dri

Digital Repository of Ireland
Taisclann Dhigiteach na hÉireann

Dr Sandra Collins

Director, Digital Repository of Ireland

Royal Irish Academy

Mission

DRI is a trusted digital repository for Humanities and Social Sciences Data

- linking and preserving the rich data held by Irish institutions, with a central internet access point

- Our Cultural & Social Heritage

Digital Repository of Ireland
Taisclann Dhigiteach na hÉireann

dri

App

App

App

Linked Logainm

DRI Platform

Access   Preservation   Discovery

Federated Archives, Storage

Growing Digital Preservation & Access Policy

Interviews

National Practice Survey

National Steering Committee

National Guidelines
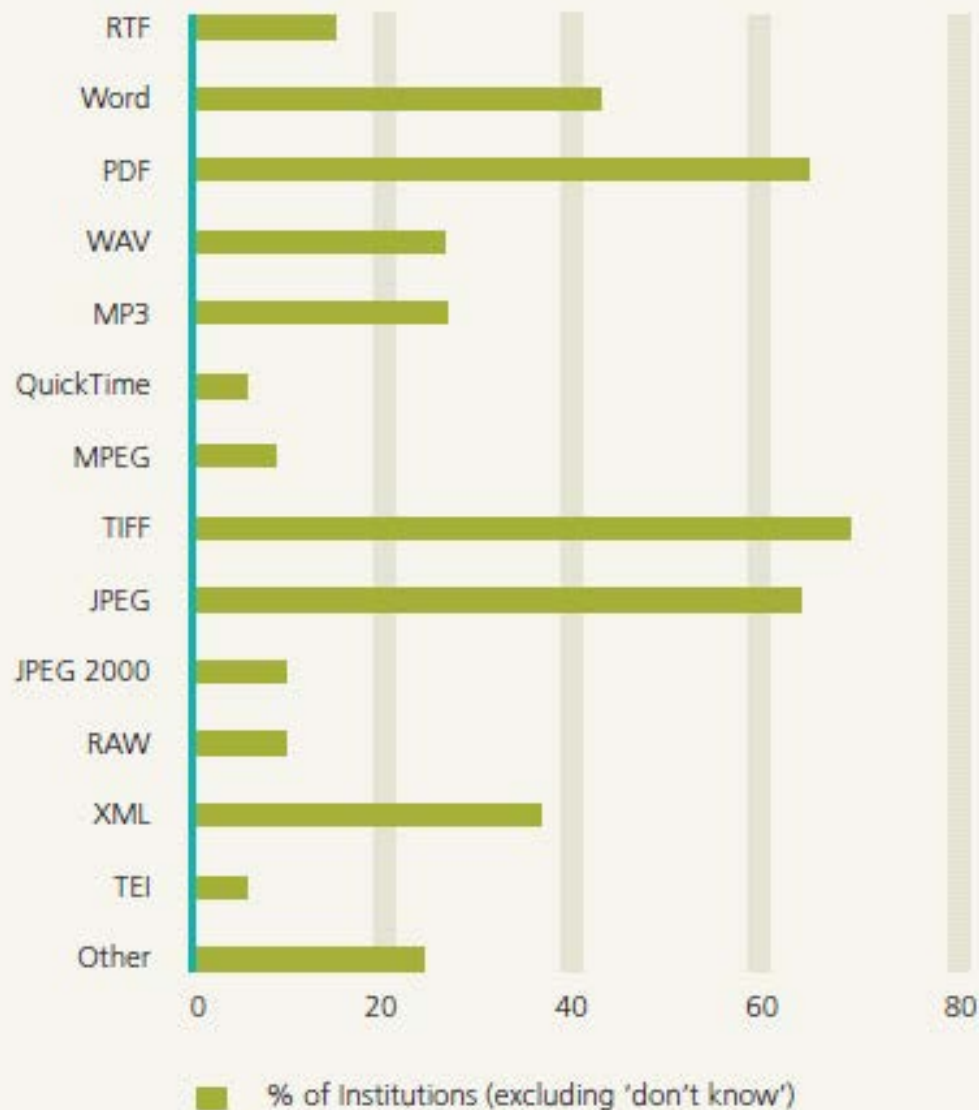
Government adoption

www.oaireland.ie

Digital Archiving in Ireland

National Survey of the Humanities and Social Sciences

Metadata

Fig. 5: Metadata standards

Digital
Archiving
in Ireland

% of Institutions (excluding 'don't know')

Formats

Fig. 4: Formats used by Institutions

Global Good Data Practice

Digital Preservation

Data citation, Permanent IDs

Metrics, funding, allowable costs, training

Sustained e-infrastructure

Copyright, IPR, licensing, data protection

Open metadata, open access

Research Data Alliance 2014
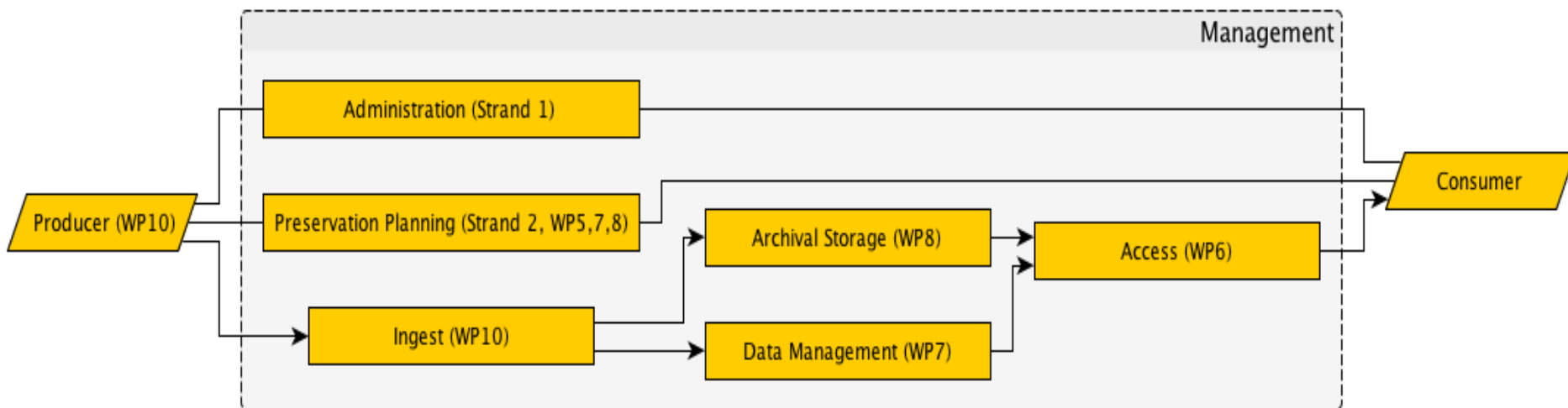
Policy, Services, Systems → Practice
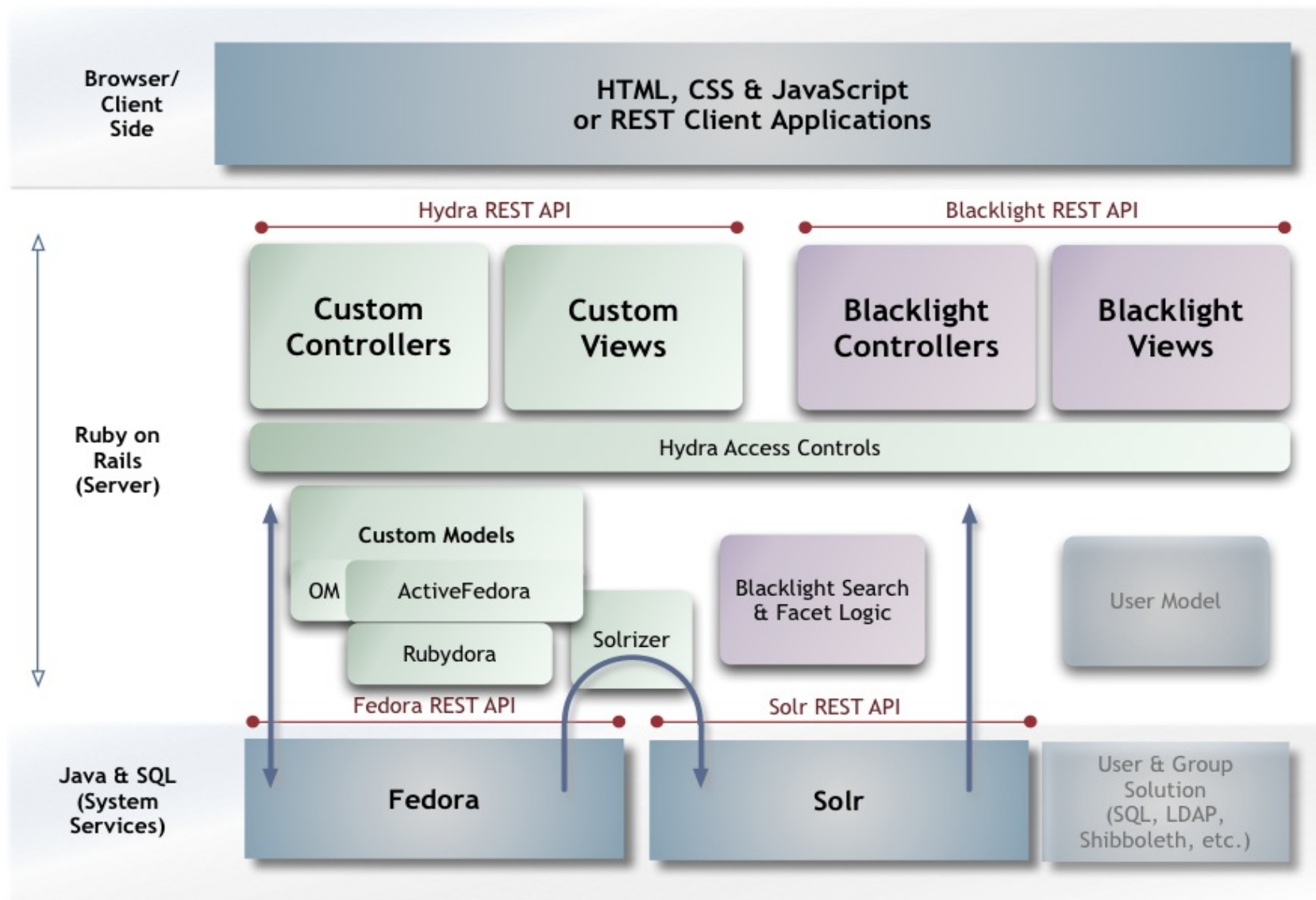
Repository

Open source components, custom code engineering

OAIS Model

Browser/Client Side

HTML, CSS & JavaScript
or REST Client Applications

Ruby on Rails (Server)

Hydra REST API

Blacklight REST API

Custom Controllers

Custom Views

Blacklight Controllers

Blacklight Views

Hydra Access Controls

Custom Models

OM

ActiveFedora

Rubydora

Solrizer

Blacklight Search & Facet Logic

User Model

Fedora REST API

Solr REST API

Java & SQL (System Services)

Fedora

Solr

User & Group Solution (SQL, LDAP, Shibboleth, etc.)

Search setup

Objects injested into Fedora Commons

Use the Solrizer gem to create the Solr index

Object metadata all CC0

Search will return metadata on all records

Authorization system will restrict access to the objects

Multi-lingual data (English and Irish at the moment)

Indices for each language

User Access

Primarily through the blacklight search interface

Other routes
- Curated collections and virtual galleries
- Georeferenced data – mapping
- Temporal data – timelines
- User defined collections
- DOI references in papers

Location LODer

Linked Logainm is a collaborative project undertaken by the Digital Repository of Ireland (DRI), the Digital Enterprise Research Institute (DERI), Fiontar at Dublin City University, the National Library of Ireland and the Placenames Branch of the Department of Arts, Heritage and the Gaeltacht.
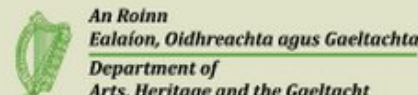
The Linked Logainm project has created a Linked Data version of the authoritative bilingual database of Irish place names logainm.ie, which is being developed by Fiontar in collaboration with the Placenames Branch. The new Linked Logainm dataset provides Irish place name data in a structured, computer-readable format which allows its value to be fully exploited by collaborators, web developers, computer scientists, the heritage community and information professionals. It also encourages the international dissemination of Irish language place names which have been given legal status by the Department of Arts, Heritage and the Gaeltacht.

The Linked Logainm narrative report gives a detailed overview of the project, including an introduction to the collaborating institutions and the Linked Data concept, and outlines the processes undertaken to create the Linked Logainm dataset.
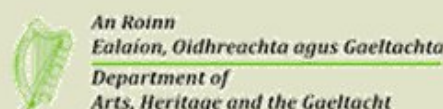
Report on the Linked Logainm Project

logainm.ie
DBpedia
Irish History Town Atlas
National Library of Ireland
Europeana

English | Gaeilge

Partners

dri — Digital Repository of Ireland / Taisclann Dhigiteach na hÉireann

DERI

DCU

nli — National Library of Ireland

An Roinn Ealaíon, Oidhreachta agus Gaeltachta
Department of Arts, Heritage and the Gaeltacht

Funders

HEA
Higher Education Authority
An tÚdarás um Ard-Oideachas

An Roinn Ealaíon, Oidhreachta agus Gaeltachta
Department of Arts, Heritage and the Gaeltacht

An Roinn Post, Fiontar agus Nuálaíochta
Department of Jobs, Enterprise and Innovation

Ireland's EU Structural Funds Programmes 2007 - 2013
Co-funded by the Irish Government and the European Union

National

Go to county:
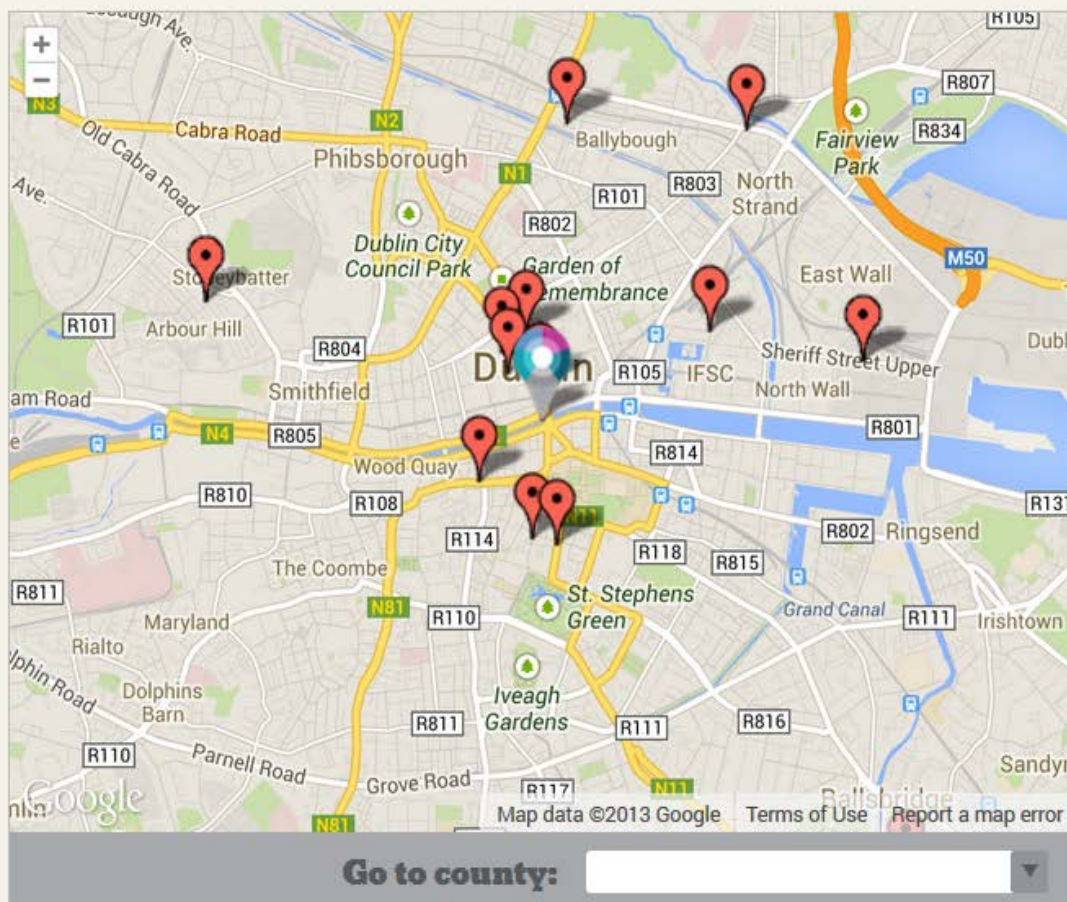
logainm.ie ▶

Ainm: Baile Átha Cliath   **Name:** Dublin
Type: city   **County:** Dublin

DBpedia ▶

Dublin is the capital and most populous city of Ireland. The English name for the city is derived from the Irish name Dubhlinn, meaning "black pool". Dublin is situated near the midpoint of Ireland's east coast, at the mouth of the River Liffey and the centre of the Dublin Region. Originally founded as a Viking settlement, it evolved into the Kingdom of Dublin and became the island's principal city following the Norman invasion. The city expanded rapidly from the 17th century; it was briefly the second largest city in the British Empire and the fifth largest in Europe. Dublin entered a period of stagnation following the Act of Union of 1800, but it remained the

Map data ©2013 Google   Terms of Use   Report a map error

logainm.ie ▶

1 A map of a piece of ground on the north side of Parkgate Street in the City of Dublin belonging to Doct. Filton. Surveyed by J. Longfield. April 1824

National Library of Ireland ▶

2 A map of that part of the Royal Canal intended to pass through the County of

Europeana ▶

1 A smokey chimney
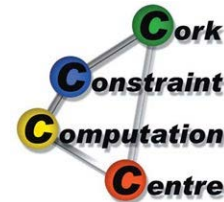2 Traffic in Dublin
3 Blue Tit
4 Coal Tit
5 Common Frog

Insight

200RESEARCHERS

74MEURO 30PARTNERS

40INVESTIGATORS 8INSTITUTIONS

1CENTRE! Insight

7X RESEARCH STRANDS

Work Packages

| Linked Data | Media Analytics | Recommender Systems | Decision Analytics |

| Personal Sensing | Semantic Web | Reasoning |

Insight
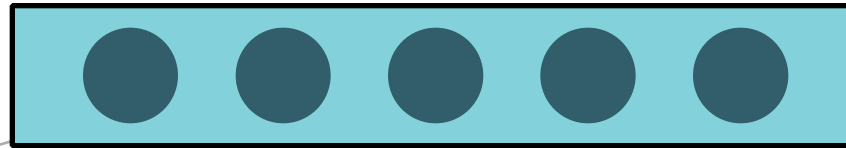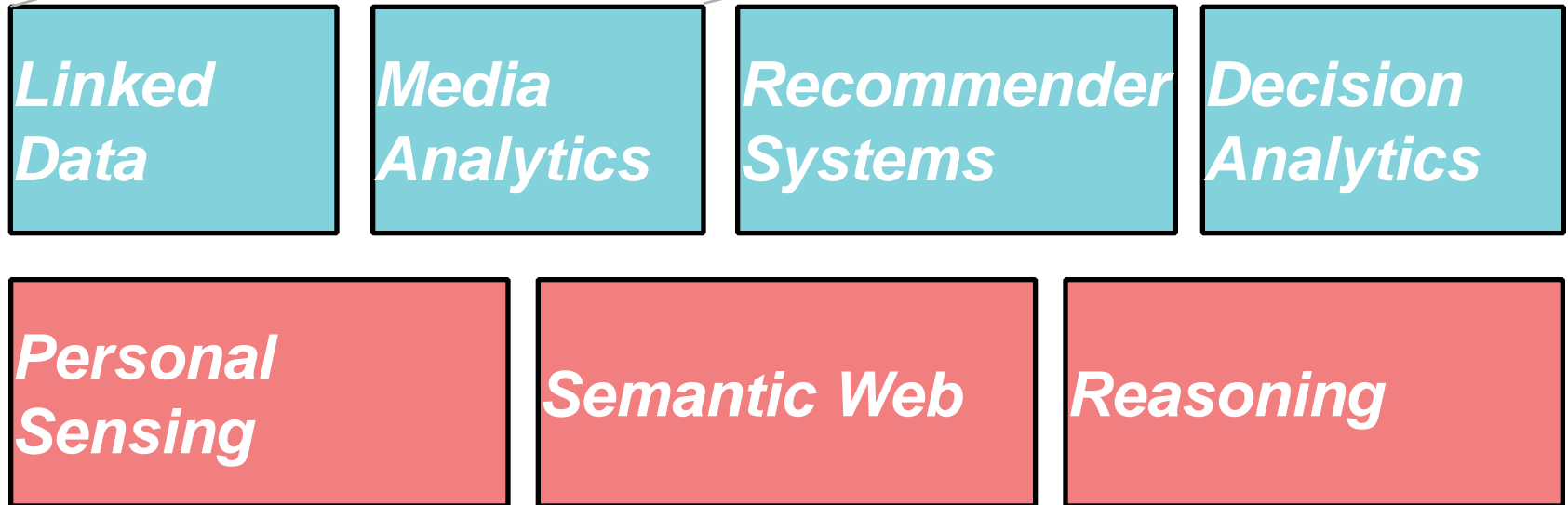
Goal of Archive Discovery Project

Linked data based discovery platform

Across multiple RTE Archives, media formats

Enhanced data discovery and delivery

Enhanced workflows, digital practices, tools

Digital Preservation, discovery and access

Two Key Ingredients

1. RDF – Resource Description Framework
   Graph based Data – nodes and arcs
   - Identifies objects (URIs)
   - Interlink information (Relationships)

2. Vocabularies (Ontologies)
   - provide shared understanding of a domain
   - organise knowledge in a machine-comprehensible way
   - give an exploitable meaning to the data

Insight
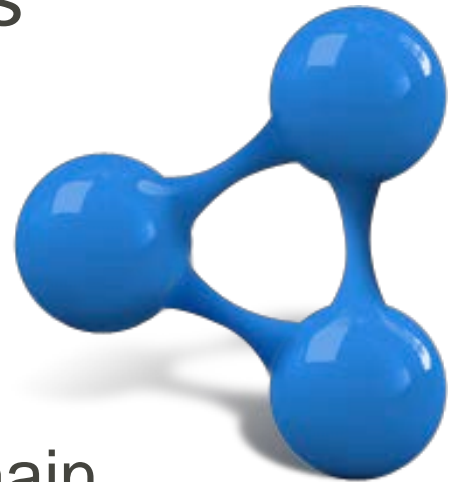
Linked Open Data cloud
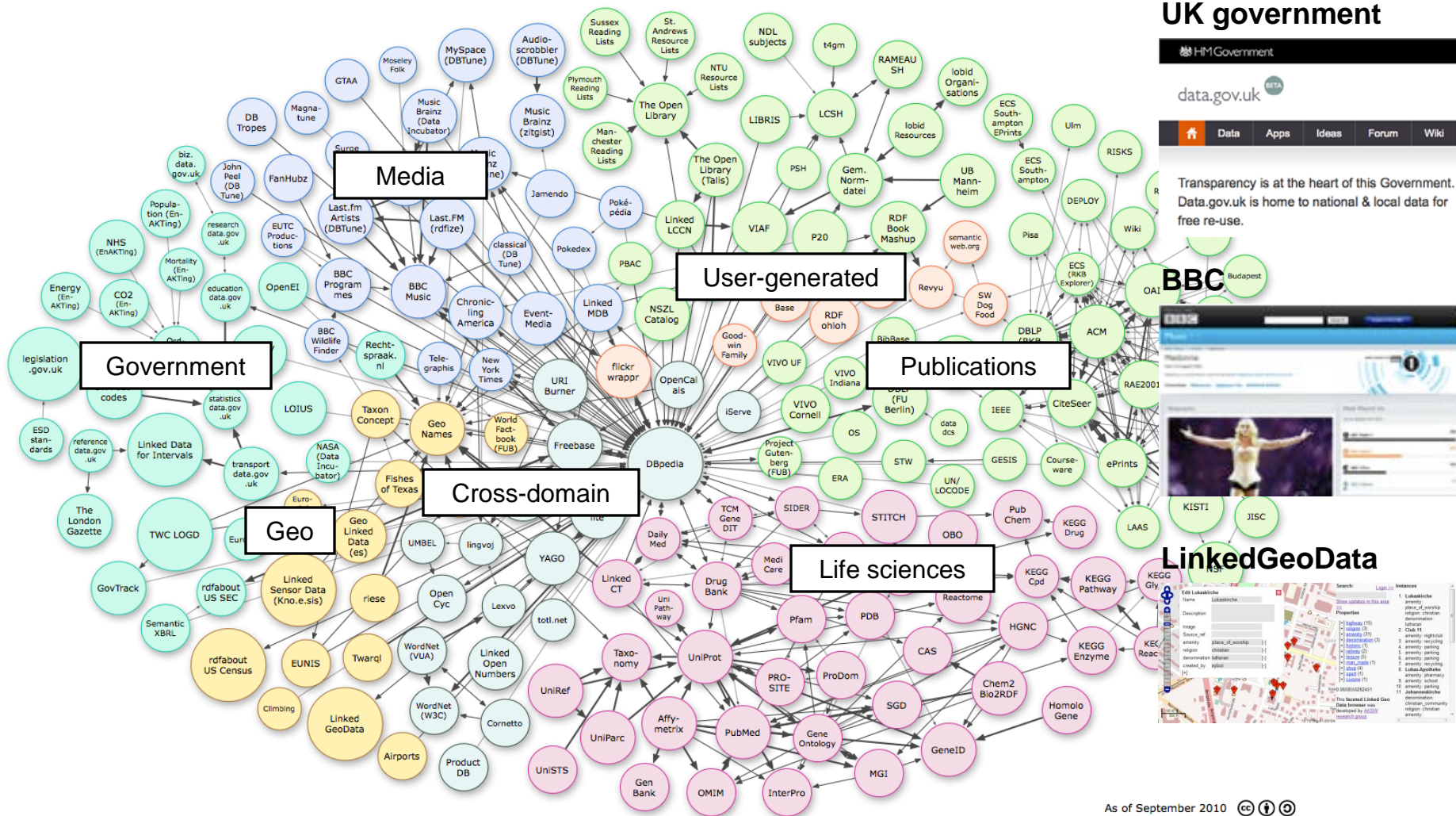
Over **200** open data sets with more than **26 billion facts**, interlinked by **400 million** typed links, doubling every 10 month!

Development

1. *Data & System survey*
2. *Architecture Specification*
3. *Selection of Pilot Data*
4. *Retrieval and transformation of data*
5. *Setup & integration of the metadata repository*
6. *Metadata enhancement*
7. *Implementation of content discovery*
8. *Classification & evaluation of discovery content*
9. *Demonstrator*
10. *Performance KPIs*
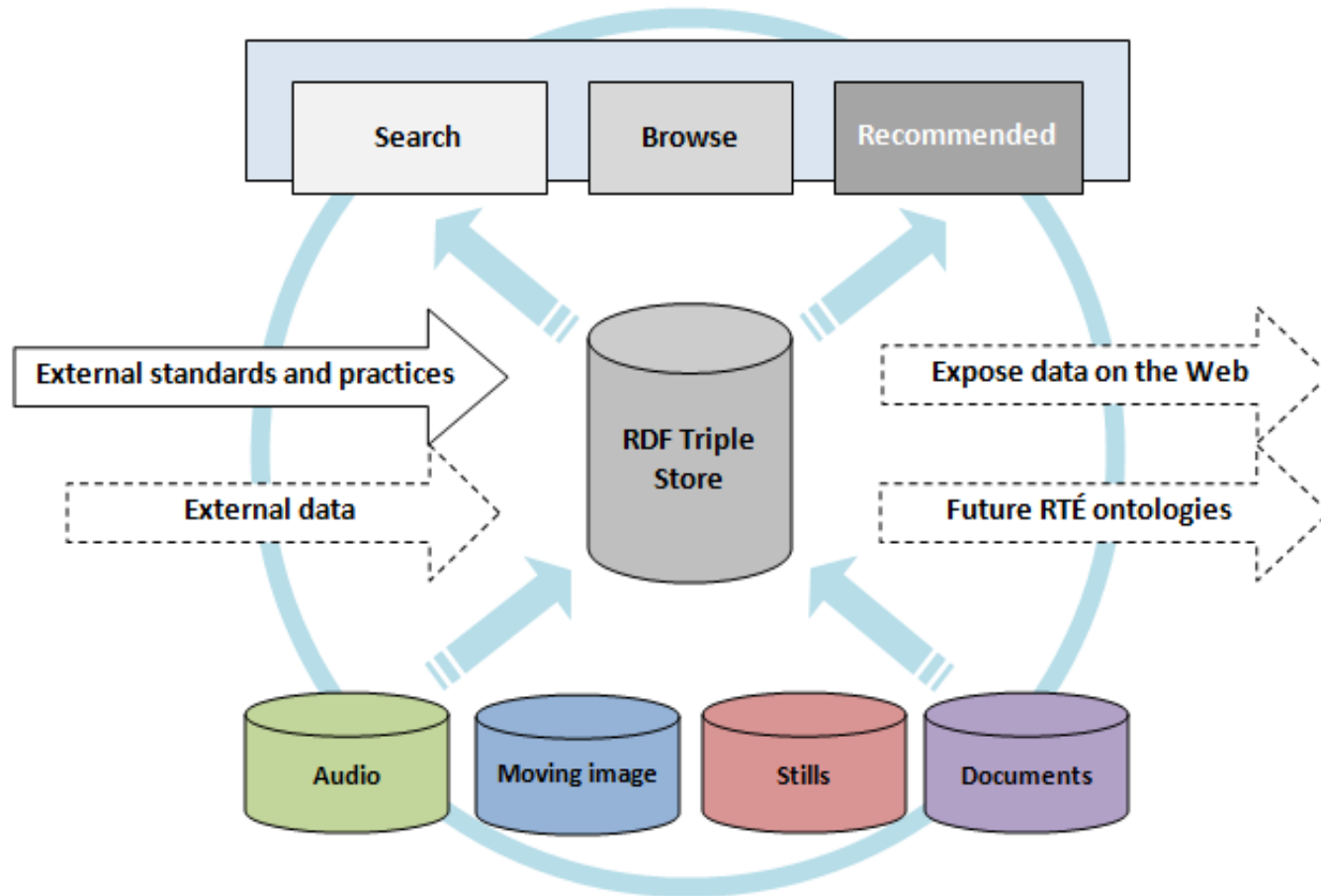11. *Enhanced workflows for content processing*
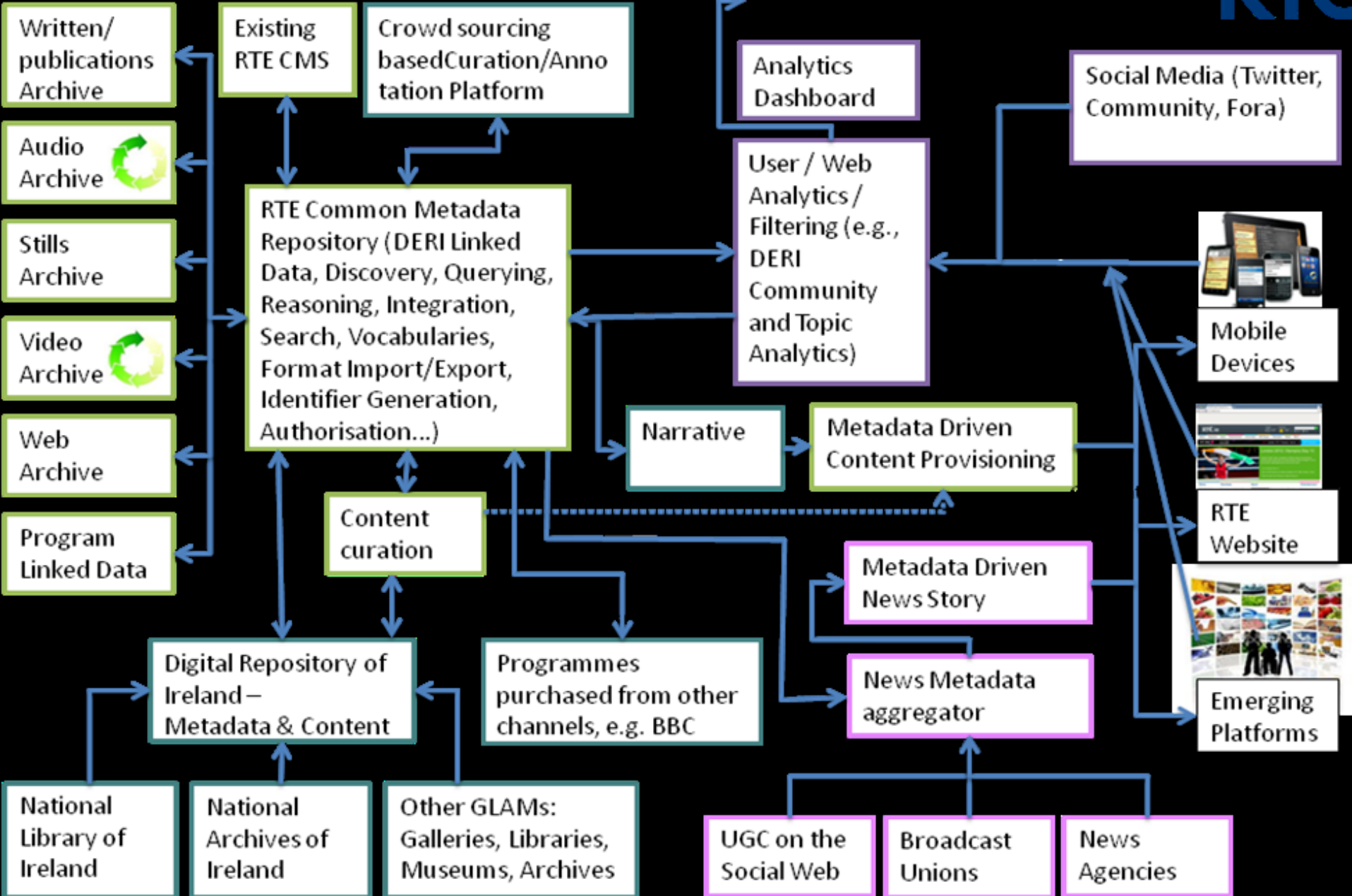
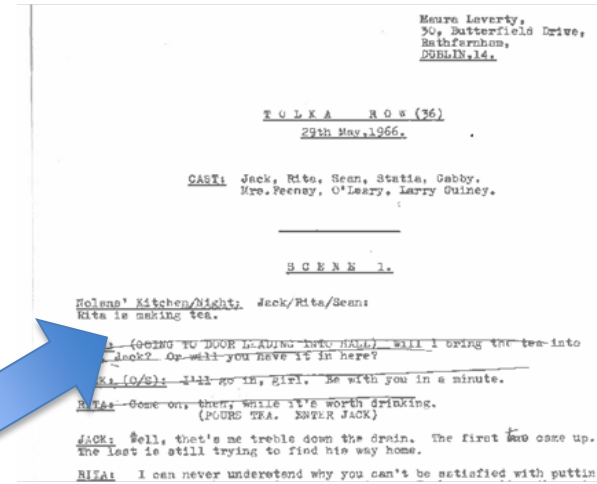*Complex systems, customised software, grown and adapted over time and use*

Authorisation

	Public user	Academic researcher	RTÉ researcher	RTÉ journalist	RTÉ Archivist	RTÉ Archives administrator
Search	✔	✔	✔	✔	✔	✔
View	✔	✔	✔	✔	✔	✔
Amend			✔	✔	✔	✔
Create					✔	✔
Delete						✔
User mgmt.						✔

OUTCOMES FOR RTÉ

OUTCOMES FOR RTÉ

Enabling cross-Institutional, cross-collection curation
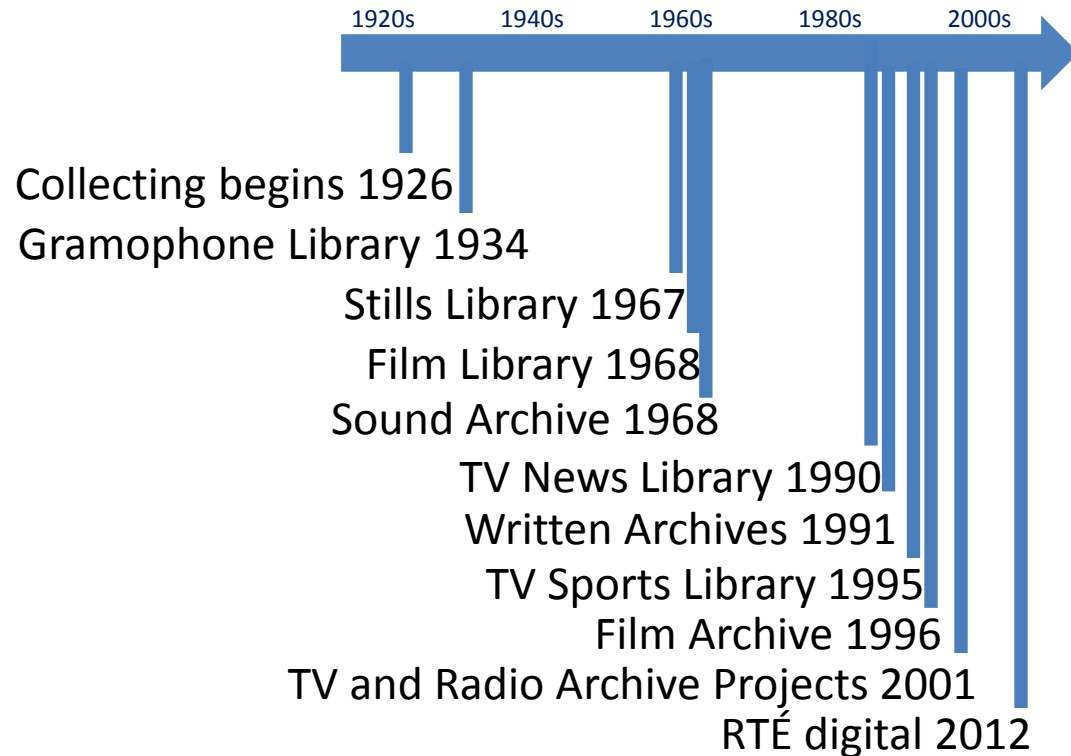
Opening up the RTÉ Archives

Through Industry and Research led collaboration

Insight & Background to Project

Bríd Dooley
Head of Archives

RTÉ ARCHIVES

- RTÉ Archives is Ireland's oldest and largest audiovisual archive

- Expanded and changed as the national broadcaster has grown.

- Employs circa 40 staff supporting over 50,000 research queries p.a

- Supplies up to 10% of original Radio & TV airtime

- Now a major part of RTÉ digital output across all platforms – and growing

1920s　　1940s　　1960s　　1980s　　2000s

Collecting begins 1926
Gramophone Library 1934
Stills Library 1967
Film Library 1968
Sound Archive 1968
TV News Library 1990
Written Archives 1991
TV Sports Library 1995
Film Archive 1996
TV and Radio Archive Projects 2001
RTÉ digital 2012

RTÉ digital

RTÉ Archives

Our Holdings today – 4 Archival Pillars

1. **MOVING IMAGE** 210,000 hours

2. **AUDIO** 150,000 hours

3. **PHOTOGRAPHIC** 500,000 + selected images

4. **DOCUMENTS** – 10.000 + new accession -still counting!

RTÉ Archives

Growing at 7% p.@,

holdings double every 15 years

RTÉ digital

Ambition – to open and develop RTÉ Archives as major online digital resource for multiple audiences and user communities

To date we have produced over 29 curated exhibitions comprising hundreds of moving image & audio segments, documents & images - fully searchable online

RTÉ Archives

RTÉ digital

We are already big users of online digital media

Through our website www.rte.ie/archives

Across daily RTÉ output
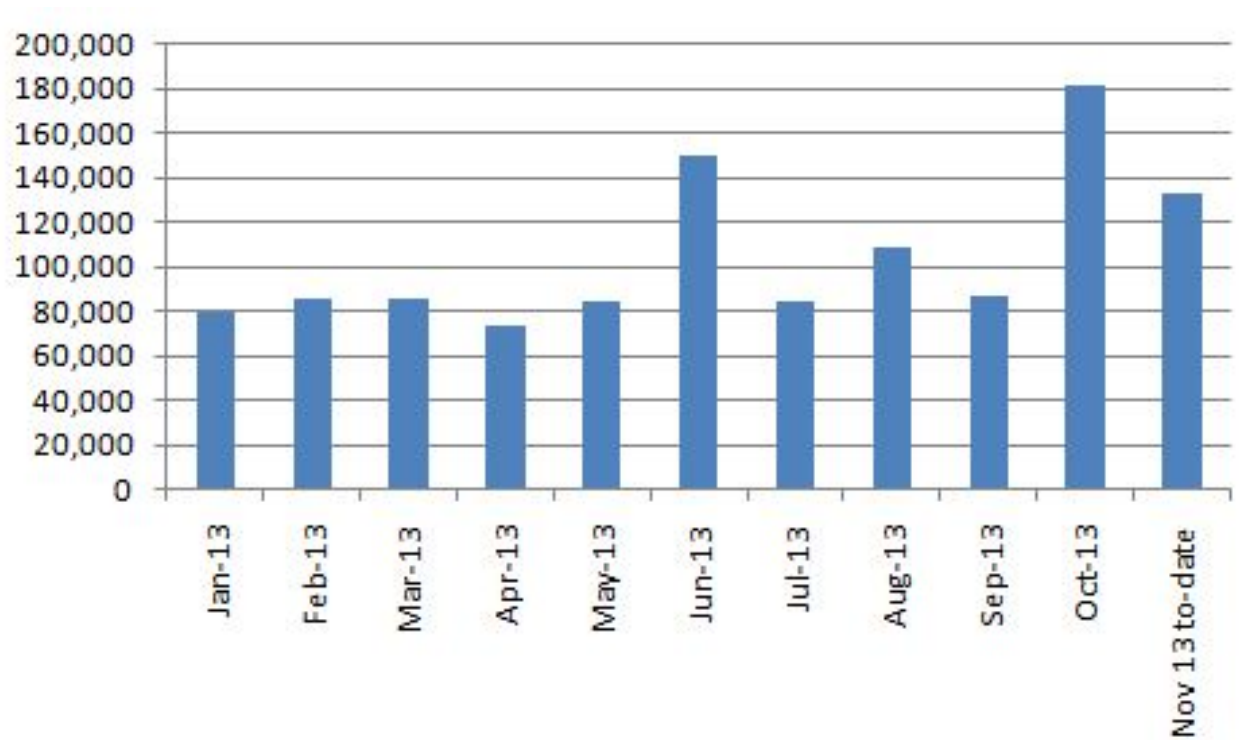
On Home page www.rte.ie   - On this Day

Using Social Media

In special
projects ..

As well as a range of partnerships
with national cultural heritage
institutions and media organisations.

RTÉ Archives

RTÉ digital

And we know that demand grows as the archive is opened up

Traffic to rte.ie/archives full year

RTÉ Archives

Common challenges to opening up Archives

Large legacy collections on dozens of different playback formats – much of it on discreet carriers.

Four separate library databases /collections with business specific metadata standards for search and query

Broadcast Standard files and formats mixed with Archival requirements in constant state of change

Digital production –archive workflows not yet end –to end

Interrupted workflows as new systems introduced

Finding those gems! Demands for quick access, search discovery and re-use of our content greater than ever.

Economic constraints of budget & personnel

New tools are needed to semi-automate discovery and Curation across our internal databases for better access

Liberties Teens Identified

A. P. McCoy Wins 4,000th Race

Meeting the Beatles 1963

Toy Testers in 1980

20 Years of Boyzone

National Day of Mourning

JFK 50th Anniversary Concert at the National Concert Hall

Kidnapped Dutchman Herrema Freed

Beatlemania Comes To Dublin 1963

Rose Kennedy - Portrait of a Mother

The Changing Face of Clerys Department Store

Mother of the Kennedys 1973

1st Dublin Marathon in 1980

Queues in Rain for Cork Jazz Festival 1996

UNESCO World Day for Audiovisual Heritage 2013

Vibraphone Player is Milt Jackson

Munster 12 All Blacks 0

3 IRA Prisoners Escape from Mountjoy 1973

Unidentified Opera Singer 1988

Thunderstorms in Dublin 2003

Senior Citizens Protest 2008

End of the Supersonic Dream

Angela O'Connor Stars in First Wexford Festival Opera 1951

Radharc Visits Ballybunion in 1963

To achieve this we want to work directly with the research community to realise opportunities in linked-data and semantic web technologies inside the broadcast archive specific to our needs

RTÉ Archives

RTÉ digital

In Summary – we need to move from Access to Discovery   - why?

Because audience & user demands are changing as rapidly as consumer technologies - and we must keep pace

Budgets and staffing shrinking while contend demand and new platforms grow

New tools are needed to aid more automated search and discovery of content both to meet and anticipate expectations & promote the value and use of archives

The search experience we want must not just return accurate results but suggest new pathways of investigation & help to track and document data use through content lifecycle.

RTÉ Archives is now collaborating with two leading research partners in Ireland to investigate how these tools can be developed within RTÉ

RTÉ Archives

RTÉ digital

Thank you .

Bríd Dooley Head of RTÉ Archives
www.rte.ie/archives
@RTEArchives