Topics Bachelor Thesis BWL FSS 2020 (Chair of Enterprise Systems)

1. **Newcomer participation in online communities**

New members are important for the survival of online communities. However, hostility toward newcomers is pronounced in many online communities, often exercised through downvotes, rejections, and negative comments from established members. Online communities have realized that such negativity can take a toll on newcomers. For example, Stack Overflow has introduced the "Unfriendly Comment Classifier," a deep learning model, to detect and remove troublesome content that might be perceived negatively by newcomers.

In this thesis, you should provide a literature review on newcomer participation in online communities and, in particular, highlight research on community interventions to retain newcomers and prevent hostile behavior toward them.
Supervisor: Florian Pethig

2. **Privacy fatigue**

The speed with which new and severe data breaches are reported has rapidly increased during the past decade. The negative implications of data breaches for companies, such as a decline in stock prices, have been well-documented in the current academic literature in management, information systems, and economics. However, as users are constantly threatened by unauthorized access to their data, many users have started to ignore the threat and simply "do nothing" after being breached.

In this thesis, you should provide a literature review on privacy fatigue and how adverse effects of fatigue on privacy decision making can be mitigated.
Supervisor: Florian Pethig

3. **Online rating systems**

In the online world, there are ratings of various kinds: restaurant ratings on Google, film ratings on IMDB, seller ratings on eBay, driver ratings on Uber. However, online rating systems sometimes suffer from biased ratings. For example, most trips on Uber receive a perfect 5-star rating and the median seller on eBay has a score of 100% positive feedback ratings.

In this thesis, you should provide a literature review on different online rating systems and explore potential problems related to users' scores.
Supervisor: Florian Pethig

4. **The Impact of Enterprise Systems on the Working Routines of Individuals**

Enterprise Systems aim to integrate processes and information across organizational departments and sites (Sykes 2015). Thus, as a consequence of enterprise system implementations previously independent departments are now reliant on each other in the execution of their daily tasks. This dependency triggered by the implemented system may cause severe changes in the work processes of affected employees.

This bachelor's thesis aims to provide a thorough summary of prior research investigating organizational changes triggered by enterprise system implementations and their influence on the working routines of individuals.
Supervisor: Johann Dietz

5. **Industry Specific Enhancements of ERP Systems**

A key difficulty in ERP system implementation projects is how to find a match between the system being implemented and an organization's business processes by customizing both the system and the organization. In order to minimize these customizing efforts large vendors (e.g. SAP) offer industry specific modifications in their standard software. These modifications aim to improve the impact of the system on the organizational structure and business processes as well as employees of implementing companies.

This bachelor's thesis aims to provide a thorough summary of prior research illuminating industry specific modifications of standard ERP software and their impact on implementing organizations.
Supervisor: Johann Dietz

6. **Leadership and decision-making in agile software development**

Agile information systems development (ISD) is well established nowadays and has been proven to be effective in various contexts (e.g., small and large projects). Among the benefits of agile ISD methodologies are the encouragement of self-organization and empowering leadership. But although agile teams are self-organized and empowered, they are not regarded leaderless or uncontrolled. Nevertheless, the responsibilities of agile leaders and their teams changed, e.g., regarding the decision-making.

In this thesis, you should provide a literature review on leadership in agile ISD highlighting the role and responsibilities of the leader and the entire team.
Supervisor: Karoline Glaser

7. **Agile Project Success**

The rise of agile information systems development (ISD) methodologies is ongoing over the last two decades. They aim to meet the changing needs of different stakeholders while developing high-quality software in a cost-effective and timely manner. Given these aspects of agile ISD approaches, the definition and formal measurement of the success of an agile project are challenging. The established success measures "In-Budget", "In-Time", and "In-Scope" are not entirely suitable for an agile project and its outputs. At the same time, the perceptions of what constitutes a successful agile project are different.

In this thesis, you should provide an overview of existing literature examining the success of agile ISD projects.
Supervisor: Karoline Glaser

8. **Software Development in Crowdwork Environments**

Changing organizational and individual contexts enable increasingly diverse work environments for IT professionals. One growing trend are crowdwork platforms. Companies may offer small software projects on those platforms (e.g., Topcoder) to IT-crowdworkers (i.e., a software developer). These crowdworkers work temporarily and flexibly as freelancers or independent contractors. Usually, the crowdworkers complete tasks of several projects for multiple companies concurrently. Engaging in crowdwork environments enables new opportunities but also challenges for companies that source their workforce and even ISD professionals who offer their workforce.

In this thesis, you should provide an overview of the existing literature examining software development in the crowdwork environment with a focus on the crowdworker's perspective.
Supervisor: Karoline Glaser

9. **Process monitoring and simulation techniques in business analytics**

Process mining provides a basic level of insights into business processes. With the help of these insights, the complicated processes of any organization can be quantified and described. Using these new parameters, researchers can enhance the existing process monitoring and simulation techniques.

In this thesis, it is expected to collect the existing literature on this topic. Eventually, the results of this literature review prioritize the research opportunities to be done in this field.
Supervisor: Fareed Zandkarimi

10. **Studying organizational routines with process mining**

Management studies and the organizational science literature advocate organizational routines as a concept to investigate "behavioral regularities, which denote recurring analytic processes embedded in firms and performed by groups of individuals". Process mining strives to "discover, monitor and improve real processes by extracting knowledge from event logs". It is also perceived as an effective tool to assist researchers in studying organizational routines. What both fields have in common is their emphasis on event sequences as a valuable source of empirical evidence when studying behavior.

In this thesis, it is expected to collect the existing literature on the utilization of process mining techniques in studying organizational routines.
Supervisor: Fareed Zandkarimi

11. **User interface design and evaluation techniques in Agile teams**

The design and development tasks of any software system are not trivial tasks. Evaluating the design, however, is even more complicated and time-consuming. We are looking for the existing techniques being used to reduce the effort in the evaluation step of the user interface design step.

A literature review on this topic should provide a summary of the existing techniques and methods as well as future research opportunities.
Supervisor: Fareed Zandkarimi

12. **Control Enactment and Dynamics in Enterprise System Research**

The formal and informal control of employees' daily work based on Enterprise Systems is crucial for value creation success for a multitude of companies. Throughout the past decades, research on control has grown to cover a wide range of aspects and issues, including control modes, amounts, and portfolios, control antecedents, consequences, and dynamics in a huge variety of research areas. This thesis aims to review the research on Enterprise System supported control (behavior, outcome, input, clan, and self control) with particular focus on how control is enacted (control style and congruence) and dynamically adjusted in the field of Enterprise System implementation and usage.

A thesis will provide a thorough summary and high-level categorization of research and put the topic in the context of related work.
Supervisor: Tobias Nisius

Wiener, M., Mähring, M., Remus, U., & Saunders, C. S. (2016). Control Configuration and Control Enactment in Information Systems Projects: Review and Expanded Theoretical Framework. MIS Quarterly, 40(3), 741–774.

13. **The Concept of Process Transparency in Enterprise System Research**

The purpose of Enterprise System implementations is the integration of processes and information across organizational departments and sites which can increase transparency even more across the entire organization (da Cunha 2013). Their design, usage, and appreciation differ significantly from non-integrated single-purpose monitoring systems due to their capability to facilitate and enhance employees' work. For example, Enterprise Resource Planning systems such as SAP log all transaction information, and Customer Relationship Management systems are used to keep track of all interactions with customers. These Enterprise Systems enable companies to leverage process transparency, an in-depth and clear visibility into business processes and how these operate.

A thesis will provide a thorough summary and high-level categorization of research on process transparency in the field of Enterprise Systems as well as associated steams and put the topic in the context of related work.
Supervisor: Tobias Nisius

da Cunha, J. V. 2013. "A Dramaturgical Model of the Production of Performance Data," MIS Quarterly (37:3), pp. 723–748.

14. **Communication and Support Structures in Enterprise System Implementations**

Prior research studied internal and external support structures (i.e. Sykes et al. 2014; Sykes 2015) as well as different types of communication (i.e. Rivard and Lapointe 2012) that companies leveraged during Enterprise System implementations in order to improve usage among employees.

A thesis will provide a thorough summary and high-level categorization of research on support structures and communication during Enterprise System implementations and put the topic in the context of related work.
Supervisor: Tobias Nisius

Rivard, S., and Lapointe, L. 2012. "Information Technology Implementers' Responses to User Resistance: Nature and Effects," MIS Quarterly (36:3), pp. 897–920.

Sykes, T. A., Venkatesh, V., and Johnson, J. L. 2014. "Enterprise System Implementation and Employee Job Performance: Understanding the Role of Advice Networks," MIS Quarterly (38:1), pp. 51–72.

Sykes, T. A. 2015. "Support Structures and Their Impacts on Employee Outcomes: A Longitudinal Field Study of an Enterprise System Implementation," MIS Quarterly (39:3), pp. 473–496.