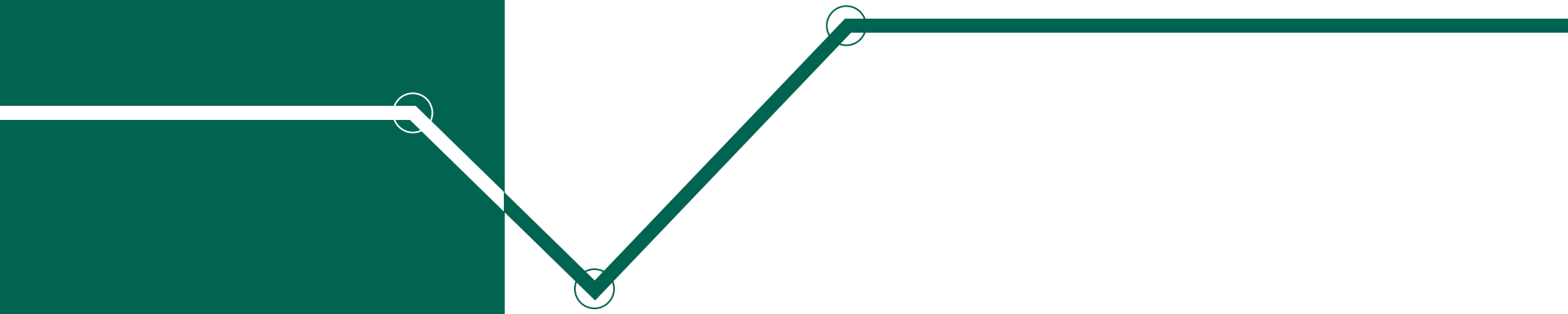
ARTIFICIAL INTELLIGENCE APPLICATIONS & CONSIDERATIONS FOR MUNICIPAL FINANCE PROFESSIONALS

Exploring AI use cases and strategies for public sector

October 14th, 2026



PRIVATE & CONFIDENTIAL

Citizens Treasury AI Team



Andrew Bates

Treasury Relationship Associate & AI Strategist

Citizens®

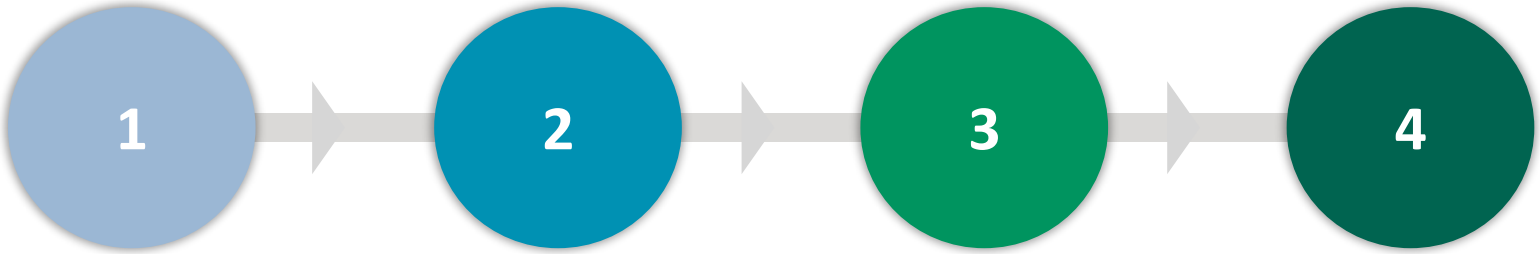
INTERACTIVE ENGAGEMENT



PRIVATE & CONFIDENTIAL

Raise your hand if you…

Raise it for every statement that applies. Keep it up as we move from left to right.



HAVE TRIED AI

HAVE USED AI AT WORK

USE AI DAILY

ARE AN AI EXPERT

Agenda

Meeting program

1. Understanding Artificial Intelligence
2. AI Adoption
3. Effective Utilization of AI — Demo
4. AI Use Cases in Financial Services
5. Government & Tax Collections AI Applications — Demo
6. Future Directions of AI
7. AI Safety & Security

1

UNDERSTANDING ARTIFICIAL INTELLIGENCE

Artificial Intelligence, Simply Explained

Artificial intelligence, or AI, combines computer hardware, software, and data to **mimic human cognition**.

1 → 2 → 3

EXAMPLES

Words, pictures, and numbers

LEARN PATTERNS

AI notices what often goes together

HELP WITH A TASK

Answers, predictions, or new content

voice assistants | recommendations | translation | writing tools

Defining AI and Comparison with Google

- The ability of a computer or machine to perform tasks that normally require human intelligence, such as thinking, learning, problem-solving, or understanding language.



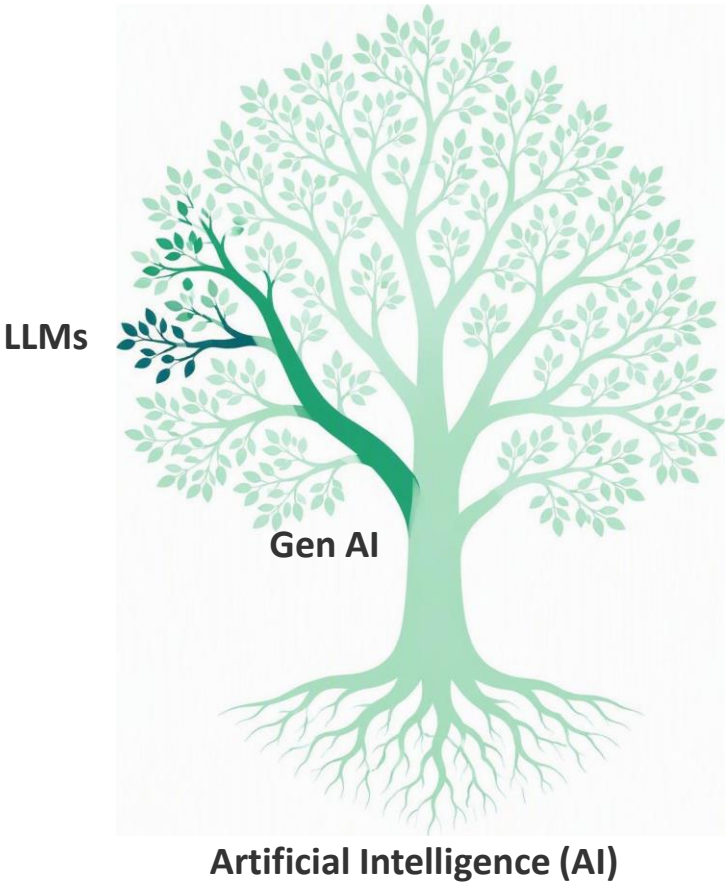
ChatGPT & Claude

Artificial Intelligence is like a tutor that can explain, summarize, and generate new ideas.

Google

A search engine or the internet is like a library catalog. Showing you where information exists.

AI, Generative AI, and LLMs: How They Relate



Artificial Intelligence (AI)

Artificial Intelligence refers to the development of systems that can perform tasks typically requiring human intelligence, such as reasoning, learning, and problem-solving.

Generative AI

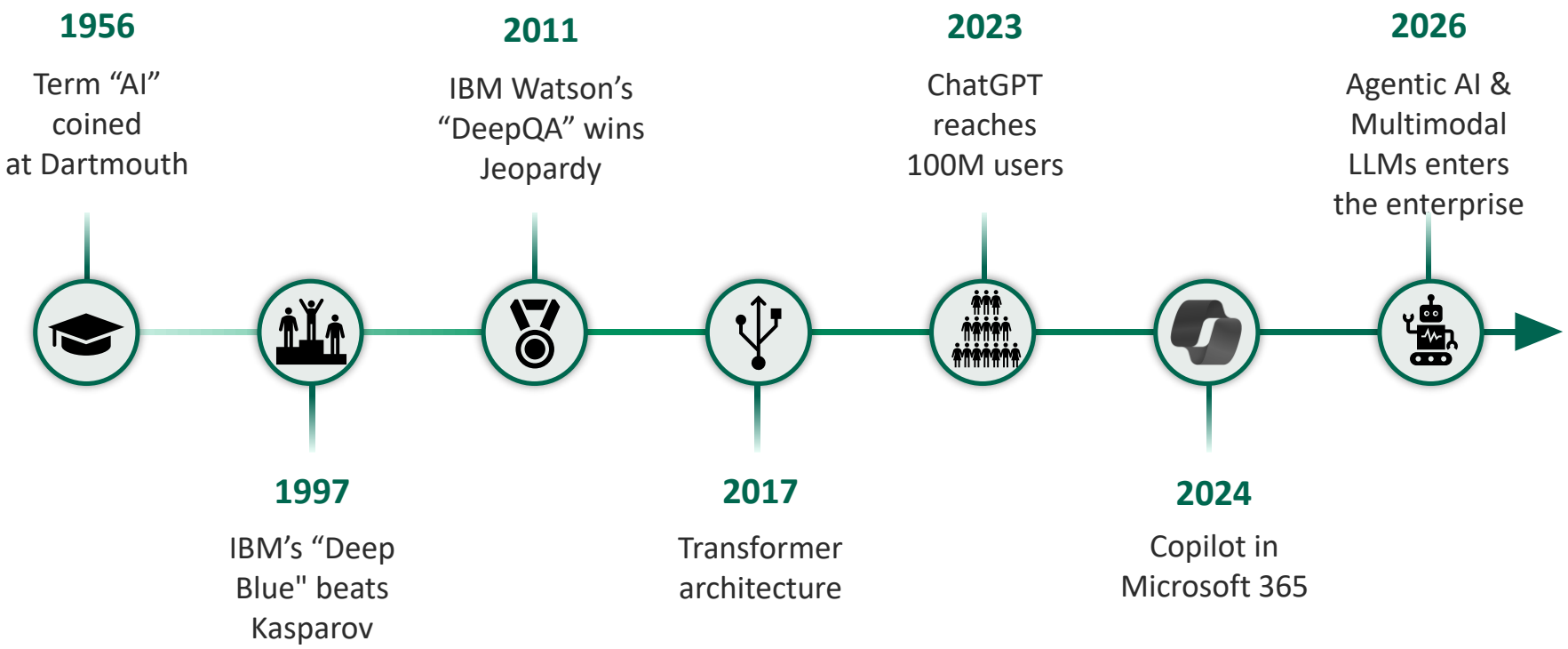
Generative AI (Gen AI) is the next phase in the evolution of AI and describes models (such as GPT, Copilot, and Llama) that can be used to create new content, including audio, code, images, text, simulations and videos based on patterns learned from existing data, prompted by user input.

Large Language Models (LLMs)

Neural networks known as large language models work by forecasting word sequences. Large language models' capabilities are evolving with additional training from frontier labs. They can now hold dialogues, write prose, and scrutinize enormous text quantities from the internet.

1) Glossary of Terms: Generative AI Basics - MIT Sloan Teaching & Learning Technologies , AI Glossary/Dictionary — MIT Media Lab

How Did We Get Here?



1) Artificial Intelligence (AI) Coined at Dartmouth | Dartmouth , Deep Blue | IBM , Watson, Jeopardy! champion | IBM , Transformer (deep learning) – Wikipedia , How ChatGPT Got 100 Million Users in 60 Days With Zero Ads (Marketing Strategy Revealed) | Marketingino.com , Microsoft Copilot – Wikipedia , 7 Agentic AI Trends to Watch in 2026 - MachineLearningMastery.com

How a Transformer Works

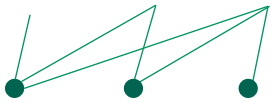
How a modern GenAI model turns text into context – the predicts what comes next

1. Input Text	2. Tokenize	3. Embed + position	4. Self-attention, repeated many times	5. Predict the next token
• Raw text goes in as a sequence	• Split into tokens – the models units • The cat sat on the	• Tokens become vectors (numbers)	• Each token weighs every other token in its context; stacking layers builds deeper context	• Estimate the probability of possible next tokens

"The cat sat on the…"

The | cat | sat | on | the





… *on the* →

mat	62%
rug	14%
bed	9%
hat	5%

"The cat sat on the mat"

- Transformers predict one token at a time, but each prediction uses context from the whole sequence

2

AI ADOPTION

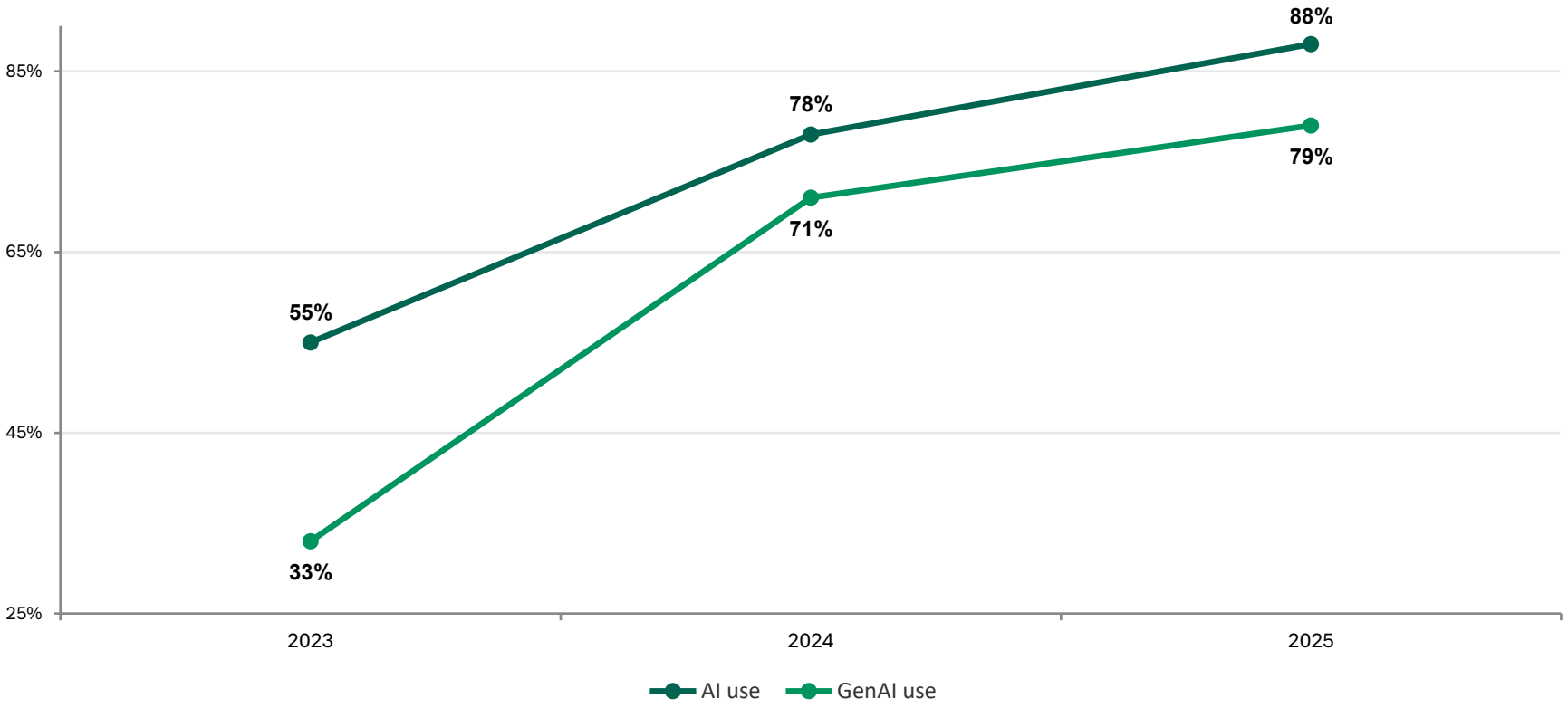
Artificial Intelligence Adoption in Business

Enterprise adoption trajectory

Share of respondents whose organizations use AI

88%
regular AI use in at least one function

79%
regular GenAI use in at least one function



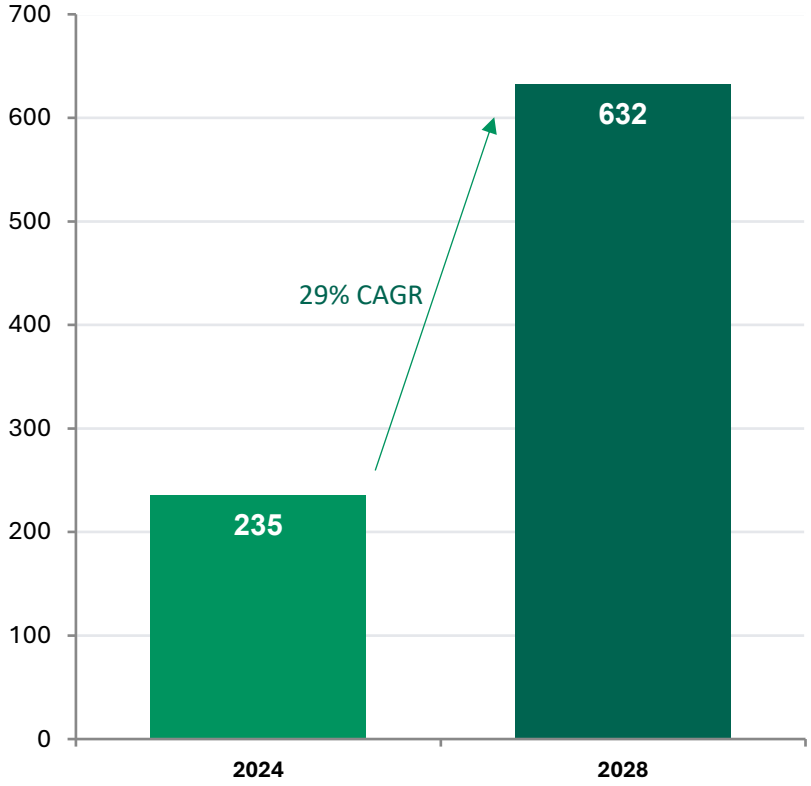
Insight: adoption has shifted from "Should we use AI?" to "Where can we redesign workflows and govern AI at scale?"

Sources: McKinsey, The State of AI in 2025; U.S. Census Bureau BTOS, "AI Use at U.S. Businesses," May 2026.

Projected adoption: increasing spend; uneven efficiency gains

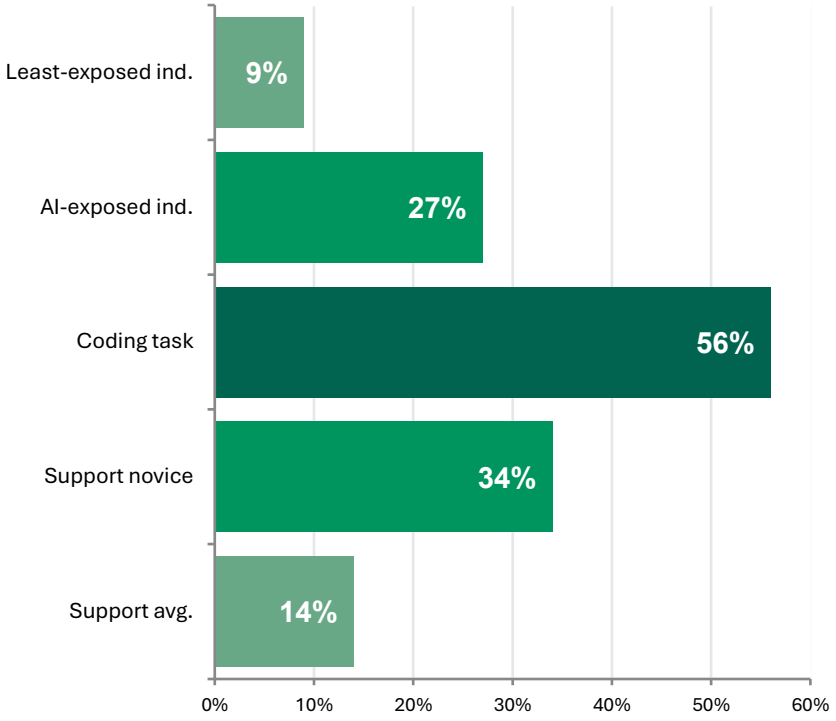
AI spend Accelerating

Worldwide AI solutions spending forecast



Observed efficiency-gain evidence

Task-level and sector-level signals



Note: "AI-exposed" and "least-exposed" bars show revenue-per-employee growth, not controlled task uplift.

29% AI spending growth forecast, 2024–2028

15% Autonomous decisions by 2028

Sources: IDC Worldwide AI & GenAI Spending Guide; Gartner agentic AI forecast; PwC 2025 AI Jobs Barometer; NBER; GitHub/Microsoft Research; McKinsey State of AI 2025

3

EFFECTIVE UTILIZATION OF AI

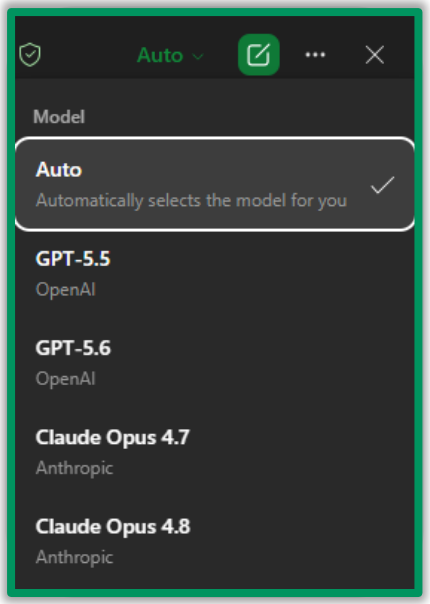
Selecting the Right Harness Around the Model

Getting the most from AI = better prompts + right models

CHOOSE FOR THE TASK — NOT THE BRAND NAME

1	**General LLMs**	Broad knowledge and everyday tasks
2	**Domain-tuned models**	Specialized treasury or municipal-finance work
3	**Grounded models**	Answers connected to your files and data
4	**Agentic models**	Multi-step workflows that take action
5	**Enterprise / GCC models**	Government-cloud hosting and controls

MODEL PICKER



A SIMPLE RULE

Use the most capable approved model that fits the task, data, and risk.

General Use Applications



Summarize & **Analyze** PowerPoints, Documents, Statements, Excel Sheets



Draft emails, calling scripts, speaker notes, proposals, plans, and more



Research companies, markets, products, people and more



Ask questions and get answers

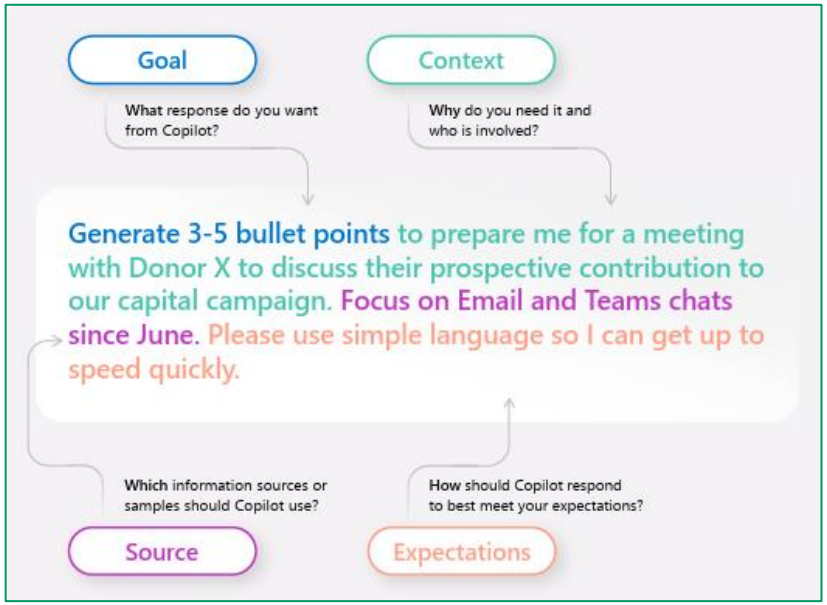


Prepare for meetings, calls, strategies, and more

Prompting - Best Practices for Using AI

Prompting

Craft clear and specific prompts to guide AI and enhance the quality of responses.



Reference Files

Reference PDFs, Text, PowerPoints, Excel sheets, Documents, and more by uploading them into your prompts.

Data Management - Best Practices for Using AI

Data Management

Use accurate and relevant data to inform AI for reliable outputs

Raw Data → **Table / Array**

Patriots Inc.	Closed/Won	$103
Eagles Co.		$76 Pipeline
Giants Gr.	Closed/Won	215$
Titans Inc.		
Rams Co.		

Company Name	Stage	2025 Revenue
Patriots Inc.	Closed/Won	$ 103.00
Eagles Co.	Pipeline	$ 76.00
Giants Gr.	Closed/Won	$ 215.00
Rams Co.	Lost	$ 53.00
Titans Inc.	Closed/Won	$ 207.00

Name files with **context** and reference files by that name when directly uploading them into prompts.

Insert / review data table **column names** and ensure they **match prompt** wording.

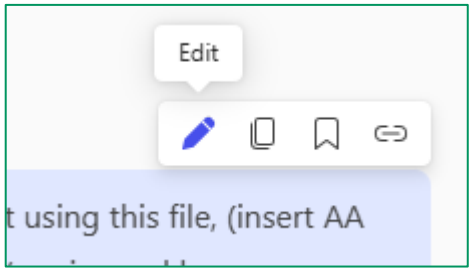
For example, if you ask AI for a list of customers, make sure the column name in the data table is labeled as "customer" and not "client" or "company" or no title.

Revising Outputs - Best Practices for Using AI

Edit Prompts

Edit previously entered to prompts to refine your inputs to achieve your desired output

1. Navigate to prompt after it has been answered by Copilot
2. Go to top right of your prompt and click the pencil icon

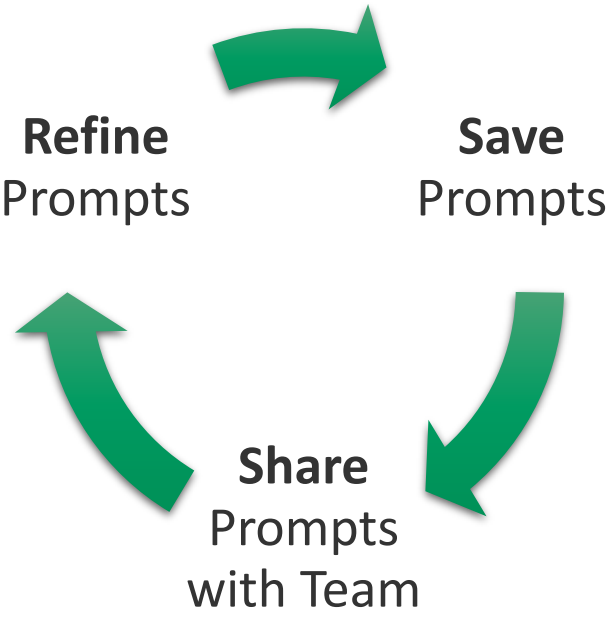


Revising Outputs

Review and refine AI-generated content to ensure accuracy and clarity.

Sharing Results - Best Practices for Using AI





Sharing Results

Distribute AI outputs responsibly to maximize collaboration and impact.

Strong Prompt Example — Before & After

Same task, dramatically different results

❌ WEAK PROMPT

- 'Write me an email about the new payment portal.'

Result

“Subject: New Payment Portal — Hi, we’ve launched a new payment portal. You can use it to pay online. Please check it out and let us know if you have any questions. Thanks.”

Generic tone, no audience, no clear call to action.

✅ STRONG PROMPT (G-C-S-E)

- **Goal:** Draft a 150-word email announcing our new payment portal.
- **Context**: Audience is town treasurers; friendly, professional tone.
- **Source:** [paste portal feature list + go-live date]
- **Expectations:** Include one call to action to sign up for training webinar.

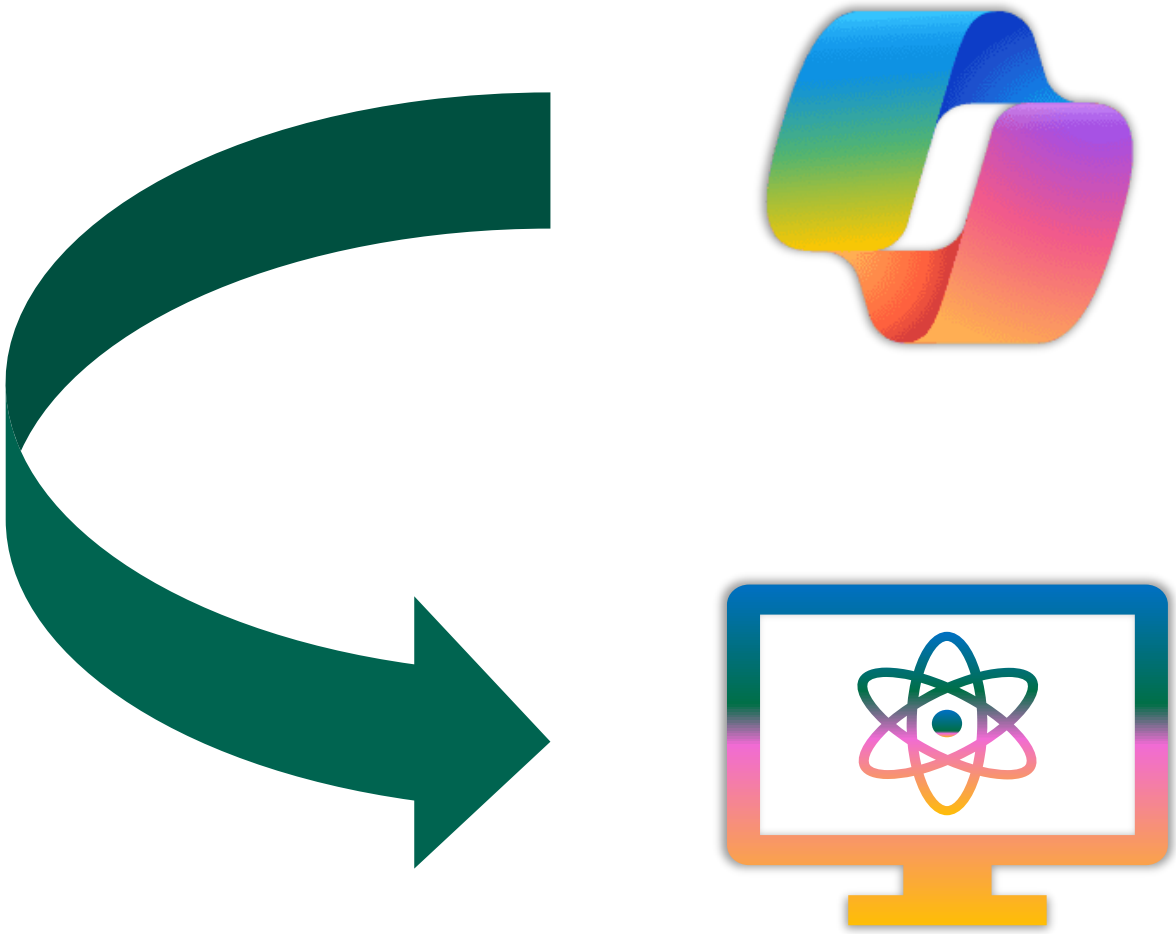
Result

“Subject: Your New Payment Portal — Register for Training. Dear Treasurer, our new portal goes live Aug 1 with one-click ACH, real-time receipts, and downloadable statements. Reserve your spot in our 30-minute webinar → [Register here].”

Right length, on-tone for the audience, clear call to action

Live Demo #1

Using AI to analyze information about trends in government treasury & finance departments



4

AI USE CASES IN FINANCIAL SERVICES

How We're Using Gen AI

AI helps surface knowledge, draft code, and speed workflows, without removing human accountability.

Human judgment stays on top of AI

Colleagues review outputs; oversight is the risk mitigant before scale.

HUMAN  AI

Contact center knowledge management

Gen AI "search engine" for Contact Center colleagues.

- Prompt with customer queries
- Concise, step-by-step answers from DASY policies and procedures
- Faster, more precise responses and a better colleague experience

Outcome: better access to information for customer-facing colleagues

Code assist

Desktop tool for writing and managing computer code.

- Expedites code-writing and improves documentation
- Supports code review before implementation
- 50-developer pilot integrating AI into Citizens' development workflow

Outcome: faster delivery, more consistent code, better developer experience

Scaling model: responsible implementation through council-led governance and colleague co-creation

1. **Submit use cases**
   Top-down + bottom-up innovation pipeline
2. **Vet & educate**
   Checks, balances and risk-fit guidance
3. **Govern & enable**
   Cross-functional Gen AI Council + platform
4. **Scale responsibly**
   New capabilities that set Citizens apart

Empowering Our People

Gen AI can give every colleague new “superpowers” — combining accessible tools with the skills, behaviors and guardrails to do their best work.



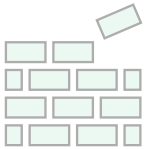
ACCESS FOR EVERY COLLEAGUE

All colleagues can use Microsoft 365 Copilot Chat. Other AI tools will vary by role and job duties.



INFUSE AI INTO DAILY WORK

Use Gen AI to tackle challenges with greater efficiency and insight — as a personal and business enabler.



BUILD NEW CAPABILITIES

New superpowers depend on mindsets, skillsets and behaviors: learning to approach problems differently.



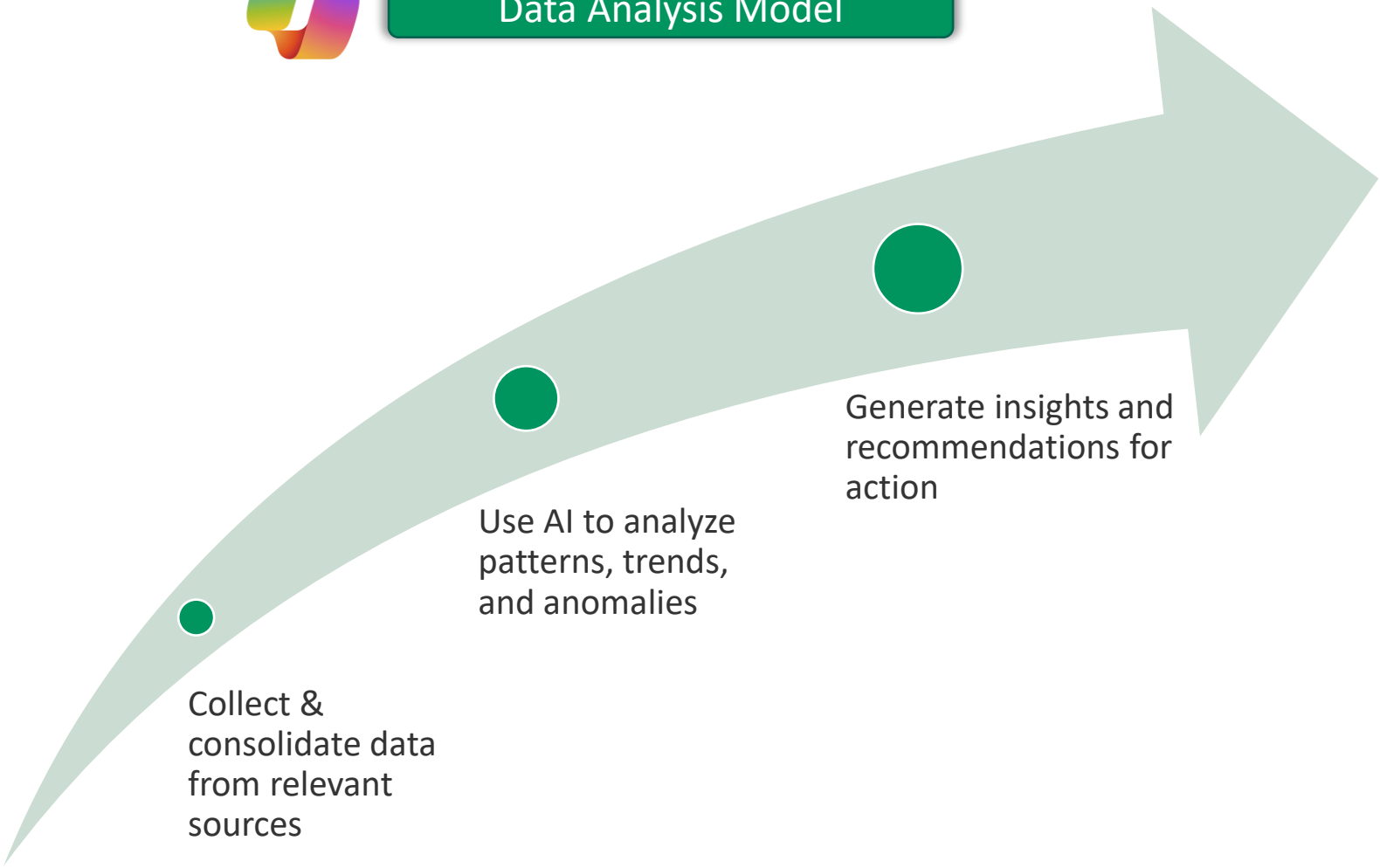
ADOPT RESPONSIBLY

Training and necessary guardrails will help colleagues use Gen AI safely and drive meaningful customer outcomes.

Tools + training + guardrails → confident adoption → better colleague and customer outcomes

Treasury AI Model

Data Analysis Model



GOVERNMENT & TAX COLLECTIONS AI APPLICATIONS

5

Automating Repetitive Financial Tasks and Example Processes



Revenue and Expenditure Analysis

AI can automate revenue modeling by examining multi-year trends and analyzing expenditure patterns efficiently.



Scenario and Debt Modeling

Automated scenario modeling supports contract negotiations, capital projects, and debt issuance planning with data-driven insights.



RFP and Report Writing

AI can generate narrative RFP reports and analyze financial data, reducing manual effort and improving accuracy in reporting.

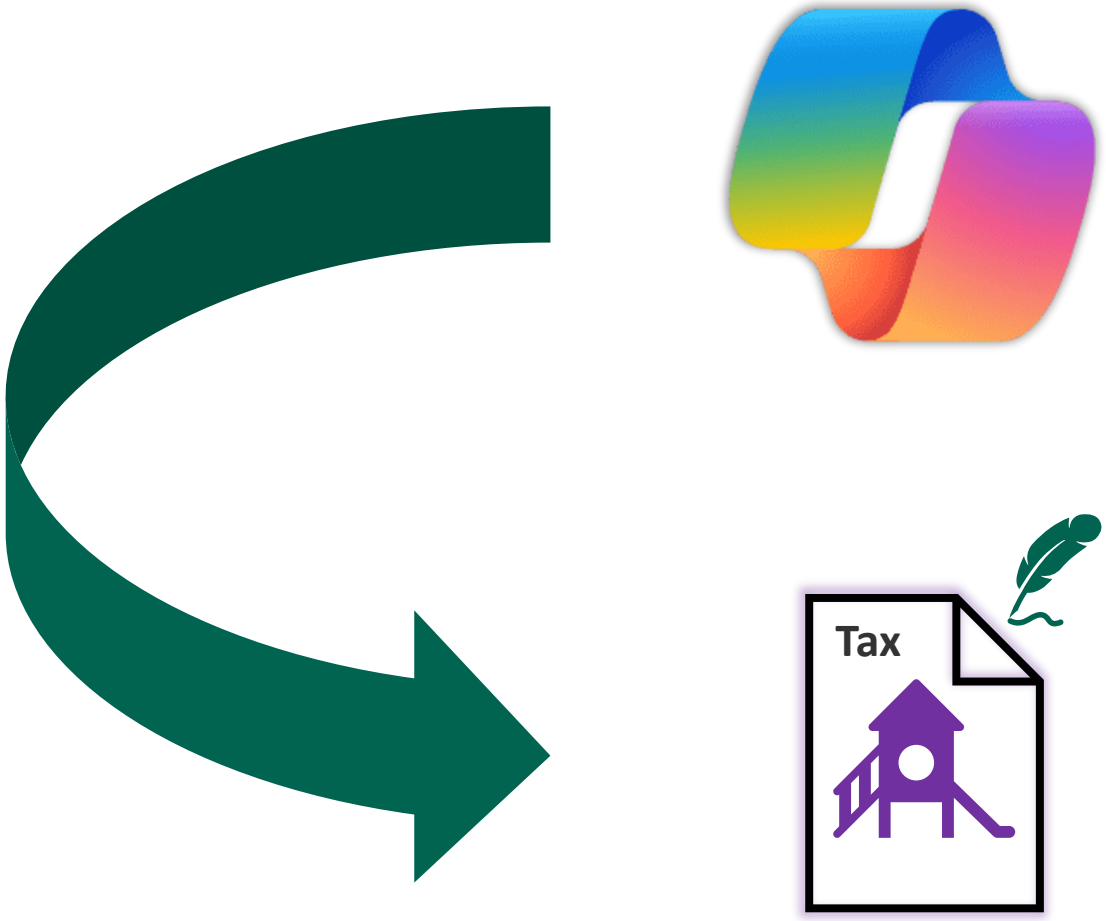


Communication Automation

Routine correspondence, such as email drafting, can be auto-generated to streamline communication for finance professionals.

Live Demo #2

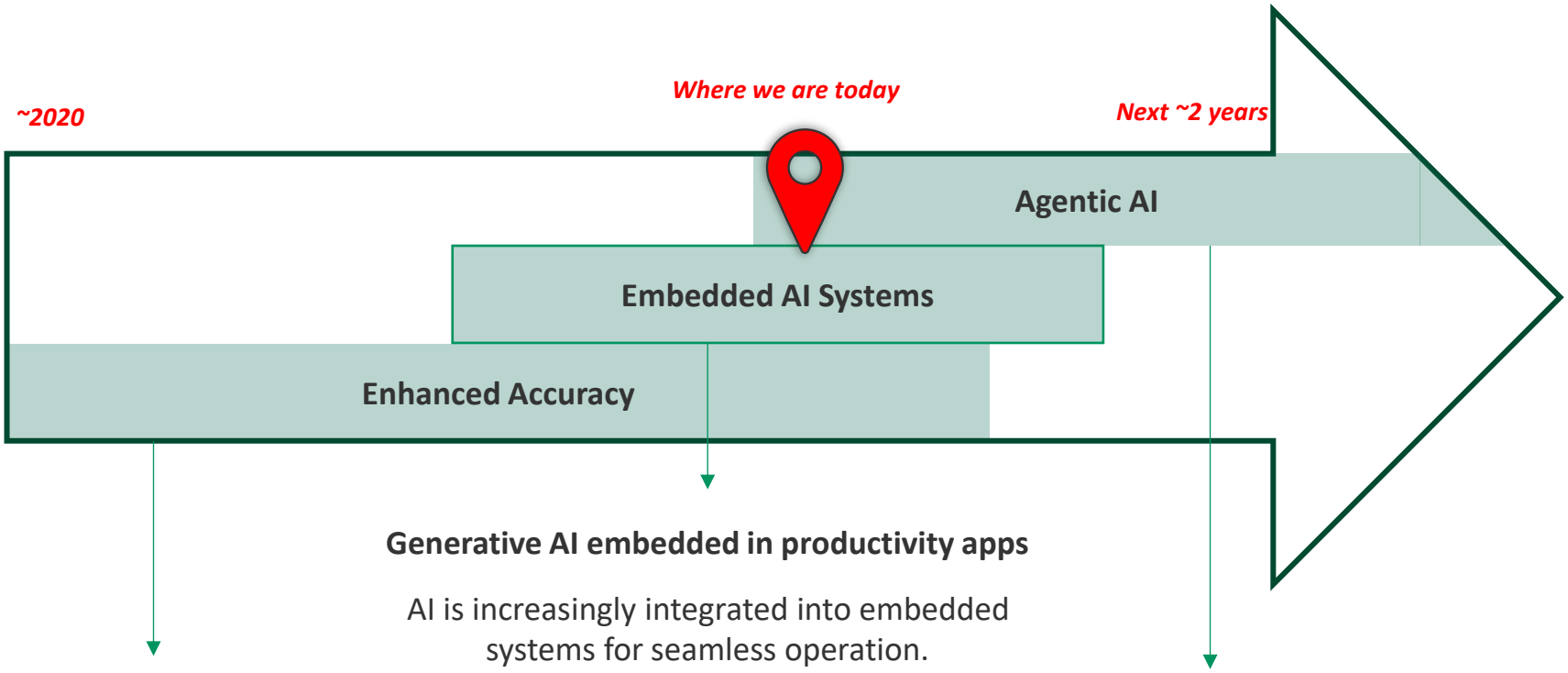
Example of using AI to generate a tax collections dashboard for a playground in Rhode Island



6

FUTURE DIRECTIONS OF AI

Agentic AI, Embedded Systems, and Enhanced Accuracy



Generative AI embedded in productivity apps

AI is increasingly integrated into embedded systems for seamless operation.

Rules-based automation (RPA, macros)

Advancements in AI lead to improved accuracy in data processing and predictive analytics.

Agentic AI running departmental workflows

AI is evolving toward agentic systems that act autonomously within diverse applications.

1) Rather than facts, forecasts are hypotheses informed by research and intuition.

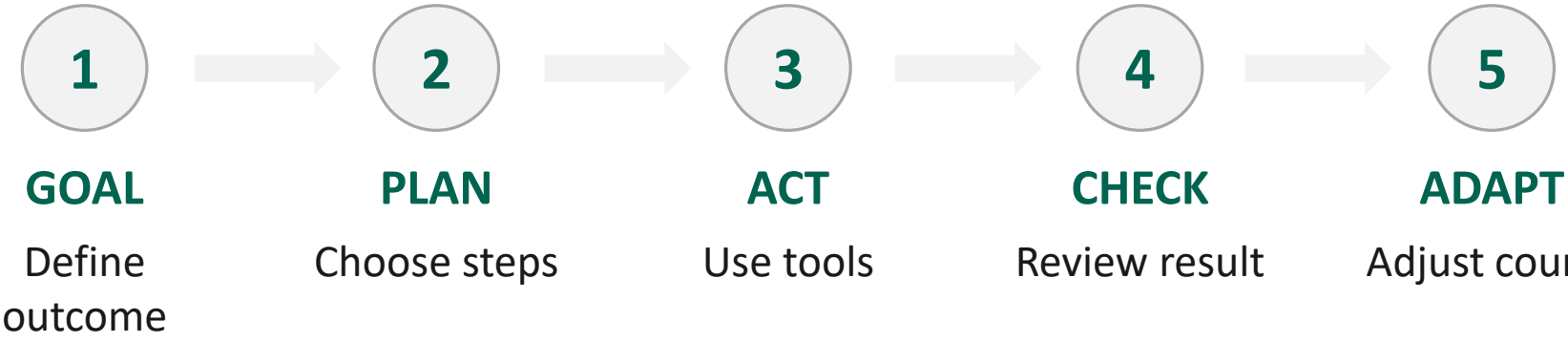
ChatGPT & Claude Agentic AI

The Autonomous Future of Artificial Intelligence

WHAT IT IS

AI that pursues a goal: planning the route, making decisions, and acting without step-by-step direction.

THE AUTONOMOUS LOOP



IN PRACTICE



7

AI SAFETY & SECURITY

Risks and Governance Guardrails

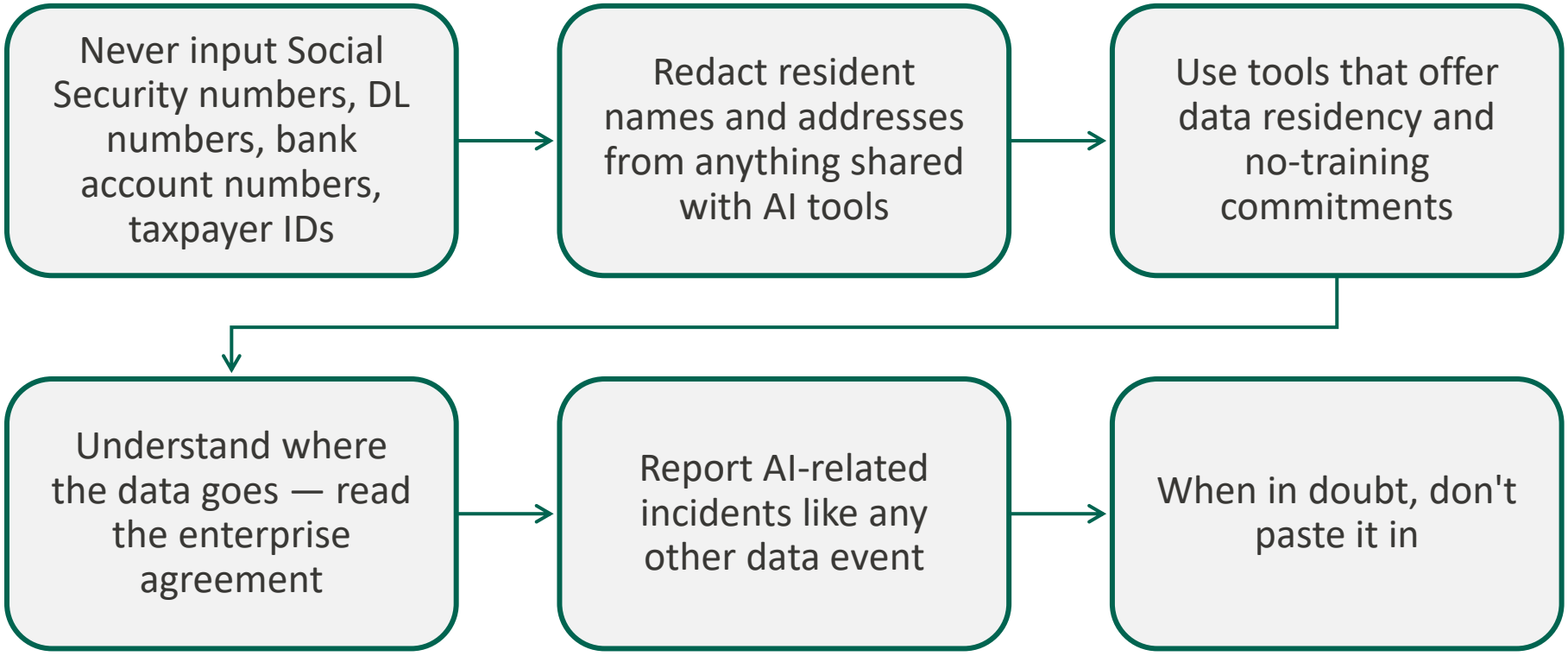
The five risks every treasury team should manage

- **Hallucinations** — AI can produce confident but wrong answers. Always verify.
- **Data leakage** — public AI tools may retain your inputs. Use enterprise/GCC versions.
- **Bias & fairness** — AI reflects patterns in training data; review for fairness in public-facing outputs.
- **Compliance** — align with state/federal record retention and public-record laws
- **Governance basics**: written policy, approved tool list, training, monitoring
- **Start small, use frequently, scale carefully**

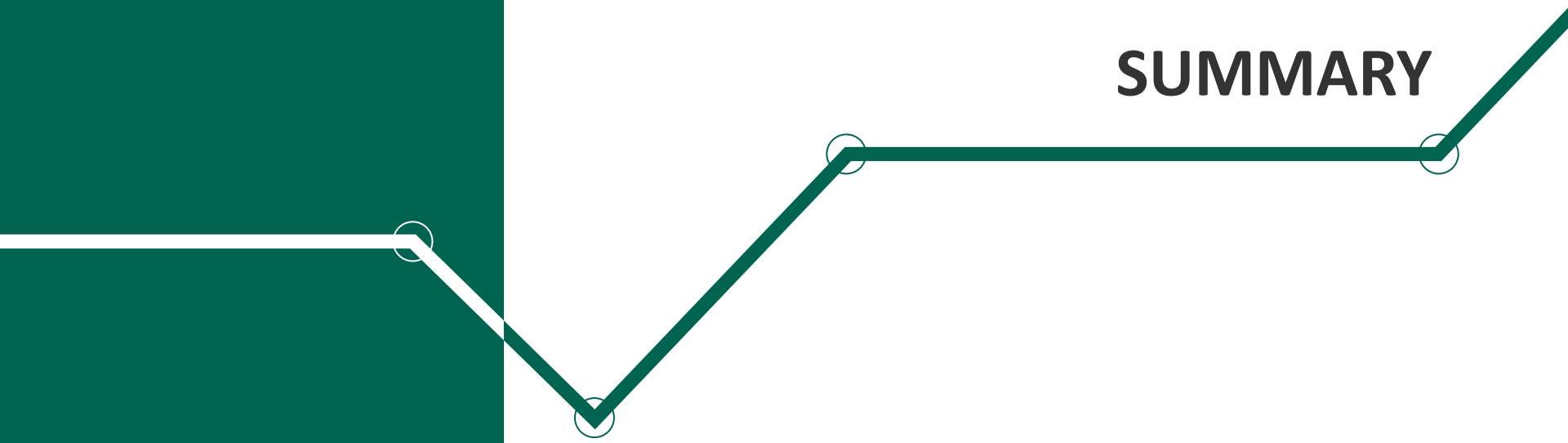
Data Privacy & PII Protection

Simple rules that keep you and residents safe

SAFE USAGE RULES



SUMMARY



Resources

Curated starting points to stay current, build practical skills, and use AI responsibly

01 STAY CURRENT

The Rundown AI

A concise daily briefing on AI news, tools, and practical applications.

Subscribe free →

02 BUILD SKILLS

MIT — AI 101

A beginner-friendly overview of core AI concepts—no prior background needed.

Explore the course →

Anthropic Academy

Practical courses on AI fluency, Claude, prompting, and development.

Browse courses →

DataCamp AI Fundamentals

An interactive path from AI basics to effective, responsible use.

Start the track →

03 USE RESPONSIBLY

Canada: Generative AI guide

Principles, policy considerations, and practices for responsible use.

Read the guide →

NIST AI RMF

A voluntary framework and playbook for managing AI risk.

Open the framework →

Start with your organization's policies and approved tools.

MAKE IT A HABIT

Read one item.
Test one workflow.
Share one takeaway.

*Official links verified 14 July 2026

Summary



Prompting & Practice

G-C-S-E: Goal, Context, Source, Expectations — write better prompts

Practice, practice, practice! It will never be perfect on your first try – even as a “pro” (it's about learning to refine)

Safety & Security

Enterprise/GCC tools + written policy + human review = safe adoption

Validate & protect data

Efficiency & Innovation

AI reclaims 10-15 hours/week per knowledge worker — reinvest strategically

Start with one use case, measure, expand — pilot in 30 days

Q&A

WE'D LOVE TO HEAR YOUR QUESTIONS

Contact Us

- Andrew C. Bates – TS Sales Associate | andrew.c.bates@citizensbank.com

THANK YOU

