Epistemological Advancements in IS Research: A Study of Selected Genres (Wissenschaftlicher Vortrag)

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Agenda

- Background

- Research Questions

- Overview of Papers on Literature Reviews

- Overview of Papers on Design Science

- Schedule

Background

Epistemology is concerned with analyzing
(1) the definition of knowledge and underlying research paradigms
(2) the evolution of corresponding schools of thought over time and the resulting intellectual organization, and
(3) the sources and processes of knowledge creation.

Genres
– structure the communication of knowledge contributions and
– provide a useful unit of analysis.

Research Questions

Two genres will be selected as a unit of analysis:
– **literature reviews** (genre 1) and
– **design science research** (genre 2).

For both genres, the research questions focus on
– the **contributions** (RQ 1)
– the **impact** (RQ 2) and
– **recommendations** (RQ 3).

Genre (Paper)	RQ 1	RQ 2	RQ 3
Literature Reviews			
Design Science			

Overview of Papers on Literature Reviews

Paper	RQ 1: Contributions	RQ 2: Impact	RQ 3: Recommendations
ICIS 2015	X		
Outlet*	X		X
ICIS 2016		X	
Outlet*		X	X
Outlet*		X	?
Outlet.*		X	?
Outlet*			X

* In preparation

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Overview of Papers on Literature Reviews

Published papers

Schryen, G., Wagner, G., and Benlian, A. 2015. "Theory of Knowledge for Literature
Reviews: An Epistemological Model, Taxonomy and Empirical Analysis of IS
Literature," in *Proceedings of the 36th International Conference on Information
Systems*, Fort Worth, Texas, USA.

Wagner, G., Prester, J., Roche, M., Benlian, A., and Schryen, G. 2016. "Factors Affecting
the Scientific Impact of Literature Reviews: A Scientometric Study," in *Proceedings
of the 37th International Conference on Information Systems*, Dublin, Ireland.

Manuscripts in preparation

Wagner, G., Schryen, G., Benlian, A. and Paré, G. "Knowledge Creation through
Literature Reviews: An Epistemological Model and Typology of IS Literature".
Planned to be submitted by mid 2017.

Overview of Papers on Literature Reviews

Schryen, G., Wagner, G., Benlian, A. "The Scientific Impact of IS Literature Reviews beyond Citations: An Epistemological Study of the IS Business Value Domain".
Planned to be submitted by mid 2017.

Prester, J., Schryen, G., Wagner, G. "Uncovering the Epistemological Impact of IS Literature Reviews: A Natural Language Processing Based Approach".

Wagner, G., Prester, J., Roche, M., Benlian, A., Schryen, G., Paré, G. and Templier, M. "Factors Affecting the Scientific Impact of Literature Reviews: A Scientometric Study".
Planned to be submitted by mid 2017.

Schryen, G., Benlian, A., Rowe, F., Gregor, S., Larsen, K., Petter, S., Paré, G., Wagner, G., Yasasin, E. "Literature Reviews: Standing on the Shoulders of Giants to Create New Knowledge".
Planned to be submitted to CAIS by mid 2017.

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Overview of Papers on Design Science

Paper	RQ 1: Contributions	RQ 2: Impact	RQ 3: Recommendations
Conference1	X		
Conference2	X		X
Conference3		X	X

Publication Strategy
- Use epistemological foundation
- Initially publish at conferences
- Develop journal manuscripts afterwards

Papers on Design Science: Conference1

Focus on contributions
- What are the epistemological contributions of DS?

Approach
– Analyze methodological literature on DS
– Identify distinct types of contributions
– Develop a classification of contributions
– Code the contributions of DS papers

Genre (Paper)	RQ 1	RQ 2	RQ 3
Literature Reviews			
Design Science	X		

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Papers on Design Science: Conference2
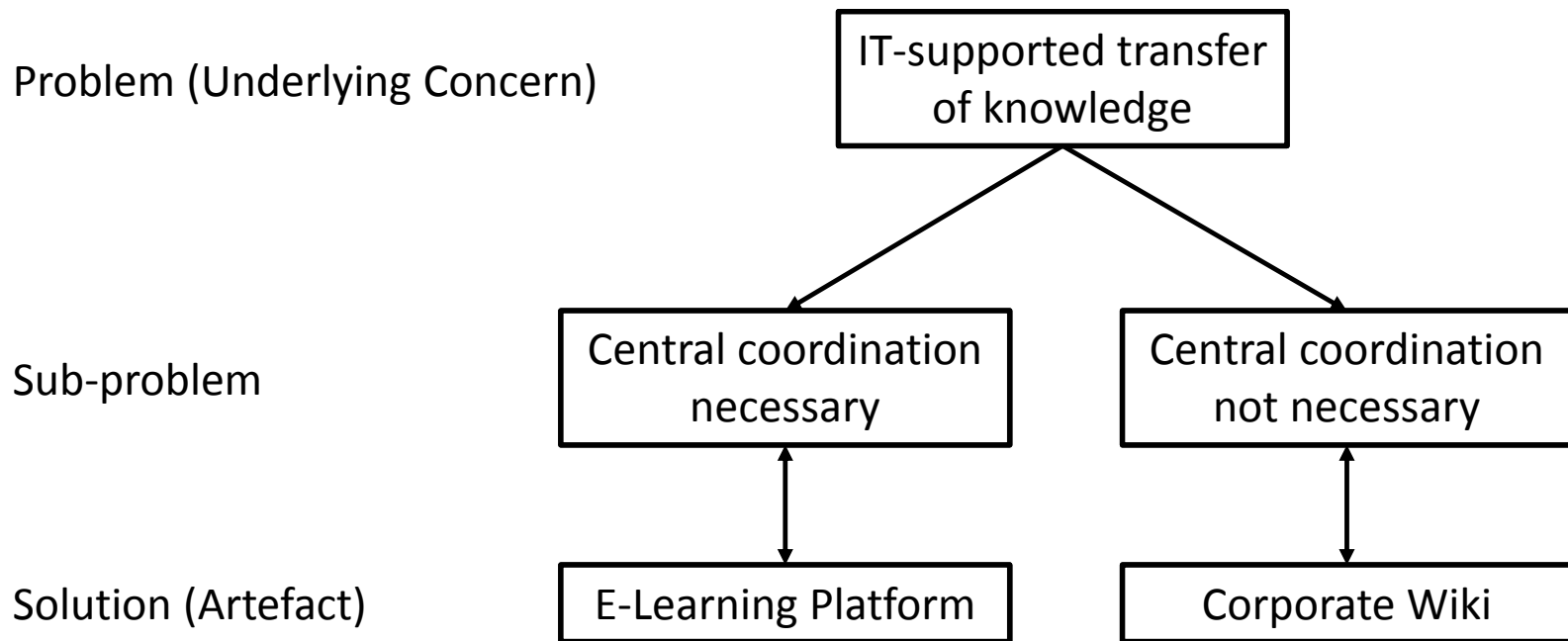
Focus on contributions and recommendations
- How can DS contributions be synthesized to develop an integrated design-oriented body of knowledge?
- How should DS contributions be developed to afford the synthesis of a cumulative body of knowledge?

Approach
- Develop a framework for aggregating DS contributions
- Derive recommendations for DS research

Genre (Paper)	RQ 1	RQ 2	RQ 3
Literature Reviews			
Design Science	X		X

Papers on Design Science: Conference2

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Papers on Design Science: Conference3

Focus on impact and recommendations
-   How can the scientific impact of DS be explained?

Approach
–   Analyze which DS papers have a higher scientific impact (quantitative)
–   Analyze how DS papers are used by subsequent research (qualitative)

Genre (Paper)	RQ 1	RQ 2	RQ 3
Literature Reviews			
Design Science		X	X

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References

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AIS Basket Journals: Genres

JMIS: no genres
ISJ, JIT, JSIS: research article, commentary, editorial
ISR: research articles, research commentaries, research notes
EJIS: empirical research, theory development, opinion paper, literature review
MISQ: research articles, research commentaries, research notes, methods articles, theory and review articles, issues and opinions