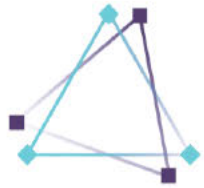
Australian Government | GovAI

ParliHelper

AI-driven Senate Estimate Summation

Department of Employment
and Workplace Relations



Executive Summary

Problem Faced

The Department of Employment and Workplace Relations (DEWR) faced significant challenges in reviewing and summarising the extensive material from Senate Estimates hearings. These hearings produce a large volume of Hansard transcripts and Questions on Notice, requiring analysts and policy professionals to spend hundreds of hours extracting key insights and responding appropriately.

Traditional review methods are resource-intensive and prone to human error, which limits the speed at which matters can be acted upon. Due to these inefficiencies, a better solution was required to streamline the process.

Solution Overview

ParliHelper is an AI-driven solution designed to streamline the summarisation of Senate Estimates discussions. It uses advanced natural language processing (NLP) and machine learning to process Hansard transcripts and live committee hearings.

Key features include:

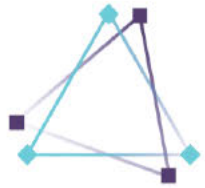
- Automated summarisation of Senate Estimates hearings
- Extraction of key insights

Benefits and Impact

ParliHelper has significantly accelerated the Senate Estimates transcription review process for DEWR. Benefits include:

- Saving an estimated 500 hours of effort by processing 128 hours of committee discussions in 22 minutes.
- Enabling policymakers to make informed decisions more quickly.
- Minimising errors and ensuring consistency across hearing summaries.
- Allowing employees to focus on higher-value tasks.

Additionally, the solution has the potential to be applied to other areas of government, enhancing general APS efficiency.



Target Audience and Stakeholders

ParliHelper is primarily used by policy analysts, researchers, and APS employees who rely on Senate Estimates summaries. Decision-makers, including ministers, advisors, and department heads, are likely to benefit from quick and accurate summaries for policy and legislative discussions.

The solution has been developed through engagements with various subject matter experts in the parliamentary services area.

Risks and Mitigation Overview

To manage cybersecurity risks, ParliHelper is developed and hosted inside of DEWR's existing cloud services framework, which includes several approval processes before a service is approved for production use.

To manage risk with input data, users are asked to only use publicly available data.

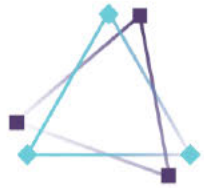
To manage risks with information produced, users must use pre-set, approved prompt/output configurations.

Use Case Status

Implemented

Use case timeline

- **Late 2023**: Developed in consultation with an external AI firm.
- **2024**: In production, used for DEWR Senate Estimate summaries.
- **2025**: Continuous improvement.



Additional Information

ParliHelper's recognition at the Australian Public Service Data Awards in 2024 highlights its significance as a transformative solution, demonstrating how AI can be leveraged to modernise traditional government functions while maintaining accuracy and integrity in public administration.

The team is now exploring ways to share ParliHelper with interested agencies, considering the challenges of support, maintenance, and security in a whole-of-government context.

Lessons Learned

Large language model outputs are non-deterministic by nature, but approaches can be taken to minimise the variability.

Users must be educated on 'human-in-the-loop', but a major enabler is making it easy for users to verify the output. Users are expected use subject matter expertise to verify the outputs based on estimates hearings.

Editable prompt/output configurations enable output flexibility; however, it is not sufficient to address all adjacent use cases.

Contact information

Responsible Entity Name

Department of Employment and Workplace Relations

Area of Entity

Platforms, Architecture and Cyber Branch,
Digital Solutions Division

Use Case Website/s

N/A

Open for Collaboration?

Yes! Feel free to talk to us.

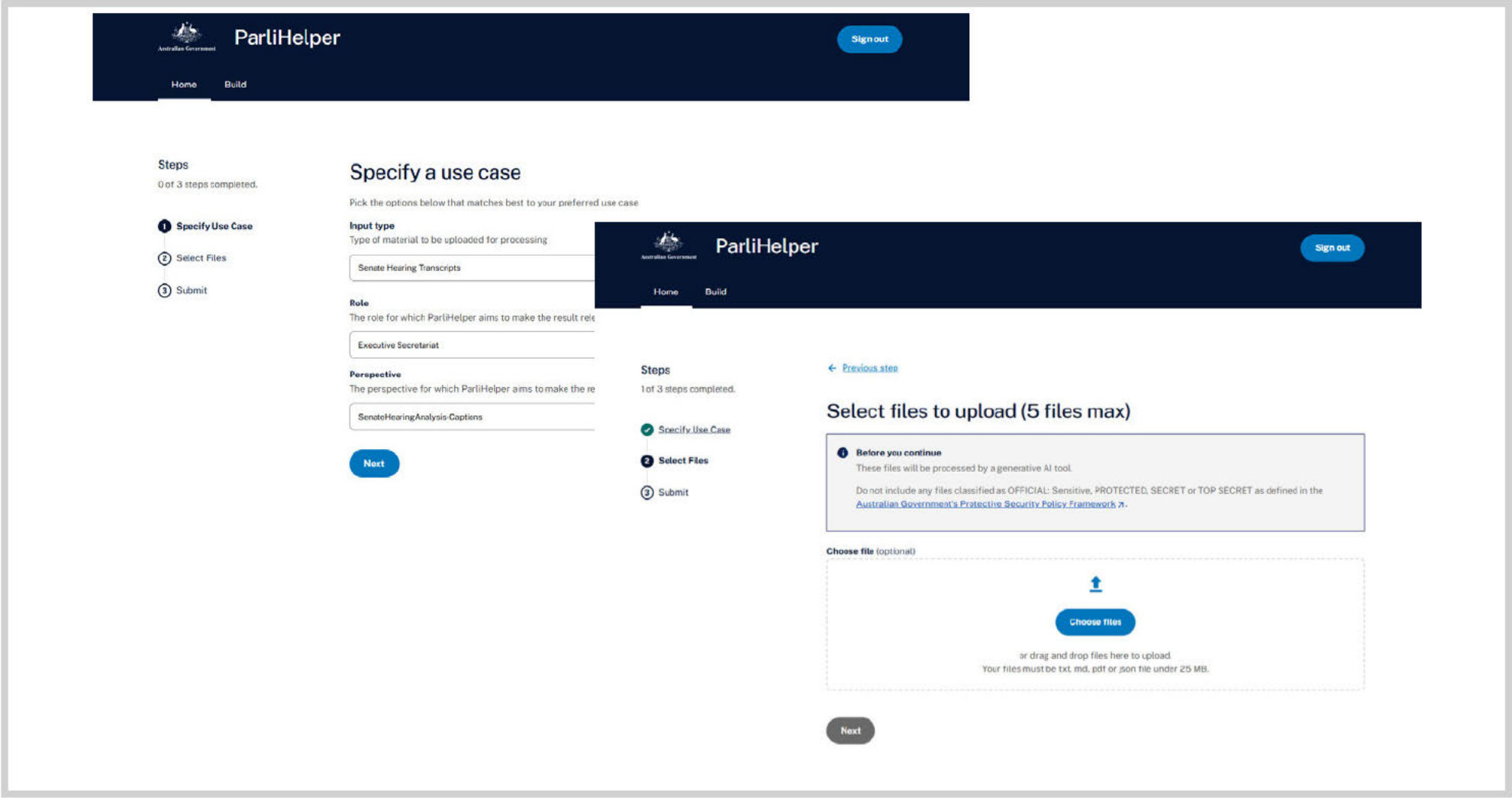
Use Case Contact

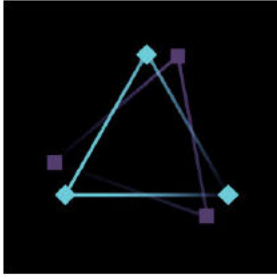
s 47E(d) [redacted]

Use Case Owner

s 22 [redacted]
Digital Delivery Capability Team
s 22 [redacted]@dewr.gov.au
s 47E(d) [redacted]

Screenshot/s





Detailed Overview

Version Control

Version	Date	Author	Description of Changes
1.0	3 Feb 2025	GovAI	Version 1 created
1.1	17 Mar 2025	GovAI	Modified based on feedback

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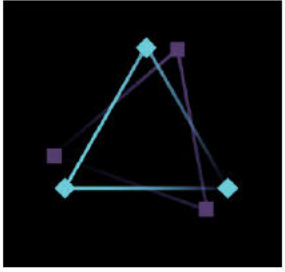
Note: For details about category items in the detailed overview, see *APS AI Use Case Repository Guidance- Guidance for Use Case Owners and Editors*.

Responsible Organisation Category

Select the Classification of the Functions of Government – Australia (COFOG-A) 3-digit category that best identifies the functional area associated with your AI use case.

☒ **01 - General Public Services**	015 - Basic research in public services
☐ **02 - Defence**	Choose an item.
☐ **03 - Public Order and Safety**	Choose an item.
☐ **04 - Economic Affairs**	Choose an item.
☐ **05 - Environmental Protection**	Choose an item.
☐ **06 - Housing and Community Amenities**	Choose an item.
☐ **07 - Health**	Choose an item.
☐ **08 - Recreation, Culture, and Religion**	Choose an item.
☐ **09 - Education**	Choose an item.
☐ **10 - Social Protection**	Choose an item.
☐ **11 - Transport**	Choose an item.

Scope of the Use Case



Use the dropdown menus below to identify the scope of your use case.

Geographical focus Choose the region for implementation from the dropdown list	National
Primary type of government interaction Choose the type of government interaction from the dropdown list	Government-to-government (G2G)
Cross-features - Sector Indicate if the use case describes a solution that can be used across sectors or in cross-sector scenarios (Yes/No).	Yes
Cross-features – Jurisdiction Indicate if the use case describes a solution that can be used across State/Federal borders or in cross-border scenarios (Yes/No)	Yes

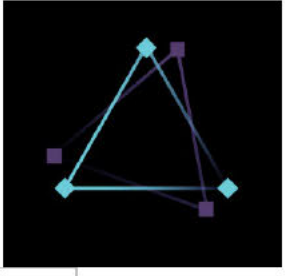
Ethical Considerations

Accuracy, Fairness, Accessibility, Bias and Discrimination	• Checking output against input data • Seeking feedback from users • Adjusting prompt configs based on feedback
Privacy	Personal data is collected only as part of the authorisation and authentication process when using the system
Rights of Users	User guide and the onboarding process will inform users of their right, as well as who to contact to provide feedback.

Value of the Use Case

Identify the public value that the solution provides or is expected to provide. Select from the multi-select options.

Improved public service This category refers to solutions that enhance the services provided to end	☐ Personalised services ☐ Public (citizen)-centred services ☐ Increased quality of public information and services

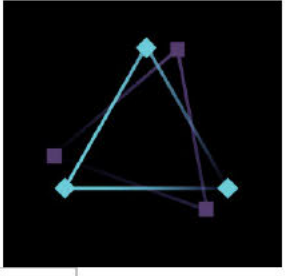


users, whether they are citizens or businesses.	☒ More responsive, efficient and cost-effective public services ☐ New services or channels
Improved administrative efficiency This category refers to solutions that increase efficiency, effectiveness, and quality while reducing costs within administrative processes, systems, and services.	☒ Cost reduction ☒ Responsiveness of government operation ☒ Improved management of public resources ☐ Increased quality of processes and systems ☐ Better collaboration and better communication ☐ Reduced risk of corruption and abuse of the law by public servants ☐ Greater fairness, honesty and equality enabled
Open government capabilities This category refers to solutions that enhance the level of openness, transparency, engagement, and communication within public organisations.	☐ Increased transparency of public sector operations ☐ Increased public participation in government actions and policymaking ☐ Improved public control of and influence on government actions and policies

AI Process Type

Select the types of tasks within government operations that the AI solution is performing or expected to perform

Supporting Decision Making- Tasks that support formal or informal agency decision-making on benefits or rights.	☐ Taking decisions on benefits ☐ Managing copyright and intellectual property rights
Analysis, monitoring and regulatory research - Tasks that collect or analyse information that shapes agency policymaking.	☒ Information analysis processes ☐ Monitoring policy implementation ☐ Innovating public policy ☐ Prediction and planning
Enforcement - Tasks that identify or prioritise targets of agency enforcement action.	☐ Smart recognition processes ☐ Management of auditing and logging ☐ Predictive enforcement processes ☐ Supporting inspection processes ☐ Improving cybersecurity

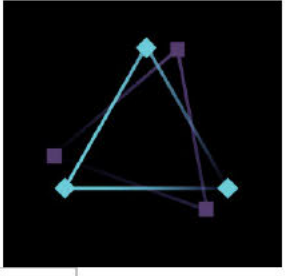


	☐ Registration and data notarisation processes ☐ Certification and validation processes
Internal management – Tasks that support agency management of resources, including employee management, procurement, and maintenance of technology systems.	☐ Internal primary processes ☒ Internal support processes ☐ Internal management processes ☐ Procurement management ☐ Financial management and support
Public services and engagement – Tasks that support the direct provision of services to the public or facilitate communication with the public for regulatory or other purposes.	☐ Engagement management ☐ Data-sharing management ☐ Governance and voting ☐ Payments and international transactions ☐ Supporting disintermediation ☐ Authentication of self-sovereign digital ID services ☐ Service integration ☐ Service personalisation ☐ Tracking of goods and assets along the supply chain

AI Technologies Utilised

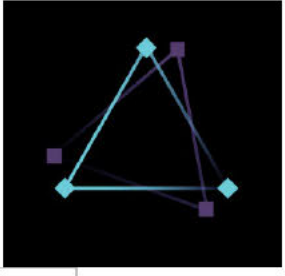
Select the types of AI technologies proposed / utilised to deliver the use case.

Reasoning or Knowledge Representation AI systems that store, structure, and process knowledge to make inferences, derive conclusions, or support decision-making.	☐ Knowledge Representation ☐ Automated Reasoning ☐ Commonsense Reasoning
Planning and Optimisation AI techniques that generate, refine, and optimise action sequences or resource allocation to achieve specific goals efficiently.	☐ Planning and Scheduling ☐ Searching ☐ Optimisation
Learning and Adaptation	☐ Machine Learning ☐ Deep Learning

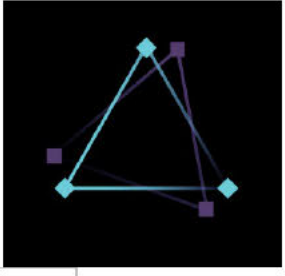


AI systems that identify patterns, extract insights, and improve performance over time based on data.	☒ Generative AI
Communication and Natural Language Processing AI systems that process, interpret, and generate human language for interaction, comprehension, and automation.	☒ Natural Language Processing (NLP) ☐ Text Generation ☐ Text Mining ☐ Machine Translation
Perception through the Senses AI systems that process and interpret sensory data, such as visual, auditory, or tactile inputs, to understand and respond to their environment.	☐ Computer Vision ☐ Audio Processing
Integration and Interaction with the Environment AI systems that interact with physical or digital environments, including autonomous agents, robotics, and interconnected systems.	☐ Multi-agent Systems ☐ Robotics and Automation ☐ Connected and Automated Vehicles (CAVs)
AI as a Service AI capabilities delivered through cloud-based platforms, offering tools, models, and infrastructure for AI-powered applications.	☒ AI Services (e.g., cognitive computing, machine learning frameworks, bots) ☐ Infrastructure as a Service (IaaS) ☒ Platform as a Service (PaaS) ☐ Software as a Service (SaaS)
Additional Comments or Explanation:	Azure OpenAI used with supporting PaaS.

Technical Elements



Platform implementation	• Hosted on Microsoft Azure • Utilises Microsoft Azure services • Azure Active Directory B2C for identity service	
Model / Algorithm used	GPT-40	
Data Sources Select the types of data sources used and provide relevant details.	☐ Internal ☒ Public	☐ Third-party ☐ Synthetic
	Details: Senate hearing transcripts, Hansard	
Risk Assessment and Mitigation Details	More details can be provided upon request.	
Security and Compliance Frameworks Select the security and compliance frameworks and measures implemented. Provide details or additional artifacts if relevant.	☒ Authority to Operate (ATO) ☒ System Security Plan (SSP) ☒ Security Risk Management Plan (SRMP)	☐ Information Security Registered Assessors Program (IRAP) ☒ Penetration Testing
	Details: The underlying Microsoft Azure cloud platform that ParliHelper is developed and hosted in has completed an IRAP assessment.	
Assurance and Government Frameworks	DTA AI Assurance Framework	
Record maintenance	A range of documentation and artefacts have been generated through the development of the application support, the design, and approvals of the system and its use. In an operational sense, guidance and logging will apply to support record management and appropriate use purposes in line with information management protocols.	
Disengagement	ParliHelper is built as a self-service system, therefore if an issue is realised, users can disengage by discontinuing use of the system. Furthermore, the users are asked to provide feedback, and the system owner will	



	support and facilitate issue investigation and resolution.
Performance Metrics and Results	• Turnaround time for generate output • Quality of the generated output • Time saved for end users