## The Problem Statement

## Why it matters

Framing the problem clearly is the foundation of any successful AI use case.

Solutions must deliver better outcomes for people and communities, support economic growth and innovation, and maintain public trust. An effective problem statement ensures:

* The AI system addresses a real-world need, and have a significant potential impact.
* The focus remains on delivering equitable, efficient, and transparent services.
* Opportunities for innovation and system improvement are captured alongside the resolution of harm or inefficiency.
* Government investments contribute to gains in wellbeing, economic growth and productivity.

A poorly framed problem risks wasted effort, public harm, and erosion of trust.

## How to frame the Problem Statement

When preparing the Problem Statement, teams can consider the following:

* Describe the real-world issue or missed opportunity: What is happening now that creates harm, inequity, inefficiency, or lost opportunity for better public outcomes?
* Identify who is affected: Which of our people, groups of people or sectors are impacted? Are there particular impacts on Māori, Pacific peoples, disabled people, or other communities who experience inequities?
* Quantify the impact (where possible): Use evidence, data, case studies, service records, to describe the scale and urgency of the problem.
* Explain why solving this matters: Link the problem to wider public service objectives on fairness, efficiency, service excellence, economic development, or innovation.
* Outline the risks of inaction: Clarify what will happen if the problem is not addressed, e.g., impact on affected communities or system performance.

## Example of a Strong Problem Statement

Problem: Processing building consents across councils is slow, inconsistent, and error prone. The average processing time exceeds 30 working days, and document verification errors delay projects significantly.

Impact:

* An estimated $200 million in annual productivity is lost in the construction sector.
* Innovation in building technologies is slowed by outdated processing systems.
* Public trust is undermined when applicants experience inequitable or confusing outcomes.

Public Value: Improving the speed and consistency of building consent processing would support fairer access, boost sector productivity, and enable innovation, while maintaining strong public safety and quality standards.

## Example of a Poor Problem Statement

**Problem:** We would like to use AI to automate document scanning.

Why this is poor:

* + It focuses on a technology, not a problem.
  + It fails to link to public outcomes or user needs.
  + It does not identify who benefits or how value is created.

**Common Traps**

* Starting with an AI system, not a need: Avoid proposing AI before the problem is clearly understood.
* Focusing only on bespoke internal agency processes: Frame the problem from a user, citizen, or economic perspective, not just isolated and minimal internal operational efficiency.
* Ignoring innovation opportunities: AI should not only fix broken processes. It should also create new value, support smarter systems, and enable better outcomes.

**Tip:** Frame the opportunity as well as the problem. Strong AI use cases show how solving the problem will improve lives, lift economic growth and productivity, and help Aotearoa New Zealand build a future-ready public service.

## Summary Checklist

1. Question: What is the real-world issue or missed opportunity?

Purpose: Anchors the project in public value

1. Question: How does it align with your organisation’s strategic priorities to create value?

Purpose: Helps identify if this is a good use case for you

1. Question: Who is affected and how?

Purpose: Centres people and communities

1. Question: How big is the problem?

Purpose: Provides urgency and evidence

1. Question: How will we ensure the system is safe and secure?

Purpose: Ensures necessary security checkpoints (including procurement processes) are considered

1. Question: Why does solving it matter?

Purpose: Links to service quality, trust, and economic growth

1. Question: What happens if we do nothing?

Purpose: Strengthens the case for investment