Preliminary Topics: Innovations in Information Systems, Augmented Reality and the Role of Digital Platforms

Bachelor Seminar WS2018/2019

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- Differentiate the concepts "Sharing Economy" and "Platform Economy" in form of a literature review

- **Necessary prior knowledge:** -

- According to which aspects could currently established platform-oriented business models be feasibly categorized?

- **Necessary prior knowledge:** -

- Survey and classify monetization strategies of established platform business models

- **Necessary prior knowledge:** -

- Present the main challenges to converting an extant pipeline business to a platform (with help of the Business Model Canvas)

- **Necessary prior knowledge:** -

- Present the main challenges to establishing a new platform business (with help of the Business Model Canvas)

- **Necessary prior knowledge:** -

- What role does <u>privacy</u> play for the use of Augmented Reality (AR) technologies?

- **ToDo:** Conduct a systematic literature review (according to an established methodology) in the human-computer interaction (HCI) domain and analyze the existing research on privacy and AR

- **Necessary prior knowledge:** -

- What role does <u>security</u> play for the use of Augmented Reality (AR) technologies?

- **ToDo:** Conduct a systematic literature review (according to an established methodology) in the human-computer interaction (HCI) domain and analyze the existing research on privacy and AR

- **Necessary prior knowledge:** -

Literature Reviews – Topic 8 (AR)

- What role does <u>security</u> play for the use of Augmented Reality (AR) technologies?

- **ToDo:** Conduct a systematic literature review (according to an established methodology) in computer science and AR-specific outlets and analyze the existing research on privacy and AR

- **Necessary prior knowledge:** -

- Define and analyze the concept of the „AR Cloud" and categorize existing research and practical reports on this topic

- Analyze the role of the AR cloud for the future development of the technology

- **ToDo:** Conduct a systematic review (according to an established methodology) considering theoretical as well as practical work

- **Necessary prior knowledge:** -

- Explore the relationship between consumer innovativeness and the use of mobile augmented reality technologies – the case of Pokémon Go

- **ToDo:** Conduct a statistical analysis on this topic based on a given data set of 681 active users of Pokémon Go (data set is provided to you before you start)

- **Necessary prior knowledge:** basic knowledge on statistics and quantitative methods

- Explore the impact of privacy concerns and experiences on the use behavior of mobile augmented reality technologies – the case of Pokémon Go

- **ToDo:** Conduct a statistical analysis on this topic based on a given data set of 681 active users of Pokémon Go (data set is provided to you before you start)

- **Necessary prior knowledge:** basic knowledge on statistics and quantitative methods

- How does the current research landscape on cryptocurrencies look like in the IS domain?

- **ToDo:** Conduct a systematic literature review (according to an established methodology) in the Information Systems (IS) domain and analyze and synthesize the existing research on cryptocurrencies

- **Necessary prior knowledge:** -

- How does the current research landscape on the distributed-ledger technologies look like in the IS domain (besides cryptocurrencies)?

- **ToDo:** Conduct a systematic literature review (according to an established methodology) in the Information Systems (IS) domain and analyze and synthesize the existing research on DLT (consider all applications except for cryptocurrencies)

- **Necessary prior knowledge:** -

- Analyze and synthesize research based on the Elaboration likelihood model (ELM) in the information systems domain

    - Especially consider research applying ELM in the context of privacy

- **Necessary prior knowledge:** -

- Analyze and synthesize research in the information systems domain which is based on an *experimental research design*

- Discuss experimental designs in contrast to other quantitative methods

- **Necessary prior knowledge:** -

- Analyze and synthesize research based on the Expectation-confirmation theory (ECT) (e.g. Bhattacherjee 2001) in the information systems domain

  - Especially consider different conceptualizations of the included constructs and analyze the specific outcomes of the different articles (meta-analysis)

- **Necessary prior knowledge:** statistical knowledge advantageous for the meta-analysis

(Bhattacherjee, A. (2001). Understanding Information Systems Continuance: An Expectation-Confirmation Model. *MIS Quarterly*, *25*(3), 351–370.)

- Critically analyze the Gartner Hype Cycle with respect to the past predictions and current represented technologies

- Method is free to choose: essay, literature review, quantitative analysis of representative cases etc.

- **Necessary prior knowledge:** statistical knowledge needed in case of choosing a quantitative method for analysis

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