

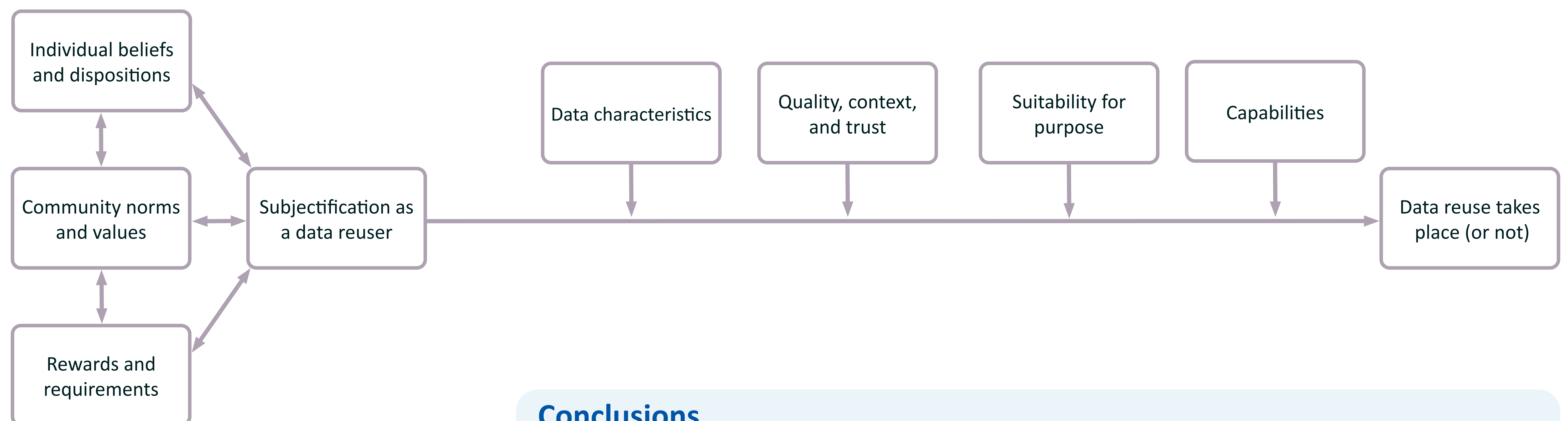
## Background

Policymakers and research funders seek to promote the open sharing of scientific data and, more recently, data that is findable, accessible, interoperable, and reusable (FAIR). Yet the scientific and societal value of open/FAIR data can only be realized if research data, once shared, is actually reused. Thus, we ask: **what are the factors that facilitate or block open research data reuse within the science system?**

## Methods

Our exploratory qualitative study draws on an extensive literature review as well as interviews with 26 research data reusers and facilitators from different scientific fields, which were transcribed, coded, and categorized.

Our findings confirm the importance of **enabling factors** such as data characteristics (including FAIRness); trust in data quality; suitability for the reuser’s purpose, and capabilities, including skills, support by data stewards, and infrastructure usability.



But we find that these factors come into play only when a researcher comes to see themselves as a data reuser, through a process of **subjectification** shaped by interactions between individual beliefs, community norms, and incentive structures.

## Conclusions

These findings have concrete implications for open science researchers, practitioners, and policymakers alike:

- **Researchers** may want to undertake studies of specific subjectification contexts, and to test the applicability of this model for data reusers in business, government, and other domains.
- **Infrastructure providers** need to see these subjectification contexts as integral to their strategies for promoting reuse.
- While **research organizations and policymakers** can encourage data reuse through incentives and support, they should also socialize these expectations by identifying and supporting “data communities” within which the work of subjectification often takes place.



*“People suddenly realize that their [data] and this other person’s [data] can make something new, and that can be exciting.”*