Identifying promising AI use cases in Ethiopia

REQUEST FOR QUOTES

1. Introduction

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Find more at gsma.com.

The GSMA Mobile for Development (M4D) foundation operates at the intersection of the mobile ecosystem and the development sector. Our aim is to stimulate digital innovation and deliver both sustainable business and large-scale socio-economic impact. Our research and insights platform, in-market expertise and community of partners push forward digital innovations and implementations that empower underserved populations. Find out more at gsma.com/solutionsand-impact/connectivity-for-good/mobile-for-development/.

The Central Insights Unit (CIU) sits at the core of GSMA Mobile for Development (M4D) and produces in-depth research on the role and impact of mobile and digital technologies in advancing sustainable and inclusive development. The CIU engages with public and private sector practitioners to generate unique insights and analysis on emerging innovations in technology for development. Through our insights, we support international donors to build expertise and capacity as they seek to implement digitisation initiatives in low- and middle-income countries through partnerships within the digital ecosystem

2. Background

AI holds immense potential to boost Africa's economy and to support the Sustainable Development Goals (SDGs) on the continent. AI applications can create social and economic impact, especially in low- and middle-income countries where innovative approaches to development are most needed. Today, Africa represents only 2.5% of the global AI market, yet recent estimates suggest that AI could increase Africa's economy by $2.9 trillion by 2030 – the equivalent of increasing GDP growth by 3%. This boost in economic growth could translate into significant development impacts for the continent and help to raise millions out of poverty.

Recent GSMA research has looked at the opportunity to leverage AI for development in Kenya, Nigeria and South Africa, some of the most advanced tech ecosystems in the region. This work aimed to identify AI-enabled use cases and solutions that could address development challenges across three selected sectors – agriculture and food security, energy and climate action – and to examine the maturity of the AI ecosystem and key enablers to understand their impact on the development and adoption of use cases.

Drawing on this work, the GSMA's Central Insights Unit has been commissioned by the UK's Foreign, Commonwealth and Development Office (FCDO) to conduct a research project on AI in Ethiopia. The country has a comparatively less mature ecosystem than other major economic leaders in the region. Mobile and internet connectivity, smartphone access, as well as foundational infrastructure such as energy supply, are all areas that require improvements and concerted efforts by public and private sector. The government has taken important steps to improve the policy environment and is currently engaged in multiple initiatives driving AI innovation and implementation.

3. Project objectives and research questions

Objectives

This research project seeks to:

- Provide an overview of the AI ecosystem in Ethiopia (data, skills, compute), and digital economy foundations (policy and regulation, financing, partnerships, telecoms and energy infrastructure);

- Identify the most promising sectors and use cases for AI-led innovations that address socioeconomic and climate related challenges

- Identify, describe and assess the maturity of these use cases in relation to the ecosystem and the opportunity to scale them up.

- Provide practical recommendations on how ecosystem actors can support the deployment of AI solutions in these sectors, and how they can enhance the enabling environment for further AI development.

Important considerations:

- We are primarily interested in the role of the government as an implementer as well as an enabler of AI for impact solutions. The project also aims to capture private sector-led initiatives and other collaborative initiatives between public, private and third sector.

- We aim to conduct an analysis on a selection of use cases where AI can be leveraged to deliver impact in Ethiopia. We will identify up to six use cases across sectors that present the most promising opportunities, in both the short- and long-term. We aim to investigate opportunities at different stages of maturity, including use cases where solutions are already being deployed, as well as more nascent opportunity areas. Selection criteria are to be defined but will likely include sectoral data availability and quality, availability and affordability of hardware and software for data collection and analysis, skills, as well as access to financing and business models.

- Specific attention should be given to local, inclusive and sustainable AI solutions, i.e. developed with a deep understanding of the local context, culture, and needs of African communities, that are accessible to all segments of society, mitigate existing inequalities, and are sustainable in the long-term.

Broader aim of the project:

This project will guide development actors (e.g. the FCDO and its partners) in Ethiopia as they seek to identify opportunities where AI can drive developmental gains, and as they look to support local partners in deploying innovative digital solutions. The project seeks to explore opportunities for the Government of Ethiopia in creating enabling environments for AI innovation. It also seeks to identify opportunities for collaboration between UK public and private sector institutions and Ethiopian stakeholders to advance AI-driven impact initiatives.

Research questions

The research will seek to answer the following questions:

1. **What does the current AI ecosystem look like in Ethiopia?**
    - How mature are the digital foundations and AI fundamentals in the country? What are the main gaps and challenges?

- What are some existing AI initiatives of national and international actors in Ethiopia? Who are the main players in the ecosystem?

2. **Which use cases and specific solutions present the most promising opportunities to leverage AI for sustainable and inclusive development?**
    - What are existing and emerging AI use cases for development that have high potential for impact across selected sectors?
    - How does the current AI ecosystem and enabling environment impact AI deployment in these use cases/sectors?
    - What specific challenges exist in realising these opportunities?
    - What are the main barriers and risks of using AI in these use cases and how can principles of inclusivity and ethics be ensured?

3. **What are priority actions to support the development of promising use cases and scale proven solutions?**
    - What kind of support do innovators need to deploy AI for impact and which actors are best placed to provide such support?
    - What role can local, regional, and international stakeholders play to support strengthen the AI ecosystem and enhance the enabling environment?

4. Scope and geography

Within the context of this study, AI refers to the use of data to make decisions or perform tasks normally considered to require human knowledge, intelligence, learning and understanding (such as visual and audio recognition, pattern recognition and detection, hypothesis testing, and optimisation) with specific contexts. AI systems refer to computer systems with the capacity to process large quantities of data and information with intelligent behaviour. Some of the common behaviours of AI include machine learning, deep learning, natural language processing, and computer vision, and speech technology. While the research will focus primarily on AI-based technologies, use cases of other frontier technologies such as IoT and blockchain will be included if they are being deployed in conjunction with AI for inclusive and sustainable development.

The research will focus on Ethiopia. Where relevant, the research will bring insights such as best practice examples and other benchmarks from relevant international markets primarily in Africa.

5. Anticipated approach and methodology

The below is a proposed methodology but we welcome further ideas and proposed methodology from the supplier.

Phase	Activities and deliverables	Timeline
Phase 1: Inception	**Key activities** - Kick off call to discuss methodology, scope, timelines and approach - Support GSMA in finalising research methodology and tools (analytical framework, KII templates) - Mapping of ecosystem players addressing gaps in GSMA's list[1]	
	Key deliverables	

[1] The GSMA already has a preliminary list of stakeholders but is expecting the supplier to leverage its network to address any gaps and suggest additional stakeholders.

	- Initial report outlining annotated bibliography of key literature identified, research framework, draft research instruments, list of additional stakeholders *Format: PowerPoint (5-10 slides)*	Deliverable 1 due mid-October (date TBC)
Phase 2: Desk research and key informant interviews	**Key activities** - Desk research - Key informant interviews (KIIs) with 25-30 stakeholders: key government and public sector stakeholders (including stakeholders implementing government-led initiatives), enabling organisations, start-ups, development partners, regional stakeholders where relevant	
	Key deliverables - Detailed summary interview notes - Interim findings/report: analysis of findings to date *Format: PowerPoint (20-30 slides)*	Deliverable 2 due mid-November (date TBC)
Phase 3: Analysis, validation and reporting	**Key activities** - Consolidating insights, analysis and report drafting	
	Key deliverables - Final report summarising insights with recommendations to key stakeholders. *Format: PowerPoint of Word Document – To be discussed with GSMA team (approx. 40 pages excluding annexes)*	Deliverable 3 due mid-January (date TBC)

Notes:

- The GSMA team is currently working on its own inception report with the analytical framework, preliminary insights and initial sector analysis, which the consultant will be able to build on.

- The total number of interviews to be completed will be determined as interviews are being conducted based on research gaps and needs.

6. Supplier requirements

The GSMA is searching for a partner to deliver analysis responding to the outlined objectives. Ideally, they will have:

- A demonstrable track record of completing similar assignments in Ethiopia (required) and other Sub-Saharan countries (desirable)
- Thematic expertise in AI, digital development, and start-up and public sector partnerships
- Knowledge of the local AI ecosystem and enablers and existing level of AI deployment
- Knowledge of AI use cases for development
- Local presence and/or a clear and proven network of local stakeholders to facilitate KIIs

The project will be designed and implemented in close collaboration with the GSMA team, with a member of the team likely traveling for in-country research.

The successful bidder is expected to:

1. Provide a named key point of contact who will work closely with the GSMA team

2. Respond to emails from the GSMA within two working days
3. Organise weekly status calls/meetings to report on project progress throughout the assignment
4. Inform the GSMA about delays and complications in a timely manner

7. Request for quotes

Suppliers wishing to be considered should submit a quote by **17:30 BST, Friday 13th September 2024** for this work to Daisy Macaskie (dmacaskie@gsma.com) and Eugénie Humeau (ehumeau@gsma.com). Timeline subject to change at the GSMA's discretion. All changes will be communicated to bidders.

Evaluations of proposals will take into account the following elements. It is unlikely the GSMA will consider proposals that do not include all elements listed. We ask that proposals be concise, in order to speed up the selection process.

1. **Understanding of the brief and approach:** Suppliers demonstrate a clear understanding of the scope of work and outline how they intend to deliver the project objectives as specified above. This should include:
    - How you intend to meet the requirements of this document;
    - Proposed analytical framework for conducting the study
    - Type and examples of organisations to be consulted
    - Considerations/limitations in response to objectives;
    - Suggestions for alternative/supplementary approaches to address the central objectives;
    - An indicative timeline for delivery and demonstration of capacity to meet this;
    - State any dependencies on GSMA staff.

2. **Team and responsibilities:** The proposed team should be included with a short bio alongside proposed roles.
3. **Relevant experience:** Include examples of previous work which demonstrates experience where possible
4. **Quality assurance and risks/mitigation strategies:** All RFQ responses should include how any potential risks may be mitigated, e.g. security risks, COVID-19, etc.
5. **Data storage and confidentiality plan:** We expect all our suppliers to comply with the EU General Data Protection Regulation. The selected supplier will be responsible for obtaining appropriate consent from all interview and survey participants.
6. **Itemized quote**: Suppliers should provide a fully itemised quote, a template can be found at the bottom of this document. The GSMA default currency requirement for all proposals is 'UK Pounds Sterling'. All costs should clearly demonstrate breakdowns in terms of staff time, travel, direct costs, and other expenses. Suppliers are also asked to provide costs for any alternative or supplementary approaches suggested in your proposal.

8. Budget template

Please provide the total price and the breakdown by unit cost using the table below as a template.[2] Please quote all rates in GBP, including any local taxes, and highlight cost savings.

[2] Please feel free to break down costs further to provide more clarity as required.

Name	Role	Delivery stage/ activity	Volume/ Item	Standard rate/ Cost (Daily rate	Total Charge
e.g. Peter James	*e.g. Senior Adviser*	*e.g. Inception stage: Desk research*	*e.g. 5 days*	*£*	*£xx*
					£xx
					£xx
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