure manufacturers consider relevant vendor-internal aspects of sales ecosystem transformation and

(i) not only revise their sales strategy and constantly adapt it to transformationally changing market requirements, but also give employees sufficient freedom in day-to-day business to actually implement the changed strategy.

(ii) adapt leadership styles to meet the sales individuals’ personal needs during transformation.

(iii) communicate in a comprehensible and motivating way which adapted performance and qualification standards apply to the sales staff, so that they know expectations.

(iv) promote a fault-tolerant corporate culture and encourage a willingness to learn.

(v) motivate their sales staff with sense-giving information, facts and ideally with positive target scenarios for transformational change. The incitement of fears and threats is suggested to be avoided.

(vi) adapt goal-setting systems and organisational structures to changing customer demands and purchasing behaviour (i.e. with MBOs, subscription based pricing schemes).

(vii) accelerate their internal processes and the interfaces to their sales

ecosystem sales partners and underlay them with SLAs that meet the increased market needs (e.g. approval process speed on special terms and discounts).

(viii) standardise the software tools used for internal/external communication with partners, set up virtual project rooms for customer-related partner interaction, and make efficient use of CRM tools like salesforce.com.

(ix) familiarise both their management teams and other sales staff with the basic psychological features of the human response to (transformational) change.

(x) give their sales employees the opportunity to develop their entrepreneurial personality through a maximum of trust and freedom, as micromanagement and “Command and Control”-oriented management models appear inappropriate for dealing with rapid market changes.

(xi) offer digitalisation-related training opportunities that go beyond the transfer of pure product and service portfolio knowledge.

(xii) maintain or create a healthy balance between “selling” and “reporting” within the vendor’s business cadence.

(xiii) institutionalise transformational change management in such a way that the focus on transformational change initiatives cannot be impaired or completely occupied by the requirements of tactical-operative day-to-day business.

(xiv) tolerate, if not promote, the emergence of a certain subculture in local sales teams in order to increase the identification of employees with their local management and the transformation goals.

(c) Recommendations for the sales transformation of the (external) sales ecosystem and its further development and expansion

Considering the underlying change drivers, it is suggested that IT infrastructure manufacturers consider the vendor-external, i.e. partner-relevant aspects of sales ecosystem transformation and

(i) adapt their go-to-market strategy to expand their vertical one-dimensional value creating structure by horizontal alliance partners with digitalisation expertise.

(ii) support the implementation of necessary ecosystem transformation measures with existing and new partners within a suitable partner governance.

(iii) offer their support in adapting and developing the partner portfolio towards digital transformation needs of customers.

(iv) ensure that there is sufficient customer-focused coordination between the sales teams of the vendor and the partner in the field, which can be organised regionally or vertically, depending on the chosen organisational structure of the sales teams. Central coordination at senior management level cannot replace local contact between the salespersons.

(v) qualify and enable the partners adequately. This qualification is suggested not to be limited to the manufacturer's product and service portfolio, but to also include required sales methodological and digitalisation-related components.

(vi) share their technological thought leadership with partners and inspire them to use their technologies in the digitalisation arena with their clients.

The contributions of this thesis are not only limited to those on professional practice, but also extend to those on knowledge. These are explained hereafter.

7.4 Contribution to Knowledge

As the literature review in Chapter 2 has shown, there is a large number of scholarly and professional sources, covering various relevant aspects of the research subject examined in this thesis. Based on this review, it became apparent, that existing transformation models seem to insufficiently address the particular problems concerning the management of transformational change processes in sales ecosystems of IT infrastructure vendors, affected by progressive digitalisation and changing customer behaviour in Germany (cf. Section 2.10).

Using the GTM approach from Corbin and Strauss (2015), this thesis closes this research gap by identifying important influencing factors, relevant structural ecosystem changes and, finally, through providing the aforementioned “A.C.T.I.V.A.T.E.” transformation framework. In this context, the interviews with twenty-four research participants (who over the years have made relevant observations in various functions at IT infrastructure vendors and their sales ecosystem partners) revealed insights into the interrelationships to be considered, which were not known in this depth before.

As a result, the thesis makes contributions to practice as described in the previous Section 7.3. Moreover, the study also contributes to knowledge, which can be placed in the context of the distinction between description and theory made by Corbin and Strauss (2015). The authors point out that descriptions in itself are not yet a theory, but serve as a basis for theory formation (Corbin & Strauss, 2015, p. 60). While descriptions can already embody concepts, theories are characterised by the fact that they are based on systematically and well-developed categories, whose characteristics and dimensions have been taken into account, and that are related to each other in such a way that with their help a theoretical framework is created which is capable of describing a particular phenomenon (Corbin & Strauss, 2015, p. 62; Starbuck & Hage, 1974).

The findings portrayed in Section 4.2 contain descriptive (participant) reports on aspects relevant from their point of view in the context of the research problem. These descriptions have been conceptualised and examined with regard to their characteristics and dimensions. The resulting thirty-three open categories have been related to each other using Corbin’s and Strauss’s (1996, 2015) paradigmatic model, taking into account various causal and intervening conditions, contexts, action strategies as well as associated consequences (cf. Section 6.2 and 8.5). Based on this, it has also been feasible to identify important characteristics of the structurally changing IT infrastructure sales ecosystems (cf. Section 4.3 and 5.3). In this way, five main categories and one core category evolved (which were also related to each other, cf. Sections 6.2.6 and 8.6), building the foundation for the “A.C.T.I.V.A.T.E.” transformation framework as a

scientifically based theoretical transformation model. Therefore, the research process used to develop the framework, as well as the model itself, complies with the above-mentioned criteria. Furthermore, the validation criteria for GTM studies regarding methodological consistency, quality and applicability proposed by Corbin and Strauss (2015, p. 353 et seq., 356 et seq, cf. Sections 3.6 and Appendix 8.8) were adhered to during the research process.

Further contributions to knowledge could be identified in the discovery of the importance of ambidexterity, trust and sales team empowerment during the transformation processes. These three aspects, which characterise the evolved core category (cf. Section 6.2.6), together represent the essential, connecting element of the submodels of the “A.C.T.I.V.A.T.E.” transformation framework.

Considered as a whole, the results of this thesis make significant contributions to closing the aforementioned research gap and thus make an important contribution to knowledge. Like any other study, this thesis has certain limitations that are suggested to be considered when interpreting and using the results.

These are examined in more detail in the following section.

7.5 Limitations of the Study

The initial focus of the study was to collect perceptions of the transformation processes in sales ecosystems of IT infrastructure vendors, both from the perspective of the manufacturers and the participating sales partners. In order to investigate important influencing factors, observations of IT professionals, who have been working for many years in the IT infrastructure industry, for vendors or for partners, sometimes even for both, were used. The collected data has been deeply analysed, evolved concepts have been compared, correlated and contextualised in the aforementioned way, leading to the described results of the study. Potentially restrictive factors that determine the validity of this thesis in particular with regards to its grounded theory methodology foundation have been discussed in Section 3.6 and Appendix 8.8. Further potentially limiting factors could in particular arise from the collection and analysis of the data.

With regard to data collection, the following factors have a potentially limiting effect:

- Data collection in this thesis was based on semi-structural interviews. These interviews were conducted with sales professionals who shared their professional experience they collected with various manufacturers and their partners. However, the hereby gathered data may reflect the subjective perceptions of the participants, which is why the generalisability of the findings may be subject to restrictions.
- The data collection took place between January 2018 and October 2018. The data does not originate from an empirical study involving longer periods of time, which may cause limitations. Nevertheless, the data reflect the experiences and observations that the participants have gathered over the years.
- The data was collected from participants who were able to collect their observations and experiences from only a limited number of manufacturers and partner companies. The participants were selected according to the requirements of theoretical sampling (cf. Section 3.4.2). Possible limitations that might arise from gaining more company-specific rather than broad general sector-specific insights were countered by selecting participants who had gained their experience with as many different companies as possible at different times.

With regard to the analysis of the data, the following aspects are noteworthy:

- The analysis of the data was inevitably carried out under a certain influence of my own professional experience (cf. Section 1.2 and Creswell, 2007). In order to counteract this effect as far as possible, e.g. the methods of constant comparison and of theoretical sampling have been applied.
- The findings of this thesis originate from my interpretations as a researcher. Other researchers could use the data to arrive at different results. In order to deal with the danger of misinterpretations, I further validated the interim findings gained in successive interviews as far as it was feasible within the

time and resource constraints limiting this study.

Even though GTM quality criteria of Corbin and Strauss (2015) have been met in the aforementioned manner regarding the consistency, quality and applicability of this study, the degree of representativeness and generalisability could be further increased. This could potentially be done by further validating the results, e.g. by means of further quantitative studies. This idea is considered in the next section with recommendations for further research.

7.6 Recommendations for Further Research

The results of this thesis give an overview of the perceptions of long-time experienced business professionals about the relevant factors for transformational change measures in IT infrastructure sales ecosystems.

Further insights into the research subject examined here could be gained if an IT infrastructure vendor would agree, e.g. as part of an action research project, to participate in a well-founded scientific accompaniment of its transformational change measures with its sales ecosystems. Such an approach could be used to test the practicability of the proposed framework and to further develop it. Furthermore, a further research project on the same topic could attempt to quantitatively validate the findings identified in this thesis.

Moreover, it would also be interesting to determine to what extent a generalised form of the “A.C.T.I.V.A.T.E.” transformation framework could be applied to other B2B-oriented sales ecosystems. Digitalisation and changing customer behaviour not only affect the IT infrastructure industry as change drivers, but are also very likely to have similar effects on other capital goods industries.

The study suggests the particular importance of trust, empowerment and ambidexterity in transformation efforts. It seems worthwhile to explore in more detail how trusting relationships and empowerment in sales ecosystems can be created, maintained and developed beyond the scope discussed here. Furthermore, it seems interesting to examine in more detail the factors that prevent manufacturers from adhering to existing ambidexterity concepts in

practice.

Finally, the research results suggest that employees of different ages have different ideas about what it means for them to work for an IT infrastructure vendor, how long and how intensively they want to be committed to the company, and what objectives they pursue by working for these organisations. It would therefore be interesting to investigate whether the concepts found are still applicable to companies that employ predominantly younger staff, such as IT start-ups.

7.7 Final Reflections

As the work on my thesis is now nearing completion, the time has come to reflect on its results and my personal journey to this point. While doing so, I must first think about how this journey began. As a Sales Director working for market-leading IT infrastructure companies, I observed a few years ago that the effects of training in sales organisations were rather limited. Many of my colleagues and team members, perhaps even myself, returned relatively quickly to day-to-day business and old sales behaviour patterns, despite the high costs associated with the trainings. I therefore began to reflect on how to increase the effectiveness of sales trainings at vendors and how a nice research project could be created. My first DBA research proposal was influenced by this idea.

During the preparation of this study I realised that I should think about my observations in a by far larger context. It became clear to me that the question of training effectiveness was only a marginal aspect of a major change process – the transformation of the IT infrastructure market and the sales ecosystems that serve it as a whole. Over time, therefore, the focus of my original research idea shifted to a comprehensive, qualitatively-oriented research project aimed at a holistic understanding of what was going on in our industry.

Today I can say that, despite the potential limitations of my study, I am very satisfied with the results and especially with the journey I have made to get there. This study has changed my way of thinking in a certain way, both personally and professionally. Most likely, I believe I have always been a thinker, but the work

on this thesis has trained my ability to ask “why” from different perspectives. Conducting interviews, transcribing, encoding and analysing them has taken quite a hold of me at times: I remember how, during the time of transcribing and coding my interviews, I unconsciously began to silently code the meanings of my friends' statements in other private conversations. Nevertheless, one of the most satisfying experiences I had during the research project was when my interview partners told me that I had made them think with my questions and that they had gained new insights for themselves through my inquiry.

As I am still working as a Sales Director in the IT infrastructure industry, I think I can say that not only I, but also the people I work with have a certain benefit from this study. As a manager, I am still confronted with the needs of the transformation of sales ecosystems, which is far from complete and probably will not be for a long time. Knowing about the close connections between customer value in digital transformation, the importance of partner alliances, the difficulties of transformation management and the high importance of organisational adaptations is in my opinion a competitive advantage for me and my employer.

However, in my view, the personal focus on employees, colleagues, partners and customers as individuals who have to deal with the phenomena caused by transformation is particularly significant. Trusting relationships with the people in my working environment were already important to me before I started this research project. However, the research project made it all the more clear to me that trust and empowerment are particularly important for the successful management of transformation processes in this environment.

Thus, at the end of this thesis, I can express my hope that other people working in IT infrastructure sales, be it at a manufacturer or at a sales ecosystem partner, can also benefit from the findings of this research project and act more successfully – and maybe also be a little more satisfied as working individuals.

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Appendix

8.1 Informed Consent Letter

Name and Address of interviewee	Date
Dear name,	
<p>My name is Ralf Kaltenbach, and I am a doctoral candidate at Sheffield Business School/Sheffield Hallam University (SHU) in collaboration with Munich Business School (MBS). I am conducting a research study about the transformation of German Information Technology (IT) infrastructure sales ecosystems during digitalisation, and I would like to invite you to participate.</p>	
<p>The influence of digitalisation on German B2B customers is enormous, the financial impact of adequate consideration ranges in hundreds of billions of Euros for both end customers and IT infrastructure vendors. Improved transformational change management frameworks can help IT infrastructure vendors to gain competitive advantage and to provide superior customer value in meeting digitalisation challenges. As a result of my research, vendors and ecosystem partners both will have access to improved transformation models which are applicable in practice.</p>	
<p>As an IT business professional, you are in an ideal position to give me valuable first-hand information from your own experience. If you agree to participate, this research will involve your participation in one or two interviews that will take about one to one and a half hour each. All interviews will be carried out with German senior managers, field sales managers and salespersons of vendors as well as with experienced professionals from ecosystem partners. The interviews will not relate to the responsibility in your role at your current employer, but to the experience you have gained throughout your career.</p>	
<p>Naturally, your participation in this research is entirely voluntary. It is your choice whether to participate or not. You may also change your mind later and stop participating even if you agreed earlier. During the interview, I will sit down with you in a comfortable place of your choice, or we will use conference services like Skype. If you do not wish to answer any of the questions during the interview, you may say so, and I will move on to the next question. No one else but the two of us will be present unless you would like someone else to be there.</p>	
<p>The entire interview will be tape-recorded, but no one will be identified by name on the tape. The tape will be kept at a safe place where nobody else has access to. Also, the information recorded is confidential, and no one else will have access to the information documented during your interview. Any information about you will have a number and your job title/managerial level on it instead of your name. Only I will know what your number is and I will lock that information up with a lock and key. It will not be shared with or given to anyone except my doctoral supervisors, the doctoral board and/or other persons who signed confidentiality/non-disclosure agreements in accordance with SHU/MBS research policy and standards. The interviews will be transcribed and analysed as a part of my dissertation thesis. Some of your statements may be quoted without reference to your name in the thesis. The thesis will be published, you will be provided with a digital or printed copy after its completion. A debriefing will be arranged upon your request.</p>	
<p>If you have any questions, you can ask them now or later. You may contact me anytime at</p>	
or	
<p>The research proposal has been reviewed and approved by the SHU Research Degrees Sub-Committee of Sheffield Hallam University and also got ethical approval to make sure that research participants are protected from harm.</p>	
<p>If you are willing to participate, please suggest a day and time that suits you, and I will do my best to be available. Please print this letter, sign and return it before or on the day of our meeting.</p>	
<p>Thank you very much for reading this letter.</p>	
Yours sincerely,	Agreed:
Ralf Kaltenbach DBA Student SHU/MBS	_____ Date/Signature participant

Figure 56: Template informed consent letter (own creation)

8.2 Interview Questionnaire

The following list contains a selection of questions that were asked to the interviewees during the data collection. The questions evolved during this phase, taking into account the principles of theoretical sampling set out in Section 3.4.2 and the research objectives stated in Section 1.4. The questions were asked depending on the competence areas and experience of the respective interview participants. Their sequential listing below does not mean that the participants were asked in that order, nor that the questions were given to all participants. Moreover, significantly more different questions were asked than can be listed here.

Collection of interview questions

- (1) Please introduce yourself: What professional roles have you held so far and to what extent have they been influenced by progressive digitalisation and changing customer behaviour? What were the main stages in your professional life?
- (2) How do you see the IT infrastructure markets changing?
- (3) How do changing customer behaviour and ongoing digitalisation affect the market according to your observation?
- (4) What effects do they have on sales?
- (5) What are the main effects for the manufacturers? What consequences do these effects have for the sales of IT infrastructure products?
- (6) In view of this, what characterises successful sales in the digitalisation environment, both from the manufacturer's point of view and from the sales ecosystem partner's point of view?
- (7) To what extent is the route-to-market for manufacturers changing?
- (8) To what extent would you assume that different technologies will be affected differently, i.e. for server, storage and network manufacturers?
- (9) Which change and transformation measures have you been able to observe that the manufacturers have implemented with regard to their own internal sales team?
- (10) What does "digitalisation" mean for sales ecosystem partners? What are the

typical challenges for sales ecosystem partners?

- (11) What does this mean for the cooperation with manufacturers?
- (12) To what extent do the change management methods and the corresponding theoretical tools you are familiar with play a role today in driving change at manufacturers, also in the interaction with their partners?
- (13) With regard to the involvement of channel partners: What do successful IT infrastructure manufacturers do differently from less successful manufacturers in the sales ecosystem transformation?
- (14) To what extent did deliberately driven change management exist in the companies you worked for?
- (15) What types of change management did you observe on the part of the manufacturers with regard to ongoing digitalisation?
- (16) In your opinion, was change management at the manufacturer supported organisationally? In which form did organisational changes take place to deal with the drivers of change?
- (17) How do manufacturers market/communicate successful changes internally?
- (18) How do IT infrastructure manufacturers react to these transformative changes with regard to their own sales and those of their sales ecosystem partners?
- (19) Do sales ecosystem partners actively promote change and transformation management according to your observation? What did this look like?
- (20) According to your observation, which abilities are missing on the part of the manufacturers with regard to change management?
- (21) What are the 3 main issues that prevent the sales employees at the manufacturer from actually doing what is actually necessary?
- (22) What are the challenges regarding overlay sales structures?
- (23) How would one actually have to goal an employee who is focused on digitalisation-related business opportunities?
- (24) What does the "Management Operating Rhythm" look like?
- (25) What would you want manufacturers and their managers to do in order to successfully manage the digitalisation requirements?
- (26) In your opinion, what would be desirable in terms of how manufacturers

should cooperate with partners in creating digital solutions?

- (27) In view of ongoing digitalisation, and from a sales perspective, what would you wish for from a partner?
- (28) According to your observations, how do good and bad partners differ in the transformation?
- (29) What would a change management framework look like from your point of view to move such a large organisation from “A” to “B”?
- (30) If you would lead a team, how would you adapt the team to changes in digitalisation and customer behaviour?
- (31) How would you like to have a mentor from the manufacturer's side so that partner companies can optimally adapt to the new world?
- (32) What distinguishes successful individual contributors in this change process?
- (33) What have you observed how do sales staff adjust to the changes?
- (34) What opportunities, or rather threats, did you recognise or perceive individually in this dynamic environment?
- (35) What would appeal to you as a salesperson if the manufacturer wanted to convince you of his transformation strategy?
- (36) How did the manufacturer for who you worked for support themselves during the change?
- (37) How did you personally adjust to these changes? Who has helped you with this? How should I imagine the change process?
- (38) What ideas do you have about how sales could have been better supported methodically, professionally and maybe even personally during transformation to make sales individuals more successful?
- (39) How did you manage this for yourself personally, also with your team, to meet these different challenges simultaneously?

Before finishing the interview:

- (40) Bearing in mind the context, is there anything we have not talked about yet?

8.3 Sample Memo

Concept: My impressions after the interview with William, Senior Sales Director with an IT Infrastructure vendor (1st interview).

Memo

I found the interview with William very inspiring. William himself spent many years as a senior sales executive in the IT infrastructure industry. He seems to have broadened his view so much that what he says could give good indications for a follow-up in the next interviews. At the beginning of the interview, William seemed a little arrogant to me because he spoke disrespectfully about certain sales professions. He was not afraid to call overlay sales employees idiots because only idiots would do such jobs. In William's opinion, really good salespeople would not accept such tasks. The same would apply to channel employees (follow-up i). William thought that a change in sales would be omnipresent, but believed that the companies had not learned how to deal with it. When he started talking about it, William became passionate and emotional and I realised that he was talking about something he really cared about. William outlined that there are at least two behaviours of salespeople at IT infrastructure vendors that are executed simultaneously. This is first and foremost that of "good corporate citizens" (as I call them), who behave as if they were driving change. And secondly, those, as William called them, Stone Age sellers who concentrated on selling the traditional products, which have nothing to do with digitalisation, and who made a considerable amount of money with it (follow-up ii).

There seems to be something like a "pseudo change management" that could be a consequence of the lack of courage or skill to change, as William reported it (follow-up iii). William explained that there could be at least two reasons for this: Firstly, in his view, many managers are not in a position to come to agreements with their employees so that the agreed change measures can actually be implemented and tracked and corrected sustainably (follow-up iv). Secondly, managers in higher positions, who are responsible for entire regions, are not in a position to assert themselves against the US headquarters and to ensure a suitable localisation of the American-influenced initiatives on the German market (follow-up v). In addition, William saw an increasingly decaying ability to think analytically and to deconstruct things in a systematic way in order to come to logical conclusions. This would be one of the reasons for unsuccessful transformation management; it would already begin with a lack of change management skills at the top management levels.

Furthermore, William believed that the vendors reward and praise the wrong things. Rewarded and praised would not be the actual performance of someone, but only the result, measured against the old standard products that would bring the current margins. This would lead to other salespeople being animated to imitate this behaviour if such "result" producers were brought on stage at the kick-off. In fact, initiating change and transformation, on the other hand, would not be

worthwhile. Only those who exceeded the short-term results and target agreements would be praised. William therefore considered the introduction of overlay sales teams to be an evasive and cowardly manoeuvre on the part of the management to avoid having to make any real changes and to be able to continue to concentrate on the existing business – so that the achievement of the current figures is not jeopardised (follow-up vi). Those who achieve and exceed the current short-term targets per quarter and fiscal year receive the recognition in the sales team that they are the real “leaders”, at least the informal “leaders”. William spoke of sales managers who should not mess with these salespeople in order not to suffer a loss of face and possibly the loss of their position. From my point of view, it is questionable who actually leads whom here. Is it the managers who lead the account managers due to these unwritten laws? Or is it the result-achieving individual contributors who lead their managers? And what can be done to keep managers in a leading position, even if the change is potentially uncomfortable for them and oriented towards transformation (follow-up vii)?

Sales ecosystem partners only played a subordinate role in William’s description, as they only reacted to new topics if they were already successfully placed on the market (follow-up viii). According to William, there were certain fears among the partners as well as among the employees that they would make mistakes by taking a progressive approach and leave their own comfort zone (follow-up ix).

William gave important insights into his observations about the people he has met over the years. He described how very different the performance culture used to be from his point of view, in contrast to today. As a young trainee he would have given his soul to start as a sales representative as early as possible in order to drive a nice car or to earn a considerable amount of money. The young people in sales today often do not want this any more. He saw a certain sense of satiety today as a reason for preventing ambitious behaviour – nobody wanted to torture himself anymore. And besides, there would be no more rebels. It seemed to him that a certain lethargy, characterised by self-optimisation, had spread – without any desire for friction. Some salespeople would be discouraged from passionately advocating change. But William also outlined that rebelliousness could be awakened in some employees so that it could be instrumentalised positively for transformational change. Instrumentalising is, I notice that when I write it, an ugly word. It’s reminiscent of manipulation. What William really wanted to say, I think, was that it was the opposite of what employees need. They need authenticity in leadership behaviour and no manipulation, not even in encouraging them to go ahead as role models. Encouragement may come from showing one’s own vulnerability on the part of the manager (follow-up x).

Finally, William also missed the necessary honesty in dealing with customers. Many customers had adapted to this by professionalising their purchasing behaviour. After all, William pointed out the importance of correct prioritisation in dealing with transformation. He used an analogue from electrical engineering and distinguished between active power and reactive power when controlling employees, and pointed out how important it is to concentrate fully on the right things. It was his observation that this was not happening. In the end, he returned to social changes and reported with a certain sadness that his own children were

no longer able to solve school tasks with paper and a pencil, preferring to look at the tablet and the electronic workbook. Could it be that people in IT infrastructure sales have difficulties in determining how to think in a sustainable and structured way because they think they can find everything at google and because of the fact that they are “constantly” distracted by their smartphone? Also in sales? (Follow-up xi). It also seems paradoxical that customers should allow manufacturers to help them with digital transformation when they have lost confidence in them due to commercial issues. I will pursue these questions in the next interviews.

Follow-up: (i) Why is overlay sales and channel unpopular? (ii) Why do companies that want to drive change compensate their employees so much for old products? (iii) Is there a lack of skill or courage to change? (iv) What is a good manager who can drive change from the perspective of the manager and from the perspective of the employee? (v) What characterises a good country manager in terms of transformation management? (vi) Do other interviewees also observe this kind of “pseudo-change management”, William talked about? (vii) What types of managers can deal with account managers who are informal leaders but slow down transformation, how do they do that? (viii) How do they encourage partners to drive new digitalisation topics for and with the manufacturer? (ix) What are employees and partners afraid of? (x) How does an “emotional buy-in” for change arise among employees? (xi) What role do modern tools such as smartphones, tools, etc. play in the transformation, are they obstructive or conducive? (xii) What can manufacturers do to regain customer confidence if they have lost it?

8.4 Code System

Open Code	Open Category	Axial Category
Digital Marketing	Customer Digitalisation Inspiration	Establishing Customer Digitalisation Companionship
Thought leadership		
Customer first		
Trusted advisorship	Trusted Digitalisation Advisorship	
Customer decision criteria		
Customer limitations		
Consulting customers	Business Value Creation	
Customer digitalisation requirements		
Strategic corporate (portfolio) repositioning	Business Strategy	
Future investments		
Competitive positioning accord. to Porter		
Strategy development		
Selling techniques	Raising the Bar	
Customer buying centre		
Internal communication	Internal Communication	
Manager as sales coach/development guide	Management & Leadership	
Applying pressure on field sales		
Management style		
Emotion management		
Leader attitude		
Motivation		
Clock builder		
Performance Management		
Valuing agility	Fundamental Sales Attitude	
Customer inspiration		
Executive engagement		
Relevance of direct sales team in indirect sales models		
Customer intimacy	Go-To-Ma Redefinition	Building Digital Partner Alliances
New Routes-to-market		
Strategy/BP Consulting/Outsourcer interaction		
Vendor driven sales ecosystems development		
Partner-driven ecosystems development		
Channel structure and development		
Partnermix		
Partnership categories		

Open Code	Open Category	Axial Category
Partner governance	Programmatic Governance	Building Digital Partner Alliances
Partner feedback/input		
Personal relationship		
Partner/Vendor task sharing		
Partner IC goaling		
Partner incentives		
Partner programmes	Partner Portfolio Development	
Partner digitalisation portfolio strategy		
Partner specialisation		
Joint customer solution development	Field Sales Alignment	
Partner Mgmt. impact		
Partner/vendor field sales alignment		
Sales-channel-partner collaboration enforcement		
Partner sales strategy and tactics	Partner Enablement	
Partner enablement		
Partner skill enhancement methods		
Combined Partner/Vendor trainings		
Digital solution incubation		
Partner differentiation factors	Partner Inspiration	
Partner inspiration	Change Encouragement	
Change encouragement		
Change training and enabling	Trust and Empowerment	
Lacking Trust		
Lacking empowerment	Skill Development	
Vendor Field Sales Skills		
Vendor Middle Management Skills		
Vendor Skill enhancement methods		
Vendor Executive Skills		
Superficiality	Sales Employee Reaction to Transformational Change	
Individuals dealing with change		
Pain point avoidance		
Sales comfort zone		
Overcoming fear		
Non-monetary human needs		
Individual's freedom		
Conformity survival strategy		
Whitewashing survival strategy		
Surviving as a family-in-the-company (emot. Ecosystem?)		
		Taking Care about Sales Individuals

Open Code	Open Category	Axial Category
Meanings of success		Taking Care about Sales Individuals (cont'd)
Inner resignation		
Critical non-conformism	Sales Staff Participation and Commitment	
Corporate and individual egocentricity		
Creation of personal buy-in		
Buzz-wording		
Informal leadership structures		
Short-term/Quarter-focus	Business Cadence and Reporting	Redefining Transactions, Sales Organisation and Procedures
Balancing current and future business		
Forecast and reporting		
Levers for digitalisation change results	Transformational Change Management Governance	
Levers for digitalisation sales success		
Pseudo Change Management		
CM Institutionalisation		
Change resistance and obstacles		
Change progress measurement		
Applied Transformational Change Mgmt		
Change Management tools		
Change effort reward	Organisational Readiness	
Goaling, planning and performing		
Next-Gen Organisation		
Workforce reduction/adaption and cost saving		
Cloud transition goaling issues		
Sales recognition		
Overlay sales		
Executive and Manager replacement		
Vendor SME/vertical business expertise		
BD and connecting the dots for digitalised solutions		
Talent allocation		
Centres of competence		
Account setup		
Channel setup		
Partner orga setup		
Virtual Partner Collaboration	Agile Process Development	
Vendor process development (internal)		

Open Code	Open Category	Axial Category
Partner process development (external)		Redefining Transactions, Sales Organisation and Procedures (cont'd)
Discount procedures		
Process acceptance		
Forecasting		
CRM-Tools	Software Tools	
Virtual collaboration and communication		
Tool development		
Salestools as Mgmt. support		
Partner expectations of vendors	Sales Ecosystem Partner Expectations	Context, Causal and Intervening Conditions
Vendor loyalty		
Risk-sharing		
Vendor opportunism	Evolving Customer Expectations and Behaviour	
Evolving customer needs		
Customer IT know-how maturity level		
Customer data as an asset		
Digitalisation as change driver for IT infrastructure vendors	Progressing Digitalisation	
Cloudification		
Meaning of Digitalisation		
Commoditisation		
Digitalisation as change driver for Ecosystem partners		
Infrastructure Technology evolution		
Digitalisation as a hype		
Value of IT		
Partner SME/vertical business expertise	Vendor's Sales Ecosystem Expectations	
Partner added value		
Vendor partner portfolio/landscape		
Partner control and direction		
Ecosystem sales partner opportunism		
Vendor expectations of partners		
Culture of Team diversity	Culture and Values	
Culture of inconsistency		
Culture of open discussion, listening and "Why"		
Corporate Values		
Culture of fault tolerance		
Culture of discontinuity		
Culture of transparency		

Open Code	Open Category	Axial Category
Culture of teaming		Context, Causal and Intervening Conditions (cont'd)
Culture of respect		
Culture of simplicity		
Culture of corporate family		
Culture of personal development		
Culture of (management) responsiveness		
Culture of non-accountability		
Culture of honesty		
Culture of credibility		
Culture of humanity		
Culture of "being stuck"		
Culture of punishment		
Shareholder value		
Machine/Human competition		
Millennials/Generation Y		
Speed of change		
US HQs ignoring local needs	Consideration of Regional Differences	
US/UK/GER Cultural match		
Sociocultural change and globalisation		
(Market-) Complexity	General Market transition	
Channel evolution		
"Gold rush is over"		
Future predictions		
IT firm consolidation		
Service and solution orientation		
Outsourcing trend		
Shifted power balance		
Legal and Compliance	Legal and Compliance	

Table 18: Code system that results from GTM data analysis (own creation)

8.5 Contexts, Causal and Intervening Conditions for the Main Categories Found

As already indicated in Section 6.1, the analysis and discussion of the action strategies in the course of the derivation of the main categories in the paradigmatic model also considered the causal and intervening conditions, as well as the contexts of the phenomena in the necessary depth. The contextual, causal and interventional conditions include the remaining open categories discussed in Section 4.2 (cf. Table 9 to Table 13 with submodels I - V).

These are the following:

- Progressing Digitalisation (cf. Section 4.2.2.2)
- Evolving Customer Expectations and Behaviour (cf. Section 4.2.2.3)
- Sales Ecosystem/Partner's expectation (cf. Section 4.2.5.1)
- Vendor's Sales Ecosystem expectation (cf. Section 4.2.5.2)
- Culture and Values (cf. Section 4.2.6.1)
- Dynamics of Shareholder and Sales staff interests (cf. Section 4.2.6.2)
- Consideration of Regional Differences (cf. Section 4.2.6.3)
- Legal and Compliance (cf. Section 4.2.6.4)
- General Market Transition (cf. Section 4.2.2.1)

As the detailed analysis has shown, these conditions have different meanings depending on the perspective. This means that they can be classified and discussed as intervening, contextual or causal, depending on the main category. Furthermore, this type of systematic classification shows that in a few cases, some of them cannot be considered meaningful for certain main categories on the basis of the research results. These cases are consequently marked as "n/a" for "not applicable".

Table 19: Context and causal/intervening conditions for five main categories (own creation)

	Establishing Customer Digitalisation Companionships	Transforming Vendor Sales Approach	Building Digital Partner Alliances	Taking Care about Sales Individuals	Redefining Transactions, Procedures and Organisation
Progressing Digitalisation	<i>Causal Condition</i>	<i>Causal Condition</i>	<i>Causal Condition</i>	<i>Causal Condition</i>	<i>Causal Condition</i>
	Progressive digitalisation forces vendors to intensify their customer relationships and raise them to a strategic level in order to differentiate themselves from the competition.	Progressive digitalisation requires adaptation of the sales methodology and organisation on the manufacturer side, as well as proactive transformation management.	As digitalisation progresses, customer needs are created that vendors can only meet with the help of an adapted and diversified partner network.	Progressive digitalisation creates a different working environment for each individual sales employee, to which they have to adapt individually.	Progressing digitalisation changes the procedural and organisational framework conditions with regard to the acquisition and maintenance of digitalisation competence, process speed and allocation of sales tasks.
Evolving Customer Expectations and Behaviour	<i>Context</i>	<i>Context</i>	<i>Intervening Condition</i>	<i>Intervening Condition</i>	<i>Context</i>
	The changing customer behaviour creates the stage on which the establishment of the strategic customer relationship takes place in a new quality and is therefore specifically part of the phenomenon.	The changing customer behaviour sets the standards for a changed sales approach on the part of the vendors and therefore belongs specifically to this phenomenon.	The changing customer behaviour creates the broad structural context in which the further developed sales ecosystems have to prove themselves with their coordinated and complementary offerings.	Changing customer behaviour creates framework conditions that affect the personal feelings of sales employees and restrict or promote their individual efforts to change.	The changing customer behaviour determines the specific parameters, for example with regard to customer expectations regarding process speed, which the manufacturers and their sales ecosystem partners have to deal with procedurally and organisationally.
Sales Ecosystem/ Partner's Expectation	<i>Intervening Condition</i>	<i>Intervening Condition</i>	<i>Context</i>	<i>Intervening Condition</i>	<i>Context</i>
	The formation of special customer relationships can be limited by the sales ecosystem partners. For example, the loyalty expectations of certain sales ecosystem partners, who already generate larger revenues in traditional standard business, may discourage manufacturers from including new partners who would be useful in building the Digital Customer Companionship.	Sales ecosystem partners work in the indirect sales model at the forefront of the customer. They are the first to learn which customer requirements must be satisfied in the digital solution environment. Partners who communicate their expectations to the manufacturers have a positive effect on their sales transformation.	Partner expectations belong specifically to the phenomenon of formation and further development of digital partner alliances. This further development can be successful if their business expectations of manufacturers are met, e.g. with regard to meeting sales targets, increasing their own strategic relevance to end customers and completing the digital solution portfolio.	The expectations of sales ecosystem partners exert additional pressure on the employees in addition to the manufacturer's change-relevant expectations of its sales staff. For example, partners have expectations regarding loyalty across companies, intelligent inspiration and trust in manufacturer's sales staff.	Partner expectations belong specifically to the phenomenon of process and organisational adaptation, as they set the standards with regard to the process speed and quality of results that have an external effect.

Table 20: Context and causal/intervening conditions for five main categories (own creation, continued i)

	Establishing Customer Digitalisation Companionships	Transforming Vendor Sales Approach	Building Digital Partner Alliances	Taking Care about Sales Individuals	Redefining Transactions, Procedures and Organisation
	<i>Intervening Condition</i>	<i>Intervening Condition</i>	<i>Context</i>	<i>n/a</i>	<i>Context</i>
Vendor's Sales Ecosystem Expectations	Meeting the vendor's expectations on the part of partners can affect the ability of manufacturers to build special strategic relationships with customers. In this way, the partner can take over tactical operational sales tasks completely and thus give the manufacturer room for strategic sales work.	The manufacturers' expectations towards their partners must be closely aligned with the manufacturers' expectations towards their own sales staff so that a symbiotic division of tasks can be carried out in the indirect sales model ("who does what?").	Vendors' expectations towards their sales ecosystem partners belong specifically to the phenomenon of alliance formation. These expectations form the strategic basis for building digital partner alliances.	The interview's results did not reveal any evidence that manufacturers' expectations of partners affect this category.	The process-related expectations of the manufacturers towards their sales ecosystem partners belong specifically to the phenomenon of alliance formation. These expectations define the tactical-operational basis for building digital partner alliances.
	<i>Intervening Condition</i>			<i>Context</i>	<i>Intervening Condition</i>
Culture and values	The corporate culture and values of the infrastructure vendor influence the strategies used in the interaction with customers, partners and the vendor's own sales force. Internal and external trust in customers and partners, individual freedom for salespeople, fault tolerance and an encouraging culture in new sales channels can have an accelerating effect. Dealing with sales employees who think entrepreneurially but are rather unadapted and who want to implement new ideas independently can determine the results of transformational change measures. A culture of appreciation for independent thinking and decentralised action rather than mandatory compliance with manufacturer initiatives can have a positive impact on business agility in dealing with disruptive change.			Corporate culture and values belong in a specific form to the phenomenon of individual change efforts on the part of sales employees. Corporate culture is shaped, among other things, by whether and in what form companies strive to meet the emotional needs of their employees.	Corporate culture and the infrastructure vendor's values influence the strategies used by manufacturers to adapt their processes and organisation to market needs. For example, the manufacturer's openness to partner suggestions for increasing agility in the sales processes determines their implementation.
	<i>Intervening Condition</i>				
Dynamics of Shareholder and Sales Staff interests	The interests of the shareholders create a broad structural context for all five main categories, which can have a restrictive or beneficial effect on the strategies applied. The establishment of special strategic relationships with end customers requires a special (pre-sales) investment that can only be justified for certain customers from the shareholder's point of view. Partner enablement expenses for strategic alliances are limited for the same reasons. Staff positions for the coordination of transformational change management may be at the expense of quota-carrying employees. The coverage of individual employee needs takes place under consideration of productivity interests. In addition, shareholder interests require mitigation of risks that may arise, for example, as a result of process accelerations in the approval process in sales.				

Table 21: Context and causal/intervening conditions for five main categories (own creation, continued ii)

	Establishing Customer Digitalisation Companionships	Transforming Vendor Sales Approach	Building Digital Partner Alliances	Taking Care about Sales Individuals	Redefining Transactions, Procedures and Organisation
Consideration of Regional Differences	<i>Intervening Condition</i>	<i>Intervening Condition</i>	n/a	<i>Intervening Condition</i>	n/a
	Customers in Germany may be more critical and reluctant to purchase new IT infrastructure than customers in Anglo-Saxon countries. This may have a limiting effect on the ability to raise customer relationships to a strategic level.	A rather sceptical and cautious approach to the implementation of transformational change management, which, according to participant observations, is frequently encountered in Germany, can limit the rapid implementation of change measures.	Relevant sales ecosystem partner companies of IT infrastructure manufacturers in Germany are often equally influenced by Anglo-American attitudes. The research participants did not report any regional differences in this regard, although they may exist in individual cases.	The expectation of the US headquarters and/or UK-based EMEA management to deal with change requirements in an opportunity-oriented and less problem-oriented manner can have a restricting effect on individual employee coping strategies.	The interview results did not reveal any evidence that regional differences affect this category.
Legal and Compliance	<i>Intervening Condition</i>				
	Legal conditions limit the customer-related exchange of information in the IT infrastructure sales ecosystem, for example through regulation by the GDPR in sales campaigns and in sales-related processes. These rules must be obeyed both internally and externally.				
General Market Transition	<i>Intervening Condition</i>	<i>Context</i>	<i>Intervening Condition</i>	<i>Intervening Condition</i>	<i>Intervening Condition</i>
	Product commoditisation, increasing comparability of products and increasing market transparency, as well as the trend towards manufacturer consolidation are shifting the balance of power in favour of customers. This has a limiting effect on the ability of vendors to form digitalisation companionships with their customers.	The general market transition belongs specifically to the phenomenon of manufacturers' sales transformation as it defines the set of conditions with which the coping strategies take place. This appears to be true, for example, in view of the decreasing opportunities for differentiation in the area of IT infrastructure products.	The pressure to change affecting existing and potential sales ecosystem partners, for example due to the trend towards consumption-based service models, is changing the balance of power between manufacturers and partners.	Increasing complexity in the digitalisation environment, decreasing numbers of employees in manufacturer sales as well as increasing speed requirements in transactional business limit the time for personal development of sales individuals.	New agile competitors without "legacy" business define new standards in terms of speed of transactions compared to established manufacturers and thus promote the need for adjustment in procedural terms.

8.6 Dependencies and Relationships between derived Categories

The main categories derived in Sections 6.2.1 to 6.2.5 have numerous cross-connections. These have been evaluated during the in-depth data analysis and theory building according to the GTM principles of Corbin and Strauss (1996, 2015). For example, there is a close mutual relationship between the main categories “Building Digital Partner Alliances” and “Establishing Digital Customer Companionship”: It seems advantageous to be able to rely on a powerful Digital Alliance Partner sales ecosystem to optimally support sales differentiation during the sales process in order to achieve a “Digital Trusted Advisor Status”. On the other hand, it appears to be necessary for the vendor to adequately position such partners at the end customer within the scope of its own sales efforts.

Table 22 gives an overview of the main relationships identified between the main categories. For this purpose, a distinction was made between mutual requirements and benefits between the individual categories.

Table 22: Relationships between core categories in terms of mutual benefits and requirements (own creation)

Impact on...		Building Digital Partner Alliances	Establishing Customer Digital Companionship	Redefining Transactions, Sales Organisation and Procedures	Taking Care About Sales Individuals	Transforming Vendor Sales Approach
		Benefits				
Building Digital Partner Alliances	R e q u i r e m e n t s		Availability of a complementary range of solutions agreed between manufacturers and partners	Established standards for partner expectations in terms of process speed and organisational agility	Assurance of adequate partner competence profiles that enable the manufacturer sales staff to focus on their tasks.	Establishment of a digital partner landscape, which is embedded in the transformation strategy of the manufacturer.
Establishing Customer Digital Companionship		Positioning of the sales ecosystem as a solution provider for strategic customer development		Consideration of customer expectations with regard to process speed and organisational agility	Orientation for manufacturer's sales staff regarding customer expectations in the digitalisation environment	Consideration of modern customer requirements in the creation and implementation of the vendor's sales transformation blueprint
Redefining Transactions, Sales Organisation and Procedures		Simplification of cooperation with digital alliance partners	Elimination of distracting process effects that affect the employee's focus on customers		Large-scale exemption of employees from transactionally oriented tasks	Ensuring the "pace keeping" of process and organisational agility with the progress of internal transformation
Taking Care About Sales Individuals		Promotion of cooperation with partners at individual employee level	Promotion of entrepreneurial basic attitudes on the part of employees for the benefit of customers	Empowerment of employees to deal effectively with changing procedures and forms of organisation		Empowerment of employees to contribute productively and personally to the change process.
Transforming Vendor Sales Approach		Inclusion of the partner landscape in the vendor sales transformation approach	Further development of the vendor sales organisation in accordance with customer requirements	Framing on the part of the vendor sales transformation for the further development of processes and organisation	Promotion of development opportunities for sales staff in customer cooperation	

8.7 Further Sales Transformation-related Reflections on the Core Category Elements

The core category developed in this GTM study contains three essential integrating elements represented by trust, empowerment and ambidexterity. Corresponding literature references to these terms have already been made in Section 6.2.6. The following presentations expand on these considerations with regard to their potential meaning in sales transformations.

(A) The general role of ambidexterity

The aspect of ambidexterity was worked out on the basis of the research findings identified in this thesis as an essential integrating element of the main categories found. In the core category, the term ambidexterity underlines the importance of equal and simultaneous coverage of transactional *and* transformational activities during the transformation of the IT infrastructure sales ecosystem. In the following, the concept of ambidexterity is examined in more detail in a scholarly context to support a comparison of this important framework element with the existing literature.

Some research participants referred during the interviews to organisational interrelationships that were important from their point of view. These statements were taken into account during the development of the transformation framework (cf. Section 6.2.7). Feedback on specialised sales overlay teams and also feedback on personally experienced overload situations during the sales transformation could be analysed using the theoretical concepts of contextual and structural ambidexterity in more depth³².

³² Some participants reported on conflicts that could be classified as difficulties in the implementation of structural ambidexterity (e.g. with regard to implementation of sales overlay teams) or contextual ambidexterity (e.g. with regards to the potential internal conflict of sales employees as to whether they were expected to work tactically operationally on day-to-day business or long-term oriented to digitalisation projects). Comparable tensions seem to exist in cooperation with sales ecosystem partners.

The literature distinguishes the concepts of contextual and structural ambidexterity in light of the need to simultaneously perform exploratory and exploitative tasks. (Tushman and O' Reilly, 1996, p. 24; Birkinshaw & Gibson, 2004b, p. 209). Alternative models that dispense with simultaneity by taking into account successive phases of exploration and exploitation³³ do not seem appropriate in the context of advancing digitalisation.

However, if exploitation and exploration are to take place simultaneously, the management task is to organise this concurrence. The concepts of structural and contextual ambidexterity differ from each other as shown in Table 23.

	Structural Ambidexterity	Contextual Ambidexterity
Achievement of ambidexterity through	Alignment-focused and adaptability-focused activities are done in separate units or teams	Individual employee time division between alignment-focused and adaptability-focused activities
Decision making authority about the split between alignment and adaptability	At the top of the (sales-) organisation	On the front line by salespeople
Role of top management	To define the structure, to make trade-offs between alignment and adaptability	To develop the organisational context in which individuals act
Nature of roles	Relatively clearly defined	Relatively flexible
Skills of employees	More specialists	More generalists

Table 23: Structural ambidexterity vs. contextual ambidexterity in sales organisations (own creation, adapted from Birkinshaw & Gibson, 2004a, p. 50)

Structural ambidexterity refers to constellations in which organisations encounter the management of the trade-off between exploitation and exploration with dual

³³ Instead of the simultaneous fulfilment of explorative and exploitative requirements, these could also be addressed sequentially. Such a model, in which long phases of exploitation (equilibrium periods) follow phases of exploration (revolutionary periods), is proposed by Romanelli and Tushman, 1994, and Gupta, Smith and Shalley (2006).

structures. In these dual structures, certain business units focus on explorative tasks, other business units on those with an exploitative character (Duncan, 1976; Birkinshaw & Gibson, 2004a; Raisch & Birkinshaw, 2008). In the research context of IT infrastructure sales ecosystems, structural ambidexterity forms exist, for example, when manufacturers decide to establish overlay sales or specialty sales organisational forms whose task it is to focus on certain product areas in the area of digitalisation.

In contrast, contextual ambidexterity combines exploitative and explorative tasks at an individual employee level. So-called ambidextrous individuals take the initiative for tasks that go beyond their actual area of responsibility, are cooperative and team-oriented, build internal, cross-departmental links and are overall “multitaskers” who carry more than “one hat” (Birkinshaw and Gibson, 2004a, p. 49).

(B) Ambidexterity in IT Infrastructure sales ecosystem transformations

In order to compare the presented ambidexterity concepts with the transformation framework for IT infrastructure manufacturers developed in this study, it appears reasonable to look at recent research regarding exploitation and exploration concepts regarding other fields than sales. The distinction between the two terms and the analysis of the tension between them dates back to the early 1960s (He & Wong, 2004, p. 482). Since then, however, a variety of different definitions have emerged, some of which are divergent and not always consistent (Jansen, 2005, p. 19; Jansen, van den Bosch, Volberda, 2005, p.351; Vogel, 2011, p. 5). Fojcik (2015, p. 53) therefore points out in his work that recent ambidexterity research has begun to classify the ambidexterity dimensions exploitation and exploration with the help of a general input-process-output relationship (cf. Tempelaar, 2010, and Rosenkranz, 2012). According to this concept, the strategic orientation of the process applied in an organisation between input and output is determined by different entrepreneurial orientations. This orientation can refer to *existing* technologies, products, resources and competencies, which refers to an *exploitation*-oriented character. On the other hand, it may also have an *exploration*-oriented character in order to address *new* markets.

Table 24: Application of a specific input-process-output ambidexterity model to the field of indirect IT infrastructure sales (own creation based on and adapted from Fojcik, 2015, p. 55)

Input			Process		Output			
	Exploitation	Exploration		Exploitation	Exploration	Exploitation	Exploration	
Structure	Centralised sales responsibility, formal, closed, functional	Decentralised sales responsibility, informal, open, project-oriented	Structural alignment/activity pattern	Orientation towards existing sales methodologies and processes that are marginally adapted	Organic, decentralised, informal, open, project oriented	General objective	Focus on existing (legacy) products and their distribution	Sale of new digitalisation-relevant products and services
Control guidelines	Tight, detailed sales target specifications, ongoing reviews	Loose planning and goal specifications, rare inspections		Strong profit, cost and efficiency orientation	Strong focus on growth and flexibility	Strategy-based objectives	Exploitation of existing sales potential	Development and implementation of new and improved sales ecosystems
Control elements	Tight process and result management with sales reviews, forecast calls, QBRs, etc.	Self-control of sales employees, trust as a control element		Focus on short-term planning horizon and corporate success	Focus on long-term planning horizon and corporate success beyond the current fiscal quarter	Innovation- and technology-based objectivess	Ensuring the sales of incremental innovations	Radical focus on the sale of transformative (cloud-based) technologies
Incentive schemes	Incentive systems based on individual sales success	Incentive systems based on the sales success of the company as a whole, taking into account maldevelopments		Low risk appetite	High risk appetite	Knowledge-based objective	Improvement of existing sales competencies	Focused competence enhancement in the digitalisation sector for sales ecosystem partners and own sales teams
Leadership and Culture	Transactional, authoritarian, top-down, command & control oriented	Transformational, visionary, participative and relationship-oriented		Experience-based improvement in the sales process and incremental development of the sales ecosystem	Systematic experimentation with the unknown and with newly identified sales ecosystem partners as well as with new sales methods in the digitalisation environment	Organisation-based objectives	Ensuring adaptability to continual change	Ensuring adaptability to discontinuous changes
General skills	Skills related to the application of predefined sales methods	Skills related to entrepreneurial thinking and digitalisation-orientated technical and business competencies						

Table 24 applies this alternative view to the case of the IT infrastructure manufacturer who has to choose a strategic orientation for the transformation of its sales ecosystem that determines the degree of exploitation and exploration to be applied.

(C) The Role of Empowerment and Trust

In addition to ambidexterity, the aspects of empowerment and trust have evolved as an essential connecting element during data analysis and are therefore also represented in the core category. As outlined in Section 6.2.6, detailed empowerment definitions refer to four essential dimensions that are suggested to be important in addressing employees so that they actually feel empowered. These are meaningfulness, competence, self-determination and personal impact (Spreitzer, 1995). The section reflects also on the various scholarly definitions of these components (Thomas & Velthouse, 1990; Gist, 1987; Deci, Connel, & Ryan, 1989; Ashfort, 1989).

In the same section, four trust-related beliefs were identified that seem to determine the willingness of employees to accept organisational change. These are (1) the conviction that others (i.e. their managers) stand by their word and fulfil their obligations, (2) the expectation that others communicate openly and honestly, (3) the expectation that others who lead the change process are actually capable of doing so, and (4) the belief that the managers also seriously consider the interests and needs of the (subordinated) participants in the change process (Loon & Wong, 2018, p. 1057). As it turned out during the interviews, meeting these criteria does not seem to be always a given, which is in compliance with other studies³⁴ (e.g. Strout, 2002).

Table 25 contains an exemplary application of the cited empowerment and trust definitions with regards to internal/external ecosystem relationships and with a view to customers.

³⁴ According to Strout (2002, p. 44), 47.4% of sales executives suspected that their employees had already lied to their customers. Approximately 75% localised the reason for this in the will of the employees to achieve their sales goals.

Table 25: Application of specific criteria of trust and empowerment research to the results of this thesis and its findings on indirect IT infrastructure sales ecosystems (own creation)

	Application of the criteria to manufacturers sales staff	Application of the criteria to Sales Ecosystem Partners	Application of the criteria to customers
Empowerment component (according to Spreitzer (1995), Thomas & Velthouse (1990), Gist (1987), Deci, Connel & Ryan (1989), and Ashfort (1989))			
Meaning	Employees can understand the purpose of the transformational sales change process and the meaning of the business scenario.	Partners can understand the unique role the vendor attributes to them in the indirect sales model for digitalisation solutions and what this means to them and their business.	The above criteria are not applicable to customers. Nevertheless, empowerment literally also plays a role for customers, since digitalisation technologies help customers to successfully shape the digital transformation of their business processes.
Competence	Employees must be enabled to position "preference setting" to new technologies at the customer in the indirect sales model and to manage the ecosystem.	Partners must be empowered by the vendor to sell and implement new digitalisation technologies to the customer.	
Self-determination	Employees can exercise a certain entrepreneurial freedom within the IT Infrastructure vendor and feel appropriate autonomy in dealing with customers and partners.	By definition, sales ecosystem partners have entrepreneurial autonomy in the indirect sales model.	
Impact	Vendors must provide employees with solutions that deliver customer value during digital transformation so that employees can achieve strategic and operational impact.	Vendors must provide sales ecosystem partner solutions that deliver customer value and differentiation opportunities for partners during digital transformation.	
Trustworthiness generating measures (according to Loon & Wong, 2018)			
Fulfill own obligations	(Senior) Sales management of the IT infrastructure vendor personally fulfills the role model requirements regarding internal transformation management.	The IT infrastructure manufacturer acts towards his partners in a predictable, useful, loyal and resilient manner.	The IT infrastructure manufacturer acts towards its customers in a predictable, useful, loyal and resilient manner.
Open and honest communication	(Senior) Sales management of the IT infrastructure vendor communicates about goals and progress of the transformation projects.	Considering appropriate limitations, the IT infrastructure vendor communicates to the sales ecosystem partners about the transformation as if the partners were part of their own organisation.	The IT infrastructure vendor communicates openly and honestly with customers, even if this endangers possible sales achievements in the short term.
Ability to manage change processes	The sales transformation management of the IT infrastructure manufacturer is institutionalised, employees are professionally and methodically trained.	The partner channel governance of the IT infrastructure vendor is institutionalised, the programmatic partner enablement part mediates sales and technology know how.	The IT infrastructure vendor's products and services enable customers to transform their business digitally.
Consideration of the interests of others	(Senior) Sales management of the IT infrastructure vendor knows and prioritises the personal needs of employees in the transformation process.	The IT infrastructure manufacturer takes commercial partner interests into account and does not play different partners off against each other.	The IT infrastructure manufacturer thinks and acts customer- and partner-centric.

8.8 GTM Checkpoints regarding Methodological Consistency, Quality and Applicability

Section 3.6 explains potential validation issues and evaluative criteria of the study carried out and refers to a checkpoint framework, introduced by Corbin and Strauss (2015) to further prove methodological consistency as well as quality and applicability of the study results. These checkpoints are listed below, each of them with an in-depth description of how the criteria are met for this study.

a) Methodological consistency of this study, according to criteria from Corbin and Strauss (2015, p. 353)

#	Checkpoint	Description of applied strategies in this study
1.	What was the target sample population? How was the original sample selected?	The target population consisted of 24 business professionals working in IT infrastructure sales who were willing to talk about their extensive professional experience gained with manufacturers and sales ecosystem partners. The sample was successively extended on the basis of the results found and oriented to questions that arose in the course of the interviews.
2.	How did sampling proceed? What kinds of data were collected? Were there multiple sources of data and multiple comparative groups?	Most of the data collected comes from interviews conducted with business professionals, supplemented by a video available on the internet with a speech of an industry leader on digitalisation. The interviewees themselves were from three groups, i.e. participants who have gained their professional experience mainly as managers of an IT infrastructure manufacturer, as individual contributors in sales at such manufacturers, or at their sales ecosystem partners.
3.	Did data collection alternate with analysis?	Each interview was analysed immediately after its completion, i.e. within 1-2 days, and summarised appropriately with regard to the most important findings gained. The first analysis served as a basis for a later, more in-depth analysis and for identifying further questions that seemed appropriate for further clarification of the research question.
4.	Were ethical considerations taken into account in both data collection and analysis?	Yes, all interviewees took part in the research project voluntarily. Each of the participants was sufficiently informed about the project in advance and asked to agree to participate by means of the informed consent letter (cf. Section 8.1). All of the commitments listed here to protect the interests of the participants have been complied with. The anonymity of the participants was ensured by the consistent use of alias names in the recording and analysis process. Data was stored on computers in encrypted form. Wherever individuals were intentionally or unintentionally named by the participants, their names were also made anonymous. Company name entries were alienated. In the case of cloud providers, for example, this was only waived if the references in question were of a general nature, which are in any case publicly available and customary.
5.	Were the concepts driving the data collection arrived at through analysis (based	The concepts were created after data collection and evaluation. At the time of the first two interviews, only a rudimentary questionnaire existed, which was completed over time and refined

#	Checkpoint	Description of applied strategies in this study
	on theoretical sampling), or were concepts derived from literature and established before the data were collected (not true theoretical sampling)?	until the end of the interview phase. The further questions were adapted on the basis of the concepts found to date.
6.	Was theoretical sampling used, and was there a description of how it proceeded?	Yes, the first interviews were conducted to gain an overview of the diversity of the research topic. The results of the first analysis of these and all subsequent interviews usually gave good indications of required further interview candidates. If, for example, an interview participant (from the role of the manufacturer) spoke about the expectations of sales ecosystem partners, further suitable interview partners were identified in the interviews following the analysis, who were able to reflect the situation from their (partner) point of view. The conceptualisations gained in this way and the elements of the main categories (e.g. the role of empowerment) were successively tested in the course of the later interviews against the background of the research problem.
7.	Did the researcher demonstrate sensitivity to the participants and to the data?	Yes. I held back as much as possible during the interviews with controlling objections and offered all participants the opportunity to express themselves freely on the questions I have asked without any influence. As salespeople, a few participants sometimes tended to stray too far from the relevant subject area. In such situations I repeated the question and specified it for the participant. In cases where respondents did not want to talk about certain topics, which was rare, this was respected.
8.	Is there evidence or examples of memos?	Yes. Please refer to Section 8.3.
9.	At what point did data collection end or a discussion of saturation end?	The duration of the data collection was mainly determined by the following factors: a) availability of participants who were willing to openly respond to relevant questions in the research context, b) feasibility of the study within a reasonable time frame, c) occurrence of redundancy of statements by different participants at the end of the interview series, which had the same significance to the research topic. The data collection ended after twenty-four interviews, which offered material for more than 3000 codings. The result of the study in the form of the framework for the management of transformational changes in indirect IT infrastructure sales shows that the substance of the data found is sufficient.
10.	Is there a description of how coding proceeded along with examples of theoretical sampling, concepts, categories, and statements of relationships? What were some of the events, incidents, or actions (indicators) that pointed to some of these major categories?	Yes, the data collection carried out as part of this thesis comprised twenty-four interviews, the associated data analysis resulted in 3442 codings, which evolved into 172 open codes and thirty-three open categories in the process of conceptualisation. This resulted in 5 (axial) main categories in the course of further analysis, which culminated in one core category. The names of the codes and categories were adapted and extended as the analysis progressed, and they were frequently regrouped as the analysis continued. For example, interview statements pointing to difficulties in terms of understanding between sales employees at management level from different countries during change processes were openly coded as "US/UK/Ger cultural match". This was later developed into an open category "Social Evolution"

#	Checkpoint	Description of applied strategies in this study
		with other open codes such as “Millennials/Generation Y”, “Speed of Change” and “Sociocultural Change and Globalisation”. The allocation to other shareholder-relevant codes, however, no longer seemed consistent from a certain point in time, which is why two other open categories evolved from this, namely “Consideration of Regional Differences” and “Dynamics of shareholder and staff interests”.
11.	Is there a core category, and is there a description of how that core category was arrived at?	Yes, a core category was developed. It is called “Promoting transformational change in IT infrastructure sales ecosystems through trust, empowerment and ambidexterity”. This core category contains three essential elements: First, it emphasises the importance of building and maintaining mutual trust during transformational change processes between all stakeholders within the manufacturer organisation, between it and its partners, and toward customers. To a certain extent, trust also forms the basis for the necessary empowerment, which the participants in all instances need in order to be able to act agilely and entrepreneurially. Finally, the collaboration in the IT infrastructure sales ecosystem must be organised and transformed taking into account ambidexterity aspects to ensure balanced exploitation of current and exploration of future business opportunities. The core category evolved as a result of careful data analysis and as an outcome of constant comparison of findings and insights gained during the study.
12.	Where there changes in design as the researcher went along based on findings?	No.
13.	Did the researcher encounter any problems while doing the research? Is there any mention of a negative case, and how was the data handled?	During the interview phase two main problems occurred. On the one hand, an interview participant in the initial phase of the interviews was only willing to make statements that strongly echoed the official marketing messages of his current or former employers, paradoxically giving the interview the character of an job application. It was only after a careful, explanatory dialogue about the purpose of the interviews that he was open to sharing his personal observations and thoughts, rather than sending the marketing messages of his previous employers unreflected and personally putting himself in a good light. Another interviewee also found that he had problems articulating his thoughts on the subject. He just started talking without internalising the questions asked. This did not change even after a reassuring, repeated explanation of the purpose of the interview. Unfortunately, the results of this interview could not be used because they did not offer valid insights.
14.	Are methodological decision made clear so that the readers can judge their appropriateness for gathering data (theoretical sampling) and doing analysis?	Yes, the applied research methodology and the reasons for its selection and application are explained in Chapter 3.
15.	Was there feedback on the findings from other	Yes, on a verbal basis. I remained in contact with some of the research participants after the interviews. One of the participants

#	Checkpoint	Description of applied strategies in this study
	professionals and from participants? And were changes made in the theory based on this feedback?	(Charly) confirmed, inter alia, the difficulties identified in the research phase in the balance between exploitative and explorative activities in the transformation of his sales work when I told him about this finding.
16.	Did the researcher keep a research journal or notebook?	Yes, I used a notebook to record the progress of the data collection and the subsequent analysis. Here I also scribbled spontaneous ideas and insights so that they wouldn't get lost.

Table 26: Methodological Consistency of this GTM study (own creation, adapted from Corbin & Strauss, 2015, p. 353)

b) Further checkpoints to evaluate quality and applicability of the GTM according to Corbin and Strauss (2015, p. 356)

#	Checkpoint	Description of applied strategies in this study
1.	What is the core category, and how do the major categories relate to it? Is there a diagram depicting these relationships?	Yes, a core category was developed. It is called "Promoting transformational change in IT infrastructure sales ecosystems through trust, empowerment and ambidexterity". The five main categories found, which are "Building Digital Partner Alliances", "Establishing Customer Digitalisation Companionship", "Redefining Transactions, Sales Organisation and Procedures", "Taking Care about Sales Individuals" and "Transforming Vendor Sales Approach" relate to the core category. This is depicted in Table 14, Section 6.2.6.
2.	Is the core category sufficiently broad so that it can be used to study other populations and similar situations beyond this setting?	Yes, the three core elements of the core category found do not refer to specific technological areas despite the fact that this study was carried out in the context of digitalisation. Rather, the core category is characterised by generally significant interpersonal, value-based and organisational aspects. Thus it is basically possible that the application of the transformation framework, which was developed on the basis of the core category, can also be applied to other contexts that are exposed to transformational challenges.
3.	Are each of the categories developed in terms of their properties and dimensions so that they show depth, breadth and variation?	Yes, during the data analysis, all thirty-three identified open categories were carefully analysed with regard to their important properties and dimensions. The evolved main categories have also been the subject of an in-depth analysis with regard to the relevant contextual conditions as well as the causal and intervening conditions. The interdependencies between the core category and the main categories have also been developed and presented in depth. This meets the demands of depth, breadth and variation.
4.	Is there descriptive data given under each category that brings the theory to life so that it provides understanding and can be used in a variety of situations?	Yes, each of the open, main and core categories contains rich descriptions of their content meaning and relevance. These explanations were supported wherever appropriate and possible by quotes from the interviews. Thereby the understanding and the reasoning of the developed transformation framework is made possible and the requirement of applicability in different situations is fulfilled.
5.	Has context been identified and integrated into the	Yes, the identified change drivers in the form of progressing digitalisation and altering customer behaviour already represent a contextual framework for the research problem examined in this thesis. This context was supplemented during the course of the

#	Checkpoint	Description of applied strategies in this study
	theory? ³⁵	research progress by, inter alia, the contextual conditions that arise from the consideration of regional differences, legal & compliance conditions, the dynamics of shareholder and stakeholder interests, corporate culture and values, as well as mutual sales ecosystem partner and manufacturer expectations.
6.	Has process been incorporated into the theory in the form of changes in action-interaction in relationship to changes in conditions? ³⁶	IT infrastructure vendors and their sales ecosystem partners use more or less distinctive strategies to manage transformational change processes. These strategies, whether already applied or considered useful by the participants, were related to the main categories found. Further considerations in this respect may be subject to future studies.
7.	How is saturation explained, and when and how was it determined that categories were saturated?	Saturation was achieved to a reasonable extent for the purposes of this study. After conducting twenty-four interviews, I realised that there were repetitions in the answers of the participants. Furthermore, the last interviews did not reveal any further findings that would have further substantiated or even called into question the basic framework of the intended theory building that had evolved until then.
8.	Do the findings resonate or fit with the experience of both the professionals for whom the research ended (sic) and the participants who took part in the study? ³⁷	Yes, some of the essential findings gained in the scope of this thesis were adapted by myself in the context of my professional activity and also discussed with other practitioners from the IT infrastructure industry to an appropriate extent and were found useful and inspiring.
9.	Are there gaps, or missing links, in the theory, leaving the reader confused and with a sense that something is missing?	It seems logical that more interviews than the twenty-four interviews conducted might have provided additional insights beyond the aspects found. Nevertheless, the theory developed on the basis of the existing data material and the associated transformation framework appear to be well founded. The self-assessment developed for IT infrastructure vendors and their partners (cf. Section 8.9) is practicable, the recommendations given (cf. Section 7.3) are practicable and written in a language that is meaningful and comprehensible for both theoretically and practically interested readers of this study. Therefore, in my opinion, there are no obvious gaps.
10.	Is there an account of extreme or negative cases?	The study did not reveal any descriptions, observations or experiences that contradict the derived results of this thesis. Future research could seek to find such cases in order to gain further insights or adapt the framework.
11.	Is variation built into the theory?	Within the scope of the possibilities on which this study was based, structurally similar situations, such as the selection of partners in digitalisation projects from the perspective of vendors and partners, were compared in order to derive findings and recommendations. This revealed, for example, different relevant expressions of mutual loyalty and commitments. Wherever possible and useful, I tried to vary the conditions under which the transformation processes examined take place and to derive findings from them.
12.	Are the findings presented	Yes, the findings of this study are presented in an appropriate

³⁵ Shortened, cf. Corbin & Strauss (2015, p. 352) for full checkpoint explanation

³⁶ Shortened, cf. Corbin & Strauss (2015, p. 352) for full checkpoint explanation

³⁷ Shortened, cf. Corbin & Strauss (2015, p. 352) for full checkpoint explanation

#	Checkpoint	Description of applied strategies in this study
	in a creative and innovative manner? Does the research say something new or put old ideas together in new ways?	form that is oriented towards the expectations of readers who are theoretically and practically interested. The developed framework for the management of transformational change processes of IT infrastructure sales ecosystems did not exist before in the developed form, it is new and, according to the research, innovative enough to successfully meet current challenges in the research field investigated.
13.	Do findings give insight into situations and provide knowledge that can be applied to develop policy, change practice, and add to the knowledge base of the profession?	Yes, in fact one of the intentions of this study was to give insights into the research field of IT infrastructure sales ecosystems in such a good quality that policies and change practices can be developed on their basis. The study also contributes to the knowledge base of the profession under study, as shown by a previous literature review and a literature review carried out subsequent to the research phase of the study.
14.	Do the theoretical findings seem significant, and to what extent? ³⁸	The findings of this study appear significant for several reasons. First of all, they close a gap with regard to transformational change management at the interface between IT Infrastructure manufacturer sales employees and sales ecosystem partners, which takes relevant customer needs into account in the era of digital transformation. Second, the results highlight important employee-related aspects such as trust and empowerment of salespeople, which are less prominent in the transformation frameworks identified during the literature review. Thirdly, the contributions to practice of this study in particular give vendors the opportunity to take individually adequate steps to transform their sales ecosystems on the basis of a self-assessment.
15.	Do the findings have the potential to become part of the discussions and ideas exchanged among relevant social and professional groups?	Yes, the findings of the study have, according to my opinion, the potential to set decisive impulses for the design of transformational change processes in the indirect sales structures of IT infrastructure vendors.
16.	Are the limitations of the study clearly spelled out?	Yes. The limitations of the study were specified in Section 7.5.
17.	Are there suggestions for practice, policy, teaching, and application of the research?	Yes, Section 7.3 contains multiple recommendations for practical application in the examined field which are also suitable for teaching, policy development and other purposes.

Table 27: Checkpoints to evaluate quality and applicability of the GTM study (own creation, adapted from Corbin & Strauss, 2015, p. 356)

8.9 Self-Assessment Model for IT Infrastructure Vendors to evaluate their Sales Ecosystems

The following self-assessment structure has been developed in order to provide vendors with a basis for self-assessment and for identifying important influencing factors that may not yet have been adequately served by them in the sense of

³⁸ Shortened, cf. Corbin & Strauss (2015, p. 352) for full checkpoint explanation

the developed model. With this structure, a manufacturer can determine its own maturity level in terms of its ability to manage transformational change in the context of the change drivers discussed here. Therefore, each of the seven dimensions of the “A.C.T.I.V.A.T.E.” model has been detailed with 10 self-assessment statements, for which the vendor can give itself one to seven points, depending on the individual perception of the degree of fulfilment³⁹. Accordingly, seventy points can be reached per dimension, the following evaluation and interpretation model offers concluding notes and recommendations for working with the results. The following statements reflect important framework parameters of the developed IT infrastructure sales ecosystem “A.C.T.I.V.A.T.E.” Transformation Model. Vendors can determine their own level of maturity by evaluating these parameters from “untrue” to “true” as appropriate. The results of the self-assessment can be summed up after the evaluation of all dimensions of the “A.C.T.I.V.A.T.E.” model presented above. The sum achieved in each category gives an indication of the individual maturity level of the IT infrastructure manufacturer’s sales ecosystem.

Self-Assessment Result	Maturity Level
More than 80%, i.e. more than 56 points in each of the “A.C.T.I.V.A.T.E.” framework dimensions.	Very high , the manufacturer is suggested to regularly check the fulfilment of the individual aspects mentioned in order to maintain this very high degree of maturity.
More than 80%, i.e. 56 points in four of the “A.C.T.I.V.A.T.E.” Framework dimensions, but between 50% and 80% of the points in one of the dimensions.	High , the manufacturer is suggested to strive to increase the individual maturity level in the dimension that has been evaluated as worst, since the success of the transformation depends on the fulfilment of all the dimensions mentioned.
More than 50%, i.e. 35 points in each of the mentioned dimensions, but less than 80% in at least two dimensions.	Medium , the manufacturer is suggested to strive for a synchronised improvement of its score in every dimension below 80% according to the recommendations made.
Less than 50%, i.e. 35 points in at least one of the “A.C.T.I.V.A.T.E.” Framework dimensions.	Unsatisfactory , the vendor is suggested to first strive for an improvement in the dimensions that have been evaluated as worst, since the success of the transformation depends on the synchronised fulfilment of all “A.C.T.I.V.A.T.E.” framework dimension.

Table 28: Self-Assessment in the “A.C.T.I.V.A.T.E.” Maturity Model (own creation)

³⁹ Piercy & Lane (2009b, p. 302 et seq.) suggest a comparable approach, which has been further developed and adapted for the purposes of this thesis.

A.C.T.I.V.A.T.E. Model Dimension: Building Digital Partner Alliances	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Target scenario definition: The vendor channel and alliance organisation has a sales ecosystem blueprint that shows the required partner skills in the digitalisation environment as well as a comparison of the target scenario with the current partner landscape.							
Partner categorisation: The vendor categorises its partner landscape on the basis of the strategic skills and resources essential for digitalisation and not just on the basis of current revenues from existing products.							
Future investment: The vendor invests money and suitable resources in the acquisition of new alliance partners which are important for sales to customers in the digital transformation process (e.g. consulting firms, SW vendors, cloud providers).							
Digital partner programme: In its partner programme, the vendor integrates and rewards special partner competencies and access to contacts and decision-makers at customers' business units in the environment of digital transformation.							
Governance model: The vendor channel programme includes a Digital Alliance Partner Governance Model that defines the structure and intensity of collaboration with specific Digital Alliance partners.							
Senior management sponsorship: The senior sales management of both the vendor and the key partners act in an executive sponsoring and engagement function, promoting the digital partner alliances internally and externally.							
Joint target agreements: The vendor and the sales ecosystem partner agree, adopt and pursue mutually agreed sales targets in the digitalisation environment. They regularly measure the degree of target achievement and, if necessary, redirect their activities.							
Digital portfolio strategy: The vendor and the partner are pursuing a joint portfolio expansion strategy that takes into account the special (cloud-related) requirements of ongoing digitalisation.							
Field sales alignment: The sales strategy defined jointly by the manufacturer and the Digital Alliance Partner is actually implemented in the daily sales work and is based on regular sales alignment across the board.							
Digital transformation marketing strategy: The manufacturer and the Digital Alliance partners define and implement a joint digital marketing strategy to ensure the joint value proposition and, if necessary, rebranding in the market regarding the expanded solution competencies in the area of digital customer transformation.							
Total:							Points

Table 29: IT Infrastructure Vendor Assessment – “Alliance”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V.A.T.E. Model Dimension: Establishing Customer Digitalisation Companionship	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Indexing of digital customer maturity: The vendor defines and implements with its partners a model to determine the individual digital customer maturity and adapts its sales strategy accordingly.							
Achievement of strategic vendor relevance: The manufacturer thinks less in terms of its own product categories than in terms of developing and applying sales strategies that support customers holistically and effectively in an advising capacity on their path to digital transformation.							
Expansion of the “sell-to” target group: With its own sales staff, the vendor addresses both the classic IT infrastructure-related buying centres and the customer business units affected by ongoing digitalisation processes.							
Customer positioning: The manufacturer does not think product and service centred, but customer value centred. He adapts its value contribution to the customer ecosystem or creates one in order to reduce the possible complexity for the customer.							
Partner symbiosis: The vendor acts holistically and sales-wise in coordination with its sales ecosystem partners in order to provide the customer with the necessary technical and business-oriented digitalisation solution competencies.							
Digitalisation added value dimensions: Together with its sales ecosystem partners, the manufacturer constantly inspires customers to use digital technologies in the areas of increased business agility, sales growth, cost reduction and risk mitigation.							
Multilevel sales: The vendor develops trustful customer relationships with its partners in a coordinated manner at all management levels in order to achieve a preferred privileged status, in particular to business units affected by progressing digitalisation.							
Digital customer intelligence: The manufacturer acts predictably in the establishment of the customer relationship and long-term oriented so that the sales staff involved can build and maintain a customer knowledge base about its digital business sales consulting.							
Digital customer data repository: The manufacturer organises its sales processes on the basis of modern CRM tools such as “salesforce.com” and ensures with particular focus the quality of the entered and continuously maintained data.							
Digital rebranding: The vendor uses methods of (digital) marketing to reposition its brand as a solution partner for challenges in the field of digital transformation.							
Total:	Points						

Table 30: IT Infrastructure Vendor Assessment – “Customer Companionship”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V.A.T.E. Model Dimension: Redefining Transactions, Sales Organisation and Procedures	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Digital sales organisation blueprint: The vendor has developed and implemented a “Digital Sales Organisation” blueprint, which is based on the input of employees and partners and takes into account their observations regarding the speed, agility and efficiency/effectiveness of the sales organisation.							
Digital media usage: The vendor provides its employees with social media tools so that they are empowered and encouraged to communicate about the vendor’s digitalisation competencies.							
Consolidation of digital communication tools: The manufacturer develops and sets standards with regard to the communication tools to be used in order to simplify the exchange within the sales teams and between manufacturers and sales ecosystem partners.							
Digital workspace provisioning: The manufacturer provides, inter alia, efficient digital collaboration interfaces/tools, for the preparation of quotations and order processing, as well as virtual project rooms internally and for cooperation with partners.							
Digital transformation sales goals: The vendor has adapted its incentive and target-setting system to support consumption-based/subscription-based (service) offers from the vendor as well as the agreement of long-term, qualitative targets with the sales staff.							
Continuous process improvements: The existing processes are regularly reviewed with regard to their effectiveness, speed and internal/external acceptance through institutionalised feedback mechanisms and adapted to changing market requirements.							
Partner goal alignment: Quantitative and qualitative sales objectives of the vendors’ sales employees do not conflict with those of the partners, but are assigned in accordance with those of the partner sales employees in particular.							
Digital information and sales platforms: The vendor provides all sales-relevant information on products, services, their specifications, and other typically sales-relevant information on portals in a time-efficient manner, adapted to customer expectations.							
Digitalisation business cadence: The vendor has defined and implemented a “digitalisation business cadence” that integrates tactical operational sales management as well as the management of digital change initiatives equally into everyday management.							
Alternative sales channels: The vendor has developed models that allow him to bring commoditised products to market on sales platforms without involving costly sales resources.							
Total:	Points						

Table 31: IT Infrastructure Vendor Assessment – “Transactions, Sales Organisation and Procedures”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V.A.T.E. Model Dimension: Taking Care about Sales Individuals	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Cross-level trainings/coachings: The vendor provides transformation relevant training opportunities for all individual contributor and all management levels including coaching opportunities, especially at the (local) top management level.							
Competence to deal with human reactions to change: Both the manufacturer's sales management and the individual contributors are trained in the psychological basics of dealing with individual human reactions to transformational/disruptive changes.							
Avoidance of micromanagement: The vendor sales management team avoids the implementation of micromanagement measures towards the employees and offers them adequate entrepreneurial freedom when dealing with transformational change goals.							
Creation of the emotional staff “buy-in”: The sales management of the vendor knows how to inspire the sales staff personally for the transformation process by putting personal employee advantages in the foreground instead of purely monetary incentives.							
Dealing with different characters: The vendor sales management is capable of recognising different types of employees and their individual handling of change in order to optimally accompany them on the transformation journey and applies this knowledge.							
Avoid threatening behaviour: The vendor Sales Management avoids trying to motivate sales employees to change by creating fears or communicating threats, but focuses on personal growth opportunities.							
Consideration of the individuality of learning types: The manufacturer takes into account the diversity of different learner types in its sales teams and refrains from limiting itself to standardised, web-based “whiteboard training” only.							
Personal contact outperforms tool inputs: The vendor management team appreciates the personal exchange with the sales employees more than their entries in CRM tools and encourages the personal exchange via the spoken word.							
Ensuring worklife balance: To keep people emotionally “on board”, the vendor sales management takes into account the increasing demands towards the employees with regard to their work-life balance and equips the sales teams with sufficient resources.							
Sense-making of change measures: The management of the vendor puts transformational change initiatives into a broader context that explains “why” sales needs to change in the expected way.							
Total:	Points						

Table 32: IT Infrastructure Vendor Assessment – “Sales Individual’s Needs”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V.A.T.E. Model Dimension: Transforming Vendor Sales Approach	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Transformation strategy: The vendor has a blueprint that determines where, why, and how it wants to develop its own sales organisation and the sales ecosystem in indirect sales.							
Institutionalisation of transformational change management: The vendor implements the identified change measures with the help of a clear transformation management governance to mitigate the risk of losing its priority in day-to-day business.							
Measurement of transformation progress: The vendor defines key milestones and measurable success criteria that allow to measure transformation progress.							
Proactively setting of new standards: The vendor regularly communicates expectations, and gives the employees orientation in the formation of extended technical and methodological competence on the transformational change path.							
Development of digital solution competencies: The manufacturer supports its staff and its sales ecosystem partners in acquiring solution competencies in the field of digital transformation and vertical customer business know-how.							
Symbiotic skills extension: The vendor sees its own sales organisation and that of the ecosystem sales partner as a whole and coordinates the skill development for both so that they complement each other.							
Transformational leadership style: The vendor defines and enforces in its sales management organisation a leadership style which contributes to achieving the transformational change goals and checks whether it is applied in day-to-day business.							
Avoidance of pseudo-change management: The vendor does not allow the emergence of a “politically correct” pseudo-change management, which avoids carrying out actual modifications of the sales ecosystem, leading to superficial transformation results.							
Transformation of product and service sales into value-based sales: The manufacturer accelerates the development of digital solution/value-based sales for customers and ensures that its sales staff do not remain methodically in product sales mode.							
Proactive transformation governance: The manufacturer proactively anticipates newly emerging market changes within the scope of its transformation governance and initiates corresponding transformation measures in a timely manner.							
Total:	Points						

Table 33: IT Infrastructure Vendor Assessment – “Transform Vendor Sales”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V. <u>A</u> .T.E. Model Dimension: Maintaining Ambidextrous Governance	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Combination of exploitative and explorative strategies: The vendor develops and implements its general sales strategy at the level of both tactical-operational business success and long-term business development on an equal basis.							
“Both and” approach: The manufacturer's sales management encourages ambidextrous thinking and action within the company and determines/implements the right level of use of contextual or structural ambidexterity.							
Avoidance of “short-term cadence”: The vendor sales management balances the focus of attention in QBRs, business reviews, and other communications between sales managers and staff not only on the short term and the current quarter, but also beyond the quarterly deadlines (12 month+).							
Appreciation of strategic initiatives: The vendor measures the performance of its sales managers and staff not only quantitatively against the fulfilment of short-term targets, but also qualitatively (e.g. with MBOs) against long-term targets.							
Room for the development of creative ideas: The manufacturer creates adequate scope for strategic, non-tactical operational tasks for sales staff to deal with digitalisation issues in appropriate depth.							
Digital knowledge pool: The vendor implements information sources for employees and partners that allow them to deal not only with day-to-day business but also with digitalisation issues of relevance for the future.							
Sales without short-term goal: The manufacturer promotes and recognises also sales activities with (digital) customer business units that are not directly involved in purchasing decisions for current projects in order to gain deeper customer knowledge.							
Digital business development: The vendor implements organisational sales units such as overlay sales teams or business development teams that do not have a direct customer sales quota and can deal with the development of sales strategies in the digital business environment.							
Digital inspiration for sales: The manufacturer seeks the alignment and exchange with customers and business partners at trade fairs and events without any direct connection to IT infrastructure.							
Ambidexterity in the partner landscape: The vendor and the sales ecosystem partners proactively develop future-oriented value propositions as a perspective for joint digital portfolio development.							
Total:	Points						

Table 34: IT Infrastructure Vendor Assessment – “Ambidextrous Governance”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V.A.T.E. Model Dimension: Promoting a culture of Trust in the Sales Ecosystems	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Avoidance of overreporting: The manufacturer's sales management resists the temptation to increase the frequency of reviews, especially in times when sales targets are not met.							
Business continuity: The manufacturer fills sales positions with a view to long-term orientation and continuity, so that trusting customer relationships can emerge.							
Avoidance of inappropriate pressure on employees: The manufacturer's sales management refrains from exerting pressure on sales employees who deal critically with transformation targets or (initially) do not achieve their goals due to changing market conditions.							
Avoidance of double reporting: The manufacturer sales management dispenses with double reporting in different reporting lines and tools, and trusts the process defined for it, even if the end of the quarter is approaching.							
Compliance with partner commitments: Even in critical customer situations/imminent loss of projects, the manufacturer keeps its commitments to Digital Alliance partners or deviates from them only after consultation and mutual agreement.							
Building trust at all levels: The manufacturer strives to build trust with customers and partners at all relevant levels through personal commitment, especially at the management level.							
Development of the ability to “let go”: In sales projects, the vendor delegates certain responsibilities, full ownership and accountability to its digital alliance partners in a trustworthy manner, while at the same time maintaining its own sales activities.							
Leadership competence: The vendor trains its managers in the application of management techniques that correspond to the transformational leadership style in order to lay the foundation for trusting cooperation between managers and employees.							
Continuity in the management team: The vendor creates a culture of trust in its management team, avoids frequent management changes and promotes the formation of a special team culture.							
“Error culture” for sales employees and partners: The manufacturer promotes the self-confidence of the sales employees and sales ecosystem partners through an error culture appropriate to the novelties of the digitalisation environment, which promotes the (controlled) taking of risks.							
Total:	Points						

Table 35: IT Infrastructure Vendor Assessment – “Trusting the Sales Employee and Partners”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)

A.C.T.I.V.A.T.E. Model Dimension: Empowering Sales Teams	IT infrastructure vendor assessment						
	Untrue		Neutral			True	
	1	2	3	4	5	6	7
Appreciation of local management: The senior management of the manufacturer in the headquarters gives the local sales management the opportunity to adapt centrally developed sales campaigns, structures and initiatives to the requirements of the local market.							
Promotion of informal leadership: The vendor takes into account the existence of formal and informal leadership relationships in its sales teams and allows or promotes the role model characteristics of employees who demonstrate successful transformational change.							
Tolerance to certain forms of non-conformity: The vendor finds a good measure of tolerance for personal “non-conformity” from top performers in order to allow and promote personal sovereignty, entrepreneurship and identification with leaders in the sales team.							
Decentralisation versus centrality: The manufacturer implements only a minimum of centrally managed performance and change control, and leaves it to the local management to implement appropriate measures to achieve the transformational change goals.							
Avoidance of the emergence of “sales robots”: The vendor gives sales staff the opportunity to develop their sales personality to implement digitalisation-oriented sales initiatives with and for customers like an entrepreneur in the company.							
Localisation of identity-generating VMS statements: The vendor allows and promotes the local adaptation of vision/mission/strategy definitions that are in line with corporate objectives and yet reflect specific local circumstances.							
Culture of equality: The manufacturer promotes the seniority of employees by giving them a say in defining transformational change measures and establishing a culture of open feedback.							
Culture of diversity: The vendor staffs its sales teams w. employees of different gender, age and experience to achieve the highest level of diversity and solution competence in the digitalisation environment, in which experienced employees work together with “digital natives”.							
Value-based acting: The vendor not only communicates its corporate values, but lives up to them and takes corrective action in the event of deviations that question loyalty to the corporate values, regardless of the hierarchical level.							
Competence formation: The manufacturer supports the development of technical and business-related digitalisation competence in its own sales teams and those of the sales ecosystem partners to a sufficient extent and measures success.							
Total:	Points						

Table 36: IT Infrastructure Vendor Assessment – “Empowering”-element of the “A.C.T.I.V.A.T.E.” Model (own creation)