

Dr. rer. pol. Hendrik Wache

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EDUCATION		Grade
2017 – 2025	Ph.D., Chemnitz University of Technology Thesis: Digital Twins in Manufacturing: A Smart Service System Perspective Committee: Prof. Dr. Barbara Dinter & Prof. Dr. Peter Gluchowski.	0.7
2015 – 2017	Master of Science in Business Intelligence & Analytics, Chemnitz University of Technology, 21.07.2017	1.1
2009 – 2012	Bachelor of Science in Information Systems, Ostfalia - University of Applied Sciences, 20.11.2012	1.7

RESEARCH INTERESTS

Topic: My research examines the strategic implications of digital transformation, focusing on how organizations, particularly SMEs, innovate their business models and create value through digital platforms. My work spans two key areas: (1) digital transformation strategies for SMEs, examining how resource-constrained firms can leverage digital platforms and network effects for strategic advantage, and (2) the strategic integration of sustainability and ethics in digital transformation initiatives, particularly focusing on responsible AI implementation and sustainable business practices. I contribute to both strategic management and information systems literature, offering practical insights for organizational decision-makers navigating digital transformation.

Methods: Case studies, design-oriented studies, action design research, and surveys.

JOURNAL PUBLICATIONS

	VHB	ABS
Ologeanu-Taddei, R., Hönigsberg, S., Weritz, P., Wache, H. , Mittermeier, F., Tana, S., Dang, D., Hautala-Kankaanpää, T. & Pekkola, S. (2025). The relationship of digital transformation and corporate sustainability: Synergies and tensions. <i>Technological Forecasting & Social Change</i> , 210(123809).	B	3
Wache, H. , Dinter, B. (2022). Die Gestaltung gemeinsamer Wertschöpfung in Service Ökosystemen – Einsichten aus einem Digital Twin Projekt. <i>HMD Praxis der Wirtschaftsinformatik</i> 59, 1411-1422.	C	
Dinter, B., Wache, H. , Ramm, S., Wittstock, E., Otto, F., & Maasch, A. (2021). Netzwerkunterstützung durch Digitale Zwillinge. <i>WT Werkstattstechnik</i> , 111(4), 243-247.		
Ramm, S., Wache, H. , Dinter, B., & Schmidt, S. (2020). Der Kollaborative Digitale Zwilling: Herzstück eines integrierten Gesamtkonzepts. <i>ZWF Zeitschrift für Wirtschaftlichen Fabrikbetrieb</i> , 115(1), 94-96.		
Grafmüller, L. K., Hankammer, S., Hönigsberg, S., & Wache, H. (2018). Developing complex, mass-customized products in SME networks: Perspectives from co-creation, solution space development, and information system design. <i>International Journal of Industrial Engineering and Management</i> , 9(4), 215–227.		1

PEER-REVIEWED CONFERENCE PROCEEDINGS (selection)

	VHB
Li, M., Hönigsberg, S., Wache, H. , & Gläsel, B. (2025) Digital Transformation in Small Businesses: Challenges of Citizen Developers and Low-Code Platforms. In 31 st Americas Conference on Information Systems, (pp. 1–10), Montreal.	C
Wache, H. , Gebhardt, L., Kollwitz, C., & Hueske, A.-K. (2025) Harnessing Hackathons and Generative AI for Social Entrepreneurship Education: Exploring the Role of Prompt Engineering in Competency Development. In 31 st Americas Conference on Information Systems, (pp. 1–10), Montreal.	C
Weritz, P., Wache, H. & Hönigsberg, S. (2024) How Digital Readiness Relates to the Intention to Use Generative AI in Workplace Service Systems. In 30th Americas Conference on Information Systems (pp. 1–10), Salt Lake City.	C
Li, M. M., Dickhaut, E., Bruhin, O., Wache, H. , & Weritz, P. (2024) More Than Just Efficiency: Impact of Generative AI on Developer Productivity. In 30th Americas Conference on Information Systems (pp. 1–10), Salt Lake City.	C
Wache, H. (2023), It's Time to Smarten Up! - A Framework for Building Smart Service Systems. In 29 th Americas Conference on Information Systems (pp. 1–10), Panama.	C

Wache, H. , Hübner, J. E., Hönigsberg, S., & Dinter, B. (2022). Closing the Implementation Gap of Digital Twins. In 28 th Americas Conference on Information Systems (pp. 1–10), Minneapolis.	C
Wache, H. , Möller, F., Schoormann, T., Strobel, G. & Petrik, D. (2022). Exploring the Abstraction Levels of Design Principles: The Case of Chatbots. In 17 th International Conference on Wirtschaftsinformatik (pp. 1–15), Nürnberg.	B
Schmidt, S., Voß, M., Wache, H. , Hönigsberg, S., & Dinter, B. (2021). Replicating a Digital Transformation Case. In 16 th International Conference on Wirtschaftsinformatik (pp. 1–17). Essen.	B
Wache, H. & Dinter, B. (2021). Digital Twins at the Heart of Smart Service Systems – An Action Design Research Study. In 29 th European Conference on Information Systems (pp. 1–17). Marrakesh.	A
Wache, H. & Dinter, B. (2020). The Digital Twin – Birth of an Integrated System in the Digital Age. In 53 rd Hawaii International Conference on System Sciences (pp. 5452–5461). Maui.	B
Hönigsberg, S., Dinter, B., & Wache, H. (2020). The Impact of Digital Technology on Network Value Co-creation. In 53 rd Hawaii International Conference on System Sciences (pp. 5233–5242). Maui.	B
Wache, H. , Dinter, B. & Kollwitz, C. (2019). Analytics Use Cases for Mass Customization – A Process-based Approach for Systematic Discovery. In 52 nd Hawaii International Conference on System Sciences (pp. 5868–5877). Maui.	B
Dinter, B., Jäkel, T., Kollwitz, C. & Wache, H. (2017). Teaching Big Data Management – An Active Learning Approach for Higher Education. In Pre-ICIS SIGDSA Symposium on Analytics for Organizational and Societal Transformations (pp. 1–16). Seoul.	-

TEACHING EXPERIENCE

(1) ICN Business School 2024-2025

- Data Analysis (Research Methods) by Burçin Güçlü – English – in-person – 2 * 90-minute units
- Business Functions (Simulation) by Leonhard Gebhardt – English – in-person – 16 * 90-minute units
- Digital and Sustainable Transformation by Leonhard Gebhardt – English – in-person – 40 * 90-minute units
- Big Data and Business Analytics by Sarah Hönigsberg – English – in-person – 16 * 90-minute units
- Digital Transformation and Cyber Security by Sabrine Mallek – English – in-person – 8 * 90-minute units
- Digital Economy (Executive MBA) by Hendrik Wache – English – in-person – 12 * 90-minute units

(2) TBS Education Barcelona 2024

- Digital Technologies Management (Business Intelligence) by Hendrik Wache – English – in-person – 6 * 150 minutes units

(3) Supervision of student research projects – officially appointed principal supervisor – TU Chemnitz

- 13 master theses (+2 secondary supervisions) – postgraduate students
- 2 bachelor theses (+1 secondary supervision) – undergraduate students
- 15 seminar works – undergraduate and postgraduate students

(4) Big Data Management – German – in-person and online – TU Chemnitz

- Modules: Hadoop Distributed File System (HDFS), MapReduce, NoSQL databases, Big Data analytics, Artificial Intelligence, digital business models, and Organizational challenges in Big Data projects
- October 2020 – February 2021, 18 * 90 minutes units
- October 2019 – February 2020, 24 * 90 minutes units
- October 2018 – February 2019, 24 * 90 minutes units
- October 2017 – February 2018, 24 * 90 minutes units

(5) Business process modeling and management – German – in-person and online – TU Chemnitz

- Modules: Process mining, modeling, simulation, optimization, controlling, event driven process chains (EPC), BPMN, UML
- April 2020 – August 2020, 6 * 90 minutes units
- April 2019 – August 2019, 12 * 90 minutes units
- April 2018 – August 2018, 12 * 90 minutes units

(6) Foundations of Information Systems – German – in-person – TU Chemnitz

- Modules: Computer systems, communication systems, business processes modeling, systems development, information management, databases
- October 2018 – February 2019, 6 * 90 minutes units

EXPERIENCE WITH THIRD-PARTY FUNDING

Collaborative Digital Twin in Value Networks (Co-TWIN) / 02P17D146

Funding Agency	Federal Ministry of Education and Research (German: Bundesministerium für Bildung und Forschung, BMBF)
Project partners	Chemnitz University of Technology, Leipzig Graduate School of Management, BHS Corrugated Maschinen- und Anlagenbau GmbH, up2parts GmbH, SITEC Industrietechnologie GmbH, and Schmale Maschinenbau GmbH
Target	Development of a platform for managing digital twins in value networks in mechanical engineering
Project Sponsor	Projekträger Karlsruhe (PTKA)
Total Funding Volume	2,775,749 Euro
Own Funding Volume	751,063 euros
Project Duration	March 1, 2019 until December 31, 2022
Own function	Writer of the full grant proposal, content-related project work and publications, management of the subproject of the Chemnitz University of Technology, preparation of software development subcontracts

Process-oriented value creation design in textile networks for mass customization in SMEs (PROFUND) / 03ZZ0618C

Funding Agency	Federal Ministry of Education and Research (German: Bundesministerium für Bildung und Forschung, BMBF)
Project partners	Chemnitz University of Technology, RWTH Aachen, Leipzig Graduate School of Management, Sächsisches Textilforschungsinstitut e. V., VOWALON Beschichtung GmbH, Paul Uebel Wirk- und Strickwaren GmbH, Buntgardine Rotschau GmbH, and Pfand Textilausrüstung
Target	Digital support of the development process of complex technical textiles in the corporate network
Project Sponsor	Forschungszentrum Jülich GmbH
Total Funding Volume	1,718,087 euros
Own Funding Volume	359,938 euros
Project Duration	May 1, 2017 until May 31, 2020
Own function	Content-related project work and publications

PROFESSIONAL SERVICES

Co-chair	AIS Doctoral Student College Executive Committee Secretary (2025) AIS Special Interest Group Artificial Intelligence Student Ambassador (2025) AMCIS Mini Track Chair for the track Human-AI Collaboration in Generative AI-Enhanced Service Systems (2025) AIS Doctoral Student College Region 2 Coordinator (2024) MISQ Insider Contributor (2021-today)
Reviewer	International Conference on Information Systems (2021) European Conference on Information Systems (2023/2024) Hawaii International Conference on System Sciences (2020/2021) International Conference on Wirtschaftsinformatik (Reviewer: 2021/2022/2023/2024/2025; Associate Editor 2025) International Conference on Design Science Research in Information Systems and Technology (Reviewer: 2024/2025; Associate Editor 2025) American Conference on Information Systems (2023) Conferences on Business Process Management (2022)

AWARDS

2024 AMCIS 2024 Best ERF Paper Nomination

DOCTORAL CONSORTIUMS

2020 ICIS Doctoral Student Consortium, Online

PROFESSIONAL EXPERIENCE

- August 2025 – present **ICN Business School**, Assistant Professor
Teaching Intrapreneurship and Business Takeover, Risk, foresight and innovation: transdisciplinary perspectives, Digital and Sustainable Transformation, Big Data and Business Analytics, and Digital Economy (Executive MBA)
- 2024 – 2025 **ICN Business School**, Lecturer (Vacataire)
Teaching Data Analysis, Business Functions, Digital and Sustainable Transformation, Big Data and Business Analytics, Digital Transformation and Cyber Security, and Digital Economy (Executive MBA)
- 2024 – 2025 **TBS Education Barcelona**, Lecturer (Profesor)
Teaching Digital Technologies Management
- 2023 – 2024 **University of Jyväskylä**, Research associate
Joint research project on the intersection of cyber physical systems and service systems in the “Value Creation for Cyber-Physical Systems and Services (CPSS)” research group
- 2017 – 2022 **Chemnitz University of Technology**, Research associate
(1) Working on an Industry 4.0 research project funded by the Federal Ministry of Education and Research - Germany
(2) Teaching courses and supervising student research projects
- 2016 – 2017 **Chemnitz University of Technology**, Student research assistant
- March – September 2015 **H&D Corporation (Chattanooga, USA)**, International Project Manager
Supporting a customer project aimed at establishing and commissioning an outsourced IT department for a US non-profit educational institution, focusing on IT-supported business processes
- 2014 – 2015 **H&D International Group (Germany)**, Business Development Controller
Project management as part of a company restructuring - Optimization and reassessment of processes in an ISO 9001 certified process landscape
- 2013 One-year sabbatical, world tour through 15 countries and numerous cultures
- 2010 – 2012 **Ostfalia University of Applied Sciences**, Student research assistant
Tutor for the lecture "Introduction to Linux System Programming"
Tutor for the lecture "Algorithms and Data Structures"

SKILLS

- Languages** German (Native speaker), English (fluent), French (basic), Spanish (basic)
- Programming** Java, JEE, C, R, SQL, XML, HTML
- Tools** ChatGPT, Claude, Copilot, MaxQDA, Tableau, Rapidminer, Hadoop, MongoDB, Splunk, Gephi, ArisExpress, SPSS, RStudio
- Certifications** ITIL 2011

MEMBERSHIPS

- Association of Information Systems** (2019-today): AIS Doctoral Student College, AIS SIGs: Artificial Intelligence (SIG AI), AIS Chapter Germany (AISD), Community Leaders: AIS Community Leaders
- Academy of Management** (2025-today): Communication, Digital Technology, and Organization (CTO) & Strategic Management (STR)
- Value Creation for Cyber-Physical Systems and Services (CPSS)** (2022-today)