Executive Summary

Overview

ANIscopio 2.0 is a cloud-based big data service that allows lawyers, financial assistants and technical assistants in the interdisciplinary modelling of infrastructure projects. Unlike any other Big data solution in the market, this product is solely focused in infrastructure PPP projects and can be used as an interdisciplinary tool to contrast financial, engineering, technical and legal subjects in project finance (financial modelling, contract drafts and risk assessment).

Problem

PPP are large scale infrastructure projects that requires a complex set of interdisciplinary efforts in the pre-investment structuring phase. It encompasses technical requirements, financial modelling, risk assessment and contract drafting (private and administrative law). The structuring nowadays entails a set of social, environmental, engineering professionals working for one side, and contractual and administrative lawyers with financial specialists for the other.

The problem is today the structuring of projects is mainly manual, and requires a day-to-day update for every team, that disables the structuring team to have a thoroughly contractual scheme that reaches in a more accurate way the project management. With a Big Data unified software the teams can assure the structuring case-by-case can take into account lessons learned by previous exercises, with a machine learning capable of incorporate knowledge of every project structured by each country (and worldwide) will enhance and increase the precision regarding the structuring and project finance processes.

Solution

ANIscopio 2.0 provides a versatile Big Data platform service that can be used by any infrastructure stakeholder. The software offers a holistic solution for addressing the project structuring and is fed by previous knowledge Worldwide and in the local context. The users will have an important decrease in disintegrated solutions, because the solution will consider engineers, financial and legal aspects that allow the project management teams to be fully cohesive when project finance matters in the prefeasibility, feasibility and promotion stages.

Opportunity

According to the Global Infrastructure Outlook, developed by GI Hub, infrastructure market 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 and geographically speaking 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, specifically in the project finance, will carry a boost in the developing countries to match their factual investment with the investment needed to develop a comprehensible infrastructure network that facilitates them the integration with global economies.

Competitive Advantages

ANIscopio competitive advantage over competitors is expressed in these key features:

- Big data availability: The National Infrastructure Agency possesses the collectable data (70 Tb) 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: The National Infrastructure Agency have an 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.

Business Model

The product itself has been engineered as subscription-based services for governmental authorities and International Organizations, as a solution it will not be an only profit initiative. Moreover, it will try to democratize the solution of an ecumenic multidisciplinary Big Data-based software that enhances the project finance accuracy in the public sector.

With this solution, the National Infrastructure Agency expects to the play the role that some organizations in developed countries has displayed, such as the LawGeex PaaS but dedicated exclusively for infrastructure matters and focused in contractual draft but also risk assessment, litigation and project management.

Team

The development team for the solution include these profiles:

- Manuel Felipe Gutiérrez Torres, Economist and Lawyer with Master of Laws, he has more than 10 years of experienced background in infrastructure and transportation in public and private sector, former Vice Minister of Transportation of the Government of Colombia and currently the President of National Agency of Infrastructure (ANI in Spanish).

- Fernando Ramírez Laguado, Economist and Lawyer with Master of Laws, he has more than 13 years of experienced background in Administrative Law and infrastructure in public and private sector, former Associate of a highlighted local Law Firm and currently the Legal Vice President of National Agency of Infrastructure (ANI in Spanish).

- Andrés Francisco Boada Icabuco, Systems Engineer with Masters in Engineering Management, with more than 15 years of experienced background in technical assistance for public entities in the Government of Colombia, he was behind of the full deployment of ANIscopio 1.0 as the first Big Data initiative started in the National Infrastructure Agency.

- Luz Elena Ruiz Castro, Lawyer and specialist, he has more than 16 years of working experience and has been working for more than 10 years in legal structuring and project finance of PPPs and Concessionary Contracts in the National Infrastructure Agency.

- Lady Daiana Pabon, Lawyer and specialist, he has more than 8 years of working experience and currently is the Legal Counsellor of the Legal Vice Presidency in National Infrastructure Agency, experienced background in Administrative Law.

- Felipe Montoya Rodríguez, lawyer and political scientist with Master of Laws and Scrum Master certification, with more than 5 years of background in infrastructure and transportation in public and private sector, former Legal Director of a local Investment Bank.

Financials

The economics of the business consists:

- Fixed costs: The servers configuration and the cost of guaranteeing a full deployment of the Big Data plug-in extension in the Cloud service, the cost of a contact center to bring customer accompaniment.

- Fixed costs: The Big Data tagging and digitization of the non-related data available in the Agency.

- The cost of savings directed by the Agency in the consultancy contracts for structuring projects activities-related.

- It will be an open-source service designed to bring help to every Infrastructure Agency worldwide, it can be integrated with SOURCE initiative, lead by Global Infrastructure Hub.

Assistance Required

MIT Solve may provide the assistance required for the MVP 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 an MVP 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.

Elevator Pitch

ANIscopio 2.0 is Big Data platform solution focused on brings a multidisciplinary assistance solution (technical, legal and financial) 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.