Platforms EOI: National Indigenous Australian Data Alliance Platform (NIADAP): A Kinship Network-Based Indigenous Data Research & Governance Platform

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Project title
National Indigenous Australian Data Alliance Platform (NIADAP): A Kinship Network-Based Indigenous Data Research & Governance Platform

Field of Research code(s)
- 08 INFORMATION AND COMPUTING SCIENCES
- 11 MEDICAL AND HEALTH SCIENCES
- 16 STUDIES IN HUMAN SOCIETY
- 18 LAW AND LEGAL STUDIES
- 20 LANGUAGE, COMMUNICATION AND CULTURE

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Collaborator details

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Project description

Indigenous-controlled research organisations, funded by the Commonwealth to provide Indigenous community services across urban, regional and remote parts of Australia, currently conduct extensive population data collection, modelling, and analysis in partnership with communities. Cumulatively, the data held, controlled, and processed by these organisations form a continental-level Indigenous population model. However, ad hoc data management practices prevent data sharing and aggregation that would permit realization of this outcome.

The Indigenous Data Network (IDN) is proposing to develop an integrated cloud-based platform (NIADAP) that will deliver modular collections of microservices common to many Indigenous research organisations, using an architecture and interface that will standardise, streamline, and facilitate collection, modelling and analysis within each organisation, and data sharing between organisations. The NIADAP architecture and interface will integrate a kinship network-based data governance framework geared to the collaborative development a single, integrated community-controlled kinship network model for the entire Indigenous population of Australia.

Existing technology

Adopt

NIADAP will adopt the system architecture and user interface design of an existing FileMaker Cloud-based platform developed by RMA Pty Ltd. This platform was originally designed and deployed in 2006 as a LAN-based FileMaker Server platform for urban Indigenous research organisations. In that application, the platform was used to model the entire Indigenous population of NSW between 1788 and 2016, yielding a geospatial kinship network model of >100,000 identified individuals. In 2017 the platform was redesigned and deployed as a cloud-based solution for use in regional and remote conditions.

Adapt

For the development of the NIADAP, the IDN will transfer the existing architecture and user interface design from its current proprietary software environment, to an open source environment. This adaptation will in turn facilitate increased accessibility for Indigenous organisations with limited infrastructure and resource support, while simultaneously creating opportunities for the development of more accessible developer and user communities, and an expansion in data sharing and linkage potential. This adaptation will also facilitate use of NRI resources such as the Nectar Cloud.

Anticipated requirements

Annual funding

$500,000 - $599,000

Proposed length

3 years

Terms

I agree to the terms

Yes