



**COUNTRY: KENYA**

**PROJECT: KENYA DIGITAL ECONOMY ACCELERATION PROJECT (KDEAP)**

**IMPLEMENTING AGENCY: INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY (ICTA)**

**PROJECT ID: P170941; CREDIT NUMBERS 7289-KE AND 7290-KE**

**TERMS OF REFERENCE FOR:**

**REQUEST FOR EXPRESSION OF INTEREST FOR CONSULTING SERVICES FOR PROVISION OF CAPACITY BUILDING FOR TECHNICAL, VOCATIONAL EDUCATION AND TRAINING (TVET) TRAINERS**

**CONTRACT NO: KE-ICTA-501676-CS-QCBS**

**ISSUE DATE: 24<sup>th</sup> FEBRUARY, 2026**

**CLOSING DATE: 11<sup>th</sup> MARCH 2026 at 1000HRS EAT**

Client:  
The Chief Executive Officer,  
ICT Authority  
Telposta Towers 12th Floor, Kenyatta Ave  
PO Box 27150 - 00100 Nairobi Kenya  
Tel: +254 20 2089061/ 2211960 Fax: +254 20 2211960  
Email: [procurement@ict.go.ke](mailto:procurement@ict.go.ke), [info@icta.go.ke](mailto:info@icta.go.ke)  
Website: [www.icta.go.ke](http://www.icta.go.ke)

## 1. Background

The Government of the Republic of Kenya (GoK) has received credit financing in the amount equivalent to US\$390 million from the World Bank towards the cost of the first phase of the Kenya Digital Economy Acceleration Project (hereafter referred to as the “Project”). The Project is designed to enhance the country's digital infrastructure and services, improve digital skills and access to markets, and build capacity within government institutions for efficient project management and emergency response.

The Project components include:

**Component 1: Digital Infrastructure and Services-**The aim of this component is to increase access to high-speed internet for individuals, industry, and government—the ‘foundation of the foundations’ of a digital economy and strengthen Kenya’s role as regional digital leader—while leveraging investments from the private sector.

**Component 2. Digital Government and Services-** This component will invest in the foundational digital services, platforms, architectures, and policies needed to transform the way the Government communicates and conducts its internal operations.

**Component 3. Digital Skills and Markets-** This component aims to equip young Kenyans with employment-ready digital skills, strengthen their abilities to access, and compete in domestic and regional markets, to study mechanisms of improving access to affordable devices and to enhance the enabling environment for e-commerce to support Kenya’s role as a regional digital hub.

**Component 4. Project Management-** This component supports project implementation and coordination, led by the Project Implementation Unit (PIU) within ICT Authority (ICTA) and capacity building.

**Component 5: Contingent Emergency Response Components-**This component will be activated in the event of an emergency.

The Government of Kenya places significant emphasis on skills development policies as a means of enhancing productivity, generating employment opportunities, and promoting industrial growth. In alignment with national legislation and international frameworks such as the Sustainable Development Goals (SDGs), access to quality training is recognized as a fundamental human right for all citizens. The Constitution of Kenya (2010) underscores the importance of education, with Article 43(1)(f) affirming that “every person has the right to education.” Additionally, Article 54(1)(b) guarantees access to education for persons with disabilities, while Article 55(a) obligates the State to implement measures, including affirmative action, to provide the youth with appropriate education and training.

The State Department for Technical Vocational Education and Training (SDTVET) is mandated to oversee trainers in the TVET sector, ensuring the delivery of high-quality skills. However, various challenges face the sector due to limited resources, natural pandemics and this have affected the education sector, necessitating a rapid transition to the adoption of digital transformation to enhance learning. The move beyond traditional classroom modalities affirms technology as a durable, scalable pathway for education delivery in the current era.

At present, the State Department for Technical and Vocational Education and Training (TVET) supervises 250 institutions—comprising National Polytechnics, Technical Training Institutes, and Technical and Vocational Colleges—with a combined enrollment exceeding 500,000 trainees. Collectively, these institutions engage approximately 12,000 trainers across diverse areas of specialization. Trainers are

employed by the Government of Kenya through the Public Service Commission and, in some cases, by TVET institutions via their Boards of Governors as well as through the Council of Governors.

The GoK therefore intends to apply a portion of the proceeds of the Credit to cover activities under sub-component 3.2 (*enhancing employment ready digital skills*) delivery of training program for enhanced digital skills and digital entrepreneurship for youth through TVETs and other training providers including training of trainers). This procurement activity is in the approved KDEAP Annual Workplan & Budget 2025/2026.

This component will facilitate capacity building of trainers (Training of Trainers) of TVET Institutions on fundamental digital skills, specifically integration of Generative Artificial Intelligence (AI) in delivery of technical, vocational education and training. The training will mainly focus on pedagogical digital skills i.e. teaching, digital content design and creation, evaluation and feedback, and personalized learning using AI. The training will also emphasize gender inclusivity, adapting content for PWD as well as aligning the content to competency-based education and training principles.

The training is intended to develop generative AI competencies among trainers to empower them to responsibly use AI tools in teaching, learning, management of learning processes, meaningful interaction with each other and trainees, enhancing learning experiences as well as support for trainers' tasks in a safe, effective and ethical manner. The training is designed to capacity-build trainers to develop their capacities to leverage the potential benefits of AI while mitigating the associated risks in education and the society. It will enable proactive, professional development and learning of trainers for a human-centered approach to the adoption of AI in training.

To achieve immediate and sustainable impact, selected TVET Trainers will be upskilled in innovative pedagogies towards the integration of artificial intelligence in course delivery.

This training initiative is envisaged to cover approximately 1950 TVET trainers across 245 TVET institutions and 50 TVET technical officers under the State Department for TVET. Participants will be selected from each institution with strict criteria for gender and disability mainstreaming to ensure the training fully supports sector-wide inclusivity.

By leveraging KDEAP connectivity and infrastructure investments in TVET, the activity will convert the investments in campus Wi-Fi that intends to cover all institutions of higher learning, into functional training capacity, reduce capital and maintenance costs, and institutionalize safe, standardized, and repeatable practical training nationwide, while enabling the tracking of measurable employability outcomes.

## **2. Objective(s) of the Assignment**

The overall objective of this assignment is to empower the State Department to build the capacity of 2,000 trainers in the strategic integration of Generative Artificial Intelligence (AI) in the design, development, and delivery of its training programs.

### **2.1 Specific Objectives**

- i. To build capacity in the development of competency-based learning outcomes using AI-enhanced techniques and tools;
- ii. To demystify the use of AI in TVET by demonstrating its relevance, application use across the training cycle;

- iii. To enable trainers to design effective session plans for both synchronous and asynchronous delivery using AI tools such as ChatGPT, Deep Research, Perplexity, Copilot and other Large Language Model (LLM)-based platforms;
- iv. To guide trainers in designing and developing interactive, enjoyable, and easy-to-read digital content that enhances engagement, supports comprehension, and promotes effective self-paced learning;
- v. To empower trainers to create and review assessment items and rubrics using AI, ensuring validity, fairness, and alignment with the intended competencies;
- vi. To foster a culture of innovation and ethical, responsible use of AI in TVET institutions.
- vii. To enrich learning experience by enhancing the content used for curriculum delivery

### 3. Scope of Work

The consultant will be expected to carry out, at minimum, the following tasks:

- i. **Needs Assessment and Inception Report:** Conduct a rapid skills gap assessment, institutional mapping, cohort selection, and submit an Inception Report with methodology, plan, and MEL framework;
- ii. **Curriculum Framework and content:** The consultant will, in consultation with the state department for TVET propose, review and adopt/adapt a curriculum framework; design, develop/adapt and localize AI training content and ToT guides (in compliant formats), and present them for approval prior to implementation;
- iii. **Training Delivery:** Deliver face- to face training to Trainers. Cohorting and parallelization is proposed for effective and efficient implementation.
- iv. **Capacity build** technical officers in the state department of TVET on ICT Integration in Education to offer first line support to the trainers
- v. **Assessment and Reporting:** develop tools for assessment and submit a training report. The consultant will also establish means to track outputs and outcomes and disaggregate data by gender/region/PWD.

#### 3.1. Target Audience

The AI training targets trainers within the TVET ecosystem, including:

- i. Training staff at the Kenya School of TVET;
- ii. Trainers responsible for delivering technical and vocational training who require capacity building on the integration of AI in training and learning;
- iii. Trainers across various disciplines, especially STEM Courses, pedagogy, curriculum design, and assessment;
- iv. Trainers responsible for overseeing the implementation of digital and AI-related initiatives within TVET institutions;
- v. Trainer of trainers (ToTs) responsible for uploading course content in Learning Management Systems and ODeL Platforms.
- vi. Trainers in charge of academics and academic departments
- vii. Trainers involved in designing or revising learning materials, who will benefit from knowledge on AI-assisted content development and personalization;
- viii. Trainers responsible for developing and managing assessments, to enable integration of AI in digital assessment design and administration;
- ix. Trainers designated to lead digital transformation within institutions who will serve as focal persons for sustaining AI innovations;
- x. State department staff at the headquarters in charge of digitalization of Government services in TVET.

## Approach and Methodology

### Training

The training program is designed to enhance individual trainer competence towards adoption of AI tools that will enable multimodal instructional content creation, prompt engineering mastery and AI integrated curriculum alignment to meet the goals of Competency-Based Education and Training (CBET). The ultimate impact is the creation of a cadre of AI-empowered TVET trainers who become facilitators of critical thinking and skill application, ensuring Kenyan graduates are competitive and readily employable in the rapidly evolving global economy.

### Training Content

The training content is structured around three competences, blending technical skills with pedagogical application in a hands-on, competency-focused manner. The content will transition TVET trainers from being basic users of digital tools to being effective prompt engineers and pedagogical innovators who can leverage multimodal Generative AI (GenAI) to co-design curriculum, deliver engaging content, and ensure objective, standards-aligned assessment.

**Table 1: Training modules**

Module	Core Technical Skill	Pedagogical Application in TVET	Critical Refinement/Focus
1: AI Overview, Trends and applications.	AI Introduction and integration in Education and training	AI use case in Curriculum Integration and delivery	Conformation to global standards and trends: Use of ICT-AI in education has become a global phenomenon and Trainers in Kenya should not be left behind
2: AI Literacy, Ethics & CBET	AI/LLM Fundamentals, Ethical Prompting	Aligning AI use with TVET CDACC standards; Developing classroom AI use policy.	Criticism Mitigation: Dedicate time to discussing algorithmic bias and data privacy in the Kenyan context, ensuring trainers understand how to mitigate these risks when generating content for diverse learners.
3: Advanced Text Prompt Engineering	Chain-of-Thought (CoT), Few-Shot, Role-Playing, Iterative Refinement.	Generating detailed, step-by-step problem-solving protocols for complex tasks (e.g., fault diagnosis, procedural calculations) and creating differentiated learning explanations.	Refinement: Move beyond simple summarization. Focus on generating structured outputs (e.g., Markdown, JSON) that can be easily integrated into digital learning platforms or technical documentation.

Module	Core Technical Skill	Pedagogical Application in TVET	Critical Refinement/Focus
4: Multimodal & Applied GenAI in TVET	Multimodal Prompting (Text-to-Image, Text-to-Code), Prompt Chaining.	Creating custom, cost-effective technical diagrams, complex infographics, virtual/simulation scenarios, and code snippets for IoT/automation subjects.	Applied Focus: Labs must involve generating content for low-resource settings (e.g. generating high-contrast images for printing, generating simple SMS-ready summaries).
5: AI for Assessment and Facilitation	Prompting for Rubrics, Scenario Generation, AI Feedback Loops.	Automating the creation of objective Competency-Based Assessment (CBA) rubrics and generating realistic, scenario-based assessment tasks that test application, not just recall.	Innovation: Focus on the trainer's new role: Facilitator of critical thinking and AI workflow coach, rather than content provider. Training on using AI for instant, non-judgmental feedback to trainees.

### Course Delivery Methodology

The course delivery must address the infrastructural and pedagogical realities of TVET in Kenya, prioritizing practicality and accessibility including:

- i. Format: Blended & Experiential. A 70% hands-on approach using live Generative AI platforms (accessible via web/mobile interfaces where possible).
- ii. Pedagogical Approach: "Prompt-First" Learning. Trainers immediately engage in iterative prompting exercises rather than long lectures.
- iii. Infrastructure Strategy: Acknowledge and address the urban-rural digital divide. Where the internet is a challenge, modules should focus on prompt design principles and the potential of offline or lower-bandwidth tools. Provide templates and frameworks that can be applied back in their institutions.
- iv. Content Contextualization: All lab work, examples, and case studies must be sourced directly from the trainers' respective trade areas (e.g., Automotive, Electrical, Hospitality, ICT) and aligned with the TVET CDACC curriculum.
- v. Assessment of Trainers: Final module assessment will be the submission of an AI-Co-Designed CBET Unit Package (including a lesson plan, a technical visual aid generated by a multimodal prompt, and a CBA rubric).

### Expected Impact and Measurable Outcomes

This training is projected to deliver significant, quantifiable impact across the TVET sector including:

- i. Instructional Quality & Efficiency: Trainers are expected to achieve a 30-50% reduction in time spent on content generation (lesson plans, quizzes, documentation). This efficiency allows for greater time allocated to individualized student mentoring and high-value practical instruction, thus improving the quality of core technical skills transfer.

- ii. **Enhanced Assessment Reliability (CBET Alignment):** The systematic use of AI for generating structured, objective, and unbiased CBA rubrics will increase the fairness and consistency of practical skill evaluation across different TVET institutions, raising overall training standards.
- iii. **Curriculum Responsiveness:** Trainers gain the capacity to use AI to analyze real-time industry job data and trends, enabling them to proactively update and adapt their course content and scenarios to meet emerging job market needs, directly reducing the skills gap.
- iv. **Equity and Access:** By mastering multimodal prompting, trainers can rapidly generate high-quality, customized, and culturally relevant learning materials, offering differentiated instruction that supports learners from diverse educational backgrounds and helps bridge the educational divide in resource-constrained environments.

### Training Schedule and Timeline

The schedule incorporates the four provided modules into a comprehensive 10-day program, integrating daily self-assessment checkpoints and a final Trainee Capstone Project to ensure practical application and mastery of the AI workflow.

The schedule strictly adheres to the core technical skills, pedagogical applications, and critical focus areas outlined in the provided training content. The proposed training schedule is illustrated below:

**Table 2: Training Schedule**

<b>Week 1: Foundational AI, Ethics, and Advanced Text Prompting</b>				
<b>Day</b>	<b>Module Focus</b>	<b>Core Technical Skill &amp; Application</b>	<b>Focus Area</b>	<b>Self-Assessment</b>
<b>Day 1</b>	AI Overview, Trends and applications.	ICT Integration: Identifying areas that can be filled with AI	Introduction to AI The Foundations of AI History of AI	Approaches to AI in education
<b>Day 1</b>	Module 1: AI Literacy & Ethics in CBET	AI/LLM Fundamentals and Ethical Prompting. Aligning AI use with TVET CDACC standards; Developing classroom AI use policy.	Criticism Mitigation: Dedicated discussion on algorithmic bias and data privacy in the Kenyan context, ensuring mitigation when generating content for diverse learners.	Assess: Ability to articulate 3 key ethical risks of GenAI in TVET.

<b>Day 2</b>	Module 2: Advanced Text Prompting (CoT)	Introduction to Chain-of-Thought (CoT). Generating detailed, step-by-step problem-solving protocols for complex STEM tasks (e.g., fault diagnosis).	Refinement: Practice generating highly structured outputs (e.g., Markdown) for easy integration into digital learning platforms or technical documentation.	Assess: Successfully generate a 5-step, structured diagnostic protocol for a known technical fault.
<b>Day 3</b>	Module 2: Advanced Text Prompting (Few-Shot & Role-Playing)	Implementing Few-Shot and Role-Playing. Creating differentiated learning explanations by asking the AI to adopt specialized expert roles.	Refinement: Mastering the context of the prompt to control tone and technical depth across various trainee levels.	Assess: Successfully generate two different explanations for the same concept using two distinct 'role' prompts.
<b>Day 4</b>	Module 3: Multimodal GenAI (Visuals)	Multimodal Prompting (Text-to-Image). Creating custom, cost-effective technical diagrams and complex infographics.	Applied Focus (Low-Resource): Labs dedicated to generating high-contrast images optimized for printing in low-resource settings.	Assess: Create and validate one print-ready, high-contrast technical diagram.
<b>Day 5</b>	Module 3: Multimodal GenAI (Code)	Multimodal Prompting (Text-to-Code). Generating code snippets for IoT/automation subjects. Review and validation of the generated code.	Applied Focus (Low-Resource): Generating simple SMS-ready summaries and checklists from generated code/diagrams for mobile access.	Assess: Generate a functional code snippet and its corresponding 3-point SMS troubleshooting summary.
<b>Week 2: Assessment Automation, Facilitation, and Project Capstone</b>				
<b>Day</b>	<b>Module Focus</b>	<b>Core Technical Skill &amp; Application</b>	<b>Focus Area</b>	<b>Self-Assessment</b>
<b>Day 6</b>	Module 3: Prompt Chaining for Simulations	Utilizing Prompt Chaining. Developing virtual/simulation scenarios for practical skills training that are safe and repeatable. Introduction of Capstone Project.	Project Integration: Trainers choose their Capstone Unit of Competence (UoC) and begin drafting the initial scenario context.	Assess: Submit the initial drafted context and branching path for the Capstone UoC scenario.

<b>Day 7</b>	Module 4: AI for Assessment (Rubrics)	Prompting for Rubrics. Automating the creation of objective Competency-Based Assessment (CBA) rubrics and aligning them with UoC performance criteria.	Application: Focusing on generating realistic, scenario-based assessment tasks that test application, not just recall.	Assess: Create and validate a full CBA rubric for a task within their Capstone UoC.
<b>Day 8</b>	Module 4: Facilitation and Feedback Loops	Implementing AI Feedback Loops. Training on using AI to provide instant, constructive, and non-judgmental feedback to trainees. Capstone Work Session.	Innovation: Focused role-play and practice in the trainer's new role: Facilitator of critical thinking and AI workflow coach.	Assess: Practice providing AI-driven feedback in a peer review simulation.
<b>Day 9</b>	Integration, Peer Review, and Capstone Work	Review of all four modules. Integration strategies for all AI-generated content (Text, Visuals, Assessment). Peer review of Capstone Project components.	Refinement Review: Using Day 4's structured output principles to organize all project resources effectively.	Assess: Receive and integrate peer feedback on the draft Capstone Project resources (diagrams, protocols, rubrics).
<b>Day 10</b>	Finalization, Project Submission & CPD	Finalizing integration and policy use. Individual Continuous Professional Development (CPD) planning for AI mastery. Final Capstone Presentation.	Program Synthesis: Submission of the complete Capstone Project and presentation of the proposed AI Workflow Coaching Strategy.	Assess: Final self-rating on proficiency across all 4 modules and a documented CPD plan.

### **Trainee Capstone Project: AI-Powered CBET Module Redesign**

**Project Objective:** Each trainer will select one existing Unit of Competence (UoC) from their current teaching area and redesign key resources and assessment tools using the generative AI skills learned across all four modules.

#### **Required Deliverables:**

- i. Instructional Protocol (Module 2): A detailed, step-by-step technical procedure generated using Chain-of-Thought (CoT) prompting, presented in a structured format (e.g., a Markdown checklist).

- ii. Resource Pack (Module 3):
  - One custom technical diagram or infographic generated using Multimodal Prompting, optimized for low-resource printing.
  - One simple SMS-ready summary or checklist derived from the diagram or protocol.
- iii. Assessment Suite (Module 4):  
One realistic virtual/simulation scenario designed using Prompt Chaining (text-based).
- iv. The corresponding Competency-Based Assessment (CBA) Rubric for that scenario. Workflow Strategy (Innovation Focus): A brief written plan detailing how the trainer will integrate the use of AI tools to act as a Facilitator of critical thinking and AI workflow coach in their classroom for this UoC.

### Training Mode

Capacity building of the trainers will be face-to-face. The training sessions will be implemented in clusters across proposed nine geographical divisions. The training period will cover two weeks per cohort/cluster.

The training is projected to reach approximately 2000 participants across the region in all the phases split in different cohorts.

Indirectly, over **500,000 students** are expected to benefit through improved teaching methodologies, enhanced content delivery, and better-aligned assessments resulting from this capacity-building initiative.

**Table 3: distribution of trainees per institution category**

S/No	Institution Category	No.	Trainees' category	No of Trainees
1.	State Department for TVET	1	Technical officers responsible for digitalization of TVETs	50
2.	Kenya School of TVET	1	Trainers of TVET Trainers	160
3.	National Polytechnics (NPs)	33	Trainers in polytechnics (15 from @polytechnic)	495
4.	Technical Training Institutes (TTIs)	48	Trainers in TTIs (10 from @TTI)	480
5.	Technical and Vocational Centres (TVCs)	163	Trainers in TVCs (5 from @TVC)	815
<b>Total</b>				<b>2000</b>

**Table 4: List of technical institutions per region**

No	Region	Total No. of TVET Institutions	No. of National Polytechnics	No. of Technical Training Institutes	No. of Technical Vocational Colleges	Trainers to be considered for training
1	Nairobi & N. Eastern	21+2 (SDTVET and KSTVET)	4	4	13	<b>375</b>
2	Western	31	6	4	21	<b>235</b>

3	Central	33	4	3	26	220
4	Nyanza	36	4	9	23	265
5	Lower Eastern	15	1	3	11	100
6	Upper Eastern	24	2	9	13	185
7	North Rift	35	7	8	20	285
8	South Rift	28	3	7	18	205
9	Coast	21	2	1	18	130
	<b>Total</b>	<b>246</b>	<b>33</b>	<b>48</b>	<b>163</b>	<b>2000</b>

### Localization & Contextualization

To ensure relevance, inclusivity, and effectiveness, the training content will be tailored to align with the CBET TVET curriculum as guided by TVET Curriculum Development, Assessment and Certification Council, the learner needs of Kenyan institutions, Industry needs and the cultural and linguistic context of the participants.

#### i. Alignment with the Local TVET Curriculum

- a) The training modules will be mapped to the existing Kenya TVET Curriculum Development Assessment and Certification Council (TVET CDACC) framework, ensuring that concepts such as Competency-Based Education and Training (CBET), Outcome-Based Learning, and Workplace Integration are emphasized throughout.
- b) Use cases, assessments, and projects will draw from realistic TVET scenarios, such as lesson planning for plumbing, electrical, ICT, fashion, hospitality, or mechanical engineering—depending on participant specialization.
- c) AI tools will be applied to TVET-specific tasks, including practical skill training, simulations, and vocational assessments.

#### ii. Responding to Learner and Trainer Needs

- a) The training will consider the varying digital literacy levels of TVET instructors by integrating foundational digital skills support.
- b) Content delivery will follow a scaffolded approach, starting with basic AI concepts and progressing to advanced applications such as AI-assisted instructional design and analytics.
- c) Training will be Face-to-face to ensure maximum participation and comprehension by the trainees

#### iii. Cultural and Language Considerations

- a) The primary language of instruction will be English, as used in the Kenyan TVET system; however, trainers may use Swahili where needed to enhance understanding, especially for complex technical explanations. Where necessary, sign language will be incorporated.
- b) The training will remain sensitive to cultural values—particularly in content creation with Gen-AI—by promoting ethical use of AI, discouraging bias or stereotyping, and adhering to respectful representation of gender and diversity.
- c) Where possible, AI-generated outputs will be reviewed or modified to reflect Kenyan names, settings, and socio-economic contexts.

## Requirement for the training

The consultant will provide the training content and the Master trainers for face-to-face training. The consultant will hire training conferences for face-to-face training within appropriate venues for training in each region considering adequate capacity to accommodate the proposed number of trainees. In liaison with the State Department for TVET, the National Polytechnics may be considered among other venues for hosting training. Additionally, the consultant will cater for the cost of the management committee. On the other hand, respective TVET institutions will be required to facilitate their nominated trainees with transport, DSA and computing equipment.

**Table 5: Summary of proposed requirements**

Support Area	Details	Responsibility
Conference package	Meeting space and refreshments for 10 days (face-to-face)	Consultant
Participants' DSA and Transport Allowance	To facilitate attendance from different institutions	Respective Institutions
AI Tool	Premium access to ChatGPT, Copilot, Deepseek, Gemini, Canvas Pro, or others if needed	Consultant
Training Materials	Printing of guides, Manuals, project templates, evaluation forms	Consultant
Computing Equipment Support	Provision of laptops/tablets/Smartboards	Trainee/Respective institution
Master trainers Facilitation	For trainers and technical team,	Consultant
Certificates & Reporting	Issuance of certificates of completion, post-training reports, documentation	Consultant in collaboration with SD TVET
Others	Management committee cost	Consultant

## Monitoring and Evaluation (M&E)

### Overview of the M&E Approach

The monitoring and evaluation (M&E) process for the Generative AI for TVET training will use a mix of quantitative and qualitative methods to assess knowledge acquisition, skills development, confidence levels, and practical application. The approach will include baseline and end-line assessments, real-time feedback mechanisms during delivery, performance-based assessment of participant outputs, and follow-up tracking to measure longer-term uptake and impact.

### Data Collection During and Immediately After Training

To assess learning progress and training quality, the process will include:

- Pre- and post-training surveys to measure changes in participants' knowledge, skills, and confidence.
- Daily reflection sheets and trainer observation notes to capture real-time feedback and participation trends during face-to-face sessions.
- Capstone projects that are peer-reviewed and assessed using standardized rubrics, to evaluate participants' ability to apply generative AI tools meaningfully in training contexts.

## **Post-Training M & E**

Post-training M&E will systematically assess:

- Changes in trainers' knowledge, skills, and instructional practices.
- The extent to which AI tools are embedded in lesson planning, delivery, and assessment.
- Documented learner outcomes related to critical thinking, problem-solving, and skills application.

The findings will be used to generate evidence for continuous improvement, inform targeted follow-up support, and guide policy and curriculum refinements within the TVET sector.

### **M&E Framework Structure**

M&E will be structured around CBET outcome levels, focusing on inputs, outputs, outcomes, and impact, and will be embedded within existing institutional Quality Management Systems (QMS) and national TVET reporting frameworks.

#### **Output Level**

At the output level, indicators will include:

- The number and proportion of trained trainers demonstrating proficiency in AI tool usage.
- The quantity and quality of AI-enabled learning materials developed.
- The extent of alignment of training delivery plans with approved CBET curricula and occupational standards.

#### **Outcome Level**

At the outcome level, M&E will assess:

- Changes in instructional practice, including integration of AI-supported teaching, learning, and assessment methods.
- Evidence of learner engagement in practical, task-based activities.
- Improvements in competency-based assessment using CBET-compliant tools such as continuous assessment records, portfolios of evidence, and practical skills demonstrations.

Data sources will include learner performance records, trainer reflective reports, internal assessment results, and evidence from lesson plans and training materials.

#### **Impact Level**

At the impact level, the M&E framework will track longer-term indicators such as:

- Improved graduate competence and employability.
- Increased adaptability to emerging technologies.

This will draw on tracer studies, industry feedback, and employer satisfaction reports, as required under national TVET M&E and reporting guidelines. Generated data will feed into institutional self-assessment reports, TVETA quality audits, and periodic reports to the State Department for TVET, supporting evidence-based decision-making and continuous improvement.

#### **Intended Long-Term Impact**

The ultimate impact is the development of a sustainable cadre of AI-empowered TVET trainers who effectively facilitate competency acquisition, critical thinking, and practical skills application. This will contribute to producing industry-responsive graduates who are competitive, innovative, and readily employable in Kenya’s evolving labour market and the global economy.

#### **Oversight, Accountability, and Key Indicators**

Key indicators will include project quality, participant satisfaction, and knowledge sharing.

The M&E process will be overseen by the Training Coordinator, supported by facilitators, and monitored by SDTVET to ensure accountability, relevance, and continuous improvement of the training programme.

#### **Financing**

The consultant will provide the estimated cost of the training with breakdown comprising the financing for training, training venue, among other considerations to facilitate face to face training of 2000 trainers.

#### **4. Duration and Location of the Assignment**

The assignment will be an overall period of six (6) calendar months from the contract commencement date.

#### **5. Reporting requirements and timelines for deliverables**

The consultant shall submit the following reports as shown in Table 6 below

**Table 6: Reporting requirements and timelines for deliverables/reports**

No	Outputs/ Deliverables	Description of Outputs/Deliverables	Timeline for submission of output from date of commencement of the Assignment	Format and Number of Report(s)
1.	Inception report	Inception report including: Pre-training survey report; detailed workplan and timelines; detailed methodology (with tools); Training program showing the topics to be trained on from day one to the last day; training plan showing what to be achieved by the participant at the end of each session; program scheduling; developed Course Content, materials and training manuals for the participants indicating how the participants can use the same manuals to acquire the same training; Inclusion plan; Risks and Assumptions; list of training venues sourced with their capacities, ICT equipment and ICT infrastructures available in the training venues	8 weeks	4 hard copies, 2 digital copies (PDF and Word)

No	Outputs/ Deliverables	Description of Outputs/Deliverables	Timeline for submission of output from date of commencement of the Assignment	Format and Number of Report(s)
2.	Conduct Training of Trainers workshops	Workshop Training report showing summary of training content, tools and technologies used, trainers and their roles, list of trainees, trainee certificates/certifications, evaluation and analysis of the training and recommendations for future training	20 weeks	copies 4 hard, 2 digital copies (PDF and Word)
3.	Detailed training report with all the ingredients	Generation of the training and assessments reports including the list of persons trained and assessed with their details; post-training report	24 weeks	4 hard copies, 2 digital copies (PDF and Word)

All draft and final reports shall be submitted in the prescribed format to:

**The Chief Executive Officer,**  
**ICT Authority**  
 Telposta Towers 12th Floor, Kenyatta Ave  
 PO Box 27150 – 00100  
 Nairobi Kenya  
 Tel : +254 20 2089061/ 2211960 Fax: +254 20 2211960  
 Email : [procurement@ict.go.ke](mailto:procurement@ict.go.ke), [info@icta.go.ke](mailto:info@icta.go.ke)  
 Website: [www.icta.go.ke](http://www.icta.go.ke)  
 Attention: The Project Coordinator, KDEAP

Upon submission of every report, the consultant is expected to make a presentation of the submitted report to the Client in a scheduled meeting. The acceptance of the report shall be recorded in the minutes of the meeting.

## 6. Payment Schedule

The proposed payment schedules based on satisfactory performance of the contract which will be negotiated with the successful consultant will be as presented in Table 7 below.

**Table 7: Payment schedule**

No	Deliverables	Timelines after Contract Commencement	Percentage of the Contract Amount
1.	Submission and Acceptance of Inception report	8 Weeks	10%
2.	Workshop Training reports	20 weeks	70%

No	Deliverables	Timelines after Contract Commencement	Percentage of the Contract Amount
3.	Submission and acceptance of Final Training report	24 Weeks	20%

Upon submission of every report, the consultant is expected to make a presentation of the submitted report to the Client in a scheduled meeting. The acceptance of the report shall be recorded in the minutes of the meeting.

## 7. Minimum Requirements for Consultant's Qualifications and Experience

The shortlisting criteria for the consulting firm will involve the following:

- a) **Core Business and Years in Business:**  
The firm must be registered/incorporated as a consulting firm with core business in the field of education technology, training, or related field for a minimum of ten (10) years.
- b) **Relevant Experience:**  
The firm shall demonstrate as having successfully executed and completed at least three (3) assignments of similar nature both in scope and complexity in a similar operating environment. Details of these assignments, including client names and addresses, scope, contract value, contract duration and year/period of assignment, must be provided.
- c) **Technical and Managerial Capability of the Firm:**  
The firm shall demonstrate as having the requisite technical capacity and managerial capacity to undertake the assignment in the submitted company profile(s).

## 8. Team Composition and Minimum Qualification and Experience Requirements for Key Experts

The consulting firm must provide a multidisciplinary team of qualified experts to carry out the assignment. The key experts shall personally carry out (with any assistance of other staff deemed appropriate) the services as described in this TOR. The team should consist of, at a minimum, the following key experts with the qualifications and experience detailed below:

**Table 8: Team composition**

Expert	Requirement
Lead Consultant	<p><b>Academic Requirements</b> A minimum of Master's degree in Education Technology, Management Information Systems, ICT, Computer Project Management or related field.</p> <p><b>General Experience:</b> At least ten (10) years of experience in the field of Education.</p> <p><b>Specific Experience:</b> A minimum of 5 years of specific experience in leading integration of technology in teaching and learning.</p>
Pedagogical Expert	<p><b>Academic Requirements</b> A minimum of Master's Degree in Computer science or related field, Education, Curriculum Development, Educational Technology, Technical Education or related field.</p> <p><b>Certifications</b></p> <ul style="list-style-type: none"> <li>● Accreditation as a curriculum developer/assessor</li> <li>● Recognized Trainer of Trainer (ToT) certification in CBET framework</li> </ul>

Expert	Requirement
	<p><b>General Experience</b> Should have a minimum of 5 years in design and development of instructional materials including curriculum delivery method plans, assessments and digital content for multimodal delivery method</p> <p><b>Specific Experience</b> Should have a minimum of three years in CBET alignment and implementation, curriculum design and ICT integration in Education</p>
Lead AI/Subject Matter Expert	<p><b>Academic Requirements</b> A minimum of Master’s in Artificial Intelligence, Applied Data Science, Computer Science or related field;</p> <p><b>Certifications</b></p> <ul style="list-style-type: none"> <li>● Certified AI professional;</li> <li>● Certified AI Consultant;</li> <li>● Artificial Intelligence Governance Professional;</li> <li>● Certified Prompt Engineer Certification</li> </ul> <p><b>General Experience</b> Should have a minimum of 5 years’ experience in design, implementation and rollout of AI models</p> <p><b>Specific Experience</b> A minimum of 3 years hands-on experience in research, design, development, training and implementation of multimodal GenAi models</p>
Institutional Strategy and Ethical Expert	<p><b>Academic Requirements</b> A minimum of Master’s Degree in in Law, Public Policy, Governance, Cyber Security or related field</p> <p><b>Certifications</b></p> <ul style="list-style-type: none"> <li>● Certified Information Privacy Professional;</li> <li>● Certified Information Privacy Technologist;</li> <li>● Certified Data Privacy Solutions Engineer</li> </ul> <p><b>General Experience</b> A minimum of 5 years’ experience in the development and implementation of institutional strategies and policies</p> <p><b>Specific Experience</b> A 3years’ hand-on experience in the development and implementation of cybersecurity, data privacy and emerging technology policies and strategies</p>
Monitoring and Evaluation Expert	<p><b>Academic Requirements</b> A minimum of Masters Degree in Statistics, Economics or related field</p> <p><b>Certifications</b></p> <ul style="list-style-type: none"> <li>● Certification in monitoring and evaluation</li> <li>● Certification in statistical applications such as SPSS</li> </ul> <p><b>General Experience</b> A minimum of 5 years’ experience in development and implementation of monitoring and evaluation systems</p>

Expert	Requirement
	<p><b>Specific Experience</b>  A minimum of 3 years' hands-on experience in the design and implementation of M&amp;E tools, and data analysis in education ecosystem</p>

## 9. Estimated Time-Inputs for Key Experts

The number of key experts and the estimated time input for each key expert for the assignment are presented in Table 9 below.

**Table 9: Key Expert Estimated Time Input**

No	Key and Support Staff	Number of Experts	Estimated Time Input in Weeks
1	Lead Consultant	1	24
2	Pedagogical expert	4	48
3	Lead AI/ Subject matter expert	4	48
4	Institutional Strategy and Ethical Expert	1	24
5	Monitoring and evaluation expert	1	24
	<b>Total</b>	<b>11</b>	<b>168</b>

## 10. Management and accountability of the assignment

The Consulting firm will report to the Project Coordinator, KDEAP, and eventually to the Principal Secretary, State Department for TVETs as the principal contact for the consulting services.

## 11. Obligations of the Client

The Consulting firm will be contracted by the Information and Communications Technology Authority (ICTA) on behalf of the State Department for TVET. The firm will ensure that the tasks identified in the scope of work are performed in a result-oriented manner, with the primary objective of achieving the expected outputs and outcomes of the assignment. The firm is encouraged to utilize local expertise wherever possible.

TVET shall provide the following support to the best of its ability:

- a) Available Data, Studies, and Literature: TVET will provide access to any existing data, reports, and relevant documentation that are essential for accomplishing the identified tasks.
- b) Access to Key Officials and Stakeholders: TVET will facilitate access to key officials within relevant government ministries and departments, and other relevant entities as needed for the completion of the assignment.
- c) Stakeholder Engagement: TVET will assist in convening key stakeholders and ensure cooperation with the Government of Kenya and other relevant organizations whose activities

are pertinent to the project, to provide the consultant with the necessary information and support to complete the assignment.

- d) Provide and facilitate the trainers to be trained in timely manner and ensuring that Females and PWD are adequately represented
- e) Timely Feedback: TVET will review and provide timely feedback on all deliverables and reports submitted by the consultant, ensuring that any revisions or clarifications are communicated promptly.

## **12. Obligations of the consulting firm**

The consulting firm is responsible for ensuring that all tasks identified in the scope of work are completed in a result-oriented manner, with the sole objective of achieving the outputs and outcomes expected from the assignment. The firm is encouraged to leverage local expertise where appropriate and ensure that project activities are aligned with TVET's strategic goals.

Key responsibilities include:

- a) Provision of necessary resources: The firm will be responsible for providing all necessary resources to carry out the assignment, including but not limited to:
  - Provide training venues and materials
  - Digital technology (AI models)
  - Means of communication
  - Reporting materials and tools
  - In consultation with the State Department, host the training materials and related software
- b) Consistency with Professional and Legal Standards: The consultant is expected to perform all activities and produce outputs that are in line with professional standards and legal requirements. All deliverables must meet the expectations outlined in the Terms of Reference.
- c) Modern Techniques and Technology: The consultant must use modern techniques and technologies to ensure efficient and accurate data collection, analysis, and reporting.
- d) Consultative Process: The consultant is required to follow a consultative process for the generation of data and other outputs, ensuring that the project maintains authenticity and ownership among stakeholders. Stakeholder engagement should be prioritized to validate findings and gain buy-in for the training and Change Management.
- e) Timely Communication: The consultant will maintain regular communication with the client throughout the project and notify them promptly of any delays, challenges, or significant changes to the work plan.

## **13. Propriety rights of Client in report and records**

All the reports, data, and information developed, collected, or obtained during the performance of the contract from the client or other Institutions shall belong to the Client. No use shall be made of them without prior written authorization from the Client.

At the end of the Services, the Consultant shall relinquish all data, manuals, reports and information (including the database, codes, and related documentation) to the Client and shall make no use of them in any other assignment without prior written authority from the Client.