



NATIONAL TECHNOLOGY BUSINESS CENTRE

REPORT ON THE HACKATHON “DIGITAL PLATFORM FOR MAINSTREAMING PRODUCTIVITY, OCCUPATIONAL SAFETY AND HEALTH (OSH) AND SOCIAL SECURITY TO MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs) IN THE INFORMAL ECONOMY”

December 2021

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1. INTRODUCTION

The Ministry of Labour and Social Security (MLSS), *Department of National Productivity Development*, with the support of the African Union (AU) and the International Labour Organisation (ILO) joint decent work programme for the transformation of the informal economy is implementing a project on mainstreaming Productivity, Occupational Safety and Health (OSH), and Social Security in Micro, Small and Medium Enterprises (MSMEs) through Digital Inclusion. The project is aimed at developing digital solutions for MSMEs in the informal economy through a digital application and linking them to the Labour Market Information System (LMIS). With the COVID pandemic disrupting business, it is expected that with this digital solution/application, MSMEs will increase their customer traffic base, undertake their business online, maintain a data base of their clients, access information relevant to their business for growth and subsequently improve their revenue opportunities.

In order to implement the above stated project, the Ministry of Labour and Social Security (MLSS) engaged the National Technology Business Centre (NTBC) to facilitate the development of the digital platform. The project fits in the Centres mandate of facilitating technology development and utilisation in the country through technology transfer, adoption, innovation promotion and commercialization of innovative products. Subsequently, the National Technology Business Centre (NTBC) issued a call (**attached**) to the general public for submission of proposals. The call opened on **28th October 2021** and was set to close on **12th November 2021**. However, due to the slow inflow of applications by approach of the deadline, it was resolved to further extend the deadline to **17th November, 2021**. The NTBC held an online information session for the potential applicants on **8th November 2021**. The information session discussed the Terms of Reference (ToRs) and clarified the various issues raised by the potential applicants.

By 17th November 2021, 19 applicants successfully submitted their proposals. These applications were screened by the IT officers from NTBC and MLSS which resulted in 9 applications being shortlisted for the next stage of the evaluation process. The screening was followed by an evaluation of the nine (09) applications by a combined team of NTBC and MLSS staff on **29th November 2021**. Three (03) applications were shortlisted from this activity. On 2nd December 2021, a team comprising of member external to NTBC and MLSS met to evaluate the three applications. The evaluations team ranked the three (03) applications. On **13th December 2021**, the three (03) finalists again pitched before three (03) experts from Botswana, South Africa, Ethiopia and Ghana.

This report therefore serves to submit a brief on the implementation of the project aimed at developing a digital platform for mainstreaming Productivity, Occupational Safety and Health (OSH) and social security to Micro, Small and Medium Enterprises (MSMEs) in the informal economy.

2. MEMBERS OF THE PRELIMINARY EVALUATION COMMITTEE

The Preliminary Evaluation Committee was comprised of the following:

- 1) Mr. Edwin Sigande: Information and Communications Technology Specialist-NTBC
- 2) Eng. Chikumbi Chungu: Technology Transfer Specialist – NTBC
- 3) Mrs. Tasila Mwewa: Monitoring and Evaluation Specialist – NTBC
- 4) Mr. Ignatius Indala: MLSS
- 5) Mrs. Yvonne Nawila: MLSS

Secretariat:

- 1) Mr. James Mwale: NTBC

3. MEMBERS OF THE TECHNICAL EVALUATION COMMITTEE

The Preliminary Evaluation Committee was comprised of the following:

- 1) Ms. Tamala Namakobo – MLSS
- 2) Eng. Garry Mukelabai – Zambia Information Communication and Technology Authority
- 3) Mr. Willie Shawa - Smart Zambia Institute
- 4) Mr. Kaluba Shiliya – Smart Zambia Institute
- 5) Mr Lusa Jilowa-ZANACO Hub
- 6) Mr. Michael Chomba - Ministry of Small Medium Enterprises Development
- 7) Chipakata Chulu- Information Communication Technology Association of Zambia

In attendance:

- 1) Dr. Chitundu Kasase, PhD – Director/CEO (NTBC)
- 2) Eng. Innocent Mandona – Manager – Technology and Marketing (NTBC)

Secretariat:

- 1) Mr. James Mwale - NTBC
- 2) Mr. Edwin Sigande - NTBC
- 3) Mr. Ignatius Indala -MLSS

4. OBJECTIVE

The objective of the activity was to implement a contest for developing a digital platform for mainstreaming Productivity, Occupational Safety and Health (OSH) and Social Security to Micro, Small and Medium Enterprises (MSMEs) in the informal economy

5. APPROACH

The contest for developing a digital platform for mainstreaming Productivity, Occupational Safety and Health (OSH) and Social Security to Micro, Small and Medium Enterprises (MSMEs) in the informal economy was implemented as follows:

a) Call for Proposals

The call for proposals was opened on **28th October 2021**. The advert is attached as Annex I. The call which was initially supposed to close on 12th November 2021 finally closed on 17th November 2021. The call was advertised through the print and electronic media as listed below:

- i. Zambia Daily mail Newspaper
- ii. Times of Zambia Newspaper
- iii. Daily Nation Newspaper
- iv. Mwebantu online news
- v. NTBC Facebook page
- vi. NTBC website
- vii. NTBC blog
- viii. ZNBC Radio 4
- ix. Radio Phoenix Fm
- x. Hot Fm Radio
- xi. ZICTA facebook page

A copy of the advert was further circulated to Innovators in the NTBC database for them to participate. In addition, a copy of the advert together with the terms of reference were issued to Higher learning institutions, NTBC stakeholders and Innovation hubs for further circulation through their respective media platforms, to relevant departments and to youths in the field of (ICT) in their networks who would be interested to participate.

b) Information Session

Alongside the call, NTBC organised a virtual information session for all interested contestants to attend. The session was held to provide guidance on the application process, terms of reference, and to address any enquiries from the contestants. The information session was held on **8th November 2021**. The session was attended by 26 potential applicants. The session was chaired by the Director - *Department of National Productivity Development* from the MLSS, and moderated by the Manager -*Technology and Marketing*, NTBC.

A total of 19 applicants responded to the call by submitting prototypes of the digital application. The submitted applications were then evaluated as discussed in section six (06).

6. EVALUATION AND SCREENING APPROACH

The process involved Three **(03) phases**.

- a) *Phase I* - Involved preliminary screening shortlisting of contestants that were meeting the minimum requirements. At this stage nine were shortlisted to proceed to the next stage.
- b) *Phase II* – Involved pitching of the shortlisted applicants before panel of evaluators composed of Staff from NTBC and MLSS. At this stage, three applications were shortlisted to proceed to stage three (03).
- c) *Phase III* – This was the final round of the contest. The top three (03) contestants pitched their prototype applications to a panel of Judges drawn from different institutions to select the most innovative contestant.

a) PHASE I - Preliminary Screening

Preliminary screening of prototype applications was conducted on **24th November 2021** by ICT staff from NTBC and MLSS. This stage of screening involved shortlisting contestant that were meeting the minimum requirements. Out of the 19 contestants that submitted proposals, 9 contestants were shortlisted for the second stage of evaluation.

The shortlisted applicants are presented below:

- i. Mr. Joshua Kanema
- ii. Mr. Lambert Kavumba
- iii. Mr. Ezra Sekelani Zulu
- iv. Mr. Jackson Tembo
- v. Mr. Daniel Sitali
- vi. Mr. Marc Ngoma
- vii. Mr. Kumbukani Simukonda
- viii. Mr. Herbert Tembo Mangani
- ix. Mr. Joseph Chipimo Mulenga

The ten applicants who did not meet the minimum requirements are contestants listed below:

- i. Temwanji Jesse Sinkala
- ii. James Chama
- iii. Kalonde Terry Mwansa
- iv. Emmanuel Mbewe
- v. Jerrix Nkhata
- vi. Kabaso
- vii. Zeyesa Hinji
- viii. Mr. Charles Lengwe
- ix. James Poda
- x. Chinyemba Kalenga

b) PHASE II - Technical Evaluation

The Second stage of evaluation was held on Monday, 29th November 2021. The nine (09) applicants presented their working prototype of the digital application to a panel of five (05) evaluators made up of three (03) NTBC Specialists and two (02) Staff from MLSS. Out of nine (09) applicants, top three (03) applicants were selected for the final round of the contest. Table 1 shows the scores from the phase II evaluations.

Table 1: Phase II evaluation scores

S/N	NAME	E1	E2	E3	E4	E5	Total Score	Average Score
1	Joseph Mulenga	89	78	94	79	90	430	86
2	Daniel Sitali	81	91	81	64	87	404	80.8
3	Ezra Zulu	62	93	68	82	78	383	76.6
4	Kumbukani Simukonda	70	58	62	76	79	345	69
5	Marc Ngoma	49	62	63	60	68	302	60.4
6	Lambert Kavumba	52	55	70	65	52	294	58.8
7	Herbet Tembo	58	60	37	46	68	269	53.8
8	Joshua Kunema	40	73	46	51	48	258	51.6
9	Jackson Tembo	50	53	42	43	37	225	45

c) PHASE III - Final Evaluation

The final stage of contest was conducted on 2nd December 2021. The top 3 contestants pitched their prototype digital applications to a panel of Judges drawn from different institution. Table 2 shows the scores from the phase III evaluations.

Table 2: Scores from the Final evaluation

S/N	Name	TE 1	TE 2	TE 3	TE 4	TE 5	TE 6	TE 7	Total
1	Daniel Sitali	68	64	98	79	97	87	88	581
2	Joseph Mulenga	82	86	82	65	94	79	72	560
3	Ezra Zulu	78	67	71	60	64	50	49	439

Therefore, based on the Phase III – Final evaluation, Mr. Daniel Sitali was determined to be the applicant with the proposal that would answer to the call.

Selected Digital Applications and Functionalities

The digital application to be developed will have three (03) access modes listed below:

- i. USSD based application
- ii. Mobile application
- iii. Web based application.

Some of the functionalities to be included on the digital application include:

- i. Access to insurance products from various insurance firms subscribed on the platform.
- ii. An online one stop online shop for business services offered by PACRA, NAPSA, ZRA and workers compensation.
- iii. MSMEs can upload their business transaction and access loan facilities from financial lenders
- iv. MSMEs can request for business services from other MSMEs via using any of the access modes mentioned above.
- v. An online advertising platform for MSMEs for easy access to an online market.
- vi. MSMEs can access labour market information via the platforms.

7. INTERNATIONAL KNOWLEDGE SHARING

At the request of the Ministry of Labour and Social Security, the National Technology Business organised a virtual international knowledge sharing session. During the session, the top 3 contestants pitched their prototype digital applications to a panel of 5 International experts from Pan African Productivity Association. The experts were drawn from, Botswana, South Africa, Ethiopia and Ghana. From the deliberation, Daniel Sitali was unanimously recommended based on demonstration and presentation of the digital application.

8. BUDGET SUMMARY

The NTBC received K154, 687. 50, to facilitate for the contest. From this amount, K60, 262.43 was spent on the activities outlined in the report, leaving a balance of **K94, 425.07 available as the Prize money.** Table 3 shows a summary of expenditure.

Table 3: Summary of Expenditure

SUMMARY OF EXPENDITURE: Digital Platform contest for the Ministry of Labour and Social Security (MLSS)							
S/N	DESCRIPTION(ACTIVITY)	REQUIREMENT	UNITS	UNIT COST (K)	TOTAL COST (K)	ACTUAL COST (K)	Remarks
1	Develop Platform Requirements	Conference Venue	1	5,000.00	5,000.00	0	Taken to S/N 04
2	Develop Platform Requirements	DSA	5	800	4,000.00	0	Taken to S/N 06
3	Platform Development Call	Posters, T.V, Newspaper and Radio placement	1	30,000.00	30,000.00	31,996.18	
4	Information Sessions (Virtual)	Conference Venue	1	5,000.00	5,000.00	0	
5	Applications Screening	Conference Venue	1	5,000.00	5,000.00	8,166.25	Evaluation conducted by two different committees.
6	Applications Screening	DSA	7	800	5,600.00	20,100.00	Evaluation conducted by two different committees.
7	Platform award and hosting	Award/ Payment	1	100,000.00	100,000.00		
	Total				154,600.00	60262.43	
	Balance tentative budget					94,337.57	
	Total Received				154,687.50		
	Balance available for S/N 07					94,425.07	

9. CONCLUSION

The digital application to be developed is expected to improve productivity, service delivery and revenue opportunities for MSMEs. It is envisaged that through the application, access to an online business platform, business services offered by Government Agencies, Private sector institutions and access to relevant labour market information for business growth will be enhanced.

The recommended developer is Mr. Daniel Sitali to receive the prize and go on to develop the digital application platform.