



Sustainable Business Models for Brokering Middleware to support Research Interoperability

The Challenge:

Broker software now has a level of maturity that requires addressing sustainment of the middleware, including the question of which business models could be adopted to best serve this need.

What is the solution?

Bridging scientific disciplines through the introduction of a broker or mediation capability has been demonstrated for a number of cross-discipline applications [Nativi, et al 2013]. The development and use of brokering middleware in a research environment is a relatively new development and the sustainability of such a capability has not previously been addressed. The Brokering governance Working Group, in addressing the questions of sustainability, does not presuppose which business/revenue or hybrid model might be embraced to sustain this middleware, but rather examines five classes of business models for consideration.



Produced by: **Brokering Governance WG**

<https://www.rd-alliance.org/groups/brokering-governance.html>

What is the impact?

The Brokering Governance Recommendation discusses the strengths and weakness of different models in the context of long-term sustainment of brokering middleware. Examination of alternatives leads to a prioritization among models with the recognition that no single model by itself is likely to provide the desired sustainment. The analysis suggests that a hybridized model incorporating aspects of three different business models over the lifespan of the brokering middleware, i.e. federally funded data facility guardianship in the establishment stage replaced or supported by a Consortium model and/or Software-as-a-Service as the broker matures, will likely provide the strongest model for sustainment.

the Brokering Governance WG
Recommendation



September 2020