



Technology & Innovation Office

Terms of Reference

About the World Bank Group:

Established in 1944, the World Bank Group (WBG) is one of the largest sources of funding and knowledge for developing countries; a unique global partnership of five institutions: the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA), and the International Centre for the Settlement of Investment Disputes (ICSID). With 189 member countries and more than 120 offices worldwide, the WBG works with public and private sector partners, investing in groundbreaking projects and using data, research, and technology to develop solutions to the most urgent global challenges.

Background/General Description:

The WBG ITS Technology & Innovation Office serves as an internal technology advisor, and a knowledge and exploration hub around operationalizing emerging technologies for development impact, enabling WBG to be future ready and competitive in the digital age. We work across multiple sectors and themes to solve corporate and development challenges in the context of the Sustainable Development Goals agenda, while harnessing the convergence of both conventional and emerging technologies and innovative paradigms including design thinking, foresight and system's design.

Technology & Innovation Office recently launched the 3-year work program anchored in the World Bank Group Korea Office. The aim of this program is to support the East Asia Pacific (EAP) region by harnessing AI and data-driven technologies to foster innovation and enhance the WBG's operations for sustainable development. This will be achieved by providing guidance to WBG operations and client countries, supporting knowledge sharing and capacity building opportunities, and delivering technical guidance on responsible AI and data safeguarding.

Roles and Responsibilities

The Terms of Reference is for the recruitment of a local consultant to be based in the WBG Korea Office to assist in this program and supporting the implementation of the workplan. The candidate should demonstrate analytical skills and engineering capability understanding of the emerging technology landscape and market trends, and ability to determine potential impact to solve development challenges.

The candidate will support the team efforts on evaluating innovative technology fit for addressing development problems and issues faced by the WBG business units and its clients. The candidate will participate or co-lead joint efforts to support use cases leveraging disruptive/innovative technologies from both technical and business perspective. The candidate can also support exploration initiatives on disruptive technologies.

Duties and Accountabilities:

- Develop and deliver prototypes, including data analysis models, interactive dashboards, or AI solution outputs, to support country-level project insights.
- Provide engineering support and technical assistance to WBG operation projects and country clients.
- Analyze technical requirements, design scalable architectures, and come up with potential solutions that align with client needs and operational goals
- Create technical documentation, analytical reports, and communication materials to showcase outcomes and prototype solutions
- Continuously research and monitor emerging technologies, industry trends, and best practices to stay current with the latest technology developments.
- Collaborate with the WBG community to identify and address new technologies and needs, ensuring active participation in innovation initiatives and projects
- Build and follow-up on engagements with various Korean stakeholders and partners and leverage cutting-edge technology for innovation
- Support various tasks and initiatives aligned with the Technology & Innovation Office workplan.

Core Deliverables

- Developing prototypes, such as AI models, data visualizations, and interactive dashboards, to support country-level projects and decision-making
- Preparing analytical reports and slide decks to communicate findings and technical solutions
- Contributing to engineering-focused tasks and initiatives aligned with the Technology & Innovation Office's strategic objectives

Required Competencies

- Master's degree in computer science, engineering, data science and/or relevant field with more than 2 years of experience (bachelor's degree with 4+ years of relevant experience).
- Degree in a field relevant to this analytical work, such as Engineering, Computer Science, Data Science, and/or related fields regarding innovation/Technology/ICT
- Strong teamwork and interpersonal skills and the ability to communicate effectively.
- Experience managing multiple projects, including simultaneous task assignments.
- Excellent communication skills, written and verbal, in English and Korean is a must.
- Familiarity with the Linux command line operations and proficiency in executing commands and navigating the Linux environment.
- Passionate about continuously studying the latest development trends, emerging techniques, and frameworks needed for project requirements.
- Proven technical skills and proficiency in Python programming, with hands-on experience in Python-based libraries and frameworks including NumPy, Pandas, Django, Flask, and scikit-learn or any related programming languages and frameworks.

Time Schedule and Operations

This position is for a maximum of 50 days within the current fiscal year. New contract can be offered in the next fiscal year based on performance