

RESERVE BANK OF MALAWI

FINANCIAL INCLUSION AND ENTREPRENEURSHIP SCALING (FINES) PROJECT

Country: Malawi

Name of Project: Financial Inclusion and Entrepreneurship Scaling (FInES) Project

IDA CREDIT No: 6746-MW

Project Funding: International Development Association (IDA)/World Bank

TERMS OF REFERENCE

FOR

CONSULTANCY SERVICES FOR DEVELOPMENT OF ONLINE TRAINING AND MARKETING PORTALS, MOBILE AND USSD APPLICATIONS FOR SUPPORT OF MICRO, SMALL AND MEDIUM ENTERPRISES

MW-RBM-369351-CS-CQS-2

1. INTRODUCTION

The Government of Malawi, with support of the World Bank, is implementing the Financial Inclusion and Entrepreneurship Scaling (FInES) Project. The Project's Development Objective (PDO) is to increase access to financial services, promote entrepreneurship and capabilities of micro, small and medium enterprises (MSMEs) in Malawi and alleviate Covid-19 implications on SMEs. The project is designed to be implemented over a period of 5 years, with the entire amount financed by an IDA loan from the World Bank (WB). The project has four components that will contribute to the achievement of the PDO described as follows:

Component 1: Liquidity Enhancement to MSMEs - The component aims at increasing the supply of wholesale financing to the project's Participating Financial Intermediaries (PFIs) towards scaling up access to cheaper financing and de-risking of MSMEs. Other alternative forms of financing for start-ups are also addressed under this component

Component 2: Scaling Entrepreneurship and Building Firm Capabilities - This component will facilitate the building of firms' capabilities through measures to enhance the quality of business support provided by Business Development Service (BDS) providers to MSMEs. Under this component, the project will provide direct support to entrepreneurs in firm capabilities and access to markets, and support capacity of the BDS ecosystem.

Component 3: Enhancing the Enabling Environment for Supporting the Financial Inclusion and Growth of Entrepreneurs - The component builds on activities supported under the Financial Sector Technical Assistance Project (FSTAP). This component is financing the implementation of activities that make it possible for MSMEs to access financing from financial institutions and to improve their prospects to grow, including supporting activities on financial sector development, financial inclusion, the electronic government to person (G2P) and government to businesses (G2B) payments system, and a deposit insurance system.

Component 4: Project Implementation Support - Funds under this component are meant to meet the costs of the Project Implementation Unit (PIU) in its capacity as the implementing entity, including costs related to fiduciary and safeguards aspects and monitoring and evaluation (M&E).

2. OVERVIEW OF SUB-COMPONENT 2.2

Through Subcomponent 2.2, the Project intends to enhance the capacity and training skills of SMEDI staff and trainers in providing backstopping services to growth firms and MSMEs focusing on areas such as business development, advisory, and information services, as well as technology

adoption and transfer within SMEDI's service provision. The subcomponent will also support purchase of goods, services, and small works for SMEDI such as computers, software, furniture, office refurbishment, Wi-Fi/connectivity, and others to expand SMEDI's outreach in the regions using existing buildings. The activities, which are informed by SMEDI's Capacity Assessment Report done by an independent consultant, will facilitate outreach and delivery of services to MSMEs and enhance SMEDI's support to MSMEs with specific focus on marginalized, women and youth owned enterprises. In this regard, SMEDI has grouped their training requirements into four thematic areas namely; Entrepreneurship and Mindset change, Business Incubation, MSME Financing as well as Business Coaching and Advisory Services. The capacity assessment report also made recommendations for improvement of SMEDI ICT infrastructure and improvement of SMEDI digital presence as a way of modernizing service delivery.

For the third phase of capacity building, SMEDI would like to utilize part of the funds to finance enhancement of SMEDI's digital presence and outreach by building or strengthening the capacity of its staff in the provision of Capacity Building and Business Advisory Services to MSMEs through the use of online platforms, applications or other digital means.

3. OBJECTIVE OF THE ASSIGNMENT

The Project Implementation Unit (PIU) would like to engage services of an ICT firm to develop a Digital Training Platform, an Online Marketing Portal, a Mobile Training Application, set up an Unstructured Supplementary Service Data (USSD) platform, modernize SMEDI website as well as ensure interoperability of these platforms. The training platform and USSD are meant to support delivery of courses and course content to provide trainers and learners an interface that supports business management skills provision, market linkages and other business advisory services to small to medium scale enterprises in Malawi. Further, the marketing portal is intended to enhance digital presence of Malawian MSMEs' products to the global market.

4. SCOPE OF WORK

Specifically, the assignment is expected to deliver, but not limited to, the following:

- 4.1 An Online Training Portal: Review and make improvements to the SMEDI online marketing portal;
- 4.2 A Digital Training Platform: Develop an interactive virtual learning platform for MSMEs that is able to administer modules, assessment of progression in relevant

business management areas including but not limited to Design Thinking, Climate Smart Business, Marketing, Book Keeping, Costing, Human Resource Management,

- 4.3 SMEDI Training Mobile Application (USSD): Develop a mobile application for ease of MSMEs access to Business management training resources
- 4.4 SMEDI Website: Modernize the existing SMEDI website and integrate it with online training and market platforms
- 4.5 Integration and Interoperability: Link all online platforms for SMEDI in such a way that information is captured as part of building of a database of Trainees and potential participants in other SMEDI business Advisory interventions

5. KEY DELIVERABLES

At the end of the assignment, the consultant is expected to produce the following:

No	Deliverable	Timeframe
1	An Inception Report and work plan detailing how the assignment	Within 1 week
	will be undertaken with proposed timelines in line with the scope	after contract
		signing
2	Draft Tools of the web-based, Mobile App and USSD	2 weeks after
	application and presentation of the tools at a stakeholder meeting	signing contract
3	Proposed Methodology for integration of the online Platforms	4 weeks after
	with SMEDI Website and the National MSME Database	signing the
		contract);
4	Stakeholder Capacity Building (Users) and pilot test with SMEs	10 weeks after
	on the online Platforms. USSD and Mobile App Management.	signing the
	undate and upgrade	contract
5	Final Online Marketing portal	14 weeks after
	Final Online Training Portal	contract signing
	• Final Operational Mobile Application and	
	• Final USSD Application (Tested and Accepted by SMEDI	
	and Stakeholders) One (1) Week after Stakeholder Workshop	
	• A modernized website	

6	Support and Maintenance plan which will include source code	1 week after final
	handover, feature enhancements, bug fixes and user support	platforms are
	channels.	delivered and
		accepted

6. QUALIFICATIONS AND EXPERIENCE

The Consultant team should comprise of the following minimum members:

1. Team Leader

The team leader is expected to have the following qualifications and experience:

- Master's degree in computer sciences, information technology or other equivalent qualification
- Proven track record and experience of more than 8 years in website development, developing online training and marketing platforms
- Working experience and demonstrable good understanding of international good practices in mobile and USSD application development
- Knowledge of the Malawian MSMEs Landscape
- Documented record of experience in research and analysis
- Strong analytical and report writing skills
- Demonstrate capacity to work independently and to meet set deadlines
- Innovative thinking and ability to manage teams
- UI/UX certification will be desirable

2. ICT Expert (s)

The ICT expert (s) is expected to have the following qualifications and experience:

- Minimum of bachelor's degree in computer sciences, information technology or other equivalent qualification.
- Should have a minimum of 4 years' experience in developing online training and marketing platforms and
- Should possess the following competencies in the areas of expertise related to this assignment as follows:

Online market and training portal:

- Front-End Development: Proficiency in HTML, CSS, and JavaScript to create visually appealing and interactive user interfaces for the online portal;
- Responsive Design: Knowledge of responsive web design techniques to ensure the portal is accessible and functional across different devices and screen sizes;
- UI/UX Design: Understanding of user experience principles and the ability to design intuitive and user-friendly interfaces for the portal;
- JavaScript Frameworks: Experience with popular JavaScript frameworks like React, Angular, or Vue.js to build dynamic and interactive components within the portal;
- Back-end Development: Knowledge of server-side programming languages such as Node.js, PHP, Python, or Ruby, along with experience in working with databases (e.g., MySQL, PostgreSQL) to handle data storage and retrieval;
- API Integration: Familiarity with integrating third-party APIs, such as payment gateways, social media platforms, or external services, to add functionality and enhance the online portal's capabilities;
- Content Management Systems (CMS): Experience with popular CMS platforms like WordPress, Drupal, or Joomla, enabling efficient content management and customization of the online portal;
- Security best practices: Understanding of web security principles and techniques, such as input validation, protection against cross-site scripting (XSS) and SQL injection attacks, and secure authentication methods;
- Version Control: Proficiency in using version control systems like Git to manage code changes, collaborate with team members, and ensure a smooth development workflow;
- Performance Optimization: Skills in optimizing web performance, including page load times, caching strategies, and minimizing network requests, to deliver a fast and efficient online portal;
- Testing and Debugging: Ability to conduct thorough testing, including unit testing and integration testing, and proficient debugging skills to identify and resolve issues within the portal;
- SEO Principles: Understanding of search engine optimization (SEO) principles to ensure the online portal is well-optimized for search engines, including proper use of metadata, URL structure, and content organization;

- Cross-Browser Compatibility: Knowledge of cross-browser compatibility issues and the ability to ensure that the online portal functions correctly across different web browsers;
- Accessibility Standards: Awareness of web accessibility guidelines and the ability to implement accessible features to ensure the online portal is usable for individuals with disabilities;
- Project Management and Communication: Strong project management skills and effective communication abilities to collaborate with stakeholders, gather requirements, and provide regular updates on the development progress.

Mobile application development skills:

- Proficiency in Programming Languages: Strong knowledge and experience in programming languages such as Java, Swift, Laravel, Objective-C, or React Native;
- Mobile Development Frameworks: Familiarity with popular mobile development frameworks like Flutter, Xamarin, or Ionic can be advantageous;
- Operating Systems and Platforms: Understanding of the specific mobile operating systems (iOS, Android) and familiarity with their respective guidelines, APIs, and development tools;
- Cross-Platform Development: Experience in developing cross-platform applications using frameworks like React Native or Flutter, allowing code-sharing between multiple platforms;
- UI/UX Design: Ability to create visually appealing and user-friendly mobile app interfaces, considering factors like layout, responsiveness, and usability.
- Mobile App Architecture: Knowledge of various architectural patterns (e.g., MVC, MVVM) and ability to design and implement scalable, maintainable, and well-structured mobile applications;
- Backend Integration: Understanding of integrating mobile apps with server-side APIs, handling data synchronization, and managing user authentication;
- Database and Persistence: Proficiency in working with local databases, such as SQLite or Realm, for data storage and retrieval within mobile applications;
- Version Control: Experience with version control systems like Git, allowing effective collaboration and code management within development teams;

- Testing and Debugging: Knowledge of testing frameworks and methodologies for mobile app development, as well as the ability to identify and fix bugs and performance issues;
- Continuous Integration and Deployment: Familiarity with CI/CD (Continuous Integration/Continuous Deployment) processes to automate app build, testing, and deployment pipelines;
- Communication and Collaboration: Strong communication skills to effectively collaborate with team members, stakeholders, and clients throughout the development lifecycle;
- Mobile App Store Guidelines: Awareness of the submission and approval process for publishing apps on platforms like the Apple App Store and Google Play Store, including compliance with their guidelines;
- Industry Awareness: Keeping up-to-date with the latest trends, technologies, and best practices in mobile app development to ensure the use of modern and efficient techniques.

USSD platform development:

- Programming Languages: Proficiency in programming languages commonly used for USSD app development, such as Python, Java, PHP, or Ruby;
- USSD Protocol: In-depth understanding of the USSD protocol, including how it works, session management, and communication with telecom networks;
- Telecom Integration: Knowledge of integrating USSD applications with telecom network APIs and protocols, such as SMPP (Short Message Peer-to-Peer) or SS7 (Signaling System 7);
- USSD Gateway: Familiarity with USSD gateway technologies and their configuration, deployment, and management;
- Telecom Regulations: Awareness of the regulations and guidelines imposed by telecom regulatory authorities regarding USSD services;
- Back-end Development: Experience in developing the backend systems and APIs required to support USSD applications, including database integration and business logic implementation;
- User Experience Design: Ability to design user-friendly and efficient USSD menus and flows, considering limited screen space and user input restrictions;
- Security: Knowledge of security best practices in USSD app development, such as encryption, authentication, and data privacy;

- Testing and Debugging: Proficiency in testing USSD applications, including simulating USSD sessions and handling error scenarios, as well as debugging and troubleshooting issues;
- Performance Optimization: Skills in optimizing USSD applications for performance and efficiency, considering limited bandwidth and response time constraints;
- Problem-Solving and Analytical Skills: Ability to analyze complex problems, propose solutions, and debug issues that may arise during USSD app development;
- Documentation: Skill in creating clear and comprehensive technical documentation for USSD the application, including specifications, user guides, and API documentation;
- Communication and Collaboration: Strong communication skills to effectively work with telecom network providers, stakeholders, and clients throughout the development process;
- Industry Awareness: Keeping up-to-date with the latest trends, technologies, and regulations in USSD app development and the telecommunications industry.

7. REPORTING ARRANGEMENTS

The consultancy firm will report to the FInES Project Manager through the Business Development Specialist. Further, the team will be required to work closely with World Bank, SMEDI as well as the SME Division in the Ministry of Trade and Industry.

8. ASSIGNMENT DURATION

The Consultancy is expected to be carried out over a period of 50 working days and within 120 calendar days from the date of engagement.

9. FACILITIES TO BE PROVIDED BY THE CLIENT AND SMEDI

To facilitate the smooth conduct of the assignment, the client will provide the following support:

- 9.1 Identification and payment of venue for training or orientation of SMEDI Staff on the Online Platforms and Applications
- 9.2 Logistical requirements to enable SMEDI staff participate in the training or orientation on the Online Platforms and Applications
- 9.3 Costs for stationery, including printing and photocopying during staff orientation workshops
- 9.4 Workspace for the consultant (Where necessary)

- 9.5 Space for user training
- 9.6 Dedicated ICT personnel during the course of the development process for sustainability
- 9.7 Technical (User) department staff