

Daniel Heinz

Head of the Digital Service Design & Innovation Lab
Karlsruhe Institute of Technology

Curriculum vitae · October 2026

daniel.heinz@kit.edu · [Institutional profile](#) · [Read this CV online](#)

Research

I study how organizations change when data and AI enter everyday work: which responsibilities shift, which capabilities people need, and how existing systems can support renewal.

My work combines qualitative field research with design science. Working systems let us study organizational change while it happens.

Academic appointments

Since 2024 · Head of the Digital Service Design & Innovation Lab

Karlsruhe Institute of Technology

2021–2024 · Research Associate

Karlsruhe Institute of Technology

Education

2025 · Dr. rer. pol. in Information Systems

Karlsruhe Institute of Technology

Dissertation: Smart Service Innovation in Incumbent Firms. Summa cum laude.

2021 · M.Sc. in Industrial Engineering & Management

Karlsruhe Institute of Technology

With distinction.

2018 · B.Sc. in Industrial Engineering & Management

Karlsruhe Institute of Technology

Visiting research stays at the University of Cambridge (2024) and The University of Queensland (2022).

Academic service

President of AIS SIG Services

Co-head of the Conferences Division, Die WI e.V.

Chair for Workshops, Tutorials & Community Events, WI 2027

Volunteering

Outside work I volunteer with DPSG, Germany's largest scout association. I lead its program for 15- to 21-year-olds in the Freiburg diocese, train youth leaders, and from 2023 to 2025 led CrOver, an international camp for about 250 scouts supported by €99,495 in Erasmus+ funding.

Selected funded projects

I work on publicly funded projects and industry collaborations at KIT, with responsibilities ranging from project leadership to proposal development.

SHAPE · 2024–2027

BMBF / BMFTR · DigiLeistDAT

How can service ecosystems coordinate people, expertise, and resources to develop digital services?

Proposal development and scientific project lead at KIT

ZirkulEA · 2022–2025

BMBF · MobilKreis

How can shared lifecycle data support circular value chains for electric powertrains?

Proposal development and scientific project lead at KIT

bi.smart · 2021–2024

BMBF · Advanced Systems Engineering

How can small and medium-sized manufacturers develop connected products and digital services around customer needs?

Project lead at KIT

AI Adoption · Since 2025

Industry-funded collaboration · BASF

How do organizations move from AI pilots to sustained use across the enterprise?

Proposal development and scientific project lead at KIT

Truck Traceability · 2025–2026

Industry-funded collaboration · Daimler Truck

How can lifecycle data help companies reuse, remanufacture, and recycle trucks and their components?

Proposal development and scientific project lead at KIT

Doctoral research

I provide day-to-day research advising. Prof. Gerhard Satzger provides formal doctoral supervision for the projects below.

Jonas Liebschner · Since April 2024

AI assistants for innovation and entrepreneurship

Linda Sagnier Eckert · Since April 2024

Traceability for the circular economy

Ida Meier · Since September 2025

AI adoption in organizations

Journal articles

A Mechanism-Based Theory of Legacy Enterprise Information System Reconfiguration in Incumbent Firms

Daniel Heinz & Christoph F. Breidbach
Journal of Information Technology 41(3), 221-249 · 2026
<https://doi.org/10.1177/02683962261461296>

Smart Services in B2B Contexts: A Taxonomy and Archetypes

Daniel Heinz, Marcel Fassnacht, Carina Benz, Philipp Luchner & Gerhard Satzger
Information & Management 63(7), Article 104390 · 2026
<https://doi.org/10.1016/j.im.2026.104390>

Backcasting the Future of the Automotive Industry: Leveraging Digital Technologies for the Circular Economy

Linda Sagnier Eckert, Ann-Sophie Finner, Daniel Heinz & Gerhard Satzger
Communications of the Association for Information Systems 58(1), 878-912 · 2026 · In press
<https://doi.org/10.17705/1CAIS.05835>

Selecting Data Assets in Data Marketplaces: Leveraging Machine Learning and Explainable AI for Value Quantification

Dominik Martin, Daniel Heinz, Moritz Glauner & Niklas Kühl
Business & Information Systems Engineering 68(3), 523-558 · 2026
<https://doi.org/10.1007/s12599-025-00940-8>

Conceptualizing Hybrid Intelligent Service Ecosystems

Christian Bartelheimer, Daniel Heinz, Sarah Hönigsberg, Dominik Siemon, Mahei Manhai Li, Timo Strohmann, Jens Poeppelbuss & Christoph Peters
Electronic Markets 35(1), Article 63 · 2025
<https://doi.org/10.1007/s12525-025-00798-4>

Unlocking the Value from Car Data: A Taxonomy and Archetypes of Connected Car Business Models

Felix Sterk, Alexander Stocker, Daniel Heinz & Christof Weinhardt
Electronic Markets 34(1), Article 13 · 2024
<https://doi.org/10.1007/s12525-024-00692-5>

Data Sharing Practices: The Interplay of Data, Organizational Structures, and Network Dynamics

Marcel Fassnacht, Jannis Leimstoll, Carina Benz, Daniel Heinz & Gerhard Satzger
Electronic Markets 34(1), Article 47 · 2024
<https://doi.org/10.1007/s12525-024-00732-0>

Creating Customer Value from Data: Foundations and Archetypes of Analytics-Based Services

Fabian Hunke, Daniel Heinz & Gerhard Satzger
Electronic Markets 32(2), 503-521 · 2022
<https://doi.org/10.1007/s12525-021-00506-y>

Exploring the Potential of Smart Service Systems: A Multi-Actor View on Affordances and Their Actualization

Daniel Heinz, Carina Benz, Jan Bode, Fabian Hunke & Gerhard Satzger
Journal of Service Management Research 6(2), 132-146 · 2022
<https://doi.org/10.5771/2511-8676-2022-2-132>

Selected conference papers

From Pilot to Production: Microfoundations and Responsibility Patterns for Enterprise AI Projects

Daniel Hendriks, Ida Meier, Henrik Wiegand, Carina Benz, Daniel Heinz, and Philipp Spitzer
ICIS · 2026 · Accepted

<https://doi.org/10.5445/IR/1000197565>

The Adoption of AI-Based Assistants in Startup Innovation: Configuring Human-AI Agency in Entrepreneurial Work

Jonas Liebschner, Ida Meier, Daniel Heinz, and Gerhard Satzger
ECIS · 2026

https://aisel.aisnet.org/ecis2026/is_adopt/is_adopt/20/

Designing AI-Based Entrepreneurial Coaching Systems

Jonas Liebschner, Daniel Heinz, and Gerhard Satzger
DESRIST · 2026

https://doi.org/10.1007/978-3-032-28313-9_2

Making the Implicit Explicit: A Human-in-the-Loop AI Pipeline for Excavating and Making Use of Latent Design Knowledge

Timo Strohmann, Linda Sagnier Eckert, Daniel Heinz, Thorsten Schoormann, Christoph Hoppe-Ludwig, and Anne Ixmeier
DESRIST · 2026

https://doi.org/10.1007/978-3-032-28316-0_3

Reallocating Uncertainty in Incumbent Firms through Digital Platforms: The Case of Google's Automotive Ecosystem Involvement

Felix Sterk, Daniel Heinz, Petra Hengstler, and Christof Weinhardt
ICIS · 2023

https://aisel.aisnet.org/icis2023/gov_strategy/gov_strategy/3/

Conceptualizing Digital Resilience for AI-Based Information Systems

Max Schemmer, Daniel Heinz, Lucas Baier, Michael Vössing, and Niklas Kühl
ECIS (Research-in-Progress) · 2021

https://aisel.aisnet.org/ecis2021_rip/44/

Teaching and advising

Digital Services: Innovation & Business Models

Master's course · KIT

Building Digital Services with AI

Practical seminar · KIT · Winter 2026/27

Philosophy of Science

Doctoral seminar · Co-developed · KIT · Winter 2026/27

Digital Services at HECTOR School

Executive education · KIT

I provide day-to-day doctoral advising and supervise bachelor's and master's theses.