Artificial Intelligence (AI) for Better Public Investment Outcomes

Presentation Public Expenditure Management Peer Assisted Learning (PEMPAL)

BUDGET COMMUNITY OF PRACTICE (BCOP)

2026 Annual Plenary Meeting, Feb 9-10, 2026, Paris

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Overview

Opportunities and Bottlenecks

#Public Financial Management (PFM) Functions as possible domain for #Artificial Intelligence (AI)

#Automation and/or #human augmentation applications: bottlenecks and opportunities

Demonstration of applications across Public Investment Management (PIM) functions

People, process, and technology lens

What can be done to improve the "jagged edges" of AI performance

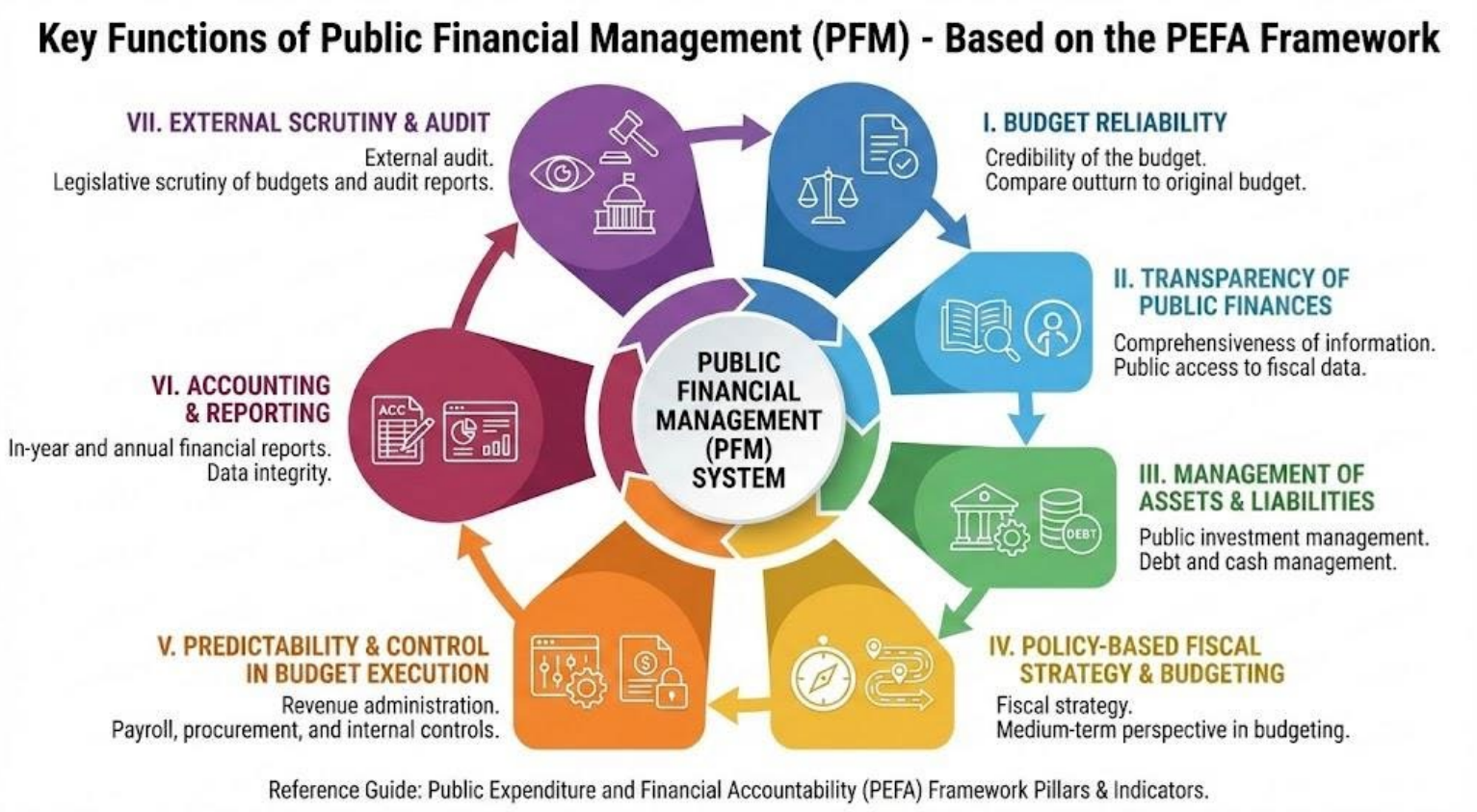
Implications of being PFM.ai leaders or laggard

Key Performance Indicators (KPIs) and Returns on Investment (ROIs)

Human-centric AI and public sector capacity building approaches: awareness, application, adoption

From prototypes to production: Operations & Maintenance (O&M)

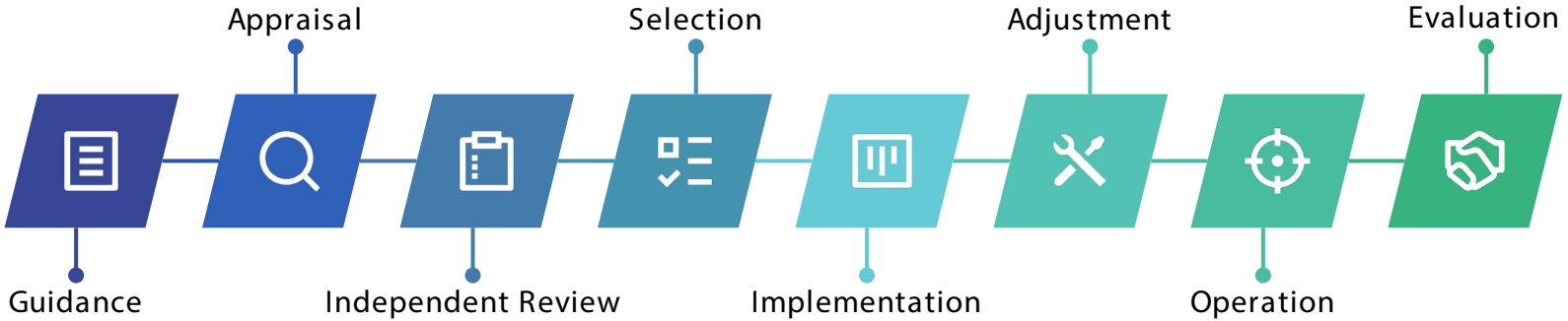
AI Expectations: PFM Functions



Credit: Google Gemini Flash 2.5 Image (*aka Nano Banana)*

Public Investment Management

Management across the project lifecycle



Foundations / Core Functions

- Business processes for lifecycle approvals (documentation and gatekeeping, disbursement)
- Clear links with core FMIS systems, including budgeting treasury and procurement (Open Contracting Data Standards)
- Timely and comprehensive information on financial and physical status -rationalization

Options / Frontier

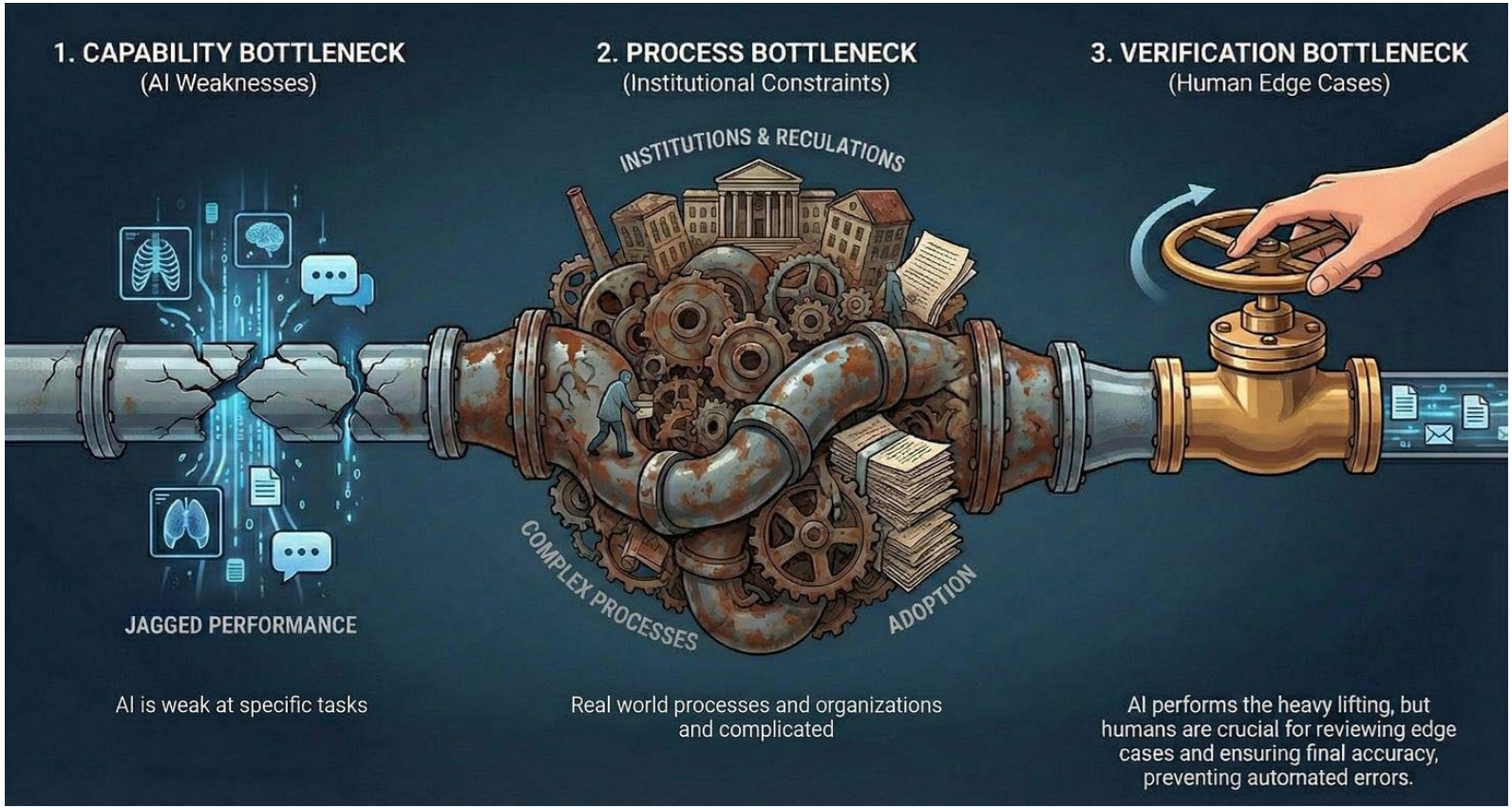
- Data analytics
- Active risk and performance monitoring, linked to rationalization
- Ability to screen projects by location for climate extremes, climate change risks, eCBA
- Transparency and accountability function (citizens disclosure)
- Planning and management of the whole-life costs of the assets

PIM Digital Transformation: Cost-Benefit Analysis

Prioritization & Sequencing: whole of project life cycle, whole of government

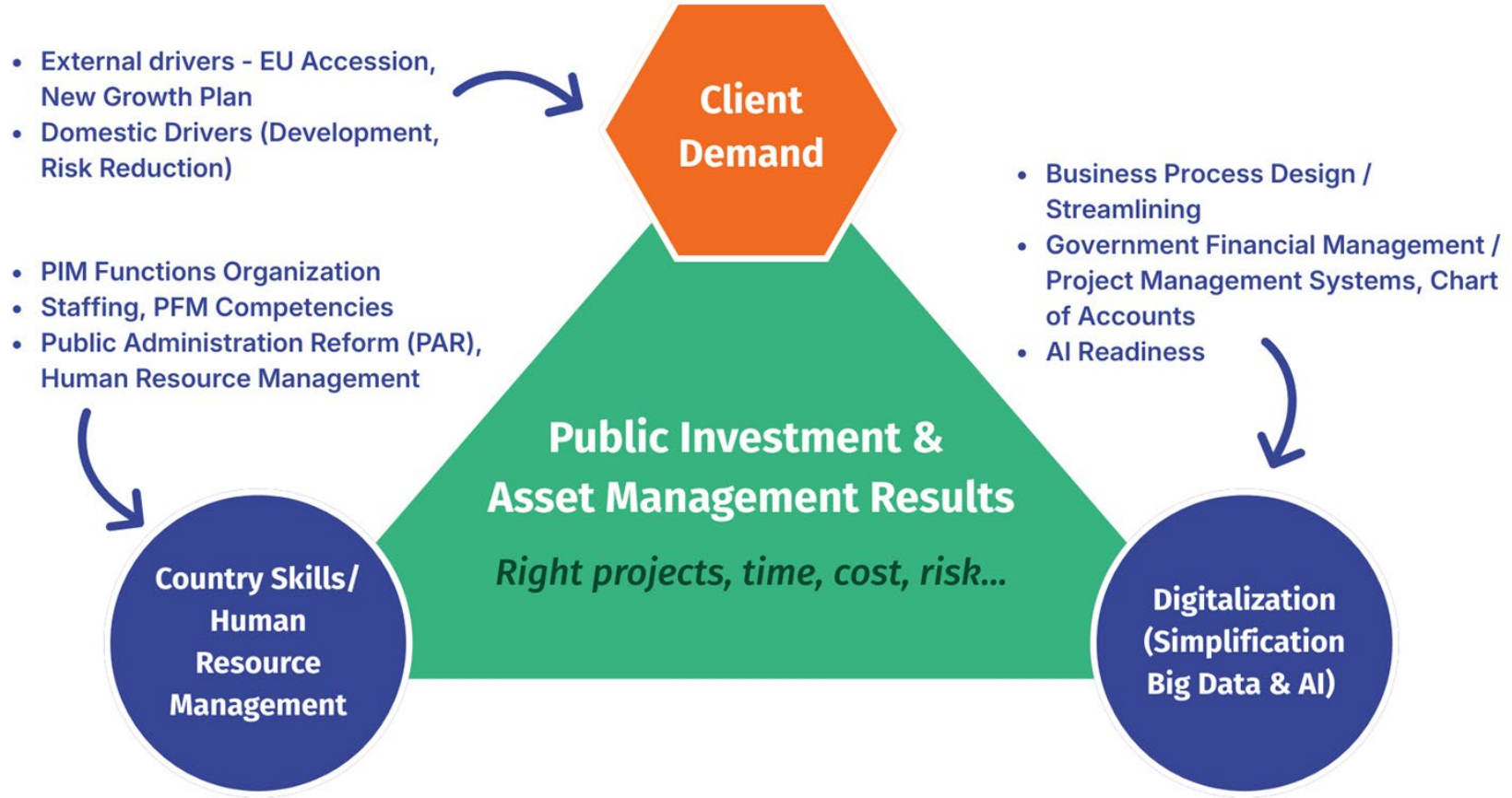
Institutional + Technology People, Process, Technology Modernization

Public Investment Management (PIM) Functions



Source: Ethan Mollick, https://www.oneusefulthing.org/

Engagement Framework



Engagement Process and Change Management

User-Centric Digital Transformation Value

People

Focus on users (who care) and decision makers (who act)

Process

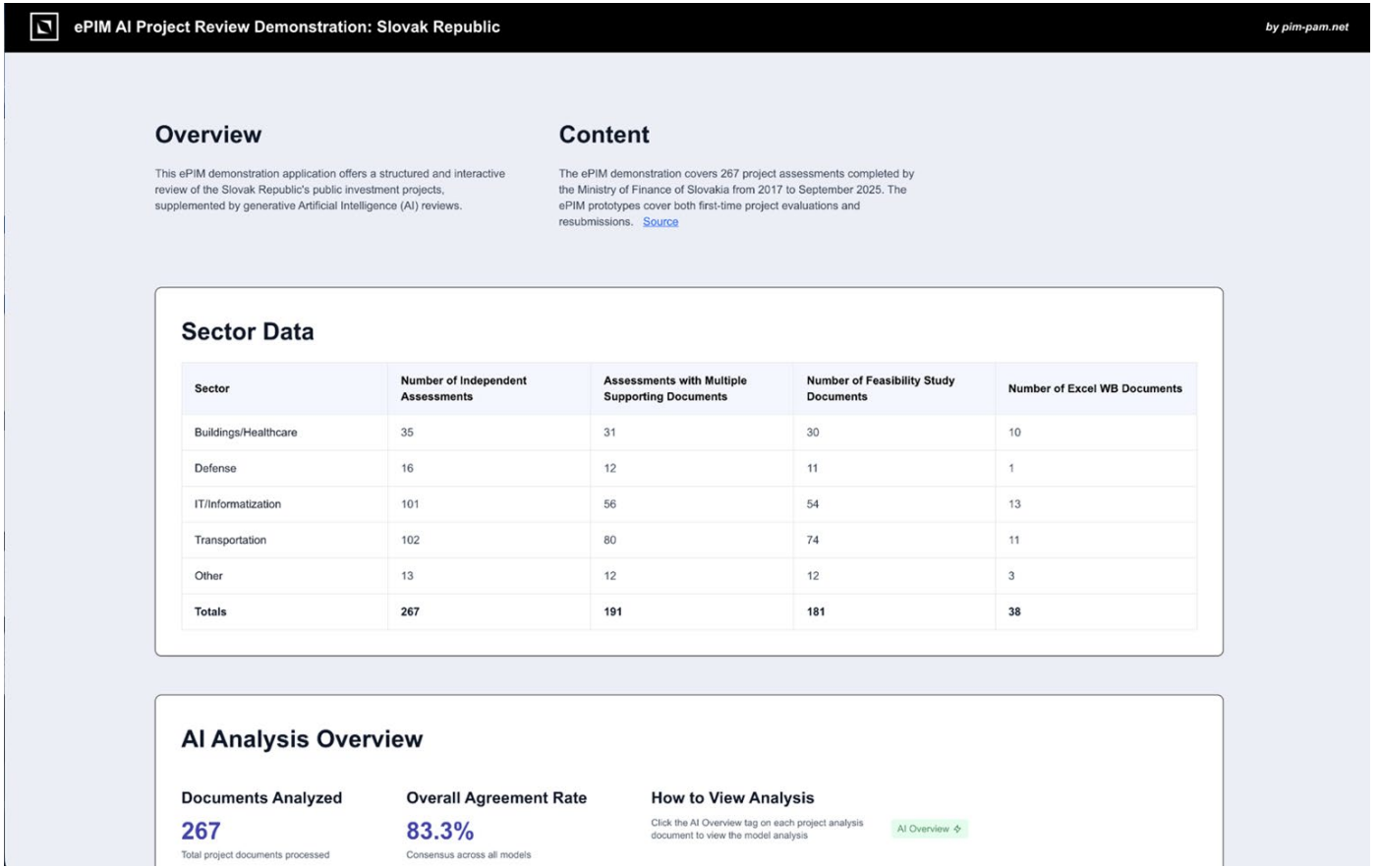
De Jure and De Facto Environment (Policy framework & Practices)

Technology

(Platforms + Data)

Digital workflows for decision-support and accountability

Demonstration Examples: Slovakia Project Disclosures



ePIM AI Project Review Demonstration: Slovak Republic

by pim-pam.net

Overview

This ePIM demonstration application offers a structured and interactive review of the Slovak Republic's public investment projects, supplemented by generative Artificial Intelligence (AI) reviews.

Content

The ePIM demonstration covers 267 project assessments completed by the Ministry of Finance of Slovakia from 2017 to September 2025. The ePIM prototypes cover both first-time project evaluations and resubmissions. Source

Sector Data

Sector	Number of Independent Assessments	Assessments with Multiple Supporting Documents	Number of Feasibility Study Documents	Number of Excel WB Documents
Buildings/Healthcare	35	31	30	10
Defense	16	12	11	1
IT/Informatization	101	56	54	13
Transportation	102	80	74	11
Other	13	12	12	3
Totals	**267**	**191**	**181**	**38**

AI Analysis Overview

Documents Analyzed

267

Total project documents processed

Overall Agreement Rate

83.3%

Consensus across all models

How to View Analysis

Click the AI Overview tag on each project analysis document to view the model analysis

AI Overview

AI & Smarter Digitalization: User Needs to Prototypes

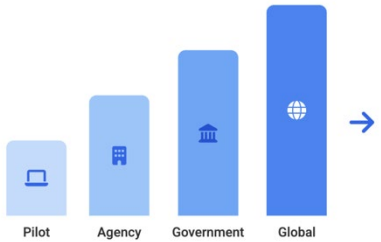
AI can **accelerate progress** in public investment management — if used responsibly and as a **co-pilot to expert judgment**.

AI doesn't replace human judgment — it helps collect data, structure knowledge, and suggest options for review.

> ***The goal:*** *Frame AI capabilities around common user needs, showing practical applications already being tested in public investment management.*

Integrates with existing digital tools like eCBA, pim-pam.net, and platforms like the Climate Legislative Actions Database.

Leverages LLM technologies through APIs like ChatGPT, Claude, Gemini, Mistral, or Llama to enhance public investment management processes.



Key User Needs & AI Applications

1. Extracting outcome indicators
AI summarizes strategy documents and feeds indicators directly into eCBA/pim-pam.net

2. Choosing quantifiable costs & benefits
AI guides users through structured options using curated libraries of feasibility studies and CBAs

3. Making existing CBAs reusable
AI converts PDFs/spreadsheets to structured formats; suggests similar past projects and highlights key assumptions

4. Tracking project implementation
AI links CBAs to budget execution to close the appraisal-execution loop

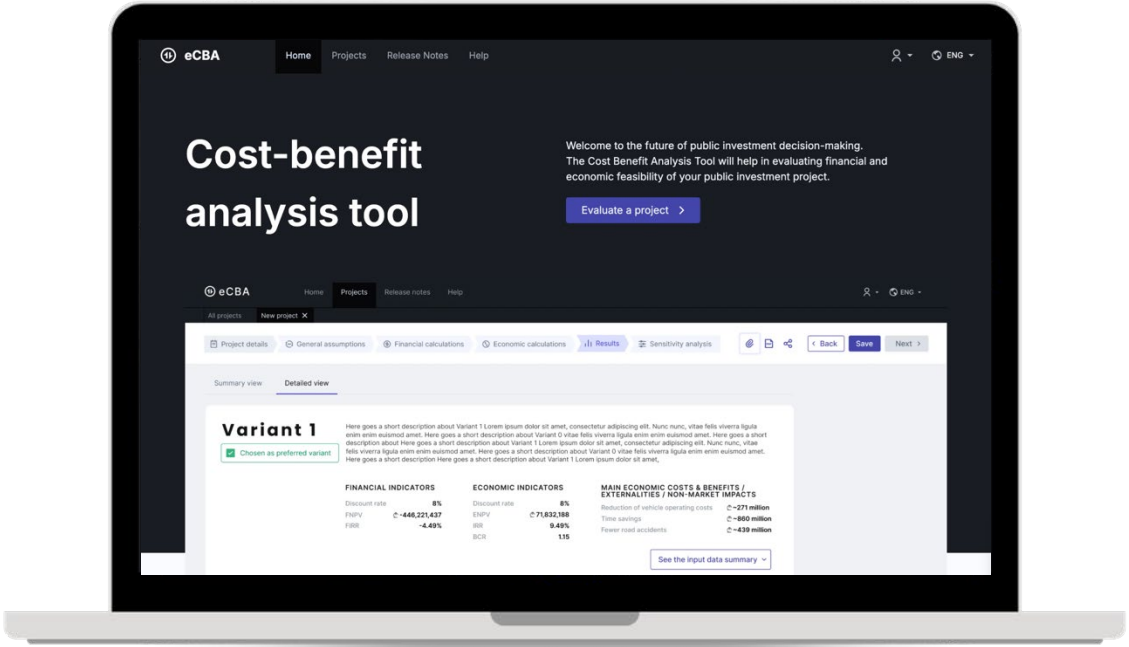
Challenges

- *Ministries of Finances / Independent Review have no real insight into CBA integrity (Excel not revealed, stress tested)*
- Public sector outsources CBA, but has no really command of results or quality of deliverable
- CBA results cannot be harnessed for evidence based decision making (ex post evaluation, AI augments, learning by doing, climate change analysis, PIM "telemedicine")

Learning by (Digital) Doing: Awareness → Application → Adoption

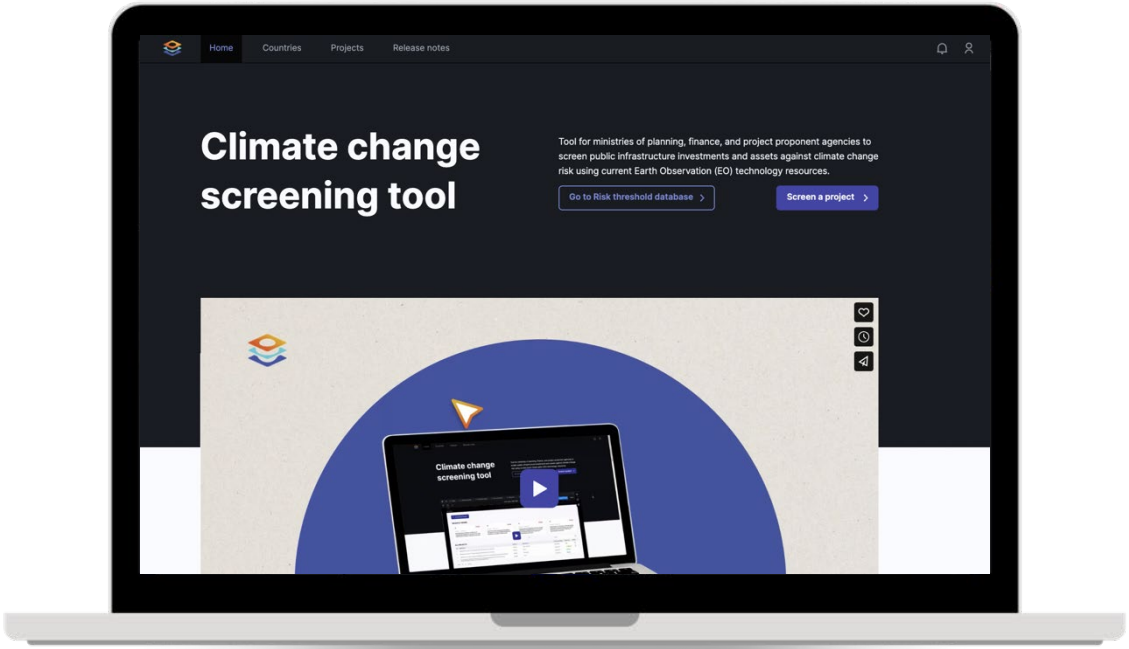
(Georgia ePIM CBA)

Geospatial Planning & Budgeting Platform (GPBP)
Cost-Benefit Analysis (CBA)



https://www.gpbp-ecba.app/en

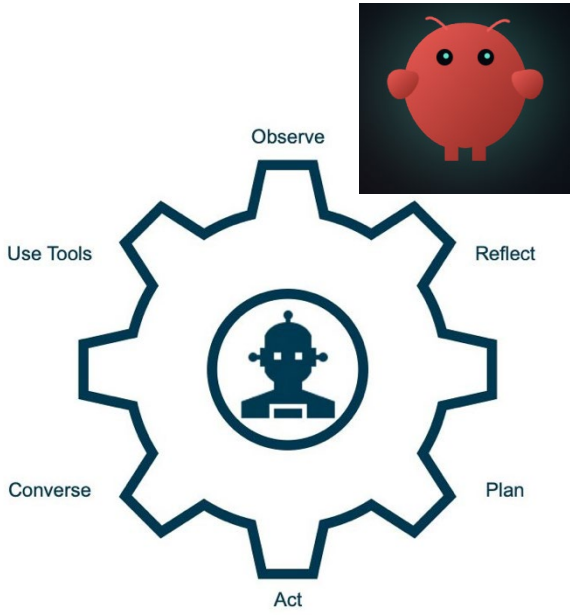
Geospatial Planning & Budgeting Platform (GPBP)
Climate Change Screening (CCS)



https://gpbp.adamplatform.eu/

AI Evolution: From ChatGPT to Agentic AI

ChatGPT ++



AI Agents
Multi-AI Agent
Orchestration

Architecture: /strategy/program/project/budget

Reviewed with

Architecture (for PIM Pipeline Phase for End -Users)

Domain Standards and Data

Good Practice PIM (InfraGov 2.0++)

National PIM Policies

Project Level Data (GPB CBA)

Agentic AI

Orchestration Agent
Specialized Agent Team

- Study Director
- CBA Analyst
- Fiscal Risk Monitor
- Climate Modeler
- Climate Modeler
- Stakeholder Sim
- External Reviewer / Quality Assurance

Human Guidance & Validation

PCN → pre-FS → FS → Selection → Implementation

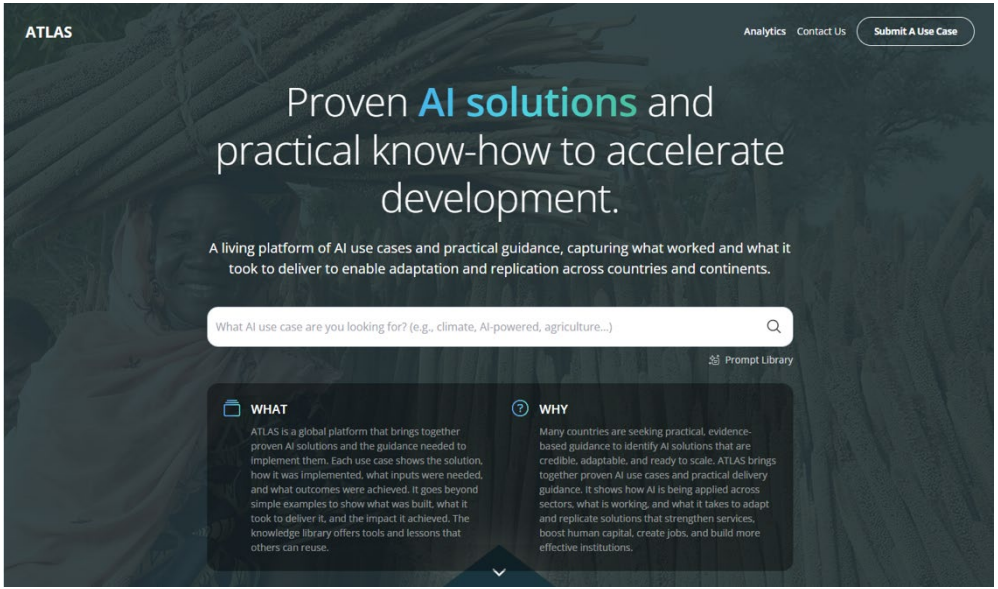
Beneficiaries

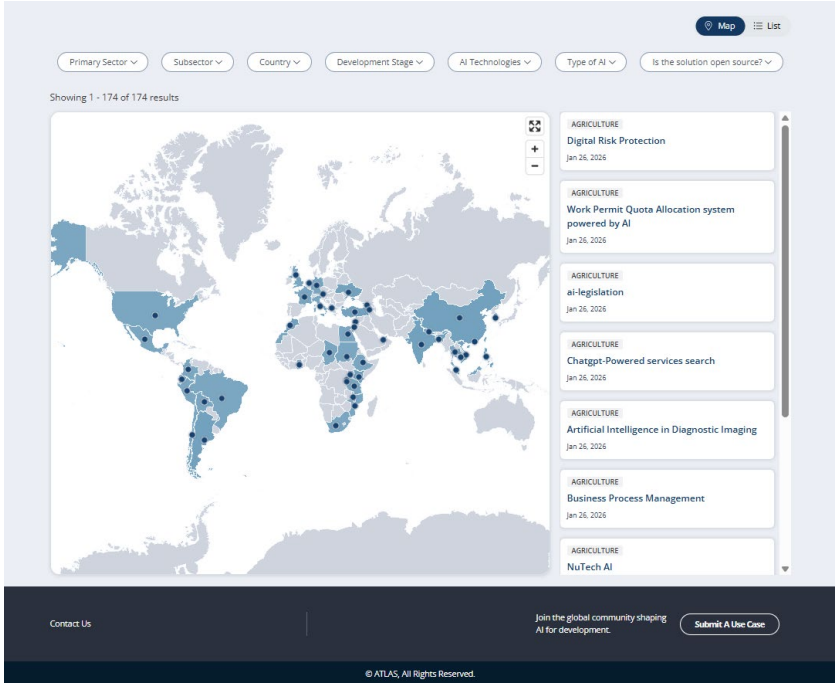
- **Ministry of Finance** (PIM/Capital Budgeting Units)
- **Financing Agencies** (Viability, Compliance, "Bankability)
- **Project Proponents** (Ministries, Agencies, Departments (MDA), Sub-National Governments (SNG), and State-Owned Enterprises (SOEs)
- **External Consultants** (Feasibility Study Providers, Independent Assessors)

Architecture (for PIM Pipeline Phase for End -Users)

	Agent Name	Primary Output	Key Data Input	pim-pam.net RAG Data
Orchestration				
	Study Director	Final Feasibility Report	User intent, Policy guidelines	Global Good Practice PIM, National Policies Database, Strategies (including Climate)
A. The Economic & Financial Cluster (Specialists)				
	CBA Analyst	Economic NPV, BCR (Benefit-Cost Ratio)	Market prices, Shadow price parameters	Good practice CBA, specific to sector, Reference Class Forecasts
	Fiscal Risk Monitor	Debt Sustainability Analysis	Public budget data, Financing terms	Risk models, legacy references
B. The Climate & Environmental Resilience Cluster				
	Climate Modeler	Climate Risk Matrix (Physical & Transition)	GCMs (Global Climate Models), Geo-data	Vulnerability reports by sector and country
	Resilience Engineer	Adaptation Plan & Costs	Engineering standards, Climate risk data	Good practice construction standards (e.g., EURO Code)
C. The Social & Strategic Cluster				
	Stakeholder Sim	Social Impact Score	Demographics, Sentiment analysis, Environmental & Social Frameworks	Guidelines, Media Report
Indepedent Verification Agent				
	External Reviewer / Quality Assurance	Validation of process, data verification, halucination checks	Error Logs, Human Validated Labeling	AI Governance, EU Digital Regulations

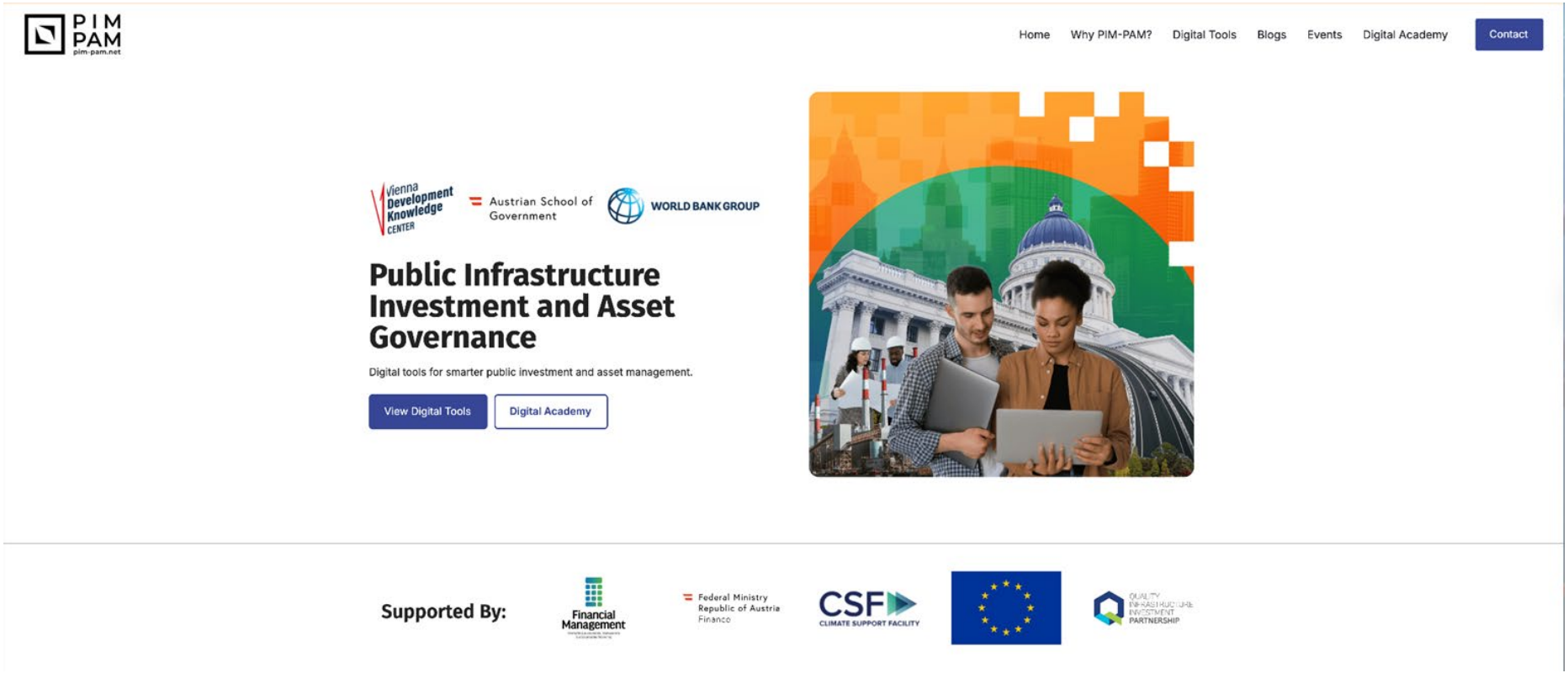
World Bank AI ATLAS (coming this week!)



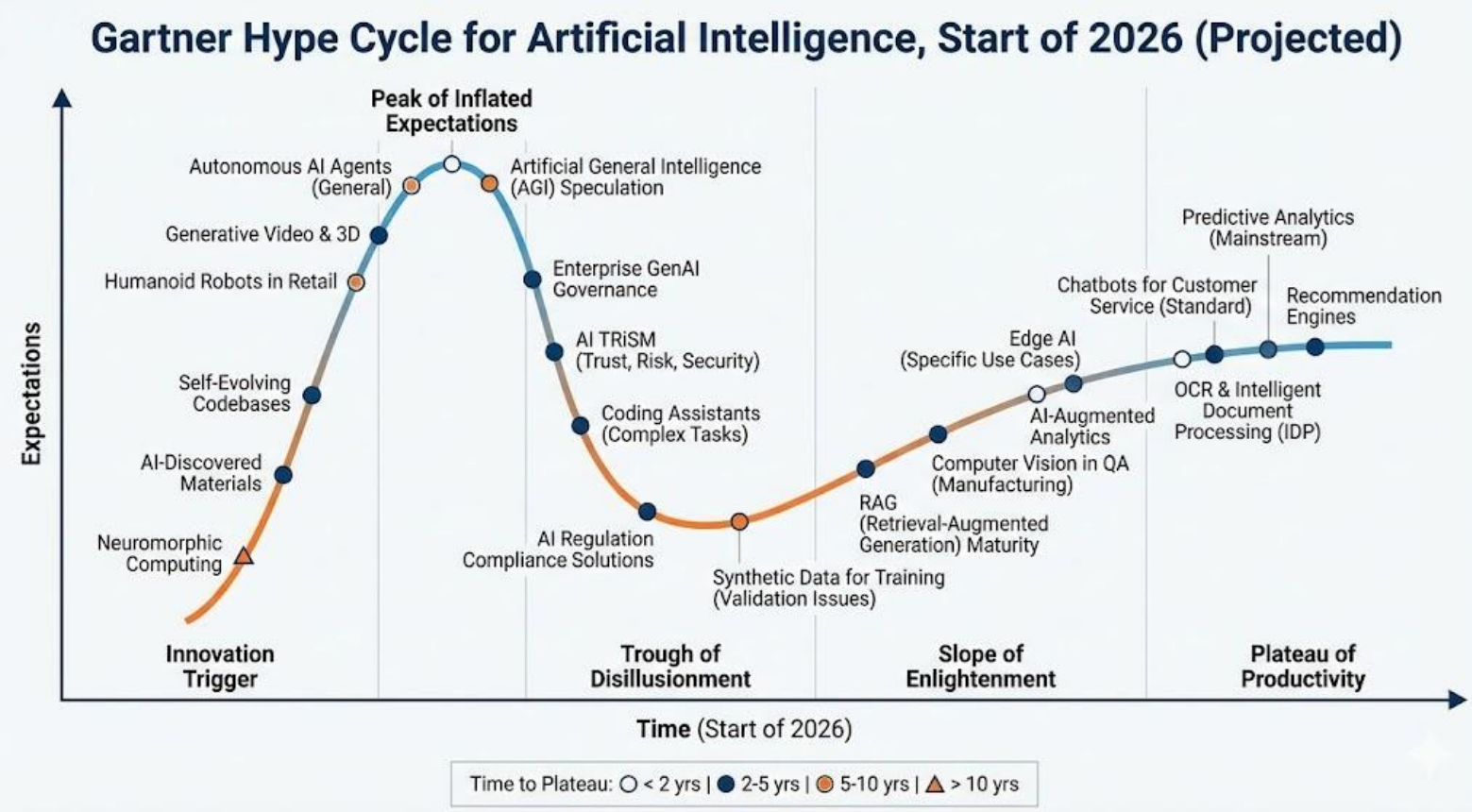


Albania AI Procurement

pim-pam.net Peer learning & learning by doing



AI Expectations



Conclusion

- **Prototyping Minimum Viable Products (MVP)**
    - People, Process, Technology (Data + Tools)
    - Peer Learning and Examples
    - Trust!
- **Mainstreaming in GovTeck Stack**
    - Policies (Laws, Regulations, Guidance)
    - Cloud Infrastructure (including cyber security)
    - O&M (including AI Application Program Interfaces (API) services)
    - Inhouse Skills & Competencies!

Selected Links

pim-pam.net

Public Sector Staffing and Digitalization for Public Infrastructure Investment Results, Dec 3-5, Vienna, https://pfm4ca.com/public-sector-staffing-and-digitalization-for-public-infrastructure-investment-results-dec25/