

Contributions to Digital Transformation and Mobile Application Development

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I. Table of Contents

I. Table of Contents	I
II. Zusammenfassung und Schlüsselwörter	III
III. Abstract and Keywords	IV
IV. Management Summary.....	V
V. List of Figures	XII
VI. List of Tables.....	XIII
VII. List of Abbreviations	XIV
VIII. Overview of Publications and Task Allocation.....	XV
1. Part A: Introduction to Digital Transformation and Mobile Application Development.....	1
1.1. Research Motivation and Relevance	2
1.2. Research Methods Used	5
1.3. Structure of the Dissertation	13
2. Part B: Implications for Mobile Application Development	15
2.1. A Taxonomy of Process Models and Methodologies for Mobile Application Development	16
2.2. Towards a Strategic Reference Model for B2X Mobile Application Development.....	17
3. Part C: Digital Transformation in the Energy Sector	20
3.1. Digital Transformation in the Energy Sector – Towards Interdisciplinary Energy Research and Practice	21
3.2. Digital Transformation and Smart Homes.....	22
3.3. Implementations of Technologies in the Energy Sector	24
4. Part D: Digital Transformation in the Financial Services Sector	26
4.1. Digital Transformation in the Financial Services Sector – A General View	27
4.2. Digital Transformation and FinTechs.....	29
4.3. Implementations of Technologies in the Financial Services Sector	32
5. Part E: Digital Transformation in Further Business Areas.....	35
5.1. Digital Transformation in Urban Mobility.....	36
5.2. Digital Transformation in the Service Sector	37
5.3. Digital Transformation in the Health Sector	39
5.4. Digital Transformation and Cybersecurity.....	41

6. Part F: Critical Appraisal, Further Research Agenda, and Concluding Remarks.....	43
References.....	51
Appendices.....	61

II. Zusammenfassung und Schlüsselwörter

In dieser kumulativen Dissertation werden Forschungsarbeiten zur digitalen Transformation in verschiedenen Geschäftsbereichen vorgestellt und diskutiert. Sie erörtert die Chancen und Herausforderungen, denen sich Unternehmen bei der Einführung von Technologien, z. B. mobilen Anwendungen, gegenüberstellen. Zusätzlich wird die Nutzung neuartiger Geschäftsmodelle aus der Perspektive der Technologieakzeptanz untersucht. Mit einem spezifischen Blick auf technische Lösungen werden in dieser Dissertation Probleme bei der Entwicklung mobiler Anwendungen und deren Prozesse untersucht und Implikationen aufgezeigt. Diese Dissertation bereichert den Wissensstand zur mobilen Applikationsentwicklung und zum Phänomen des digitalen Wandels auf Unternehmens- und Individualebene. Basierend auf den Limitationen der enthaltenen Artikel wird eine Forschungsagenda abgeleitet, die die Grundlage für weitere Untersuchungen im Bereich der digitalen Transformation sowie der mobilen Anwendungsentwicklung bildet. Wissenschaftler können diese Agenda für ihre zukünftigen Forschungsprojekte nutzen.

Schlüsselwörter: Digitale Transformation, Finanzdienstleistungssektor, Energiesektor, Geschäftsmodelle, Entwicklung mobiler Applikationen

III. Abstract and Keywords

This cumulative dissertation presents and discusses research on digital transformation in several business areas. It discusses the chances and challenges businesses face when introducing technologies, e.g., mobile applications. Also, the usage of new technology-accelerated business models is investigated from a technology acceptance perspective. With a specific look at technical solutions, this dissertation examines challenges in mobile application development and their processes and presents implications. This dissertation enriches the body of knowledge of mobile app development and the phenomenon of digital transformation, both on a business and individual level. Based on the limitations of the contained paper, a research agenda is derived that lays the foundation for further tailored investigations in the field of digital transformation as well as mobile application development. Researchers can use this agenda for their further research projects.

Keywords: Digital Transformation, Financial Services Sector, Energy Sector, Business Models, Mobile Application Development

IV. Management Summary

This cumulative dissertation contains 18 academic articles among four areas of research. Implications on mobile application (“app”) development are presented. Furthermore, this dissertation investigated the phenomenon of digital transformation (DT) in the business areas of energy, financial services, urban mobility, and health.

Implications for Mobile Application Development

Mobile apps receive ongoing attention in academia and practice. Several process models and methodologies with or without a special focus on mobile app development exist. However, their usage and adaptation in practice are questionable. Two papers deal with the characteristics and specificities of these process models (Werth, Guhr, & Breitner, 2022a, submitted to the *Journal of Management Information Systems*, 2019). They provide a taxonomy of process models for mobile app development. The taxonomy enriches the academic body of knowledge by providing a structured overview of which process models or methodologies exist in literature. Interviews with 28 stakeholders involved in a typical mobile app development process were conducted about the knowledge, potential, and fallbacks of the usage of process models for mobile app development. It became apparent that those process models were not very well-known in practice, and companies mostly followed their self-developed guidelines, roughly oriented on agile working methods. Furthermore, the taxonomy and the results were used to derive a high-order reference model for mobile Business-to-X (B2X, “X” for business, customer, etc.) app development from closing this research-practice knowledge divide. In this strategic reference model, four main layers were identified and visualized. All these layers play a crucial role in B2X mobile app development and should be considered by responsible stakeholders, e.g., project managers, in the development process.

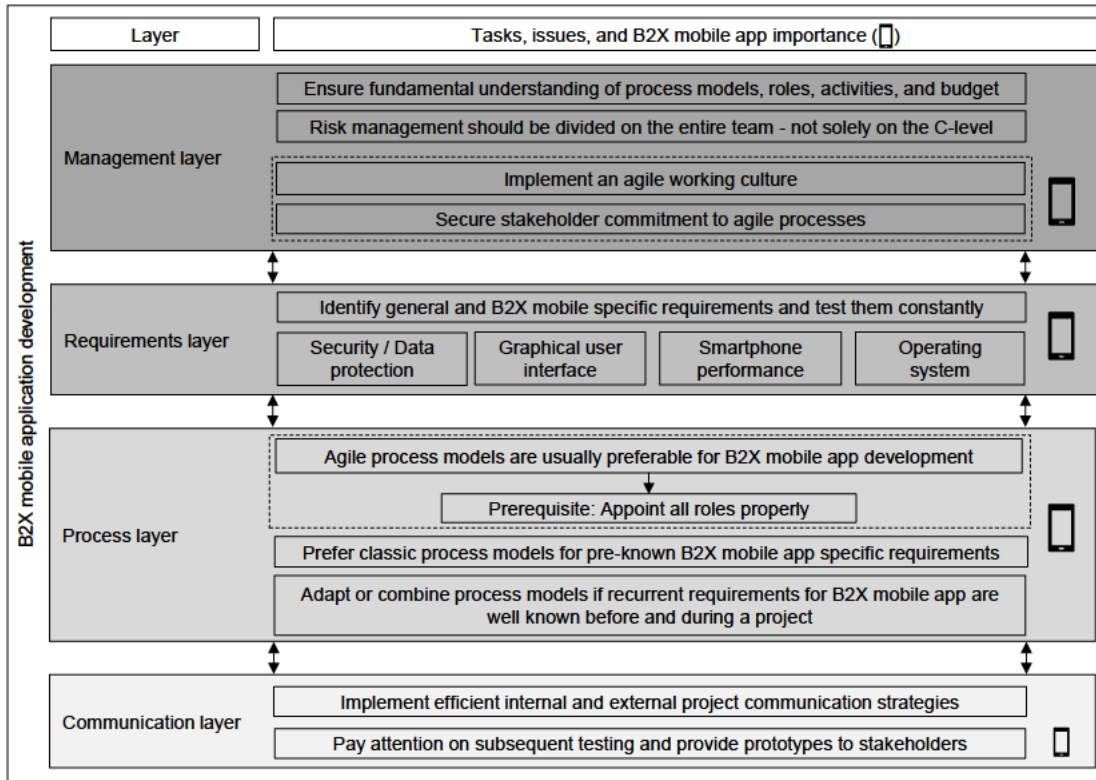


Figure 1. The strategic reference model for holistic B2X mobile application development (REMOB) by Werth et al. (2022a, submitted to the Journal of Management Information Systems)

Digital Transformation in the Energy Sector

The energy sector is influenced by digital transformation (DT) and new technologies. Four papers in this dissertation deal with the phenomenon of DT within the energy sector. Energy researchers, social scientists, and practitioners face problems that cannot be solved alone. Therefore, efficient collaboration between those stakeholder groups is important for successful interdisciplinary work within the energy sector. One paper deals with a requirements analysis of crucial elements for such a collaboration platform specially designed for the needs of the energy sector (Werth, Ferenz, & Niese, 2022b). 36 interviews with experts from the energy sector reveal the first set of requirements that can save the long-term success of a collaboration platform. Requirements can be organized along the five main services: competence, best practices, repository, simulation, and transparency, which should be implemented.

Two papers deal with smart homes (SHs) and their associated chances and challenges (Guhr, Werth, Blacha, & Breitner, 2020; Werth, Guhr, & Breitner, 2020a). Growing DT enhances new possibilities for private living spaces. The first publication reviewed academic articles about SH in connection with private households. Generally, the literature could be structured among three main categories (SH systems, applications, and end-users). Furthermore, the review identified 15 related concepts of SH in the context of private households that have been investigated. The results were diverse in their context. However, the paper reveals several further research directions toward a better academic understanding of SH in the connection of private households. The second paper is concerned about privacy concerns in the SH context, which was largely unexplored by researchers before (Guhr et al., 2020). A survey-based approach identifies that privacy concerns and other factors, like perceived usefulness and subjective norm, play an important role in the behavioral intention to use SH. From a theoretical perspective, the paper shows relevant predictors for the usage of SH by its intended users. However, their model shows a predictive power of around 53 percent, leaving room for further investigations on this important topic. The results and findings of the paper are depicted in the following:

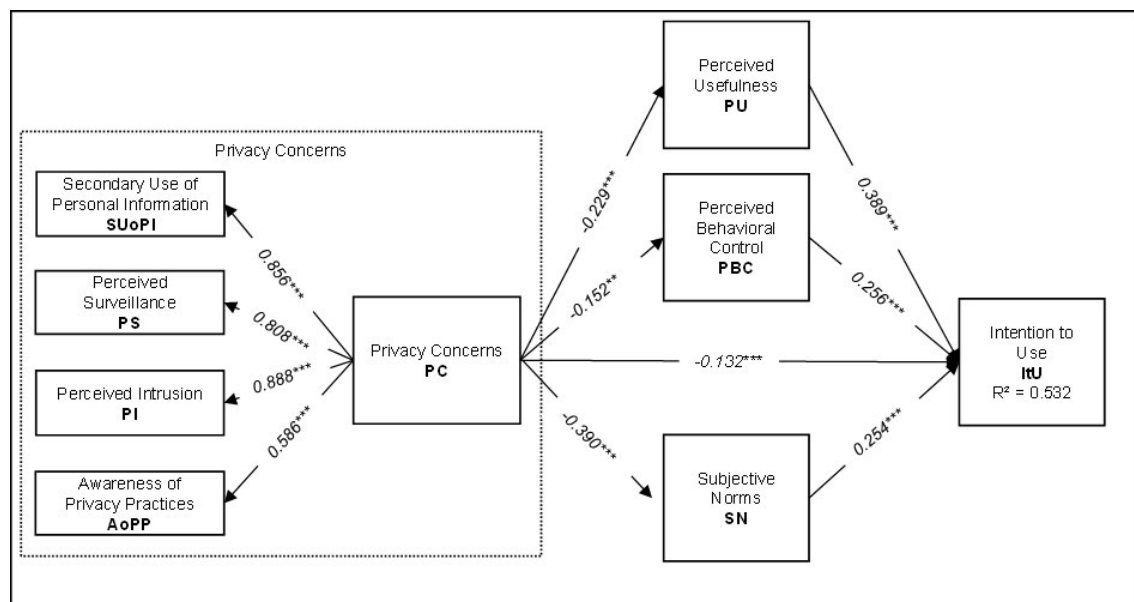


Figure 2. Overview of the results and findings by Guhr et al. (2020, p. 8)

The last research paper comes from Gerlach et al. (2021) and investigates microgrids with morphological analysis. Generally, microgrids integrate energy into an energy network. Based on their examination, 18 dimensions with 60 characteristics were first identified and structured among the layers of governance, business, intelligence, communication, and physical infrastructure. The authors classified 30 real-world microgrids, and further research directions (FRDs), e.g., social aspects or maturity levels, were identified.

Digital Transformation in the Financial Services Sector

The first of seven papers analyze DT from a general perspective on the financial services sector. With a qualitative approach, the paper of Werth et al. (2020b) investigates the influencing factors of DT in the financial services sector. Their analysis reveals that banks and insurance companies face similar challenges, like the threat of so-called BigTechs (Google, Amazon, Facebook, Apple). However, the influences are perceived differently (banks more than insurance companies).

Three papers focused on (critical) success factors for FinTechs with quantitative and qualitative approaches. The investigation by Roeder et al. (2018) examines 221 FinTech companies and identified that “Product/Service Offering” is the most important factor for success, i.e., venture capital acquisition. The paper of Werth et al. (2019) follows a qualitative approach and interviewed FinTech ventures and venture capitalists for their opinions about relevant critical success factors for FinTech. Nine factors were identified that generally apply to all ventures and FinTechs. Six factors, however, are especially relevant within the FinTech environment, e.g., technology advantage and regulatory knowledge. The recent research paper of Werth et al. (2022c, under review at Electronic Markets) uses a structured taxonomy-based approach to investigate relevant success factors for FinTechs from past literature among different FinTech archetypes. Their research reveals that factors like “security, privacy, and transparency,” “technology adoption,” “user trust,” and the “cost-benefit dynamic of the innovation” have been identified as crucial for FinTech success. The following figure shows the relative frequencies determined by the taxonomy-based content analysis of success factors for FinTechs by Werth et al. (2022c, under review at Electronic Markets).

	D1 Strategic factors				D2 Operational factors					D3 Technological factors					D4 Value proposition				D5 User factors						D6 Economic factors		D7 Environmental factors			Cumulative percentage per FinTech archetype			
	C _{1,1}	C _{1,2}	C _{1,3}	C ₁	C _{2,1}	C _{2,2}	C _{2,3}	C ₂	C _{2,5}	C _{3,1}	C _{3,2}	C _{3,3}	C ₃	C _{3,5}	C _{4,1}	C _{4,2}	C _{4,3}	C ₄	C _{5,1}	C _{5,2}	C _{5,3}	C ₅	C _{5,5}	C _{5,6}	C _{6,1}	C _{6,2}	C _{7,1}	C _{7,2}	C _{7,3}				
Alternative trading venue	3%	4%	3%	4%	2%	7%	2%	3%	2%	6%	10%	4%	0%	0%	0%	0%	0%	8%	4%	1%	0%	4%	4%	6%	6%	0%	3%	5%	1%	3%	2%	3%	100%
Co-creator of financial analysis	9%	6%	11%	0%	9%	6%	3%	6%	6%	0%	6%	14%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	3%	0%	0%	3%	6%	0%	3%	100%	
Cryptocurrency	0%	4%	4%	1%	0%	7%	3%	7%	4%	9%	8%	10%	1%	1%	0%	0%	0%	1%	3%	5%	0%	2%	0%	5%	1%	2%	2%	0%	7%	2%	4%	8%	100%
Information aggregator	0%	6%	0%	0%	6%	6%	0%	19%	6%	0%	0%	6%	0%	0%	0%	0%	6%	0%	0%	0%	0%	6%	0%	6%	6%	0%	6%	0%	0%	6%	6%	100%	
Insourcer of sub-processes	2%	8%	7%	1%	3%	4%	1%	5%	4%	6%	8%	9%	1%	0%	8%	0%	0%	0%	0%	0%	0%	3%	2%	4%	5%	4%	3%	1%	6%	4%	3%	100%	
Lending community	0%	3%	1%	4%	1%	3%	1%	1%	1%	15%	16%	1%	0%	0%	1%	0%	12%	1%	0%	0%	0%	9%	5%	4%	4%	0%	3%	7%	0%	4%	1%	0%	100%
Payment services	4%	2%	7%	0%	1%	5%	0%	2%	1%	10%	8%	7%	0%	0%	2%	2%	3%	0%	0%	0%	5%	3%	11%	2%	3%	7%	0%	2%	4%	3%	4%	100%	
Robo-advisor	0%	4%	4%	7%	4%	0%	0%	0%	7%	4%	4%	11%	0%	0%	0%	0%	0%	0%	0%	0%	4%	4%	7%	7%	11%	0%	7%	0%	4%	11%	0%	4%	100%

Note: Bold black border: most relevant success factors per FinTech business model archetype; Gray box: most relevant success factors per dimension; no literature was found for the business model archetypes "Financial markets intermediary" and "Information extractor"

Figure 3. Relative frequencies of identified success factors for FinTech archetypes (Werth et al., 2022c, under review at Electronic Markets)

The paper of Torno et al. (2021) focused on mobile personal finance apps that are available in the common app stores like Apples App Store and Googles Play Store. With a taxonomic approach, they classify 170 mobile personal finance apps into twelve dimensions. While investigating these apps, they combined a technical with a financial services perspective. Furthermore, ten distinct clusters of app configurations were found. The paper of Rodriguez-Cardona et al. (2019) looks specifically at Chatbot technologies and their adoption within German insurance companies. With a mixed-methods approach, they identified that understanding the technology and its interface and the perceived advantage of the usage is crucial for the success of such technologies. At last, Eden et al. (2022) performed a multiple case study within two financial services that implemented technologies for advisory processes. With the help of the Technology-Organization-Environment framework, the paper identified 13 factors that influence advisory work and the involved stakeholders when technological innovations, like video chats, are implemented.

Digital Transformation in Further Business Areas

This dissertation contains five papers that deal with DT in other business areas than the energy and financial services sector.

Two articles are concerned with the introduction and acceptance of ridepooling services. The studies of Sonneberg et al. (2019) and Werth et al. (2021) used well-known technology acceptance models for their survey-based quantitative approaches. Their results from two independent online surveys with 115 and 224 respondents reveal crucial acceptance factors of (potential) users of such urban mobility services. Here, factors like perceived compatibility or usefulness strongly predict ridepooling services. The results of the bootstrapping analysis by Werth et al. (2021) are presented in the following figure:

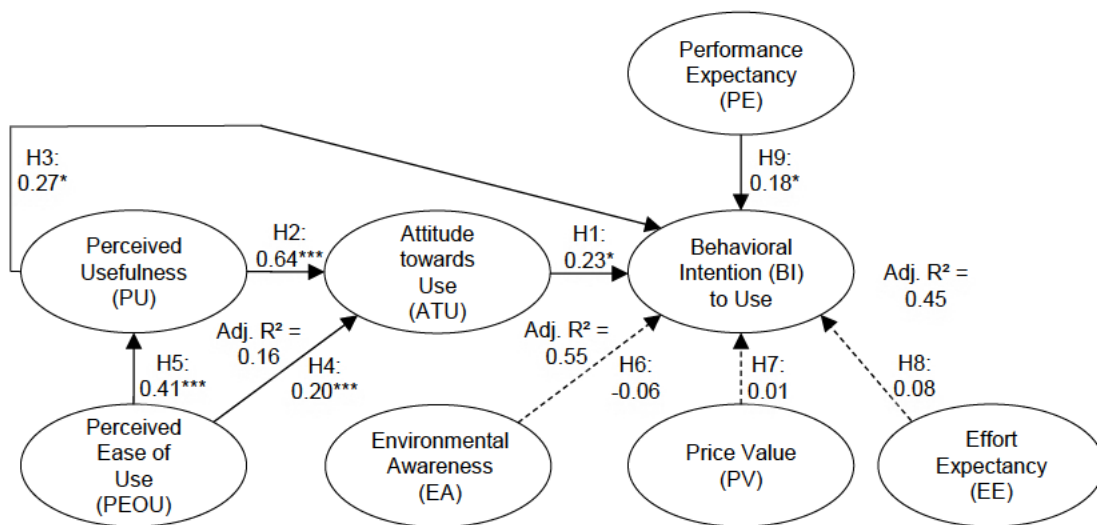


Figure 4. Results and findings of the bootstrapping analysis for the structural model according to Werth et al. (2021, p. 1317)

Another article in the industry sector examines ten design principles for knowledge management services for smart services (Dreyer, Werth, Olivotti, Guhr, & Breitner, 2021). The structured literature review of 157 papers extracted crucial requirements, i.e., design principles, for knowledge management services for smart services that should be considered in such artifacts' implementation and design process.

With a focus on the health sector, Mueller et al. (2022) investigated 55 apps for depression with a taxonomic approach. Depression is a major concern for societies and can be burdened on people. However, several apps for depression exist. This market for apps for depression is fragmented and can be overwhelming for

academics and practitioners. Against this backdrop, they investigated eleven dimensions, 46 characteristics, and six different archetypes within this area of interest. The provided taxonomic structure and archetypes can help intended users locate the most appropriate app for depression.

The completed research by Gerlach et al. (2022) investigated artificial intelligence-based cybersecurity services. Cybersecurity plays an important role for companies and private people to protect themselves from cybercrime threats. While the market is growing for such services and is somewhat fragmented, they classified 229 services provided and clustered them among four distinct archetypical business models. This examination helps to identify what the market for artificial intelligence-based cybersecurity services is offering. Furthermore, they derived DETRAICS, a decision tree that serves as decision support for interested stakeholders in cybersecurity to choose the most appropriate service for their purposes.

The paper contained in this dissertation is presented and discussed. Based on the limitations and methodologies used, a research agenda with fourteen FRD is presented that can serve as an ignition for more tailored research in the field of mobile app development and DT in business areas.

V. List of Figures

Figure 1. The strategic reference model for holistic B2X mobile application development (REMOB) by Werth et al. (2022a, submitted to the Journal of Management Information Systems)	VI
Figure 2. Overview of the results and findings by Guhr et al. (2020, p. 8).....	VII
Figure 3. Relative frequencies of identified success factors for FinTech archetypes (Werth et al., 2022c, under review at Electronic Markets)IX	
Figure 4. Results and findings of the bootstrapping analysis for the structural model according to Werth et al. (2021, p. 1317)	X
Figure 5. Literature search procedure by Dreyer et al. (2021, p. 33).....	7
Figure 6. Results and findings of the PLS-SEM procedure by Sonneberg et al. (2019, p. 10).....	10
Figure 7. Adapted taxonomy development process by Werth et al. (2022c, under review at Electronic Markets)	12
Figure 8. Overview of the parts and publications in this dissertation	14
Figure 9. Taxonomy of process models and methodologies according to Werth et al. (2022a, submitted to the Journal of Management Information Systems)	18
Figure 10. The strategic reference model for holistic B2X mobile application development (REMOB) by Werth et al. (2022a, submitted to the Journal of Management Information Systems)	19
Figure 11. Service elements of the platform from Werth et al. (2022b, p. 6)	21
Figure 12. Overview of the results and findings by Guhr et al. (2020, p. 8).....	24
Figure 13. Combination of Porter's Five Forces (meso-level or industry-internal influences) and PEST-analysis according to Werth et al. (2020b, p. 160)	28
Figure 14. Critical success factors for FinTechs, according to Werth et al. (2019, p. 5).....	29
Figure 15. Literature search process by Werth et al. (2022c, under review at Electronic Markets)	30
Figure 16. Relative frequencies of identified success factors for FinTech archetypes (Werth et al., 2022c, under review at Electronic Markets)	31
Figure 17. Adapted technology-organization-environment framework with results from Eden et al. (2022, p. 18)	32
Figure 18. Results and findings of the bootstrapping analysis for the structural model according to Werth et al. (2021, p. 1317)	37
Figure 19. Decision tree for AI-driven cybersecurity, according to Gerlach et al. (2022, p. 11).....	42

VI. List of Tables

Table 1. Chronological overview of publications.	XXII
Table 2. Research questions and research objectives answered in the paper contained in this dissertation.....	5
Table 3. Interview demographics by Werth et al. (2020b, pp. 163–164)	9
Table 4. Overview of the research methods used within the publications	13
Table 5. Requirements and design principles for smart service KMS by Dreyer et al. (2021, pp. 42–43).....	38
Table 6. Final taxonomy with the number of occurrences for each characteristic by Mueller et al. (2022, p. 5)	40
Table 7. Further research agenda for mobile application development and digital transformation	50

VII. List of Abbreviations

Apps	Applications
ATU	Attitudes Towards Usage
BI	Behavioral Intention
B2B	Business-to-Business
B2X	Business-to-X
CB	Covariance-based
CSF	Critical Success Factors
DETRAICS	Decision Tree for AI-Driven Cybersecurity Services
DP	Design Principle
DSR	Design Science Research
DT	Digital Transformation
EA	Environmental Awareness
EE	Effort Expectancy
FRD	Further Research Direction
IoT	Internet of Things
ISR	Information Systems Research
KMS	Knowledge Management System
PC	Perceived Compatibility
PE	Performance Expectancy
PEOU	Perceived Ease of Use
PEST	Political-Environmental-Social-Technological
PLS	Partial Least Squares
PS	Perceived Safety
PU	Perceived Usefulness
PV	Price Value
R&D	Research and Development
RO	Research Objective
RQ	Research Question
SEM	Structural Equation Modeling
SH	Smart Home
REMOB	Strategic Reference Model for B2X Mobile App Development
TAM	Technology Acceptance Model
UTAUT2	Unified Theory of Acceptance and Use of Technology 2
VC	Venture Capitalist

VIII. Overview of Publications and Task Allocation

The following chronological overview covers 18 research publications, forming this cumulative dissertation's basis. Table 1 provides an overview of the publications contained within this dissertation. Besides the title, authors, and outlets, Table 1 assigns the rating of the German academic association for business research, VHB JOURQUAL 3 (shortly "VHB"), to the contained publications (Henning-Thurau, Sattler, Dyckhoff, Franke, & Schreyögg, 2022). Based on this classification of the VHB, the rating assigns relevant scientific outlets grades from "A+" to "D."

Contained articles contribute to challenges related to digital transformation (DT), the changes in businesses and their behavior, and mobile application ("app") development. All publications were written in collaboration. The task sharing of each article and a short introduction to the respective topic are described in the following.

The completed research conference paper "Make or Break. Business Model Determinants of FinTech Venture Success" (Röder et al., 2018) deals with critical venture success determinants of FinTech companies. All involved authors developed the idea of the article. Davinia Rodríguez Cardona and I wrote the theoretical background, results, limitations, and future research. Jan Roeder and Matthias Palmer authored the introduction, methodology, discussion, and conclusion sections. Jan Muntermann and Michael H. Breitner were discussants and contributed to the article's final version. Jan Roeder presented at the Multikonferenz Wirtschaftsinformatik 2018 in Lüneburg, Germany.

The research paper "Successful Mobile Application Development: Towards a Taxonomy of Domain-Specific Process Models and Methodologies" (Werth, Guhr, & Breitner, 2019) contains a taxonomy of process models and methodologies for mobile app development. It discusses the characteristics and dimensions of the investigated process models and methods. I wrote the main parts of the manuscript. Nadine Guhr was responsible for the methodology and details of the discussion. Michael H. Breitner was a discussant and contributed to the article's

final version. I presented at the 52nd Hawaii International Conference on System Sciences in Maui, Hawaii, United States.

The third research paper, “Challenges of the Financial Industry - An Analysis of Critical Success Factors for FinTechs” (Werth, Rodríguez Cardona, et al., 2019), deals with a qualitative examination of critical success factors for FinTech venture success. I wrote the main parts of the manuscript. Jan Nowatschin and Matthias Werner collected and analyzed the interview data. Davinia Rodríguez Cardona and Michael H. Breitner were discussants and contributed to the article's final version. I presented at the 25th Americas Conference on Information Systems in Cancun, Mexico.

The research paper “A Mixed Methods Analysis of the Adoption and Diffusion of Chatbot Technology in the German Insurance Sector” (Rodríguez Cardona, Werth, Schönborn, & Breitner, 2019) investigates the adoption and diffusion factors of chatbot technology in the German insurance sector with a mixed-methods design. Davinia Rodríguez Cardona wrote the main parts of the manuscript with Svenja Schönborn. Michael H. Breitner and I were discussants and contributed to the article's final version. Davinia Rodríguez Cardona presented at the 25th Americas Conference on Information Systems in Cancun, Mexico.

The published journal article “Privacy Concerns in the Smart Home Context” (Guhr, Werth, Blacha, & Breitner, 2020) explores how participants are influenced by privacy concerns regarding their usage of smart home (SH) technologies. Nadine Guhr wrote the main parts of the manuscript with Philip Peter Hermann Blacha. I wrote the theoretical foundations and details of the hypothesis generation section. Michael H. Breitner was a discussant and contributed to the article's final version. The article was published in SN Applied Sciences.

“An Empirical Study of Customers’ Behavioral Intention to Use Ridepooling Services—An Extension of the Technology Acceptance Model” (Sonneberg et al., 2019) investigates critical acceptance factors for ridepooling services with the usage of the Technology Acceptance Model. Marc-Oliver Sonneberg wrote the discussion of the manuscript. Max Leyerer was responsible for the research background and introduction. I wrote the methodology, analysis, and discussion. Wiebke Wille and Marvin Jarlik were responsible for data collection and analysis.

Michael H. Breitner was a discussant and contributed to the article's final version. I presented the research paper at the 14th International Conference on Wirtschaftsinformatik in Siegen, Germany.

The journal article “Smart Home in Private Households: Status Quo, Discussion, and New Insights” (Werth, Guhr, & Breitner, 2020a) analyzes the literature about SHs in private households through a literature review. I wrote the main parts of the manuscript. Nadine Guhr was responsible for the methodology and parts of the discussion. Michael H. Breitner was a discussant and contributed to the article's final version. The article was published in the International Journal of Service Science, Management, Engineering, and Technology.

“Influencing Factors for the Digital Transformation in the Financial Services Sector” (Werth, Schwarzbach, Rodríguez Cardona, Breitner, & Graf von der Schulenburg, 2020b) carves out aspects of DT at banks and insurance companies through qualitative expert interviews. I wrote the main parts of the manuscript with Christoph Schwarzbach. The first two authors were responsible for data collection. Davinia Rodríguez Cardona was accountable for aspects of the discussion. Michael H. Breitner and Johann-Matthias Graf von der Schulenburg were discussants and contributed to the article's final version. The article was published in the German Journal of Risk and Insurance.

The completed research conference paper “Classification of Real-World Microgrids Based on a Morpho-logical Analysis” (Gerlach et al., 2021) classifies 30 real-world microgrids with diverse types and locations and presents them through a morphological box. Jana Gerlach and Sarah Eckhoff wrote the main parts of the paper and collected the data. I wrote the methodology section. All authors contributed to the discussion of the paper. Michael H. Breitner was a discussant and contributed to the article's final version. Jana Gerlach presented at the 27th Americas Conference on Information Systems (online conference).

“Examining Customers’ Critical Acceptance Factors towards Ridepooling Services” (Werth, Sonneberg, Leyerer, & Breitner, 2021) investigates critical acceptance factors for ridepooling services with the Unified Theory of Acceptance and Use of Technology 2 as the underlying theory. I wrote the main parts of the research paper. Max Leyerer was responsible for the research background and

introduction. Marc-Oliver Sonneberg wrote parts of the analysis and discussion. Michael H. Breitner was a discussant and contributed to the article's final version. The journal paper appeared in *Transportation Research Record: Journal of the Transportation Research Board*.

The completed research paper “More than Mobile Banking – A Taxonomy-Based Analysis of Mobile Personal Finance Applications” (Torno, Werth, Nickerson, Breitner, & Muntermann, 2021) examines common characteristics and dimensions as well as archetypes of mobile personal finance applications through a taxonomic approach. Albert Torno and I contributed to the manuscript equally. Robert C. Nickerson, Michael H. Breitner, and Jan Muntermann were discussants and contributed to the final version of the article. Albert Torno presented at the 25th Pacific Asia Conference on Information Systems (online conference).

The journal article “Design Principles for Knowledge Management Systems of Smart Services” (Dreyer, Werth, Olivotti, Guhr, & Breitner, 2021) examines ten design principles through a comprehensive literature review under the Design Science Research paradigm. Sonja Dreyer and Daniel Olivotti wrote the main parts of the paper. I was responsible for parts of the discussion and methodology. Nadine Guhr and Michael H. Breitner were discussants and contributed to the article's final version. The journal article appeared in the *e-Service Journal*.

The conference paper “Requirements for an Open Digital Platform for Interdisciplinary Energy Research and Practice” (Werth, Ferez, & Niese, 2022b) examines critical factors that are relevant to the development of an open digital platform for energy research. I wrote the main parts of the manuscript. Stephan Ferez contributed to the theoretical backgrounds and discussions. Astrid Niese was a discussant and contributed to the final version of the article. I presented at the 17th International Conference on Wirtschaftsinformatik (online conference).

“Influences of Digital Innovations on Advisory Work in the Financial Services Sector” (Eden et al., 2022) examines influencing factors for advisory work within two financial services providers. Theresa Eden wrote the main parts of the paper. Christoph Schwarzbach, Davinia Rodríguez Cardona, and I were responsible for data collection and discussions. Michael H. Breitner and Johann-Matthias Graf von der Schulenburg were discussants and contributed to the final version of the

article. The journal article was published in *Die Unternehmung – Swiss Journal of Business Research and Practice*.

“How is Your Mood Today? - A Taxonomy-based Analysis of Apps for Depression” (Müller, Werth, König, & Breitner, 2022) examines common characteristics, dimensions archetypes of apps for depression through a taxonomic approach. Nina Müller was responsible for data collection and analysis. I contributed to the methodology and theoretical backgrounds. Claudia M. König and Michael H. Breitner were discussants and contributed to the final version of the article. I presented this completed research at the 28th Americas Conference on Information Systems in Minneapolis, Minnesota, United States.

The completed research “Artificial Intelligence for Cybersecurity: Towards Taxonomy-based Archetypes and Decision Support” (Gerlach, Werth, & Breitner, 2022) examines common characteristics and dimensions, archetypes, and a decision tree of artificial intelligence-driven business models for cybersecurity. Jana Gerlach wrote the main parts of the paper and collected the data. I was responsible for the methodology section, discussions, and introductions. Michael H. Breitner was a discussant and contributed to the final version of the article. The article was accepted for publication at the 43rd International Conference on Information Systems. Jana Gerlach will present at the conference.

The journal article “What Determines FinTech Success? A Taxonomy-Based Analysis of FinTech Success Factors” (Werth, Rodríguez-Cardona, Torno, Breitner, & Muntermann, 2022c, under review at *Electronic Markets*) examines critical factors for the survival of FinTechs with a qualitative-based taxonomy approach. Davinia Rodríguez Cardona and I wrote the main parts of the manuscript. Albert Torno was responsible for theoretical backgrounds, data collection, and discussions. Michael H. Breitner and Jan Muntermann were discussants and contributed to the final version of the article. It was submitted to *Electronic Markets* (under review, major revision).

The journal article “Holistic B2X Mobile Application Development – A Strategic Reference Model” (Werth, Guhr, & Breitner, 2022a, submitted to the *Journal of Management Information Systems*) examines qualitative expert interviews with mobile application developers. It discusses the characteristics, chances, and

challenges associated with using process models and methodologies for app development. I wrote the main parts of the manuscript. Nadine Guhr was responsible for the methods and parts of the discussion. Michael H. Breitner was a discussant and contributed to the final version of the article. The article was submitted to the Journal of Management Information Systems.

#	Date	Title	Order of Authors	Outlet	Status	VHB Journal V3	Appendix
1	03/18	Make or Break. Business Model Determinants of FinTech Venture Success	Jan Roeder, Davinia Rodríguez Cardona, Matthias Palmer, Oliver Werth , Jan Muntermann, Michael H Breitner	Proceedings of the Multi-konferenz Wirtschaftsinformatik, Lüneburg, Germany	Published	D	A1
2	01/19	Successful Mobile Application Development: Towards a Taxonomy of Domain-Specific Process Models and Methodologies	Oliver Werth , Nadine Guhr, Michael H Breitner	Proceedings of the 52nd Hawaii International Conference on System Sciences, Maui, Hawaii, United States	Published	C	A2
3	06/19	Challenges of the Financial Industry - An Analysis of Critical Success Factors for FinTechs	Oliver Werth , Davinia Rodríguez Cardona, Jan Nowatschin, Matthias Werner, Nadine Guhr, Michael H Breitner	Proceedings of the 25th Americas Conference on Information Systems, Cancun, Mexico	Published	D	A3
4	06/19	A Mixed Methods Analysis of the Adoption and Diffusion of Chatbot Technology in the German Insurance Sector	Davinia Rodríguez Cardona, Oliver Werth , Svenja Schönborn, Michael H Breitner	Proceedings of the 25th Americas Conference on Information Systems, Cancun, Mexico	Published	D	A4
5	02/20	Privacy Concerns in the Smart Home Context	Nadine Guhr, Oliver Werth , Philip Peter Hermann Blacha, Michael H Breitner	SN Applied Sciences, Issue 2, Article 247	Published	-	A5
6	03/20	An Empirical Study of Customers' Behavioral Intention to Use Ridepooling Services—An Extension of the Technology Acceptance Model	Marc-Oliver Sonneberg, Oliver Werth , Max Leyrer, Wiebke Wille, Marvin Jarlik, Michael H Breitner	Proceedings of the 14th International Conference on Wirtschaftsinformatik, Siegen, Germany	Published	C	A6
7	10/20	Smart Home in Private Households: Status Quo, Discussion, and New Insights	Oliver Werth , Nadine Guhr, Michael H Breitner	International Journal of Service Science, Management, Engineering, and Technology, Volume 11, Issue 4	Published	D	A7
8	12/20	Influencing Factors for the Digital Transformation in the Financial Services Sector	Oliver Werth , Christoph Schwarzbach, Davinia Rodríguez Cardona, Michael H Breitner, Johann-Matthias Graf von der Schulenburg	German Journal of Risk and Insurance, Volume 109, Issue 2-4	Published	C	A8
9	06/21	Classification of Real-World Microgrids Based on a Morphological Analysis	Jana Gerlach, Sarah Eckhoff, Oliver Werth , Tobias Kraschewski, Tim Brauner, Michael H Breitner	Proceedings of the 27th Americas Conference on Information Systems, Online Conference	Published	D	A9

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10	06/21	Examining Customers' Critical Acceptance Factors towards Ridepooling Services	Oliver Werth , Marc-Oliver Sonneberg, Max Leyerer, Michael H Breitner	Transportation Research Record: Journal of the Transportation Research Board, Volume 2675, Issue 11	Published	-	A10
11	06/21	More than Mobile Banking – A Taxonomy-Based Analysis of Mobile Personal Finance Applications	Albert Torno, Oliver Werth , Robert C. Nickerson, Michael H. Breitner, Jan Muntermann	Proceedings of the 25th Pacific Asia Conference on Information Systems, Online Conference	Published	C	A11
12	12/21	Design Principles for Knowledge Management Systems of Smart Services	Sonja Dreyer, Oliver Werth , Daniel Olivotti, Nadine Guhr, Michael H. Breitner	e-Service Journal, Volume 13, Issue 2	Published	D	A12
13	02/22	Requirements for an Open Digital Platform for Interdisciplinary Energy Research and Practice	Oliver Werth , Stephan Ferenz, Astrid Niese	Proceedings of the 16th International Conference on Wirtschaftsinformatik, Online Conference	Published	C	A13
14	03/22	Influences of Digital Innovations on Advisory Work in the Financial Services Sector	Theresa Eden, Oliver Werth , Christoph Schwarzbach, Michael H Breitner, Johann-Matthias Graf von der Schulenburg	Die Unternehmung – Swiss Journal of Business Research and Practice, Volume 76, Issue 1	Published	C	A14
15	04/22	How is Your Mood Today? - A Taxonomy-based Analysis of Apps for Depression	Nina S. Müller, Oliver Werth , Claudia M. König, Michael H. Breitner	Proceedings of the 29th Americas Conference on Information Systems, Online Conference	Published	D	A15
16	09/22	Artificial Intelligence for Cybersecurity: Towards Taxonomy-based Archetypes and Decision Support	Jana Gerlach, Oliver Werth , Michael H. Breitner	Proceedings of the 43rd International Conference on Information Systems	Accepted for publication	A	A16
17	10/22	What Determines FinTech Success? A Taxonomy-Based Analysis of FinTech Success Factors	Oliver Werth , Davinia Rodríguez Cardona, Albert Torno, Michael H. Breitner, Jan Muntermann	Electronic Markets - The International Journal on Networked Business	Under review (Major revisions)	B	A17
18	11/22	Holistic B2X Mobile Application Development – A Strategic Reference Model	Oliver Werth , Nadine Guhr, Michael H Breitner	Journal of Management Information Systems	Submitted to journal	A	A18

Table 1. Chronological overview of publications.