



Artificial Intelligence (AI) for Better Public Investment Outcomes

Presentation PEMPAL BUDGET COMMUNITY OF PRACTICE (BCOP)

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Opportunities and Bottlenecks

Public Financial Management (PFM) Functions as possible domain for AI human automation and/or 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

Returns on Investment (ROIs)

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

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



Key Functions of Public Financial Management (PFM) - Based on the PEFA Framework



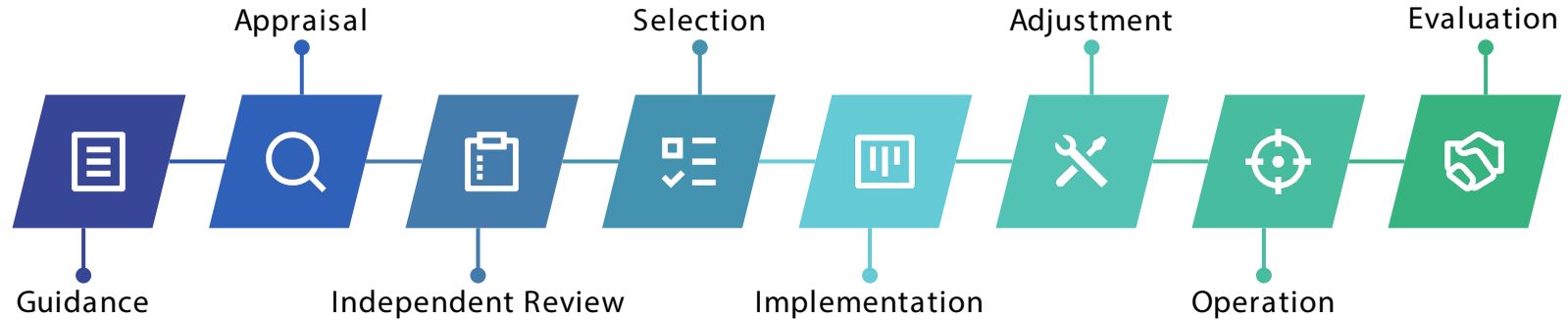
Reference Guide: Public Expenditure and Financial Accountability (PEFA) Framework Pillars & Indicators.

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

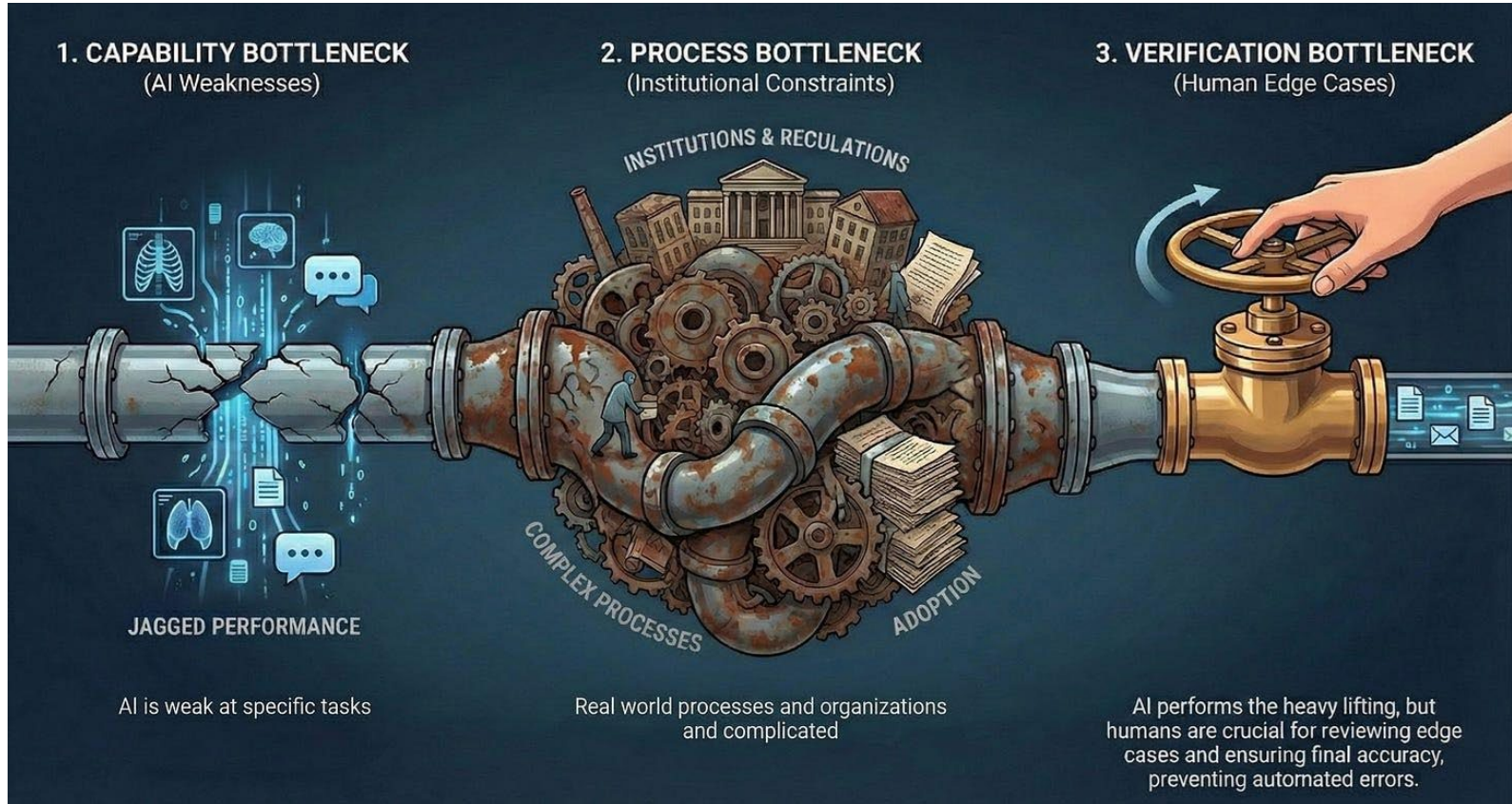
Ability to screen projects by location for climate extremes, climate change risks, eCBA

Transparency and accountability function (citizens disclosure)

Planning and management of the whole-life costs of the assets



Public Investment Management (PIM) Functions





Engagement Framework

- External drivers - EU Accession, New Growth Plan
- Domestic Drivers (Development, Risk Reduction)

- PIM Functions Organization
- Staffing, PFM Competencies
- Public Administration Reform (PAR), Human Resource Management

Client Demand

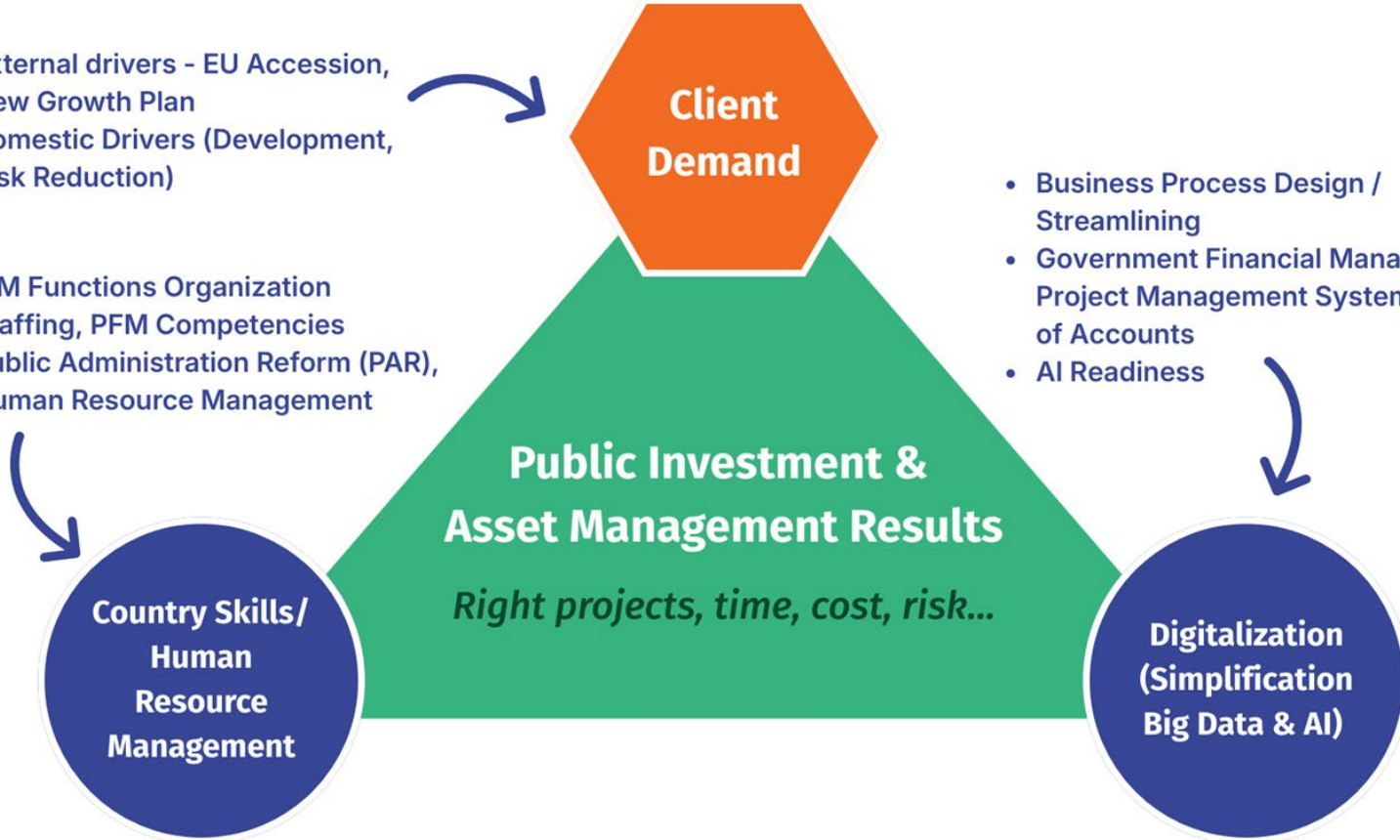
- Business Process Design / Streamlining
- Government Financial Management / Project Management Systems, Chart of Accounts
- AI Readiness

Public Investment & Asset Management Results

Right projects, time, cost, risk...

**Country Skills/
Human
Resource
Management**

**Digitalization
(Simplification
Big Data & AI)**





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





AI & Smarter Digitalization: User Needs to Prototypes

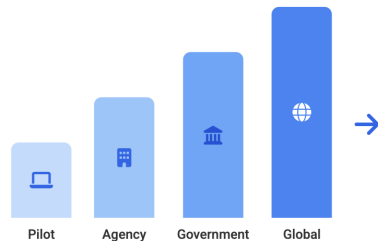
 AI can **accelerate progress** in public investment management — if used responsibly and as a **co-pilot to expert judgment**.

 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



- *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

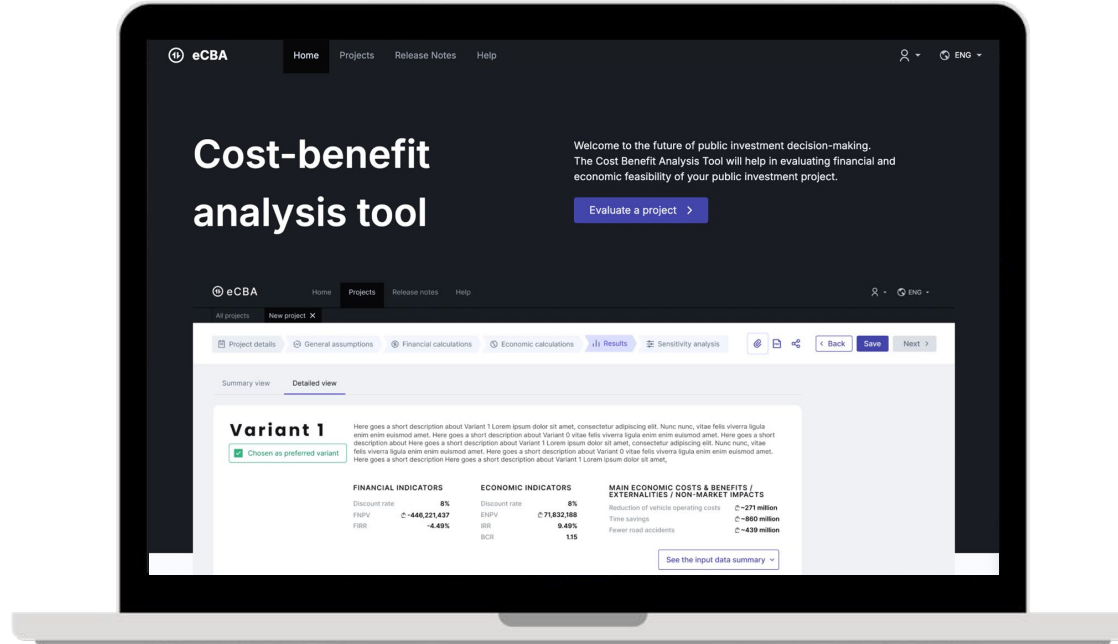
CBA results cannot be harnessed for evidence based decision making (ex post evaluation, AI augments, learning by doing, climate change analysis, PIM “telemedicine”)

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

(Georgia ePIM CBA)



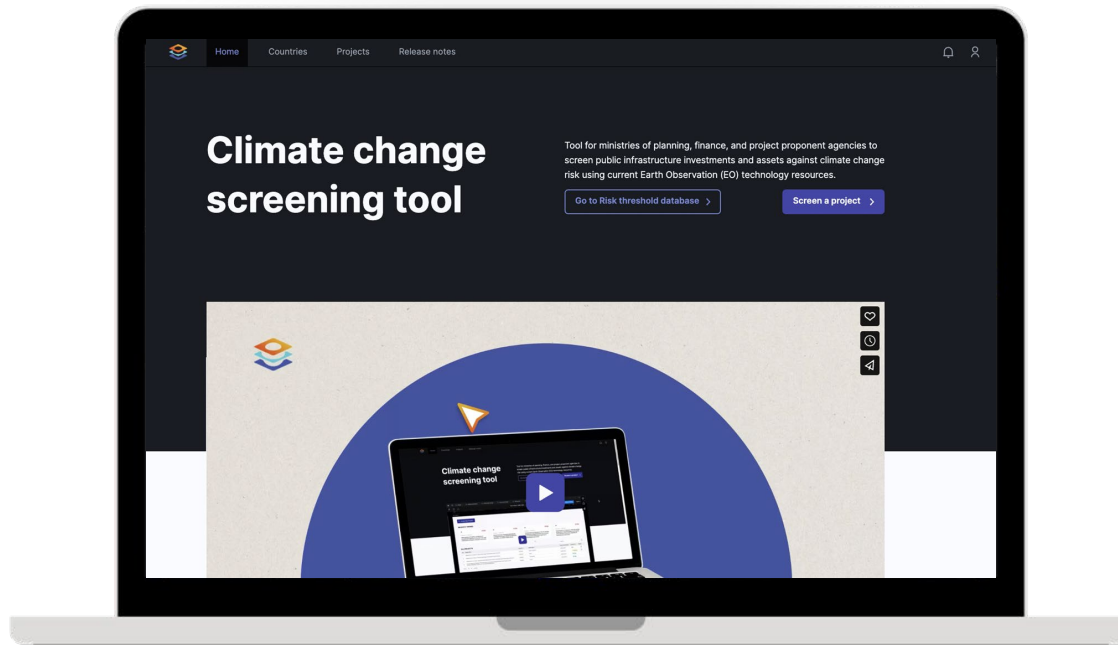
Geospatial Planning & Budgeting Platform (GPBP) Cost-Benefit Analysis (CBA)



<https://www.gppb -ecba.app/en>



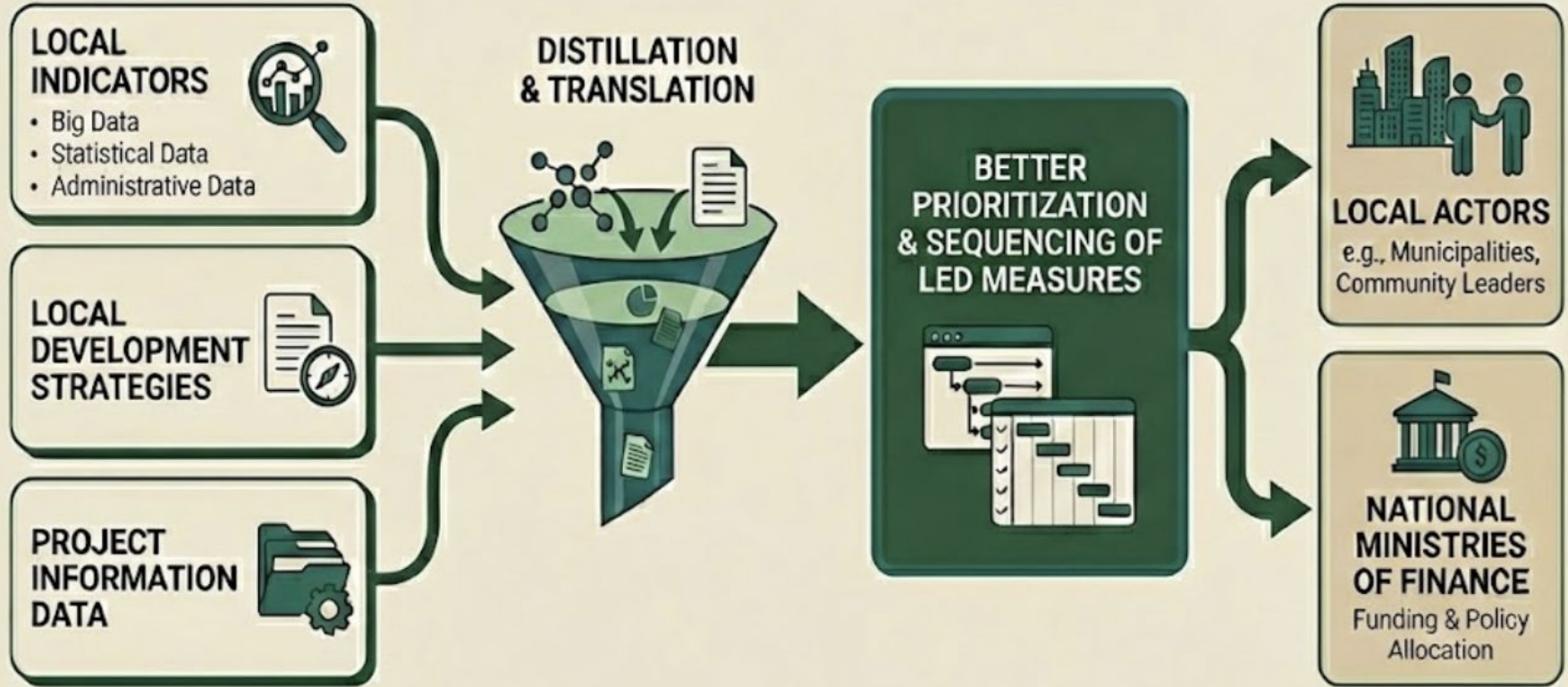
Geospatial Planning & Budgeting Platform (GPBP) Climate Change Screening (CCS)



<https://gpbp.adamplatform.eu/>



AI for Local Economic Development (LED) Support





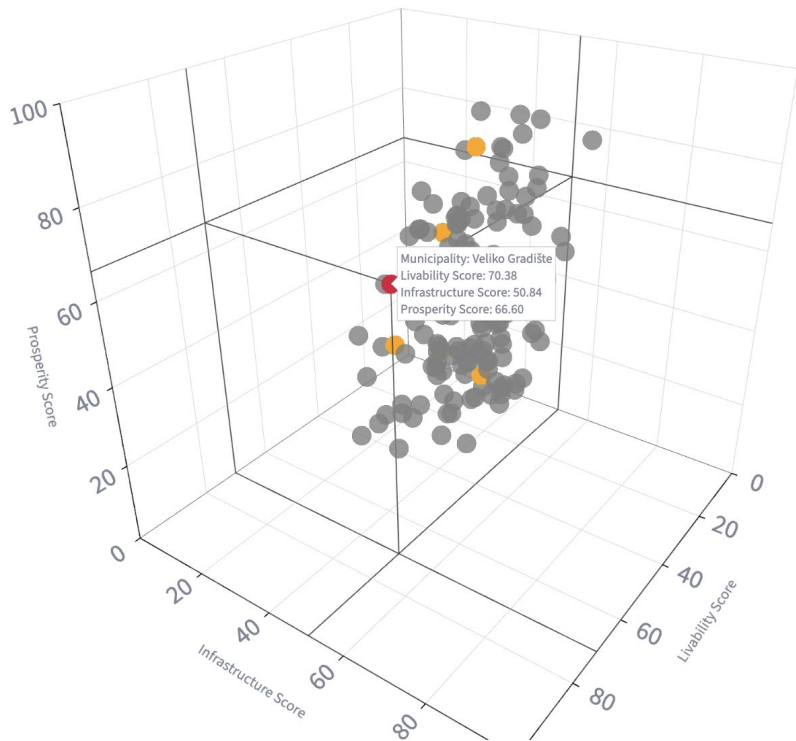
Deep Dive: Veliko Gradište

- **Veliko Gradište is a small Danube-side municipality in north-eastern Serbia**, covering around 344 km² with 26 settlements.
- The town of Veliko Gradište is the administrative, economic, and cultural centre.
- Its development rests on two main pillars: **tourism and agriculture**.





A Quantitative View of Veliko Gradište

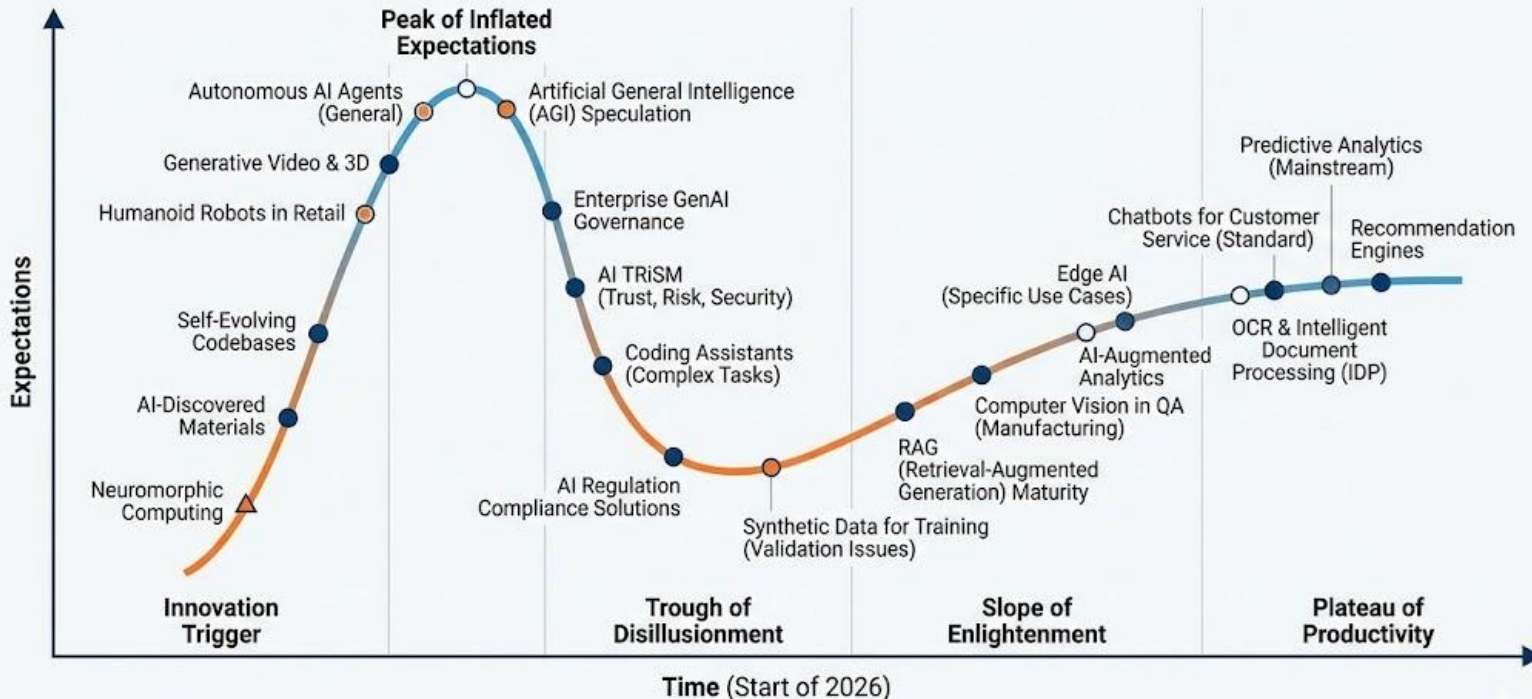


- **Veliko Gradište and its district peers stand out in 3D:** we plot all Serbian municipalities by Prosperity, Infrastructure and Livability, with VG and its neighbours clearly highlighted.
- **The pattern is clear at a glance:** VG is doing quite well, but its Infrastructure score relatively lags behind its Prosperity and Livability.
- **That's our cue to dig deeper:** we zoom in on Infrastructure to unpack which specific components are pulling the score down and where the development gaps really are.



AI Expectations

Gartner Hype Cycle for Artificial Intelligence, Start of 2026 (Projected)



Time to Plateau: ○ < 2 yrs | ● 2-5 yrs | ● 5-10 yrs | ▲ > 10 yrs



- **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!



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/>