

## Mind the Gap: Addressing the Glitches in the Research Workflow or ‘Scholarly Commons: From Theory to Practice’

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The Scholarly Commons working group has been engaged in a synthesis activity over the past two years to survey the existing sets of charters, principles and best practices and tools to try to knit them together into a coherent vision and set of practices for scholarly communications. Based on this work, we've concluded that the Future of Research Communications and e-Scholarship is, in indeed, FORCE: a FAIR, Open, Research-object based, Citable Ecosystem. Two questions arise:: Do we have such an ecosystem already? If so, can we provide concrete guidance on how to work within it?

At a workshop in Sept 2016, it was proposed to address these questions by creating a series of decision trees that would help in making research objects Open, FAIR and Citable. These decision trees are both forward and backwards looking. That is, they define a set of practices that makes research objects maximally commons compliant. But they also define practical paths for those who are interested in getting started today working with existing artifacts or with limited resources. In these cases, we want to guide people to make the best possible choices given certain contexts.

Here, we will explain where we stand currently in the creation of open, FAIR and citable scholarly objects, highlighting technological and other barriers. This will be based upon  
the mechanics of the research work itself  
the developing insights as to why it is so difficult to do  
The experiences and observations of the conference delegates

This session will serve as an introduction to the proposed second session ‘Decision Trees 2’ or ‘What (Commons-compliant) researchers really want’. Finally, we are proposing a hackathon to allow people to use the tools ,but also contribute to bridging the gaps

The Decision Tree work involved:

1. Defining the “matrix” of the commons - an enumerated list of the entities involved: research objects, e.g. data, software, narrative works; materials such as IRB approvals; and entities such as people, organizations and working groups.
2. Creating decision trees to help stakeholders ensure that scholarly objects are open FAIR and citable.
3. Creating tools that let others create, publish, and share decisions trees, and enable everyone comment on existing decision trees.

We've tried to do this so that the trees themselves are open, FAIR and citable. We found that many of the needed pieces already existed, but the current research infrastructure contains many barriers to practising in this way.