Presentation made during the XXth International CODATA Conference, Beijing, CHINA

23 October 2006

Michel Sabourin, Ph.D.

Chair, Canadian National Committee for CODATA

Government of Canada | Gouvernement du Canada

Canada

OUTLINE

- Objectives
- Background
  - OECD Ministerial Declaration (2004)
  - SSHRC National Data Archive Consultation (2002)
- Forum
  - Participants, Format, Speakers and Sponsors
  - Strategy - Vision 2020
  - Findings - Impact Areas, Challenges to Open Access and Areas for Action
- Recommendations

OBJECTIVES

- Recommend open access actions to the Canadian research community
- Help to preserve historically significant data
- Generate workable solutions to the different barriers to access

BACKGROUND

Introduction

-Public funding debate – value for money

-Open access as an accelerator vs commercial interests

-Need for systematic data archiving

-Other issues

BACKGROUND (Cont'd)

OECD Ministerial Declaration on Access to Public Research Data (2004)

Social Sciences & Humanities Research Council (Canada) Consultation on National Data Archive (2002)

FORUM (November 2004)

PARTICIPANTS

- Task Force, chaired by David Strong
- Project Management, chaired by Gordon Wood
- Participants: N = 74
- Wide coast-to-coast representation of organizations and disciplines

Participants

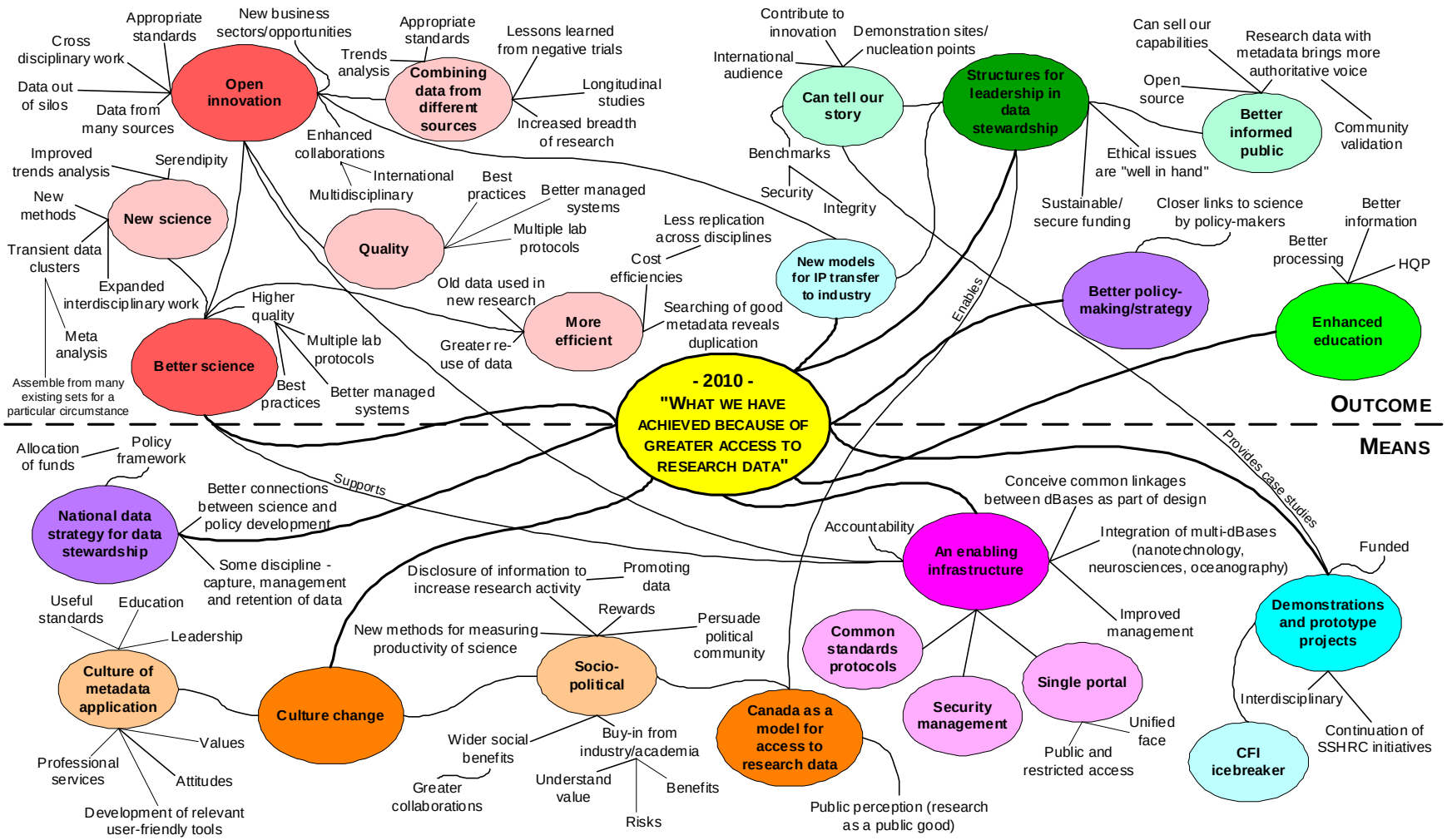
- Senior Academic Researchers
- Senior Academic Administrators
- Federal Networks of Centres of Excellence
- Research Laboratory Senior Scientists
- Research Laboratory Administrators
- Data Libraries (CARL)
- Granting Council Senior Staff
- Statistics Canada Researchers

FORUM (Cont'd)

FORMAT

- Prominent speakers to set tone, give background & focus minds
- Facilitated, small groups discussions with periodic plenary sessions
- Generated a « mind-map » - means of grouping ideas

FORUM– “Mind-Map”



Speakers

- **Dr. Arthur Carty** – Keynote
- **Chuck Hasel** (sub for Martin Godbout) – Genome Canada
- **Marie Tobin** – Industry Canada. (OECD Rep.)
- **Janet Halliwell** – SSHRC
- Lessons learned
  - **Paul Uhlir** – US NA
  - **David Moorman** – SSHRC
  - **Charlyn Black** – CIHR
- Greetings from Partner organizations
  - **Patricia Kosseim** – CIHR
  - **Eliot Phillipson** – CFI
  - **Steve Shugar** – NSERC
  - **Michael Raymont (Bernard Dumouchel)** – NRC

Sponsors

- Managing Sponsor
  - National Research Council of Canada
- Primary Sponsors
  - Canada Foundation for Innovation
  - Canadian Institutes of Health Research
  - Natural Sciences and Engineering Research Council of Canada
- Collaborating Sponsor
  - Industry Canada

FORUM – Strategy

- Relate to a vision of the Canadian data scene in 2020

Vision – 2020

- Canada is the centre of the global knowledge grid.
- It has become the desired nation with which to partner in research because of its national system of open access to research data.
- Canadian creativity and innovation is the highest in the world.
- Open but secure access to powerful and globally assembled data has transformed scientific research. …

Vision – 2020 (Cont'd)

- Researchers routinely analyze problems of previously unimaginable complexity in months rather than decades
- Resulting knowledge and discovery have
  - enriched quality of life,
  - transformed healthcare,
  - improved social equality,
  - provided greater security,
  - broadened decision perspectives,
  - transformed advancement of human knowledge.

FORUM – Given that Vision …

- What were the challenges?
- What were the inhibitors?
- What did we do to get there?
- What are the actions needed now?

Findings – Impact areas

- New Science
- Better Science
- Leadership in Innovation
- Superior Policy and Strategy
- More Efficient Research
- Enhanced Education

Findings – Challenges to Open Access

- Priority of Need
- Champions for Change
- Culture (research, administrative and bureaucratic)
- Training
- Standards and Processes
- Archival Expertise
- Responsibilities, Systems and Tools
- Other Challenges and Opportunities

Findings – Areas for Action

- Research Culture and Behaviour
- Research Institute Management, Policies and Strategies
- Legal and Policy Frameworks
- Financing and Budgeting of Research
- Data Technologies and Computing Infrastructure

Recommendations (1)

- Sponsors/Partners
  - Establish ‘Data Force’
- Data Force
  - Commission small scale pilot project
  - Plan & supervise formation of Data Canada
  - Education – foster awareness in leadership
  - Funding – seek long-term funding for Data Canada
  - Develop data access strategic plan

Recommendations (2)

- Data Canada
  - Interaction with international community
  - Deal with ethics, privacy, liability and anonymization issues
  - Establish a framework for archiving selected data
  - Take steps to preserve databases at risk
  - Develop assessment criteria for data quality and value (via international collaboration)

Recommendations (3)

- Funding Agencies
  - Train principal investigators in data management practices
  - Require data management plans in grant applications
  - Provide resources to fund preservation of important data
  - Establish peer review mechanism for evaluating data
  - Establish reasonable time limits for denying access by others
- Universities and Researchers
  - Extend reward system to include recognition of excellence in data ‘management’
  - Train specialists in data preservation and curation

Conclusion - Next Steps

Find Champion(s) to take forward with support of Partners/Sponsors