

20/Mar/2018

# Who's paying?

Breaking down the costs of shared services

<http://sli.do>

# SSDP

Do you know how much your  
Research Data Management (RDM) is  
currently costing you?

» Are you sure?



Jisc is the UK **higher, further education** and **skills** sectors' **not-for-profit** organisation for **digital services** and **solutions**

Jisc

We...

Provide trusted **advice** and **practical assistance** for universities, colleges and learning providers

Negotiate **sector-wide deals** and **conditions** with IT vendors and commercial publishers

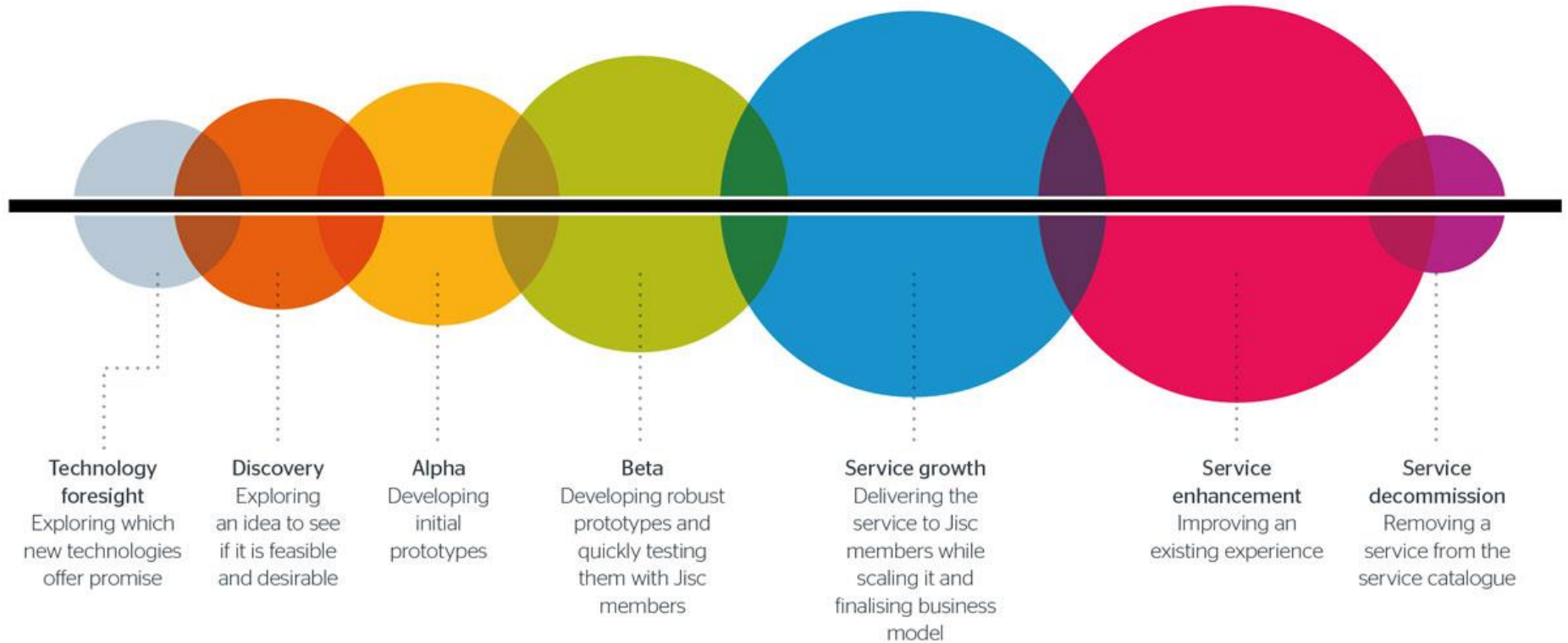
Operate **shared digital infrastructure** and **services**

## Vision

To make the **UK** the most **digitally advanced education and research nation in the world**

## Mission

To enable people in higher **education, further education and skills** to perform at the **forefront of international practice** by exploiting fully the possibilities of **modern digital empowerment, content and connectivity**



## Today's RDM cottage industry

c.200 UK public sector institutions perform around £6b of funded research per year in public purse every year

No sector-wide visibility of RDM effectiveness

Only 20% of research data from the 1990s is still usable

Majority of research institutions want a solution which cuts the pain

Stand-alone solutions need every institution to manage and maintain on limited budgets

**Research Funders require data to be managed and EPSRC have put onus on institution to preserve and make research data available as a condition of funding**

## Jisc shared service

**Share and optimise cost and benefit across the sector**

**Grow value of research data and increase research productivity**

**A single, cost-effective, pre-integrated solution available to all**

**Filling a gap**

**75%** of respondents look first to their institution to preserve their data

**Uptake of RDM**

Only **40%** of respondents have a Research Data Management plan

**Advocacy**

Only **16%** of respondents are currently accessing university RDM support services

**Metadata**

Only **18%** of respondents say they follow established metadata guidelines

**Public datasets**

**>70%** recognise that research is a public good and should be publicly released

**Sensitive data**

**41%** of respondents have some form of sensitive data

Advice &  
best practise

Capture & reuse

Preserve

Report

Source: Jisc DAF Survey results 2016 (<https://tinyurl.com/y7ro9pbx>)

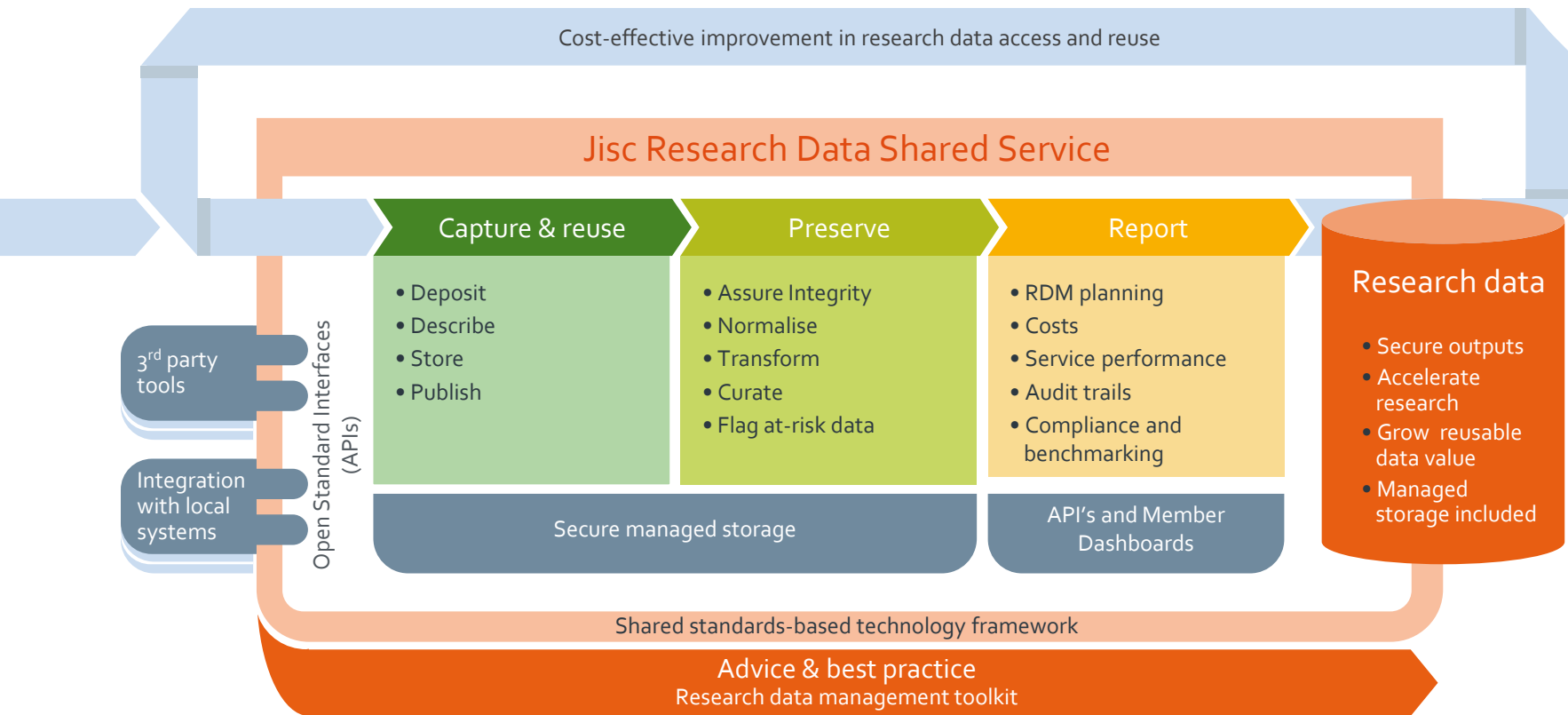


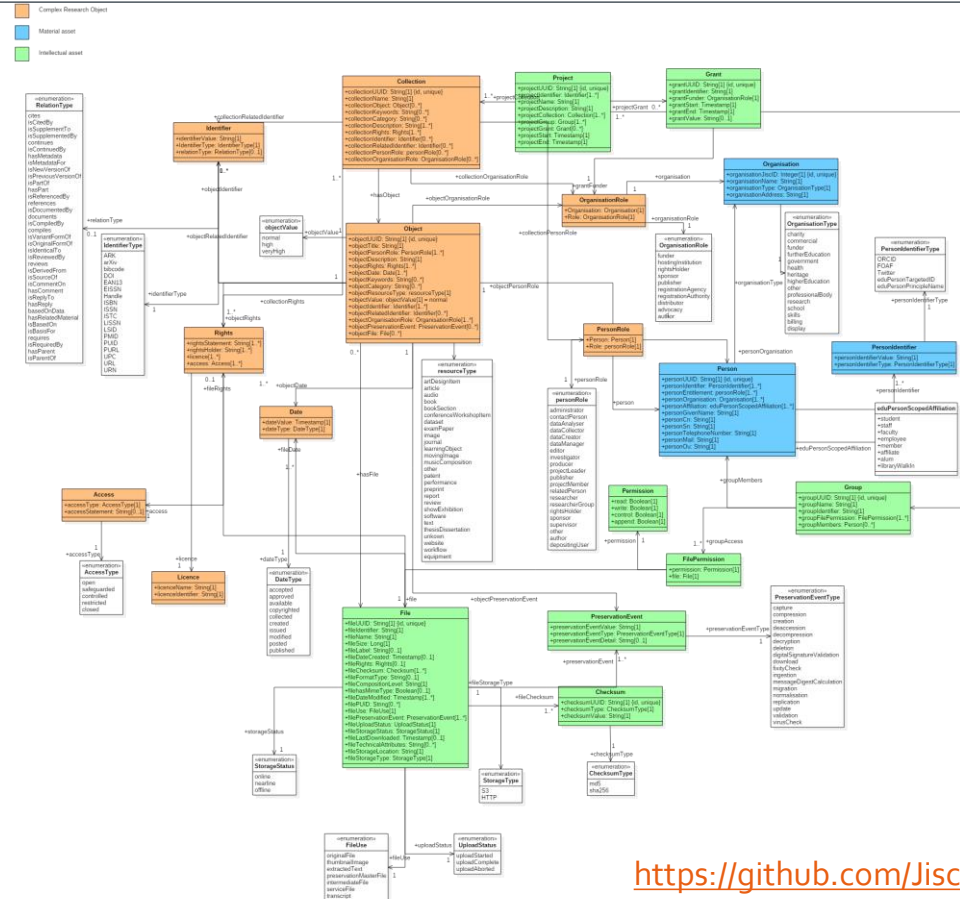


EPSRC and RCUK have both set out clear expectations that Institutions must take responsibility for Research Data Management, Preservation and Sharing

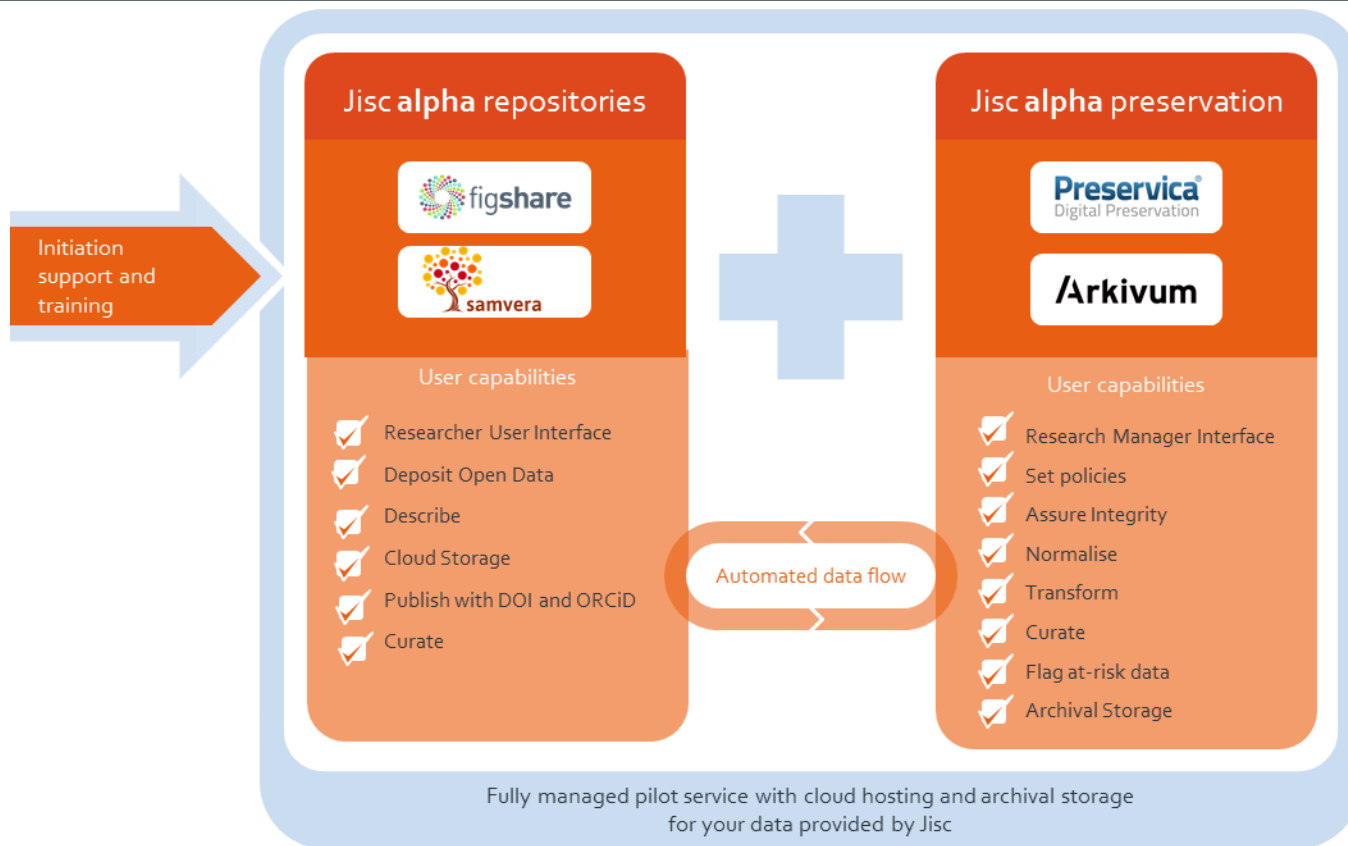
<https://www.epsrc.ac.uk/about/standards/researchdata/expectations/>

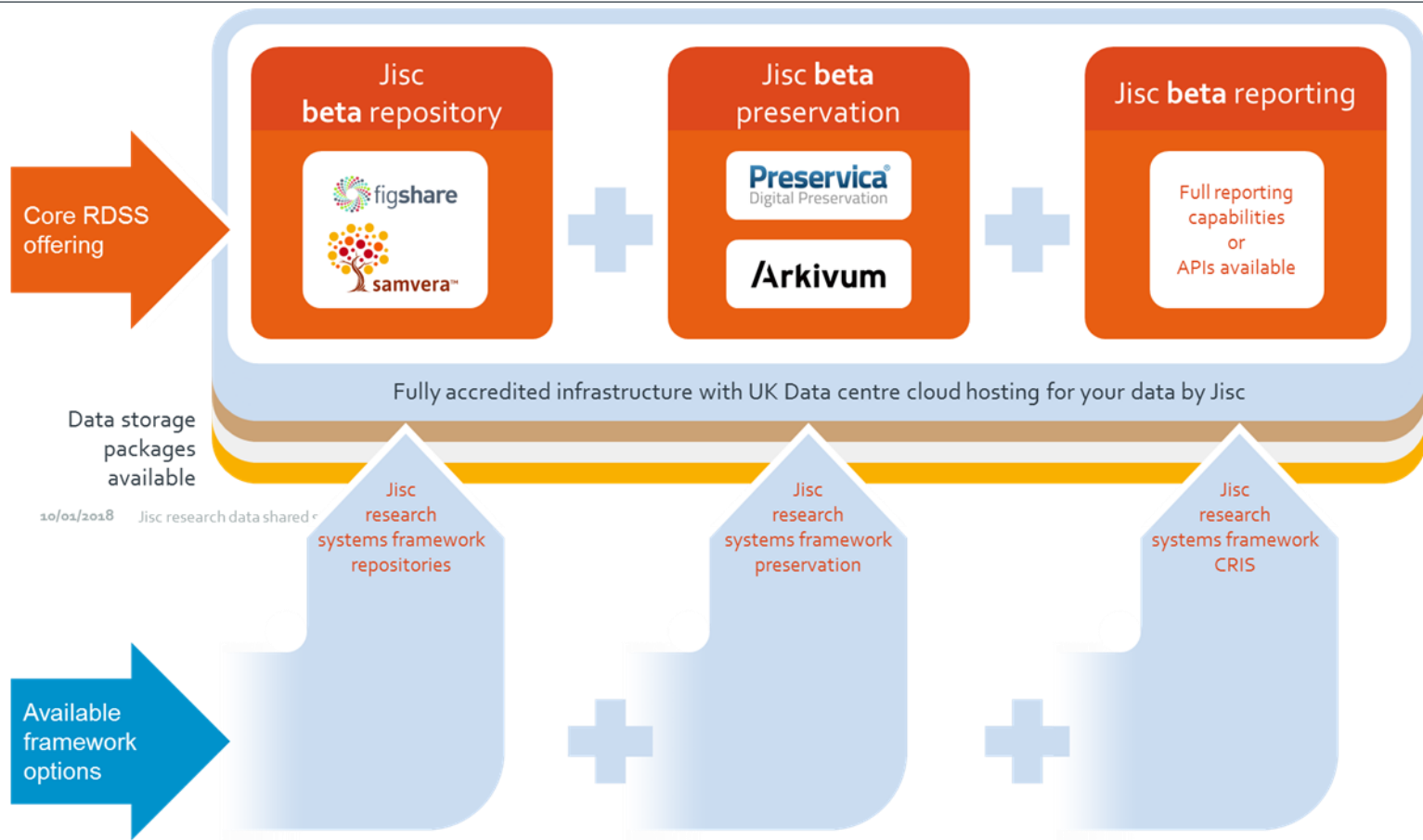
Costs & risks	Risk to research funding	Reduced income	Consequential loss
	Loss of research data	Lost value of research work (17% lost key data – DAF survey)	
	Leakage of sensitive data	Legal threat and cost (Unlimited fines with GDPR)	
	Researcher reputation	Key staff leave (75% EXPECT HEI to do this)	
	Institution reputation	Defensible integrity of research, responding to FOI etc. (e.g. Climategate)	
	Cost and risk of delivery	Inefficient research and over-expensive IT	

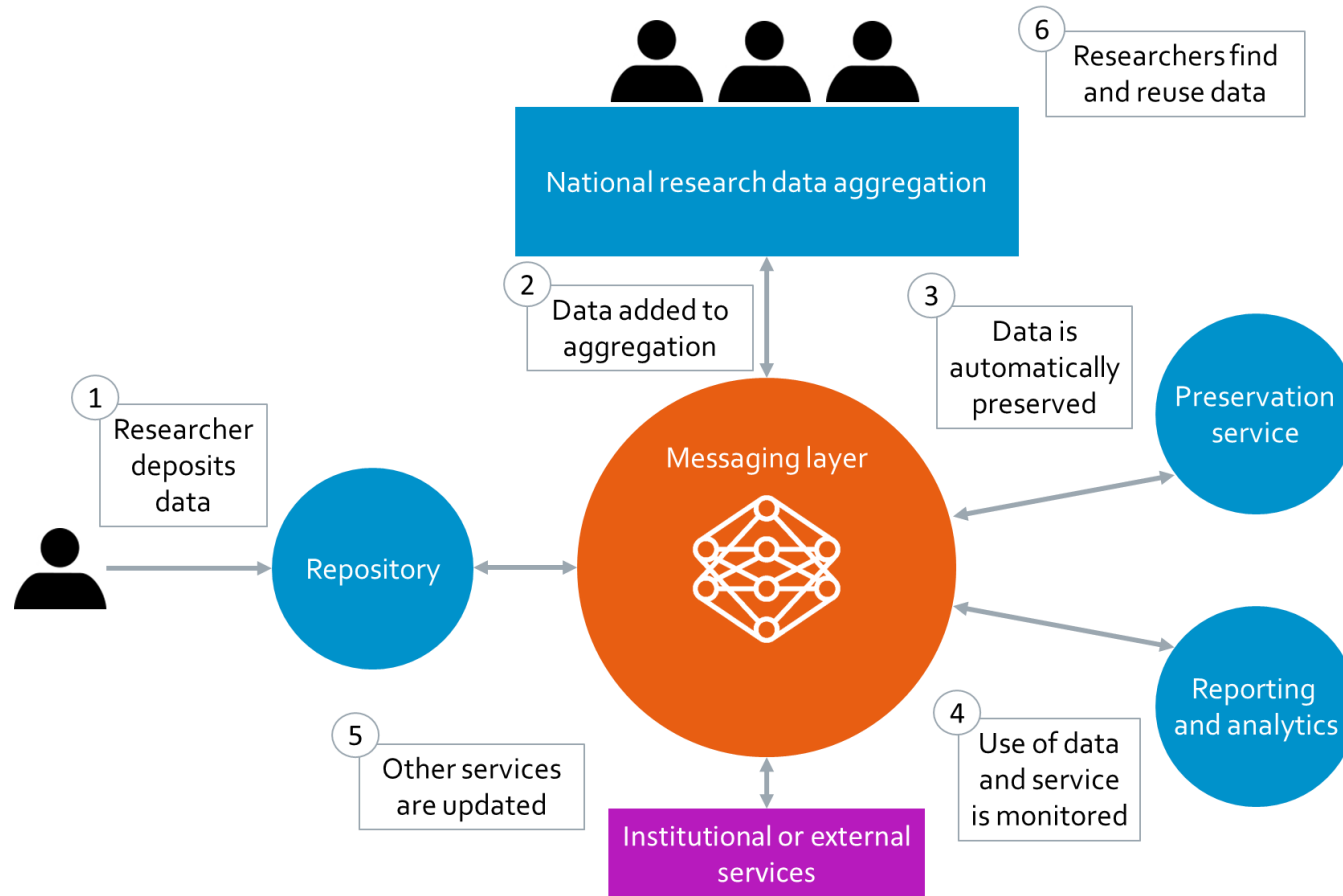




<https://github.com/JiscRDSS/rdss-canonical-data-model>







- » Integration with Jisc Safe Share
- » Integrations with active data storage e.g. Institutional storage area network, file sync and share services.
- » Integrations with additional 3<sup>rd</sup> Party systems
- » Integration with Jisc Tiered Storage
- » Integration with updated DMP Online
- » Certification



End-to-end  
service



Repository  
service



Preservation  
service



Approach supports pilot investments in a range of components, direction of travel towards standard managed solution for all over time.

All 3 options include:

- ✓ Financial benefits
- ✓ Standards
- ✓ Advisory
- ✓ Network membership



## A shared service can ...

Save you money

Reduce risk

Reduce burden

Ensure re-use

If you don't have  
a plan for RDM now,  
we can help you to  
develop one.

If you do have a plan,  
we can help you to  
validate, optimise and  
implement it.

## Background...

Jisc has worked with the sector for 2 years to develop a shared service for Research Data Management to enable re-use of research outputs

16 HEIs and some of the world's leading vendors joined the Jisc to pilot and develop the service, and our team regularly speaks and engages at global conferences on RDM.

120 UK HEIs attended our Research Data Network meeting in June 2017 – all are investing time and energy in understanding their future obligations and options for managing research data efficiently.

- » New funder mandates
- » 10 years from last access

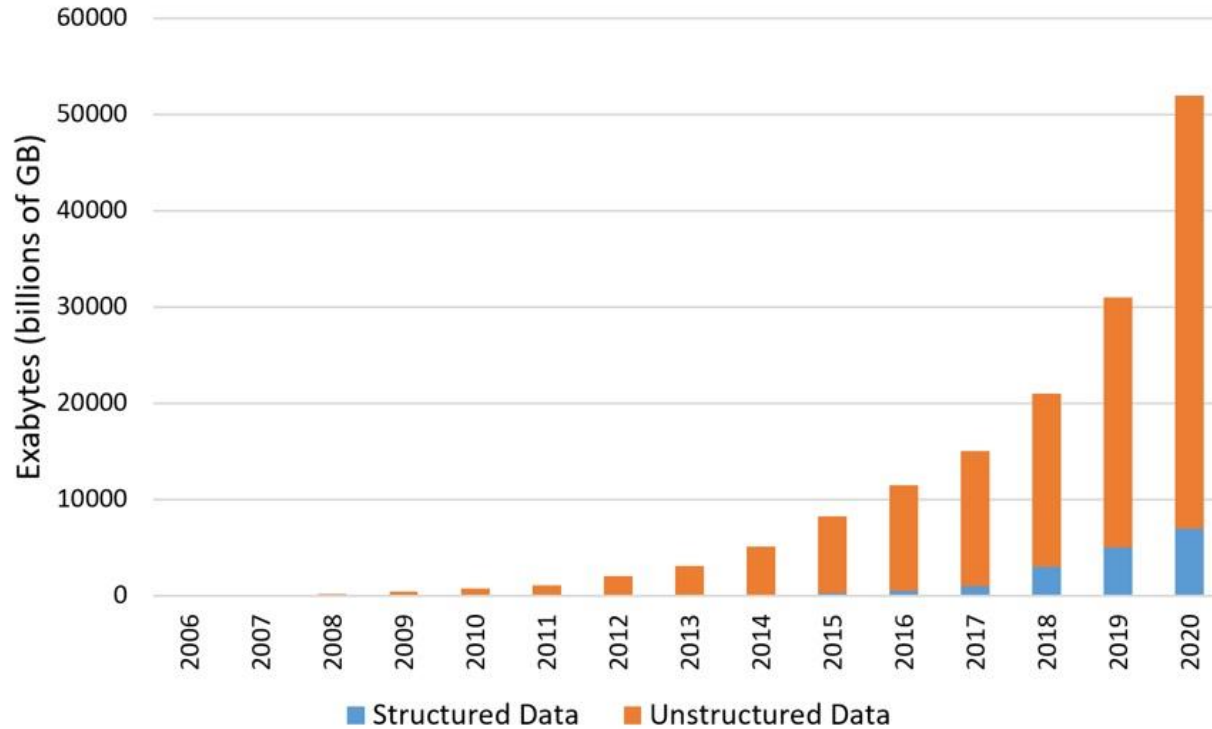


OR



?

## The Cambrian Explosion...of Data



Source: Patrick Cheesman

- » No existing provision and no budget
- » No concept of the true cost
- » No inter-communication



New need/mandate + no budget + lack of understanding

=

**sustainability  
headache**



- » The funding cliff
- » What can I put in my budget?
- » Can I recharge?
- » How?
- » Double dipping





- » How much is it going to cost in the future?
- » How much does it cost NOW?

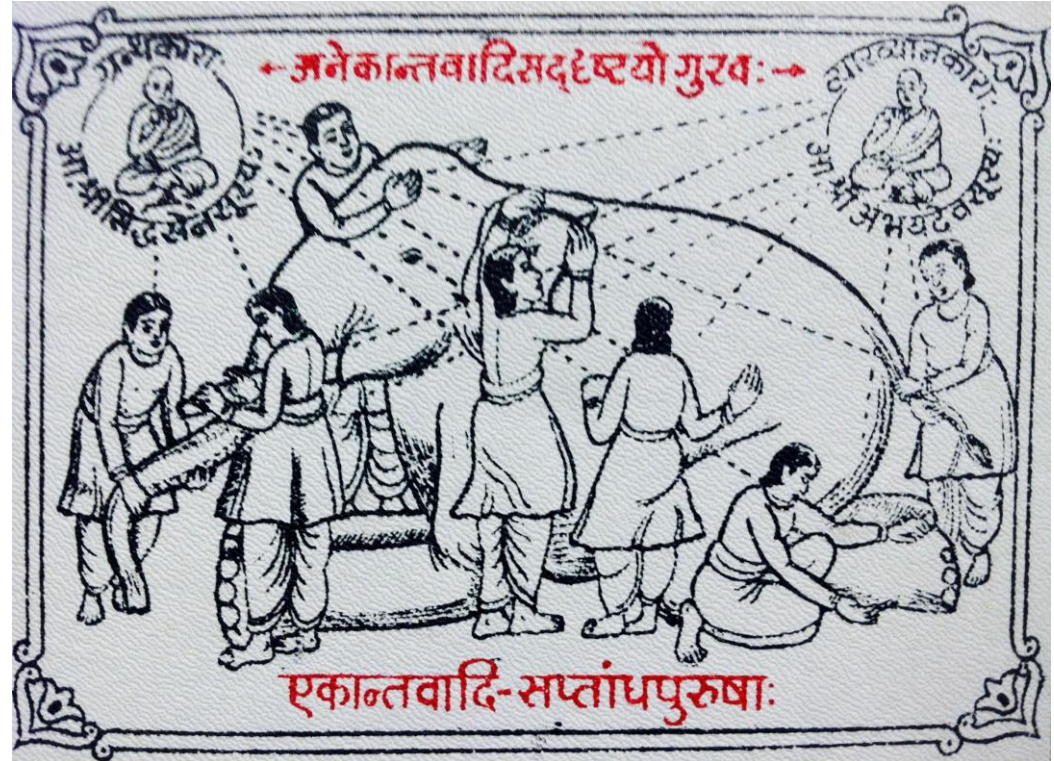


- » What it's worth?
- » What are the risks and benefits?
- » How can we measure intangibles?





» Lack of understanding



## » The Sustainability Chasm



Its **ALL** about the  
money, money  
money

(despite what Jessie J says)

<http://sli.do>

# SSDP

Who currently pays for your Research  
Data Management (RDM)?

» In an ideal world...

- › Project proposal with realistic RDM budget
- › Approved
- › Spent
- › (pay once keep forever)
- › Tracked
- › Claimed



- » What actually happens
  - › No budget / unrealistic Approved
  - › Spent
  - › Over budget
  - › Under claimed



- » Commissioned high level business case
- » Commissioned research re costing framework and methodology analysis
- » Commissioned research re funder mandates
- » Financial X-Ray for Research

RESEARCH







# Activity Based Costing

1. Determine ALL activities associated with a product/service (direct and indirect)
2. Establish costs for those activities
3. Add it all up and divide by the number of units to get the unit cost

# Traditional Costing

1. Determine the direct costs (e.g. Salary)
2. Add the company "standard" overhead (e.g. salary x %)
3. Add it all up and divide by the number of units to get the unit cost

# ABC

## versus

# Traditional

More accurate

**BUT**

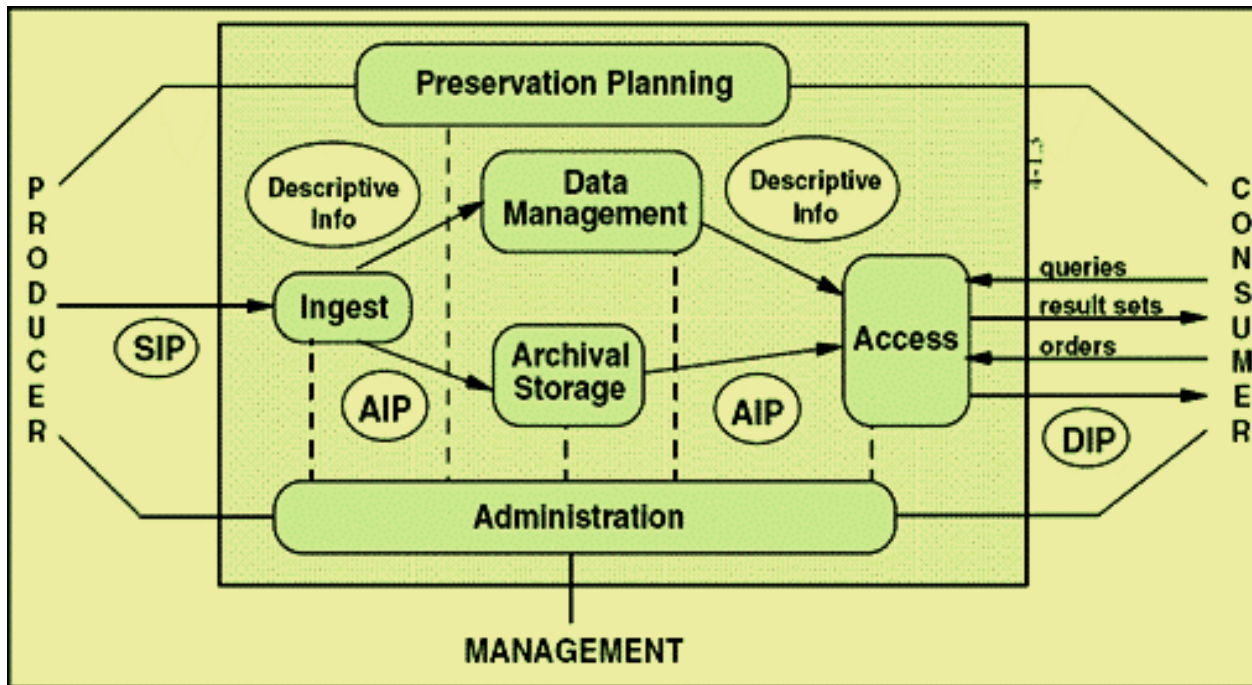
Harder to do

Easier to do

**BUT**

Less accurate

## What activities?



### Breakdown of RDM by costing activities

<b>Managing active data</b>	First time R&D, development of best practice Acquisition Ingest Data management and DMP Access <b>Active data storage</b>
<b>Pre-archive phase</b>	Generate metadata Outreach Initiation Creation
<b>Archive phase</b>	First time R&D, development of best practice Acquisition Disposal Ingest <b>Archive Storage</b> Preservation Planning Data Management Access <b>Data publication</b> <del>Generate metadata</del>
<b>Support Services</b>	Administration Common services
<b>Training and advocacy</b>	Publicity and information dissemination Training

### Dimensions to consider for each activity

Cost type(s)  
(staff/hardware/software/capital costs)  
Nature of cost  
(fixed/variables/semi-variable/ step costs)  
**Anticipated or realised costs?**  
**Activity fulfilled by**  
**Recurrent costs?**  
Timing of activity

*All you really need to know  
for the moment is that ~~the~~ **costing**  
~~universe~~ is a lot more  
complicated than you might  
think, even if you start from  
a position of thinking it's  
pretty damn complicated in  
the first place.*

Douglas Adams



- » Staff
- » Licencing
- » Storage
- » Procurement
- » Compute
- » Set-up
- » Training





- » Fully managed
- » Economies of scale
- » Standards based
  - › Certification and API
- » Uses cost effective optimised storage
- » Integrated
- » Reporting
- » Network of shared expertise





- » ~~Do nothing~~
- » Do it yourself
- » Use a fully managed, end to end service



- » Costs less than 1% of total research income
- » Shared service between 50% an 80% cheaper than DIY
- » Practical and auditable cost recovery



Who currently pays for your Research  
Data Management (RDM)?

Who **should** pay for your Research  
Data Management (RDM)?  
(and who funds the chasm?)

<http://sli.do>

# SSDP

Who **should** pay for your Research  
Data Management (RDM)?  
(and who funds the chasm?)

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# SSDP

Which of the following  
statements.....?

# Any questions....



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