TORONTO PARKING AUTHORITY

# AI-Powered Transformation

**Strategic Roadmap for Competitive Advantage**

Scott Collier, President
Toronto Parking Authority Board of Directors
October 16, 2025

# Agenda

1. Introduction

2. Artificial Intelligence Overview

3. Our Approach to Developing an AI Strategy

# Development of AI strategy is grounded in our ERM priorities

| # | Key Risks | 2025 Residual Risk | 2024 Residual Risk |
|---|---|---|---|
| 1 | Change in the City's Direction | 20 | 20 |
| 2 | Cyber Security | 15 | 15 |
| 3 | Parking Equipment / Technology Management | 15 | 10 |
| 4 | Corporate Culture | 12 | 12 |
| 5 | Brand Value and Equity | 12 | |
| 6 | Aging Parking Infrastructure | 12 | 12 |
| 7 | Partnerships & Collaborations | 12 | |
| 8 | AI Strategy & Governance | 12 | |
| 9 | Security / Vandalism / Theft | 12 | 12 |
| 10 | TPA Parking Inventory Availability/Assets | 10 | |
| 11 | Talent Attraction, Retention & Succession | 9 | 9 |
| N/A | Financial Sustainability | | 20 |
| N/A | Outdated IT Infrastructure & Systems | | 9 |
| N/A | Data Ownership | | 6 |
| N/A | Internal Scalability | | 6 |

**Legend:**
Green Text = New key risks in 2025
Red Text = Removed key risks from 2024

## Key Highlights

**New key risks in 2025**

Brand Value and Equity
- There is an increased focus in developing, protecting, and marketing our brand to help grow the existing customer base and build new opportunities

Partnerships & Collaboration
- Strategic partnerships are critical to driving TPA's growth, TNG Bank partnership with BST has been successful and financially beneficial, and there is potential shareholder support for TPA to enter into a public-private partnership to build out the City-wide EV network

AI Strategy and Governance
- There is an opportunity for TPA to accelerate the adoption of AI to increase competitiveness and be at the forefront / lead AI from a Government-entity perspective. However, there is a lack of understanding of AI application and governance which may result in greater impacts in the mid-term

TPA Parking Inventory Availability/Assets
- There are shifting City priorities away from parking (e.g., housing, parks, CaféTO, cycling, etc.) while a strategic city-wide approach to parking remains in flux

**Removed key risks from 2024**

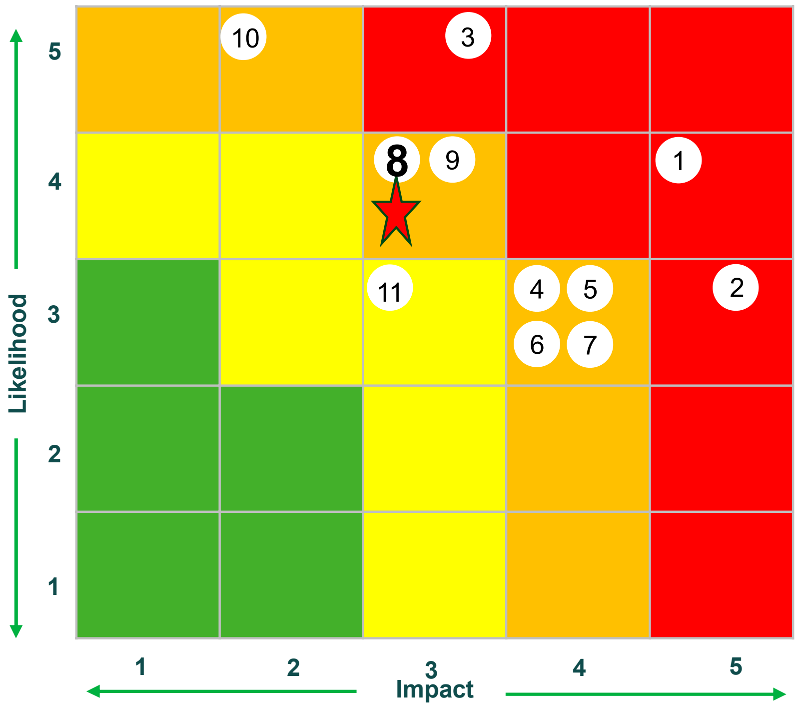
Financial Sustainability
- There is a new income-sharing agreement

Outdated IT Infrastructure & Systems
- There have been a number of upgrades / replacements of legacy applications

Data Ownership
- There have been initiatives providing greater access to data

Internal Scalability
- This is an outcome of other risks (e.g., outdated IT infrastructure & systems)

# AI strategy and governance has emerged as a major risk priority

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**Legend:**
Green Text = New key risks in 2025
Red Text = Removed key risks from 2024
------► = Change in residual risk rating

# Why are we here...

1. AI Strategy is an emerging risk because there is a lack of organizational literacy including concerns about oversight and ‘shadow AI’, which may lead to unintended consequences.

2. AI brings opportunities for the TPA to leverage Artificial Intelligence to drive productivity, value-creation and competitive advantages in the marketplace.

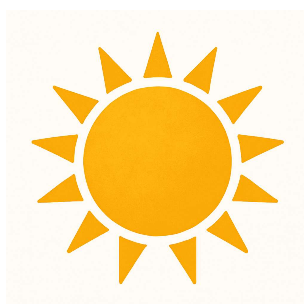
3. In partnership with the City of Toronto, our priority is to establish a framework and strategy to ensure the disciplined and thoughtful deployment of AI across the organization.

# Artificial Intelligence Overview

# Artificial Intelligence

**Definition**

**Artificial means something made by humans, that is not found in nature.
It is created to imitate, replace, or improve what nature provides.**



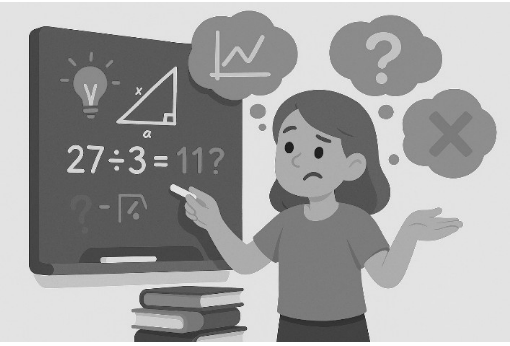
Example 1:
**Sunlight (Natural)**

Example 2:
**Lightbulb (Artificial)**

# Artificial Intelligence

Definition

**Intelligence is the ability to perceive, comprehend, and learn from information in order to make good decisions.**




Example 1:
**Guessing answers at random (nonrational)**


Example 2:
**Solving a math problem correctly (Intelligence)**

# Artificial htelligence

**Definition**

**Artificial Intelligence (AI) is human-made software that can perceive, comprehend, and make decisions like we do.**

Example 1:
**Human Intelligence**

Example 2:
**Artificial Intelligence**

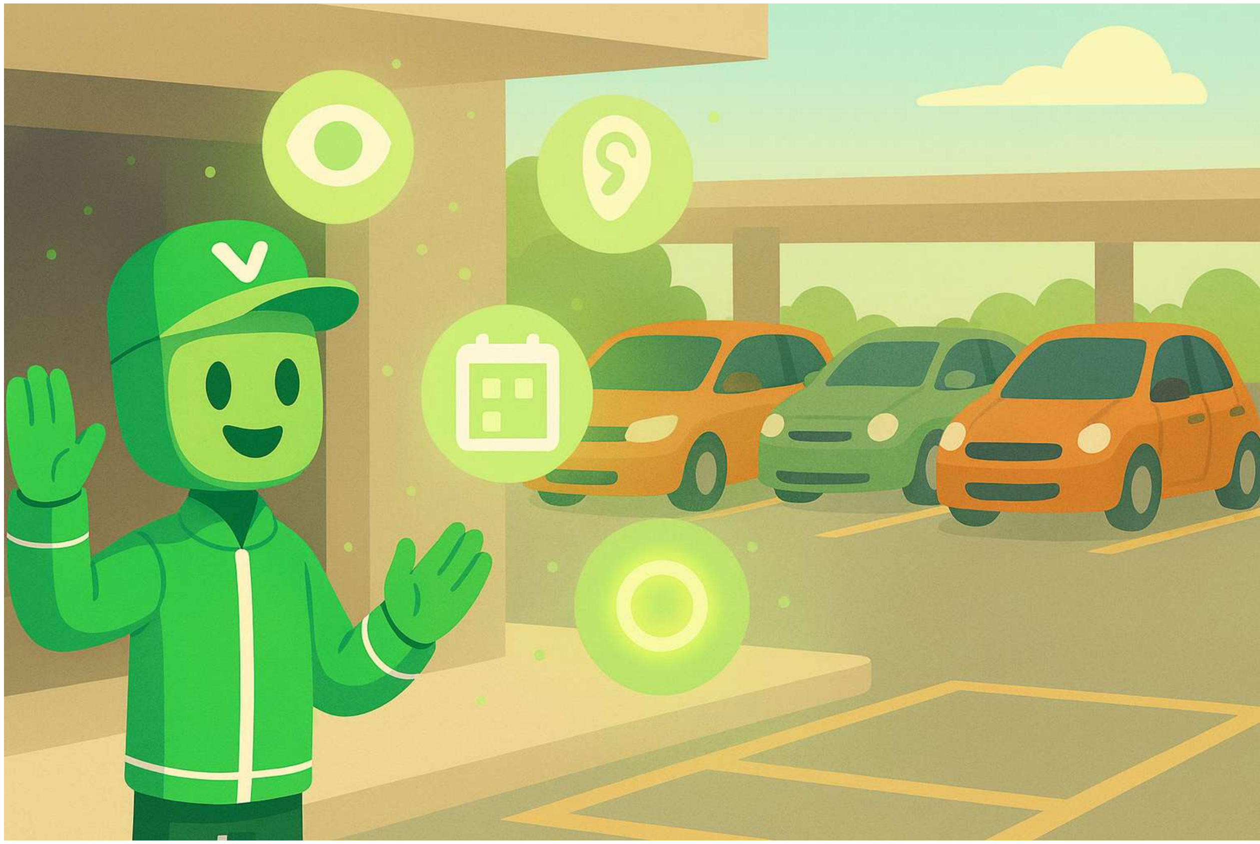
# AI Senses

**AI has digital senses, just like us, and just like a valet**

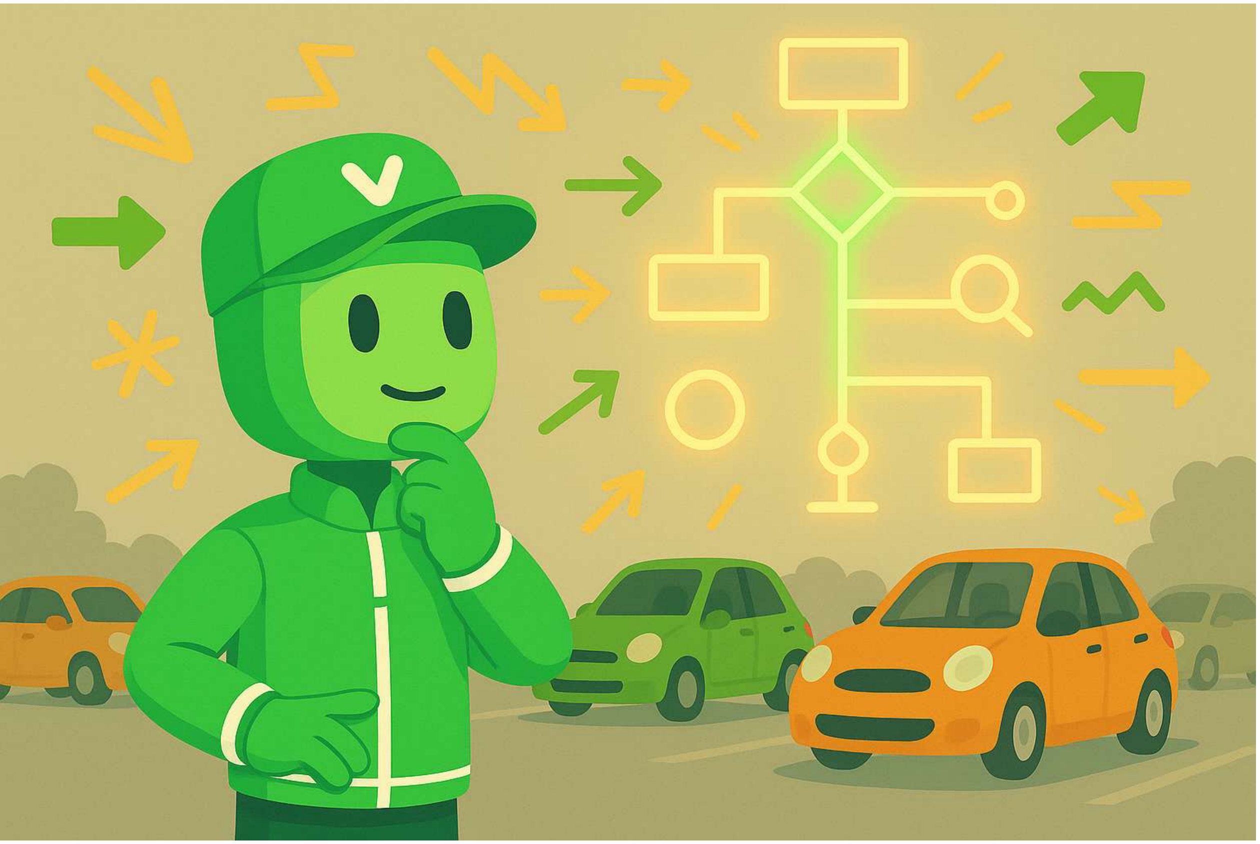
- **Sees** → cameras, license plate readers, satellite/partner feeds
- **Hears** → customer inputs, app requests, voice
- **Feels** → sensors (space occupancy, curb activity, EV charger status).
- **Remembers** → arrival patterns, dwell times, payment history.

**Key Takeaway #1**

AI gathers data from many sources.



# AI Decides



**AI decides with rules & learning, just like a valet choosing the best spot**

- **Processes** streams of sensor data in real time
- **Uses algorithms** to weigh options (closest, right-fit space)
- **Learns** from past patterns to improve decisions
- **Balances goals** such as revenue, fairness, convenience

**Key Takeaway #2**

AI applies logic and learning to choose the best action.

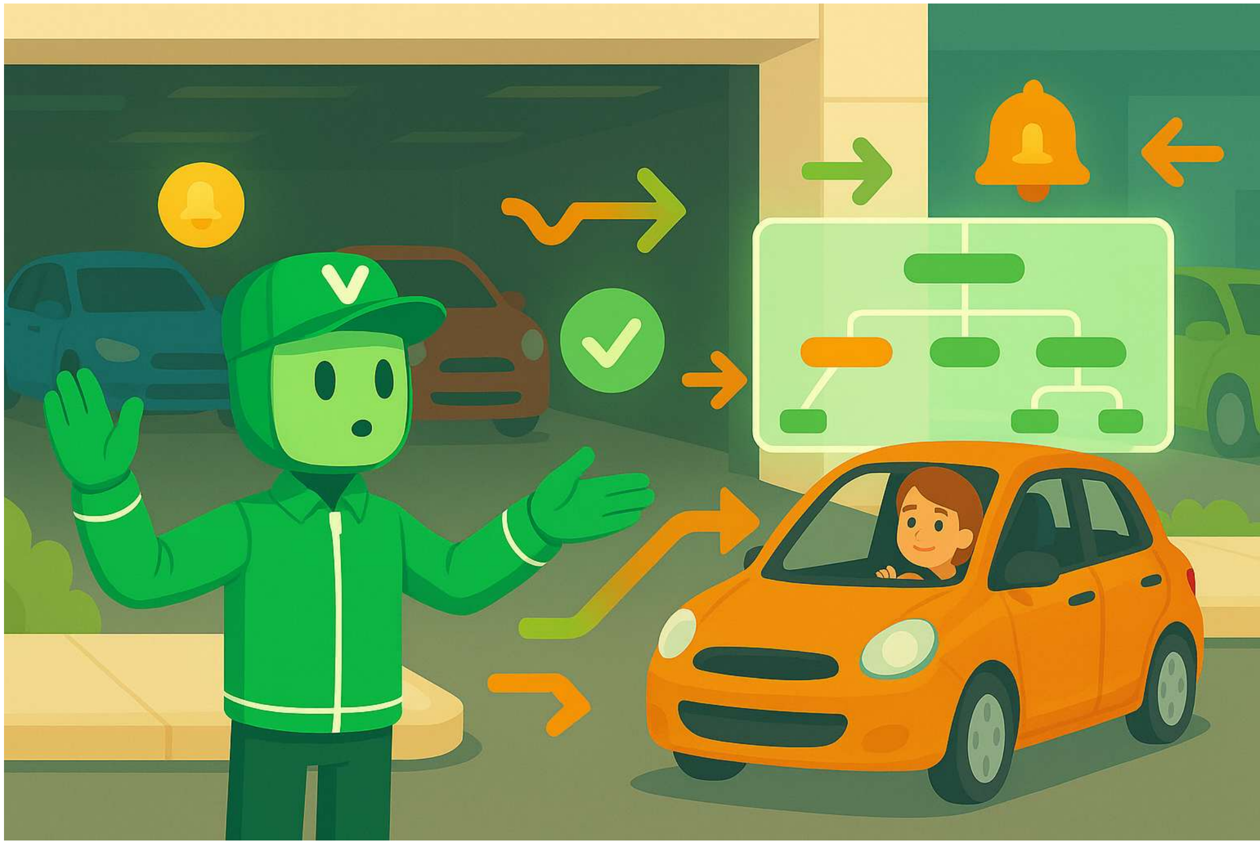
# AI Acts

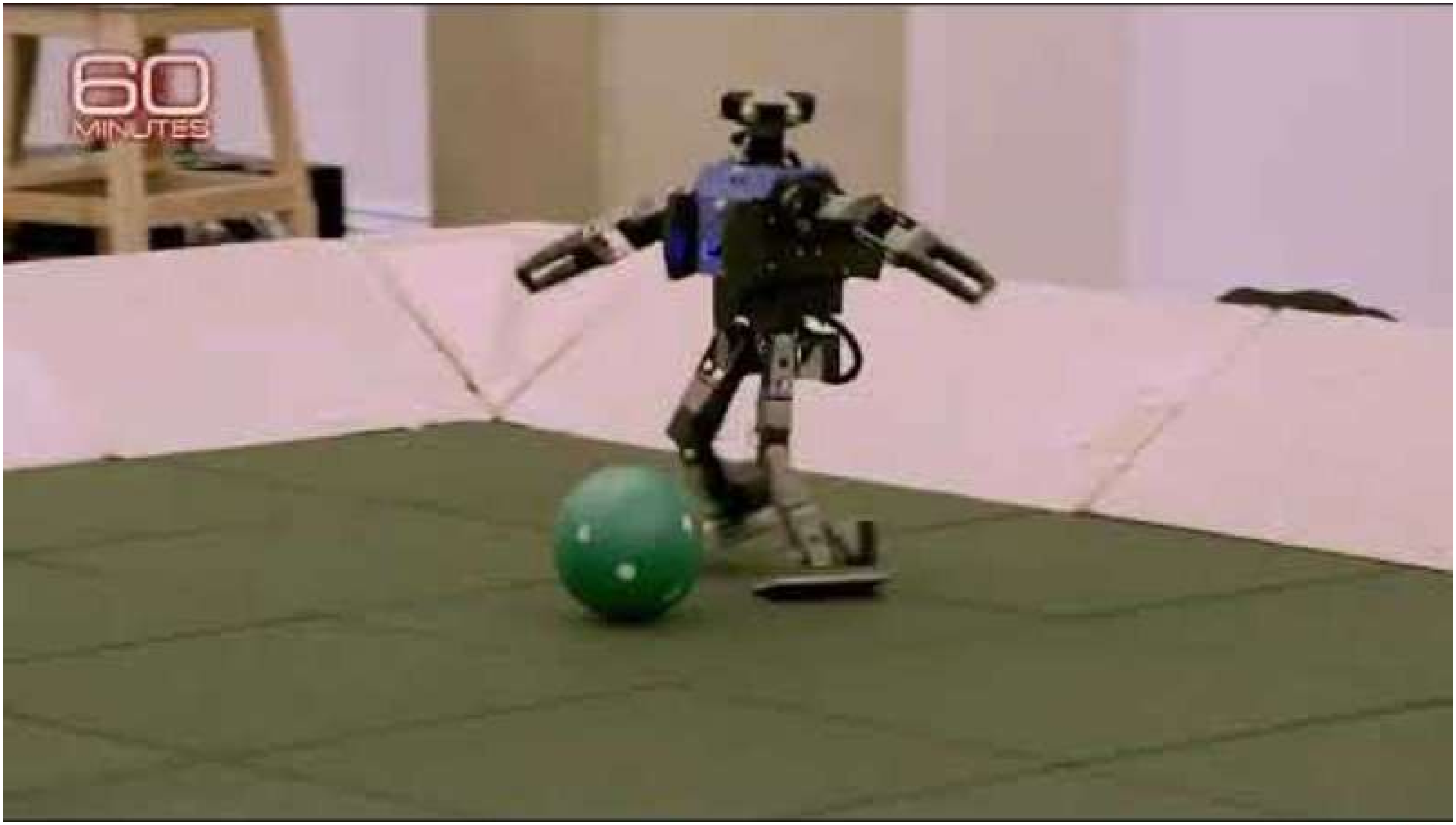
**AI acts instantly and at scale. Like dozens of valets at once**

- **Guides drivers:** navigation arrows to open space.
- **Automates billing:** session starts/stops seamlessly.
- **Sends nudges:** reminders before violations.
- **Triggers enforcement:** alerts when rules are broken.

**Key Takeaway #3**

AI turns decisions into real-world actions automatically.




60
MINUTES

# Action Plan

# Strong AI governance ensures Artificial Intelligence deliver measurable returns without compromising trust, values or compliance

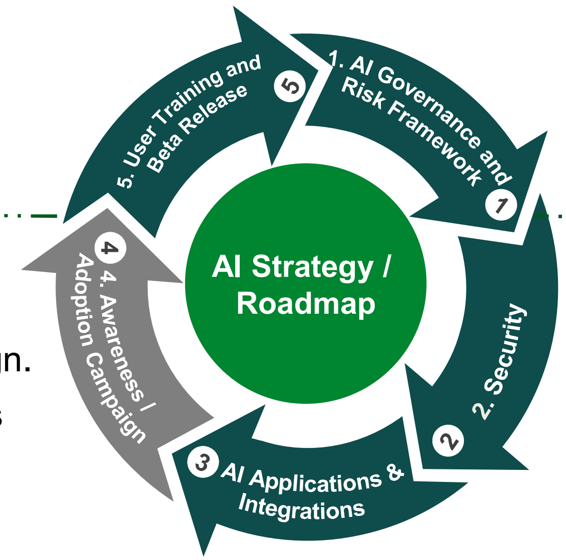
### Step 1
- AI Governance and Risk Framework.
- Establish Key Principles.
- Emphasis on scalable policies, controls, and oversight.

### Step 2
- Ensuring responsible and compliant AI adoption.
- Security.

### Step 3
- AI Applications & Integrations.
- Includes prioritized use cases and implementation roadmap.

### Step 4
- Awareness / Adoption Campaign.
- Drives organizational readiness through education and training.

### Step 5
- Beta Release.
- Accelerates user adoption and maximizes value.



# Our roadmap to developing AI Strategy

| OCT - NOV | | NOV-DEC | JAN - MAR |
|---|---|---|---|
| **Assess** | | **Equip** | **Align** |
| **October 2025** | **November 2025** | **December 2025** | **March 2026** |
| Complete AI awareness survey. | Conduct interviews to gauge AI awareness. | Participate in Executive & Board workshops. | Final presentation of findings, roadmap and next steps |
| **5 – 10 minutes** | **1 – 2 hours** | **Half Day (3 to 4 hours)** | **1 – 2 hours** |

# Our roadmap

| Q1&Q2 2026 | Q3&Q4 2026 | 2027> |
|---|---|---|
| **Short Term** | **Medium Term** | **Long Term** |

**A. Governance & Policy**
Build trust and set rules before launching

**B. Data Architecture**
Make sure the foundation is in place.

**C. Intelligence Setup**
Turn data into smart decisions.

**D. Proof of Concept**
Test in a small, controlled area before going citywide.

**E. Evaluation & Scaling**
Assess outcome and how to expand.

**F. Continuous Governance**
Keep the system fair, safe, and effective long-term.

**Centralized Activities**

**1. Finalize AI Governance & Policies**
Centralized framework that is universal across use cases internally and externally, including standing up of AI governance body and updates to policies.

**2. Develop Data & AI Strategy**
Identify, prioritize and map shortlisted use cases to applicable data sources, ensuring datapoints are accessible and available

**3. Procure, Enable, & Integrate AI Applications**
Conduct vendor selection, complete hardware purchase orders, and integrate new AI capabilities with TPA environments.

**4. Launch Pilot Projects for Key Use Cases**
Develop, configure, and implement AI for shortlisted use cases

**5. Measure KPI's against benchmarks & Refine**
Use feedback to improve accuracy, fairness, and reliability

**6. Ongoing Review & Update Mechanisms**
Regular audits, stakeholder feedback loops, and policy refresh cycles.

Use Case 1 Off The Shelf Solution *(New Hardware Required)*

Use Case 2 Off The Shelf Solution *(New Licenses required)*

Use Case 3 Custom Development *(Leverage existing technology)*

# Thank you!