

Sir Rupert Hamer Awards Case Study

Public Record Office Victoria

Cardinia Shire Council

Working to deliver good data governance
and services - an AI story

Cardinia Shire Council investigated and then successfully implemented an automated mail processing system, utilising artificial intelligence to create time savings of between 40% to 70%, while maintaining 100% accuracy of data capture. Cardinia Shire Council received the award for Excellence and Innovation in Records Management at the 2018 Sir Rupert Hamer Awards.

About Cardinia Shire Council

The Shire of Cardinia is one of the fastest growing regions in Victoria. Located on the outskirts of south-east Melbourne, between Western Port and the Yarra Ranges, it has an area of 1,280 square kilometres, and recorded a population of 94,128 at the 2016 Census.

The Challenge

As a growing municipality, Cardinia Shire Council has recently experienced a substantial rise in the demand for their services and requests for information. Since 2013, daily incoming mail has increased by 50%. In addition, email is now the primary communication method used, which brings with it greater requirements to ensure that data integrity and security controls are in place.

Concurrently, rate capping has restricted the Council's revenue and resulted in the Shire having one of the smallest staff to population ratios. The workload has affected staff morale. Across the team, staff were concerned about the large amount of projects and tasks that were banking up without the necessary resources available to complete them. Cardinia needed to look for innovative ways to meet rapidly growing mail, records management and training service requirements without the ability to increase staff numbers or budget.

Key Topics

Electronic Records Management

Utilising Artificial Intelligence

Information Management

Key Discoveries

Implementing an automated mail processing system not only creates time savings while maintaining data accuracy, it also enables staff to expand their roles beyond data processing.

The Solution? AI Technology

Cardinia needed a solution that would:

- work within the existing operational budget
- free staff for capability and capacity building to meet rising demand for higher value records management services
- raise the quality of information and data capture, distribution and control

They evaluated four different options and eCloud Business Services, which is widely used across New Zealand local government, was the stand out contender.

How did it help?

The point of difference with eCloud, was that their software, oMail, could apply machine learning, plus a number of other artificial intelligence disciplines to determine the content of each document or business transaction. A range of business rules could be automatically applied to each document to automate the process of capturing the document and assigning it to an actioning officer within HPE RM (the Council's Electronic Document and Records Management System). This task alone was taking Council staff hours each day to complete manually.

Engaging eCloud Business Services to implement their artificial intelligence automation software, oMail, was the first step to empowering the organisation to adopt and adapt many other changes that have strengthened the records and information management culture in Cardinia.

Approach

With the software chosen, the next step was to plan a pilot project. This involved:

- communicating with stakeholders - communication with the Corporate Information team was particularly important, as they needed to prepare for the road ahead and the significant impact on their roles
- writing a project plan with clearly defined tasks, timelines, dependencies, responsibilities and success criteria
- deciding on the three most efficiently registered record types to assess the value of automation against current processes:
 - a. acquisitions and dispositions
 - b. building permits applications including large format plans
 - c. planning permit applications including large format plans

During the three month pilot stage, Cardinia Shire Council's Corporate Information staff prepared and scanned the documents, using only the oMail automation. Where source data was lacking, an exception flag for human intervention enabled staff to add data so the system learned for the next event. Typically, most exceptions related to Cardinia's database not listing the document author (name and address). Intervention allowed staff to create the author and address, and educate the oMail automation software. This meant that the next time the author communicated with Council, the data would be captured and the document would simply be fully registered and sent through to the action officer via HPE RM.

Before signing an ongoing agreement with eCloud Business Services, a further cost benefit analysis was conducted to decide on the most efficient process. Cardinia realised that they would save far more in time and cost by sending the whole incoming mail processing (from mail receipt through to delivering scanned mail via HPE RM to action officers) to eCloud Business Services.

Cardinia is now working on cleansing the data and records to support external community access to their data via a community portal. The Corporate Information team are being consulted throughout this process to ensure the new systems are compliant with PROV and CPDP standards, and that privacy and security controls are in place.

The Result

The impressive result of the pilot trial was a time saving of between 40% to 70% for each record type and 100% accuracy of data capture. The process also meets key requirements of the Victorian Electronic Records Strategy (VERS) standards, for instance oMail includes all the metadata when it pushes the scanned and emailed documents into HPE RM.

The time savings equated to 60 hours a week across five staff. The Corporate Information team were then able to retrain and now have time to focus on specialised work involved with data cleansing, education, user training and supporting information governance across the organisation. The team have transformed their traditional mail processing roles into expanded roles of Information Governance champions and Data Stewards. In addition, once the whole incoming mail processing is being undertaken by eCloud Business Services, Cardinia anticipates saving a further 60 hours a week.

Embarking on this project has raised awareness of records management across the organisation. Practices that ensure the quality and security of data are now built into all business units as part of their normal business.