IT Governance for Emerging Digital Technologies – AI & Cognitive Bias

Project Overview

This project was developed for the Victorian Government to address shortcomings in ICT governance and prepare for the integration of artificial intelligence (AI) systems into public sector operations. The initiative focused on how cognitive biases undermine ICT project performance and how governance frameworks and debiasing techniques can ensure ethical, transparent, and efficient adoption of AI technologies.

Scenario

The Victorian Government has struggled with repeated ICT project failures, with delays and cost overruns often linked to poor governance and decision-making behaviour. Concerns were also raised about the ICT Dashboard's effectiveness as a governance tool. With AI systems expected to become central to government operations, Commissioners sought guidance on how to improve governance frameworks while managing decision-making biases.

Solution Proposed

- Identified key cognitive biases (optimism bias, planning fallacy, anchoring bias) that affect ICT projects.
- Recommended debiasing techniques including contingency planning, reference class forecasting, and flexible project reassessment.
- Applied international and national frameworks for AI governance to ensure ethical deployment.
- Proposed governance reforms to enhance accountability, transparency, and resilience of public ICT projects.

Frameworks Applied

- ISO/IEC 38507:2022 – Governance of AI in organizations.
- Australian National Framework for AI Assurance (2024).
- Cognitive Bias and Debiasing Models – Optimism Bias, Planning Fallacy, Anchoring Bias.

Skills Demonstrated

- IT Governance and Risk Management.
- Cognitive Bias Analysis and Mitigation.
- Application of AI Governance Frameworks (ISO/IEC 38507, AI Assurance).
- Public Sector ICT Reform and Policy Recommendations.
- Strategic and Professional Reporting.