

DIGILOGIC

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D3.3 AU Regional digital & entrepreneurship capacity building plans

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Abstract	A document describing the details of each regional capacity building offer, including timing, description of target groups and synergies with local ecosystem actors to ensure the foreseen outreach.
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Document Revision History

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DISSEMINATION LEVEL		
PU	Public, fully open, e.g., web	√
CL	Classified, information as referred to in Commission Decision 2001/844/EC	
CO	Confidential to DIGILOGIC project and Commission Services	

* R: Document, report (excluding the periodic and final reports)

DEM: Demonstrator, pilot, prototype, plan designs

DEC: Websites, patents filing, press & media actions, videos, etc.

OTHER: Software, technical diagram, etc.

EXECUTIVE SUMMARY

Background: DIGILOGIC is a project funded by the European Union with the goal of creating a pan European and African network of Digital Innovation Hubs (DIHs). These DIHs aim to support innovators, start-ups, and SMEs to jointly develop smart logistics solutions in close cooperation with industries and ventures. DIGILOGIC sees the horizontally connecting logistics industry at the converging point of interest and priorities for digital innovation for social and business development, a crucial node for Europe's and Africa's sustainable prosperity.

Rationale: This document aims to display an overview of the inclusive digital & entrepreneurship capacity building program for the DIGILOGIC Capacity Building Plan (CBP). The capacity building processes MEST and BongoHive (B-Hive) envisage deploying focusses on the target group of vulnerable and unemployed youth (18-35) and groups in Africa (Ghana, Zambia, South Africa, Kenya and Nigeria), especially including women (40%). The goal of the programme is to enable the beneficiaries to transfer their newly acquired skills to start a business themselves and/or enhance their employment opportunities.

Focus: Unemployed youth and women represent specific demographic groups with different digital literacy skills and time availability during the week. To match these pre-conditions, the program will use a hybrid mode of delivery on the DIGILOGIC community platform to provide an online format as well as leverage our DIH facilities for physical training.

Offering: MEST and B-Hive have created an inclusive digital & entrepreneurship capacity building programme for 4 weeks that focuses on entrepreneurial and digital skills. We propose a practical approach for our young participants where we will aim to use African logistics companies as case studies. Participants will learn business skills like problem solving, presentation skills etc., and they will build on their developing skills where they will demonstrate those skills by solving problems around the case study. The digital skills will for example be around learning the concepts for building a website. The participants will work in teams to also learn leadership and communication skills. There will be interactive and guest speaker virtual slots to give tips and opportunities to the participants. Also included are downloadable lessons, live and on demand webinars, online 1-to-1 technology mentoring, open-source materials and assessments, practical assignments and case studies.

We will facilitate the same course in Ghana and Zambia via the online community platform. This will be deployed as two four-week curriculums in the second half of 2022. These programmes will be practical to enable the participants to effectively learn tangible skills in such a short period of time. We will also link the internship elements of the program with the DIGILOGIC co-creation lab which will take place in the second half of 2022. This will make a strategic and impactful link to the capacity building program.

Internship: We will be offering an internship opportunity with Solar Taxi – Our Case study company - while also linking this to the other elements of the DIGILOGIC activities like the Challenges and Co-creation Labs launching in May and July respectively.

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ABBREVIATIONS

AU	African Union
B-Hive	BongoHive
BMC	Business Model Canvas
CLM	Critical Last Mile
DHM	Digital Hub Management
DIH	Digital Innovation Hub
DOP	Design Option Paper
EU	European Union
FINN	Friuli Innovazione
HCD	Human Centred Design
ICT	Information and Communication Technology
MEST	Meltwater Entrepreneurial School of Technology
STEM	Science, Technology, Engineering and Maths
VTT	Technical Research Centre of Finland

1 INTRODUCTION

1.1 BACKGROUND AND CONTEXT

Through the call H2020-ICT-58-2020 with the topic "International partnership building between European and African innovation hubs", the European Commission aims to reinforce the development and establishment of Pan-African networks of Digital Innovation/Tech Hubs through strengthening local digital innovation and start-up ecosystems.

The DIGILOGIC project contributes to this mission by boosting cooperation and partnership among European and African Digital Innovation Hubs (DIHs). Within the DIGILOGIC project, DIHs aim to support innovators, start-ups, and SMEs to jointly develop smart logistics solutions in close cooperation with industries and ventures. DIGILOGIC sees the horizontally connecting logistics industry at the converging point of interest and priorities for digital innovation for social and business development, a crucial node for Europe's and Africa's sustainable prosperity. DIGILOGIC intends to build bridges between the islands of innovation scattered across Europe and Africa, leverage, strengthen and connect DIHs in Europe and Africa to build the first Smart Logistics Pan EU-Africa Digital Innovation Hub Network fostering a broad digital transformation in the African logistics sector.

As part of their mission and amongst other objectives, DIGILOGIC intends to

- a) strengthen the DIHs technology transfer capabilities to advance African innovators and ICT professionals for better job opportunities, and
- b) empower African youth, especially women and vulnerable groups with entrepreneurial and digital literacy skills to significantly increase good quality employment opportunities, including self-employment.

As a means to achieving this, DIGILOGIC is implementing an inclusive digital & entrepreneurship capacity building programme for unemployed youth and vulnerable groups. The programme is implemented and conducted by the African DIHs MEST and BongoHive (B-Hive). The digital upskilling and reskilling for the DIGILOGIC Capacity Building Program is devised from some of the areas of a **Design Option Paper (DOP)**, which has given the basis for understanding how we can improve the learning experience for our beneficiaries. Furthermore, MEST and B-Hive have leveraged on their combined experience and contextualization from how they run their current programmes.

The programme is divided into two cohorts of participants who are offered a 30-day-course in June and November 2022, respectively. The programme will be conducted in a hybrid format with the option to attend physically at the facilities of MEST in Accra, Ghana and B-Hive in Lusaka, Zambia.

The timeline of the Capacity Building Programme can be seen in Figure 1: Timeline for the Capacity Building Programme.

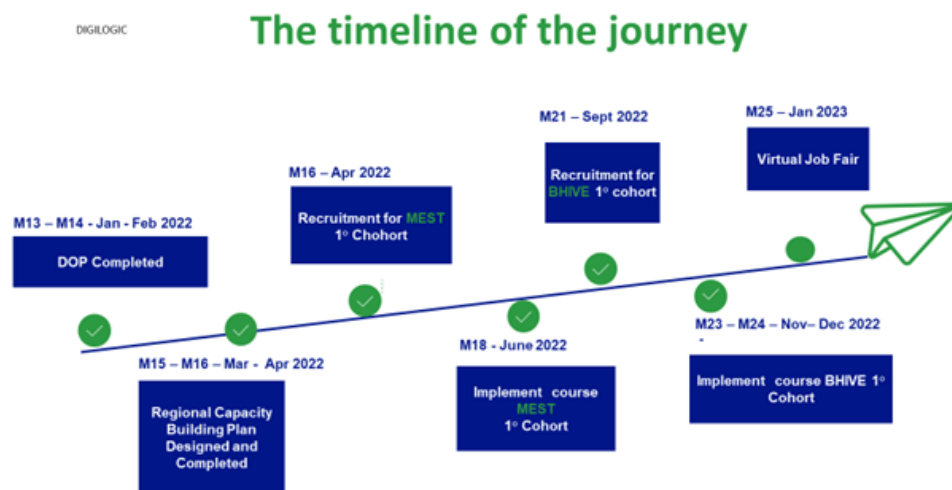


FIGURE 1: TIMELINE FOR THE CAPACITY BUILDING PROGRAMME

The Virtual Job Fair will be conducted in January 2023 and will be available for our participants to engage and network with our ecosystem with their new skills to apply for relevant work and entrepreneurial opportunities.

This document gives a breakdown of the various parts of the programme, including

- Format of the programme
- Target audience
- Marketing
- Recruitment of the participants
- Topics of the programme
- Curriculum
- Monitoring and Evaluation

1.2 OBJECTIVES

The main objective of the inclusive digital & entrepreneurship capacity building programme for 30 participants of vulnerable youth (18-35) and groups in Africa is to concretely foster their employment opportunities. We will disseminate our capacity building courses currently offered and present a united 4-week package of training in a hybrid format on the DIGILOGIC Community Platform in June and November 2022. The programme will be disseminated in both Ghana and Zambia physically and in South Africa, Kenya and Nigeria virtually.

Other DIGILOGIC activities like the Challenges and the Co-creation Labs will represent an additional and complementary learning opportunity for participants and they will be starting in May and July 2022 respectively.

2 SCOPE OF THE CAPACITY BUILDING PROGRAM

2.1 FORMAT OF THE PROGRAM

We will deploy a 4-week inclusive digital & entrepreneurship capacity building programme for 30 participants from unemployed youth (18-35) and vulnerable groups in Africa to foster their employment opportunities. We have created the courses and will present 2 hybrid versions on the Community Platform and on site in June and November 2022 respectively.

The hybrid mode of delivery was chosen to best fit our beneficiaries. We will provide the online format on the DIGILOGIC Community platform while leveraging the MEST and B-Hive facilities for the physical training. The training will be disseminated in both Ghana and Zambia and offered both physical and virtual access to the capacity building program. For those participants in Accra and Lusaka there will be the opportunity to choose virtual interactions and also have access to the MEST and B-Hive spaces for their work interactions and meetings with facilitators. Virtual sessions will only be offered to participants from other regions in Ghana, Zambia, South Africa, Kenya and Nigeria. We have also created a relevant mix of content and training modules to achieve the intended impact of digitally upskilling and reskilling the beneficiaries to better find employment or develop their business models.

Beneficiaries will be introduced to a real-life case study of a logistics company - Solar Taxi (APPENDIX 4) - where our trainers will help to develop their understanding of Design Thinking methods around the Business Model Canvas, entrepreneurship and digital skills. Participants will learn how to approach Solar Taxi's challenges with a critical mindset for problem identification and solving. The chosen topics will aim to draw out such skills including but not limited to, leadership and communication skills within small teams to further develop these skills. Namely, participants of the Capacity Building Programme will obtain the following skill-set:

- Skills for problem identification and solving
- Intercultural communication
- Working in and managing interdisciplinary teams
- Business pitching skills
- Business model development (based on business model canvas)
- Critical thinking skills, HCD approaches and principles
- Prototyping

2.2 TARGET AUDIENCE

We are aiming to recruit 30 participants per cohort and we will establish a waiting list of a further 10 participants per cohort to take into consideration any unexpected unavailability of any of the participants. Thus, we will form a pool of 40 participants who will be included onto the programme.

The target group is expected to live up to the following criteria which will be captured on the application form:

1. Availability to attend in person or virtually (in Accra, Ghana attending at MEST facilities or in Lusaka, Zambia attending at B-Hive facilities; If you are in Nigeria, Kenya or SA - availability is virtually only)
2. Unemployed for at least 3 months
3. Women (40%)
4. Between the ages of 18-35
5. Interested in upskilling and reskilling in the areas of business, technology and entrepreneurship
6. Motivated, self-starter, eager and committed to learning
7. Able to commit to the time demands of the programme
8. Would like to explore careers in the digital and entrepreneurial space

The applications are reviewed and ranked by these selection criteria as described in more detail under the assessment Rubric in APPENDIX 1.

2.3 RECRUITMENT OF THE PARTICIPANTS

In total, the goal is to reach a minimum of 200 applications across all channels. Thereof, a minimum of 40 trainees will be recruited and admitted onto each programme with a minimum of 40% (16) women trainees. We will use the Assessment Rubric for the selection of our participants – APPENDIX 1.

The following elements are part of the recruitment process:

Information Session:

There is a pre-learning support for all applications scheduled via an information session in the form of an instructive webinar during the application process for an hour. It is a live information session and has been held on Wednesday April 20th 2022. 37 participants have joined the live session. It has been recorded and is available on the community platform via link for reference after the initial session and can be found [here](#). There will be a mix of marketing and messaging to reach the target group: via the DIGILOGIC newsletter as well as MEST and B-Hive newsletters, social media, e-mails and word of mouth.



FIGURE 2: INFORMATION SESSION ON CAPACITY BUILDING PROGRAMME

Pre-learning Courses:

Each applicant will need to complete the following pre-learning courses and submit a complete application form in order to be considered for the program. These will need to be completed before the start date: 6th June 2022 for Cohort 1 and for Cohort 2 in November 2022.

1. **Pre-learning on Design Thinking Course for Beginners** (2.5 hours) - IBM Acclaim Profile (Please click [here](#))
2. **Business Model Canvas** (2 hours) Statement of Participation /Digital Badge - Open Learn Create – please click [here](#)
3. **Pre-learning on Digital Skills course:** please click [here](#) (20 mins) and [here](#) (20 mins)

The courses are freely accessible on the websites via sign-in. On completion of the courses the participants will receive a certificate that they need to upload when registering for the Capacity Building Programme.

Application form:

The application form is to be completed through the community platform as shown in Figure 3: Application Form. To fill in the form, applicants need to be registered as users on the [community platform](#).

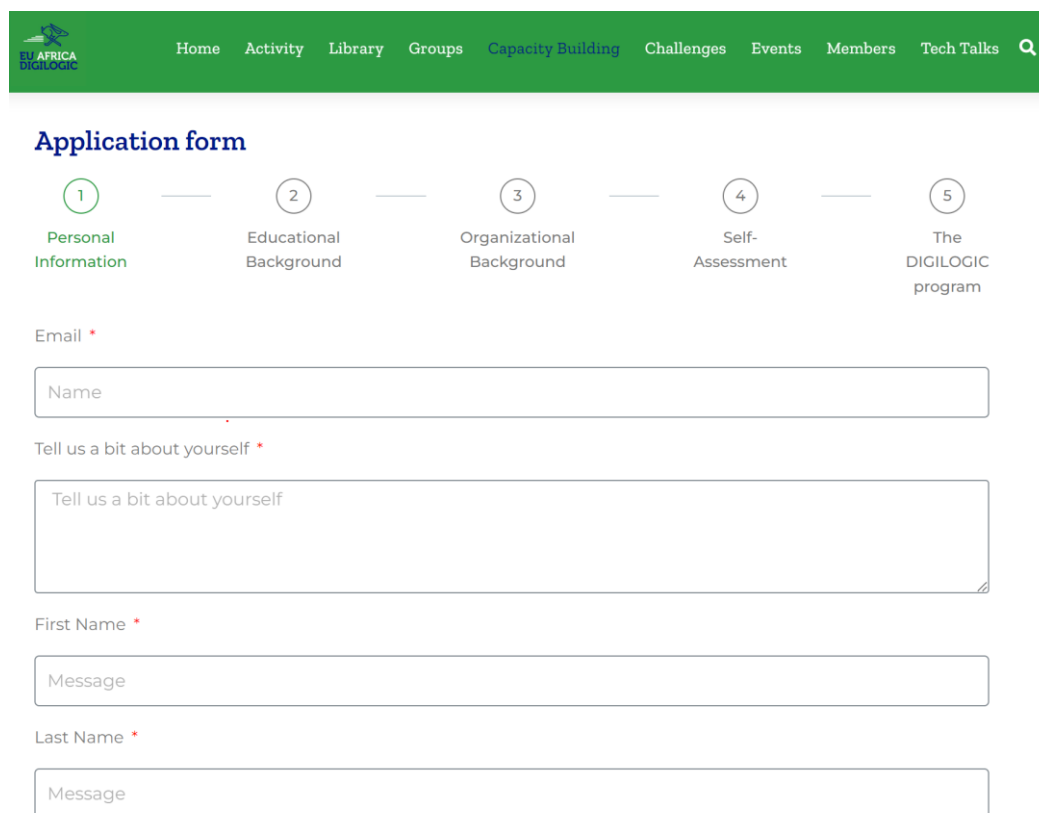


FIGURE 3: APPLICATION FORM

Application review process:

MEST and B-Hive team will review all applications submitted through the community platform. A provision has been made to download all application data from the platform into an Excel form that will be uploaded into a Google drive shared between MEST and B-Hive. This will ensure both teams are able to review and evaluate the applications simultaneously. The selection process will take place on a rolling basis for time management purposes, the teams will review and evaluate applications on a weekly basis to gauge the progress of the application drive.

Once the programme starts, all training sessions will take place on the community platform via a ZOOM integration. Successful applicants will be provided with the necessary information to join classes via the capacity building page on the platform. Both live and pre-recorded sessions will be available for their use and reference even after the lessons have been disseminated. Additionally, participants will be able to upload their assignments for feedback via the platform where the facilitators will be able to access them.

The application form and pre-learning details will also be assessed for completeness with B-Hive/MEST reviewing the data and verifying the qualification of applicants and creating a shortlist/waiting list.

FAQs:

FAQs are being composed for easy support in the application process. Those will be accessible via the community platform.

Virtual Interviews:

During the final week of applications, MEST/B-Hive will conduct one-on-one/group interviews with the shortlisted candidates. The purpose of these interviews is to determine their preparedness and commitment for the programme.

Onboarding management (virtual):

A dedicated onboarding management will entail the briefing on the whole programme including the curriculum, code of conduct and pertinent aspects and benefits of the program.

The successful candidates will be invited to a virtual onboarding session lasting at least an hour– similar to the Information Session held after the launch for applications. They will be given an overview of the program and its curriculum with expectations of how to conduct themselves with a code of ethics and consequences. They will be shown how to navigate the platform for interactions. 80% attendance of the course will equate to a certification of attendance.

2.4 MARKETING

There will be a 5 week marketing campaign from Tuesday April 19 – Friday May 13 2022 to recruit participants. Based on the results of the campaign this will allow for any extensions to the deadline date and any other additional selection protocols.

We envision a mix of marketing and messaging and will focus on newsletters, social media, emails and website channels of the consortium and the wider ecosystem for dissemination of these messages.

The targeted countries for our 18–35 year old unemployed youth are

- AU: Ghana, Zambia, Kenya, South Africa and Nigeria
- EU: Germany, Italy and Finland

We have established on the DIGILOGIC community platform the campaign countdown for the deadline for applications ([Capacity Building - DIGILOGIC Community](#)). We will then focus on the selection process for the start of the program on June 6th 2022.

Elements of the marketing activities are:

- [DIGILOGIC](#) Webpage
- Capacity building page on the community platform ([Capacity Building - DIGILOGIC Community](#))
- Social media (LinkedIn, Twitter, Facebook)
- Information sessions marketing assets i.e., speaker photos, bios and branded power point presentation
- Recruitment e-mails
- Spreading of information through WhatsApp groups
- Events (i.e., information session)
- Distribution of information materials through partners of MEST and B-Hive within Ghana, Zambia, Kenya, South Africa and Nigeria

The Marketing strategy full schedule can be found under APPENDIX 2.

2.5 TOPICS OF THE PROGRAMME

The Capacity Building Programme consists of the following topics that can be found in Table 1: Topics of the Programme.

WEEK	THEME	PRESENTER
1	Design Thinking with entrepreneurship	MEST/B-Hive
2	Design Thinking with digital skills	MEST/ B-Hive
3	CLM stories via guest speakers and Pitch training	Ecosystem/MEST
4	Pitching and Graduation	MEST/ B-Hive

TABLE 1: TOPICS OF THE PROGRAMME

2.6 TRAINING CURRICULUM

The training curriculum is being developed by MEST and B-Hive and includes training sessions conducted by either of the two partners as well as by guest speakers/facilitators. Finally, in the last two days of the programme, the participants get the opportunity to pitch their project in front of an audience.

The current state of the curriculum can be found in Table 2: Training Curriculum. Final decisions on the programme and guest speakers are yet to be made in the first half of May 2022.

Date/ Time	Monday	Tuesday	Wednesday	Thursday	Friday
WK 1	6 Jun 22	7 Jun 22	8 Jun 22	9 Jun 22	10 Jun 22
3 HRS	Introduction to Design Thinking Methodology & Problem Space Mapping	Understanding the User, their Journey and Pain Points to be addressed	Ideation (Exploring solution concepts)	Prototyping & Introduction to the Business Model Canvas	Developing Business Model Canvas & Reflection
WK 2	13 Jun 22	14 Jun 22	15 Jun 22	16 Jun 22	17 Jun 22
3 HRS	Introduction – Digital skills Product design	Sketching	Designing in Figma	Prototyping in Figma	Testing Designs
WK 3	20 Jun 22	21 Jun 22	22 Jun 22	23 Jun 22	24 Jun 22
3 HRS	Guest Speaker & Q&A	Guest Speaker & Q&A	Guest Speaker & Q&A	Pitching Training	Hands on case study

WK 4	27 Jun 22	28 Jun 22	29 Jun 22	30 Jun 22	1 Jul 22
3 HRS	Iterations and feedback	Dress Rehearsal for all teams	Pitch Day 1	Pitch Day 2	Graduation

TABLE 2: TRAINING CURRICULUM

Curriculum Focus Areas: Design thinking and Human Centered Design (HCD) - these are the principles/ approaches that will be used within the context of the BMC throughout the programme.

Entrepreneurial Basics: The Power of Design Thinking with Entrepreneurship workshop is a curated experience, designed to equip the cohort with the fundamental entrepreneurship and intrapreneurship skills, Design Thinking tools and principles that would empower them to be more conscious and empathetic problem solvers and change makers either as business leaders or employees. The Business Model Canvas focusses on the following 9 Areas:

1. Customer segments
2. Value propositions
3. Channels
4. Customer relationships
5. Revenue streams
6. Key resources
7. Key activities
8. Key partnerships
9. Cost structure

Digital Skills: Design Thinking by enabling digital solutions for CLM

- **Sketching** - Sketching enables you to start the best ideas. It's a powerful process since it always helps you in discovering new ideas and solutions to your designs. When you start sketching your ideas and imagination, you open a way to put your creativity to action and in turn enhancing your skills.
- **Wireframing** - Wireframing is a process where designers draw overviews of interactive products to establish the structure and flow of possible design solutions.
- **Designing** - describes the process of imagining, creating, and iterating products that solve users' problems or address specific needs in a given market.
- **Prototyping** - is an experimental process where designers implement ideas into tangible forms from paper to digital. Teams build prototypes of varying degrees of fidelity to capture design concepts and test on users. With prototypes, you can refine and validate your designs so your brand can release the right products.

Additionally, 3 Guest Speaker Virtual slots from our CML Stakeholders (either virtual or live) are included in the curriculum, which are yet to be announced.

An example of the training content is provided in APPENDIX 4.

The topics and skills will be conveyed through the application to a real-life business case:

1 Ghanaian Business Case Study: Cohort 1: Enabled by digital solutions: Including a case study business model for CLM: **Solar Taxi** – APPENDIX 5

1 Zambian Business Case Study: Cohort 2: Enabled by digital solutions: Including a case study business model for CLM: *TBC for November 2022*

Timeline:

1. Cohort 1: Monday June 6th – Friday July 1st 2022
2. Cohort 2: TBC in November 2022
3. 3 hours per day: 5 days per week: 4 weeks duration
4. Pre-recorded/live lectures and weekly assignments: Assignments will be given at the beginning of each week and submitted at the end of each week via the community platform.

At the start of each week, there will be a learning theme for the week. Participants will be given their assignments at the same time and they are expected to complete them by the end of each week. The assignments will be assessed by the team and feedback given to the participants, who will then implement the feedback given at the start of the next week. The assignment will only be deemed complete when the team confirms it meets the right level of quality and completeness.

Context:

2 main areas: Entrepreneurial and Digital Skills to focus on and develop/deploy a full list of modular programs based on some of MEST and B-Hive's existing courses and 2 case studies for a Ghanaian and a Zambian logistics company. We will aim to share all agreed materials on the Community Platform.

Post-Cohort Activities:

The attendees of the Capacity Building Program are offered several follow-up activities to deepen their knowledge and skillset, benefit from employment opportunities or further develop themselves:

1. Virtual Internship (Offered by case study company; yet to be specified)
2. Co-Creation Labs
3. Challenges
4. Tech Talks
5. Virtual Job Fair (attendees (amongst others): DHL, SnooCode, RTT and Proctor & Gamble)

2.7 THE TEAMS

MEST INTERNAL FACILITATION AND VIRTUAL TRAINING TEAM:

- **Toyin**, Project Manager
- **Rhoda**, Program Associate
- **Liana**, Program Manager, Pre-MEST
- **Fiona**, Marketing and Recruitment Manager
- **Francis**, Recruitment and Admin Associate
- **Bhavik**, Monitoring and Evaluation Manager
- **Israel**, Operations and Consultancy Director
- **Isaac**, Finance
- **Gerhart**, Consultancy – Head of Training

BHIVE INTERNAL FACILITATION AND VIRTUAL TRAINING TEAM

- **Maumo**, Projects Lead,
- **Silumesii**, Director of Consult,
- **Simunza**, Director of Entrepreneurship and Innovation,
- **Peter**, Entrepreneurship Lead,
- **Mareta**, Communications Lead,
- **Rhoda**, Entrepreneurship Associate,
- **Brian**, Monitoring and Evaluation Lead,
- **Taaza**, Finance Lead

3 MONITORING AND EVALUATION

M&E is a critical component of the program that starts during the design phase and continues after the program has ended. The process is iterative, where the program team is able to learn and gain insights into how to improve, change and/or adapt the programming.

Listed below are the key quantitative-centered evaluation instruments used for the two 1-month programs for African beneficiaries. In addition to the tools included here, the program will collect interim feedback from students, trainers and mentors. This will ensure continuous improvement and learning. A knowledge test will further be developed and used at the end of the two 1-month programs. The instruments below will be updated and the additional features designed, once the finalized course structure, approach and content are defined.

Baseline Assessment Form:

Dear participants,

Welcome to DIGILOGIC and the 1-month digital & entrepreneurship capacity building programme. This short questionnaire is designed to determine your perceived level of entrepreneurial and digital literacy skills as well as your expectations from this 1-month programme. This will help us to identify your existing skills, strengths, expectations and potential needs within the programme. This will enable us to support you in the best way possible. This questionnaire is not a test and there are no right or wrong answers.

Please share your honest self-assessment and expectations. The answers will remain anonymous and have no influence on your participation. Please note that your participation in this survey is optional, but strongly recommended, as it will allow us to make changes that will directly benefit the programme.

Attendee ID	The first two letters of the month you were born	The first two letters of your mother's first name	The first two letters of your father's first name	The digits of the year you were born

1. Gender: How do you identify?

- ☐ Man
☐ Non-binary
☐ Woman
☐ Prefer not to answer

2. What year were you born? Dropdown: years

3. Where do you currently live?

<input type="checkbox"/>	Ghana
<input type="checkbox"/>	Nigeria
<input type="checkbox"/>	Kenya
<input type="checkbox"/>	South Africa
<input type="checkbox"/>	Zambia
<input type="checkbox"/>	Other, please specify....

4. Are you currently.....? (Please select all that applies)

<input type="checkbox"/>	Employed with wages
<input type="checkbox"/>	Self-employed
<input type="checkbox"/>	Unemployed
<input type="checkbox"/>	In Education (e.g. University)
<input type="checkbox"/>	Other, please specify _____

PERCEIVED EXPECTATIONS AND SKILLS

1. What is your motivation for participating in this 1-month programme? What do you expect to gain out?
2. If you had the chance to pick any topic for the programme curricula, which one would you pick?
3. What is your perceived level of skill with the following topics?

	1 Not skilled	2	3	4	5 Very skilled
	Guidance on what skills are needed per level (1 to 5) will be included per topic				
Entrepreneurship					
Topic 1					
Topic 2					
Digital literacy					
Topic 1					
Topic 2					
Key enabling technologies for smart logistics					
Topic 1					

Topic 2					
---------	--	--	--	--	--

5. Do you have any additional comments, suggestions etc.? Please add here:

Thank you for participating in this survey.

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Additional M&E Activities can be found in APPENDIX 3.

4 COMMUNITY PLATFORM

All potential participants of the Capacity Building Programme who are visiting the DIGILOGIC community platform will be able to browse and explore the platform but will be required to register and provide relevant details to sign up for the different programmes and opportunities. The community platform has a variety of features, so to help our participants we included a help section on the community platform which houses a series of instructional videos on how to use or subscribe to the various features and opportunities offered, including how to register. The help section can be found [here](#).

Once registered on to the community platform users will be able to access a variety of feature. These features are also accessible and beneficial to the attendees and potential candidates of the Capacity Building Programme. The following features are available:

Community Activity:

Here, members can follow-up on who registered on the community platform, what has been posted by the members and which interactions have taken place recently.

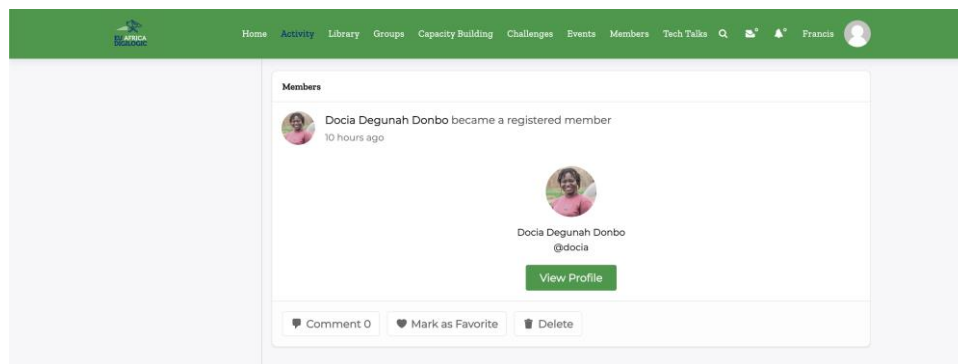


FIGURE 4: COMMUNITY PLATFORM - ACTIVITY FEED

Resources Library

The platform also has a dedicated area where different forms of media can be found such as podcasts and articles relating to the logistics eco system these resources can be used as research material and a knowledge base for the community.

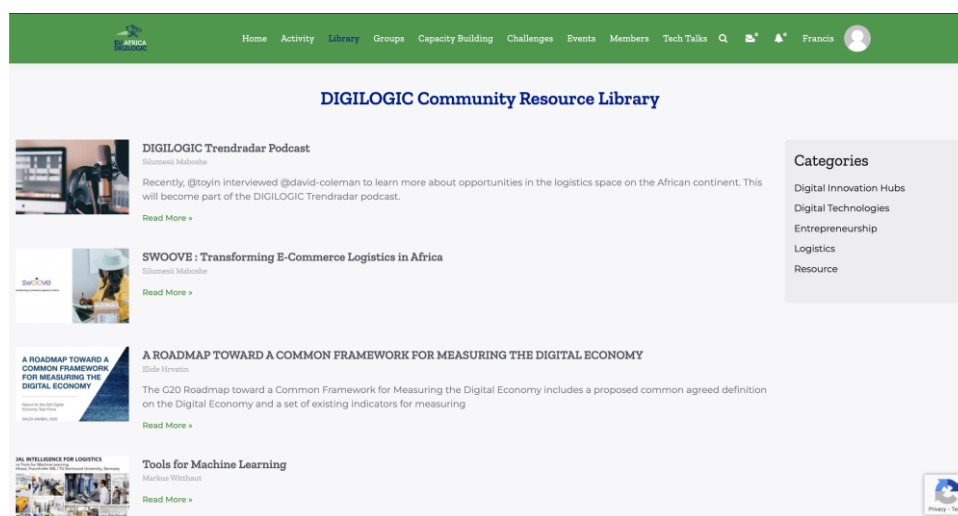


FIGURE 5: COMMUNITY PLATFORM - RESOURCES LIBRARY

Groups:

This feature encourages collaboration, any teams formed in any of the programs can create private groups to communicate amongst themselves on the platform throughout the duration of the program. The instructional video on how to create groups can be found in the help section.

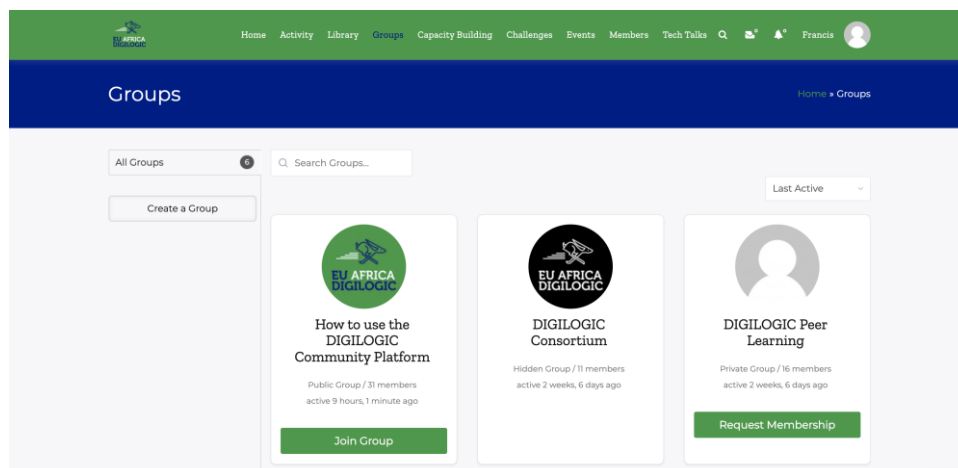


FIGURE 6: COMMUNITY PLATFORM - GROUPS

Capacity Building:

The capacity building programme will predominantly take place on the community platform to ensure the consortium has as much control over the programme and the various resources needed and used to accomplish the programme goals. In addition, this provides more sustainability for the programme and the platform as all resources and stakeholders will remain on the platform beyond the close of the programme.

The application process will also be facilitated through the platform. On the capacity building page, applicants will be provided with a form that they can complete and submit within the platform. Similarly, to registration and creating groups an instructional video of the application process can be found in the help section.

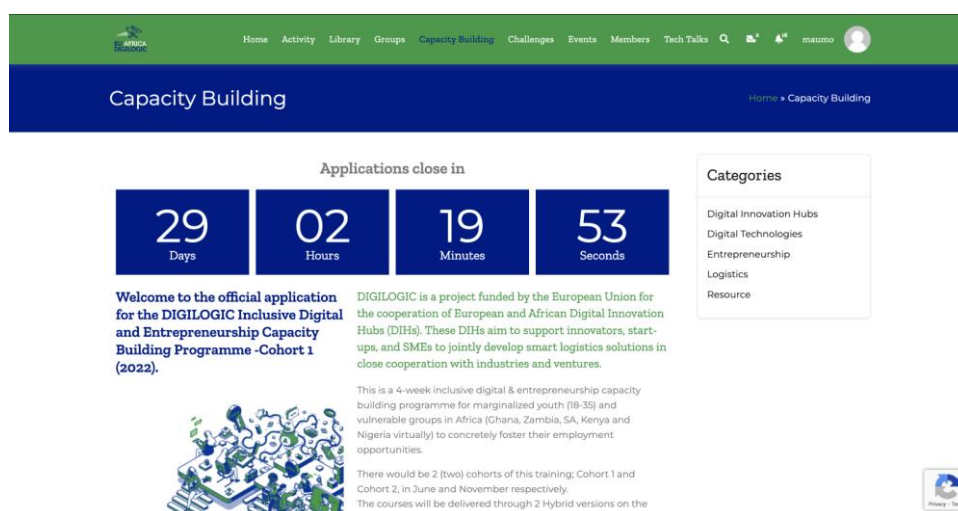


FIGURE 7: COMMUNITY PLATFORM - CAPACITY BUILDING PROGRAMME

Co-Creation Labs:

The Co-Creation labs will offer tech empowerment with a hands-on approach also to vulnerable groups, by building a set of feasible solutions to answer real needs. There will be 6 co-creation laboratories where real

African small businesses case studies will be used to collaboratively design possible digital solutions to relieve logistics obstacles that hinder profitability and business scale up.

Co-creation, design thinking, visual thinking, know-how exchange, fast prototyping, blend learning and other techniques meant to engage participants and encourage teamwork, facilitators from DIH staff and tech experts will be used.

Information on the co-creation labs and access to the sign-up for attendees will also be available on the community platform.

Challenges:

Users will be able to view and apply for the DIGILOGIC Challenges, which will provide them with the selection criteria, what the proposals should contain, how to submit, and expectation of the commitment that will be required by the participant if selected. We have an instructional video of how to apply for the Challenges program as well.

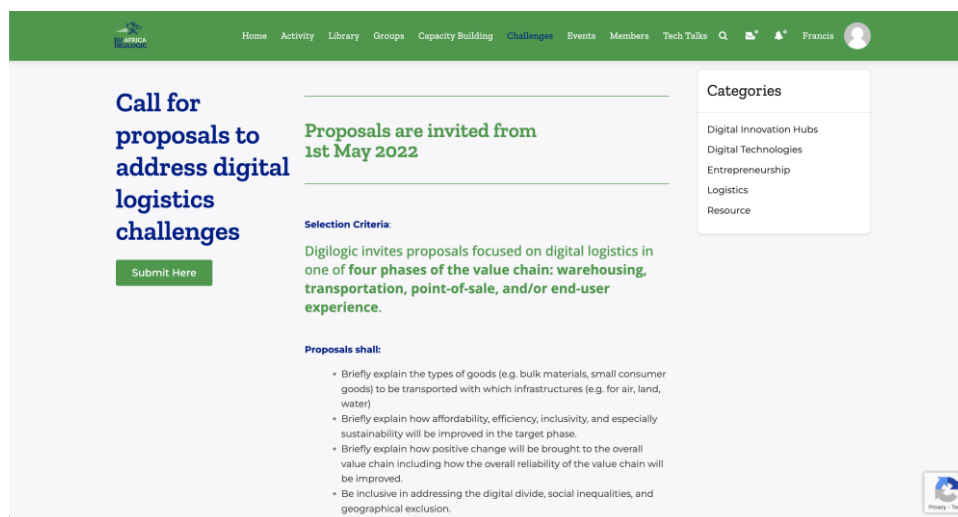


FIGURE 8: COMMUNITY PLATFORM - CHALLENGES

5 APPENDIX

APPENDIX 1: RECRUITMENT STRATEGY: ASSESSMENT RUBIC

APPENDIX 2: MARKETING STRATEGY

APPENDIX 3: M&E STRATEGY

APPENDIX 4: TRAINING STRATEGY

APPENDIX 5: THE CASE STUDY

APPENDIX 1: RECRUITMENT STRATEGY: ASSESSMENT RUBRIC

DIGILOGIC COHORT 1 - June 2022

ELEMENT	WHAT TO LOOK OUT FOR	VALUE	MAX. VALUE
Age	Desired: Should be aged 18 - 35 years (matured, preferably not in school) preferred: born from 1985 - 2003 Not desired: born before 1985 or after 2003	Age: 18-35 - 2 points (preferred) Age: under 18 or over 35 years - 0 points (not our target)	2 points
Employment Status	Preferably unemployed, or doing their own work to be able to commit the time Should not be in school/university	Employed in a formal organization Or a student still in school - 0 points Unemployed - 3 points (ideal) Self-employed or an Entrepreneur - 1 point	3 points
Application Form	Completed and submitted application form All questions appropriately answered Coherent development and presentation of ideas Relevant responses to questions asked Professional communication and use of the English language Prior experience in logistics is not required, but should be able to communicate his/her need to pursue the training and the eventual utilisation of skills acquired	Great Communication - Minimal grammatical errors, relevant answer to question - 5 points Standard Communication - Some grammatical errors, but generally relevant responses to questions asked - 2 points Poor Communication - Many grammatical errors and irrelevant responses to questions asked - 0 or 1 point based on assessor's discretion	5 points
Pre-Learning Courses	Complete and submit the certificate for Pre-Learning Courses	No certificates submission - 0 points Submitted Certificates - 5 points	5 points

Application Assessment Key

Please use this colour key guide to highlight each applicant in the appropriate colour, after assessing and reviewing their application data.

- Red:** Has not met the minimum requirements of the application form
- Yellow:** Has met minimum requirements on the application form
Has not submitted a certificate of completion for the pre-learning course
- Green:** Has completed and met all requirements on the application form
Has submitted a certificate of completion for the pre-learning course

APPENDIX 2: MARKETING STRATEGY

Marketing Strategy and timelines:

5 Week Campaign: April 19– May 13 2022 with DIGILOGIC Consortium and networks

- Mix of Marketing and Messaging: Newsletters, social media, emails and website channels.
- Targeted Countries: AU: Ghana, Zambia, Kenya, South Africa and Nigeria EU: Germany, Italy and Finland
- Countdown to Start of the program: June 6th 2022

WEEK	THEME FOCUS – SOCIAL MEDIA MESSAGING EXAMPLES	LINK
1	<p>Information session and application – Women and Young People in targeted African Countries : social media: LinkedIn, Facebook, Twitter</p> <p>The problem: Many young people in OUR TARGETED AFRICAN COUNTRIES: Ghana/Zambia/SA/Nigeria/Kenya lack the skills and experience needed to secure dignified jobs. Despite there being a burgeoning tech scene in these countries, there are an insufficient number of qualified people to address this need.</p> <p>The solution: The DIGILOGIC CAPACITY BUILDING PROGRAM offers free entrepreneurial and digital skills training to young people in OUR TARGETED AFRICAN COUNTRIES: Ghana/Zambia/SA/Nigeria/Kenya who wish to improve their skills in these areas, increase their job and entrepreneurial readiness and launch careers in technology</p>	Apply here
2	<p>CTA – registration – Women and Young People. Newsletter Headlines and social media:</p> <ul style="list-style-type: none"> • Launch your career with an Introduction to entrepreneurial and digital skills training with DIGILOGIC • Get free entrepreneurial and digital skills training and internship opportunities • Get job ready. Launch your career WITH entrepreneurial and digital SKILLS WITH DIGILOGIC • Take your entrepreneurial and digital career to the next level • Want to become an entrepreneur or work with SMART LOGISTICS ? • Free training and job opportunities 	Apply here
3	<p>CTA Registration – Young people : social media :</p> <p>Are you a young person living in OUR TARGETED AFRICAN COUNTRIES: Ghana/Zambia/SA/Nigeria/Kenya looking to enhance your entrepreneurial and digital skills? Get free training + a virtual internship based in Ghana with the 2022 DIGILOGIC CAPACITY BUILDING program.</p>	Apply here

4	<p>CTA Registration Women: Social Media :</p> <p>If you're a young woman looking to break into tech - here's your chance! Develop the skills you need with our free 4-week training and kickstart your career in tech with project internships and networking opportunities.</p>	Apply here
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WEEK	THEME FOCUS – EMAIL MESSAGING EXAMPLES	LINK
1	<p>Information session and application – Women and Young People in targeted African Countries : E-mails to network and WhatsApp</p> <p>Hello [Name],</p> <p>We are excited to announce that BHIVEB-HIVE, in partnership with the DIGILOGIC, is for the first-time accepting applications for the 2022 DIGILOGIC CAPACITY BUILDING PROGRAM</p> <p>The free program is designed for young people in Ghana, Zambia, South Africa, Kenya and Nigeria interested in acquiring in-demand digital skills and launching entrepreneurial careers</p> <p>Over the course of 4 weeks, you'll receive training and mentorship from experienced facilitators while working on hands-on projects. In addition, networking will be offered and participants will have the opportunity to gain work experience through project internship within their training</p> <p>The program will start on June 6th, 2022 at MEST in Accra and B-HIVE in Lusaka. Virtually for Nigeria, Kenya and SA</p> <p>Cohort 1: MEST - 6th June 2022</p> <p>Cohort 2: B-HIVE - November 2022 (TBC)</p> <p>Interested? Start your application today. Application for the program closes on Friday May 13th, 2022)</p>	Apply here
2	<p>Replicate above and add the following:</p> <p>Are you passionate about acquiring entrepreneurial and digital skills? Do you want to enhance your skills to secure a new role or improve your enterprise?</p>	Apply here
3	<p>Replicate above and add the following:</p> <p>The DIGILOGIC Project, is accepting applications for the 2022 DIGILOGIC CAPACITY BUILDING PROGRAM.</p>	Apply here

	<p>Here are 5 reasons why you should apply for the program;</p> <ol style="list-style-type: none"> 1. A Free 4-week training program 2. Networking participation 3. Access to experts and trainers 4. A Project based 4-week internship 5. Become a part of the DIGILOGIC Community 	
4	Replicate above	Apply here

APPENDIX 3: M&E STRATEGY: DIGILOGIC SAMPLE SURVEYS AND INTERVIEW

As stated earlier these M&E surveys and Interviews will be conducted by MEST and B-Hive with support from ENDEVA.

Pre-Program Survey

- ☐ Name
- ☐ Gender
- ☐ Location
- ☐ Educational experience
- ☐ Work experience
- ☐ Pre-learning modules rating
- ☐ Pre-learning modules skills and knowledge improvement
- ☐ Pre-learning modules comments
- ☐ Baseline program modules skills and knowledge understanding
- ☐ Baseline program modules skills and knowledge comments
- ☐ Other comments

End-Program Survey

- ☐ Name
- ☐ Gender
- ☐ Program modules rating
- ☐ Program modules skills and knowledge improvement
- ☐ Program modules comments
- ☐ Confidence in applying skills in real world
- ☐ Program process satisfaction
- ☐ Program process rating (communication, information, etc.,)
- ☐ Program process comments
- ☐ Other comments

Interview

- ☐ How did you find your experience during the program?
- ☐ What were the most interesting skills that you learned and why?
- ☐ How confident do you feel about getting a job in the real world and applying your skills
- ☐ What do you think of the experts teaching you?
- ☐ What do you think can be improved about the program

End line Assessment Form

APPENDIX 4: TRAINING STRATEGY

DIGILOGIC inclusive digital & entrepreneurship capacity building program: **Design Thinking Workshop and Entrepreneurship Workshop**

Week 1 – Workshop Schedule:

Background

The Power of Design Thinking with Entrepreneurship workshop is a curated experience, designed to equip the cohort with the fundamental entrepreneurship and intrapreneurship skills, Design Thinking tools and principles that would empower them to be more conscious and empathetic problem solvers and change makers either as business leaders or employees.

The goal in designing the programming for the workshop is to facilitate a practical learning experience using the Solar Taxi case study, to stimulate knowledge-sharing, and generate applicable real-world solutions to the sub-challenges present in the problem space of the case study.

Scope of Work

The 5-day workshop will focus on creating a learn, apply, and improve environment for the cohort in implementing Design Thinking & HCD Tools in problem solving; and using a Business Model Canvas as a strategic management template for developing and visualizing business models.

With experience in Pitch Training and an award in Public Speaking from the English-Speaking Union (ESU), Pitch training may also be included as a 1-hour workshop in the 3rd week.

Workshop Schedule

Day 1 | Introduction to Design Thinking Methodology & Problem Space Mapping:

- The VUCA world terminology will be introduced to contextualize the volatile, uncertain, complex, and oftentimes ambiguous nature of most industries today, highlighting the transport (e-mobility) and e-commerce industries
- The Design Thinking Methodology and complimentary HCD tools applied across the Double Diamond Model in the problem-solving process will be presented to the cohort
- Florence Nightingale's discoveries of the effectiveness of using visualization to map out problems with tools such as the polar area diagram will serve as a launch point to present problem space mapping tools that can be applied to the case • Teams will have time allocated to mapping out their problem space

Post review, teams will develop a problem statement to present the problem space, affected users, needs to be addressed and insights informing their focus areas more succinctly

Assignment: Students will conduct further secondary or proxy research to validate their problem spaces, and present new insights on Day 2.

Day 2 | Understanding the User, their Journey and Pain Points to be addressed:

- Participants would do a brief presentation of their visualized problem spaces and problem statements.
- Personas would be developed by the teams to better represent the characteristics of the customer segment(s) and the solution it is being developed for
- Empathy Maps will be used by the teams to better describe the experiences of the customer pertaining to the problem space
- A point of view statement will be developed by each team as an actionable statement towards commencing the ideation process

- Journey Maps will guide teams towards better understanding the nodes where users and/or Solar Taxi experience challenges

Assignment: Teams will have to review all tools developed (User Personas, Empathy Maps, Journey Map and POV statements) to ensure they are well aligned with the case to commence ideation

Day 3 | Ideation (Exploring solution concepts):

- This would be a fun filled day where teams explore ideation techniques • Teams would move towards developing ideas directed towards their user pain points identified in the problem spaces according to the case study
- Student teams would generate ideas using ideation techniques and visualize ideas using idea napkins
- Brief presentation on top 2 ideas per team
- Student teams would learn about low-mid fidelity prototyping methods
- Student teams would select a prototyping method of choice to present their idea
- Student teams would commence the prototyping process

Assignment: Students continue prototype development

Day 4 | Prototyping & Introduction to the Business Model Canvas:

- Teams have time to put prototypes together for a brief presentation
- Teams present prototypes briefly to kick-off the day and receive feedback
- Teams are introduced to the concept and elements of the Business Model Canvas
- Teams commence developing BMCs centered around their prototyped solutions Assignment
- Team review whether their idea and prototype can be the center of a viable and feasible BMC

Day 5 | Developing Business Model Canvas & Reflection:

- Recap of the week
- Teams continue developing BMCs centered around their prototyped solutions
- Cross-team peer review of BMCs and Solutions
- Teams present the progression of their work from defining the problem, identifying the needs of the users, to developing a prototype from an idea and developing a BMC around it

Curriculum Overview

As summarised in the Workshop Schedule presented above, the Curriculum for week 1 will cover:

- VUCA world terminology and how the volatile, uncertain, complex, ambiguous nature of most industries today create 'Wicked' problems that are best solved with HCD approaches
- To ground our contextualization in a strong foundation, we will adapt the traditional Design Thinking Double Diamond Model for engagement. This model enables professionals in varying fields with or without a design thinking background to tackle some of today's most complex socio-economic and environmental problems. This model concerns itself with how people process information in order to create solutions and consists of four (4) stages found in a majority of creative problem-solving processes. These are: Discovery, Definition, Development and Delivery. Jointly, these stages highlight the design thinking process or human-centered approach and work as a map to guide designers in providing order to their thoughts and improving the creative process.

HCD Tools: To be intentional about the learning and application process, HCD tools to be shared and applied in the workshops would include but not limited to: Problem Space Visualizers (Tree Diagrams, Fishbone Diagrams, etc.); Empathy Maps; Persona Maps; Journey Maps; Ideation Tools (Disney's 3 rooms, 6 thinking hats, etc.); prototyping techniques (Low-medium fidelity prototyping (Storyboarding, wireframing, etc.))

The process of developing a Business Model Canvas would be introduced to the cohort, to inform how they strategically present business models and consider the various crucial elements (value proposition, customer segments, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, cost structures) that inform a viable model

Expected Outcomes

The expected outcome of the workshop is in 3 major parts:

1. To share tools for problem space exploration that enables critical thinking and empowers the program participants with an understanding of the ethnographic approaches to research and visualizing problem spaces.
2. To run participants through the design thinking process focusing on problem definition, ideation, prototyping, business models; and how as entrepreneurs they can use these tools and complementary frameworks to create customer-oriented solutions from the problems they discover.
3. To develop tangible solutions to the Solar Taxi Case Study that can be applicable to the company's operations
4. To aid the participants understand how to journey through their careers and make a difference where they find themselves, whether leading a business or as a n employee.

Week 2 - Workshop Schedule

Day 1 | Introduction Digital skills

- How might we – designing questions that allow us to reframe our insights into opportunity areas and innovate on problems found during user research.
- Mapping and targeting - Identifying the current customer journey and the different actors involved in the process, selecting one or more pain points in the journey to solve for.
- Proposed solution showing updated customer flow

Day 2 | Sketching

- Recap of day 1
- Visualising product flow and screens through sketches

Day 3 | Wireframing and Designing in Figma

- Recap of day 2 sketches
- Getting started with figma
- Design low fidelity wireframes

Day 4 | Designing and Prototyping in Figma

- Recap of day 3
- Begin high fidelity wireframe designs
- Intro to prototyping in figma

Assignment: Link all the pages in your design showing the customer flow of each feature available

Day 5 | Testing and Feedback

- Recap of day 4
- Testing prototypes and providing feedback
- preparations clean up and final touches consultation

Expected outcome

- Fully clickable prototypes showing customer flow and experience of propose solution.

Assignment: Iterating designs based on feed back

Week 3 - Workshop Schedule

Day 1 |

- **Introduction to Week 3** – Guest Speakers Q&A and Group work to complete Case Study opportunities
- Review and Feedback of Week 2
- **Expected outcome:** Interactive session with industry leader 1 and their journey with challenges and opportunities. Participants will interact and build confidence from their training in Week 1 and Week 2.
- **Group work:** Request support through Q&A to speakers and integrate lessons into their Pitches.

Day 2 |

- Feedback of Day 1
- Interactive session with industry leader 2
- **Group Work:** Request support through Q&A to speakers and integrate lessons into their Pitches

Day 3 |

- Feedback of Day 2
- Interactive session with industry leader 3
- **Group Work:** Request support through Q&A to speakers and integrate lessons into their Pitches

Day 4 |

- Feedback of Day 3
- Pitch Training
- **Group Work:** Pitch knowledge incorporated into their pitches

Day 5|

- Feedback of Day 4
- **Group Work:** Hands on case study updates and refinements

Week 4 Workshop Schedule

Day 1|

- Feedback of Day 5
- Interactive session with industry leader 2
- **Group Work:** Request support through Q&A to speakers and integrate lessons into their Pitches

Day 2|

- Feedback of Day 1
- Pitching Dress Rehearsal for all teams
- **Group Work:** Disseminate feedback into pitches

Day 3 |

- Feedback of Day 2
- Pitch Day 1 x 4 Teams with Solar Taxi
- **Group Work:** Dissemination of feedback into pitches

Day 4 |

- Feedback of Day 3
- Pitch Day 2 x 4 teams with Solar Taxi
- **Group Work:** Dissemination of feedback into pitches

Day 5 |

- Feedback of Day 4
- Graduation Day
- Pitch results and allocation of Internship opportunity
- M&E
- Certification

APPENDIX 5: THE CASE STUDY

SOLAR TAXI CASE STUDY

Solar Taxi is an e-mobility Ghanaian start-up limited liability company that provides modern eco-friendly, affordable and sustainable transportation/mobility facilities and services for modern Africans. The company designs and locally assembles electric-powered vehicles (EV's - bikes, tricycles, mini cars), trains locals on how to operate the vehicles, and offers affordable, eco-friendly transport services while giving customers the potential of owning their own locally assembled vehicle. Currently, the company offers electric vehicles for lease to customers and provides courier services with its electric motorbikes. The business also has a mobility software platform as a service

Solar Taxi started as a partnership initiative between Kumasi Hive and the Mastercard Foundation in September 2018. This project focused on producing solar-powered electric vehicles for use across the country. The goal of this collaboration was aimed at alleviating poverty, creating employment while protecting the environment. The success of the project was centred on 2 key ideas: Using solar as a cheap energy source to “fuel” vehicles would increase the popularity of solar powered EVs, while the low maintenance cost of these vehicles also meant more savings for individuals patronising this means of transportation for personal use or business.

The current business model of Solar Taxi has two wings: Leasing EVs to clients, and running a delivery service using EVs. As originally designed, Solar Taxi has been assembling solar powered electric vehicles and leasing them to customers, some with a contractual period of only 1 month. This provides flexibility and ownership opportunities to clients in a market with difficult financing options for vehicles, let alone EVs. Additionally, unlike in places like South Africa, when such financing options are available, they are not as widely spread across the country.

The more substantial aspect of Solar Taxi's business is the provision of delivery services leveraging the company's locally manufactured electric motorcycles. With this delivery service, the customers of Solar Taxi will be other e-commerce businesses that require the services of a delivery intermediary to transport products purchased by clients via an online medium, to the doorstep of the purchasing customer. This makes the service essentially a B2B one.

There are 4 categories of clients that Solar Taxi is targeting (small or large e-commerce businesses), with 2 main models for running the business at profitability; via a subscription model or through a rental service. The subscription model is fairly similar to the current means by which most small businesses with an online front execute their delivery of items to clients. With this system, a small business will be a subscriber to our EV delivery service, such that when a client makes a purchase of their product, they would in turn request a dispatch to transport the purchased product to the customer. The benefit of this to the subscriber clients is that delivery vehicles/assets are always available when a customer makes a purchase, and using EVs means cheaper transportation charges. For Solar Taxi, a subscription means more predictable revenue flows and thus allows for better planning and management of the company's finances. The categories of clients to be targeted with this subscription model are small online businesses, often operating on Instagram, as well as lower volume SME businesses such as restaurants.

THE TARGET CUSTOMER NEEDS BREAKDOWN:

1. Family needs priority
2. Environmentally aware
3. Quality conscious
4. Mobility important
5. Accomplished

With the Rental Service model, which is targeted at e-commerce setups with heavy online presence (such as Jumia), and/or high-volume transactions (such as MaxMart), Solar Taxi shall have the delivery service integrated in the backend electronic set-up of the business. This will be a seamless transition from the viewpoint of the purchasing customers so that when they make their online purchases and opt for delivery, the Solar Taxi delivery service will be automatically activated to make the delivery without requiring any process initiation by the e-commerce business owners. For such clients, working with Solar Taxi means that they second their delivery processes to a 3rd party, allowing them to focus their energies on running the core aspects of their businesses, while bringing the benefit of rental income to Solar Taxi from the arrangement.

Currently, Solar Taxi has four different locations where it operates in Ghana namely Accra, Kumasi, Takoradi, and Tamale. To properly and more efficiently run the delivery business, the WOTEE App was developed and deployed mainly in Accra. Based on its business model, Solar Taxi had attempted collaborating with existing delivery service companies to provide the delivery service using their EVs, or to get these companies to acquire (whether through a direct purchase or lease purchase) EVs and include them in their fleet of delivery vehicles. This was not as successful as envisioned thus forcing Solar Taxi to develop the app to manage the delivery business.

HOW THE APP OPERATES: Provided on the app are various E. V's that are accessible for ride hailing and delivery purposes with current operations in Accra

The launch of the app witnessed an increase in revenue for the company. With the e-commerce landscape in Ghana projected to grow by a whopping 404% to a market size of approximately \$74billion, a meagre growth of 30% in Solar Taxi's revenues by the next quarter in terms of users and efficiency; proves that there is more out there to be achieved by the company.

CURRENT PROBLEMS: There are a number of fundamental problems that challenge the growth projections of Solar Taxi: -

1. The WOTEE app, whose deployment in Accra brought a much-needed increase in revenue for the company is operational only in Accra. The company recognizes the need to deploy it in its other locations across the country. This is however a challenge due to resource constraints. The company currently has 3 software engineers, who are based in Accra, making expansion of the app to other areas difficult. As a growing start-up, the company is further constrained financially and cannot employ more developers for this crucial need, as developer talent is costly

An additional problem stems from the company's team operating in 4 different locations across the country. Staff members in the out-stations have been found not to be as efficient as in Accra due to limited supervisory activity. The company recognizes the need for a management dashboard to centralise reporting and management of activities of all staff and branches of the company. To develop this software solution, a management consultancy firm was engaged but the costs involved were prohibitive. This idea of a management dashboard therefore remains a desired solution.

2. Finally, the organisation has not developed a proper channel for clients to bring complaints to the attention of management. This presents serious frustrations to clients and hampers future growth. The executive management team has considered acquiring an Enterprise Resource Planning software which can help manage clients as well as other human and financial resources of the business. This is especially important as expansion plans consider deploying the WOTEE app across all locations leading to an increase in customers. A move to make this acquisition however has not been made because they have not had the time to utilize one just yet.

On the back of all these internal challenges, Solar Taxi is still optimistic about becoming the foremost electric vehicle delivery business, and seller in the near future.

Having been recently engaged as a consultant to review the business of Solar Taxi, and to help them come out of their current predicament, you have a 4-week window through your participation in the program to acquire the knowledge and learn the skills needed to help find solutions to Solar Taxi's problems enumerated above.

You shall be presenting your solutions to an audience that includes representatives from Solar Taxi, and the team with the most reasonable and practical solutions will be engaged for a 1-month Virtual Internship opportunity at Solar Taxi.

To help you work your thoughts around possible solutions, the following questions have been posed to elicit the intended responses in the necessary areas to be addressed.

REQUIREMENTS

1. Evaluate the business activities of Solar Taxi to identify any strengths or opportunities that could give them a competitive edge in their industry, and/or propose likely solutions to the current challenges identified.
2. With the recent introduction of the new Electronic Transactions Levy by the Ghanaian Government (E-Levy), how do you envision Solar Taxi's business to be affected
3. What can Solar Taxi do to deploy the WOTEE App in all the other parts of the country?
4. Brainstorm and design the dashboard for the centralization of reporting and management of the company's resources across all locations
5. Do you think Solar Taxi needs the Enterprise Resource Planning software? If yes, identify the reasons for your choice, and if not what are the other ways they could achieve the same purpose as using the ERP?
6. A demo of a digital solution based on your research that shows how your solution solves at least one pain point identified in the case study will need to be incorporated into your pitches.