



Agencia Nacional de
Infraestructura

ANIscoPIO 2.0

Big Data-based PaaS solution



La movilidad
es de todos

Mintransporte

You can't solve a problem on the same level that it was created. You have to rise above it to the next level

Albert Einstein

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ANIscoPIO 2.0

Innovative Solution

ANIscoPIO 2.0 is a big data based platform as a service solution focused on bringing a multidimensional assistance solution (contract-drafting, risk assessment and project management) regarding financial modelling, contract drafting and risk assessment to the infrastructure structuring and project finance processes in the PPP projects directed by public authorities around the globe.

ANI will apply data aggregation alongside structured and unstructured data.

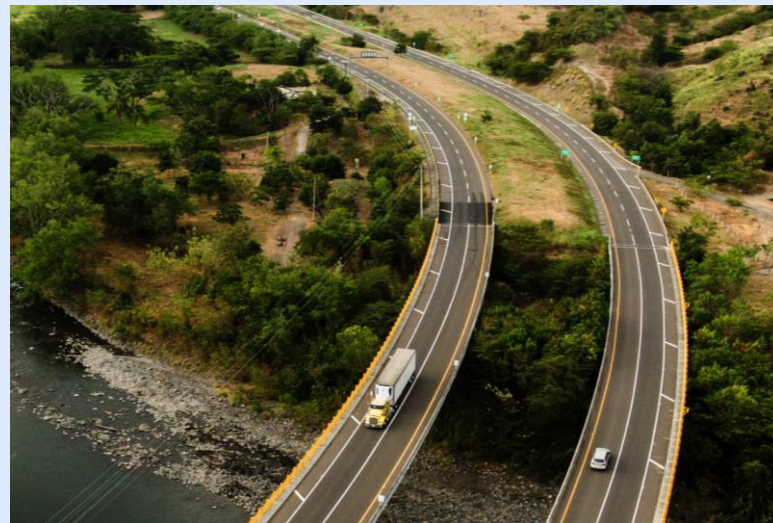


Problem to solve

PPP are large scale infrastructure projects that requires a complex set of interdisciplinary efforts in the structuring and delivery phase. (technical, financial and legal).

Today the project finance is mainly manual, and requires a day-to-day update for every team, that disables the structuring team to have integration.

With an AI-based unified platform the teams can assure the structuring case-by-case can use lessons learned by previous exercises, incorporate knowledge of every project structured by each country.



Big Data in Infrastructure

Efforts have been made to apply AI in the infrastructure sector, mainly academic, such as:

- Financial management of Public Private Partnership projects using artificial intelligence and fuzzy model. Sharafi, Arileza et al. International Journal of Energy and Statistics.
- Modelling optimal risk allocation in PPP projects using artificial neural networks, Jin, Xiao-Hua. International Journal of Project Management

SOURCE initiative in Global Infrastructure is the first global initiative addressing the AI option.



Cloud Computing

Our Big Data provider will offer us a portfolio of services that will help escalate the ANIscopio 2.0:

- SQL Database.
- Multidimensional DataBase.
- Anomaly Detector.
- Questions and Answers Automate Maker.

The integration of this solution will create a PaaS capable of obtain assessments thoroughly.

Opportunity

According to the Global Infrastructure Outlook, infrastructure market outlook worldwide will suffer an incremental surge in investments in the coming years, up until 2040 the global investment needed globally will be about USD 2,5 trillion yearly on average

The Americas will be spending at least USD 1,2 billion annually ceteris paribus.

Colombia, needs to spend USD 339 billion in the period comprised between 2015-2040.

The necessity for infrastructure structuring and project finance will not just persist but grow in almost every continent globally at least until mid of 21st century, therefore, the potential benefits lead by applying Artificial Intelligence to the market,

AI will bring comprehensible infrastructure solution that facilitates the maturity of projects.

Competitive Advantage

- **Big data availability:** Collectable data of the current PPP projects and concessionaire projects running in Colombia, this enables to establish an AI-led engine that permits us to understand a first hand approach of the sector's problems.
- **Interdisciplinary knowledge:** Eclectic project management team integrated with engineers (civil, social, environmental), financial specialists and lawyers that may enrich the machine learning in those scenarios for the PPP projects.
- **Cutting-edge expertise:** ANIscopio 2.0 will provide first AI-based solution coming from a niche operative environment.

Assistance Required

MIT Solve may provide the assistance required for the Beta development and subsequently launch of the solution will be technical help in the machine learning software deployment and testing, the development needs to be qualified enough to guarantee a product. The data available needs tagging to be easily systematized, later the metadata digitization will be necessary to assure the Big Data cloud-based solution. We do have cloud-based providers to enable the AI plug-in configuration.

The development team comprised for a 6-month development lead by 2 Data Scientist, 2 Backend developers, a Scrum Master and a Product Owner with solely dedication to the project, included cloud services needed to create the Multidimensional Database.

Business Model

- **Non-for-profit Initiative.**
- **Monthly subscription-based initiative.** For an affordable price for every stakeholder (specially Public Authorities).
- **Integrated with SOURCE (GI Hub Initiative/SIF).**
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Team

Interdisciplinary effort

- Manuel Felipe Gutierrez (President of ANI, Product Owner).
- Fernando Ramírez (Legal Vice President of ANI).
- Andrés Boada (CTO, Development Team Leader).
- Luz Elena Ruiz (Project Finance and Structuring Manager).
- Lady Pabon (Legal Counsellor).
- Felipe Montoya (Legal Assistant, Scrum Master).
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Thank you

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