

Analysing the Social Dilemma of Putting Open Science into Practice



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BACKGROUND

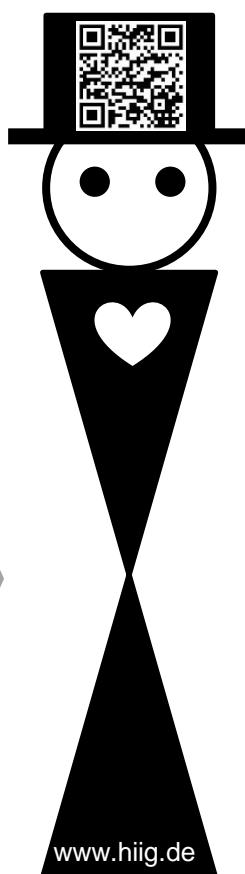
- **Open science** is the idea of making the entire research process as transparent and accessible as possible
- Open science **speeds up the research process, fosters collaborations on a global scale, and has the potential to revolutionise science**
- There is a **discrepancy** between the idea of open science and research practices of scientists

ARGUMENT

- The phenomenon of open science can be seen through the prism of a **social dilemma: what is in the collective best interest of the scientific community is not necessarily in the best interest of the individual scientist**
- Many scientists support the idea of open science but do not put it into practice
- The individual researcher who wants to practice open science is **confronted with various obstacles**; we have grouped them into **individual and systemic obstacles**.

MATERIALS AND METHODS

- 22 qualitative exploratory **interviews** conducted between February and June 2013
- **Sequential sampling strategy**: Science 2.0 workshop of the Leibniz Research Association in Hamburg (February 2013), International Conference on Internet Science in Brussels (April 2013), re:publica 13 conference in Berlin (May 2013)
- **Average length** of interviews is about 33 minutes, conducted face-to-face and via Skype
- Interviews were transcribed and coded using QRS NVivo 10 Software



INDIVIDUAL OBSTACLES

- Fear of free-riding
- Need to invest extra time and effort
- Trouble with digital tools for science
- No impetus to publish negative results
- Difficulties of guaranteeing data privacy
- Reluctance to share code

SYSTEMIC OBSTACLES

- Evaluation criteria impede openness
- Cultural and institutional constraints
- Ineffective policy guidelines
- Lack of standards for sharing research materials
- Lack of legal clarity
- Financial aspects of openness

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