Research Data Alliance @ T=0: Goals, Principles, Component Groups
Francine Berman, Ross Wilkinson, Juan Bicarregui
The RDA Governance Model

- The Vision (Francine Berman)

- The Community (Ross Wilkinson)

- The Support (Juan Bicarregui)

- The Plenary
Digital Data has hit the “Tipping Point” as a Global Priority
It’s Not Just Your Data, It’s Other People’s Data
Data Sharing Fundamental to Data-Driven Innovation
Common Infrastructure, Policy and Practice Drives Data Sharing and Exchange throughout the Data Life Cycle

Create
Edit
Use / Reuse
Publish / Disseminate
Preserve / Destroy

Stewardship and Management Practice
Common Interoperability Framework
Tools and Infrastructure that Promote Discoverability
Sustainable economic model
Preservation of Valued Collections
Policy for Sharing Data
Common Metadata standards
Digital Object Identifiers

Framework for Comparative Analytics
Access and Distribution Policy
Community coordination accelerates data-driven discovery and innovation

- "Just do it" -- Focused efforts help communities drive tangible progress

Creation / adoption of data sharing policies have accelerated research innovation

Development and adoption of parallel communication protocols through the MPI Forum drove a generation of advances

Now 25 years old, the Internet Engineering Task Force’s mission “to make the Internet work better” has resulted in key specifications of Internet standards that support innovation

Development of a publicly available shared data collection enabling new results for Alzheimer’s
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.
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
RDA Working Groups Create Enabling Infrastructure

Data Use, Sharing and Exchange

Community deployment of adopted / implemented infrastructure, tools, policy, practice, standards facilitating data sharing and exchange

Foundations
RDA Working Group Focus:

Beneficiaries:

Deliverables:

Adopters:

How this WG is driving research results through increased data sharing and exchange:
RDA Working Group Focus:
Interoperability between 4 major community collections on materials and functions for the basket-weaving community

Beneficiaries: Basket-weavers in the particular area of materials and community use as well as the basket-weaving community more broadly

Deliverables:
1. Interoperable infrastructure and metadata framework integrating each of the major collections deployed at the collection repositories;
2. Public access portal for the community to a virtual unified collection

Adopters: Collection stewards: Swedish Basket-weaving Institute, Chinese Basket-weavers Association. Basket-weaving Institute of America; Portal supported by STFC

How this WG is driving research results through increased data sharing and exchange: Researchers can now address key questions in a richer way:
- Which basket materials are most resilient? Bio-degradable? Etc.
- What are baskets used for in various cultures?
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Building the RDA Community

RDA being built through bootstrapping: “bottom-up” work of expanding community and interest groups coordinated with creation of an organizational framework:

• Community building through the rd-alliance forum

• Guidance on initial case statements by Organizing Group liaisons

• Focus on active partnership with projects, related organizations, companies, funding agencies, 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.
Individual Members: Ways to contribute

- “Join” RDA by signing up through rd-alliance.org website
- 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
A forum for progressing of ideas and activities

May deliver reports, contribute to roadmaps, foster communities

May be long lived

May lead to a number of working groups

Open: Supported by RDA Forum for open discussion

Community-driven Open to all with an interest
Creating Working Group Efforts

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

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

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

Post-completion broader community adoption of deliverables and amplification of impact.
Working Groups: “Tiger Team” Model

Beneficiaries

Researchers / scientists / users whose work will be facilitated through the sharing and exchange of public access research data

Builders / Technologists

Developers who create specific harmonized standards, practice, policy, tools, infrastructure and/or other concrete deliverables

RDA Working Group

Adopters

Institutions / projects / organizations who adopt and deploy the deliverables of the Working Group
Key questions of Case Statements:

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?*
Two RDA Working Groups have been 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
Building the RDA

- **Growing the RDA Community**
  - Increase membership through the rd-alliance.org website and forums
  - Create a pipeline of impact-oriented deliverables through the development and backing of RDA Working Groups
  - Foster RDA Plenary events as a gathering place for the community

- **Growing the RDA Organization**
  - Develop a functional and effective organizational structure (v.1 by the Plenary)
  - Reach out to founding Organizational Partners and Affiliates and create a win-win partnership model

- **Growing RDA Support**
  - Populate the initial Council, Technical Advisory Board, Organizational Advisory Board, Secretariat
  - Work with active community members to take on leadership roles and responsibilities
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What organisational structure is needed to support the work?

- Need to coordinate the work of the Working Groups
  - Deal with overlaps
  - Find gaps

- Need to organise the meetings and run the communications
  - Website, Forums, Mailing lists

- Need to manage the resources
  - Underwrite the meetings
  - Provide staffing

- Need to keep RDA aligned with the vision and mission
  - and update them if necessary
What kind of Organisation do we need?

Need to build bridges

- Bridges to the future
- Bridges to research partners
- Bridges across disciplines
- Bridges across regions
- Bridges across communities

....to find new solutions
Stretching the bridge metaphor...

Some bridges we can build:

- Connecting Data
- Connecting People
- Connecting Disciplines

What kind of organisation do we need to do this?
Proposal for organizational Framework

RDA Strategy and Leadership: Council
Responsible for overarching mission, vision, sustainability of RDA

Technical Leadership: Technical Advisory Board (TAB)
Responsible for Technical Roadmap

Administrative Leadership: Secretariat
Responsible for Administration and Operations

Organizational Partners: Organisational Advisory Group (OAG)
Responsible for Process and Strategy Reference Document

Community Impact: Working Groups
Responsible for impactful, outcome-oriented efforts

Government Group (Science Agency Colloquium)
Appropriate International R&D Agency Support
Documents that will help Define the RDA

- **Technical Roadmap** *(responsibility of the TAB):*
  - Description of technical plan and deliverables
  - Areas of focus in the interest groups, working groups and membership;
  - Identify new areas where adoption of concrete deliverables can make an impact.

- **Process and Strategy Document** *(responsibility of the OAB)*
  - Description of the overarching workflow and processes
  - Implementation of goals from the Strategic Plan

- **Strategic Plan** *(responsibility of the Council):*
  - Description of short and long term goals and strategies to achieve the RDA mission and
  - Maximize the impact to the data community of its efforts and deliverables.

- **Operating Plan** *(responsibility of the Secretariat):*
  - Annual plans for meetings, staffing, finances etc
RDA Constituent Groups

Individual Members - ways to contribute

Discussion Forums → Generate →

Discussion Forums

Interest Groups

Generate →

Case Statements

Working Groups

Produce →

Initially Adopted Outputs

Plenary

Results in →

More Broadly Adopted Outputs

Technical Advisory Committee

Supports

Responsible for

Technical Roadmap

Council

Supports

Responsible for

Strategic Plan

Organisational Advisory Board

Supports

Responsible for

Process Reference Document

Secretariat

Advises

Secretariat

- Supports the administrative, logistical, communications, development, strategic, and other operations of the RDA
- Members appointed and supported by the RDA Council.
- Intention is for one of the Secretariat members to serve as a lead contact for the group and participate as an ex officio member of the Council.
  - Process / individual TBD …

Current RDA Secretariat:
- Stefanie Kethers (AU)
- Mark Parsons (US)
- Herman Stehouwer (EU)

Contact: secretariat@rd-alliance.org
Technical Advisory Board

- TAB provides technical expertise and advice

Responsible for:
- Guiding the technical work of RDA, through the development and evolution of the RDA Technical Roadmap
- Cultivating candidate Case Statements and Working Group deliverables that promote the RDA goals of adoption and impact
- Working with RDA Working Groups to promote adoption and effectiveness of their deliverables.
- Working with Council to evaluate candidate Working Group Case Statements.
- Advising RDA membership and Council on impact-oriented WG opportunities and discussion topics
- Providing technical advice to Council to inform strategic approaches and decisions

Organizing Group - Council playing the role of the TAB until elections this Spring.

See the TAB Task Force document on the rd-alliance website for details and to comment.
Organizational Advisory Board

- OAB provides advice on sustainability, organizational and process issues, overarching strategy, etc. Representatives of RDA organisational members

- Responsibilities:
  - Maintains and evolves the RDA Process and Strategy Plan
  - Provides input to Council on the organizational processes, structure, strategic direction, and sustainability of the RDA.
  - Contributes financial or in-kind support to the RDA at a level TBD in the OAB model.
Council

- Sets strategic direction
  - Maintains the vision and mission
  - Elected members and TAB, OAB and Secretariat chairs (ex officio)

- Responsible for:
  - Developing and setting RDA’s strategic direction and evolving the RDA Strategic Plan
  - Reviewing and coordinating RDA component Plans
  - Growing the OAB and approving new organizational partners
  - Reviewing and assessing new Case Statements for impact and alignment with RDA mission
  - Promotion of Working Group efforts and outputs
  - Overarching organizational health and impact of RDA

Current RDA Council:
- Fran Berman (US)
- Ross Wilkinson (AU)
- John Wood (EU)
- Expand to ~9
Organizational Affiliates

- Synergistic opportunities for substantial partnerships between RDA and related organizations
  - CODATA
  - W3C
  - WDS
  - DELSA
  - DataCite
  - etc.

- Plans are to develop an organizational affiliate model in which joint efforts, MOUs, etc. can be developed that benefit both organizations and strengthen ties within the data community

Ross Wilkinson and Fran Berman heading up group to develop a viable Organizational Affiliate model by Plenary 2.
Work in Progress: Support Model

Present support - Science Agency Colloquium:
- Currently supported by founding set of sponsors
  - European Union Commission through iCORDI,
  - U.S. National Science Foundation through RDA / US,
  - Australian Government through the Australian National Data Service.
- First two RDA Plenary events supported by sponsoring countries.
  - Will have modest registration fee at Plenary 2.

Moving forward
- Goal is to achieve self-sustainability within ~5 years
- Will develop a sustainable economic model that will support its activities
- Expected that OAB members will provide financial or in-kind contributions.
“T=0” - 18 March 2013: We are here!

Thank you for being the founding members of RDA!

Be involved:

- Help RDA live up to its aspirations:
  - focused effort,
  - tangible progress,
  - maximum impact
- Work with colleagues to create Working Groups that will make a difference to the research community
- Get involved in RDA component groups
- Make RDA better
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<tr>
<td>08:00</td>
<td>Registration</td>
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<tr>
<td>09:00</td>
<td>Data Driven Research - Experiences from Humanities and Life Sci&lt;br&gt;Manfred Laubichler, Phil Bourne,</td>
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<td>10:30</td>
<td>Coffee</td>
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<td>11:00</td>
<td>RDA Agora: Case Statement Presentations, Overview Presentations</td>
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<td>14:00</td>
<td>RDA for newcomers: open discussions and Q&amp;A&lt;br&gt;&lt;i&gt;Interactive session&lt;/i&gt;</td>
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<tr>
<td>14:00</td>
<td>Work in Progress: Working groups, Interest Groups and BOFS&lt;br&gt;&lt;i&gt;Interactive session&lt;/i&gt; Schedule on forum</td>
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<tr>
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| 09:00 | United we stand: RDA and the data initiatives around the world  
Scott Brim, Deputy Technology Officer of Internet2  
Bob Chen Columbia University and CODATA  
Mustapha Mokrane ICSU World Data System  
Robert Kahn, President & CEO, CNRI and DONA  
Ross Wilkinson, Australian National Data Service, Australia (RDA) |
| 10:30 | Coffee                                         |
| 11:00 | Reports from Interest Groups, Working Groups, BoFs |
| 12:30 | Lunch                                          |
| 13:30 | RDA Plenum meeting                             |
| 15:15 | Announcement of next Plenary plans             |
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
Questions for your Consideration

- Are there mechanisms that the RDA should include that will help it be more effective and high-impact?
- What should the role of the Technical Advisory Board be? How can we achieve balance in its distribution and election?
- Is the Organizational Advisory Board a good way for organizations to be involved? What should their responsibilities be?
- What approaches should the RDA take to be sustainable?

Time for discussion at the end of this session and Wednesday Plenum session.
Thank You
Questions??

research data sharing without barriers
rd-alliance.org