

1	Literacy and Machine Learning: How Intelligent Information Aggregation Changes Our Information Literacy – A Systematic Literature Review
Keywords	Literacy, Machine Learning, Artificial Intelligence, Literature Review
Goal	<p>Seemingly intelligent applications of machine learning algorithms, like for example natural language processing systems (i.e., ChatGPT), simplify information sourcing, aggregation and understanding. It naturally affects our literacy if information can be sourced anywhere, anytime, and we do not need to rely on our own reasoning anymore. However, critical thinking and sourcing of information from primary sources are important literacy skills for a reliable understanding of diverse contexts.</p> <p>This Bachelor thesis is expected to elucidate effects of machine learning applications on literacy of humans. Effects, consequences and future research avenues should be critically discussed, based on a systematic literature review.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Behrens, S. J. (1994). A conceptual analysis and historical overview of information literacy. <i>College and Research Libraries</i>, 55(4), Article 4. Scopus. • T: Belkin, N. J., & Croft, W. B. (1992). Information filtering and information retrieval: Two sides of the same coin? <i>Communications of the ACM</i>, 35(12), Article 12. • T: Demetis, D., & Lee, A. (2018). When Humans Using the IT Artifact Becomes IT Using the Human Artifact. <i>Journal of the Association for Information Systems</i>, 19(10), 929–952. • T: Mackey, T. P., & Jacobson, T. E. (2011). Reframing Information Literacy as a Metaliteracy. <i>College & Research Libraries</i>, 72(1), Article 1. • T: Malhotra, N. K., Jain, A. K., & Lagakos, S. W. (1982). The Information Overload Controversy: An Alternative Viewpoint. <i>Journal of Marketing</i>, 46(2), 27–37. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(06), 552–567. • M: Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>SSRN Electronic Journal</i>. • M: Smith, H. J., Dinev, T., & Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989–1016. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using grounded theory as a method for rigorously reviewing literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Moritz Bruckner

2	Software Failure Repair: What Does Intelligent Software Need to Do after It Has Failed? – A Systematic Literature Review
Keywords	Software Failure, Artificial Intelligence, Machine Learning, Literature Review
Goal	<p>Artificial intelligence (AI) and machine learning are on the rise. So far, we know of the capabilities of AI from non-critical contexts like “ChatGPT”.</p> <p>However, AI is soon to be integrated in critical infrastructures like for example autonomous driving. In fact, investments in the development of autonomously driving systems are already one of the biggest investment fields of AI.</p> <p>Independent of the context, the more sophisticated software becomes, the more it is prone to failure. But what is left to do when AI has failed? Can it repair itself?</p> <p>This thesis is aimed to draw insights and conclusions for how AI can repair itself from the service failure and -recovery literature. The bachelor thesis is expected to include a systematic literature review.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Carter, M., & Grover, V. (2015). Me, My Self, And I (T). <i>MIS Quarterly</i>, 39(4), 931–958. • T: Craig, K., Thatcher, J. B., & Grover, V. (2019). The IT Identity Threat: A Conceptual Definition and Operational Measure. <i>Journal of Management Information Systems</i>, 36(1), 259–288. • T: Wang, X., Wong, Y. D., Li, K. X., & Yuen, K. F. (2020). This is not me! Technology-identity concerns in consumers’ acceptance of autonomous vehicle technology. <i>Transportation Research Part F: Traffic Psychology and Behaviour</i>, F(74), 345–360. • T: Goode, S., Hoehle, H., Venkatesh, V., & Brown, S. A. (2017). User Compensation as a Data Breach Recovery Action: An Investigation of the Sony Playstation Network Breach. <i>MIS Quarterly</i>, 41(3), 703-A16. • T: Najjar, M. S., Kettinger, W. J., & Kettinger, L. D. (2022). IS incident recovery and service value: a service-dominant logic view. <i>European Journal of Information Systems</i>, 31(4), 492–524. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(06), 552–567. • M: Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>SSRN Electronic Journal</i>. • M: Smith, H. J., Dinev, T., & Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989–1016. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using grounded theory as a method for rigorously reviewing literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Moritz Bruckner

3	Software Failure Repair: What Does Intelligent Software Need to Do after It Has Failed? – A Case Study Analysis
Keywords	Software Failure, Artificial Intelligence, Machine Learning, Case Study
Goal	<p>Artificial intelligence (AI) and machine learning are on the rise. So far, we know of the capabilities of AI from non-critical contexts like “ChatGPT”.</p> <p>However, AI is soon to be integrated in critical infrastructures like for example autonomous driving. But what would happen after the software fails or behaves divergent from one’s expectations?</p> <p>Independent of the context, the more sophisticated software becomes, the more it is prone to failure, which raises the need to explore software responses that mitigate negative consequences of software failure.</p> <p>For this reason, this case study aims at exploring technical solutions and measures that are expected from consumers to repair software failures. This thesis includes interviews, transcription, and coding.</p>
Methodology	<p>Case Study – <i>Interviews can be conducted in-person or online (e.g., via Skype, Zoom, etc.)</i></p> <p>An additional workshop "Introduction to Case Studies" - only for students who will conduct a case study or similar qualitative research - will be held on: Tuesday, 14.05.2024, 2:00pm-5:15pm (J 2102). Attendance is mandatory.</p>
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Carter, M., & Grover, V. (2015). Me, My Self, And I (T). <i>MIS Quarterly</i>, 39(4), 931–958. • T: Craig, K., Thatcher, J. B., & Grover, V. (2019). The IT Identity Threat: A Conceptual Definition and Operational Measure. <i>Journal of Management Information Systems</i>, 36(1), 259–288. • T: Wang, X., Wong, Y. D., Li, K. X., & Yuen, K. F. (2020). This is not me! Technology-identity concerns in consumers’ acceptance of autonomous vehicle technology. <i>Transportation Research Part F: Traffic Psychology and Behaviour</i>, F(74), 345–360. • T: Goode, S., Hoehle, H., Venkatesh, V., & Brown, S. A. (2017). User Compensation as a Data Breach Recovery Action: An Investigation of the Sony Playstation Network Breach. <i>MIS Quarterly</i>, 41(3), 703-A16. • T: Najjar, M. S., Kettinger, W. J., & Kettinger, L. D. (2022). IS incident recovery and service value: a service-dominant logic view. <i>European Journal of Information Systems</i>, 31(4), 492–524. • M: Sarker, S., Xiao, X., and Beaulieu, T. (2013). Qualitative Studies in Information Systems: A Critical Review and Some Guiding Principles. <i>MIS Quarterly</i>, 37(4), 3–18. • M: Eisenhardt, K. M. (1989). Building Theories from Case Study Research. <i>Academy of Management Review</i>, 14(4), 532–550. • M: Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. <i>Qualitative Inquiry</i>, 12(2), 219 –245. • M: Sarker, S., Sarker, S., Sahaym, A., and Bjørn-Andersen, N. (2012). Exploring Value Cocreation in Relationships Between an ERP Vendor and Its Partners: A Revelatory Case Study. <i>MIS Quarterly</i>, 36(1), 317–338.
Supervisor	Moritz Bruckner

4	Embodiment, Immersion and Presence in the Metaverse – A Systematic Literature Review
Keywords	Metaverse, Virtual Environments, Virtual Reality, Literature Review
Goal	<p>Recent developments on highly immersive virtual environments, e.g., the Metaverse, show that users perceive their experiences in such environments as real and persistent merging physical reality with digital virtuality. Such experiences are enabled by the unique characteristics of Metaverses: immersion, presence, and embodiment. These three concepts are well-known in the IS literature, but a comprehensive overview of their prior application and the implications for Metaverses is still missing.</p> <p>The aim of this bachelor thesis is to conduct a structured literature review bringing together insights from prior literature on the concepts of embodiment, immersion, and presence. The work should identify the relevant literature streams and structure the results of previous studies in a comprehensive way, distinguish e.g., between theories applied, research approaches, dependent and independent variables as well as different contexts, and possibly conclude with an agenda for future research.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Biocca, F., Harms, C., & Burgoon, J. K. (2003). Toward a More Robust Theory and Measure of Social Presence: Review and Suggested Criteria. <i>Presence: Teleoperators and Virtual Environments</i>, 12(5), 456–480. • T: Dincelli, E., & Yayla, A. (2022). Immersive virtual reality in the age of the Metaverse: A hybrid-narrative review based on the technology affordance perspective. <i>The Journal of Strategic Information Systems</i>, 31(2), 101717. • T: Mystakidis, S. (2022). Metaverse. <i>Encyclopedia</i>, 2(1), 486–497. • T: Schultze, U. (2010). Embodiment and presence in virtual worlds: a review. <i>Journal of Information Technology</i>, 25(4), 434–449. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6), 552–567. • M: Smith, H. J., Dinev, T., & Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989–1016. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Adeline Frenzel-Piasentin

5	Generative Artificial Intelligence (GenAI) – A Systematic Literature Review
Keywords	ChatGPT, Generative Artificial Intelligence, Literature Review
Goal	<p>Generative artificial intelligence (GenAI), such as ChatGPT, uses generative models to create text, images, or other data. GenAI can support humans in various domains, e.g., decision-making or idea generation and innovation, by generating output in response to prompts. Humans can then use this output to elevate their capabilities and improve desired outcomes, i.e., they can become more productive in creative tasks. Due to the fast pace of developments of GenAI, the literature is scattered, and a comprehensive overview is missing.</p> <p>The aim of this bachelor thesis is to conduct a structured literature review bringing together insights from prior literature on GenAI. The work should identify the relevant literature streams and structure the results of previous studies in a comprehensive way, distinguish e.g., between theories applied, research approaches as well as different contexts, and possibly conclude with an agenda for future research.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Banh, L., & Strobel, G. (2023). Generative artificial intelligence. <i>Electronic Markets</i>, 33, 63. • T: Eloundou, T., Manning, S., Mishkin, P., & Rock, D. (2023). GPTs are GPTs: An Early Look at the Labor Market Impact Potential of Large Language Models (arXiv:2303.10130). <i>arXiv</i>. • T: Feuerriegel, S., Hartmann, J., Janiesch, C., & Zschech, P. (2024). Generative AI. <i>Business & Information Systems Engineering</i>, 66(1), 111–126. • T: Sabherwal, R., & Grover, V. (2024). The Societal Impacts of Generative Artificial Intelligence: A Balanced Perspective. <i>Journal of the Association for Information Systems</i>, 25(1), 13–22. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6), 552–567. • M: Smith, H. J., Dinev, T., & Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989–1016. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Adeline Frenzel-Piasentin

6	Digital Innovation with ChatGPT – An Ethnography on GenAI
Keywords	ChatGPT, Generative Artificial Intelligence, Digital Innovation, Ethnography
Goal	<p>Generative artificial intelligence (GenAI), such as ChatGPT, uses generative models to create text, images, or other data. GenAI can support humans in various domains, e.g., decision-making or idea generation and innovation, by generating output in response to prompts. Humans can then use this output to elevate their capabilities and improve desired outcomes, i.e., they can become more productive in creative tasks. However, it currently remains unclear how humans change due to their collaboration with GenAI for digital innovation.</p> <p>The aim of this bachelor thesis is to identify how an individual (i.e., the student) may use GenAI for digital innovation and how the collaboration with GenAI changes during the innovation process as well as how the individual (i.e., the student) changes due to the collaboration. To answer this research question, the student will conduct an ethnography, consisting of personal, weekly diaries (i.e., self-reports), and will document the collaboration with a GenAI (e.g., ChatGPT output). Additionally, 3 to 4 interviews will be conducted with the supervisors at the beginning, in the middle, and at the end of the project. In the end, the work should identify the relevant aspects and steps of the digital innovation process and eventually structure the results in a comprehensive and self-reflective manner.</p>
Methodology	<p>Ethnography – <i>Weekly self-reflecting diaries and outputs can be documented online in a structured manner. A coding analysis of the diaries will be part of the empirical investigation.</i></p> <p>An additional workshop "Introduction to Qualitative Research" - only for students who will conduct qualitative research - will be held on: Tuesday, 14.05.2024, 2:00pm-5:15pm (J 2102). Attendance is mandatory.</p>
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Banh, L., & Strobel, G. (2023). Generative artificial intelligence. <i>Electronic Markets</i>, 33(1), 63. • T: De Ridder, P., & Bogaert, N. (2023). How to use ChatGPT if you're an Innovator - 20 use cases. <i>Board of Innovation</i>. https://www.boardofinnovation.com/blog/how-to-use-chatgpt-if-youre-an-innovator-20-use-cases/ • T: Feuerriegel, S., Hartmann, J., Janiesch, C., & Zschech, P. (2024). Generative AI. <i>Business & Information Systems Engineering</i>, 66(1), 111–126. • T: Jarvenpaa, S., & Klein, S. (2024). New Frontiers in Information Systems Theorizing: Human-gAI Collaboration. <i>Journal of the Association for Information Systems</i>, 25(1), 110–121. • M: Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. <i>Organizational Research Methods</i>, 16(1), 15–31. • M: Myers, M. D. (2019). <i>Qualitative Research in Business and Management</i>. London: Sage. • M: Schultze, U., & Boland, R. J. (2000). Knowledge management technology and the reproduction of knowledge work practices. <i>The Journal of Strategic Information Systems</i>, 9(2), 193–212. • M: van den Broek, E., Sergeeva, A., & Huysman, M. (2021). When the Machine Meets the Expert: An Ethnography of Developing AI for Hiring. <i>MIS Quarterly</i>, 45(3), 1557–1580. • M: Van Maanen, J. (2011). <i>Tales of the Field: On Writing Ethnography, Second Edition</i>. University of Chicago Press.
Supervisors	Felix Büsching, Adeline Frenzel-Piasentin, Moritz Bruckner

7	How Do Groups Protect Information Online? – A Case Study on WhatsApp
Keywords	Information Privacy, Group Norms, Case Study
Goal	<p>Individuals regularly exchange private information in groups using digital technologies. This information exchange takes place on the basis of developed group information privacy norms which aim to protect a groups' privacy, and which can be refined over time. During group norm development and group norm refinement, it remains unclear whether all individuals in a group have the same understanding of the group information privacy norms.</p> <p>The aim of this bachelor thesis is to identify how groups develop and refine information privacy norms. In order to grasp an understanding of the phenomenon of group privacy, a case study shall be conducted. The case study shall include either at least 2 focus groups (4-5 participants each) or at least 5 semi-structured interviews, both with members of the same online group. The work should identify the relevant aspects, steps and constructs of information privacy norm refinement and eventually structure the results in a comprehensive way.</p>
Methodology	<p>Case Study – <i>Interviews can be conducted in-person or online (e.g., via Skype, Zoom, etc.)</i></p> <p>An additional workshop "Introduction to Case Studies" - only for students who will conduct a case study or similar qualitative research - will be held on: Tuesday, 14.05.2024, 2:00pm-5:15pm (J 2102). Attendance is mandatory.</p>
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Bélanger, F., & James, T. L. (2020). A Theory of Multilevel Information Privacy Management for the Digital Era. <i>Information Systems Research</i>, 44(2), 510–536. • T: Feldman, D.C. (1984). The development and enforcement of group norms. <i>Academy Management Review</i>, 9(1), 47–53. • T: Lampinen, A., Lehtinen, V., Lehmuskallio, A., & Tamminen, S. (2011). We're in it together: interpersonal management of disclosure in social network services. <i>Proceedings of the 2011 Annual Conference on Human Factors in Computing Systems - CHI '11</i>, 3217–3226. • T: Laufer, R.S., & Wolfe, M. (1977). Privacy as a concept and a social issue: A multidimensional developmental theory. <i>Journal of Social Issues</i>, 33(3), 22–42. • M: Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. <i>Organizational Research Methods</i>, 16(1), 15–31. • M: Myers, M. D. (2019). <i>Qualitative Research in Business and Management</i>. London: Sage. • M: Urquhart, C., Lehmann, H., & Myers, M. D. (2010). Putting the 'theory' back into grounded theory: guidelines for grounded theory studies in information systems. <i>Information Systems Journal</i>, 20(4), 357–381. • M: Walsham, G. (1995). Interpretive Case Research in IS: Nature and Method. <i>European Journal of Information Systems</i>, 4(2), 74–81.
Supervisor	Adeline Frenzel-Piasentin

8	Developing Privacy-by-Design Principles – A Case Study on Artificial Intelligence
Keywords	Information Privacy, Privacy-by-Design, Artificial Intelligence, Case Study
Goal	<p>The use of artificial intelligence (AI) and data privacy leads to a tense relationship, as they seek to safeguard conflicting interests that do not appear to be compatible at first sight. On the one hand, AI is intended to provide new insights or make decisions based on large amounts of data. On the other hand, information privacy aims to limit the processing of personal data to narrow, legally defined boundaries based on considerations of expediency. Privacy-by-Design (PbD), an approach that embeds privacy directly in technology design, can be a possible solution. PbD provides strong data privacy mechanisms without the user having to act.</p> <p>The aim of this bachelor thesis is to identify principles how PbD can be applied in the case of AI. In order to do so, a case study shall be conducted. The case study shall include either at least 2 focus groups (4-5 participants each) or at least 5 semi-structured interviews, both with members of the same online group. The work should identify the relevant aspects or principles of PbD in the context of AI and eventually structure the results in a comprehensive way.</p>
Methodology	<p>Case Study – <i>Interviews can be conducted in-person or online (e.g., via Skype, Zoom, etc.)</i></p> <p>An additional workshop "Introduction to Case Studies" - only for students who will conduct a case study or similar qualitative research - will be held on: Tuesday, 14.05.2024, 2:00pm-5:15pm (J 2102). Attendance is mandatory.</p>
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Cavoukian, A. (2006). The 7 Foundational Principles. https://privacysecurityacademy.com/wp-content/uploads/2020/08/PbD-Principles-and-Mapping.pdf. • T: Gurses, S., Troncoso, C., & Diaz, C. (2011). Engineering Privacy by Design. <i>Computers, Privacy & Data Protection</i>, 14(3). • T: Oetzel, M. C., & Spiekermann, S. (2014). A systematic methodology for privacy impact assessments: a design science approach. <i>European Journal of Information Systems</i>, 23(2), 126–150. • M: Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology. <i>Organizational Research Methods</i>, 16(1), 15–31. • M: Myers, M. D. (2019). <i>Qualitative Research in Business and Management</i>. London: Sage. • M: Urquhart, C., Lehmann, H., & Myers, M. D. (2010). Putting the ‘theory’ back into grounded theory: guidelines for grounded theory studies in information systems. <i>Information Systems Journal</i>, 20(4), 357–381. • M: Walsham, G. (1995). Interpretive Case Research in IS: Nature and Method. <i>European Journal of Information Systems</i>, 4(2), 74–81.
Supervisor	Verena Kessler Verzar

9	Privacy Personas: Exploring the Interplay between Information Privacy and Individual Traits – A Systematic Literature Review
Keywords	Information Privacy, Personality Traits, Privacy Behavior
Goal	<p>Individuals' privacy behavior strongly relies on their personalities. For example, prior research identified a person's age, their gender, or their individual disposition to value privacy as determining factors of privacy behavior. However, an overarching, general view of the interrelation between privacy behavior and personality is still needed.</p> <p>The aim of this bachelor thesis is to conduct a systematic literature review on the relationship between privacy-related behavior and individual personality traits. The work should identify the relevant concepts and theories in this context and eventually structure the results in a comprehensive way.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Bélanger, F., & Crossler, R. E. (2011). Privacy in the Digital Age: A Review of Information Privacy Research in Information Systems. <i>MIS Quarterly</i>, 35(4), 1017–1041. • T: Karwatzki, S., Dytynko, O., Trenz, M., & Veit, D. (2017). Beyond the Personalization–Privacy Paradox: Privacy Valuation, Transparency Features, and Service Personalization. <i>Journal of Management Information Systems</i>, 34(2), 369–400. • T: Smith, J. H., Dinev, T., & Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989–1016. • T: Xu, H., Dinev, T., Smith, J., & Hart, P. (2011). Information Privacy Concerns: Linking Individual Perceptions with Institutional Privacy Assurances. <i>Journal of the Association for Information Systems</i>, 12(12), 798–824. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6). • M: Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems research. <i>Working Papers on Information System</i>, 10, 1–5. • M: Smith, H. J., Dinev, T., & Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 980–1016. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), xiii–xxiii. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Verena Kessler Verzar

10	The Role of Digital Innovation Units in Driving Organizational Digital Transformation
Keywords	Digital Transformation, Digital Innovation Units, Organizational Level, Literature Review
Goal	<p>This topic explores how digital innovation units within organizations facilitate digital transformation, focusing on their strategies, structures, and impact on traditional business models. Although digital transformation on an organizational level is receiving a lot of attention in IS research (Vial, 2019), the way and means that organizations take to achieve success in such a transformation remain unclear.</p> <p>The aim of this bachelor thesis is to conduct a systematic literature review and give a comprehensive overview on the interplay of digital innovation units with their parent organizations identified in IS research. A possible result of this study would be to understand the best practices, challenges, and outcomes of establishing these digital innovation units.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Chnias, S., Myers, M. D., & Hess, T. (2019). Digital transformation strategy making in pre-digital organizations: The case of a financial services provider. <i>The Journal of Strategic Information Systems</i>, 28(1), 17–33. • T: Fuchs, C., Barthel, P., Herberg, I., Berger, M., & Hess, T. (2019). Characterizing Approaches to Digital Transformation: Development of a Taxonomy of Digital Units. <i>Wirtschaftsinformatik 2019 Proceedings</i>. • T: Drechsler, K., Gregory, R., Wagner, H.-T., & Tumbas, S. (2020). At the Crossroads between Digital Innovation and Digital Transformation. <i>Communications of the Association for Information Systems</i>, 47, 521–538. • T: Haskamp, T., Mayer, S., Lorson, A., & Uebernickel, F. (2021). Performance Measurement in Digital Innovation Units - An Information Asymmetry Perspective. <i>ECIS 2021 Research Papers</i>, 16. • T: Vial, G. (2019). Understanding digital transformation: A review and a research agenda. <i>The Journal of Strategic Information Systems</i>, 28(2), 118–144. • T: Yeow, A., Soh, C., & Hansen, R. (2018). Aligning with new digital strategy: A dynamic capabilities approach. <i>The Journal of Strategic Information Systems</i>, 27(1), 43–58. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6). • M: Okoli, C., and Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>Sprouts: Working Papers on Information Systems</i>, 10(26), 1-5. • M: Smith, H. J., Dinev, T., and Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989-1016. • M: Webster, J., and Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13-23. • M: Wolfswinkel, J. F., Furtmueller, E., and Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45-55.
Supervisor	Jan Münch

11	How to Achieve Success in Digital Transformation? – A Systematic Literature Review on Digital Strategic Initiatives
Keywords	Digital Transformation, Digital Strategy, Digital Strategic Initiatives, Literature Review
Goal	<p>In the digital age, it has become crucial to dissect the critical components that contribute to successful digital transformation through a systematic literature review of digital strategic initiatives. It explores the multifaceted approaches organizations adopt to integrate digital technologies into their core business processes, enhancing efficiency, value creation, and competitiveness.</p> <p>The aim of this bachelor thesis is to conduct a systematic literature review and identify best practices, common challenges, and effective strategies for navigating the complex landscape of digital transformation described in the literature. Key areas of focus include the role of leadership, organizational culture, technology adoption, and the alignment of digital strategies with overall business objectives.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Matt, C., Hess, T., & Benlian, A. (2015). Digital Transformation Strategies. <i>Business & Information Systems Engineering</i>, 57(5), 339–343. • T: Piccoli, G., Rodriguez, J., & Grover, V. (2022). Digital Strategic Initiatives and Digital Resources: Construct Definition and Future Research Directions. <i>MIS Quarterly</i>, 46(4), 2289–2315. • T: Vial, G. (2019). Understanding digital transformation: A review and a research agenda. <i>The Journal of Strategic Information Systems</i>, 28(2), 118–144. • T: Wessel, L., Baiyere, A., Ologeanu-Taddei, R., Cha, J., & Jensen, T. B. (2021). Unpacking the Difference Between Digital Transformation and IT-Enabled Organizational Transformation. <i>Journal of the Association for Information Systems</i>, 22(1). • T: Yoo, Y., Henfridsson, O., & Lyytinen, K. (2010). The New Organizing Logic of Digital Innovation: An Agenda for Information Systems Research. <i>Information Systems Research</i>, 21(4), 724-735. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6). • M: Okoli, C., and Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>Sprouts: Working Papers on Information Systems</i>, 10(26), 1-5. • M: Smith, H. J., Dinev, T., and Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989-1016. • M: Webster, J., and Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13-23. • M: Wolfswinkel, J. F., Furtmueller, E., and Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45-55.
Supervisor	Jan Münch

12	Digital Innovation Units: A Probate Driver of Organizational Ambidexterity? – A Systematic Literature Review
Keywords	Digital Innovation, Digital Transformation, Ambidexterity, Literature Review
Goal	<p>In our fast-paced and dynamic digital world, organizations can no longer only rest on exploiting their traditional business models. They must bridge the gap to explore new opportunities, especially those arising from digital technologies. For this end, digital innovation units are often used as a driver (Göbeler et al., 2020). This inevitably raises the question of what is known so far in IS research about the role that digital innovation units take in organizational ambidexterity.</p> <p>The aim of this bachelor thesis is to conduct a systematic literature review and accordingly provide a comprehensive overview on how ambidexterity is utilized in IS research as a theoretical lens to study digital innovation units on an organizational level. A potential outcome could be a conceptual process model, that describes how digital innovation units foster organizational ambidexterity.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Drechsler, K., Gregory, R., Wagner, H.-T., & Tumbas, S. (2020). At the Crossroads between Digital Innovation and Digital Transformation. <i>Communications of the Association for Information Systems</i>, 47, 521–538. • Gibson, C. B., & Birkinshaw, J. (2004). The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity. <i>The Academy of Management Journal</i>, 47(2), 209–226. • T: Göbeler, L., Schaar, D., & Hukal, P. (2020). Initiating Ambidexterity through Digital Innovation Labs. <i>ECIS 2020 Proceedings</i>, 16. • Gregory, R. W., Keil, M., Muntermann, J., & Mähring, M. (2015). Paradoxes and the Nature of Ambidexterity in IT Transformation Programs. <i>Information Systems Research</i>, 26(1), 57–80. • T: Wessel, L., Baiyere, A., Ologeanu-Taddei, R., Cha, J., & Jensen, T. B. (2021). Unpacking the Difference Between Digital Transformation and IT-Enabled Organizational Transformation. <i>Journal of the Association for Information Systems</i>, 22(1). • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6). • M: Okoli, C., and Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>Sprouts: Working Papers on Information Systems</i>, 10(26), 1-5. • M: Smith, H. J., Dinev, T., and Xu, H. (2011). Information Privacy Research: An Interdisciplinary Review. <i>MIS Quarterly</i>, 35(4), 989-1016. • M: Webster, J., and Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13-23. • M: Wolfswinkel, J. F., Furtmueller, E., and Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45-55.
Supervisor	Jan Münch

13	Digital Dreams to Reality: Exploring the Creation Process of Digital Ventures
Keywords	Digital Ventures, Digital Entrepreneurship, Information Systems, Literature Review
Goal	<p>Digital ventures are young enterprises or startups “that have at the core of their market offerings a new digital artifact” (von Briel et al., 2018, p. 278). Therefore, the unique characteristics of digital artifacts assume a crucial role in digital ventures, namely their malleability, re-combinability, and distributability (Kallinikos et al., 2013; Yoo et al., 2010).</p> <p>Recent information systems (IS) research suggests that the venture creation process may vary depending on the type of digital artifact that forms the core of a venture’s market offerings (von Briel et al., 2018). Such variations could, for example, be explained by the idea that digital artifacts with a physical component (e.g., GoPro) are less malleable than, for example, software-based artifacts (e.g., WhatsApp). However, we will lack a structured review of the existing literature, hindering our understanding of the artifact-related factors influencing the creation process of digital ventures.</p> <p>The aim of this bachelor thesis is to conduct a structured literature review bringing together insights from existing research examining young digital ventures. Since the topic is situated somewhere between Entrepreneurship, Management, and Information Systems, the thesis aims to marry the literature of the three disciplines by following Steininger (2019).</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Huang, J., Henfridsson, O., Liu, M. J., & Newell, S. (2017). Growing on Steroids: Rapidly Scaling the User Base of Digital Ventures Through Digital Innovation. <i>MIS Quarterly</i>, 41(1), 301–314. • T: Lehmann, J., Recker, J., Youngjin Yoo, & Rosenkranz, C. (2022). Designing Digital Market Offerings: How Digital Ventures Navigate the Tension Between Generative Digital Technology and the Current Environment. <i>MIS Quarterly</i>, 46(3), 1453–1482. • T: McDonald, R. M., & Eisenhardt, K. M. (2020). Parallel Play: Startups, Nascent Markets, and Effective Business-model Design. <i>Administrative Science Quarterly</i>, 65(2), 483–523. • T: Steininger, D. M. (2019). Linking Information Systems and Entrepreneurship: A Review and Agenda for IT-Associated and Digital Entrepreneurship Research. <i>Information Systems Journal</i>, 29(2), 363–407. • T: von Briel, F., Recker, J., & Davidsson, P. (2018). Not All Digital Venture Ideas Are Created Equal: Implications for Venture Creation Processes. <i>The Journal of Strategic Information Systems</i>, 27(4), 278–295. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6), 552–567. • M: Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>Sprouts: Working Papers on Information Systems</i>, 10(26), 1–5. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Felix Büsching

14	Making Sense of Technology – A Systematic Literature Review
Keywords	Sensemaking, Information Systems, Literature Review
Goal	<p>“To interact with technology, people have to make sense of it; and in this sense-making process, they develop particular assumptions, expectations, and knowledge of the technology, which then serve to shape subsequent actions toward it. While these interpretations become taken-for-granted and are rarely brought to the surface and reflected on, they nevertheless remain significant in influencing how actors in organizations think about and act toward technology” (Orlikowski & Gash, 1994, p. 175).</p> <p>As mentioned above, digital technologies exhibit interpretative flexibility, i.e., they offer room for multiple interpretations by different users. Naturally, existing information systems (IS) research has a long tradition of examining how organizations and individuals make sense of digital technology. However, we still lack a comprehensive overview of the sensemaking literature within the IS discipline.</p> <p>The aim of this bachelor thesis is to conduct a structured literature review bringing together insights from existing sensemaking research. The work should focus on the IS discipline, identify the relevant literature streams, structure the results of previous studies in a comprehensive way, and possibly conclude with an agenda for future research.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and Sensegiving in Strategic Change Initiation. <i>Strategic Management Journal</i>, 12(6), 433–448. • T: Mesgari, M., & Okoli, C. (2019). Critical Review of Organisation-Technology Sensemaking: Towards Technology Materiality, Discovery, and Action. <i>European Journal of Information Systems</i>, 28(2), 205–232. • T: Orlikowski, W. J., & Gash, D. C. (1994). Technological Frames: Making Sense of Information Technology in Organizations. <i>ACM Transactions on Information Systems</i>, 12(2), 174–207. • T: Seidel, S., Recker, J., & vom Brocke, J. (2013). Sensemaking and Sustainable Practicing: Functional Affordances of Information Systems in Green Transformations. <i>MIS Quarterly</i>, 37(4), 1275–1299. • T: Techatassanasoontorn, A. A., Waizenegger, L., & Doolin, B. (2023). When Harry, the Human, Met Sally, the Software Robot: Metaphorical Sensemaking and Sensegiving Around (...) Digital Technology. <i>Journal of Information Technology</i>, 38(4), 416–441. • T: Vlaar, P. W. L., van Fenema, P. C., & Tiwari, V. (2008). Cocreating Understanding and Value in Distributed Work: How Members of Onsite and Offshore Vendor Teams Give, Make, Demand, and Break Sense. <i>MIS Quarterly</i>, 32(2), 227–256. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6), 552–567. • M: Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>Sprouts: Working Papers on Information Systems</i>, 10(26), 1–5. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23. • M: Wolfswinkel, J. F., Furtmueller, E., & Wilderom, C. P. M. (2013). Using Grounded Theory as a Method for Rigorously Reviewing Literature. <i>European Journal of Information Systems</i>, 22(1), 45–55.
Supervisor	Felix Büsching

15	Redefining Value Creation: Exploring the Service-Dominant Logic in Information Systems Research
Keywords	Service-Dominant Logic, Value Cocreation, Information Systems, Literature Review
Goal	<p>Traditionally, entrepreneurs and researchers have viewed products as the primary focus of economic value creation, a view referred to as the goods-dominant (G-D) logic. Recently, however, the view that service, rather than tangible goods, is the core element of economic exchange has found its place in the mindset of practitioners and researchers, commonly referred to as the service-dominant (S-D) logic. In contrast to the G-D logic, the S-D logic argues that a “firm’s offerings are not embedded with value, but rather value occurs when the offering is useful to the customer or beneficiary” (Lusch & Nambisan, 2015, p. 159). Therefore, authors applying S-D logic as a theoretical lens in their research believe that firms “cannot deliver value; they can only offer a value proposition as an invitation to engage with the firm (and potentially other actors) for the cocreation of value” (Lusch & Nambisan, 2015, p. 159).</p> <p>Since the introduction of the service-dominant logic 20 years ago (Vargo & Lusch, 2004), the meta theory has become an integral part of various research disciplines. The question remains, however, to what extent S-D logic has informed information systems (IS) research over the past 20 years. Hence, the aim of this bachelor thesis is to conduct a structured literature review bringing together insights from prior IS literature adopting the service-dominant logic. The work should identify the relevant literature streams and structure the existing research in a comprehensive way.</p>
Methodology	Literature Review
Readings on the Topic (T) and possible Methods (M)	<ul style="list-style-type: none"> • T: Frey, A., Trenz, M., & Veit, D. (2019). A service-dominant logic perspective on the roles of technology in service innovation: uncovering four archetypes in the sharing economy. <i>Journal of Business Economics</i>, 89(8–9), 1149–1189. • T: Lusch, R. F., & Nambisan, S. (2015). Service Innovation: A Service-Dominant Logic Perspective. <i>MIS Quarterly</i>, 39(1), 155–176. • T: Scherer, A., Wunderlich, N. V., & von Wangenheim, F. (2015). The Value of Self-Service: Long-Term Effects of Technology-Based Self-Service Usage on Customer Retention. <i>MIS Quarterly</i>, 39(1), 177–200. • T: Sun, R., & Gregor, S. (2023). Reconceptualizing platforms in information systems research through the lens of service-dominant logic. <i>The Journal of Strategic Information Systems</i>, 32(3). • T: Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. <i>Journal of Marketing</i>, 68(1), 1–17. • M: Leidner, D. (2018). Review and Theory Symbiosis: An Introspective Retrospective. <i>Journal of the Association for Information Systems</i>, 19(6), 552–567. • M: Okoli, C., & Schabram, K. (2010). A Guide to Conducting a Systematic Literature Review of Information Systems Research. <i>Sprouts: Working Papers on Information Systems</i>, 10(26), 1–5. • M: Webster, J., & Watson, R. T. (2002). Analyzing the Past to Prepare for the Future: Writing a Literature Review. <i>MIS Quarterly</i>, 26(2), 13–23.
Supervisor	Felix Büsching