

## **Automating Information Governance at Auckland Transport with Autoclassification and Transparent AI**

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### **1. About the Case Organization**

This case study presents the journey of Auckland Transport (AT) in implementing a six-year digital transformation project to enhance findability and automate record appraisal and disposal processes using autoclassification and innovative data models.

Auckland Transport (AT) is the regional transport authority responsible for overseeing public transportation and transport infrastructure in the Auckland region of New Zealand. Auckland Transport's primary responsibilities include managing and planning public transportation services such as buses, trains, and ferries, as well as maintaining and improving roads, cycle ways, and pedestrian facilities within the region.

### **2. About the Challenge**

The project's initial objective in 2017 was to utilise autoclassification to enhance content findability within the AT SharePoint environment.

However, following a recordkeeping audit in 2018, the project's focus shifted to using autoclassification for machine-based appraisal and disposal of records in compliance with the NZ Public Records Act.

### **3. What We Did**

To achieve these objectives, we needed to generate high quality fit-for-purpose metadata to support various outcomes related to autoclassification and record appraisal.

The following approach was adopted:

1. **Building Multiple Taxonomies:** Multiple taxonomies were assembled and implemented to support automated classification in SharePoint, enhancing search and categorization capabilities. These taxonomies were tailored to create a faceted classification model, which provided a knowledge base for supplementary machine-based processing.
2. **Thesaural expansion of the taxonomies with synonyms, acronyms, etc., and development of rules (algorithms) for processing by the autoclassification engine.** This provided additional richness and context to the taxonomy terms, to support the machine classification.
3. **Developing an Appraisal Ontology:** A deterministic data model (ontology) was created which codified appraisal knowledge, for machine-based application of retention and disposal rules for AT records.

The approach was designed to utilise the inhouse technologies at AT:

- A.K.A. by Synercon for the design and construction of ontologies and the information governance scheme<sup>1</sup>
- DiscoveryOne by Pingar New Zealand for autoclassification using NLP and rules-based transparent AI<sup>2</sup>

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<sup>1</sup> <https://synercon.co/products-and-services/aka-software/>

<sup>2</sup> <https://www.pingar.com/products/discoveryone>

- Percipio RM by Synercon, a co-designed workflow engine for processing record disposal<sup>3</sup>.

#### **4. Challenges and Lessons Learned**

The project has faced multiple challenges over its six-year timeline, including:

- **Adapting to External Disruptions:** The project had to navigate through many disruptions caused by COVID-19 including staff turnover, head count reduction and budget constraints.
- **Overambitious Approach:** Initially, the project aimed to achieve too much at once, which was beyond the means of the project team.
- **Capability gaps:** Taxonomy and rule building are specialist skills requiring multi-disciplinary capabilities. The use of unqualified personnel resulted in considerable reworking of the taxonomies and rules.

The AT's digital transformation project serves as a testament to the power of autotaxonomy and innovative data models in enhancing information management, efficiency, and compliance. By adopting an incremental approach and leveraging the right technology and skills, the project is achieving its objectives and paving the way for future improvements in information accessibility and governance.

Lessons learned include:

- the importance of ensuring that the taxonomy, ontology and rule-building work is conducted by appropriately skilled and experienced personnel,
- the value of using a transparent AI tool so that consistency and continuity of decision making can be sustained over a period of time, with staff turnover,
- as the project progressed, the technology's potential to provide valuable analysis and reporting data for management decision-making became evident.

#### **5. Impact and Benefits**

Despite the challenges, the project achieved significant success, resulting in the following benefits:

- **Successful Model Implementation:** The project demonstrated that the chosen data models and approach were workable and effective.
- **High Classification Accuracy:** Following revisions, we achieved 85%+ coverage and precision in auto-generating metadata, enabling confident automated retention and disposal processing.
- **Compliance and Audits:** AT passed internal audits for recordkeeping compliance, ensuring adherence to industry standards.
- **Resilient Model:** The workable model allowed AT to manage classification, retention, and disposal processing despite ongoing staff cuts.
- **Transparent AI:** The approach and modelling has allowed visibility into the AI-driven processes, ensuring transparency and accountability.

#### **6. Next Steps**

**Expanding Opportunities:** The success of the auto-classification project has opened new possibilities for leveraging artificial intelligence and machine learning including beyond unstructured data. These could include images, CCTV footage, and GIS based information.

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<sup>3</sup> <https://synercon.co/use-cases/auto-appraisal/>

The AT information governance team plan to expand the model's application to sensitivity labelling and to identify additional opportunities for deterministic tagging to enable further automation of information governance processes.