

Compendium of ADM systems

Part of the special report to Parliament under section 31 of the Ombudsman Act titled 'A map of automated decision-making in the NSW Public Sector'

8 March 2024

ISBN: 978-1-922862-36-5

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Introduction

This document is part of the special report to Parliament under section 31 of the Ombudsman Act titled, 'A map of automated decision-making in the NSW Public Sector' (8 March 2024). It is a compendium of automated decision-making (ADM) systems reported to be in use or in development by NSW public sector agencies and local councils.

Information in this compendium is primarily sourced from data collated by the academic research team that performed the mapping exercise in the report presented as part of the above special report to Parliament titled, 'Automated decision-making in NSW: Mapping and analysis of the use of ADM systems by state and local governments' (8 March 2024).

Agencies were given explanatory material about the scope of the mapping exercise to guide them in identifying relevant ADM systems. The compendium represents agencies' views about what constitutes ADM systems. It is likely to include some systems which, with further analysis, would not be considered ADM systems – however all entries are included for completeness.

In preparing this document, and after the academic research team had completed their mapping research, the NSW Ombudsman contacted Secretaries of portfolios in the NSW public sector, the Police Commissioner, and independent integrity agencies to give them a further opportunity, prior to publication of this document, to:

- validate the details of ADM systems and add any further systems not originally included, and
- request omission of ADM system details due to security or confidentiality reasons.

As a result of this validation process, the statistics on ADM systems (including the number of systems and the technology used) generated from this document will not align with those presented in the academic research team's report. See below for more information about how the outcomes from the validation process are indicated in the Compendium.

It should also be noted that the descriptions of ADM systems contained in that document are in the terms provided by those organisations including some edits that were made to the descriptions given the research team – for the most part, edits were to support ease of understanding for audiences outside of government and the research team. The descriptions have not otherwise been edited or verified by the NSW Ombudsman.

Notes about the information in this document

Some symbols and other explanations have been added to this document as follows:

- 'Null' has been added for entries where an agency did not provide information (e.g. the nature of the technology used by the ADM system).
- Square brackets indicate where information has been anonymised (e.g. a system name requested to be withheld from publication at the request of an agency). All local government names have been anonymised.
- An asterisk indicates a use case provided to the NSW Ombudsman for inclusion in this compendium after the closure of the research team's survey. Those use cases were not part of the analysis in the research team's report.
- Consistent with the research team's survey approach, ADM systems in the local government sector do not identify specific councils. References to specific vendors and products in local council ADM systems have also been removed to minimise the possible identifiability of specific councils or the inadvertent release of security-sensitive information.

ADM systems

NSW public sector agencies

Climate Change, Energy, the Environment and Water portfolio

Agency Name	ADM Name	Status	Technology	Description
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	Unknown*	Planned in the next 3 years	Fully automated, rule-based system Automated data gathering system of sensor	Using artificial intelligence and advanced computer power to analyse large data sets collected by audio call recorders. Remote recorders are being deployed in the wild for detecting the unique audio calls of cryptic Grasswren species; Grey Grasswren in Narriearra-Caryapundy Swamp, and Grey Range Thick-billed Grasswren in White Cliffs. This technique creates large data sets of audio files (i.e. recorded calls) which can be efficiently analysed through the development of call recogniser software and AI.
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	Beachwatch Forecast Model*	In use	Risk assessment/ predictor/ profiling/ classifier tool Modelling/ simulation systems	<p>A forecast model that predicts the health risk to swimmers and provide advice on where and when to swim at monitored swim sites in NSW across ocean beaches, estuaries and lagoons.</p> <p>The model uses the relationship between bacterial contamination drawn from water quality monitoring and rainfall data gathered from various sources and any other reported pollution incidents that may affect water quality such as sewage overflows, lagoon openings and algal blooms.</p> <p>Real time water quality forecasts are reported twice daily as water quality ratings which can be accessed via the Beachwatch website, email subscription, Twitter and Facebook.</p> <p>Expansion of the forecast model to include inland waterways such as freshwater rivers and lakes is underway.</p>
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	RavenPro*	In use	Visual, audio or biometric processing	BCS currently uses call recognition software to analyse data collected on song meters deployed for Southern Bell Frog and Sloane's Froglet.
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	NSW Nearshore wave tool*	In use	Risk assessment/ predictor/ profiling/ classifier tool Structured decision-making tool Modelling/ simulation systems	<p>This tool forecasts waves along the NSW coast using both parametric and spectral methods to transform deepwater forecast wave conditions to the nearshore (10m water depth, 200m resolution).</p> <p>The tool enables users to access wave data for locations along the NSW coast for a 10-day forecast period and a hindcast period back to 1950.</p> <p>It is designed to provide improved data to coastal managers to model coastal hazards including surf conditions, coastal erosion and inundation.</p> <p>The tool is here: nearshore.waves.nsw.gov.au/home/forecast.</p>

Agency Name	ADM Name	Status	Technology	Description
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	NSW Air Quality Alert System*	In use	Fully automated, rule-based system Automated data gathering system of sensor Risk assessment/predictor/ profiling/ classifier tool	Customised automated system that issues air quality alerts to the general public when air quality at a NSW monitoring station exceeds national air quality standards.
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	[System 1]*	In development	[Omitted]	[Details omitted at the request of the agency]
Department of Climate Change, Energy, the Environment and Water (Biodiversity, Conservation and Science Group)	NSW Air Quality Forecasting System*	In use	Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Modelling/ simulation systems	The system forecasts future air quality (up to 72 hours ahead) each day of the year. The system supports NSW Health and RFS activities and underlies the issuing of NSW Air Pollution Health Alerts (www.airquality.nsw.gov.au/health-advice).
Department of Climate Change, Energy, the Environment and Water (Energy, Climate Change and Sustainability)	LARRY*	In use	Structured decision-making tool	The system checks a customer's eligibility for a Commonwealth concession card using Services Australia's Centrelink eServices (CCeS) to determine the customers eligibility for the Low Income Household, Gas, Life Support and Medical Energy Rebates (for embedded network customers only). An agent also manually assesses a customer's electricity bill to ensure it matches the applicants name and address.
Department of Climate Change, Energy, the Environment and Water (Energy, Climate Change and Sustainability)	FER*	In use	Structured decision-making tool	The system checks a customer's eligibility for a Commonwealth concession card using Services Australia's Centrelink eServices (CCeS) to determine the customers eligibility for the Family Energy Rebate. An agent also manually assesses a customer's electricity bill to ensure it matches the applicants name and address (for embedded network customers only).
Department of Climate Change, Energy, the Environment and Water (Energy, Climate Change and Sustainability)	Energy Bill Relief Newly Eligible Salesforce instance*	In use	Fully automated, rule-based system Structured decision-making tool	The system checks a customer's eligibility for a NSW electricity rebate (for embedded network customers only) against the FER and LARRY systems, and automatically determines their eligibility for the National Energy Bill Relief payment.
Department of Climate Change, Energy, the Environment and Water (National Parks and Wildlife Service)	Unknown*	Planned in the next 3 years	Visual, audio or biometric processing Automated data gathering system of sensor	Camera trap and audio detection.
Department of Climate Change, Energy, the Environment and Water (National Parks and Wildlife Service)	Unknown*	Planned in the next 3 years	Visual, audio or biometric processing Fully automated, rule-based system	Numberplate recognition.
Department of Climate Change, Energy, the Environment and Water (National Parks and Wildlife Service)	NPWS website module*	Planned in the next 3 years	Natural Language Processing Structured decision making tool	Chatbot aligned with NPWS website to address community inquiries.

Agency Name	ADM Name	Status	Technology	Description
Department of Climate Change, Energy, the Environment and Water (National Parks and Wildlife Service)	NPWS website module*	Planned in the next 3 years	Risk assessment/ predictor/ profiling/ classifier tool Structured decision-making tool	Visitation analysis leading to personalised offerings to park visitors.
Department of Climate Change, Energy, the Environment and Water (National Parks and Wildlife Service)	Unknown*	Planned in the next 3 years	Automated data gathering system of sensor Risk assessment/ predictor/ profiling/ classifier tool	Risk assessment of visitor precincts that are known to present a risk under some conditions (rainfall; temperature; tides; etc).
Department of Climate Change, Energy, the Environment and Water (National Parks and Wildlife Service)	Figure 8 Pools Risk Forecast*	In use	Risk assessment/ predictor/ profiling/ classifier tool Structured decision-making tool Modelling/ simulation systems	This tool forecasts overwash hazard at the Figure 8 Pools in the Royal National Park and provides a risk rating to enable visitors to choose lower risk times to visit. The warning system is here: http://www.nationalparks.nsw.gov.au/things-to-do/lookouts/figure-eight-pools . The tool combines forecast tide and wave conditions to predict overwash extent which is presented in simple colour coded risk rating. The overwash extent algorithm was developed using site specific wave, water level and overwash data which is outlined here: www.mdpi.com/2072-4292/10/1/11 .
Department of Climate Change, Energy, the Environment and Water (Office of the Secretary)	Grants Management System (Environmental Grants)*	In use	Fully automated, rule-based system Structured decision-making tool Geo-location tool Recommender systems Risk assessment/ predictor/ profiling/ classifier tool	Customised end to end system for all stages of the grants administration process – through application, review, decision, award, monitoring, acquittal and reporting.
Lord Howe Island Board	Avorta	In use	Visual, audio or biometric processing	Program that is trained to recognise biosecurity hazards (rodents) from field cameras, to inform whether there has been an incursion requiring follow up.
Taronga Conservation Society Australia	Chatbot*	Planned in the next 3 years	Natural Language Processing Fully automated, rule-based system	Chatbot will be used in Contact Centre to enhance customer service, improve efficiency, and reduce operational costs. It will operate 24X7 and support response to frequently asked questions.
Taronga Conservation Society Australia	Copilot/ ChatGPT*	Planned in the next 3 years	Natural Language Processing Fully automated, rule-based system	Pilot for internal use to automate reporting within controlled Taronga owned data sets.
Taronga Conservation Society Australia	Animal Behaviour AI*	In development	Modelling/ simulation systems Geo-location tool Visual, audio or biometric processing	Expansion of the world-first machine-learning pilot, which aims to increase animal longevity and well-being in zoo care, with applications to conservation breeding and rewilding programs.

Agency Name	ADM Name	Status	Technology	Description
WaterNSW	WMS (Water Market System)	In use	Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Automated data gathering system or sensor Geo-location tool Recommender systems	Assessment, approval and administration of Water Licences, Work Approvals and metering for non-urban water take.

The following agencies/branches within the Climate Change, Energy, the Environment and Water portfolio reported having no ADM systems as defined by the scope of this project: Heritage NSW; Water Group; Biodiversity Conservation Trust; Energy Corporation; and Environmental Protection Authority.

Communities and Justice portfolio

Agency Name	ADM Name	Status	Technology	Description
Corrective Services NSW	OIMS	In use	Structured decision-making tool	A partially automated decision tree with manual functions to determine the classification of inmates.
Corrective Services NSW	OIMS decision automation	Planned in the next 3 years	Fully automated, rule-based system, Structured decision-making tool	Further automation of the decision-making process based on predictive analytics.
Department of Communities and Justice	ChildStory	In use	Structured decision-making tool	Structured decision-making model by Evident Change is implemented in ChildStory. This is currently used to support Helpline calls and in field assessments.
Department of Communities and Justice	TIP	Planned in the next 3 years	Risk assessment/predictor/ profiling/ classifier tool	A proof-of-concept project undertaken to research, explore and develop a potential automated risk identification tool.
Department of Communities and Justice	Connect for Safety	In use	Other: Fuzzy Logic Data Match	Matching algorithms are used to provide potential child protection information to support better casework decision making.
Department of Communities and Justice	Genesys - CPHL	Planned in the next 3 years	Optimisation tools	AI improvements to Child Protection Helpline telephony system.
Department of Communities and Justice	[System 2]	In use	Null	Used to automate manual repetitive rule-based processes.
Department of Communities and Justice	myWorkZone	In use	Null	A multi-tenanted Enterprise Resource Planning (ERP) system. This system includes both HR and finance services.
Department of Communities and Justice (Courts, Tribunals and Service Delivery)	[System 3]	In use	Fully automated, rule-based system Other: There is human intervention in the process	Utilised to assess reports to highlight certain cases for reporting to NSW Health.
Department of Communities and Justice (Courts, Tribunals and Service Delivery)	Jury Management System	In use	Structured decision-making tool	Used to establish jury pools, select and manage jury empanelment.
Department of Communities and Justice (Courts, Tribunals and Service Delivery)	[System 4]	In use	Structured decision-making tool	Onboard and manage defendants to the NSW Drug Court program.
Department of Communities and Justice (Courts, Tribunals and Service Delivery)	[System 5]	In use	Structured decision-making tool	Client Management System for victims of crime.
Department of Communities and Justice (Housing)	HCC Robotic Process Automation	In use	Structured decision-making tool	Automates DCJ Housing Contact Centre (HCC) processes.
Fire and Rescue NSW	ESCAD	In use	Structured decision-making tool Geo-location tool	Routing of appliances to incidents.
Fire and Rescue NSW	SAP	In use	Structured decision-making tool	Automated processes based on a ruleset – for example determination of approvals based on HR Hierarchy, delegations levels etc.

Agency Name	ADM Name	Status	Technology	Description
NSW Ageing and Disability Commission	Referral pathway	In use	Structured decision-making tool	The NSW Ageing and Disability Commission (ADC) website has a 'referral pathway' that steps a person through decisions/selection options to guide them as to which agency is appropriate to handle their matter (i.e. whether this is the ADC, HCCC, NDIS Commission, Aged Care Commission, etc). The process is intended to put reporters on the path to the correct agency and reduce the work of the ADC in having to manually refer matters to the right place. NB: at the end of the pathway, if the ADC is identified as the correct agency, this doesn't automate the subsequent decisions of the ADC, but it does provide automated guidance to the reporter about their next steps.
NSW Crown Solicitor's Office	Legal Advice Writing System	Planned in the next 3 years	Natural language processing	The Crown Solicitor's Office (CSO) currently has an extensive digital resource library of advices, legal precedents and access to legislation. The purpose of this project is to see whether AI technology can be used to assist lawyers in the preparation of legal advices, in a manner that improves efficiency and/or quality.
NSW Rural Fire Service	Athena	In use	Risk assessment/ predictor/ profiling/ classifier tool Geo-location tool Modelling/ simulation systems Recommender systems	Automated predictions based on 000 calls to help understand risk posed by fire and identify suitable response options. Informs human decision making.
NSW Rural Fire Service	CAD	In use	Null	Business rule driven system based on 000 calls to dispatch most appropriate appliance to a job.
NSW State Emergency Service	GEMS	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool Geo-location tool Modelling/ simulation systems	GIS system used for operational awareness, intelligence and decision making.
NSW State Emergency Service	Flood & Storm Intelligence	Planned in the next 3 years	Null	Realtime and predictive flood modelling.
NSW State Emergency Service	Hazard Watch	In use	Null	Flood, storm and tsunami warning system to the public.
NSW Trustee and Guardian	NSWTG OWLS*	In use	Structured decision-making tool	The Online Wills system makes risk-based decisions on instruments to be examined by a senior staff member.
NSW Trustee and Guardian	[System 6]*	In use	Fully automated, rule-based system Structured decision making tool Risk assessment/ predictor/ profiling/ classifier tool	<ul style="list-style-type: none"> Where an invoice is received and within an annual budget for a specified category, approval and payment are automatic. Rules based automated budget renewal.

Agency Name	ADM Name	Status	Technology	Description
NSW Trustee and Guardian	[System 7]*	In use	Fully automated, rule-based system Structured decision making tool Risk assessment/predictor/ profiling/ classifier tool	<ul style="list-style-type: none"> Investment review based on calculated value and thresholds. Tax review based on calculated income and thresholds. Adherence to legislative frameworks for entitlement and distributions. Apportionment of funds.
The Office of the Advocate for Children and Young People	Automated Email Triage	In development	Null	An automated system that triages emails that are received to our public facing emails with individual enquiries to the appropriate subject matter expert on staff.
The Office of the Advocate for Children and Young People	Mandatory Reporting Guide	In use	Null	In the occasion where an incident is reported that requires a mandatory report under the relevant legislation, the Mandatory Reporters Guide is used to record and escalate that disclosure accordingly.
The Office of the Advocate for Children and Young People	Automated Referral Triage	In development	Null	An automated system that triages referrals.
The Office of the Advocate for Children and Young People	Automated Youth Advisory Application Triage	In use	Null	An automated system that triages applications on key demographic information.
The Office of the Advocate for Children and Young People	Automated E-Postcard Triage	In use	Null	An automation process that triages requests for physical or electronic postcards to be sent to specific organisations as a consultation initiative.

The following agencies/branches within the Communities and Justice portfolio reported having no ADM systems as defined by the scope of this project: Dust Diseases Tribunal; Legal Profession Admission Board of NSW; Multicultural NSW; NSW Civil and Administrative Tribunal; NSW Crime Commission; NSW Judicial Commission; NSW Law Reform Commission; NSW Sentencing Council; Office of the Director of Public Prosecutions; Office of the Legal Services Commissioner; Office for Veterans Affairs; Registrar of Community Housing; State Parole Authority; Victims Services; Volunteering NSW; and Youth Justice NSW and NSW Police Force.

Customer Service portfolio

Agency Name	ADM Name	Status	Technology	Description
Digital NSW (Government Technology Platforms)	Licence NSW*	In Use	Fully automated, rule-based system Structured decision- making tool Automated data gathering system or sensor Anomaly detection Recommender systems	System automation which unlocks straight through processing of trade licence applications based on meeting logical rules and requirements. Should a certain set of rules be met, human intervention in an application is not required. This includes information (such as ABN look ups and trade qualifications) that is automatically verified. Currently we use this logic to support initial application of licences, licence renewals, and registrations. Permits are also issued and renewed automatically. The Licence NSW ecosystem relies on information declared by customers, data provided by / or held by Registered Training organisations, calls to validate 3rd party information (for example the ABN lookups). There are fail saves in place to ensure anomalies in information provided triggers a human intervention.
Digital NSW (Government Technology Platforms)	Regulation NSW*	In development	Fully automated, rule-based system Structured decision- making tool Risk assessment/ predictor/ profiling/ classifier tool Anomaly detection Recommender systems Automated data gathering system or sensor	System automation with compliance and enforcement data that is providing the foundation in the future to flag trends or identify potential business / individuals that are high risk. Current development focusses on integration into warehouses where data is pulled from and can be referenced by Regulators to make informed decisions. Tools are being built that support the Licence NSW logic outlined above. This includes being able to add alerts against and individual or business (whether licenced or not) to block applications. This will add historical data that can be used to strengthen the logic that eventually will allow for greater automation of processes and more richly support risk-based regulation best practice
Digital NSW (Government Technology Platforms)	Government Licensing System (GLS)*	In Use	Structured decision- making tool Automated data gathering system or sensor Anomaly detection Recommender systems	Licence schemes on GLS is in the process of transitioning to Licence NSW. As for Licence NSW, GLS uses a rule engine to manage licences including applications and renewals. A degree of system automation is in place to allow rules and logic to be applied to licensing processes to reduce the need for manual review. An example includes determining the applicable fee based on conditions of a licence application.
Digital NSW (Government Technology Platforms)	Virtual Contact Centre – Agent Assist*	In development	Other: Agent Assist uses conversation AI to surface relevant knowledge articles based on customer spoken phrases that maps to existing content	When an agent interacts with a customer, Genesys Agent Assist offers agents potential answers to customer questions. Genesys Agent Assist uses the assigned knowledge bases to provide responses to customer inquiries. Agents can surface knowledge automatically, or manually search the knowledge base for responses.

Agency Name	ADM Name	Status	Technology	Description
Digital NSW (Government Technology Platforms)	Virtual Contact Centre – Digital Chat Bot*	In development	Structured decision-making tool Automated data gathering system or sensor Anomaly detection Recommender systems Other: Chat bot widget is embedded on the website	Chat bot uses Context / Emotion / Knowledge / Behaviour / Intents / Annotations to respond to the customer with the best available answer. Customers can request information in real time from the bot, that is relevant to the page they are viewing. In the event the Bot cannot address the customers query, they have the option to be routed to an agent.
Digital NSW (Government Technology Platforms)	Virtual Contact Centre – Predictive routing*	In development	Other: utilises machine learning AI algorithms	Predictive routing enables you to use machine learning to optimize your key performance indicators (KPI – Average Handle Time) by matching each interaction with the available agent that is best able to handle it. Predictive routing currently supports voice, email, and asynchronous message interactions. Message interactions include third-party messaging platforms, inbound SMS, Genesys Cloud web messaging, and open messaging.
Digital NSW (Government Technology Platforms)	Experience Management Qualtrics (Workflows, TextIQ, Analysis, Scoring, Quotas)*	In Use	Natural Language Processing Other: Routing Functionality Within Qualtrics' Survey Configuration User-Profiling Clustering	Workflows allow you to trigger tasks based on various events. Examples include creating a ticket when someone opts-out of your XM Directory, sending a follow-up email to a customer after a low satisfaction score. For both the inciting event and the resulting task, you have a lot of options, most of which are inside the Qualtrics platform and some of which are outside. Text iQ is Qualtrics' powerful text analysis tool. Text iQ allows you to assign topics to feedback you've received, perform sentiment analysis, report out on your results with dynamic widgets, and more. Scoring is a function within surveys where you're able to assign a numerical value to each response option within a survey. These point values are summed up to give your respondent a final score at the completion of their response. Quotas allow you to keep track of how many respondents meet a condition in your survey. You can also specify what will happen to your respondents once a quota has been met, such as ending the survey prematurely or deleting the extra responses. The purpose of a quota is to make sure that you gather only the exact amount of data required for your study.
Independent Review Office	Resolve	In development	Structured decision-making tool Optimisation tools	Automated reminder notices to Approved Lawyers for updates on the progress of their grants. Also, automated actions for IRO Grant Managers to prioritise urgent actions. Planned further development of automated workflows and processes (including invoice processing) based on pre-set rules.
Independent Review Office	Genesys	In development	Risk assessment/predictor/ profiling/ classifier tool	Voice recognition to identify key words and sentiment of caller. Enables operational reports to be further interrogated using free-text questions

Agency Name	ADM Name	Status	Technology	Description
Information and Privacy Commission	GIPA Tool	In use	Structured decision-making tool	GIPA Tool for agencies that provides case management and may calculate statutory time frames. May be used by agencies to calculate time frames for statutory action, e.g. notice of decision.
Information and Privacy Commission	Web to case lodgement	In use	Structured decision-making tool	Web to case lodgement that may calculate timeframes for lodgement. Manual checking would also be undertaken to ensure that the application was made within the statutory timeframes.
Information and Privacy Commission	Regulatory Search Tool	Complete for deployment/ use	Automated data gathering system or sensor	The bot will be hosted by the IPC and deployed to public facing websites to identify open access requirements e.g. the presence of an Agency Information Guide (AIG).
NSW Architects Registration Board	BOASYS	In use	Fully automated, rule-based system Structured decision-making tool Automated data gathering system or sensor	BOASYS is the data base that contains the NSW Register of Architects and NSW List of Architect Corporations and Firms. It automatically issues renewal reminders, certificates of currency, manages recording of continuing professional development undertaken by architects, and accepts registration renewal payments.
Registry of Births Deaths & Marriages	Online birth registration system	In use	Fully automated, rule-based system Other: When rules are met then can be automated and only for online birth registration.	System automation utilising business rules to assist in confirming birth registrations submissions from parents meet business rules, have appropriate identification for the parents, have been confirmed by a hospital or midwife, among other rules. If all rules are met birth can be registered automatically and if a birth certificate has been ordered along with the birth registration form submitted online, then a certificate will automatically print. The auto-registration function is currently turned off while system enhancements are being made to enable the system to check the validity of names. Once this enhancement has been made, the Registry will resume the auto-registration of births where a name has been determined as valid.
Registry of Births Deaths & Marriages	Robotic automation for processing certificate and registration applications	In use and further bots are in development	Fully automated, rule-based system	An automation tool is in use to process online certificate applications. In terms of ADM certificate applications, these can be processed if business rules are met, and exact matches are made. AI more used to recognise forms and identification collateral rather than for decision making. Further automations are under development for registration applications.
Registry of Births Deaths & Marriages	Chatbot	Planned in the next 3 years	Structured decision-making tool Natural Language Processing	Utilise chatbot function to answer simple customer enquiries and direct customers to the correct area if they need to talk to a customer service officer.

Agency Name	ADM Name	Status	Technology	Description
Revenue NSW	MARS*	In use	Fully automated, rule-based system Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Automated data gathering system or sensor Optimisation tools	MARS, the Revenue NSW core system, enables the administration of the Taxation Administration Act. It's an extensive system with partial automation of policy-driven decisions and customer contact.
Revenue NSW	IMPS*	In use	Fully automated, rule-based system Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Automated data gathering system or sensor Recommender systems Optimisation tools	IMPS, the Revenue NSW core system, enables the Fines Act's administration. It's an extensive system with partial automation of policy-driven decisions and customer contact.
Revenue NSW	FES*	In use	Fully automated, rule-based system Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Automated data gathering system or sensor Recommender systems Optimisation tools	FES, the Revenue NSW core system, enables the administration of the Fines Act, primarily fines debt management. It's an extensive system with partial automation of policy-driven decisions and customer contact.
Revenue NSW	DMS*	In use	Fully automated, rule-based system Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Automated data gathering system or sensor Recommender systems Optimisation tools	DMS, the Revenue NSW core system, enables the administration of the State Debt Act, primarily government debt management. It's an extensive system with partial automation of policy-driven decisions and customer contact.

Agency Name	ADM Name	Status	Technology	Description
Revenue NSW	Satellite Support and Optimisation Systems (various)*	In use	Fully automated, rule-based system Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Modelling /Simulation systems Recommender systems Optimisation tools	Satellite support and optimisation systems enable automation capabilities that support business users and minimise manual workarounds within the central Revenue NSW Core systems. This automation completes rules-based policy decision-optimised processing. This category also includes the use of the Salesforce system.
Service NSW	Savings finder*	In use	Structured decision-making tool Geo-location tool Recommender systems	A digital tool to help individuals and businesses find benefits from across govt based on the former's situation, eligibility and needs. The tool does not actively recommend a specific option but helps in transparent discovery of benefits and savings through govt programs.
Service NSW	Early Childhood Education Finder*	In use	Structured decision-making tool Geo-location tool Recommender systems	In partnership with NSW Department of Education, Service NSW has created a tool that allows parents and guardians to find and select what early childhood education providers are right for their needs and requirements by taking into account the providers hours of operation, locations, availability, National Quality Standard (NQS) rating, transport options, and distance to a selected address.
Service NSW	Before & After School Care Finder*	In use	Structured decision-making tool Geo-location tool Recommender systems	In partnership with NSW Department of Education, Service NSW has created a tool to allows parents and guardians to find and select what before and after school care providers are right for their needs and requirements by taking into account the providers hours of operation, locations, availability, National Quality Standard (NQS) rating, transport options, and distance to the child's school.
Service NSW	Vacation Care Finder*	In use	Structured decision-making tool Geo-location tool Recommender systems	In partnership with NSW Department of Education, Service NSW has created a tool to allows parents and guardians to find and select what vacation care providers are right for their needs and requirements by taking into account the providers hours of operation, locations, availability, National Quality Standard (NQS) rating, transport options, and distance to a selected address.
Service NSW	Eva Conversational AI*	In use	Natural Language Processing Recommender systems	Eva is Service NSW's Generative AI service and platform that enables NSW government department and agencies to deliver NSW residents, businesses, and front-line employees personalised information, advice, and services through a large language model (LLM) designed to understand and respond to natural language input.
Service NSW	Life Journeys*	Decommissioned in past 3 years	Structured decision-making tool Recommender systems	In Partnership with Department of Customer Service, Service NSW has created a tool that brings advice, information, and services from the public sector, private sector, and NGOs to NSW residents based on what stage of life journeys they are on. This provides NSW residents an end-to-end source of advice, information, and services. Not just related to their engagements with government.

Agency Name	ADM Name	Status	Technology	Description
Service NSW	Toll Relief Rebate*	In use	Structured decision-making tool Recommender systems	In partnership with Transport for NSW, Service NSW has developed a transaction in which motorists can claim back parts of their toll spend. Eligibility is determined based on the eligibility criteria set out in the policy.
Service NSW	Seniors Energy Rebate*	In use	Structured decision-making tool Recommender systems	In partnership with the Office of Energy and Climate Change (OECC) Service NSW has developed a transaction that allows households to receive a one-off National Energy Bill Relief Household Payment as a lump sum of up to \$500. Eligibility is determined based on the eligibility criteria set out in the policy.
Service NSW	Active and Creative Kids*	In use	Structured decision-making tool Recommender systems	In partnership with the Office of Sport, Service NSW has created a transaction in which parents can apply for Active and Creative kids vouchers for their children/dependants. Eligibility is available for applicants based on their Family Tax Benefit status and other factors.
Service NSW	pre-IVF fertility testing rebate*	In use	Structured decision-making tool Recommender systems	In partnership with NSW Health, Service NSW has developed a transaction that allows users to apply for a rebate of \$500 for out-of-pocket expenses related to pre-IVF fertility testing. Eligibility is determined based on the eligibility criteria set out in the policy and each application is manually assessed.
Service NSW	Fertility Treatment Rebate*	In use	Structured decision-making tool Recommender systems	In partnership with NSW Health, Service NSW has developed a transaction that allows users to apply for a rebate designed to help with the costs of IVF and other Assisted Reproductive Technology (ART) treatments. Eligibility is determined based on the eligibility criteria set out in the policy and each application is manually assessed.

The following agencies/branches within the Customer Service portfolio reported having no ADM systems as defined by the scope of this project: Board of Surveying and Spatial Information; Geographical Names Board of NSW; Office of the Registrar General; Personal Injury Commission; and Surveyor General of NSW.

Education portfolio

Agency Name	ADM Name	Status	Technology	Description
Department of Education	Blue Prism	In use	Optimisation tools Other: process automation	Blue Prism is our Robotic Process Automation application that assist in transferring repeated information from specific system to other. This also transfer information to system where integration is not feasible. In various automation scenarios, there is human activity to review to ensure assurance is in place.
Department of Education	Power Automate	In use	Optimisation tools Other: process automation	Power Automate is widely used to automate the internal manual process so that the information is processed by relevant areas with ease removing manual retyping and usage of manual processes. This is used across multiple areas within the organisation for reporting, dashboard, analytics, and automated workflow purposes.
Department of Education	Grants Management System	In use	Structured decision-making tool	This is a legacy Grants management system supporting the grants management processes.
Department of Education	Teacher Benefit calculator	In use	Structured decision-making tool	Teacher Benefit Calculator system was developed to provide teachers with a consolidated electronic view of the available allowances/benefits, as part of the Teachers Locality Allowance Project. The benefits and allowances are calculated based on the rules.
Department of Education	Student complaints Analysis	In use	Other: Analysis	This system is utilised by Student and Parent Experience team to capture the feedback and any complaints with an objective of providing better services. This solution aims to address complaints received directly by the Department through the Education NSW website or the Service NSW website.
Department of Education	Student attendance prediction	In use	Risk assessment/predictor/ profiling/classifier tool Other: Analysis and Prediction	A reporting solution providing projections as well as predictive information on student attendance, this information is used to provide insight and support in taking any relevant actions.
Department of Education	EagleEye	In use	Risk assessment/predictor/ profiling/classifier tool Geo-location tool Other: Spatial Data Capture	EagleEye is a map based, custom built platform for analysing relevant and insightful data across School Infrastructure NSW (SINSW) on the hybrid cloud. This is internal facing to gather relevant information.
Department of Education	ECO - Digital Hub (Grants Management)	In development	Structured decision-making tool	ECO - Digital Hub is new improved solution gathering information from early childhood areas and streamlining the process so that all the information including calculation for grants are presented to processing areas for review, update and progressing. This new platform will transition the older Grants management system stated above. Grants management that helps governments and nonprofit organizations to manage their grant programs efficiently. These solutions provide a unified platform for grant management, allowing users to streamline their grant application processes, track grant funding, and monitor grant performance.

Agency Name	ADM Name	Status	Technology	Description
Department of Education	NSWChatEdu	In pilot	Natural language processing	<p>NSWEduChat is purpose-built generative artificial intelligence (GAI) chat app, currently being trialled by school staff and students in select schools within NSW. It is designed and built by the NSW Department of Education to:</p> <ul style="list-style-type: none"> • support staff and students in sourcing and accessing content via a safe, secure and pedagogically aligned generative AI experience. • provide context based interactions with generative AI e.g. asking a question relating to risk assessment, NSWEdUChat uses semantic search to query and incorporate Department policies relating to risk in its response. • incorporate principles of the Australian Framework for Generative AI in Schools, thus making it safe for use in education with school-aged children. <p>NSWEduChat is designed to be safe and ethical for use in schools, and relevant and appropriate for NSW classrooms. The trial is intended to support the department in further decision making around the safe and ethical use of AI in schools, in line with key principles outlined in the Australian Framework for Generative Artificial Intelligence in Schools.</p>

Enterprise, Investment and Trade portfolio

Agency Name	ADM Name	Status	Technology	Description
Department of Enterprise Investment and Trade (Investment NSW)	Skilled and Business Visa Nomination Assessments	In use	Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Anomaly detection	The Department processes a range of applications for visa nominations. Automation processes have been developed to aid data collection, data quality and assessment processes to improve efficiency, transparency, and consistency of decisions.
Department of Enterprise Investment and Trade (Investment NSW)	Grants Assessment Automation Program	In use	Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Anomaly detection	The Department is increasing its use of automated processes to gather grants application data and to automate stages of assessment to improve efficiency, transparency and consistency of decisions for government and applicants.
Department of Enterprise Investment and Trade (Investment NSW) (Screen NSW) (Office of the 24Hour Economy Commissioner) (Study NSW)	Personalised Website Experiences	Planned in the next 3 years	Recommender systems (e.g. for individualising content for a user for an enhanced customer experience)	The Department is seeking to leverage existing NSW government approaches to deliver better user experiences on websites and to serve more relevant content or targeted messages on its websites for business, prospective students and visitors.
Department of Enterprise Investment and Trade (Investment NSW)	Study NSW Chatbot – generative AI experimentation to assist in servicing website users with information from grounded website data	Proof of Concept	Natural Language Processing	Study NSW provides information and support to prospective international students considering study in NSW. Initially, the chatbot will respond to enquiries relating to local student accommodation and student visas and will assist with navigating the website for further information or links to external sites. A proof-of-concept chatbot is in development and will utilise relevant generative AI models to make recommendations based on queries and responses.
Department of Enterprise Investment and Trade (Office of Responsible Gambling)	Intelligent Search for Gamble Aware Website	Planned in the next 3 years	Natural Language Processing	Gamble Aware’s purpose is to work towards zero gambling-related harm in NSW through research, education and support for individuals and communities. Use of chatbots and generative AI capabilities will enable better responses to enquiries and access to website and external resources.
Department of Enterprise Investment and Trade (Hospitality and Racing)	Compliance Resource	Planned in the next 3 years	Risk assessment/predictor/ profiling/ classifier tool Anomaly detection Optimisation tools	Liquor & Gaming NSW undertakes a range of review and compliance monitoring activities. Intent is to leverage advanced analytics capabilities for better compliance planning and resource utilisation.
Department of Enterprise Investment and Trade (Hospitality and Racing)	Licence Management	Planned in the next 3 years	Natural Language Processing Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool	Liquor & Gaming NSW plans to increase its use of automated processes to gather licence application data, simplify and automate stages of assessment to improve efficiency, consistency, and transparency of decisions for government and applicants.

Agency Name	ADM Name	Status	Technology	Description
Department of Enterprise Investment and Trade (Destination NSW)	Visitor Itinerary Planner	Proof of Concept	Natural Language Processing Geo-location tool	Destination NSW is experimenting with capability to enrich visitor experience and drive tourism uplift by providing an itinerary planner that allows a user to define their high-level requirements through natural language interactions. The chatbot will provide a recommended itinerary for a trip to the desired destination including accommodation, experience and travel advice.
Greyhound Welfare & Integrity Commission	eTrac System	In use	Structured decision-making tool Automated data gathering system or sensor Geo-location tool	The Greyhound Welfare Integrity Commission controls, supervises and regulates greyhound racing. The eTrac system is a strategic platform for compliance, communications, registration and veterinarian teams. Development of functionality for race day management is underway and will provide greater automation, efficiency, data quality and transparency of decisions.

The following agencies within the Enterprise, Investment and Trade portfolio reported having no ADM systems as defined by the scope of this project: State Archives and Records Authority; Sydney Opera House Trust; Create NSW; Library Council of NSW; Art Gallery of NSW; Australian Museum; Museum of Applied Arts and Science (Powerhouse Museum); Independent Liquor and Gaming Authority; and NSW Independent Casino Commission.

Health portfolio

Agency Name	ADM Name	Status	Technology	Description
Health Education and Training Institute	Medical Intern Recruitment Application (MIRA)*	In use	Optimisation Tools Structured decision-making tool	MIRA allocates medical internship applicants across training positions across 15 NSW prevocational training networks.
Health Education and Training Institute	CPDHome*	In development	Structured decision-making tool	<p>The Health Education and Training Institute (HETI) is accredited by the Australian Medical Council and approved by the Medical Board of Australia (MBA) as a Continuing Professional Development (CPD) Home for doctors.</p> <p>The Australian Health Practitioner Regulation Agency (AHPRA) and the MBA have developed revised CPD requirements that began on 1 January 2023 for doctors. As part of those requirements, doctors are required to be registered with a CPD Home that administers their completion of, and compliance with, CPD requirements from 1 January 2024. (See AHPRA CPD website). A plan to automate the application process into the CPDHome program based on eligibility criteria is currently under consideration for implementation over the next few years.</p> <p>The HETI CPD Home is for NSW-based doctors not affiliated with a specialty college, with a focus on doctors in their early years of practice (principally NSW Health staff), from PGY3 and onwards. The HETI CPD Home fulfills all requirements for accreditation with the Australian Medical Council (AMC), providing members with individually tailored support and guidance in the creation of a professional development plan (PDP), and to plan, meet and log the requisite CPD activities.</p>
Health Education and Training Institute	ClinConnect*	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool	ClinConnect is a training placement system to support students gain work experience as part of the course work to complete health-related qualifications. Currently, a student that is allocated to a placement in the system but remains 'Not Compliant' for health protection reasons will have their placement automatically cancelled by the system 7 days prior to the commencement date. The student has the opportunity to appeal the cancellation affected by the system.
HealthShare NSW	IPTAAS TRACS	In use	Fully automated, rule-based system Optimisation tools	System makes a decision on patient's eligibility for reimbursement of travel and accommodation costs and calculates the reimbursement owed. (Ruby on Rails is the program code).
HealthShare NSW	GMAT (Get My Assistive Technology)	In use	Fully automated, rule-based system	Works out a patient's eligibility for equipment.

Agency Name	ADM Name	Status	Technology	Description
HealthShare NSW	The SARA Virtual Assistant (VA)	In use	Fully automated, rule-based Natural Language Processing	The SARA VA works like a chatbot. The VA has been built to answer FAQ (Frequently Asked Questions) about a limited list of common topics asked by employees. SARA VA helps to reduce the need for employees to raise inquiry tickets or spend time on the phone with the Customer Service Desk. Only employees who are logged into NSW SARA system can access SARA VA. SARA VA is available 24/7 365 days a year to support employees obtain answers to FAQs outside of standard call centre hours. SARA VA also provides employees with suggested links to detailed knowledge articles and instructions on frequently used employee self-serve systems. Currently SARA VA can converse with employees on a limited list of FAQs pertaining to employee Payroll. Future: enquires from the public and vendors on how to pay NSW Health and sundry debtors.
HealthShare NSW	Cash Forecasting of bank account to pay salary and wages and suppliers	In use	Fully automated, rule-based system Structured decision-making tool Optimisation tools	Uses predictive analytics to forecast cash needs for NSW Health. To fund the health system and provide reporting to NSW Treasury.
HealthShare NSW	Task Allocation System (TAS)	In use	Fully automated, rule-based system	Prioritises cleaning and portering tasks for patients within hospitals.
HealthShare NSW	Patient Transport Services CAD	In use	Structured decision-making tool	Makes decision on scheduling patient transports on availability of vehicles. Also determines if the requested transport is within the scope of delivery of this service.
Illawarra Shoalhaven Local Health District	Fit for Frailty Dashboard	Discontinued within the last 3 years	Other: SQL based code with Qlik used as customer facing dashboard	We adapted an algorithm developed as an observational study in the UK and published in The Lancet (Volume 391, Issue 10132, P1775-1782) that applies a Hospital Frailty Risk Score in a low-cost, systematic way to screen for frailty and identify a group of patients who are at greater risk of adverse outcomes and for whom a frailty-attuned approach might be useful. A real-time dashboard was developed to provide a predictive indicator to clinicians in conjunction with human clinical assessments (Rockwood Frailty Score).
Mid North Coast Local Health District	MIM*	In development	Visual, audio or biometric processing	An engine to automate anatomy contouring. Aligning two or more 3D images into a common coordinate frame.
Ministry of Health (Centre for Alcohol and other Drugs)	Yaas – ChatBot*	In development	Structured decision-making tool Natural Language Processing Optimisation tools	A ChatBot to assist users to navigate content on the Your Room website - the NSW Health alcohol and other drug community information website.

Agency Name	ADM Name	Status	Technology	Description
Ministry of Health (Centre for Epidemiology and Evidence)	PHREDSS signals	In use	Anomaly detection	The NSW Public Health Rapid, Emergency, Disease and Syndromic Surveillance (PHREDSS) system provides daily monitoring of most unplanned presentations to NSW public hospital emergency departments and all emergency Triple Zero (000) calls to NSW Ambulance. Emergency hospital presentations and ambulance calls are grouped into related acute illness and injury categories. The number of presentations and calls in each category is monitored over time to quickly identify unusual patterns of illness. Unusual patterns could signify an emerging outbreak of disease or issue of public health importance in the population.
Ministry of Health (Centre for Oral Health Strategy)	Non-clinical dental triage	Planned in the next 3 years	Fully automated, rule-based system, Structured decision-making tool, Natural language processing, Geo-location tool, Recommender systems	The present situation is a patient phones the local health district public dental service Contact Centre (CC) and is triaged by a staff member. The CC staff members would ask a series of questions to prioritise a patient and determine the correct outcome. The outcome could be for the patient to be (i) offered an appointment, (ii) placed on a waiting list, (iii) offered a voucher to seek dental care at a participating private practice.
Ministry of Health (Centre for Population Health)	PHIMS (Population Health Intervention Management System) Tobacco	In use	Risk assessment/predictor/ profiling/ classifier tool	Collects, manages, reports, shares and visualizes data relating to enforcement of retail inspections and smoke-free environments.
Ministry of Health (Centre for Population Health)	PHIMS (Population Health Intervention Management System) HCl (Healthy Children Initiative)	In use	Risk assessment/predictor/ profiling/ classifier tool	Used to track and report on the adoption of healthy eating and physical activity practices in schools and services.
Ministry of Health (Centre for Population Health)	PHIMS (Population Health Intervention Management System) Nutrition	In use	Risk assessment/predictor/ profiling/ classifier tool	Supports the implementation, monitoring and evaluation of the Healthy Food and Drink in NSW Health Facilities for Staff and Visitors Framework.
Ministry of Health (Financial Services and Asset Management)	DeliverEASE - Scheduled Ordering*	In development	Risk assessment/predictor/ profiling/ classifier tool	Based on past ordering patterns, current stock holdings and usage the system will "propose" an order of medical consumables for a hospital ward. That order will be checked and (if needed) amended by a staff member on the ward prior to the order being submitted. This saves significant order time as it will be pre-populated and won't need to be entered by the order.

Agency Name	ADM Name	Status	Technology	Description
Ministry of Health (Legal and Regulatory Services)	SafeScript NSW*	In use	Structured decision making tool Risk assessment/predictor/ profiling/classifier tool Other: Partially automated rule-based system	<p>Pharmaceutical Services of the Ministry of Health administers the Poisons and Therapeutic Goods Act 1966, which regulates the supply chain of medicines, poisons and therapeutic goods in NSW. The Secretary, upon application, may give an authority for the medical practitioner or nurse practitioner to treat a person with a Schedule 8 substance. An authority is required for the prescribing and supply of certain Schedule 8 substances or in specific circumstances.</p> <p>SafeScript NSW is a real time prescription monitoring and approval management system. It allows prescribers and pharmacists to access real-time information about their patient's prescription history for certain high-risk medicines, known as monitored medicines, as well as offering an online solution for prescribers to manage applications for authority to prescribe and/or supply these medicines as required under the Poisons and Therapeutic Goods Act 1966. This helps prescribers and pharmacists make safer clinical decisions, improves compliance and reduces the incidence of harm, including death, from the unsafe use of monitored medicines.</p> <p>The approval management component of SafeScript NSW is a partially automated rules-based decision-making system for management of applications for section 29 authorities under the Poisons and Therapeutic Goods Act 1966. Applications are received through an online portal accessed via the SafeScript NSW system. A pre-determined set of objective criteria approved by the delegate of the Health Secretary is applied to specific application types submitted through SafeScript NSW. Applications are assessed against a set of criteria ("the rules"), and those meeting a pre-determined threshold are granted. Applications that do not meet the criteria set out in the approval rules are referred for manual review. No applications are automatically refused.</p> <p>Where an application is not auto approved, the application is assessed by a delegate of the Health Secretary. In this respect the information provided through the application portal by an applicant allows for a structured decision-making tool by the delegate.</p> <p>Automated decision-making through SafeScript NSW for the processing of applications improves efficiency, reduces red tape, increases accuracy, improves consistency, enhances patient experience and provides insights and learning for continuous improvement. The increased productivity enables staff to be directed to other statutory functions in relation to the supply chain of medicines, poisons, and therapeutic goods in NSW.</p>

Agency Name	ADM Name	Status	Technology	Description
				The real time prescription monitoring component of SafeScript NSW assists with the identification and assessment of high-risk supply scenarios. Users of SafeScript NSW may observe alerts which are displayed where a high-risk situation has been detected in a patient's prescription or dispensing record for monitored medicines. The alerts are generated in real time, as the events are recorded in the system. Alerts are red or amber, depending on the potential for harm. Prescribers and pharmacists can use these warnings to support their clinical decision making, enabling them to make safer clinical decisions at the point of care.
Ministry of Health (Legal and Regulatory Services)	LARA*	In use	Fully automated, rule-based system	Service NSW-based platform for the calculation of annual license fees for private health facilities in NSW, and automated distribution of reminders to licensees. It also provides the portal for the payment of those fees.
Ministry of Health (Mental Health Branch)	[System 8]*	In use	[Omitted]	[Details omitted at the request of the agency]
Ministry of Health (Mental Health Branch)	[System 9]*	Planned in the next 3 years	[Omitted]	[Details omitted at the request of the agency]
cMinistry of Health (Strategic Communications and Engagement)	Request for Bacille Calmette-Guérin (BCG) vaccination*	In use	Fully automated, rule-based system	This system directs users to relevant chest clinic based on person's post code.
Ministry of Health (Strategic Communications and Engagement)	Cold chain audit immunisation*	In use	Fully automated, rule-based system	This system directs immunisation providers to relevant PHU based on post code.
Ministry of Health (Strategic Communications and Engagement)	Post-custodial support program*	Planned in the next 3 years	Fully automated, rule-based system	This system sends user information to a specific NGO based on the facility the user wants to apply for treatment at.
Ministry of Health (Strategic Reform and Planning Branch)	S100 Co-payment claiming portal*	In use	Other: Cloud based portal where pharmacists upload submissions for co-payment claims to be assessed and paid by the Pharmacy Guild on behalf of NSW Health.	Pharmacy registration and claims submission portal for community pharmacy claims for the NSW S100 Co-payment Program.
Ministry of Health (System Information and Analytics)	Risk of Hospitalisation Algorithm*	In use	Risk assessment/ predictor/ profiling/ classifier tool Modelling / simulation systems Structured decision-making tool	Identifies patients at risk of unplanned hospitalisation in the next 12 months. Used to triage patients into in NSW Health supported programs based on their needs.

Agency Name	ADM Name	Status	Technology	Description
Ministry of Health (System Management Branch)	Patient Flow Portal – Ambulance Matrix*	Planned in the next 3 years	Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool	Execute complex algorithms to ensure: <ul style="list-style-type: none"> • Patients are transported to the right location, for the right care. • Ensure appropriate patient distribution to maximise use of health system resources. • Promote a system-wide approach to patient flow. • Ensure patient safety and quality of care is prioritised above all. • Keep patients as close to home as possible and where appropriate, to promote continuity of care. • Promote increased collaboration between primary care, hospital staff and paramedics.
Ministry of Health (System Management Branch)	Patient Flow Portal – Patient Risk Algorithms*	Planned in the next 3 years	Risk assessment/predictor/ profiling/ classifier tool	Execute algorithms on a near real time dataset at a population and patient level to support: <ul style="list-style-type: none"> • Identifying members of the NSW population who are at risk of hospitalisation in the next 12 months and could benefit from hospital avoidance strategies through connected care and partnership programs. • Identifying the likelihood of a patient being admitted based on point of triage assessment criteria in an Emergency Department. • Identifying the likelihood of a patient deteriorating in an Emergency Department and requiring immediate or escalated care based on vital sign observations.
Ministry of Health (System Management Branch)	Patient Flow Portal - Bed Demand and Capacity Predictive Tool*	In use	Risk assessment/predictor/ profiling/ classifier tool	14 day bed demand and capacity predictive tool that supports hospital planning relating to patient flow and care coordination.
Nepean Blue Mountains Local Health District	eMeds*	In use	Structured decision-making tool	Prescription alerting and brand prioritisation.
Nepean Blue Mountains Local Health District	Patienteer*	In use	Structured decision-making tool Recommender systems Optimisation tools	Scheduling Optimisation.
Nepean Blue Mountains Local Health District	BCMS*	In use	Automated data gathering system of sensor Structured decision-making tool	Providing facility wide environmental controls such as water temperature adjustments, heating & cooling, etc.
Nepean Blue Mountains Local Health District	MOSAIQ Oncology EMR*	In use	Structured decision-making tool Risk assessment/predictor/ profiling/ classifier tool Anomaly detection Recommender systems	Automates routine tasks and processes within oncology practices, such as scheduling appointments, managing patient records, generating treatment plans based on physician input, and facilitating communication among care team members. It also includes features for decision support, such as alerts for potential conflicts or inconsistencies in treatment plans.
Nepean Blue Mountains Local Health District	QFLOW*	In use	Structured decision making tool Optimisation tools	Patient Journey Optimisation - Appointments Bookings, Arrival Management and Appointment Adjustments.

Agency Name	ADM Name	Status	Technology	Description
Nepean Blue Mountains Local Health District	Telehealth*	Planned in the next 3 years	Risk assessment/ predictor/ profiling/ classifier tool Recommender systems	In-Home Patient Monitoring and Alerting.
Nepean Blue Mountains Local Health District	Medical Imaging*	Planned in the next 3 years	Structured decision-making tool Recommender systems Optimisation tools	Image Interpretation & Diagnoses Assistance.
NSW Health Pathology	Rippledawn*	In use	Anomaly detection Risk assessment/ predictor/ profiling/ classifier tool	Processes clinical orders and billing to identify anomalies based on a set of sequential rules.
South Western Sydney Local Health District	Curious Things*	In development	Natural Language Processing Visual, audio or biometric processing	A chat bot that spoke to isolated patients each day - checking on wellbeing and health status.
South Western Sydney Local Health District	Curious Things*	In development	Natural Language Processing Visual, audio or biometric processing	A chat bot that conducts exit interviews with staff who are leaving the organisation.
Western Sydney Local Health District	NEOFace*	In use	Risk assessment/ predictor/ profiling/ classifier tool Visual, audio or biometric processing	NEOFace is a facial recognition system. When we've been contacted by police, or have a violent person/POI who has been put on a watch-list for the hospital, the system will notify Security if and when they enter the hospital, so an appropriate response can be determined (meeting at the entrance, calling police, etc).

The following agencies/branches within the Health portfolio reported having no ADM systems as defined by the scope of this project: Cancer Institute NSW; Clinical Excellence Commission; Mental Health Commission of NSW; Health Professionals Councils Authority; Ambulance Service of NSW; Bureau of Health Information; eHealth NSW; Health Infrastructure; NSW Agency for Clinical Innovation; Central Coast Local Health District (LHD); Far West LHD; Justice Health and Forensic Mental Health Network; Murrumbidgee LHD; Northern NSW LHD; Northern Sydney LHD; South Eastern Sydney LHD; Southern NSW LHD; St Vincent's Health Network; Sydney LHD; and The Sydney Children's Hospitals Network.

Planning, Housing and Infrastructure portfolio

Agency Name	ADM Name	Status	Technology	Description
Independent Planning Commission	Natural language analysis of submissions	In use	Natural language processing Geo-location tool Anomaly detection	Categorises and classifies submissions by submission type (support/object), geographic location, and key word and thematic analysis.
Local Government Remuneration Tribunal	Chatbot	Planned in the next 3 years	Null	Provide aggregated workforce data in response to natural language queries.
Office of Strategic Lands (Planning Ministerial Corporation)	Land Use Decisions	Planned in the next 3 years	Structured decision-making tool	Still in planning stage - to support agency to identify the best use of land in its portfolio.

The following agencies/branches within the Planning, Housing and Infrastructure portfolio reported having no ADM systems as defined by the scope of this project: Hunter and Central Coast Development Corporation.

Premier and Cabinet portfolios

Agency Name	ADM Name	Status	Technology	Description
Department of Premier and Cabinet	Security Information and Event Management (SIEM) / Security Orchestration, Automation, Response (SOAR)	In use	Structured decision-making tool Risk assessment/predictor/ profiling/classifier tool	Consolidates and analyses security logs.
Department of Premier and Cabinet	Endpoint Detection Response	In use	Fully automated, rule-based system Risk assessment/predictor/ profiling/classifier tool Automated data gathering system or sensor Anomaly detection	Consolidates and analyses events from endpoints.
Department of Premier and Cabinet (Industrial Relations)	Einstein Chatbot	Being piloted	Natural language processing	We have currently deployed an Einstein Chatbot (Salesforce based Service Cloud Product) that is being used to answer Long Service Leave frequently asked questions.
Independent Pricing and Regulatory Tribunal	The Energy Security Safeguard App (TESSA)	In use	Structured decision-making tool Anomaly detection Other: TESSA has elements of 'full automation' for some processes, it has limited 'anomaly detection' for some processes	TESSA is an online system used to manage the Energy Savings Scheme and the Peak Demand Reduction Scheme. It is used by businesses operating under the schemes and by IPART who regulate the schemes. The system has a registry function which allows for the registration and trading of energy savings certificates and peak demand reduction certificates. The system has a licensing function to manage applications for accreditation and amendments to accreditation. It also has functionality to manage audits of businesses and certificate creation. the components of the system where ADM occur are: <ul style="list-style-type: none"> • Acceptance or refusal of certificate registration application by Accredited Certificate Providers • Acceptance or refusal of voluntary surrender of certificates • Acceptance or refusal of transfer of certificates. More information can be found here: www.energysustainabilityschemes.nsw.gov.au/tessa .

The following agencies/branches within the Premier and Cabinet portfolios reported having no ADM systems as defined by the scope of this project: Public Service Commission; Office of the Inspector of the Independent Commission Against Corruption; Office of the Inspector of the Law Enforcement Conduct Commission; and NSW Aboriginal Land Council.

Regional NSW portfolio

Agency Name	ADM Name	Status	Technology	Description
Department of Regional NSW (Mining, Exploration and Geoscience)	Activity Compliance and Enforcement System (ACES)	In use	Risk assessment/ predictor/ profiling/ classifier tool Other: Semi-automated 'human-on-top' system, rule-based system	Supports the following functions: Resources Regulator Safety and Environmental functions, Certificates of Competencies.
Department of Regional NSW (Primary Industries)	DPI Shellfish App (incl. Rules engine)	In use	Fully automated, rule-based system	The DPI Shellfish App provides a digital version of the oyster shipment logbook required under Fisheries and Biosecurity regulations to be completed for all movements of oyster stock or equipment out of NSW estuaries. The data entered by an oyster farmer is sent through a rules engine which has been developed using a Rules as Code process to codify the rules under the legislation. The output either issues as shipment number (successful/compliant shipment) or an error message identifying what rule has been broken (unsuccessful/non-compliant shipment).
Department of Regional NSW (Primary Industries – Fisheries)	FishOnline	In use	Fully automated, rule-based system Structured decision-making tool Other: Transaction dependent share register which maintains authority / shareholding / permit information (Not fully automated with regards to all transactions)	The suite of business applications which assisted service interaction and self-service interaction for both commercial fishing and aquaculture fishing industries. Depending upon the transaction undertaken these can be ADM in part or fully self-service.
NSW Food Authority	Byte	In use	Fully automated, rule-based system Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool	Byte is the department's regulatory system, used for Licensing, Compliance, Enforcement and helpdesk type activities. It includes a number of automation features including: <ul style="list-style-type: none"> • bulk processing of licenses for various stages of the License lifecycle, based on coded business rules • audit scheduling based on level of risk and previous audit outcomes; redirection of complaints for triage and management based on specific data inputs • assigning of relevant checklist questions to audits based on the approvals assigned to the facility being audited.
NSW Food Authority	Byte mobile	In use	Fully automated, rule-based system	Byte mobile is a mobile app used by Biosecurity and Food Safety field staff and external third party auditors for the recording of Audits and inspections in the field. The application will use business rules to determine audit and inspection outcomes based on level of compliance with inbuilt checklists; enable or disable a third party auditor from creating an audit based on their approvals for different audit types, the approval of the facility to be audited indicating if it is approved to be audited by a third party auditor and the type of audit being requested.

Agency Name	ADM Name	Status	Technology	Description
NSW Food Authority	Online forms	In use	Fully automated, rule-based system Structured decision-making tool	We have a single online application forms for all licenses under the Food Regulation that applies conditional logic to determine what approval the applicant is seeking and the fees they are required to pay before they can submit their form.
NSW Food Authority	Online forms incorporating AI	In development	Fully automated, rule-based system Structured decision-making tool Risk assessment/predictor/ profiling/classifier tool Visual, audio or biometric processing	We are currently working on a new online form which will incorporate submissions of photos by the applicant which uses image recognition and machine learning to determine compliance of the photo against specific criteria. The aim here is for low risk vehicles and vessels to not require onsite inspections and can rely on the applicant submitting photos instead of that onsite inspection to determine compliance.
NSW Food Authority	Food-i	Being piloted	Automated data gathering system or sensor Anomaly detection	Food-i is a horizon scanning tool, which rapidly filters and extracts key information from food safety notifications (outbreaks, alerts, recalls) from a variety of external data sources, that can be used to generate alerts or trend notifications over time.
NSW Food Authority	BFS Portal	In use	Fully automated, rule-based system	The BFS Portal enables groups of end users to view the data we hold about them and initiate transactions. There are levels of conditional logic enabling and disabling different functions based on status or other factors.

The following agencies/branches within the Regional NSW portfolio reported having no ADM systems as defined by the scope of this project: Local Land Services.

Transport portfolio

Agency Name	ADM Name	Status	Technology	Description
Point to Point Transport Commissioner	Taxi Licence Scheme	In development	Structured decision-making tool Recommender systems	Taxi licence application approval process for standard applications.
Sydney Trains	Incident Management System	In use	Recommender systems	Incident recording, management, and attribution system. Simple business rules to assist users in classifying incidents and initiating response workflows.
Sydney Trains	Rail Traffic Management System	Planned in the next 3 years	Fully automated, rule-based system Structured decision-making tool Anomaly detection	Traffic Management System – Manages the day of operation. Degradation recovery.
Sydney Trains	Rail Timetable Management System	Planned in the next 3 years	Fully automated, rule-based system Structured decision-making tool Optimisation tools Modelling / simulation systems	Timetable Publishing – The program will implement a contemporary timetabling system that meets current and future passenger and freight customer demands, optimises End to End timetabling planning capabilities. This is a key enabler for Digital Rail system and More Trains More Services.
Sydney Trains	Train Crew Operations and Planning System (TCOPS)	Planned in the next 3 years	Fully automated, rule-based system Structured decision-making tool Optimisation tools Modelling / simulation systems Recommender systems	Crew allocation – The TCOPS program will deliver a new Train Crewing Operations and Planning solution for Sydney Trains and NSW Trains, replacing the existing OpCrew-based solution.
Sydney Trains	Fleet Allocation System	In use	Fully automated, rule-based system Structured decision-making tool Optimisation tools Modelling / simulation systems	Fleet Allocation and recording supports the allocation of the train sets to trips to meet the requirements of the timetable and the fleet maintenance.
Sydney Trains	TRIMS	In use	Structured decision-making tool Modelling / simulation systems	Freight Management.
Sydney Trains	TrackAR	In use	Geo-location tool Visual, audio or biometric processing	Augmented Reality on Corridor access is a native mobile application which helps Protection Officer on Track to identify Sydney Trains Asset like Boundary Gates, Turnouts, Signals and others like overhead wires (OHW) stanchions assets in a more visible way such as Augmented Reality markers for the entire network.
Sydney Trains	Geospatial Tooling	In use	Geo-location tool	Geospatial Service to visualise the corridor.
Sydney Trains	Digital Engineering Tooling	In use	Anomaly detection Modelling / simulation systems	Building Information Modelling (BIM) for road and rail assets. Traffic Modelling. Asset Management Lifecycle Tooling for Transport critical infrastructure.

Agency Name	ADM Name	Status	Technology	Description
Sydney Trains	Transport Data Hub Platform	In development	Fully automated, rule-based system	Transport Data Hub Platform is an enterprise grade centralised data management platform to provide quality data landscape, integration into the various operational data stores and domain centric data lakes/data warehouse within the Transport.
Sydney Trains	Customer Information System	In Use	Fully automated, rule-based system	Predicts train arrival times and carriage congestion and generates customer information for each platform at each station automatically.
Transport for NSW (Safety Environment & Regulation)	Automated Camera Enforcement System	In use	Fully automated, rule-based system Automated data gathering system or sensor Anomaly detection	Under the NSW Government's Automated Enforcement Strategy, Transport for NSW delivers a range of automated enforcement programs to detect road rule breaches. Automated enforcement is relatively low cost and highly effective in reducing road trauma. A government Officer always undertakes a human review of the potential offence data before issuing a penalty. The level of automation varies across the programs. For example, fixed speed cameras are highly automated and back-office systems run checks and balances to verify the presence of key features including valid device testing certificates. The mobile phone camera detection program uses artificial intelligence software to automatically review images and detect potential offending drivers and excludes images of non-offending drivers from further action. Images that are automatically deemed likely to contain a mobile phone offence are verified by appropriately trained personnel. Images rejected by the artificial intelligence will typically be permanently deleted within an hour of detection.
Transport for NSW	Road Occupancy License Issuance and Management	In use	Structured decision-making tool	OPLINC – Online Planned Incident System (Front End for Occupancy License Issuance). ROAM – Road Occupancy Assessment Module (Backend for Occupancy License). PREP – Planned Road Event Portal. Part of ICMP (Intelligent Congestion Management Platform). PREP will replace OPLINC and ROAM.
Transport for NSW	Transport Customer Complaint and Engagement Management	In use	Fully automated, rule-based system Structured decision-making tool	Customer Relationship Management – Complaint Management. Customer Engagement Tool – Bang the Table.
Transport for NSW	Automatic Road Traffic Management Systems	In use	Automated data gathering system or sensor Modelling/simulation systems	SCATS – Sydney Coordinated Adaptive Traffic System uses real-time data and advanced algorithms to make intelligent decisions that adapt to changing traffic conditions and ensure safer road journeys. Using vehicle sensors at intersections, SCATS manages traffic light signal phases to minimise delays on the road network, as well as prioritising emergency services vehicles and public transport. Scatter – Network Asset Intelligence.
Transport for NSW	Fare Compliance	In use	Geo-location tool	Vanguard fare compliance system consolidates transport crime statistics, security incidents and fare compliance data into one system. This allows Security and Revenue Protection teams to more effectively provide actionable insights and analytics within Transport and our partners.

Agency Name	ADM Name	Status	Technology	Description
Transport for NSW	Bus Contract and Service Management	In use	Structured decision-making tool	Public Transport Information & Priority System (PTIPS). <ul style="list-style-type: none"> Bus Fleet Management System. Bus Contracts Management Bus Service. Alteration Request. Bus Contract Key Performance Indicators. Registry Indices and Bond Rates. MMPR - Multi Modal Performance Reporting. Bus Operating Payment Processing System.
Transport for NSW	Motorways and Toll Management	In use	Automated data gathering system or sensor Modelling/ simulation systems	Motorways Management System. Tolling Compliance Management System.
Transport for NSW	Ticketing Sales and Management	In use	Fully automated, rule-based system	Transport Concession Systems. Electronic Ticketing System.
Transport for NSW	Incident and Risk Management	In use	Risk assessment/ predictor/ profiling/ classifier tool Geo-location tool	CMCS – Central Management Computer System at TMC. SAMS – Service Alert Management System. SRIMS – Safety Risk Information Management System. Security Incident Management.
Transport for NSW	Enterprise Threat, Risk, and Assurance Management	In use	Risk assessment/ predictor/ profiling/ classifier tool Visual, audio or biometric processing Geo-location tool	CCTV Systems. An enterprise-wide Risk and Compliance platform used by Transport and Sydney Metro for Compliance Management, embedding ISO 31000 standards and manage organisational risks and audit issues. SRIMS – Safety Risk Information Management System: Transport wide system to manage health and safety hazards and incidents.
Transport for NSW	Road/Vehicle systems	In use	Fully automated, rule-based system	Driver License and Vehicle Registration Access System (DRIVES / DRIVES24): Used by Transport to manage and access driver licence and vehicle registration information for New South Wales. SpeedLink2 System – Provide single point of truth system to manage and coordinate the road speed limits for New South Wales.
Transport for NSW (Maritime)	Vessel License and Compliance Check Systems	In use	Fully automated, rule-based system Structured decision-making tool Geo-location tool	AMSA (Australian Maritime Safety Authority) Maritime Safety System – for Commercial Vessel compliance check. Boating Officers Safety Network (BOSN) – Perform vessel and licence checks, run campaign, perform education checklist, capture informal warning, raise infringement and penalty notice

Agency Name	ADM Name	Status	Technology	Description
Transport for NSW (Maritime)	Maritime Registration, Licenses and Product Management	In use	Structured decision-making tool Geo-location tool	<ol style="list-style-type: none"> 1. Department of Customer Service OneGov Portal for customer registration, licence and product renewals. 2. Department of Customer Service Government Licensing Systems – Maritime Licenses. 3. Marine Dealer Vessel Registration Scheme Portal – Service NSW hosted. 4. Maritime Aquatics Online – Department of Customer Service hosted online aquatic license application. 5. Moorings Online – Department of Customer Service hosted private Mooring online application. 6. Public Vessel Registration Register
Transport for NSW (Maritime)	Grants Management	In use	Structured decision-making tool	Maritime Grants Management System – Manages the financial grants to councils for boating infrastructure projects. These grants are typically under various funding programs to delivery partners such as Local Government Agencies to improve, upgrade or provide new recreational boating facilities across NSW.
Transport for NSW (Maritime)	Maritime related incident and risk management	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool Geo-location tool	<ol style="list-style-type: none"> 1. EAGLE Incident Management – Case management database for marine incident investigation 2. Maritime Incident Management System – The new MIMS solution will bring together all combating activities of maritime incidents as well as logging special aquatic events in a single platform using Noggin System. The key activities of Maritime incident management include incident reporting, incident assessment, incident action plan, situational and pollution reporting. 3. Wharf Safety Audit 4. SRIMS – Safety Risk Information Management System
Transport Management Centre	Central Management Computer System (CMCS)	In use	Other/ Unsure	Incident management database: This application is used for fault management reporting and houses ICEMS (Police dispatch messaging application), Variable Messaging Sign (VMS), Variable Speed Limit Signs (VSLs), and other roadside assets. It is used for planned and unplanned Incident Management, traffic flow management, traffic data collection and information dissemination.
Transport Management Centre	Service Alert Management System (SAMS)	In use	Other/ Unsure	Ability for operators to create service alerts and disruption information in SAMS and send information to Transport Management Centre / Rail Operations Centre. Replaces legacy ICS system used to publish real time PT disruption info.
Transport Management Centre	Security Incident Management	In use	Other/ Unsure	Security Incident Management Solution.

Agency Name	ADM Name	Status	Technology	Description
Transport Management Centre	CCTV Systems	In use	Visual, audio or biometric processing	Live and recorded video streams at camera locations - situational awareness. Traditionally known as Video Control System (VCS) Key Components: <ul style="list-style-type: none"> Physical cameras Variable Message Signs Identity and Access Analytics on the CCTV
Transport Management Centre	Intelligent Congestion Management Program	In development	Automated data gathering system or sensor Geo-location tool Optimisation tools	Enhanced Core Transport Management System (ECTMS) is an integrated, real-time, multi-modal transport management system that will provide operational and functional capabilities. It is a core platform delivered as part of Intelligent Congestion Management Program (ICMP).
Transport Management Centre	PREP – Planned Road Event Portal. Part of Intelligent Congestion Management Platform (ICMP)	In development	Automated data gathering system or sensor Geo-location tool Optimisation tools	Road occupancy license management. This will replace OPLINC and ROAM.
Transport Management Centre	Shared Information Management System (SHIMS)	In use	Fully automated, rule-based system Geo-location tool	Supports incident management processes by providing spatial location finding and referencing capability. Includes spatial information such as NSW road layer classification, callout information, Transport Operations Room Sector boundaries, location of CCTV and Video Management System, points of interested Support web-based location and incident creation through WEB/URL interface to the Central Management Control System and Incident Management System.

The following agencies/branches within the Transport portfolio reported having no ADM systems as defined by the scope of this project: NSW Trains; NSW TrainLink; Transport Asset Holding Entity of NSW.

Treasury portfolio

The following agencies/branches within the Treasury portfolio reported having no ADM systems as defined by the scope of this project: Treasury; and Infrastructure NSW.

Independent Integrity Agencies

Agency Name	ADM Name	Status	Technology	Description
Independent Commission Against Corruption	Analysis of electronic evidence	Currently in development, Planned in the next three years	Automated data gathering system or sensor	Our agency gathers significant volumes of electronic evidence. We currently use a product called NUIX (www.nuix.com) to store, search and classify this evidence. NUIX is building AI capabilities into its products including "natural language processing" technology. It is likely that we will explore the use of these NUIX tools, or similar products offered by competitors. See https://www.nuix.com/resources/nuix-nlp .
Law Enforcement Conduct Commission	Power BI Machine Learning	Planned in the next three years	Risk assessment/predictor/ profiling/classifier tool Automated data gathering system or sensor Optimisation tools	Help identify trends in law enforcement allegations, using data already available to the Commission. Provide interactive reports on the Commission's work to the public.
NSW Ombudsman	ChatBot	Planned in the next 3 years	Natural Language Processing Recommender systems	The NSW Ombudsman is an independent integrity agency that performs a range of functions including receiving complaints about oversight agencies. The ChatBot will respond to enquiries from the public about the role and work of the Ombudsman and will assist with navigating the website. It is anticipated the ChatBot will also be able to direct users to information about bodies that can handle complaints outside the Ombudsman's jurisdiction. While the ChatBot is in planning phase it is intended to use generative AI models for the ChatBot 'agent' that will essentially direct and make recommendations based on queries and responses.
NSW Ombudsman	eDiscovery tool to sort and analyse large volumes of information*	In use	Natural Language Processing Automated data gathering system or sensor	eDiscovery software is currently used to support more efficient and rigorous analysis of documentation obtained in investigations. The technology can flag possible gaps in the information provided to our office. These insights may inform decisions made by investigation officers to compel additional information from an agency. The software has a range of additional AI-enabled capabilities (not currently used) that can highlight themes in large volumes of information. Such analysis might inform decisions to pursue a particular line of inquiry in an investigation. Use of these functions will be considered in the future.
NSW Ombudsman	Complaint management system*	Currently in development	Structured decision-making tool	A new complaint management system (CMS) is in development. The new CMS will incorporate guided pathways depending on the option selected by the subject matter expert (SME). The guided pathway moves the user through a process from triage to assessment, for example based on input of the SME or their manager. The CMS will be implemented across the range of NSW Ombudsman functions.

NSW local councils

Metropolitan councils (5 councils)

ADM Name	Status	Technology	Description
AI Tool for Asset Management including automatic identification of road faults	In development	Automated data gathering system or sensor Visual, audio or biometric processing Anomaly detection	We are trialling the ability to identify road defects via automated image collection from council vehicles and AI base analysis of road condition.
Resident information Chatbot	Planned in the next 3 years	Natural language processing	As part of our customer experience strategy, we will be looking at how to provide better advice to residents through the use of chat bots.
Digital Forms Platform	In development	Other: Forms based data entry, which includes customer and other inline validation services	Digital Forms provides customers with a digitised form process for applications and request at [council]. The digital form is accessed through a web portal, offering mobile and other digital points of access.
Chatbot and live chat service	In use	Fully automated, rule-based system Natural language processing	Provides a virtual customer assistant chatbot and live chat service that utilises [product] for natural language processing to access [council] information and services.
ePlanning portal	In use	Structured decision-making tool	Provides an ePlanning portal to support the electronic lodgement, assessment, and determination of planning and development related applications at [council].
Invoice scanning	In use	Fully automated, rule-based system	Accounts payable invoice scanning solution that automates the processing of pdf/scanned invoices and integration with [council's] financial management system.
Enterprise Booking Management System	Planned in the next 3 years	Structured decision-making tool	Enterprise booking management system that will centralise a number of legacy systems and provide a streamlined online booking process for venues and spaces that the manages.
Licence Plate Recognition	Being piloted	Structured decision-making tool	Licence Plate Recognition [product] provides optical character recognition software that is being trialled to detect/track vehicle license plates of parked cars.
End-to-end local government platform	In use	Structured decision-making tool	[Product] is the [council's] end-to-end local government platform used to manage regulatory services, people, land and property revenue. This includes functionality to manage different licenses, applications and permits for parking, footways and building compliance.
Customer Booking System	In use	Fully automated, rule-based system	Customers choose a site, (checks availability), customer registers, books and pay online (depending on customer type and site booked), receive confirmation and receipt automatically.
Customer Request Website Journeys	In use	Structured decision-making tool Geo-location tool	Customers choose descriptions on the website to categorise their concern, gather required information (address, description of issue and photos) and direct to the correct team for response/action.
Request Management	In use	Structured decision-making tool Geo-location tool	Requests from customers on phone or email are directed to teams and automatic "events" actioned to assign priorities/allocate tasks/triage issues/ automatically send confirmations to customers.
Spatially Enabled Application	In use	Risk assessment/ predictor/ profiling/ classifier tool Geo-location tool	In-house created spatial tool with layers for all assets e.g. roads, buildings, stormwater pipes etc. Site information for each property collates all information for a site including planning rules, historical applications, customer interactions.
[Council] Parking Permits System	In use	Fully automated, rule-based system	System determines applicable permits based on address the customer enters, checks for existing permits, allocates permits, accepts payment.

ADM Name	Status	Technology	Description
Planning Certificates System	In use	Fully automated, rule-based system	Land Check/Zoning information – Look up all relevant planning information for a property once address entered, accepts payment and email certificate/s to applicant (Section 10.7).
eServices – application and payments module	In use	Fully automated, rule-based system	Website application processing and payment tool, customer enters all required information, pays for application and receives confirmation. e.g. hoarding permits, road closure permits etc.
Library Management System	In use	Fully automated, rule-based system	Various automations, most significant example is the access control for 24/7 [Suburb] library, using library card and pin number. Validates entry and allows after hours access.
Flood Intelligence Tool	In use	Modelling/simulation systems	Alerts, monitoring and modelling – Flood Modelling Tool used to assess floodplain status based on constantly changing conditions and identify potential need to evacuate areas at threat of flooding.
Traffic Data Analysis	In use	Modelling/simulation systems	Traffic Control Planning tool – Traffic utilisation with [state transport agency] – traffic on particular streets – alerts on high use.
DA Fee Calculator	In use	Fully automated, rule-based system	Customer puts in key info and gives a breakdown of cost for DA – Application and Certificate fee calculator for the website – no payment processing.
Assess (ePlanning)	In use	Structured decision-making tool	Report writing tool – pulls in property, zoning, land attributes DCPLEP info into relevant section of Development Assessment report.
NSW Planning Portal	In use	Fully automated, rule-based system Structured decision-making tool	[State planning agency] mandated tool to use for lodgement of DA, CDC and related applications.
Parking meter management system	In use	Fully automated, rule-based system	List of current number plates through [vendor] Parking meter provider. List plates via zones and when they expire.
Fitness centre booking system	In use	Fully automated, rule-based system	[Name] fitness centre booking system, class availability shown based on existing bookings, book and confirms spot in available classes.
Parking system	In use	Fully automated, rule-based system	Currently ticketed parking based on time spent – auto payments – future parking sensors and related advice on availability of spaces published to website / app.
Pavement management system	In use	Automated data gathering system or sensor Anomaly detection	Asset – pavement management system – assess quality of road surface and alert for maintenance as need.
Parking system	In use	Automated data gathering system or sensor, Visual, audio or biometric processing	License Plate recognition and fees due calculation based on time – for vehicles using council parking lots (across multiple lots).
Plant Assessor	In use	Fully automated, rule-based system	Log pre assessment for plant and fleet – calculates need for servicing and if vehicles fit for use.
Grant management system	In use	Structured decision-making tool	Structured decision making to assess grants. Set up grant program, record submissions, assess them and award and manage grants.
Licence Plate Recognition	Being piloted	Visual, audio or biometric processing Anomaly detection	Provides drive-by regulatory enforcement of parking infringements where cars that have overstayed their allotted time are identified. The only part that is manual is checking for a disability permit, otherwise the infringement is fully automated.
Parking Permit Application Management	Planned in the next 3 years	Fully automated, rule-based system	To support decisions about issuing a parking permit based on eligibility criteria (connection to the property, connection to the vehicle) and the number of permits issued is based on rules around number of off-street parks and exemptions based on construction date of the dwelling.

ADM Name	Status	Technology	Description
Automated Planning Certificate (s10.7) Generation	In development	Fully automated, rule-based system	To automatically issue planning certificates for individual parcels of land based on eligibility to purchase the permit.
Rebate Eligibility Management for Sustainability Grants	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool	To check and ensure that rebates issued for our sustainability grants meet Council requirements for documentation – residents provide documentation and the system assesses eligibility.
Automated production of s.603 rates notices	In development	Fully automated, rule-based system	To automatically generate and issue a section 603 rates balance notice.
Bookings eligibility management	Planned in the next 3 years	Visual, audio or biometric processing Anomaly detection	To determine criteria for being able to book a community hall.
Beach Analytics – beach usage and crowding data	In use	Null	To count the number of people on a beach using camera analytics to aid in resource planning.
Sport Fields Sensors	In use	Automated data gathering system or sensor Optimisation tools	Council installed sports field sensors to measure soil conditions and control irrigation remotely to save water and ensure that the field is usable. Also linked this analytic information and made it available to public on Council website to help customers decide on their booking of the sport field
CCTV	In use	Visual, audio or biometric processing, Geo-location tool, Optimisation tools	Over 870 CCTV cameras installed across Council buildings and public areas to improve safety and reduce crime. The system is integrated with the local police and helped resolving some critical crimes promptly.
Number Plate recognition	In use	Fully automated, rule-based system Structured decision-making tool Visual, audio or biometric processing Geo-location tool Optimisation tools	Automated the penalty notices where installed at agreed locations. It was also installed on ranger vehicles for a short period of time.
People Count	In use	Fully automated, rule-based system Structured decision-making tool Optimisation tools	Used to feed data to property managers of shopping areas to decide on rent and property enhancements.
Integrated Online Booking	In use	Structured decision-making tool Optimisation tools	Customers can now book facilities online (availability, payment, access code, confirmation and receipt). This also includes checking the condition of the sports field prior to booking. Facility configuration can also be checked and extra equipment can be ticked.
Rates Notices	In use	Fully automated, rule-based system Optimisation tools	A complete online portal showing previous, current and future rate notices. Notifications, payments and confirmation all completed through an online portal.

ADM Name	Status	Technology	Description
Drones	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool Automated data gathering system or sensor Visual, audio or biometric processing Geo-location tool Modelling/simulation systems Optimisation tools Anomaly detection	Property maintenance are using it to assess the conditions of difficult to reach creeks, stormwater drainage and roofs for maintenance and repairs. Assessors would know exactly what need to be done and send the appropriate crew and equipment avoiding multiple visits. Photos and videos are much clearer without the need to plan for a hazard free assessment visit.
Kerb Collection	In use	Visual, audio or biometric processing Optimisation tools	Fully integrated online booking, collection, cameras and iPads installed on trucks, routes optimised, illegal materials identified by the cameras at the boot of the truck. The request is completed and closed on the spot.
Illegal dumping	In use	Automated data gathering system or sensor Visual, audio or biometric processing Optimisation tools	Mobile CCTV cameras installed at known locations of illegal dumping helped reducing these activities and court proceedings.
Facial/Crowd Analysis	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool Visual, audio or biometric processing Optimisation tools	Used mainly during festivals with active police monitoring.

1 metro council reported having no ADM systems as defined by the scope of this project.

Metropolitan Fringe councils (2 councils)

ADM Name	Status	Technology	Description
Robotic Process Automation	Being piloted	Fully automated, rule-based system Natural language processing	Automation of inbound emails for a select number of use cases being the creation, lodging and assignment of documents/tasks within Council's Electronic Document Management system. This has replaced the process of an employee opening, reviewing and lodging a document into the relevant folder in target system.
APIs	In use	Null	Currently developed and implemented 53 distinct API's automating a range of processes and data entry into various applications across Council.
eForms	In use	Null	Automation of workflows and approvals.
Endpoint detection & Response	In use	Null	Implemented the ability to automatically isolate devices where a security incident has been identified.
Identity Access Management	Planned in the next 3 years	Null	Automate the provision of access to systems, distribution lists as part of the onboarding and offboarding process and as an employee's role changes through the employee's employment lifecycle.
Privileged Access Management	Planned in the next 3 years	Null	The provision of privileged access for individuals for a duration required for the task at hand along with privileged access credential management to improve security over privileged accounts.
Chatbots for customer service	Planned in the next 3 years	Natural language processing	[Council] are in the early stages of consideration of how Chatbots could be used to automate customer interactions.
AI over dashcam footage for road condition assessment	Planned in the next 3 years	Risk assessment/ predictor/ profiling/ classifier tool	[Council] have seen this demonstrated by other Councils and vendors, and are in early stages of consideration for implementation at Council.
Rates self-service	Planned in the next 3 years	Fully automated, rule-based system	[Product] provides for customer self-service of their rates account with Council. It provides automation of the payment plan process by automatically calculating payments required to avoid interest charges, and automatically reminds the customer of payments due, without any staff interaction.
Generative AI	Planned in the next 3 years	Natural language processing	We're again in the early stages of consideration, but [product] will bring advanced AI capabilities to our everyday work.
Workflow tool	In use	Fully automated, rule-based system Recommender systems	Tool provides for workflows to be configured with automated decision making.
[Analytics and Automation] Platform	In use	Recommender systems	The [products] allow for information to be presented to inform decision making, and workflows to be configured based on those decisions.

1 metro fringe council reported having no ADM systems as defined by the scope of this project.

Regional Town/City councils (5 councils)

ADM Name	Status	Technology	Description
Car park management system	In use	Fully automated, rule-based system Automated data gathering system or sensor Visual, audio or biometric processing	[Product] is a fully automated car park management system. Customers book a car park stay online, and when arriving at the car park, their licence plate is read and entry to the car park is granted. On departure they simply drive towards the exit, their license plate is read and the vehicle is released. Under normal operations, the system requires no human intervention other than a person making an online booking, or a car park concierge attending to equipment malfunction or failure.
Town planning development assessment and compliance automation	Planned in the next 3 years	Fully automated, rule-based system Structured decision-making tool	[Product] reduces/removes administrative burden from town planning development assessment and compliance by automating these tasks.
eServices	In use	Fully automated, rule-based system	[Vendor] eServices provides customers with an automated way of applying for statutory certificates online. Certificates are ordered via a workflow that guides the user to the correct certificate and applicable fees, and delivers the application to a staff member who then is presented with the completed certificate for checking prior to issue to the customer (this final step can be omitted if desired).
Enterprise Resource Planning (ERP) system	In use	Optimisation tools	Council's ERP. Issues rates, processes applications, automates human processes to a certain degree.
Automation tool	In use	Automated data gathering system or sensor	Council's internet and intranet. Automates some council application processes, automates human processes.
Geospatial platform	In use	Modelling/simulation systems	Council's geospatial platform. Automates decision making using data.
Chatbot	In use	Natural language processing	Hosts a chatbot for automating contact centre transactions.
Bin Monitoring	Being piloted	Automated data gathering system or sensor	This system consists of a number of LoRaWAN sensors installed in bins around the [council]. The fill status of the bin is shown on a dashboard and will be used to target bin collections.
Bat Sensor	Being piloted	Null	This system uses computer vision to count bats in local nesting areas.
Water Meters	Planned in the next 3 years	Null	This system is used to collect water usage across various areas in the shire. The data collected will be used for billing and also to warn ratepayers of unexpected high flows from leaking taps or broken pipes etc.

ADM Name	Status	Technology	Description
Environmental and location data gathering systems to assist asset optimisation	In use	Automated data gathering system or sensor	<p>Council operates systems to gather data at locations within the local government area, which would otherwise be collected using manual methods such as inspection. These systems may be used in various scenarios to inform decisions about asset optimisation or service planning. For example:</p> <ul style="list-style-type: none"> • aerial lighter surveys provide images to look at beach dune regression which assists staff to consider decisions about asset maintenance and repairs or inform plans around climate adaptation. • a third party system tracks information about attendance at beaches and parks which assists in making a range of decisions across Council including servicing public amenities or identification of new facilities. • temporary sensors were recently installed in locations to inform development of urban heat strategies. • a camera trial is currently underway to determine usage of roads in one location to assist in determining road condition upgrades, the trial may be extended to other locations depending on outcomes. • consumption data is collected at facilities to make informed decisions such as whether to implement solar at Council owned and operated community facilities. <p>For water consumption data collected for a key local swim centre, determination of anomalies is currently manual and Council is looking at options to automate the anomaly detection. At present, these systems generally require manual analysis of the data once collected.</p>
Asset data gathering systems to assist resource allocation	Being piloted	Automated data gathering system or sensor	<p>Council has remote sensing devices in place for real time monitoring of Council's prescribed dams. Changes in levels have prescribed responses under dam management plans. The sensor triggers an alert to a responsible officer's mobile device. Council is currently trialling a product that automatically detects deterioration in the road pavements from a video capture, which would otherwise be collected via manual methods such as inspection.</p>
Smart beaches	In use	Automated data gathering system or sensor	<p>Council uses smart beaches technology to understand beach usage patterns and conditions to assist in service decisions such beach closures and services planning.</p>
Online decision assessment – tree pruning and removal	In use	Fully automated, rule-based system Structured decision-making tool	<p>Council has created online forms containing decision assessment tools which can be directly used by members of the public to return a decision on whether a formal application for tree pruning or removal within the local government area is required. This replaces an officer's advice on whether a formal application is required. The forms are based on question logic, and the related assumptions are set out in documentation for development of the form.</p>
Digital twin for modelling planning scenarios	Planned in the next 3 years	Modelling/simulation systems	<p>Council is involved in a project to prepare a digital twin, which will be designed to assist staff in modelling different scenarios regarding planning controls.</p>

ADM Name	Status	Technology	Description
Regulatory enforcement and fine decision tools	In development	Structured decision-making tool Automated data gathering system or sensor	Council has been developing a range of systems to assist in our regulatory enforcement and fine decisions including: <ul style="list-style-type: none"> • Licence Plate Recognition software for Ranger vehicles to electronically chalk vehicles and to issue penalty notices or cautions, identify stolen vehicles or vehicles that are out of registration. • Car parking sensors, to electronically chalk vehicles and then notify council officers of any vehicles that have overstayed the allotted time limit. • Administrative fine assessment tool to guide a decision around council policy and NSW legislation. • Automated fine mailing system called print and post. The system that is operated by an external provider posts fines to offenders automatically for council.
Visualisation of maintenance works to inform planning	In use	Other	Council has systems in place with some automated aspects to enable increased visualisation of data about work completed across the local government area (such as pothole repair). A system is used to link to Council's GIS system which includes enhanced visualisation options. This visual tool is manually reviewed at various stages in decision processes to consider resource allocation (for example if 60 potholes have been completed in a period, different options for road resurfacing and reconstruction programming at that location may be considered). The process for collecting this data includes processes for automated customer requests to be sent to field-based staff, who then undertake work and upload information manually into the systems.
Spatial information tool	In use	Structured decision-making tool Risk assessment/ predictor/ profiling/ classifier tool Automated data gathering system or sensor Visual, audio or biometric processing, Geo-location tool Recommender systems	[Product] is a package to create and modify spatial information that is used to determine certain criteria.
Information aggregation tool	In use	Null	Working in conjunction with [spatial information tool] this is an off-the-shelf system that groups information together that can help in the decision-making process (i.e. Planning, Environmental).

8 regional town/city councils reported having no ADM systems as defined by the scope of this project.

Large Rural councils

10 large rural councils reported having no ADM systems as defined by the scope of this project.

Rural councils

3 rural councils reported having no ADM systems as defined by the scope of this project.

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