The Research Data Alliance

Stefanie Kethers, Australian National Data Service

research data sharing without barriers

rd-alliance.org

Outline

- My context: The Australian National Data Service
- The Research Data Alliance (RD-A)
  - Why RD-A?
  - What is RD-A?
  - Where did RD-A originate?
  - Where is RD-A at?
  - How can I get involved?

Australian National Data Service

- An initiative of the Australian Government being conducted as part of the National Collaborative Research Infrastructure Strategy ($A 24M) and the Super Science Initiative ($A 48M)
- ~ 30 staff, currently funded to end-2014

- **More researchers re-using more data more often**
- **Data as a first-class object**

ANDS Enables Transformation of

Data that are:

- Unmanaged
- Disconnected
- Invisible
- Single use

To Structured Collections that are:

- Managed
- Connected
- Findable
- Reusable

ANDS's Approach to Research Data

- A **coherent institutional approach** to data leads to greater research efficiency
- A **national approach** to data publication and discovery services for tackling larger problems, with greater synergy
- An **Australian Research Data Commons (ARDC)** – the means of sharing research data
- **Building capability** to exploit – tools, policy, skills

Selected Core ANDS Services

- **Research Data Australia**
  http://researchdata.ands.org.au/
  - Discovery service
- **Cite my Data**
  - DataCite DOI registration authority for Australia
- **Identify my Data**
  - Handle service
- **Register my Data**
  - Advanced service, complex metadata

RESEARCH DATA AUSTRALIA

SEARCH

Advanced Search

Research Data Australia is a discovery service for Australian research data.

What's in Research Data Australia

Research datasets or collections of research materials.

Browse All Collections (54,392)

Researchers or research organisations that create or maintain research datasets or collections.

Browse All Parties (7,231)

Services that support the creation or use of research datasets or collections.

Browse All Services (140)

Projects or programs that create research datasets or collections.

Browse All Activities (26,934)

Spotlight on research domains

More information on research data infrastructure for specific domains:

◄ TERN Australian Plant Phenomics Facility ►

NCRIS and EIF Capability - Terrestrial Ecosystem Research Network

TERN is a network of ecosystem scientists and infrastructure for the collection, cataloguing, storage and sharing of long-term ecosystem research data sets for science and management applications.

Home Browse Collections Parties Activities Services Topics About Contact ands

RESEARCH DATA AUSTRALIA

SEARCH Advanced Search

Home | James Cook University | Collection

Share

Rainforest vertebrates (locations & abundances) of the Australia Wet Tropics

Database of containing abundance and location information for vertebrates of the Australia Wet Tropics rainforests. Records contained here are sourced from miscellaneous records & standardised surveys of the Centre for Tropical Biodiversity & Climate Change, supplemented by an array of external personal and institutional datasets.

More...

More Information:

URI: http://creativecommons.org/licenses/by/3.0/au/

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URI: http://www.nrrc.org.au/mtsrf/theme_2/project_2_5ii_4.html

Reports and publications available from principle funding project MTSRF

Vertebrates of the Wet Tropics rainforests of Australia: species distributions and biodiversity

URI: http://www.jcu.edu.au/rainforest/publications/vertebrate_distributions.htm

Spatial Coverage:

Temporal Coverage:
From 1994-01-01 to 2020-12-31

Subjects:

ANZSRC

Terrestrial Ecology

Keywords

invertebrate specimens | Abundance | species distribution | insect sampling | Australian Wet Tropics | vertebrate

Identifiers:

Local: 822a630c-92a9-4b49-9bbf-2f36022543c6

Access

https://eresearch.jcu.edu.au/...

Rights

Rights statement

Licensing: Creative Commons - Attribution alone (by)

Access rights

Contact owner for access

Contacts

stephen.williams@jcu.edu.au

Centre for Tropical Biology and Climate Change
Australian Tropical Science and Innovation Precinct 145

Connections

Services

- Edgar: Climate Change Impact on the Distributions of Australian Bird Species

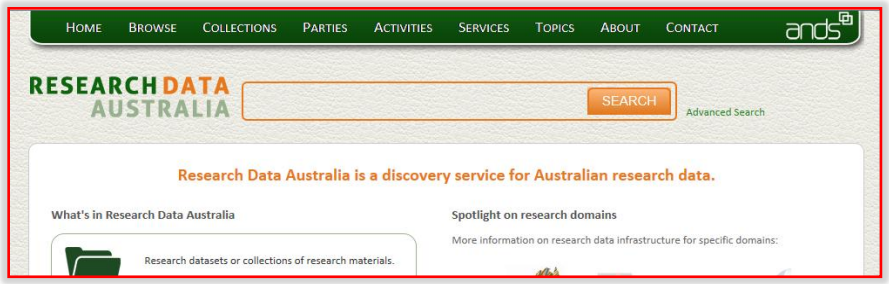
ANDS Suggested Links

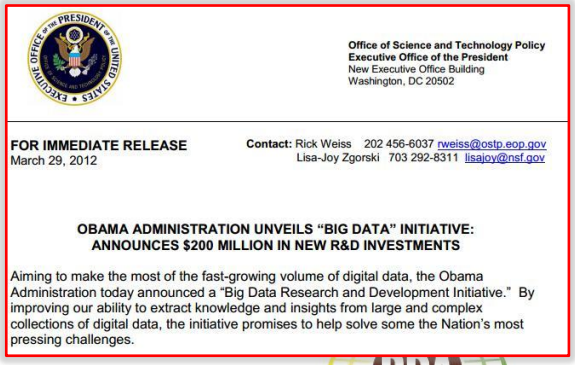
Internal Records:

1557 Collections with matching subjects

The Research Data Alliance

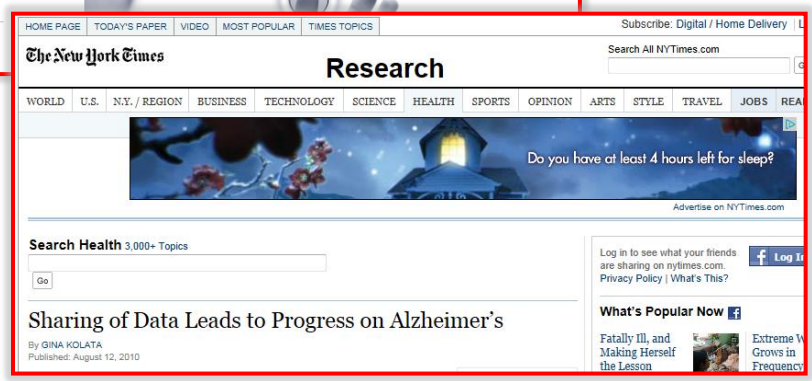
Digital Data has hit the "Tipping Point" as a National and Global Priority

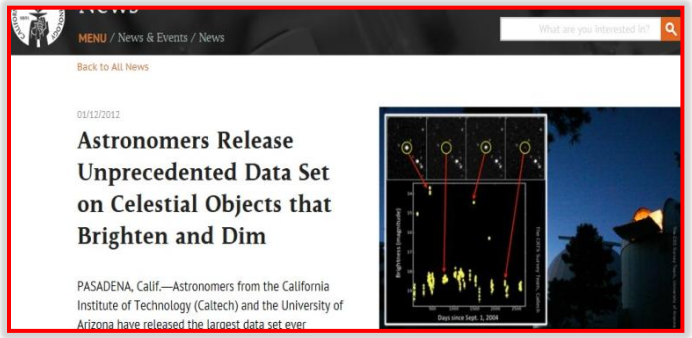


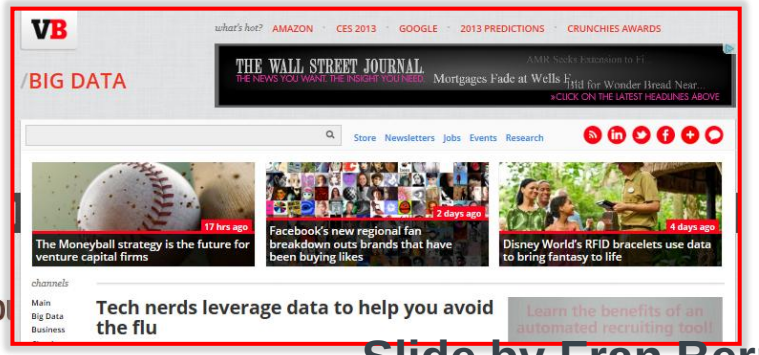


Slide by Fran Berman

It's Not Just Your Data, It's Other People's Data: Data Sharing Fundamental to Data-Driven Innovation







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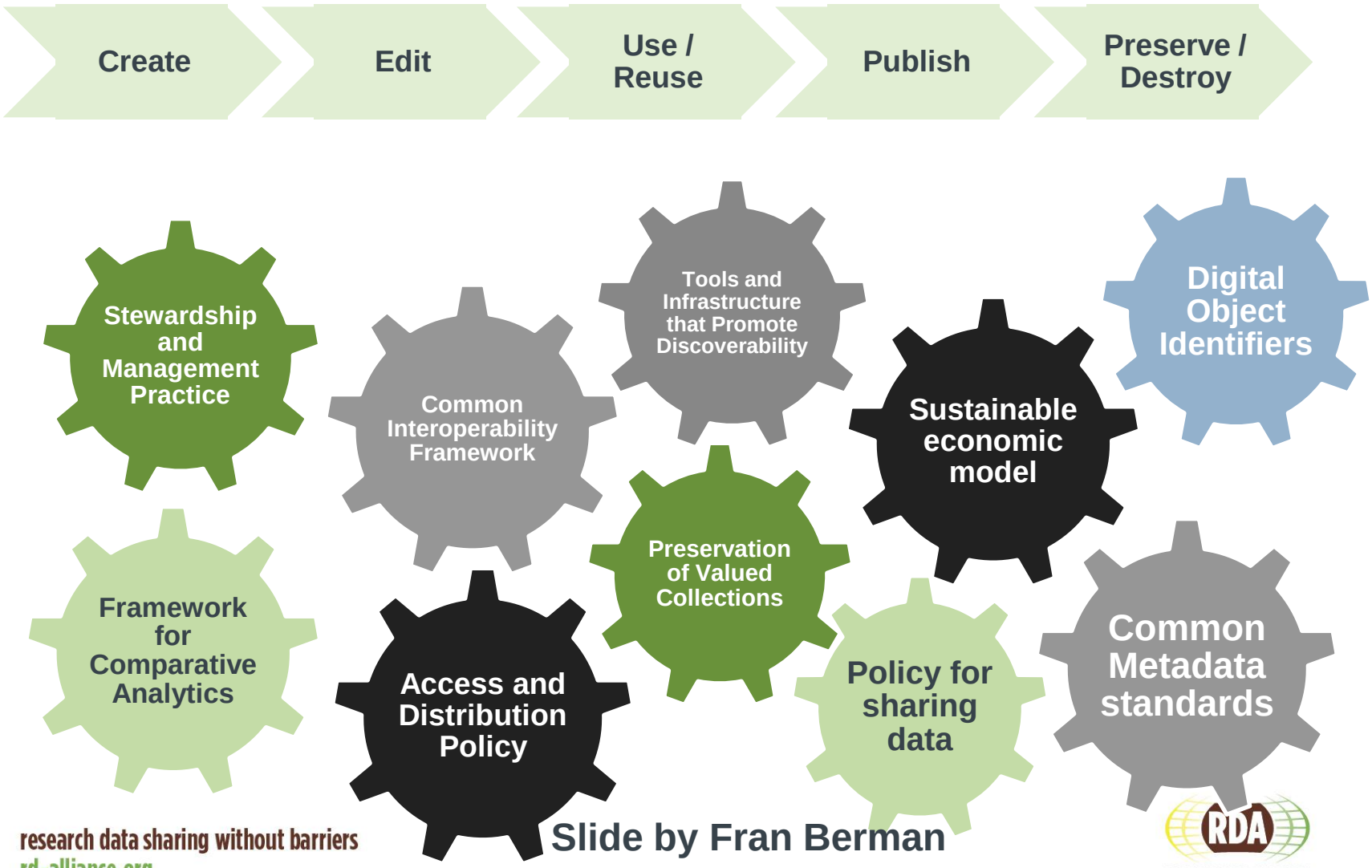
RESEARCH DATA ALLIANCE

Common Infrastructure, Policy and Practice Drive Data Sharing and Exchange throughout the Data Life Cycle



Slide by Fran Berman

Research Data Alliance: A New Community Organization to Accelerate Global Data Sharing and Exchange

- The Research Data Alliance (RDA) is a new organization forming to facilitate **specific, short-term efforts that accelerate the sharing and exchange of research data**
- **Working groups will serve as accelerants** to data sharing practice and infrastructure. Work products / deliverables to include
  - Adopted standards
  - Deployed infrastructure
  - Adopted policy
  - Implemented best practice, etc.

Guiding Principles of the RDA

- **Openness –** Membership is open to all interested individuals who subscribe to the RDA's Guiding Principles. RDA community meetings and processes are open, and the deliverables of RDA Working Groups will be publicly disseminated;
- **Consensus –** The RDA moves forward by achieving consensus among its membership. RDA processes and procedures include appropriate mechanisms to resolve conflicts;
- **Balance –** The RDA seeks to promote balanced representation of its membership and stakeholder communities;
- **Harmonization –** The RDA works to achieve harmonization across data standards, policies, technologies, infrastructure, and communities;
- **Community-driven –** The RDA is a public, community-driven body constituted of volunteer members and organizations, supported by the RDA Secretariat.
- **Non-profit -** RDA does not promote, endorse, or sell commercial products, technologies, or services.

Initializing RDA: Organizers and Sponsors

Steering Group

- Fran Berman, US
- Juan Bicarregui, UK
- Leif Laaksonen, EU
- Beth Plale, US
- Andrew Treloar, AU
- Ross Wilkinson, AU
- Peter Wittenburg, EU
- John Wood, EU

Secretariat

- Herman Stehouwers, EU
- Stefanie Kethers, AU
- Mark Parsons, US

Sponsors

- US: Research Data Alliance / U.S. – funded by NSF, in-kind support from NIST
- AU: Australian National Data Service – funded by the Australian Government
- EU: iCORDI – funded by the European Commission

Council

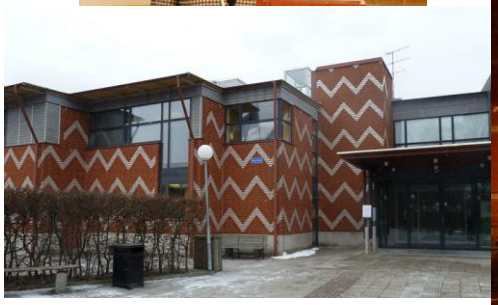
- John Wood, EU
- Fran Berman, US
- Ross Wilkinson, AU

Expansion of sponsoring countries is key to moving RDA forward as a global organization

Current Status

- Initial meetings held in Munich and Washington
- ~200 Delegates
- Workshops at eIRG, IDCC, ESIP….
- ~12 Interest and Working Groups being established
- Website, Forums, Mailing Lists etc.
- Initial Council and Secretariat forming
- Launch and first Plenary: 18-20 March 2013

First Plenary in Gothenburg

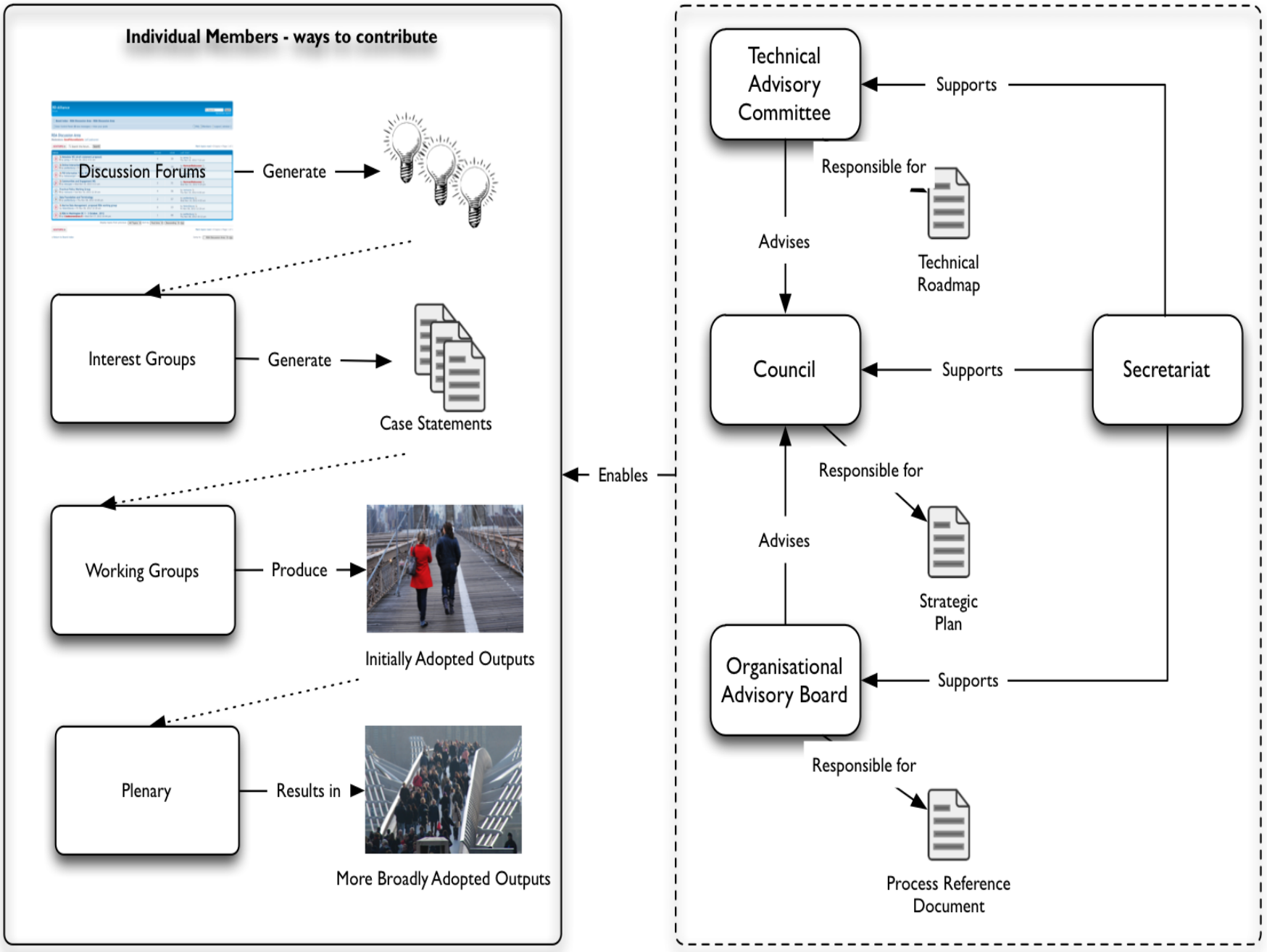


- > 200 delegates from 31 countries
- > 5,500 tweets on #RDALaunch, @resdatall now has over 120 followers
- Face-to-face time for groups at Plenary meeting
- Second plenary to be held 16-18 September 2013, Washington D.C., USA

RD-A Interest and Working Groups

- Interest groups:
  - no fixed life span,
  - may have reports or other documents as output,
  - may lead to one or more working groups

- Working groups:
  - 12-18 month duration,
  - tangible and measurable, implementable outputs,
  - follow process



Slide by Andrew Treloar

Research Data Alliance Approach: Focused efforts, tangible progress

RDA Working Group Deliverables are:

- **Focused pieces of adopted code, policy, infrastructure, standards, or best practices** that enable data to be shared and exchanged
- **"Harvestable" efforts** for which 12-18 months of work can eliminate a roadblock for a substantial community
- **Efforts that have substantive applicability** to "chunks" of the data community, but may not apply to everyone
- **Efforts for which working scientists and researchers can start today** while more long-term or far-reaching solutions are appropriately discussed in other venues

Slide by Fran Berman

Creating Working Group Efforts

Community discussion of issues and areas that facilitate data-driven research. Many groups forming at forum.rd-alliance.org

Case Statement

Community feedback on Working Group ideas; assessment of technical, impact and alignment to RDA mission by TAB and Council

RDA WG Endorsement

RDA Working Group: 12-18 month outcome-oriented effort culminating in adoption and implementation of specific deliverables

Group Culmination

Post-completion broader community adoption of deliverables and amplification of impact

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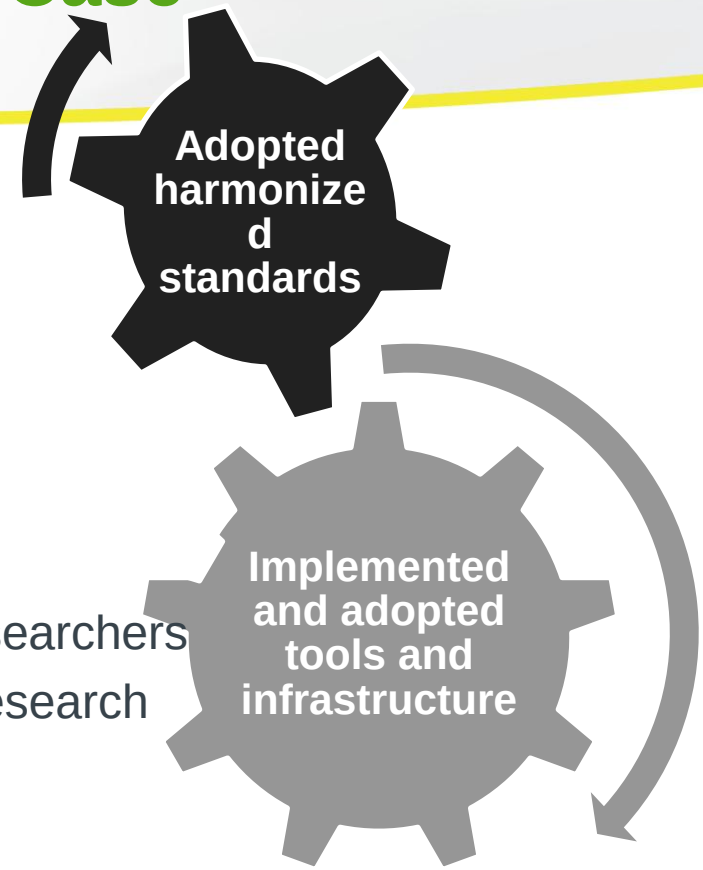
Making Data Work: Assessing Case Statement Impact



Key questions for Candidate Working Groups:

1. What are the practical outcomes of the work?
2. Who will benefit from the work and what research issues will be facilitated?
3. How do the deliverables make it easier for researchers to do their work? How do they change how research will be undertaken?
4. Who will implement / adopt the deliverables? Are adopters and beneficiaries included in the Working Group?
5. What is the schedule for implementation / adoption?
6. What are the advantages of this approach over existing approaches?

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Two RDA Working Groups approved through Technical + Council assessment process

- **Data Type Registries**
  - Formulate a data model and expression for types
  - Design a functional specification for type registries
  - Prototype type registry
  - Contact Larry Lannom, Daan Broeder
- **PID Information Types**
  - Define core PID information types, roles and profiles
  - Deliver a prototype of these elements and accompanying rudimentary services
  - Contact Tobias Weigel,Timothy DiLauro
- Working groups are complementary

Current Working and Interest Groups

- **PID Information Types**
- **Data Type Registries**
- UPC Code for Data
- Metadata
- Pub/Data Citation/Linking
- Data Foundation and Terminology
- Practical Policy
- Legal Interoperability
- Defining Urban Data Exchange for Science
- Contextual Metadata
- Community Capability Model

Current Working and Interest Groups (cont'd)

- The Engagement Group
- Marine Data Harmonization
- Repository Audit and Certification
- Preservation e-Infrastructure
- Contextual Metadata
- Community Capability Model
- Agriculture
- Big Data Analytics
- Education and Skills Development

- Somewhat in flux – emerging, merging, changing, etc.

How to get involved?

- Visit http://rd-alliance.org/
- Sign up if you agree with the RD-A principles
- Individual members encouraged to
  - Contribute to the forum
  - Be involved with or initiate Interest groups
  - Be involved with or initiate Working Groups
  - Serve on the Technical Advisory Board (elected post)
  - Engage their organizations to partner with RDA
  - Come to the bi-annual Plenaries

Thank you!

- http://rd-alliance.org
- Forum area: http://forum.rd-alliance.org/
- Contact: enquiries@rd-alliance.org
- Twitter ID: @resdatall

- Information on the First Plenary, including presentations: http://rd-alliance.org/programme/
- Twitter hashtag: #RDAlaunch

- Stefanie Kethers, stefanie.kethers@ands.org.au
- http://www.ands.org.au