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Assessing Research Projects:
A Framework

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Title:

Author:	Format:	Deadline:

Problem Identification	Goal(s)

Related Studies	Hypotheses / Research Question(s)

Research Design

Risks	Methods / Phases	Time

Limitation(s)

1   Introduction

In the day-to-day life of researchers, they are constantly faced with new research opportunities. At a first glance it is not always clear whether an idea can be put into real-world research. A researcher has to select the most suitable ideas for his personal research. A suitable tool is required that helps to decide whether a research idea has the potential to contribute to close a research gap and to academic and/or practical knowledge. Challenges and possible problems have to be uncovered in an early stage, ideally before starting the research. Additionally, further aspects have to be considered, such as hypotheses, goals and potential methods. Not only the assessment of own ideas but also of those from other researchers requires a compressed overview. A short summary of the rough research idea should enable an early assessment whether the research approach is promising. This is similar to the situation of company founders or investors who have to identify the best ideas from many business opportunities.

The "Business Model Canvas" by Osterwalder et al. (2010) is often used for evaluating business models. The works of Latham (2016) as well as Nagle and Sammon (2016) have already shown that it is also possible to develop a canvas for research. As Nagle and Sammon (2016) have already described, such a framework is similar to "Design Thinking" and "Visual Thinking" (Ware 2010) methods as they visualize ideas and enable collaboration on them. Nagle and Sammon (2016) focus on the application of a research canvas in the design science environment. On the other hand, Latham's research canvas aims to be universally valid. He divides his canvas into the parts foundation and method. When applying the research canvas to assess ideas for own ideas and publications, we have missed aspects in both models. We think that an examination of the problems and risks that can arise in a research project should be part of a framework for assessing research ideas. The rough research design should also emerge from the framework. This leads us to the research question of this paper:

RQ: How does a framework for assessing research ideas look like?

We developed our framework in different steps. We analysed existing literature and frameworks in the field of research idea evaluation. Based on this, in combination with our own experiences of important aspects, we designed a first prototype of a framework. We and further participants tested this prototype. Through tests and focus group discussions the prototype was improved and led to the final framework.

The paper is organized as follows: Chapter 2 presents existing literature concerning frameworks for evaluating and assessing research approaches. It is followed by the development of an own framework. The results are discussed in the fourth chapter. The paper closes with conclusions in chapter 5.

5 Conclusions

The first approaches to the evaluation of research ideas by Latham (2016) and Nagle and Sammon (2016) are already a good basis for a framework. However, we have seen room for improvement in the analysis of risks and the presentation of the research design. Our developed framework is divided into two parts. The first part describes the basis of the research. The second part is devoted to research design, limitations, the planned time, individual methods and their risks in the elaboration. During the development phase, the first tests with bachelor and master theses of students have already been incorporated into the structure of the framework. It has been shown that it is important for the students that the individual areas of the framework can be easily delimited. The maturity of the model is to be further enhanced by additional tests with students and doctoral students.

References

Hassan, N. R., Benbasat, I., Nunamaker Jr, J. F., Briggs, R. O., & Mueller, B. (2013). Benefitting from IS Research – Who and How? A Panel on the Value of IS Research. In: Proceedings of the Americas Conference on Information Systems, Chicago, August 15–17, 2013.

Hevner, A. R., March, S. T., Park, J., & Ram, S. (2004). Design Science in Information Systems Research. MIS Quarterly 28(1), pp. 75–105.

Latham, J. R. (2016). The Research Canvas: A Framework for Designing and Aligning the "DNA" of Your Study. (2nd ed.). Colorado Springs, Colorado: Organization Design Studio, Ltd.

Müller-Bloch, C., & Kranz, J. (2015). A framework for rigorously identifying research gaps in qualitative literature reviews. In: Thirty Sixth International Conference on Information Systems, Fort Worth, December 13–16, 2015.

Nagle, T., and D. Sammon (2016). The Development of a Design Research Canvas for Data Practitioners. Journal of Decision Systems 25(1). pp. 369–380.

Osterwalder, A., Pigneur, Y. & Smith, A. (2008). Business Model Generation. (https://strategyzer.com/canvas/business-model-canvas, accessed December 21, 2017).

Wang, Y., Xu, D., & Rohde, F. H. (2010). A Systematic Framework of IT-Enabled Service Research towards Formulating Research Questions in IS Realm. In: Proceedings of the Americas Conference on Information Systems, Lima, August 12–15, 2010, paper 68.

Ware, C. (2010). Visual thinking: For design. Burlington, MA: Morgan Kaufmann.