Republic of Ghana

Ministry of Communications and Digitalisation

eTransform Project
IDA CR 6741-GH

Terms of Reference

for

DIGITAL ECONOMY STUDIES ON THE FOLLOWING SECTORS: ENERGY; TOURISM, HOSPITALITY AND LEISURE; TRANSPORTATION AND MOBILITY; LOCAL GOVERNMENT

July 2021

1.0. Background

Digitalisation has taken centre stage in the running of socio-economic affairs globally. This phenomenon makes it incumbent on countries to lay a solid foundation to drive the adoption of digital tools, frameworks, policies, and best practices to respond to, and leverage current digital paradigms for the benefit of people and institutions. In shaping the digital future of nations, initiatives, policies, and development programmes must be aligned with the actual needs of the citizens and institutions.

Approaching the development of the digital economy in a manner that speaks to the needs and the environmental conditions of the local economy not only presents top-of-the-level outcomes for the people but also safeguards their future and imbues the country, its people and institutions with capabilities that enable them to respond to future events more optimally.

In the wake of COVID-19, the need for sound digital readiness capabilities by countries cannot be overemphasised. However, it is absolutely essential to develop a decision-making environment that is backed by data and insights. That is why conducting the right studies must be the first steps taken towards the development of a digital economy that yields top-notch results for all stakeholders.

Aligning policies and initiatives to the realities of the people and institutions in Ghana requires critical studies of key sectors of the economy to solicit relevant baseline insights and essential data to support decision making to help develop a digital economy that enriches the lives of all stakeholders.

Recognising the relevance of research to the development of our digital economy, the Government of Ghana and the World Bank, through the eTransform Project, have earmarked digital economy studies into specific sectors to provide the foundational insights that will aid Ghana's quest to determine a robust, all-encompassing digital future for her people.

The results of the studies will provide the Government and all stakeholders, with the proper foundation, aided by data, to enact sound policies and programmes such as the future Ghana Digital Acceleration Project (GDAP).

The eTransform Ghana project focuses on employing ICT-based interventions, and the prudent and efficient use of government resources, to advance shared and accelerated development in priority areas for Ghana. The project development objective is to improve the efficiency and coverage of government services delivery using ICT. The Project employs digital platforms, among other things, to nurture new businesses, create job opportunities, and promote digital entrepreneurship. The Project recognises that the process of digitalisation has the potential to improve the quality and reach of government service delivery, improve targeting of social protection spending, and ensure greater use of digital commerce. All activities supported by the Project are underpinned by an open and transparent environment, with provision for access to open and secure data, and potential for innovative applications.

2.0. Objectives of the Assignment

The objective of the consulting service is to utilise the appropriate research tools and resources to conduct comprehensive research on key selected sectors of the Ghanaian economy, (notably, **Energy;Tourism, Hospitality and Leisure; Transportation and Mobility; Local Government**). The assignment will collect and provide baseline data and offer critical insights for decision-making on the development of Ghana's digital economy. The findings of the study will form the basis for the development of quick-win sectoral projects for future funding.

3.0.Scope of Work

The Consultant will conduct research into allotted digital economy study areas. Among other things, the Consultant, for each research area shall conduct his/her research in consonance with the expected scope of study in the scope table below:

Research Scope Table for the Sectoral study on Energy, Tourism, Hospitality and Leisure; Transportation and Mobility; Local Government

No.	Sector	Research Area	Scope
1	Energy	A Comprehensive Assessment of Ghana's On-grid and Off-grid Energy landscape. (Ghana has launched diverse energy sufficiency programmes and initiatives. Most of Ghana's Energy programmes such as the Rural Electrification Masterplan emphasises ownership of energy assets by government. • Ghana has off-grid programmes such as the deployment of mini-grids in difficult- to - reach communities. These initiatives are government-led with very limited private sector participation • Private Sector participation is mainly	a) Establish key metrics and baselines b) Determine key demographics c) Undertake a stocktaking of Ghana's off-grid and on-grid energy assets d) Provide a taxonomy of the sector and the value chain with key indicators e) Assess the current policy and identify policy gaps and policy requirements f) Determine Policy needs to transform the off-grid energy sector. Determine Policy needs to transform the off-grid energy sector by stimulating the enabling conditions to deepen private sector participation while establishing Ghana as a sustainable energy innovation hub. g) Conduct a comparative benchmarking assessment of peer countries, in Africa and around the

No.	Sector	Research Area	Scope
		seen in the provision of Solar Home Systems. • For Ghana to become energy sufficient and meet its energy requirement as part of sustaining and fulfilling its digitisation agenda, there needs to be a comprehensive assess - ment of Ghana's energy sector within the context of sustainable energy. • Ghana needs to have off-grid and on-grid energy benchmarks and targets)	world, establishing key success factors and lessons. h) Map out the start-up or digital entrepreneurship ecosystem in the sector
2	Tourism and Hospitality and Leisure	Assessment of the usage of digital technologies in the Leisure, Hospitality and Tourism sector	a) Establish critical baselines and metrics to assess the use of digital technologies and digital service delivery in the Leisure, Hospitality and Tourism sector b) Develop a taxonomy of the value chain c) Undertake an inventory of the current use of digital technologies in the sector d) Assess the current policy and identify policy gaps and policy requirements e) Build an inventory of digital assets in the sector f) Develop an inventory of general assets of the sector g) Identify potential areas for leveraging digital technologies and make recommendations to bridge the digital gaps. h) Conduct a comparative benchmarking assessment of peer countries, in Africa and around the world, establishing key success factors and lessons. i) Map out the start-up or digital entrepreneurship ecosystem in the sector

No.	Sector	Research Area	Scope
3	Transportation and Mobility	A comprehensive study of Digital Readiness and Digital Penetration in Ghana's Transportation Sector. The study will cover GPRTU, Tolls Booths, Aviation, Harbour and Railway, DVLA; Connectivity to security and Police etc; Road Safety Commission, and all transport sector agencies in both the public and private sectors (road, rail, maritime and air transport). For air transport assess links to border management and security systems, port health among others.	a) Establish key baselines and metrics related to the use of digital technologies in the sector b) Establish key demographics c) Determine the digital readiness of ecosystem players such as drivers (by-seb-sector) d) Take stock of digital tools and services in the sector (by sub-sector) e) Assess digital payment readiness in the sector f) Assess the state of digital infrastructure in the sector g) Provide comparative Benchmarking analysis of peer and advance countries h) Identify policy gaps i) Make Policy Recommendations
4-1	Local Government	a) Local Government Conduct a nationwide digital readiness study of the 16 regions of Ghana with a district-level digital readiness assessment	a) Establish key baselines and metrics related to the use of digital technologies in the sector b) Establish key demographics c) Conduct a digital readiness SWOT of the various districts in the regions d) Assess the state of digital infrastructure and take stock of available digital services and infrastructure in the various districts e) Provide comparative Benchmarking analysis of peer and advance countries f) Identify policy gaps g) Make Policy Recommendations h) Develop a nationwide digital penetration index to serve as a benchmark for measuring digital development in the various districts and regions of Ghana (including sume suggestion for regular data collection and monitoring at district level)

No.	Sector	Research Area	Scope
4-1		b) Geospatial Data Management and Skills Conduct a comprehensive assessment of national/municipal geospatial information management capacity for spatial planning	a) Determine infrastructure/skills needs in relation to the generation, maintenance, analysis and presentation of relevant geospatial information for the purpose of spatial planning b) Assess the state of infrastructure and skills at the national/municipal level c) Assess institutional readiness/maturity to coordinate and implement geospatial projects for spatial planning d) Identify, evaluate and assess the policy and regulatory challenges, constraints and problems with respect to sharing and dissemination of data and information e) Make policy recommendations

4.0. OUTPUTS AND DELIVERABLES, AND ADMINISTRATIVE ARRANGEMENTS

Administrative Arrangements
The Consultant will work under the direct supervision of the Chief Director of the Ministry of Communications and Digitalisation through the Digital Economy Studies Coordinator (DESC). All deliverables of the Consultant will require approval of the Ministry of Communications and Digitalisation. All deliverables of the Consultant shall be shared with stakeholders, including the World Bank.

Assignment Duration and Schedule of Deliverables
The duration of the assignment will be seven and half months(7.5) months.
The Team Leader's time inputs should be more than that of any other Specialist of the Consulting team. The selection method to be used under this Consultancy is a Quality and Cost Based (QCBS) Selection Method. The Consultants must therefore plan the staff inputs of Consultants into this assignment in order to be competitive.
 The expected deliverables and the corresponding timing of various tasks are as follows:

	Deliverable	Activity	Time from the start of the assignment
1	Research and Resource Plan	Inception document and a structured programme the Consultant intends to use to conduct the digital economy research. This should include a plan of activities, tools, and resources (including human resources), key stakeholders and contacts required to conduct the research.	Commencement + 2 weeks
2	Draft Scoping and Literature Review Report	Conduct an initial framing of the research problem, scoping and review of available evidence and literature to inform the structuring of the research and make initial contact with relevant stakeholders.	Commencement + 4 weeks
3	Overarching Research Framework for sectoral studies	Defines an overarching framework to be used to structure and guide the research. The framework will ensure consistency in methodologies and approaches to produce a coherent and integrated analysis across the study areas. This should look at: 1. the scope of the research, 2. the questions to be answered 3. the definitions to be employed 4. the key methodological issues to be addressed 5. the approach to dealing with all the above. It should also include topic guides to structure: 1. evidence reviews, 2. consultations and 3. case studies, and 4. specify the types of data required and how these will be used in the analysis. It will also provide guidance in ensuring that consultations and case studies cover a representative range of demographics, countries, ecosystems, and sectors as far as	Commencement+ 6 weeks

	Deliverable	Activity	Time from the start of the assignment
		this is consistent with the research results being conveyed.	
4	Presentation at Stakeholder workshop on Deliverables (1-3)	Provide updates on the progress of the research being conducted by the research through the DESC. Be available to do a presentation to key stakeholders.	Commencement + 8 weeks
5	Conduct Research	Conduct research using the most appropriate research and engagement methods.	Commencement + 18 weeks
6	First Draft of Findings Reports and Sheet of Indicators and Metrics (SIM)	Prepare the first full draft of the research findings. This draft may include sections where the research is not yet complete, or not yet completely integrated. Where this is the case, the draft will include information on progress made and expected content and plan to complete the rest of the study report. Submit a Sheet of Indicators and Metrics to highlight key statistics, metrics and baselines in the specific sectors being studied.	Commencement + 24 weeks
7	Presentation of Draft Sector specific Digital Economy studies Report at Stakeholder workshop	Presentation of draft sector specific reports to stakeholders at a meeting to be organised by the Ministry of Communications and Digitalisation	Commencement + 26 weeks
8	Final Research Report	• Complete research and submit final research document for review • Submit final Sheet of Indicators and Metrics to highlight key statistics, metrics and baselines in the specific sectors being studied. • Clear indication of quick- win projects to be articulated	Commencement + 30 weeks

All deliverables are to be provided in electronic form via email and on a USB memory stick and five (5) hard copies. Deliverables will be delivered to the Presidency through the Ministry of Communications and Digitalisation.

All reports, except the final, will be reviewed by MoCD and the World Bank and comments provided within two weeks from submission. The final report will be reviewed within three weeks. As part of the review process, the Consultant, working through the Digital Studies Economy Coordinator (DESC), will be expected to organise a presentation of reports at stakeholder workshops to be organised by MoCD.

Payments will be made after approval of submitted reports by MoCD and The World Bank.

5.0. QUALIFICATIONS AND EXPERIENCE OF CONSULTANT
The Consultant is expected to be a firm which should meet the following minimum requirements:
   a) The selected organization should be a legally established organization in operations for a minimum of five years.
   b) The Consultant or Consulting entity shall have or shall have in their team, individuals with demonstrable experience conducting research in the specified areas of the studies.
   c) Experience in designing, implementing, and conducting studies in the context of the technology, digitisation, and the economy
   d) Provide References to similar research work conducted in the past
   e) Proof of financial capacity to mobilise needed logistics and resources to conduct the Digital Economy studies
   f) Proof of international experience and available network of experts to conduct such studies
   g) Demonstrate familiarity with Ghana and the Global environment with regards to the digitisation and the tech ecosystem
   h) Fluency and ability to conduct research in the English Language
   i) Proven experience in working with and supporting government agencies in Ghana or Africa

5.1. Staffing
The assignment will be executed by a multi – disciplinary team of experts comprising the following:

   1. A Digital Economy Expert (Team Leader)
   2. Sector-specific Experts
      a) Energy Expert
      b) Tourism/Hospitality Specialist
      c) Transportation Specialist

d) Local Government Specilaist

e) Geo Spatial Data Specialist

3. A Sociologist/Economist

4. Monitoring and Evaluation Expert

Staff Qualifications and Experience

Digital Economy Expert (Team Leader)
- At least a Masters degree in ICT, Economics, Sociology or any other related field
- Must have been engaged in Digital Economy work for the past 5 years
- Minimum 10 years experience in conducting research work
- Prior experience working with the Government of Ghana is desirable, especially in the sectors under study
- Excellent written and oral communication skills
- Proven ability to deliver high-quality outputs to meet tight deadlines

Sector Experts
- At least a Masters degree in the sector under study or a related field
- Must have been engaged in the sector under study for the past 5
- years
- Minimum 5 years experience in conducting research work
- Prior experience working with the Government of Ghana is desirable, especially in the sectors under study
- Excellent written and oral communication skills
- Proven ability to deliver high-quality outputs to meet tight deadlines

Sociologist/Economist
- At least a Masters degree in Sociology or Economics
- Minimum 5 years experience in conducting research work
- Prior experience working with the Government of Ghana is desirable, especially in the sectors under study
- Excellent written and oral communication skills
- Proven ability to deliver high-quality outputs to meet tight deadlines

Monitoring and Evaluation Expert
- At least a Masters degree in ICT, Sociology, Economics or any other related field.
- Minimum 5 years experience in conducting research work
- Post Graduation training in Monitoring and Evaluation and/or demonstrated experience in Monitoring and Evaluation of development programmes
- Prior experience working with the Government of Ghana is desirable, especially in the sectors under study
- Excellent written and oral communication skills
- Proven ability to deliver high-quality outputs to meet tight deadlines

5.2. Adhering to Ethical Research Standards

The Consultant shall ensure that in conducting the studies, they adhere to strict ethical standards as stipulated below:

1. **Respect**: The researcher must recognise the capacity and rights of all individuals to make their own choices and decisions, and their right to be treated with dignity.
2. **Beneficence**: The researcher must have the welfare of the research participant in view.
3. **Fairness**: The researcher must ensure that the benefits for participants far outweigh the risks
4. **Research Design**: Research must be designed to protect vulnerable participants. Questions should be crafted in a very respectful manner by employing appropriate tone, language, and sensitivity to the culture of the participants
5. **Selecting Participants:** Participants should be involved if the participants will benefit from the findings of the research. The benefits of participating in the research should be more than the risks. Ultimately it is up to the participant to make that choice.
6. **Gaining the Consent of Participants: The** Researcher must gain informed and voluntary consent before conducting research with participants. This means that the participants must:
   a. have the relevant information about what the research is
   b. understand it, including the possible risks and benefits to themselves
   c. be free to choose whether to participate, without inducement
   d. give their consent, either written or verbal.
   e. have the right to withdraw from the research at any time.
7. **Researchers must be qualified and/or trained for the task:** The Researcher needs to have good self-awareness and strong listening skills.
8. **Safe Spaces and Channels:** Research should be conducted in places that are socially comfortable for the participant and where they can speak freely.
9. **Cost Reimbursement:** If the participant incurs direct financial costs for participating, then they can be reimbursed. They should, however, not be paid to participate.
10. **Available Contact:** The participants must be able to contact the researchers, either directly or through local partners, in relation to any direct or indirect impact or experienced after engaging in the research. •
11. **Using the research findings:** Participants be told how research findings. Responses and input may be used.
    a. They must then be asked, and must be free to choose whether:
       i. they can be quoted in future materials by stakeholders of the research
       ii. their real name can be used in stakeholder(s) materials
       iii. their photographic image and/or film of them (if taken) can be used in stakeholder materials.
    b. Their choices must be clearly recorded and always kept with their testimony and/or the relevant media.

c. If it is agreed that all or any part of a participant's testimony should be confidential, then that commitment must be clearly recorded and respected.
d. If the testimony is to be made anonymous or used with a false name, make sure that any other identifying details are also changed.

6.0. DATA, FACILITIES AND PERSONNEL TO BE PROVIDED BY THE CLIENT

The MoCD will provide access to relevant reference materials, existing reports, data information available that may be required by the Consultant. The MoCD will also facilitate access to other Government offices, private and public enterprises as appropriate. The Consultant is expected to be self-sufficient in terms of office space, supplies, communications, computers, and transport during the performance of the assignment.