

## Harnessing the Power of Digital Technologies for Health Solutions



Photo: Happyness Alexander presenting her project concept to stakeholders and management team of EANNASO.

East Africa and the continent of Africa at large has faced a varying number of diseases outbreak in the past and the year 2020 brought with it the new unpredicted covid-19 pandemic, that has affected livelihood and marginalized communities in the region, leaving many with the quest for reliable health information that will help safeguard lives. There is a need to scale up access to health services in the region and organizations such as the Eastern Africa National Networks of AIDS and Health Service Organisations (EANNASO) are spearheading regional exchange platform for knowledge sharing on health-related matters. Headquartered in Arusha, Tanzania, EANNASO is a regional network of national networks of Civil societies and community-based organizations in seven Eastern Africa Countries, namely: Kenya, Uganda, Tanzania (including Zanzibar), Rwanda, Burundi, Ethiopia and Southern Sudan. A collaboration between the organization and the Centre of Excellence for ICT in East Africa (CENIT@EA) was established to draw the attention on the need to develop a regional platform for the purpose of dissemination of information, assisting border communities, citizens and residents that travel in the region to locate medical facilities.

“For Eastern Africa National Networks of AIDS and Health Service Organisations (EANNASO), the Young Professionals programme came in quite timely and has proved to be fruitful in filling in the gaps that existed with the organization’s efforts in pioneering digital solutions and amplified our plans on scaling new innovative products and services to the regional communities we serve”, explained Olive Mumba, Executive Director at EANNASO.

Happyness Alexander, a CENIT@EA master’s student specialized in Mobile Systems, has successfully implemented the project on transformation of the Afya Digital web-based platform to a mobile application now known as *Wananchi Afya Digital*, integrating Android Operating System in the design of algorithms and features of the Mobile App. The platform is envisioned to be accessible on online and offline mode, for ease of access of information by users at any time. With an increased penetration of smartphone users in East Africa, Android OS occupies 84.6% of the largest share of Africa’s market. A web-based platform is not user-friendly with

difficulties in accessibility and sometimes faced issues of unreliability of connection to servers. The app will provide real-time access to information and health updates notifications for any user, as well giving detailed information on health facilities and actual map locations. She continues to support the organization in the deployment of the Mobile App on to Google Play Store services and the development of the app for access with iPhone OS users.

The Wananchi Afya Digital App user interface is designed to provide the user with access to information through a dashboard that incorporates health information such as mapped facilities, travel guidelines, locations of healthcare centers, country's health and safety updates among others. This digital innovation builds upon the existing initiatives, together with the afyadigital.health, a web-based digital platform previously initiated and developed by EANNASO with financial support from the Incubator for Integration and Development in East Africa (IIDEA), a GIZ-East African Community Cooperation project. The overall aim of the development of the Mobile App is geared towards the provision of access to local digital health options by mapping health service provision points in East Africa, along with up-to-date health alerts for travelers, which makes available an outlook of the health situation in a particular country being visited and shares necessary measures to abide to. Through the Wananchi Afya Digital Mobile App, one is able to access pertinent information on existing health facilities, including locations and the type of services provided, as well as contact information should one need to schedule an appointment. It helps to save time by informing the user on the health facility which is the closest. So, one is better able to plan travel with the peace of mind of knowing where to access essential health services if needed.

The Afya Digital health platform currently covers Kenya and Tanzania. More than 4,000 people across the world have used the platform since its launch in 2020. Benchmarking on time and availability of resources, the platform will be scaled up across the African continent. Afya Digital is now fully developed into a native mobile application using the Android operating system to ensure wide coverage with support of ICT developers from the Center of Excellence (CENIT@EA).

After the completion of the project implemented by the student, the organization plans to engage CENIT@EA for a post-internship support component on digital skills training for its employees, to further support on the sustainability and enhancement of the digital solutions. EANNASO acknowledges the power of digital technology in stemming health solutions and sees a positive influence of digital transformation in the achievement of the organization's goal in the future, thus scaling up access to health services beyond the borders of Tanzania and Kenya. With the success of the projects implemented, EANNASO plans on working closely with GIZ and CENIT@EA, gaining valuable technical and financial support in the roll out and scaling of new projects in the region. "Numerous projects are in the pipeline and a continued engagement of Young Professionals from CENIT@EA will enable the organization to pilot and evaluate the feasibility of the new digital products and services in the market", added Rodrick W. Mugishagwe, TB Program Officer and Knowledge Management & Learning Team Leader at EANNASO.



*Photo: Happyness Alexander (2<sup>nd</sup> from left) posing for a photo with the executive team of EANNASO and NM-AIST Academic Supervisor, after the completion of her internship.*