

# Supplementary Material for Vision Paper

## ”*Quo Vadis, Explainability? – A Research Roadmap for Explainability Engineering*”

Wasja Brunotte<sup>\*†</sup> , Larissa Chazette<sup>\*</sup> , Verena Klös<sup>†</sup> , Timo Speith<sup>§</sup> 

<sup>\*</sup>Leibniz University Hannover, Software Engineering Group, Hannover, Germany

<sup>†</sup>Leibniz University Hannover, Cluster of Excellence PhoenixD, Hannover, Germany

<sup>‡</sup>TU Berlin, Chair for Software and Embedded Systems Engineering, Berlin, Germany

<sup>§</sup>Saarland University, Institute of Philosophy and Department of Computer Science, Saarbrücken, Germany

Email: {wasja.brunotte, larissa.chazette}@inf.uni-hannover.de, verena.kloes@tu-berlin.de, timo.speith@uni-saarland.de

### I. ABOUT

This document is the supplementary material for the vision paper *Quo Vadis, Explainability? – A Research Roadmap for Explainability Engineering* accepted at the 28th International Working Conference on Requirement Engineering: Foundation for Software Quality. Since the space allocated for vision papers did not suffice to elaborate on all details, this document serves to amend this lack. In particular, we give some background information about the workshop we held and present its outcome in the form of a structured mind map.

### II. WORKSHOP

The vision paper that this document is supposed to complement is based on the results of one workshop. Specifically, it is based on the *First International Workshop on Requirements Engineering for Explainable Systems (RE4ES)*, co-located with the *2021 IEEE 29th International Conference on Requirements Engineering* [1].

Overall, the two-day workshop included seven paper presentations, one industry keynote and one research keynote, and two break-out sessions to facilitate collaboration and discussions. Taken together, this resulted in seven sessions.

On the first day of the workshop, the paper presentations focused on global visions regarding explainability [2, 3] as well as interdisciplinary visions and approaches to explainable software systems [4, 5], followed by an author panel. Afterwards, there was a break-out session to actively discuss *Open Research Questions and Takeaways*. On the second day, the paper presentations focused on explainability use-cases [6–8]. The workshop concluded with an activity to develop a shared vision of a *Research Roadmap*, based on the open research questions and takeaways identified during the first workshop day.

The result of the activities was a first, very disordered mind map and many notes on potential research questions. The authors of this paper have met several times after the workshop to process these scattered information and create a structured mind map based on them. The resulting mind map serves as our research roadmap and can be seen in Figure 1.

### ACKNOWLEDGMENTS

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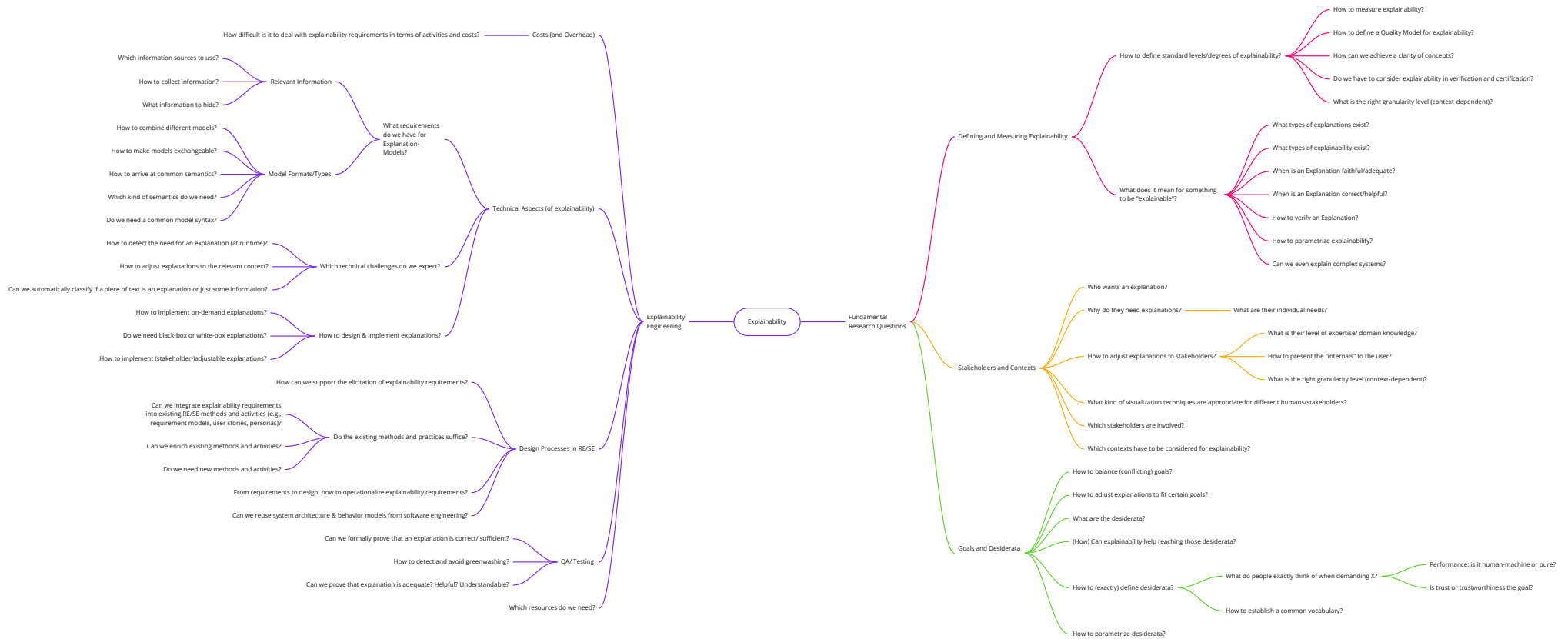


Fig. 1. The research questions curated from the workshop results.