Organisation	**Don Bosco Tech Africa (DBTA)**		
Terms of Reference (ToR)			
Post Title	Consultancy for digitising five solar training manuals in line with the DBTA e-learning framework		
Ref. No:	DBTA-092023-SSFP-II-DSM		
Title of the activity	Digitise five (5) solar training manuals as per the DBTA e-learning framework		
List of Manuals	1. Installation and safety, maintenance and repair manual 2. Solar water pumping manual 3. Solar entrepreneurship manual 4. AC-couple Systems / hybrid systems manual 5. Pico-solar photovoltaics (PV) manual		
Department in charge	DBTA - Curriculum Development and training department		
Activity duration	Maximum 3 Months	Starting Date: 25 September 2023	Closing Date: 22 December 2023

Contents

Background

Skills training institutions in Africa are experiencing a disruption driven by technological advances and exacerbated by the recent demand for remote service provision caused by the COVID-19 global pandemic. These disruptive innovations affect both teaching and learning and institutional processes and accelerate digitalisation at the institutional level. This is happening in an environment in many countries where all aspects of skills systems are moving towards digitalisation.

Digital technologies are driving change in the tools and modalities of learning, assessment, and certification, providing knowledge, skills, career guidance, job matching, and labour market services. An article by Intel think tank highlights that dramatic change will continue to have a significant impact on our everyday life, the way we communicate, the way we access services, the way we move from one place to another, the way we store data and access it, the way we learn and impart knowledge. All these changes are driven by technology and the knowledge worker.

Entry into the job market requires sufficient digital know-how as TVET institutions, industries and enterprises are adopting new technology to enhance efficiency and profitability. New job roles and forms of work organisation are placing new demands on enterprise recruitment, affecting talent management and staff development practices in all economies.

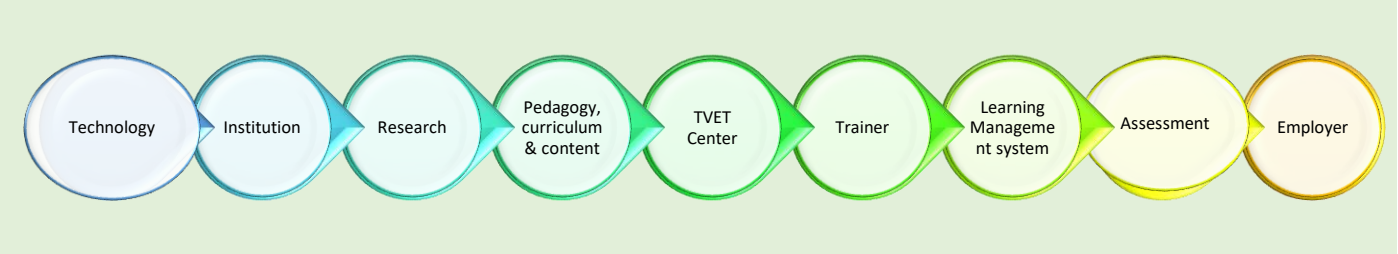
TVET, as the supply side of the skilled and knowledge worker, is increasingly focusing on preparing knowledge workers to meet the challenges presented by the transition from brick to click to the information and technology age. The call for a digitalised system is well articulated by an ILO/World Bank/UNESCO survey in May 2020 that found that:

- Many countries and stakeholders in the TVET sphere were insufficiently prepared to respond adequately and swiftly to the shock caused by the COVID-19 pandemic.
- For many TVET providers, the switch to remote learning has been a learning process by doing.
- The COVID-19 pandemic has accelerated many changes already underway in training systems and labour markets, such as digitalisation, but has also been a significant disruptor for economies and societies.
- The need for a rapid response to school closures substantially increased the understanding of distance learning, its benefits, and awareness of its challenges.
- The COVID-19 crisis provided the impetus to create or strengthen public-private partnerships and collaboration in TVET.
- Substantial constraints prevented the continuation of good quality TVET provision for all population groups, particularly those in lower-income countries and more vulnerable households.

- Policy responses and remote learning options struggled to deliver on some of the critical features of TVET, namely the acquisition of practical skills and work-based learning.

Additionally, the availability of digitised content, connectivity issues, trainers' capacity and the hardware to enhance access were in significant shortage, especially in Africa.

The TVET ecosystem and digitalisation in the TVET and employment ecosystem is currently a fragmented supply chain, where systems do not 'talk' to each other. The Learning Economy Foundation (2021) states that ideological gaps exist between each of the following core components:



The digitalisation of TVET makes information from varied sources more accessible to the management, trainers, and trainees, improving quality and enhancing the sustainability of the TVET Systems. The outcomes are increased youth employability and improved living standards, which spill over to society. TVET must accelerate its adoption of more advanced innovations in teaching, training, learning, assessment and certification processes.

Don Bosco Tech Africa (DBTA), the coordinating network of the 113 Don Bosco TVET centres spread in 34 African countries, has developed a Learning Management System (LMS) to host all the training courses provided in the network. We have also developed five solar training manuals that should be digitalised and uploaded into the LMS to move with technology and increase accessibility by learners in Africa. DBTA's Learning Management System (LMS) platform is a well-designed, learner-centred, interactive, and facilitative learning environment that can be accessed anywhere. The system utilises attributes and resources of various digital technologies and other learning materials suited for open and distributed learning environments.

The process of the DBTA TVET digitalisation is well aligned with two objectives of the DBTA strategic plan:

- To improve the Quality and Relevance of its TVET provision through quality training in line with labour market demands, upgrading of infrastructure, equipment, and curricula to meet modern training needs and providing life skills-based approaches.

- To improve Access and Equity in its TVET provision by accommodating more significant numbers of underprivileged youth, including those who are differently abled.

In the framework of TVET digitisation and skills development, DBTA has developed five solar training manuals: installation and safety, maintenance and repair, solar water pumping, solar entrepreneurship, AC-couple systems / hybrid systems and pico-solar photovoltaics (PV). DBTA is now seeking an expert to digitize the five mentioned solar manuals to improve relevance, quality, access, and equity among TVET institutions in the Africa – Madagascar region.

Main objective

The proposal's main objective is to digitize the content and information in the 5 solar training manuals as per DBTA's Learning Management Framework.
Re-design, develop pedagogical approaches and convert the manuals to digital content with text, video, audio, simulation, gamification, or any other format that can make these accessible interactively to the learners in the DBTA Learning Management System.

Specific objectives

The specific objectives for digitising the five solar training manuals as per the DBTA e-learning framework are:

- Make the content of the five manuals accessible interactively to the learners over the DBTA Learning Management System (LMS)
- Create an outline of the learning process and determine the instructional strategies, activities, and assessments that will be used to achieve the goals of the learning program from the training manuals
- Develop pedagogical approaches to the course content of 5 solar training manuals that can guide and enhance training and learning for the learners and trainers.
- Ensuring the learning process meets the identified digital learning needs in the TVET space. It is converted to digital content with text, video, audio, simulation, gamification where applicable, or any other format that can make learning exciting and effective.

Output

- Designed and uploaded course content of five solar training manuals to the Learning Management System (LMS)
- Elaborated outline of the digital training from learning to assessment
- A guide for the users on how to access and navigate the training learning activities
- A completion report detailing the process undertaken to accomplish the task.

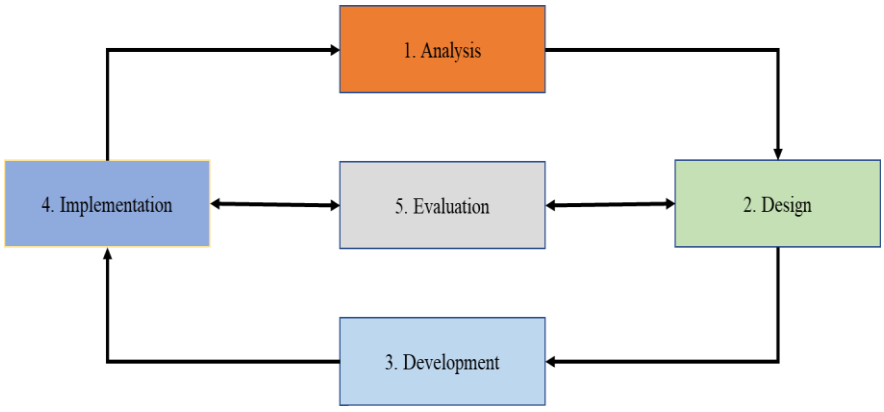
Scope of the assignment

The number of manuals to be digitised is five (5) in solar energy field with description in the table below:

N°	Description	Number of pages	Language
1	Installation and safety, maintenance and repair manual	100 pages	English
2	Solar water pumping	86 pages	
3	Solar entrepreneurship	84 pages	
4	AC-couple Systems / Hybrid Systems	78 pages	
5	Pico-Solar photovoltaics (PV)	82 pages	

Methodology

The five solar manuals will be digitized in the framework of the DBTA instructional design model: the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) Model as indicated in the figure below:



Source: DBTA E-learning framework

The consultant should demonstrate clearly the methodology that will be used to digitise the five solar manuals in line with the DBTA e-learning framework. Moreover, the consultant should demonstrate clear deliverables of the assignment.

The execution period of the assignment

The implementation period of the assignment is three months: October, November and December 2023. Due to closure of the project, the implementation of this activity will start on 25th September 2023 and be concluded by 22nd December 2023, or before. The selected consultant shall fix the timetable by considering the set dates. The consultants can customize the tasks and will demonstrate clear mothod(s) and techninques to deliver quality work within the fixed implementation period.

Qualification & experience of the consultant

This assignment will be conducted by a consultancy company whose team should be qualified with relevant experience, competence and expertise to deliver comprehensive and quality work, and with at least five years of previous working experience in the same field.

The consultant team should at least have the following qualification:

Personnel	**Qualification**	**Experience**
E-learning Expert (Lead Consultant)	Subject Matter Expert in Solar and renewable energy least qualification being a bachelor degree At least a master's degree in information systems, instructional design, or a related field.	❖ Proficiency in e-learning software such as Articulate Storyline or Adobe Captivate ❖ Familiarity with Learning Management Systems (LMS) ❖ Experience developing online courses or content digitisation ❖ Experience and expertise with a Learning Management System as a developer or administrator ❖ Previous experience in administering Learning Management Systems ❖ Extensive previous experience with e-learning development ❖ Previous experience in partnering with business stakeholders to create learning content ❖ Previous experience working in a fast-paced customer-focused environment

		❖ Strong communication and interpersonal skills ❖ Strong reporting skills ❖ Demonstrable experience in data analysis and reporting ❖ Fluency in the English language

DBTA Team

The consultant will work closely with the DBTA Project Management Team including the DBTA E-Learning Officer, primarily the Project Officer in charge who will coordinate the work and the Program Manager, who will oversee the activity.

Financial proposal and payment

The financial proposal shall specify a total lump sum amount (including a breakdown of costs for fees, tasks, and number of working days). Payments will be made in installments based on key outputs, i.e., upon delivery of the services specified in the ToR.

45% on signing the contract and submitting a blueprint, including the work plan and methodology for the assignment (in English). And,

55% on submission of the comprehensive work done as per the ToR and contract. All financial information should be provided in either Kenya Shilling or Euro.

Ethics and copyright

The consultant shall follow the highest ethical Deliverable Acceptance Criteria (DAC) to ensure quality standards of the assignment. The consultant shall not disclose any information/data related to DBTA and its associates to a third party without prior approval of DBTA. All the data generated, whether in soft or hard form, along with the report, shall be the property of DBTA and will be submitted to DBTA upon completion of the task. The consultant will ensure that citations are well-referenced, plagiarism is avoided, and there is no copyright infringement in the digitized content.

Application procedure

Interested competent consultancy companies shall submit the following documents for application:

a) Application letter
b) Proposal describing the 5 solar manuals digitization approach, methodology, work schedule

c) Profile of each consultant (max. 1 page) detailing their suitability (relevant skills) for the assignment
d) Cost estimation of the assignment with an adequate breakdown of costs (in Ksh or Euro). Please note: Provide a total budget, but kindly break it down under appropriate descriptions (purpose, unit name, number of units, rate per unit, total budget).
e) Relevant experience of the consultancy firm, including reference certificates (if applicable)
f) Copies of certificates / registration documents

The interested consultancy companies should submit a proposal in PDF format electronically (in one document) to application@dbtechafrica.org and must copy projectofficer1@dbtechafrica.org by quoting the reference number: **DBTA-092023-SSFP-II-DSM. To be received not later than Thursday 21st September 2023 at 5.00 PM, Nairobi time. Proposals sent after the indicated date and time will not be considered.**

Proposed work plan

		2023															
		September				October				November				December			
	Activity	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4
1	Development of concept note																
2	Call for proposal and engage the consultant company																
3	Inception meeting and agreement with the consultant																
4	A comprehensive inception report detailing the approach and methodology for undertaking the assignment																
6	Digitise 5 Solar training manuals in line with the DBTA E-learning framework.																
8	Presentation of the digitised manuals in the DBTA LMS platform and approval by the Deputy Director/Program Manager																
9	Completion letter and close of the activity																