Curtin University

Research Data Management Plan

Economoics experiment: collective action of common-pool resource by researchers

Supervisor	Cameron Neylon
Data Management Plan Edited by	David Flanders
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Faculty	Vice Chancellory

1 Research Project Details

1.1 Research project title

Economoics experiment: collective action of common-pool resource by researchers

1.2 Research project summary

This experiment will investigate the collective-action dilemma which groups of researchers face when accessing common-pool resources (such as taxpayer funded grant marketplaces, like the Australian Research Council). The experiment hypothesizes three outcomes for the participant: (i) defection from the group (aka 'tragedy of the commons'), (ii) self-promotion in the group (Nash equilibrium), and/or (iii) cooperation in the group (Pareto social optimisation). The decision making process for each researcher in the group experiment, will be individually evaluated against an economic theory of public good or common-pool resources. The following research experiment is a replication of the field experiement which Juan-Camilo Cardenas and Elinor Ostrom conducted with three rural villages in Columbia (1998) to explore their use of local forestry resources for individual benefit between 1994-2004.

1.3 Keywords

economics, common-pool resources, group behaviour, field experiment, cooperation, collective action, trust, game theory

2 Research Project Data Details

2.1 Research project data summary

(a) Data type: survey instrument for collective action behaviors of researchers in field experiment (n=14-21). (b) Analysis of individual decisions against proposed economic theory (collective action of common-pool resources). (c) Data will be evaluated via quantitative game-theory and qualitative natural language processing against proposed theoretical framework. (d) see ethics applications re human experimentation protocols for confidentiality agreement and open access licensing agreements.

2.2 Will the data be identifiable

- Re-identifiable — identifiers have been removed and replaced by a code, but it is possible to re-identify an individual

2.3 Will biospecimens or human participant information be sent overseas?

No

2.4 Will novel information about controlled goods or technologies on the Defence and Strategic Goods List (DSGL) be sent overseas?

No

2.5 Data organisation and structure

(a) data will be stored via a git versioning system with README.md file as directory. (b) a file naming convention will be utilised, including W3CDTF, experimental group id and meatadata tags. (c) Git will manage versioning, branching and amendments as per Open Source code development protocols.

3 Research Project Data Storage, Retention and Dissemination Details

3.1 Storage arrangements

(a) data will be stored via a git versioning system, published with open source licenses and archived via Curtin library via open access licensing.

3.2 Estimated data storage volume

1TB

3.3 Safeguarding measures

Via Git backup.

3.4 Retention requirements

7 years (All other research with outcomes that are classed as Minor)

3.5 Collaboration

As an Open Source project everyone who has an internet connection will have access to the published data.

3.6 Data dissemination

Deposit of data in the Curtin Research Data Collection.

3.7 Embargo period

Data will be published as soon as it is anonymized and cleared for open access publication.