

Taking the analysis to sensitive data. Test cases with the British Library Digital Data and F1000 Research Data

27/2/2015

AMASED Access Methods for Analysing SEnsitive Data

Research data spring

- >Lead: University of Bristol
- Collaborators: London Metropolitan University, Content Mine, British Library, F1000 Research
- Stakeholders: research data providers, researchers, research libraries, publishers etc.

Jisc

Scope and Gap

- »Sensitive data crucial in almost all areas.
 - >Patchy understanding of how to deal with them (3.9). Tools and methods evolving rapidly.
- »DataSHIELD (<u>www.datashield.ac.uk</u>) developed for Biomedical/Life sciences (EU,MRC)
 - >Extend to new roles in biomedicine, text data in humanities, and work with 3.3 to develop capacity for data cleaning
- »Goal 1: Scope integration of the data cleaning tool ICT-RD (3.3) with DataSHIELD
- »Goal 2: Local instance of DataSHIELD for open text data (digitised books) from the British Library
- »Goal 3: Scope the challenges of implementing DataSHIELD as a paper data access-analysis solution for F1000 Research.
- »FINAL (Month 13): Final products implemented with London Met, British Library, F1000 Research



Impact and Benefits

Ethics

Explain DataSHIELD to ethical and data access committees

Hackathon will feed into ongoing evaluation by the proposed DataSHIELD Security Oversight Committee

Potential developers

Raise interest in new project to optimise the exploitation of biomedical data, opportunity to develop new functionality

New use cases

Raise awareness of DataSHIELD beyond scope of biomedical community. Application to other research areas?

Researchers

Increase their access to datasets globally Simplify the process of pooled data analysis Ability to analyse individual level data

Pata providers

Data providers

Increase usability of datasets globally Preserve intellectual property Preserve participant confidentiality



Sustainability

- »Open source products
- Free to user and data provider
- Growing international development communityProtocols for quality control
- »Open for others to join us



of success

DELIVERABLES

- 1. Identify a workflow and methodology to implement the ICT-RD data cleaning tool in existing DataSHIELD infrastructure for numerical data.
- 2. Locally deployed DataSHIELD test infrastructure for text analysis of digitized books
- 3. Explore and identify a model for an F1000 Research DataSHIELD infrastructure for analysis of data in their papers.

MEASURES OF SUCCESS

- 1. Defined and realistic methodology for integrating The two pieces of software
- 2. Achieve unrestricted textual analyses of openly available text data (digitised books) using a locally deployed DataSHIELD test infrastructure
- 3. Defined and realistic methodology for implementing DataSHIELD on F1000 research data



FEC Funding

1		Cost including Inflation YEAR 1 TOTAL		Cost excluding Inflation YEAR 1 TOTAL	
		£	£	£	£
Staff Costs	FTE			-	
Dr Rebecca Wilson				1	
Basic Salary		l o	0	1 0	0
National Insurance		0	0	0	0
Superannuation		l o	0	1 0	0
Total	0.0	0	0	0	0
Grade J				1	
Single Spine (Grades A-M) - Grade J - Increment point 1 - Universities Superannuation Scheme					
Basic Salary		6,728	6,728	6,728	6,728
National Insurance		528	528	528	528
Superannuation		1,077	1,077	1,077	1,077
Total	0.191	8,333	8,333	8,333	8,333
Single Spine (Grades A-M) - Grade I Single Spine (Grades A-M) - Grade I - Increment point 2 - Universities Superannuation Scheme					
Basic Salary		1.466	1.466	1.466	1,466
National Insurance		112	112	112	112
Superannuation		235	235	235	235
Total	0.045	1,813	1,813	1,813	1,813
Total Staff Costs [1]		10,146	10,146	10,146	10,146
Non Staff Costs					
Travel & Subsistence		2,000	2,000	2,000	2,000
Total Non Staff Costs [2]		2,000	2,000	2,000	2,000
Facility Costs					
Total Facility Costs [3]		0	0	0	0
Estate Costs					
Estate Costs		1,844	1,844	1,844	1,844
Infra Lab Technician Costs		0	0	0	0
Total Estate Costs [4]		1,844	1,844	1,844	1,844
Indirect Costs					
Indirect Costs [5]		10,264	10,264	10,264	10,264
TOTAL COSTS [6=1+2+3+4+5]		24,254	24,254	24,254	24,254