Sir Rupert Hamer Awards
Case Study

Public Record Office Victoria

Agriculture Victoria

Knowledge Curation Tool

Key Topics

Records management

Content curation

Access

Key Discoveries

- **Knowledge Curation Tools allow for a single point of accessing records no matter where they're located.**

About

Agriculture Victoria is a group within the Department of Economic Development, Jobs, Transport and Resources (DEDJTR). The purpose of DEDJTR is to create the conditions to sustainably develop the Victorian economy and grow employment. The Department's Agriculture Victoria group provides services and support to the farming sector to achieve this objective.

The Challenge

Like most organisations worldwide, Agriculture Victoria creates and stores knowledge and records in the form of thousands of documents, images, videos and a wide variety of other formats.

The Agriculture Research and Farm Services sections within Agriculture Victoria had tried a number of ways of managing this information in the past including Electronic Document Management Systems, collaboration spaces and cloud-based file hosting and sharing tools, with varying degrees of success.

While these systems went some way to reducing the problem, they fell well short of meeting the businesses requirements and staff were struggling to discover knowledge stored within multiple systems.

"It was a lot like going to the local library and finding there's no catalogue and no librarian – there are books on the shelves, but there's no logical order to how or why they're placed where they are." Kieran Murphy, Farm Services Knowledge Management Coordinator.

Changes to the organisation, including staff turnover and restructuring also contributed to the problem.

Sir Rupert Hamer Awards

The Sir Rupert Hamer Awards recognise excellence and innovation in records management within the Victorian Public Sector.

The Awards seek to highlight the importance of good recordkeeping in ensuring government accountability and efficient operation of public administration within the State of Victoria.

For further information about the Sir Rupert Hamer Awards visit prov.vic.gov.au

The Solution

The proposed solution was a knowledge management platform known as the Knowledge Curation Tool (KCT) that provides tools, standards and processes to allow the consistent description of knowledge resources and collections. It provides dynamic navigation across relationships (people, organisations, projects, time, subject matter etc.) allowing knowledge assets to be identified, sorted and categorised quickly and effectively, enabling websites, intranets, catalogues and other knowledge repositories to be managed more quickly and at lower cost than existing technologies.

The platform was to be system and standard agnostic, allowing specialised repositories to be used for different assets using different data and metadata standards. This would also mean that digital assets and records would not need to be centralised or stored in the same place, allowing legacy systems to be maintained and new systems to be added as Agriculture Victoria's needs evolve.

KCT makes use of Application Programming Interfaces (APIs), to provide a completely customisable front door to the system and its capabilities, making it very flexible and responsive to evolving organisational needs and reducing the long-term cost of ownership of the system.

Approach

Significant consultation was undertaken across the organisation to identify and refine system and user requirements. A pilot project was then identified and a content audit undertaken to locate assets, resources and records related to the project to inform the creation of document collections.

Agriculture Victoria contracted two Victorian companies ExactData and Revium to design, develop and implement the metadata driven KCT product.

A proof of concept system was then developed and staff from across Agriculture Victoria invited to test the system and provide detailed feedback on functionality and the user experience. The proof of concept was then discarded, and a new system built from scratch in eight weeks incorporating the lessons learned during the user testing process. In total, system implementation (development and testing) was achieved in three months.

The Result

KCT consists of two major components: a custom-built backend database with an interconnected metadata registry and metadata repository for managing standards-based metadata descriptions through time; and a series of user interfaces for the capture and description of structured metadata for storage in the metadata repository. The initial development has been designed to support public viewing aggregation modules to make content available through a range of different distribution channels. KCT has been developed by combining Australian Government and international standards for records and archives with theories of contextual information management drawn from archival science and complex network theory.

KCT aims to capture information about resources and collections of resources as structured data which can be expressed as AGLS metadata, while also providing functionality to create, manage and relate International Standard for Archival Authority Records for Corporations, Persons and Families (ISAAR-CPF) compliant records about entities (called Creators and Concepts in KCT) and the complex networks of relationships that exist between entities and other entities, between resources and other resources, and between entities and resources. KCT also allows for the management of local standards, or local extensions to existing standards. For example, as the name suggests, ISAAR (CPF) is designed to capture information about Corporate Bodies, Persons and Families. KCT extends the same type of structured description to other types of entities as part of contextual information networks, in this case associated with Victoria's regulatory framework in the dairy industry. KCT can be used to describe collections of regulatory resources as well as being able to publish the structural elements of different standards.

KCT can provide sections within Agriculture Victoria a single point of access to all of its knowledge and data, breaking down organisational silos and giving the organisation a quick and efficient way to connect and search all of its databases, regardless of their function, design or location.

With any technology solution, iterative design and development, user acceptance testing and quality assurance are ongoing. KCT is currently in being deployed within the Agriculture Research & Farm Services sections of Agriculture Victoria as KCT 2.0 version. With significant business capability being adopted, KCT's is being used to redefine how relevant and contextual information is curated and presented onto the Agriculture Victorian website, with a series of Agriculture productivity related content presented via the KCT API to the website launching in February 2017.