Title	Description	Supervisor
1. Determinants of knowledge use	We encounter new knowledge daily and have access to an overwhelmingly vast amount of deep information, including publicly accessible research. However, we only absorb and use minor portions of it, e.g., due to mental or time constraints. Understanding the factors that influence knowledge use, such as the accessibility and reputation of the source, is essential for both knowledge providers and consumers. This understanding can help them enhance their knowledge provision or consumption, respectively. Against this backdrop, you are asked to provide a literature review on the determinants of knowledge use. **References** Forsgren, N., Sabherwal, R., and Durcikova, A. 2018. "Knowledge Exchange Roles and EKR Performance Impact: Extending the Theory of Knowledge Reuse," *European Journal of Information Systems* (27:1), (F. Rowe and A. Hardin, eds.), Taylor & Francis, pp. 3–21. Havakhor, T., Soror, A. A., and Sabherwal, R. 2018. "Diffusion of Knowledge in Social Media Networks: Effects of Reputation Mechanisms and Distribution of Knowledge Roles," *Information Systems Journal* (28:1), pp. 104–141.	Jan Schilpp
2. Simulated data in quantitative empirical research	Data collection for quantitative empirical research is highly resource consuming. Simulated data might be a promising alternative offering rich data access at low cost. For instance, it is possible to leverage large language models to simulate human behavior. These models are trained to emulate human behavior and serve as computational models of human interaction. Consequently, they might provide a viable avenue for conducting studies through simulation in the realm of social interaction (Horton 2023). Against this backdrop, you are asked to provide a literature review on how simulated data is used in quantitative empirical research. **References** Abbasi, A., Chiang, R., and Xu, J. 2023. "Data Science for Social Good," *Journal of the Association for Information Systems* (24:6), pp. 1439–1458.	Jan Schilpp

Title	Description	Supervisor
	Argyle, L. P., Busby, E. C., Fulda, N., Gubler, J. R., Rytting, C., and Wingate, D. 2023. "Out of One, Many: Using Language Models to Simulate Human Samples," *Political Analysis* (31:3), pp. 337–351. Horton, J. J. 2023. Large Language Models as Simulated Economic Agents: What Can We Learn from Homo Silicus?, *arXiv*. (https://doi.org/10.48550/arXiv.2301.07543).	
3. Current State of Citizen and Fusion Team Development in Agile Software Development	In recent years, the term "Fusion Development" was established by leading NoCode / LowCode vendors such as Microsoft or Mendix. The term describes the concept of "Citizen-Developer" and "Pro-Developer" working together in order to build apps and workflows to solve real business challenges. Gartner predicts that by 2024, low-code application development will be responsible for more than 65% of application development activity. Therefore, it has to be investigated whether such a statement can be trusted and whether "Fusion Development" is the next evolutionary step of Agile Software Development. Within this seminar thesis, you are asked to conduct a literature research regarding the relevance of "Citizen Development", and which role "Fusion Development" plays in scientific literature. Furthermore, the shortcomings of Agile Software Development (ASD) have to be investigated and whether "Fusion Development" has the potential to mitigate potential shortcomings of ASD. **References** Nurdiani, Indira, Jürgen Börstler, Samuel Fricker, Kai Petersen, und Panagiota Chatzipetrou. „Understanding the order of agile practice introduction: Comparing agile maturity models and practitioners' experience". Journal of Systems and Software 156 (1. Oktober 2019): 1–20. https://doi.org/10.1016/j.jss.2019.05.035. Binzer, Björn, und Till J. Winkler. „Democratizing Software Development: A Systematic Multivocal Literature Review and Research Agenda on Citizen Development". In Software Business, herausgegeben von Noel Carroll, Anh Nguyen-Duc, Xiaofeng Wang, und Viktoria Stray, 244–59. Lecture Notes in Business Information Processing. Cham: Springer International Publishing, 2022. https://doi.org/10.1007/978-3-031-20706-8_17. Chetankumar, Patel, und Muthu Ramachandran. „Agile Maturity Model (AMM): A Software Process Improvement framework for Agile Software Development Practices". International Journal of Software Engineering 2 (1. Januar 2009).	Marcel-René Wepper

Title	Description	Supervisor
4. **The impact of Fusion Development / Low Code No Code Platform upon Strategic Alignment in the Domain of Software Development**	Strategic alignment describes the process of planning and implementing practices to ensure organizational objectives are aligned with its strategies. In order to do so, long-term company goals have to be defined with operations, methods and for its strategy. In the context of software development, strategic alignment refers to the business strategy of its IT functions and software projects within its business constraints, such as compliance and regulations. Within this domain, it has to be investigated which role the concept of "Citizen Development" plays in strategic alignment in IT. Furthermore, it has to be evaluated, if maturity models such as the Strategic Maturity Model can be applied (with wich implications), and whether similar/different models exist. **References** Pastor, O., Noel, R., Panach, I. (2021). From Strategy to Code: Achieving Strategical Alignment in Software Development Projects Through Conceptual Modelling. In: Hameurlain, A., Tjoa, A.M. (eds) Transactions on Large-Scale Data- and Knowledge-Centered Systems XLVIII. Lecture Notes in Computer Science(), vol 12670. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-662-63519-3_7 Luftman, J. (2015). Strategic Alignment Maturity. In: vom Brocke, J., Rosemann, M. (eds) Handbook on Business Process Management 2. International Handbooks on Information Systems. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-45103-4_1 Chetankumar, Patel, und Muthu Ramachandran. „Agile Maturity Model (AMM): A Software Process Improvement framework for Agile Software Development Practices". International Journal of Software Engineering 2 (1. Januar 2009).	Marcel-René Wepper
5. **Enablers of (Gen)AI in digital Platforms**	With the rise of GenAI-tools, such as Copilot from Microsoft, a plethora of potential use cases where tools such as Copilot can be integrated into existing processes are increasing drastically. In particular in the domain of B2B, a research gap for potential use-cases has been identified. In addition to this, there are also compliance issues and risks (bias / discrimination) involved when using such tools.	Marcel-René Wepper

Title	Description	Supervisor
	Within this seminar thesis, you are asked to conduct a literature research regarding the relevance of integrating GenAI into existing processes and/or potential use cases, especially in the domain of FIS. The goal is to achieve a broad overview of potential concepts. **References** Kanbach, Dominik K., Louisa Heiduk, Georg Blueher, Maximilian Schreiter, und Alexander Lahmann. „The GenAI Is out of the Bottle: Generative Artificial Intelligence from a Business Model Innovation Perspective". Review of Managerial Science, 13. September 2023. https://doi.org/10.1007/s11846-023-00696-z.	
6. The Impact of Generative Artificial Intelligence on Citizen Development	Generative Artificial Intelligence (GenAI) tools, like Microsoft's Co-Pilot, can greatly enhance the speed and quality of software development. It's important to explore whether the benefits of GenAI for development have been fully studied, especially in the context of citizen development. Citizen development allows business departments to create their own applications, typically using low-code development platforms such as the Microsoft Power Platform. In this seminar thesis, you're asked to conduct a literature review on the impact of GenAI tools in speeding up software development processes and to explore related topics. A special focus should be on how citizen developers are using these tools. This research will help us understand the role and impact of GenAI tools in software development. **References** Kanbach, Dominik K., Louisa Heiduk, Georg Blueher, Maximilian Schreiter, und Alexander Lahmann. „The GenAI Is out of the Bottle: Generative Artificial Intelligence from a Business Model Innovation Perspective". Review of Managerial Science, 13. September 2023. https://doi.org/10.1007/s11846-023-00696-z. Nguyen-Duc, Anh, Beatriz Cabrero-Daniel, Adam Przybylek, Chetan Arora, Dron Khanna, Tomas Herda, Usman Rafiq, u. a. „Generative Artificial Intelligence for Software Engineering -- A Research Agenda". arXiv, 28. Oktober 2023. http://arxiv.org/abs/2310.18648.	Marcel-René Wepper

Title	Description	Supervisor
7. **Artificial Intelligence and Corporate Governance**	The adoption of GenAI in enterprise systems is a very topical issue. Many large companies are currently facing the challenge of integrating artificial intelligence into their corporate strategies. How can companies be restructured to cope with the new requirements and opportunities of GenAI?	Prof. Dr. Hartmut Höhle
8. **Improving Online Discourse: Mitigating Toxicity Across Web Platforms**	Recent research and media reports highlight a concerning trend in online interactions: the increasing prevalence of unfriendly, toxic, and even hateful language. This phenomenon extends beyond social networks, permeating collaborative knowledge-sharing platforms such as Wikipedia or Stack Overflow. Such environments, heavily reliant on the contributions of volunteer users, are at risk as toxicity deters participation and drives users away. In light of these challenges, your task is to conduct a comprehensive literature review focused on existing and proposed strategies for reducing toxicity on online platforms. This review should encompass various mechanisms, critically analyzing their effectiveness and the broader impact they have within these digital communities. Your analysis should aim to provide a nuanced understanding of how these approaches can foster healthier, more constructive discourse across diverse online platforms, as well as what limitations and drawbacks they have.	Prof. Dr. Hartmut Höhle