

6th - 8th AUGUST 2019 SENSI TECH INNOVATION HUB, 67 Sir Samuel Lewis Road, Aberdeen. 8:00am – 6:00pm daily Food, Drinks and Transportation Allowance provided

Resilient Urban Mobility HACKATHON

Visit the link to Apply http://ipsite.org/8uy3 www.mobilityhack.sensi-sl.org



About DSTI

Our Vision

 To use science, technology and innovation to support the Government of Sierra Leone to deliver effectively and efficiently on its national development plan and to help transform Sierra Leone into an innovation and entrepreneurship hub.

Our approach

At DSTI we take a
 Mobile-First design
 approach and we are
 people oriented in all
 our designs.

Our Ethos

- Problem Oriented
- Agile
- Peer Learning
- Open
- Collaborative
- Future Focused



At DSTI, We Operate around four(4) Strategic pillars:

DATA FOR DECISION MAKING

Where we develop real-time decision support tools for government using state-of-the-art analytical methods and visualization tools

DATA SYSTEMS & TECHNOLOGY DESIGN

Where we develop data systems and technologies that enable secure collaboration, cross-sector planning and translation within government.

DATA SYSTEMS & TECHNOLOGY DESIGN

Which comprise the deployment of robust services and solutions that address citizens' needs, facilitate their engagement with government, and enhance their human capital.

ECOSYSTEMS STRENGTHENING

Where we support a culture of innovation and entrepreneurship through targeted initiatives, investments, and incentives for individuals, start-ups, and industry.



HACKATHON

- Hack or hacking means trying to come up with innovative and inventive solutions to problems, often using technology; marathon means covering a large distance in a short period of time.
- ☐ It is a social event that brings motivated individuals to get mentorship and inspiration from experts and then to collaborate intensely building new solution or improving on existing ones based on technology.







PROCESS

DSTI committed to lead on component 1.2 of the IRUMP to give technical assistance and boost innovation.

Strengthening the local ecosystem, the WBG through DSTI hired Sensi Technology & Innovation hub to organize and host the Hackathon.

Developed concept note

Communication/
Launch of the
Hackathon website:
sensitization of key
stakeholders &
potential
participants on the
concept of IRUMP

Gender balance

Stakeholders engagement: MoTA, SLRSA, SLRTC, FCC, SLURC, Drivers Union, Traders Unions etc. Recruitment of participants- nearly 300 participants registered but needed only 100 participants.



MULTIPLE STAKEHOLDERS' PRESENTATIONS

- **SLRTC**: Presentation on the modernization of The Sierra Leone Road Transport Corporation (SLRTC)
- SLRSA: Road Safety Authority Role In Addressing Urban Mobility
- WBG: Vulnerable People in Public Transport
- **SLURC**: Urban mobility research in Freetown
- Richard Bockarie, GIS Specialist: Geo-spatial perspective to resilient urban mobility
- MoTA (Hindolo Shiaka, Director of TIDU): Sierra Leone Integrated Resilient Urban Mobility Project
- FBC (Consultant Ing. Alpha Badamasi Savage): Presentation based on a Project done under the GFDRR funded by The World Bank Group.



IMPLEMENTATION

As the facilitator of the event –Sensi Tech Hub led the preparation of the hackathon. The Sensi team worked closely with the collaborating partners to plan and implement the hackathon.

- Launched an official website that acted as a repository of relevant information about the hackathon.

 The website was equipped with the functionality to allow preliminary registration of participants.
- A collaborative approach was adopted to develop and execute the preparation and organization by developing necessary templates, plans and guidance documents.
- Held meetings and pre-hackathon events with stakeholders, potential mentors, potential judges and potential participants in order to have dialogue to clarify the concept, inspire about resources and mentorship that would be available, build community buzz, and encourage participation.
- The coordinating team designed and delivered the components of the methodology and document toolkit. This repository of documents which had detailed information about concept and the hackathon, explained the steps to follow to organize the hackathon. It outlined the communication strategy.



IMPLEMENTATION CONT'D

- Social media such as Facebook, Twitter and Instagram served as effective channels to reach out
 to the relevant stakeholders efficiently and effectively. Every day leading up to the event, the Sensi
 Team worked diligently on social media communication to complement direct correspondence and
 in-person meetings.
- The Sensi team orchestrated a multi-pronged effort to drive recruitment, registration and crucially confirmation of participants.
- In order to achieve gender balance, the team made connections with local groups from women's tech classes as well as across groups from social work, entrepreneurship, NGO/development and innovation programs.
- With inspiration from speakers and mentors and guidance from facilitators, participants form teams of people from different backgrounds and over a few days quickly brainstormed and designed new ideas and solutions to approach risk communication across the challenge themes.
- The facilitators suggested 5 -10 people per team. It was important to not just pick your friends! Participants were recommended to consider a healthy mix of needed skills, pulling in participants with perspectives from different backgrounds successful teams are not all software developers and not all social work specialists.
- To incentivize participation, prizes were awarded to the top three teams as chosen by the judges; 1st prize: \$4000 2nd prize: \$2000 3rd prize: \$1,000





MOBILITY HACKERS

ABOUT: Mobility Hackers are innovators from various walks of life whose aim is to provide and build mobility system in the transportation sectors.

PROBLEMS OF THE PROJECT: Over some years, residents within the municipality of Freetown found it difficult to access easy transportation.

SWIFT PAY: is a platform for cashless payment of public transportation services. Users would pay through the application subscription for public transport which will be verified in real time so people can access the services without the exchange of money through hand payment. Reducing the possibility of conversion of government's revenue generated from the services.

Our target devices are both smart and local phones and also a web-based application.









DIGITAL WHEELS

TEAM PROFILE: the team comprises of diversified young, dynamic intellectuals from different disciplines who are problem solving inclined and determined to provide a solution that can enable and enhance easy swift Urban Mobility.

DESCRIPTION: Digital Wheels team will embark on the solutions below to combat Resilient Urban Mobility

PROPOSED SOLUTION: A smart mobile App that allows road users to report road incidents such as (Broken bridges, stationary Vehicles and other traffic flow obstruction incidents)

https://digiwheels.ushahidi.io/views/map

http://digiwheels.sensi-sl.org/#











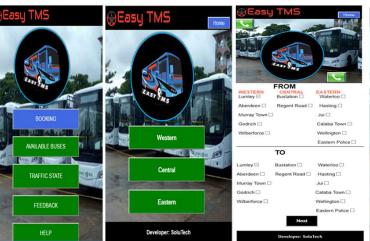
SOLUTECH

ABOUT TEAM: SoluTech Team, the team is trying to find solutions to societal problems. The SoluTech team consists of ten (10) members with visionary ideas from diverse disciplines, universities with gender equity and also with the intent of solving the poor transportation management system in urban areas.

PROBLEM OR CHALLENGE ADDRESS: The team aim to address challenges relating to poor access to Transportation in Urban Areas in Sierra Leone, improving the payment system by introducing the cashless payment system in the transportation system in our country.

PROPOSED SOLUTION: Creating a two-way Android application which will ease transportation access within the city while reducing the level of congestion mostly resulting in traffic and unguaranteed measures of road safety. The application will solve this issue by updating road users about the less congested areas and inform users about the next available or nearby vehicle.











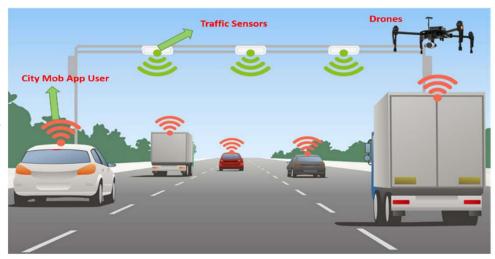
CITY MOB

City Mob, is short form of City Mobility. It is the group name, also the name of the project. The group is a combination of three ICT personnel, two entrepreneurs and a social worker.

PROBLEM/CHALLENGES ADDRESSED: Access to transport and Environment quality and resource

PROPOSED SOLUTION: Their concept is to develop an application as a prototype that will show direction of how to access transport vehicles like public cars, buses and motorcycles to different destinations and also help Drivers to use the App for quality transport facility environment. Locating available parking space around the central business district (CBD) areas which also involve a cashless payment system through the app by using SMS alert by using code for respond querying location in real time.







TEAM WISE - LEO-MOBILITY APP

ABOUT OUR TEAM: - Team wise comprises of seven members among which includes- software developers, Database Administrator, Network Administrator and Media and Social worker.

PROPOSED SOLUTIONS: - We want to create a web based and downloadable mobile application that will address issues of road safety and will as well provide users information related to road safety measures (Leomobility app).

HOW THE SOLUTION WORKS: - The app will provide direction to Police Station, Hospital, Ambulance Service, SLRSA Office, Fuel Station, Bus Station nearest to your immediate location that you can use during an emergency or when you need a service of that nature.



It will also provide information about road crash, breakdown, it will monitor and keep track of speed limit zones and alert you while driving. It will enable users to report road crash or emergency incident on the road.

It will enable authorities to broadcast alerts about relevant information on road safety and regulations as they change or are implemented. Education feature that will have graphics and information to educate drivers about road safety and security, gender safety, Sierra Leone traffic law that will reduce conflict between the police, road safety officers and road users. It will digitize driving education materials for people who are wanting to learn how to drive – the materials will be provided SLRSA.



LESSONS LEARNT

- The need for strong collaboration among the organizers, Government and relevant stakeholders to find technology solution to Urban challenges.
- Hackathon can be a powerful tool to enhance the relationship between the government and creative young minds and find solutions from a bottom up approach.
- It is important to have a strong group of mentors during the hackathon to guide the teams while developing their ideas.
- We have seen that involving diverse teams (in terms of background, gender, social group) has a
 powerful impact in creativity.
- The organizing team is confident that among contacted organizations and individuals there is increased understanding and sensitization of what Resilient Urban Mobility is.
- The team made a wise decision to centralize information on the event website. The website became a "one-stop-shop" location for all information on the hackathon and findings.



LESSONS LEARNT CONT'D

- There is a need for more iterative learning, transparency and sharing of experiences and tools as a means to improve the tangible impact that solutions can have in order for hackathon outputs to lead to meaningful outcomes for beneficiaries.
- Securing the commitment and participation of some key stakeholders in the event was extremely challenging, despite several communications through various media.
- There needs to be more proactive effort and involvement particularly by key stakeholders like the government MDAs to ensure that they elect and delegate responsibilities to specific individuals to secure their representation and participation at the event.



OUTCOME & AFTERCARE PROGRAMME

- Many brilliant ideas around the Urban Mobility were brought to life during the hackathon. Most of the organizers have
 decided to incubate some of the winning teams to further refine their prototypes and build business cases for them. The
 process has already made significant headway, and we sincerely hope that in future, those applications will mark their
 strong presence by facilitating the process of mobile micro work at a national scale.
- Capacity building in the youths on issues around Urban Mobility and strengthening their entrepreneurial skill set were increased.
- The top winning team will join an aftercare mentoring program that will be facilitated by DSTI in collaboration with Sensi and other expert mentors to help them develop their idea or prototype towards viable, sustainable operations.
- Sensi will also provide limited facility and mentorship support to the second and third place teams separate from the World Bank support of the top team.



THANK YOU!







