WSISPublications

WSIS Stocktaking ICT Case Repository

The Coronavirus Response Special Report









ICT Case Repository: The Coronavirus Response

ZERO DRAFT

(10 September 2020)

Introduction

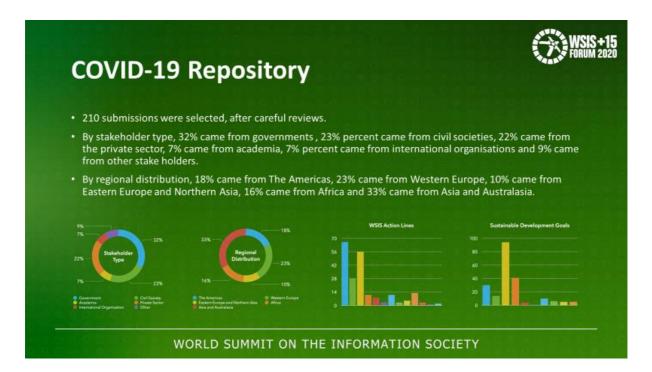


The WSIS Stocktaking process was initiated in October 2004 during the Tunis phase of WSIS, and in the years since has come to comprise of a database for the exchange of information on projects, sharing of best practices of stakeholders in the various regions as well as initiatives related to the implementation of the 11 WSIS action lines. The WSIS stocktaking platform provides various stakeholders an avenue to network and interact.

Since the first edition of the WSIS Stocktaking Report was issued in 2005, periodic reporting has been a key tool for monitoring the progress of ICT initiatives and projects worldwide. The principal role of the WSIS Stocktaking exercise is to leverage the activities of stakeholders working on the implementation of WSIS outcomes, share knowledge and experience of projects by replicating successful models designed to achieve the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development.

As a part of the WSIS Stocktaking ongoing efforts to promote the good use of ICTs in making social impact, and in order to provide useful, replicable and actionable information to all WSIS community and beyond, the platform is now available for collecting projects and activities on how ICTs are assisting stakeholders in their everyday life, work, and combating challenges caused by this extraordinary pandemic.

The objective for this call for submissions was to encourage various stakeholders to submit reports on how they used ICT tools and technologies to help their communities respond to the coronavirus pandemic whilst meeting the WSIS Action Lines and SDG goals. The aim of this repository was to help stakeholders continue to partner, collaborate and implement projects, policies and measures in these exceptional circumstances. The call resulted in a big number of submissions made from ICT practitioners from around the world.



After careful reviews Two-hundred and ten (210) submissions were selected. Out of this two-hundred and ten submissions:

- thirty-two (32) percent came from governments
- twenty-three (23) percent came from civil societies
- twenty-two (22) percent came from the private sector
- seven (7) percent came from academia
- seven (7) percent came from international organisations
- nine (9) percent came from other stake holders.

Again, out of these submissions:

- eighteen (18) percent came from The Americas
- twenty-three (23) percent came from Western Europe
- ten (10) came from Eastern Europe and Northern Asia
- sixteen (16) percent came from Africa
- thirty-three (33) percent came from Asia and Australasia.

Out of the submitted projects:

- fourteen (14) percent promoted the SDG goal one
- seven (7) percent promoted the SDG goal two
- forty-five (45) percent promoted the SDG goal three
- SDG goal four was promoted by twenty (20) percent of the submitted projects
- two percent (2) of the submitted projects promoted SDG goal five,
- approximately one (1) percent of the projects exhibited or promoted the SDG goal six
- five (5) percent also promoted the SDG goal eight
- three (3) percent of the submitted projects promoted SDG goal nine
- two (2) percent promoted SDG goal sixteen
- two (2) percent of the projects submitted promoted SDG goal seventeen.

The submitted reports promoted the various WSIS action lines:

- thirty-one (31) percent of the projects promoted WSIS action line one
- thirteen (13) percent promoted WSIS action line two
- twenty-seven (27) percent of them promoted WSIS action line three

- five (5) percent promoted WSIS action line four
- four (4) percent promoted WSIS action line five
- one percent (1) promoted action line WSIS action line six
- seventeen (17) percent promoted WSIS action line seven
- one (1) percent promoted WSIS action line nine.

Lastly, out of the submitted project:

- eighty-eight (88) percent of them are sustainable, whilst
- twelve (12) percent are not sustainable.
- eighty-five (85) percent of submitted project are replicable and can thus be adopted by other stakeholders are repeated in various regions, and
- fifteen (15) percent are not replicable that is they can be implemented in that particular region alone.

To conclude, the coronavirus pandemic was an issue that blindsided everyone no matter the sector or community. However, the use of ICTs made it possible to mitigate some of the adverse effects of the coronavirus on society. It prevented the outright disruption of studies in many instances. Indeed as the saying goes "necessity is the mother of invention" thus, the need to provide rapid response to the pandemic has brought to light the various things we can do with ICTs and why there is the need to fast track the equitable use of ICTs across the globe.

We would like to thank all stakeholders that made the submissions and also call out on other stakeholders to continue submitting their COVID-19 projects to help partner entities combat the various challenges created by these exceptional circumstances.

ICT Case Repository: The Coronavirus Response

Case 1

Title of the project, Contact Organization Name, Stakeholder type, Country

Bangladesh NGOs Network for Radio and Communication (BNNRC)

Bangladesh NGOs Network for Radio & Communication (BNNRC)

Civil Society

Bangladesh

Beneficiaries

Rural People

Website

http://www.bnnrc.net

https://bnnrc.net/covid-19/

Description

Bangladesh NGOs Network for Radio and Communication (BNNRC) has been mobilizing all community radios for developing and broadcasting awareness building programs on COVID-19: Coronavirus contamination to protect lives and livelihoods since March 1, 2020.

Now 18 Community Radios stations in Bangladesh have been broadcasting 165 hours Coronavirus prevention education in line with the National Preparedness and Response Plan for COVID – 19, published by Directorate General of Health Services, Health Service Division, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh. There are 200 community youth and youth women working as community broadcaster.

The COVID -19 demands cooperation among government, CSOs, local business communities, multi-stakeholders. BNNRC are continuing work 24×7 to reach rural communities in Bangladesh with life-changing information through the community radio. It's not easy to get information to the hard-to-reach at the best of times, and we will continue to strive to make sure the needs of these communities are not forgotten. To that note, we'll be continuing to share stories of our work, and the work of community broadcasters and rural people, while also supporting communities in getting the information they need about COVID-19.

In this perspective, BNNRC has been working on COVID -19 covering with the following issues:

Animate CSOs, Government, health service providers and communities for reinforcing collective action; Keeping community people's daily life normal and livelihood function; Mobilize further cooperation among government, CSOs, local market and communities' response.

ICT Tools

Community Visual Radio and Social Media

Challenges / Partnership / Sustainability / Replicability

Rapid social distancing & Quarantine/ Isolation have caused massive pressure on the community radio sector extremely due to short notice. Fundraising process have been cancelled and revenues such as advertising income are drying up overnight resulting in immediate cash flow problems, cuts in grant-funded projects & many community radio stations have few or no cash reserve to tide them over situations like this. This project is looking for fundraising partnership. Community Radios stations, as one of the source of information, helping to raise awareness on COVID- 19 and reinforcing Behavior Change Communication (BCC) by CSOs, Government, health officials and locally elected bodies (LEB). Community Radio stations are building awareness to change attitudes among community people at different points in their daily lives. Community Radio stations, as a platform for those who involve in COVID -19 responses to update rural communities. They are also providing a channel for two-way communication with community people where listeners are sending SMS or call in with questions. Community Radio stations have been coordinating with the District and Upazila level Coronavirus Prevention Committees. Community Radio stations have assigned one broadcaster in each radio stations as the focal person to coordinate COVID - 19 program. Community Radio stations are broadcasting programs on COVID -19 in local languages or dialects.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning | AL C9. Media SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 16: Promote just, peaceful and inclusive societies

Case 2

Title of the project, Contact Organization Name, Stakeholder type, Country

Scratch4All Contest

Universidad de las Ciencias Informáticas (UCI)

Academia

Cuba

Beneficiaries

children and adolescents

Website

https://www.uci.cu/

https://www.facebook.com/scratchersdecuba

Description

We invite all children and adolescents to participate in the First Edition of the Science and Technology Projects Contest Scratch4All. We invite them to think, create, contribute, innovate, undertake. Their project will be a contribution to their school and their community. We promote reflection on the usefulness of programs to represent ideas and solve problems. Stimulate trust through the use and execution of programs designed by the participants, with the promotion of a responsible use of technologies and collaborative work.

ICT Tools

With Scratch you can program your own interactive stories, games and animations; and share your creations with others in the online

Challenges / Partnership / Sustainability / Replicability

The main challenge has been access to the Internet. We are interested in collaboration with other projects in the area of educational technologies, computational thinking and creative learning. The winning works will be promoted in celebration of World Scratch Day during the May activities, in order to make the project presented and its authors and institution more widely known. The project is replicable, and has been extended to all primary and secondary schools in the country.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 5: Achieve gender equality and empower all women and girls

Case 3

Title of the project, Contact Organization Name, Stakeholder type, Country

Volunteered Geographic Information Generates New Spatial Understandings of COVID-19 in Fortaleza, Brazil

Federal University of Ceará - UFC

Academia

Brazil

Beneficiaries

This type of data collection may increase the quantity of data available on the pandemic and offer critical spatial information for decision making among public health authorities.

Website

http://www.labocart.ufc.br/?page id=798

http://www.labocart.ufc.br/?page id=786

Description

Volunteered Geographic Information (VGI) on the Covid-19 outbreak in Fortaleza, Brazil, was obtained through an internet-based survey with non-probabilistic snowball procedures from 12,000 respondents during 8-10 April 2020. Analysis of the VGI identified 181 confirmed Covid-19 cases in the city distributed among more than half the neighborhoods, mainly in those with high socio-economic status. VGI also indicated 795 suspected Covid-19 cases distributed in nearly all neighborhoods. 97.5% of research participants considered that social isolation important to combating the spread of Covid-19. 68% of respondents indicated that everyone in the residence was in full compliance with social distancing. The main reasons for less than full compliance were paid work, purchasing food and medicine, paying bills, and disbelief that social isolation is important to contain Covid-19. The results aim to contribute to geospatial understandings of Brazil's Covid-19, which began 26 February 2020 in São Paulo and had 25,684 confirmed cases and 1,552 deaths by 14 April.

ICT Tools

Our research protocols focused on obtaining VGI directly from residents through a 12-question survey that allowed for one free response regarding the reasons for non- or partial compliance with social distancing recommendations made by Brazil's Ministry of Health on 12 March 2020.

We deployed the survey between 8 and 10 April 2020, obtaining 12,000 responses through an internet platform on the Labocart/Geografia site of the Universidade Federal do Ceará (UFC). On 8 April 2020 we published the survey the Labocart website, which was shared through contact lists through WhatsApp. Within eight hours we were contacted by UFC's upper administration and state authorities who were directly involved in controlling COVID-19. These officials asked us to include the entire Fortaleza metropolitan region and to publish our preliminary findings and maps so that authorizes could compare the VGI we collected to their official data. In the next days, we received support from UFC's upper administration to disseminate the survey through WhatsApp. We were invited to participate in TV programs and offer press release of preliminary findings among our collaborators.

Challenges / Partnership / Sustainability / Replicability

We plan additional work to disseminate the survey and produce maps that show the spatial dynamics of COVID-19, not only in the Fortaleza urban area but also in rural and

coastal areas where traditional communities may have less access to health care. We also aim to use data from health agencies, aiming to ascertain relationships with social vulnerability, per capita income, housing types, educational attainment, health infrastructure, among other variables.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 4

Title of the project, Contact Organization Name, Stakeholder type, Country

National Information Contact Center (311)

Ghana Investment Fund for Electronic Communications

Government

Ghana

Beneficiaries

Make information more readily available to the citizenry.

Website

https://www.gifec.gov.gh

http://moi.gov.gh

Description

The National Information Contact Center (NICC) (Info311) is a single-point-of-access non-emergency phone number that allows the public to call in for information on Government services / policies, make complaints, or report problems. More importantly, the system allows citizens to make inputs and also allows Government to "push" information to the citizenry as well as conduct survey to elicit feedback on Governmental issues.

ICT Tools

A fifth generation contact center solution-ZXNGCC.A multi-media contact center system that seamlessly allows the convergence of mobile, narrow band, fixed and data communications and processes data and content coming from different media.

Challenges / Partnership / Sustainability / Replicability

We have embarked on an Education and Awareness programme aimed at sensitizing the public to stop the prank calls to give opportunity to the real people in distress and in need of governmental information on COVID-19 and other related matter. New Partners in the area of "Technological Assistance" are welcomed

Our project is sustainable. The 311 is a Toll Free Service. The Government of Ghana has officially sanctioned the Contact Centre as the main avenue and repository of information for the general public on governmental services and access to general information. And so there is an oversight responsibility from the Central Government which will ensure proper supervision to enable citizens have access real time information on government services and elicit feedback.

Our project is replicable. It can be replicated in other countries. The basic facilities needed for the set-up such as access to Toll Free Number, establishing connectivity with Telecom Companies among others can easily be done and acquired through proper coordination with the Ministry responsible for Communications and the Nations Regulatory Company.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C3. Access to information and knowledge

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 5

Title of the project, Contact Organization Name, Stakeholder type, Country

Preventing Covid -19 is our responsibility

OGERO Telecom

Government

Lebanon

Beneficiaries

All users, mainly students for online studies and corporate for work at distance

Website

https://www.ogero.gov.lb/

Description

To cope with the spread of the Corona virus, OGERO took a set of measures including doubling free of charge, the ceiling of Internet consumption and speed for the unlimited packages, for its users encouraging citizens to stay at home and conduct their work at distance and enabling students to continue their studies online. OGERO have launched an awareness campaign calling for a reasonable use of the Internet, in particular by number of computers connected simultaneously or by reducing the quality of videos on YouTube. Noting that OGERO is maintaining local caches for the major OTT content (YouTube, Netflix, Facebook.) so its National Broadband network carried easily the surge in traffic. Some extra capacity was added where needed mainly between the major regions and Beirut to handle the additional demand. OGERO is continuously upgrading its capacity on its submarine cables and increasing the size of its international peering links in order to meet the increasing demand of the Lebanese market but It is noted that 2 months after confinement our international links are not strained.

ICT Tools

Broadband

Challenges / Partnership / Sustainability / Replicability

The huge challenge was to cope with the additional demand but extra capacity was added to connect Beirut, the capital, with the major regions. Plans are made to expand international links.

OGERO is cooperating with its usual partners.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C2. Information and communication infrastructure

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 6

Title of the project, Contact Organization Name, Stakeholder type, Country

The First International CyberSchool of the future for the new IT-generation KIBERone LLC «System»

Private Sector

Russian Federation

Beneficiaries

Our audience is children and teenagers from 6 to 14 years old, and we have made our program available by transferring training online.

Website

https://kiber-one.com/

Description

Due to the spread of COVID-19: 1. We have converted the training into an online format; 2. We have developed a support program for parents of our students so that they can be closer to each other and spend more time together

ICT Tools

Multimedia (educational online platforms, specialized software, presentations), audiovisual equipment (laptops, projectors), the Internet, information in electronic format (video, audio)

Challenges / Partnership / Sustainability / Replicability

Not all parents have good digital skills, so they can't always help their children with online learning. We help children to master technology through remote support.

The sustainability of the project is due to several factors: 1. Shortage of qualified IT specialists in many countries of the world, which indicates the demand for high-quality specialized education now and in the future; 2. Stable demand for high-quality services for the additional development of children in the field of digital technologies:

According to the company's own marketing research, the number of children in the world who regularly attend training centers in the field of digital technologies is growing by about 6-10% annually; 3. Additional full-fledged education in the format of an IT school. The project program implies long-term comprehensive training, which is designed for a period of up to 9 years and can take place in parallel with the basic education and in addition to it; 4. Team of qualified specialists involved in the implementation of the project. The project team consists of specialists in programming and IT, management, marketing, and pedagogy. The total number of employees and developers is about 100 people; 5. Constant adjustment and updating of the training program through the introduction of modern educational modules, relevant training platforms, as well as interesting and non-standard tasks and projects for self-implementation; 6. Sources of stable financial flows: The volume of financial revenues of the company is formed through three permanent channels: training in its own divisions, the implementation of franchises (lump-sum contributions), and regular payments by existing franchisees (royalties); 7. The possibility of replication of the project in any locality (population size does not matter);8. The project's target audience is children and adolescents aged 6-14 (children at this age are especially susceptible to new knowledge, are interested in modern technologies, and actively use gadgets, but use them mainly for entertainment) and their parents (they care about quality education of their children, and precisely at the age of 6-14 invest the core capital in their development)

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 7

Title of the project, Contact Organization Name, Stakeholder type, Country

RegoPantes

8villages

Private Sector

Indonesia

Beneficiaries

Indonesia

Website

http://8villages.com

http://regopantes.com

Description

With the low demand from culinary businesses, making farmers' incomes decrease significantly, the alternative taken is to sell to end consumers, a digital market is needed to connect farmers directly to end consumers so that in this difficult time farmers still get the proper income. Shopping for vegetables and fruit online is no longer a lifestyle, but has become a necessity.

RegoPantes.com (means FairPrice) by 8villages continues to try to be a marketplace between farmers and consumers and keep involve farmers in the value chain to reduce dependence on many parties.

ICT Tools

Smartphone, by giving the right incentive which is marketplace for farmers and buyer, farmers want to learn more, upgrade themselves to go beyond planting and involve more in the value chain.

Challenges / Partnership / Sustainability / Replicability

Before COVID-19, farmers depend on bus to send their product from outside West Java, now since the bus stop operating, the connection cut out, together with Coordinating Ministry for Economic Affairs, 8villages leverage the state-owned train company to deliver fruits, and not just solving the logistic problem, it also reducing logistic cost up to 60%.

Our project is very sustainable, because it's already running for 3 years now. Farmers receive better income and buyer receive fresh product directly from farmers.

We manage to start the project by connecting farmers in Central Java to customers in Jakarta, now we have supply coming from farmers in Java and Bali and connect them to consumers in Jakarta, Bogor, Depok, Tangerang, and Bekasi. We also successfully connect farmers to businesses too.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 8

Title of the project, Contact Organization Name, Stakeholder type, Country

Safe Remote Learning

SWGfL

Civil Society

United Kingdom

Beneficiaries

Schools

Website

https://www.swgfl.org.uk

https://swgfl.org.uk/resources/safe-remote-learning/

Description

The Covid-19 outbreak has meant many schools have been forced to close. Safe Remote Learning supports schools in planning and carefully and carefully considering how to adequately safeguard children, staff and parents when learning online.

ICT Tools

Guidance and support provided. Also invaluable Information for teachers in working at home.

Challenges / Partnership / Sustainability / Replicability

There are a number of online live and recorded video options that schools may consider, ranging from merely setting homework or providing access to online resources through video tutorials and interactive video conferencing. Staff capability and the age of your children is going to determine your approach.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 9

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID Symptoms Tracker with Data Sharing

Open Health Network

Private Sector

United States of America

Beneficiaries

There are tens of thousands people worldwide using covid.openhealth.cc daily, share data with doctors to get immediate feedback on treatment, escalations if needed. Governments use heat map to predict next hot spot. Physicians use this tool as it enables them to track symptoms in between appointments.

Website

http://www.openhealth.cc

http://covid.openhealth.cc

Description

We released Free covid.openhealth.cc in English, Spanish, Chinese, French & Russian to enable people to track their symptoms, share with physicians before and after telehealth and in person appointments, find covid testing center nearby, manage medications, donate plasma and more.

ICT Tools

We deployed web, iOS & Android apps. Future updates include integrations to wearables devices, EHR and more.

Challenges / Partnership / Sustainability / Replicability

We need to create a wider awareness of this solution. We'd like to partner with more government officials, healthcare providers. This offering can easily be adapted to many other disease areas. We have been working with many prominent healthcare organizations for many years in cardiology, cancer, wellness, addictions, GI and other disease areas and know how to create solutions that deliver value.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

Goal 3: Ensure healthy lives and promote well-being for all

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 10

Title of the project, Contact Organization Name, Stakeholder type, Country

AliHealth Online COVID-19 Consultation Platform

AliHealth

Private Sector

China

Beneficiaries

The platform started to serve China from January 24th and expanded to overseas from March 8th. More than 200 Chinese embassies overseas have recommended AliHealth Online COVID-19 Consultation Platform.

Website

https://www.alihealth.cn/

https://www.alibabacloud.com/covid-19-global-medixchange#J 7231040460

Description

We have launched an online COVID-19 consultation platform. People can directly contact doctors online with COVID-19 treatment experience for advice. Doctors are available 8:30-24:00 (GMT+8).

ICT Tools

The platform is built in a mobile app, AliPay. Users can enter consultation page by searching "scientifically fight disease".

Challenges / Partnership / Sustainability / Replicability

The platform is currently free of charge. AliHealth has subsidized \$570,000 for the consultation fee. We are looking forward to partner with more doctors.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 11

Title of the project, Contact Organization Name, Stakeholder type, Country

Social Watcher

Information Age Consulting

Private Sector

Kuwait

Beneficiaries

Govermental Organizations that have interest in understanding public opinion trends in relation to Corona Virus outbreak.

Journalists, media professionals, decision makers, politicians, professionals Interested in the Kuwaiti public affairs, and the general Public.

Website

http://information-age-consulting.com

https://watcher.social/site/en

Description

Social Watcher is a large-scale community service which utilizes media and ICT tools and expertise. The service utilizes Artificial Intelligence, Text Mining, Big Data analytics and visualization, and Natural Language Processing to analyze the public opinion regarding political and social issues in Kuwait and study the impact of those political and social issues on the Kuwaiti society. During Corona Virus outbreak, we developed an online indicator which provides an analysis of the public interaction with the spread of the Corona virus in the State of Kuwait during the days when the virus spread in the country. The indicator implemented as an online dashboard which shows daily updates statistics abort corona virus cases in Kuwait using Data Visualization techniques. The dashboard also shows the trending tweets and hashtags in Kuwait on Twitter during the period of the spread of Corona virus in Kuwait.

ICT Tools

Artificial Intelligence, Text Mining, Big Data analytics and visualization, Natural Language Processing, and Web Services Integration.

Challenges / Partnership / Sustainability / Replicability

We have several challenges: 1- The running cost of data analytics software and the cost of web hosting. In this respect, Social Watcher offers its service for free and this means that the cost of running this service is handled by the project owners. 2- The time and efforts needed to keep up with the event.3- The time and efforts needed for the collection of data, preparation and cleansing of data, analysis of data, visualization of data, and presentation of results (designing infographics for example).4- Decision makers, politicians, and many media professional lack the understanding the role of social media analytics to identify the public opinion.5- Misunderstanding of our efforts by some political figures.6- Illiteracy in understanding interactive infographics and interactive dashboards among some of our audience.7- Resistance to change by some of our targeted audience segments.8- Since our reports are freely available for the public through an open access web platform, our efforts are at the risk pf being stolen by others.

The project is sustainable through continuous Research and Development (R&D) to enhance the social media analytics, text mining, and natural language processing tools and methods we use and through responding to user's feedback. This project is replicable

through using the same analysis methods and applying and adapting the same social media analytics and visualization tools to the social media content published in other societies and countries.

Action Lines

AL C3. Access to information and knowledge | AL C5. Building confidence and security in use of ICTs | AL C9. Media

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 12

Title of the project, Contact Organization Name, Stakeholder type, Country

Cibervoluntarios Responde (Cibervoluntarios Response)

Fundación Cibervoluntarios

Civil Society

Spain

Beneficiaries

"Cibervoluntarios Responde" has the support of 1,500 cybervolunteers throughout Spain willing to help all people who need to solve questions related to technology for example for people who has never telework before, help elderly to use video call apps to stay connected with their families or helping parents and kids with online school tasks. Note that all communication is established online, however, because some people may not have access or do not know how to access online, a telephone number is also available to help in this situation.

Website

https://www.cibervoluntarios.org/

Description

"Cibervoluntarios Responde" is a Free online support to stay connected, for citizens who may need tehcnological AID during this health crisis. From home, anyone who may have technological questions can ask online to a team of 1.500 cybervolunteers. The platform has offer more than 150 answers in three weeks of confinement in Spain.

ICT Tools

"Cibervoluntarios Responde" is a free online platform that helps and supports citizens in this period. Cibervoluntarios Foundation, make an extra effort in its aim promote the use and knowledge of new technologies as a means to alleviate social gaps and generate a more inclusive society. For example, the new service can help elderly people to make online grocery shopping.

Challenges / Partnership / Sustainability / Replicability

"Cibervoluntarios Responde" is a free online platform that helps and supports citizens in this period. Cibervoluntarios Foundation, make an extra effort in its aim promote the use and knowledge of new technologies as a means to alleviate social gaps and generate a more inclusive society. For example, the new service can help elderly people to make online grocery shopping.

Fundación Cibervoluntarios is always looking for new partnerships and collaboration between multi-stakeholder organizations, private and public, to amplify our goals. Fundación Cibervoluntarios collaborates with more than 700 organizations to carry out all our programs.

The initiative "Cibervoluntarios Responde" is an online tool and it can be sustainable and replicable with the know-how and experience of the cibervoluntarios network.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 13

Title of the project, Contact Organization Name, Stakeholder type, Country

Ensuring the Continuity of Telecommunications Services in the Age of Coronavirus Office of Electronic Communications (UKE)

Government

Poland

Beneficiaries

All the consumers/users, especially those whose professional life fully or largely relies on fast broadband connection.

Website

http://www.uke.gov.pl

https://uke.gov.pl/en/newsroom/ensuring-the-continuity-of-telecommunications-services-in-the-age-of-coronavirus,273.html

Description

The President of UKE urged telecommunications operators to take the necessary actions to guarantee service continuity by preventing and removing the effects of network congestion resulting from increased demand during the COVID-19 outbreak. Pursuant to Regulation 2015/2120 of the European Parliament and of the Council, during such threats as the coronavirus epidemic, the regular ban on the use of non-standard traffic management measures may be reduced. The Regulation allows measures to be taken in order to:

1.preserve the integrity and security of the network, of services provided via that network and of the terminal equipment of end users; 2. prevent impending network congestion and mitigate the effects of exceptional or temporary network congestion.

At the same time, we remind the public about adoption and publication of the Joint Statement from the Commission and BEREC on coping with the increased demand for network connectivity. Actions taken by operators in accordance with the abovementioned premises arising from Regulation 2015/2120 and the Statement from the Commission and BEREC will not lead to a violation of the prohibition to apply traffic management measures.

ICT Tools

As a result of COVID-19, almost all the activities, both professional and leisure, shifted to the online world. Consequently, data usage increased dramatically. Since many individuals and entities rely fast connection, we want to make sure that the continuity of network and data transfer is provided. Therefore, UKE asked telco operators to take necessary measures in order to equip the customers with whatever is needed. In this way we support the digital transformation but also, if not foremost, make sure that digital world is flawlessly functioning now.

Challenges / Partnership / Sustainability / Replicability

The biggest challenge for all of us now is increased demand for data transfer and reliable connection. Thus, UKE asked the operators for joint efforts to make sure that we can overcome these challenges as best as we can. As mentioned above, it is a joint initiative with the telco operators. Multistakeholder collaboration is a key, especially during this COVID-19 crisis moment.

This project is definitely replicable and similar actions could be taken in other regions and countries.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 14

Title of the project, Contact Organization Name, Stakeholder type, Country

#stayhome campaign

Office of Electronic Communications (UKE)

Government

Poland

Beneficiaries

Children and their parents – we are aware how many different challenges they are facing now, that is why we want to make sure that necessary tools and advice are provided.

Website

http://www.uke.gov.pl

https://cik.uke.gov.pl/aktualnosci-cik/zostanwdomu,15.html

Description

UKE came up with different tools and ideas to facilitate transition from school-based to home-based education during the COVID-19 outbreak. We offer students and their parents the three following cycles – their content will be updated on a regular basis so users can access new resources.

- a) #Talktochild during this unusual time, most of us moved our activities to the virtual world. We work, learn, exchange messages and follow news in the network, we also enjoy online entertainment. This is an opportunity for parents to see how children use the Internet. We encourage you to read our articles about the effects of the Internet and social media on children and young people.
- b) Did you know that...? the history of telephony, mail or the Internet is more complex than we think. Thanks to our campaign children will learn the most interesting facts, dates and characters related to telecommunications and post.
- c) I click sensibly! our well established and known educational campaign is continued online! It is our proposal to spend time together at home. For younger and older children we have prepared puzzles related to telecommunications among them on-line quizzes, crosswords, cross-sections and coding diagrams.

ICT Tools

Digital transformation cannot fully happen without taking education into account. Learning and teaching are the basis for any progress to come. That is why we decided to provide students and their parents with tools and materials to ensure continuity of education. We use online platforms and various materials in order to facilitate education during this challenging time.

Challenges / Partnership / Sustainability / Replicability

The biggest challenge is the transition in itself – sudden shift of education from schools to homes. However, we want to take this challenge as an opportunity that shows us how important digital tools are and how efficiently we can use them, especially during this sort of unusual situation.

We are happy to collaborate with schools and other institutions (also from different sectors) in order to ensure the continuity of education. This project is replicable and we can already see many other institutions, entities, and countries implementing similar strategies by providing students (and teachers) with different tools available.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 15

Title of the project, Contact Organization Name, Stakeholder type, Country

China Unicom epidemic prevention and control big data platform

China Unicom Network Technology Research Institute

Other

China

Beneficiaries

China Unicom epidemic prevention and control big data platform can bring benefits to government departments, enterprises and individual users.

Website

http://www.chinaunicom.com

Description

In the early stage of the coronavirus disease (COVID-19) outbreak, China Unicom adopted various schemes to support the prevention and control of the outbreak. Based on the analysis of telecommunications big data, China Unicom provides users with the service of "inquiry of places visited within 14 days" to help relevant departments improve the efficiency of itinerary inspection of mobile personnel. In addition, by analysis of operator big data, we can obtain the complete location information of users reported by communication base stations from countries, provinces, and cities to scenes, streets, and buildings. Based on this data resources and technology, China Unicom launches an epidemic prevention and control big data platform combined with SEIR Infectious disease model, establishing an epidemic prevention security rating evaluation model to evaluate the epidemic prevention security rating of various areas of the city.

ICT Tools

Based on the SEIR model, operator's big data epidemic prevention work is mainly carried out at two levels: controlling the source of infection and controlling the transmission route.

Challenges / Partnership / Sustainability / Replicability

There are two main challenges in the analysis of epidemic data. First, the timeliness requirements are high while data processing is difficult. Because the analysis involves massive data of millions of users in multiple cities, it is necessary to preprocess the data and perform feature extraction in the process of multidimensional analysis and combine machine learning for model training and optimization at the same time. However, the situation of the epidemic is changing rapidly, and early detection can prevent it earlier. Fortunately, we have an excellent technical team and sufficient computing resources. After several rounds of program discussions, the efficiency of data processing has been effectively improved to meet the timeliness requirements. Second, the difficulty of team communication during the epidemic increased. Because of work from home during the epidemic, communication between colleagues is not smooth, and it is easy to delay the project process. To this end, we actively formulate a remote communication mechanism.

This project contributes to the realization of sustainable development. In the short term, it is difficult to completely eliminate the coronavirus disease (COVID-19), the impact of coronavirus disease (COVID-19) has been received globally. Thus, the epidemic prevention and control work has been gradually normalized. The assessment of security levels in key areas, the detection of migration and the analysis of public opinion can ensure that social

individuals participate equally in epidemic prevention and control, improve selfprevention capabilities, and can help the government to carry out resumption of work in an orderly manner and realize social long-term sustainable economic development.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all |Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 16

Title of the project, Contact Organization Name, Stakeholder type, Country

#PhilharmonicatHome #сфилармониейдома

Sverdlovsk Philharmonic

Civil Society

Russian Federation

Beneficiaries

Citizens of Sverdlovsk region and Yekaterinburg, Russia and any other country, as all the broadcasts are open and free of charge. The main benefits are: access to the high quality musical educational programs for school children of grades 2 through 9 created by the Philharmonic's musicologists, access to recordings of concerts of the Philharmonic's orchestras and choir, and those of guest artists, conductors and groups.

Website

https://sgaf.ru

https://en.sgaf.ru/vkz

Description

Starting from March 20, 2020, on a daily basis the Sverdlovsk Philharmonic's Digital Concert Hall broadcasts educational programs and concert recordings from its archive collection for free, from 13.00 to 17.00 (Philharmonic lessons, lectures, daytime family concerts) and from 18.30 to 21.00 (evening concert programs). Live streams are also run via our accounts in social networks and partner websites (cultural media, digital cinemas, city news portals), reaching from 70K to 130K views per day.

ICT Tools

We fully utilized our Concert Hall without Borders technology (WSIS Champion 2018) when we faced the lockdown situation. Our goal was to continue the concert activities of the Sverdlovsk Philharmonic and keep on providing the public with free access to musical education and cultural values.

Challenges / Partnership / Sustainability / Replicability

Funding for ensuring quality broadcasts is the main challenge. Currently, we are supported by the local government grant, but if the economy needs extra time to recover from the Covid-19 pandemic consequences, we may face the need to explore alternatives.

Our Concert Hall without Borders project has been running since 2009. The sustainability is ensured by many factors. The main ones are: the fact that the Philharmonic has its own venue and three symphonic collectives, which perform regularly at the concert hall and

are available for recording. The high (and growing) demand from the population is an important factor, especially from our beneficiaries in the remote areas of the region, patients of the welfare institutions, educational system, etc. Another important factor is the financial support, in our case it's the governmental grants. Personnel is important - tech staff, musicologists, editors, admin, etc.

This is a replicable project and can be reproduced by a similar cultural organization which has a capacity to create video programs and broadcast them via internet. The technology we use is described here: https://en.sgaf.ru/festival/20884/technology. Besides, it is always possible to join our project and re-broadcast our content to your audiences.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 17

Title of the project, Contact Organization Name, Stakeholder type, Country

Head of Smart school group

Name error in the table

Government

Iran (Islamic Republic of)

Beneficiaries

Students, teachers, Manager Schools and Parents

Website

http://www.medu.ir

http://shaddl.medu.ir

Description

Social private Network

ICT Tools

SNA, LMS, Virtual Class. Skyroom, Adobe conect and MOOCs

Challenges / Partnership / Sustainability / Replicability

We have 3 Challenges. 1: Lack of proper telecommunication infrastructure and internet network

Solution: It needs to be upgraded in the long run.

- 2: Lack of access for all stakeholders due to financial problems of some families and some teachers. Solution: The government should provide these people with facilities.
- 3: Low internet speed. Solution: Increase in bandwidth by the government

If we achieve the desired results. It is used in all kinds of events that may occur. It can be used even in normal conditions.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 5: Achieve gender equality and empower all women and girls

Case 18

Title of the project, Contact Organization Name, Stakeholder type, Country

Joint Agreement Protecting Subscribers

Office of Electronic Communications (UKE)

Government

Poland

Beneficiaries

The people who benefit from this project are all the Internet users, the most vulnerable in particular (e.g. elders who are not so tech savvy or kids who have not yet acquired enough digital skills to safely operate within the digital world).

Website

http://www.uke.gov.pl

Description

The President of UKE together with the Minister of Digital Affairs, NASK and Orange Polska, Polkomtel, P4 and T-Mobile Polska have entered into an agreement on cooperation in the special protection of Internet users against data phishing sites, including for personal data, during the states of emergency, such as an epidemic. The agreement will contribute to protecting consumer interests. In connection with the COVID-19 outbreak, Internet domains are increasingly appearing to mislead and phish for users' personal data as well as financial resources, in particular using SMS and MMS. This is facilitated by increased use of electronic communications during the widespread model of remote work and online education. The agreement is the basis for joint actions of UKE, the Ministry of Digital Affairs, NASK and operators to create and efficiently maintain a list of alerts regarding Internet domains that are used to phish for subscribers' data and funds. The register developed by NASK will complement UKE's current anti-fraud activities. UKE investigates, among others the phenomenon of consumer frauds such as "wangiri fraud", which is provoking a subscriber to call back a missed international call, or impersonating another operator to induce a new contract.

ICT Tools

Digital transformation cannot happen without ensuring security and consumer/user protection. Meaningful and inclusive connectivity has to be rooted in safety in every possible form. Otherwise, this process of transformation will rather increase existing gaps instead of bridging them. The joint agreement is a great example of collaboration between different entities and showing that there is a common prevailing goal — protecting citizens and allowing them to equally benefit from the digital opportunities.

Challenges / Partnership / Sustainability / Replicability

Phishing activities are the biggest challenge in this scenario that is why UKE and the other entities signed this agreement. We are aware that it requires constant action and being up to date with activities taken by phishers. Therefore, we join our efforts with e.g. the operators so together we can be more effective.

The agreement was signed in cooperation with the abovementioned entities. Consumer protection is our priority and we know it requires joint efforts, from each possible side (telecom operators, civil society, government, etc.). Collaboration across sectors is crucial in this case.

The project is replicable and gives a great example on how to collaborate with other entities. This sort of agreement and the following actions can be replicated in any other environment/region. It also shows how quick a response to a given crisis situation should be – all in order to protect the customers.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C5. Building confidence and security in use of ICTs

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 19

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Emergency Response

Digital Agency for Public Innovation

Government

Mexico

Beneficiaries

Beneficiaries are the residents of Mexico City who are in need of assistance because of COVID-19, lost their jobs due to the pandemic, are owners of a microenterprise that has been economically affected, or are just looking for credible, official information regarding the current situation. The screening tool, as well as the information on available hospital beds are both available in English as well.

Website

https://adip.cdmx.gob.mx/

https://covid19.cdmx.gob.mx/

Description

Mexico City has developed a thorough strategy consisting of several coordinated actions that aim to solve some of the issues derived from the pandemic. The automated screening model was launched to provide attention to people that suspected to have coronavirus. Users of this service enter their contact information and symptoms, following an automated flow of questions. According to their responses, the system formulates a general diagnosis. This system allows for better patient monitoring and follow-up care and is available via SMS, online, through the city's official app, and by dialling the city's call center, Locatel. In addition to this service, more than 6,000 medical kits have been delivered to people whose cases have been confirmed as coronavirus, to help keep sick patients from leaving their homes. A website shows the availability of hospitals beds capable of treating COVID-19 cases patients in Mexico City and the metropolitan area. The forms for applying to the Unemployment Insurance Program are now available online to people who have lost work because of the health crisis.

ICT Tools

The automated screening model alleviates the pressures on the health system by using an automatic question flow that gathers information on the people that might be infected with coronavirus. The hospital availability tracker has proved to be an efficient means to avoid having patients visit more than one hospital looking for an available bed, therefore diminishing the risk of contagion.

Challenges / Partnership / Sustainability / Replicability

The developers are working around the clock and it has been a challenge to count on enough personnel to keep up with the needs of the city. Another significant challenge has been to make it possible for the different platforms to interoperate and share reliable, updated information. It is also necessary to process the information gathered almost in real time.

We are looking for partners that could provide human and digital resources to analyse and make an efficient use of the data gathered through all the platforms put to place. The interphase that has already been developed for providing information on the hospital availability could continue to be in place after the pandemic is over. The automated screening model could be later adapted for other ends, whether health-related or not. New procedures that formerly could only be done in person are now available online, thus broadening the scope of digitization in the city.

This project could be replicated in cities that are in need of an automated screening tool to provide information to patients or to give them medical attention, allocate resources for people who have lost their jobs due to the pandemic, allocate resources for entrepreneurs whose businesses are struggling to continue operating due to the pandemic, or provide face-to-face attention to people who have been victims to certain kinds of crimes but are unable to leave their homes.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 20

Title of the project, Contact Organization Name, Stakeholder type, Country

Wikis, Education & Research

International Academic Network WEIWER® - Wikis, Education & Research Academia

Portugal

Beneficiaries

Our project is mainly addressed to pupils, students, teachers, and school librarian teachers. The key benefits are improving ICT literacies and social skills through the use of digital tools; strengthening communication and other soft skills by participating in a learning, teaching and training community, in which typically our primary beneficiaries are not usually involved in. The participants have been having the chance to follow an innovative and unique training, at least in the Portuguese context, and in some cases are also benefiting from the use of certain technological services that are not generally provided by their educational organizations.

Website

http://www.weiwer.net/

Description

Due to the global pandemic situation, caused by the SARS-CoV-2, the training sessions that were initially scheduled to take place in a face-to-face scenario had to shift to a b-

learning modality. The fact that alternative solutions were proposed, discussed and negotiated with the people involved in the project has helped to overcome any fear of not accomplishing the work. In addition, the preliminary diagnosis of the ICT skills was updated, so as to make everyone at ease with the following stages of the project.

ICT Tools

We use video-conference tools (Zoom Colibri). There has also been an increase in the use of other ICT tools (email, Moodle, Word, PowerPoint, Genial.ly, videos, podcasts, WhatsApp), not only to fulfil the training tasks and assignments, but also for communication, mentoring, supervision and support.

Challenges / Partnership / Sustainability / Replicability

The main challenges are related to (self) organization, in time and effort, caused by the unexpected current pandemic situation that has forced us to work from home. It is more demanding to follow (and succeed in) an online course, compared to face-to-face course. And the risk of drop-out is much bigger too than in face-to-face courses. Continuous assistance and mentoring are the key to fight these challenges.

Partnership would be most welcome to explore one aspect of the project in which an IT specialist is needed, i.e. data science, artificial intelligence, and semantic scholarship. Funding could allow us to hire specific services (e.g. administrative support), and/or to provide for scholarships (e.g. research scholarship). Other types of partnerships are envisioned for instance with political/official stakeholders in education.

A strong innovating social entrepreneurship spirit has kept the project self-sustained. The principles of open access and open science we have been following are aligned with the Portuguese national strategy for digital skills (Portugal INCoDe.2030) and, at an international level, particularly with the SDG 4.

It all started in only one school. In this school year we have been working with 6 schools. We were reaching only the district of Lisboa, and now we are also reaching the district of Santarém.

In the near future, we expect to further replicate the project (e.g. in the United Republic of Tanzania), aiming at continuing to foster the development of digital skills and competences, including ICT and informational, on an individual or global-society scale, ultimately where most needed in close alignment with the United Nations' Sustainable Development Goals.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning | AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 21

Bangladesh Computer Council

Government

Bangladesh

Beneficiaries

The project is developed to provide authentic information service to General People, Journalists, Scientists and Statisticians, and Decision Makers in Bangladesh. It is also beneficial for the general public as a result of provision for displaying or searching in Bengali.

Website

http://www.bcc.gov.bd

http://covid19tracker.gov.bd/

Description

It is a web based data/information collection system that shows the collected data through maps. It exposes API (Application Programming Interface) to be integrated with external systems, and it is connected to the National e-Service Bus platform. Therefore, any other system or organization (if needed) can get updated information on Corona virus infections in real-time. The main purpose of this system is to ensure authentic information delivery for the citizens of the country. The Salient Features of the COVID-19 Tracker include user interface in Bangla. The Tracker collects data from authenticated National/International sources (IEDCR.gov.bd, worldometers.info, www.jhu.edu). It focuses Bangladesh statistics at default page loading and users can view comparison & statistics of multiple countries in chart or graphically. The search can be performed in Bangla or in English. The Tracker refreshes automatically every 5-10 minutes. Full screen map view, bubble map view and change map legends view are available and the Tracker provides a mobile friendly view. There is also an option to search, sort, filter and export data from tabular format.

ICT Tools

It is the FIRST EVER Map-based graphical COVID-19 Tracker in Bangla Language. It tracks Covid infections-related data. It uses Java based Web Application, HTML5, Node.js, JSON and Map and Chart tools. ESRI Bangladesh has contacted us showing interest to assist us to extend COVID-19 tracker. Local freelancers have shown interest to develop iOS/Android app based on the tracker. Wikipedia Bangladesh has mentioned URL of the tracker as an information source in its article related to COVID-19.

Challenges / Partnership / Sustainability / Replicability

Local authentic source was a main challenge as we show segregated infections count for smaller geographic areas (i.e. District) of Bangladesh. Our COVID tracker does not require manual data entry because it may introduce human errors. Unfortunately, we are yet to get API from the local source IEDCR authority, hence we have to process data from IEDCR and upload to our portal after quality check. We have feedback to show infections count for a smaller geographic area (i.e Upazilla) of Bangladesh. However, IEDCR does not publish such data in public and there is no other reliable source.

The Tracker is developed in partnership between Division (ictd.gov.bd) and Bangladesh Computer Council (bcc.gov.bd). However, as we take data from IEDCR (Institute of Epidemiology, Disease Control and Research), it will be good to develop partnership with them. In that case, we can get data via API in real-time. The tracker now has an official roadmap and BNDA team is officially responsible to maintain and upgrade the tracker dedicatedly.

The Tracker is replicable to any geographic region of the world. However, it may require some customization and localization changes. In generic sense, this project is replicable for any disaster prevention scenario where quick flow of information needs to be established.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 22

Title of the project, Contact Organization Name, Stakeholder type, Country

The UK's Government Digital Service (GDS) support to the COVID-19 response Government Digital Service (GDS) - GDS is a unit of the Cabinet Office Government

United Kingdom

Beneficiaries

An Extremely Vulnerable Persons Service, which is managing the needs of over a million extremely vulnerable people who require support in order to self-isolate. A service to allow business to let government know what help they can provide. Our minimum viable product (MVP) for this focused on personal protective equipment.

https://www.gov.uk/coronavirus-extremely-vulnerable

Website

https://www.gov.uk/

https://www.gov.uk/coronavirus

Description

GDS have been at the forefront of the UK's response to COVID-19. Our existing services have been in high demand. They are ensuring citizens remain informed and able to access vital services. Across the digital, data and technology function across government, 39 user facing digital services have been developed as part of the COVID-19 response, with a further 40 in the pipeline.

GOV.UK, the place to find government information and services online, is supporting the design of a range of new products. The GOV.UK content team is also working closely with the Prime Minister's Office to organise the management and improvement of all coronavirus content. Visitors to GOV.UK per week have gone up over 600%.

https://www.gov.uk/ask

GOV.UK Notify - the government's messaging platform, has been used for National Health Service (NHS) text message support for the extremely vulnerable and those isolating at home; business continuity messaging for public sector staff; and FCO travel alerts. Over 250 local authorities and 173 services use Notify. At its peak, over 8 million SMS messages were sent using Notify, compared to a daily average of 150,000.

GOV.UK Verify, used to prove identity online. Verify is receiving approximately 500% more traffic from certain services, and this has risen to up to 900-1000% at its peak.

GOV.UK PaaS is a cloud hosting platform that allows departments to deploy applications without infrastructure specialists.

ICT Tools

The UK's COVID-19 response highlights that good digital projects are based on much more than just technology, but on strong digital policy, services and standards and embedded digital, data and technology skills across the public sector.

Challenges / Partnership / Sustainability / Replicability

To be able to meet the heightened demand for our existing and new services, we've had to reprioritise and adapt our ways of working. We have published new guidance on conducting user research remotely while people must stay at home because of coronavirus. We've also built new relationships with some parts of government. One of the services allow business to let government know what help they can provide. Our minimum viable product (MVP) for this focused on personal protective equipment. The Crown Commercial Service (CCS) 'Working From Home' Task Force collaborates with the GDS DDaT COVID-19 Working Group to ensure a coherent cross-functional response to meet procurement demand with suitable and available supply. The sustainability of what we have done is grounded in the fact that the bulk of our response has been built from existing digital services, standards, skills and policies ('digital foundations'). GOV.UK now streams the government's daily press conferences live from GOV.UK Since going live, these products have been continually iterated and scaling up continues.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 16: Promote just, peaceful and inclusive societies

Case 23

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Approaches to Resilience and Adaptation in Jamaica (DARAJA Project) Caribbean Climate Innovation Center

Private Sector

Jamaica

Beneficiaries

The main beneficiaries from this project are vulnerable communities and small groups, which include recluse farming communities.

Website

http://www.caribbeancic.org/

Description

The proposed solution will be a new climate resilience and adaptation methodologies and technologies to improve climate risk management and COVID-19 responses in Jamaica through this program.

ICT Tools

The platform will be complemented by a smartphone-based weather application for communicating information directly to individuals, which will provide a tailored weather, and COVID information.

Challenges / Partnership / Sustainability / Replicability

Lack of information on climate and weather data makes some communities extremely susceptible and vulnerable coupled with the information on the COVID-19 situation daily bulletin.

A second aspect of the project will focus on the creation of a Climate Resilience Sandbox, to support the development of innovative solutions for early-warning systems & risk reduction systems utilizing open data from searchable online database of all key international (NASA, ESA, Caribbean Scientific Institutions), as well as the national datasets on climate hazards and exposure data related to climate risk in Jamaica. This project will directly stimulate business development in Jamaica by establishing a climate resilience data innovation incubation program for up to 10 SMEs/start-ups utilizing big data and artificial intelligence to access the DARAJA Information Sharing Platform. These innovators will utilize the data to develop added value products and services that help to build climate resilience. The alumni of this program will become the founding cadre of private sector actors to engage with MSJ and the public sector agencies releasing their data sets onto the DARAJA Platform. Their business initiatives will combine data and information from DARAJA with other relevant information to create revenue-generating products and services that improve Jamaica's overall resilience to weather and climate shocks. This will be published and licensed as open data. It will offer rapid prototyping and marketing testing guides for Jamaica start-ups/SMEs interested in creating new open data driven climate risk information products and revenue streams.

This project is a piloted project currently in Jamaica that will be replicated for the rest of the Caribbean.

Action Lines

AL C2. Information and communication infrastructure | AL C3. Access to information and knowledge

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation | Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 24

Title of the project, Contact Organization Name, Stakeholder type, Country

Audiopedia Corona Awarenesses WhatsApp Campaign

URIDU

Civil Society

Germany

Beneficiaries

This project is especially destined to marginalized populations, especially illiterate rural women. They can benefit from accurate, reliable and accessible health information about COVID-19.

Website

https://www.uridu.org & https://www.audiopedia.org/corona

Description

The coronavirus affects all of our lives. However, in the poorest countries it will be devastating. Especially for women and girls, who will be on the frontlines of the response. Knowledge about symptoms, transmission, and prevention of COVID-19 is vital. But how can we provide this information to marginalized, often illiterate populations? The audio recording of localized messages and their distribution via WhatsApp is an efficient and timely solution, not only to spread accurate information, but also to counter fake news. Audiopedia is a non-profit project that makes health knowledge audible. For this project we set up a global Corona Awareness Campaign using WhatsApp Audio which currently includes +62 translations and audio recordings in more than 30 languages (see https://www.audiopedia.org/corona/). The campaign provides easily shareable text and audio information on a dedicated web site, which has been optimized for mobile web (www.audiopedia.io/corona). Both smartphones and smart feature phones can access the contents, people can share to WhatsApp with just one click. To ensure credibility of the messages we are cooperating with NGOs that work in health education, disaster risk management, and social and behavior change communication. Being a member in relevant networks enables us to be able to reach out to thousands of NGOs that can act as multiplicators with high credibility among the local population. NGOs can become part of our Audiopedia NGO Network (https://www.audiopedia.org/ngo) to coordinate their efforts with us.

ICT Tools

The ICT Tools for our project include mobile web apps, smart feature phones, smartphones, WhatsApp, and social networks.

Challenges / Partnership / Sustainability / Replicability

Fake news and misinformation are predominantly generated through messaging services like WhatsApp, which play a major role for our target group. In order to convey reliable information and fight fake news one must use the same communication channels and mechanisms. WhatsApp is a powerful tool for this kind of campaigns for several reasons: messages come directly to the user's phone, from known contacts, and therefore seem more credible, the immediacy of message delivery can create a feeling of urgency about particular topics and it can be used to penetrate communities that do not have access to other platforms. Various measures have been taken in the past to curb the viral spread of fake news - with limited success. Fighting misinformation is important. But instead of just reacting, NGOs and government organizations should be enabled to create viral SBCC campaigns for mobile communication channels by themselves. We are looking for NGOS that would partner with us to disseminate this information. And funding partners to expand the project. The project is sustainable as it is entirely digital and open source. We are actually planning to use it in as many languages/regions as possible. And to adapt it to other health related campaigns, such as TB, Ebola, Zika etc.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 25

Title of the project, Contact Organization Name, Stakeholder type, Country

Wi-fi Home by Beinday

BEINDAY by INTERFACE SAS

Private Sector

Senegal

Beneficiaries

Before the COVID-19 crisis, the Wifi Events, Wifi-Biz and Wifi-zone offers met with success with our users. Today, the COVID-19 crisis forces us to be confined. So, we had to quickly highlight the Wifi-Home which is very useful for teleworking. The added value is precisely to allow families to connect to E-commerce platforms so that they can track their delivery in real time during COVID-19. The strengthening of digital connection systems allows a large number of users to be connected to networks without creating disturbances.

Website

http://interface.sn

https://beinday.com

Description

While one in two inhabitants of this planet is currently confined, business life is getting organized. Beinday by Interface SAS maximizes the potential of the WI-FI connection in Senegal to promote telework and e-commerce during this period of fight against COVID 19.We have implemented Wi-fi Home dedicated to real estate agencies and owners of rental properties. The focus was on "STAY AT HOME" because of the COVID-19 pandemic. The objective is to be able to better adapt its product in the current context.

ICT Tools

Beinday is a platform for monetization and injection of advertising content through free Wi-Fi through its various offers ranging from Wi-Fi Home (in homes) Wifi -Biz (in reception areas) to Wi-Fi Zone (Public spaces) via Wi-Fi on board (in public and private transport) and Wi-Fi Edu for schools and universities.

Challenges / Partnership / Sustainability / Replicability

Our strategy is precisely to go in partnership with these real estate companies to always stay in the B to B to C taking into account the particularities of their sector. The objective is to make the real estate product much more attractive through simple and efficient Wi-Fi for the benefit of the client who is the tenant by integrating this service into the rent package by the lessor. We will take care of recruiting these companies, which evolve in the hiring in order to be able to integrate our solution in their offers. We are going to work with all operators who also wish to support us in this new segment with our Wi-Fi Home solution on the Beinday platform for the management of tenant users. An African ambition well achievable after a stake of 35,000 euros made by the Delegation for Fast Entrepreneurship of Women and Youth DER / FJ, new funding mechanism for young entrepreneurs set up by the State of Senegal with a fund which amounts to more than 43 million euros. Recently, the start-up also raised another 35,000 euros. After a first failure with a company whose name was disputed to them by a big American company, the team is convinced that success is not far away. Consisting of several different profiles including IT engineers, telecom specialists, managers, finance, marketing, communication and sales experts, Interface SAS is managed by a top management made up of two Senegalese and two Germans who have come together in association with a team of 6 full-time premises in production. The band has just had a patent from the African Intellectual Property Organization (OAPI) to establish itself in the 17 countries targeted, on the continent with different offers relating to both events and dedicated WIFI banks, cars, establishments open to the public and reception areas, such as cultural places, etc.

In a country where not everyone has access to the Internet yet (only 58% versus 25% in Africa), the project quickly found supporters. Sonatel, Expresso, Free and the Arc Télécoms Access Provider contract or negotiate with the start-up Interface SAS which celebrated its first purchase order. The objective is to be present in around twenty countries including Benin, Cameroon, Gabon, Mauritania, Niger and Togo with a presence by 2022 in Mali and Côte d'Ivoire.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 26

Title of the project, Contact Organization Name, Stakeholder type, Country

Project BIRD (Broadband Infrastructure for Rural Area Digitalization) Global Plan Inc.

Private Sector

Japan

Beneficiaries

Primary beneficiaries are unconnected people, particularly those who live beyond difficult terrain with low income. The main benefits/services are the unprecedentedly practicable and affordable availability of terabit-capable connectivity.

Website

http://www.globalplan.jp

Description

The project BIRD (Broadband Infrastructure for Remote-Area Digitalization) is for affordably closing the digital divide that help cope with COVID-19 by enabling remote work, tele medicine etc. at every corner of the globe. During 2016-2018, ITU-T SG5 and SG15 published ITU-T L.1700, L.110 and L.163. The president of Global Plan Inc. initiated the standardization discussions and worked as the key editor. By meeting those standards, an affordable optical cable solution was proposed.

ICT Tools

Technologies/ICT tools used in BIRD is affordable and reliable optical fiber cable connectivity that meets new ITU-T standards. It is applicable to urban-rural broadband backhaul connectivity for tele medicine, distant learning and remote work. The cost of optical cable installation are typically 70 to 80 per cent of the entire CAPEX of the network today, with cable installation currently relying on heavy machinery and highly skilled labor. This challenge is made even greater by the low densities of rural communities. To reduce the cable installation cost, a lightweight, robust and thin optical cable is used that meets ITU-T L.110. The cable well realizes a terabit capability, low latency and cost-effective upgradability/scalability needed for ever—growing demand toward 5 G era and beyond. The cable is with ease of handling and excellent environmental durability implementable from the ground surface to underground to air to water by following L.163 standard. With this cable, the civil work can be simple and easy without demanding heavy machinery and skilled engineers. The CAPEX can be reduced by ~80% than with conventional cables.

Challenges / Partnership / Sustainability / Replicability

The challenge was to make ITU-T agree that cost-effective implementation be the standard's top priority for rural communications in developing countries, where reliability is the second most important attribute. This reversed the common approach to fibre-optic connectivity design — reliability is usually the first prize, but with L.1700, affordable implementation comes first. The next challenge was to identify the cable design realizing the lowest installation cost. The cable for the BIRD solution selected is lightweight thin robust that is based on the submarine cable technologies.

To seek for the partners to globally deploy the BIRD solution, it must be recognized that closing the digital divide and coping with COVID-19 should be recognized as the need from prevention of societal loss rather than from pursuit of financial profits.

Another point is solution's compliance with ITU standards that is unprecedentedly aiming

at closing the digital divide thereby coping with the pandemics today and tomorrow. The solution BIRD is developed aiming at the best sustainability from the holistic point of view by considering not only the sustainability of the solution itself but more importantly, socio-public sustainability that is realized through broadband optical cable connectivity at every corner of the globe.

Action Lines

AL C2. Information and communication infrastructure | AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 27

Title of the project, Contact Organization Name, Stakeholder type, Country

CoronaSurveys Project

IMDEA Networks Institute

Academia

Spain

Beneficiaries

The decision makers can use our results and estimates to make more informed decisions.

Website

https://www.networks.imdea.org_&https://coronasurveys.org

Description

In the CoronaSurveys project we combine crowdsourcing, the wisdom of the crowds, and the multiplicative effect of indirect reporting to estimate numbers and their evolutions over time.

ICT Tools

Online surveys to collect data, data repositories (GitHub) to make the data available publicly, data processing tools to estimate pandemic parameters, web technology to show the results are the ICT Tools that we are deploying for this project.

Challenges / Partnership / Sustainability / Replicability

We are facing challenges in deploying a system for multiple countries. We also have to attract participation, clean the data from bogus responses, generate estimates of number

of cases, number of new cases, infection rates, etc. from the data. We are finding solutions to present the estimates in a useful form and to reach decision makers so they make use of our results.

From the above challenges the hardest is to deploy the surveys in many geographical areas. Partners that are interested in doing so in their country or region, or are willing to fund promotion campaigns are welcome.

The project is sustainable because we use very limited resources.

It can not be replicated because the data that is not collected at a given point in time is lost.

Action Lines

AL C3. Access to information and knowledge | AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 16: Promote just, peaceful and inclusive societies

Case 28

Title of the project, Contact Organization Name, Stakeholder type, Country

Protege BR

Olabi.Org

Civil Society

Brazil

Beneficiaries

Our main beneficiaries are hospitals and local makers. Hospitals have their demand for PPE supplied and local makers can exchange information regarding the production on a small and large scale. The objective is to build a lexicon common to both groups, which usually work in such different ways. The platform aims to give visibility to a national problem and to pressure agents from industry and public authorities to act while generating a feeling of solidarity with health professionals and calling on citizens for generous actions.

Website

https://www.olabi.org.br/

https://protegebr.org/

Description

We built a digital platform that organizes information related to the decentralized production of resources for hospitals during the Covid-19 pandemic and connects the necessary stakeholders to make donations of medical supplies viable: producers (makers/designers/players from industry/universities), hospitals, volunteers who help logistics, material producers, possible local donors.

The platform collects demands from hospitals and connects them with local makers who can help, highlighting active initiatives and also hospital protocols.

ICT Tools

When using our platform, the user can find via Google Maps initiatives that are working daily to fight COVID-19 in Brazil. Besides the main goal - aka meet the immediate needs of local hospitals - we use this channel to connect small and big players across the country so they can locate their peers and exchange information and experiences on combating COVID-19. Many of these small players lacked visibility and needed research, studies, and prototypes.

Challenges / Partnership / Sustainability / Replicability

Brazil has 8.516 thousand km² and its population is more than 200 millions. Our main challenge was to locate small initiatives in states farthest from large capitals, exactly where there is a structural need in the public and privates hospitals. This challenge can be overcome with mass dissemination of our platform through social media, search engines, and specialized debate environments on the fight against COVID-19.

Our main goal now is to expand the coverage area of the platform so we need a partner that can disseminate the platform aiming to connect more players across the country and save lives.

Our platform uses Google Maps to search and insert initiatives in Brazil. Therefore, it is possible to use the same principle for other countries that are facing the same difficulty.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health | AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 29

Title of the project, Contact Organization Name, Stakeholder type, Country

"Ngabuburit online" with the theme of Downloading Blessings of Ramadan ICT Volunteer Bojonegoro

Civil Society

Indonesia

Beneficiaries

The beneficiaries of the program are the Muslim community in Bojonegoro and the speakers at Bojonegoro.

Website

http://www.rtikbojonegoro.or.id

Description

We went through this year's Ramadhan in a very different atmosphere from previous years, we had to find various ways so that the atmosphere of the fasting month this year was still felt, for that we present the event "ngabuburit online with the theme of Downloading Blessings of Ramadan"

"Ngabuburit online" is an Islamic religious lecture carried out during the Ramadan of 2020. Due to the Covid-19 outbreak that has an impact on all aspects of life, we try to help the speakers by utilizing digital technology to still be able to do lectures from their respective homes. This is important for us to do where currently in Indonesia there is a large activity limitation (PSBB). This activity takes place by utilizing the Google Meet application so that the face-to-face atmosphere between lecturers and auditors can still take place from their respective places.

ICT Tools

We use an existing Google Meet application for these activities; ICT Volenteer Bojonegoro since the last three years has received an application grant from Google so this is the time to use it for the benefit of the people in our region.

Challenges / Partnership / Sustainability / Replicability

Because this is new, we must be able to provide short training to (lecturers) of lecturers to be able to operate the Google Meet application, besides that we must be able to overcome the lack of signal in certain areas so that this activity can continue well and all of that we can handle it well.

In carrying out this activity we partnered with religious organizations and boarding schools in Bojonegoro, there were 10 organizations involved together to carry out these activities.

This program is ongoing, we will continue to develop and perfect this program in the future, of course we will also use program techniques for various interests such as education for various levels (elementary to high school) it is very possible to adopt this program.

The project can be explored in any region, especially areas that have similar beliefs with us in Indonesia.

Action Lines

|AL C8. Cultural diversity and identity, linguistic diversity and local content | AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 30

Title of the project, Contact Organization Name, Stakeholder type, Country

Taleemabad - Making education come to life

Orenda

Other

Pakistan

Beneficiaries

The Taleemabad platform is aimed at providing education to children living in remote access areas, who do not have access to the same learning opportunities as children who go to high-cost private schools in the cities. Parents who have become disillusioned with education and its benefits through years of being exposed to subpar education that has not brought any improvement in their lives. Children with stunted learning levels. We are providing free content to these children through the multiple channels mentioned before. The app contains all the features of the Taleemabad platform - animated video lessons, gamified tests, parent portal and adaptive learning - at a minimal cost of 20 PKR (0.13 USD) per week.

Website

http://orendaproject.org & http://taleemabad.com

Description

The Taleemabad learning series is the national curriculum of Pakistan presented in an engaging animated format, consisting of hundreds of video lessons and thousands of assessments. Through contextualised storylines and engaging characters, we can build a deep relationship with children, which enables us to retain their attention for longer, thus helping us instil deep-rooted learning. The content (lessons, assessments, practice questions) is available in Urdu, English and soon in multiple regional languages.

ICT Tools

Close to 40.4 million children have access to a television, 24.5 million have latent access, and 1 million children have a personal device. Smartphone penetration and the constant increase in 3G/4G connectivity has allowed us to take the Taleemabad platform all across Pakistan, and in places where access to these resources is limited, we are now able to reach them through television. Recently, Taleemabad was picked by the Federal Government for daily broadcast on a free to air special new channel called 'Teleshool', run by the national broadcaster. Taleemabad is also being aired on a Provincial cable channel called 'TaleemGhar', launched by the Punjab government, and is also available on a content aggregator called Ilm Exchange, launched by the LEAPS study faculty at Harvard. Our placement on these channels, plus a very strong surge in growth (35,000 new users joined the platform in April, compared to 2500 in February) means that we have a serious shot at reaching a substantial number of children with Television, or latent smartphone access.

Challenges / Partnership / Sustainability / Replicability

Content production is an expensive activity in terms of time and money. To date, we have produced 480 videos but to keep up pace with the rate at which tv channels are burning through content (4 hours per day, for 5 days a week) we need to keep churning out more videos. We are looking for funders to help us complete our goal of creating content for the entire K-12 spectrum. We also need partners for evaluation of our content and to conduct impact assessments to make us more cognizant of our shortcomings and help us

pivot to provide an even better learning solution. In the past 5 years, we have gathered a team of experienced curriculum developers, assessment specialists, data analysts, designers, developers, and animators. These team members have also often travelled to rural Pakistan together, engaging with students and understanding their pain points. As such, they are well equipped to design and produce an educational platform that can begin to solve these problems for the students. The content creating process has become linear and can be replicated anywhere in the world.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 5: Achieve gender equality and empower all women and girls

Case 31

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Humanitarian platform

Geneva Centre for Education and Research in Humanitarian Action

Academia

Switzerland

Beneficiaries

This website is with a cross-disciplinary nature. It hosts both technical guidelines as well as operational field experiences. The information is not only useful for humanitarian actors, but also helpful to health professionals to understand ways the humanitarian sector respond to the COVID-19.

Website

https://www.cerahgeneve.ch & https://www.covid19humanitarian.com

Description

The COVID-19 Humanitarian platform is a joint project of Johns Hopkins Center for Humanitarian Health, Health in Humanitarian Crises Centre (of the London School of Hygiene and Tropical Medicine), and Geneva Centre of Education and Research in Humanitarian Action (of the Graduate Institute of International and Development Studies and the University of Geneva). The three Centres created the COVID-19 Humanitarian platform to gather, curate, analyse, interpret and disseminate COVID-19-specific and sensitive interventions that are being implemented in a variety of humanitarian settings. The goal is to facilitate the sharing of context-specific field experiences about how humanitarian actors, with their programs, are responding to and being adapted to the COVID-19 pandemic.

ICT Tools

We use an online platform to invite sharing of experience and co-create knowledge. Our objective is to capture examples of how humanitarian organisations are responding to and adapting their existing programs or innovating new programs to address COVID-19 in their unique environments.

Challenges / Partnership / Sustainability / Replicability

Diversity matters: Many of the approaches used to prevent and respond to COVID-19 in the most affected areas thus far (e.g., China, Europe and the United States of America) will not be feasible in most humanitarian settings. Numerous humanitarian organizations are creating guidance and tools for the field, but there is a need for more evidence describing how such programs are being adapted according to varying contexts and sociocultural settings. These adaptations and innovations need to be shared widely so others can learn from them and adopt or modify them according to their specific setting. Time constraint: On the platform, users can click on 'Share field experience' to provide inputs. However, knowing that humanitarian actors are busy in responding to COVID-19 and many will not have the time to respond, we have undertaken interviews with colleagues in the field, and then uploading the content to the website using the standardized forms. The three centres and their belonging universities are partners of the COVID-19 Humanitarian platform project. These provide sufficient research and administrative capacity. However, the nature of the project is to engage local partners to share their experience. In addition, partners with ideas on how to improve the flow of information from the field to the platform are of interest. The project is designed in a way to facilitate self-reporting, so organisations can continue to share their experiences and learning. The knowledge captured will be useful for professionals from the humanitarian sectors and health sectors as COVID-19 evolves and in future epidemics and crisis situations. It is also used for learning in the future in both sectors, as field based experiences can be synthesized and analysed to identify transferable lessons. As the project is with a global coverage, replication should avoid duplication and rather consider pooling efforts. Field experiences are collected and summarized in a standardized form to be ensure consistency when data is collected across many contexts.

Action Lines

AL C3. Access to information and knowledge | AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 32

Title of the project, Contact Organization Name, Stakeholder type, Country

Virtual Assistance to Citizens about COVID-19

ESTRATEGO TECHNOLOGIES

Civil Society

Ecuador

Beneficiaries

The main beneficiaries are the city that has an immediate information point about COVID 19 from official sources. The main benefits is 24/7 uninterrupted and timely attention to official information.

Website

http://www.estratego.com.ec

Description

We made our virtual assistant AMALIA available to the citizens, to give them information from official sources. Through this service, false news is avoided. In addition, day-to-day information is provided on COVID-19 cases as well as information of deceased people.

ICT Tools

We use IBM Watson, AWS and Whatsapp to create a chatbot with Artificial Intelligence to making citizens see new forms of customer service, and promote social distancing.

Challenges / Partnership / Sustainability / Replicability

The most complicated task was creating trust in the citizens for AMALIA, it could be solved by support from recognized organizations, that are in favour of the diffusion.

We are looking partners in other countries to promote AMALIA in their cities and to contribute to give information of COVID and social distancing measures for the citizens.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 33

Title of the project, Contact Organization Name, Stakeholder type, Country

Our Actions Against Coronavirus (COVID-19)

General Directorate of Ministry of Justice of Turkey

Government

Turkey

Beneficiaries

Our primary beneficiaries are mainly judicial workers and lawyers. We also serve to the Ministry officials. We develop and host e-justice services.

Website

http://www.bigm.adalet.gov.tr/

Description

With the remote working model, technical personnel were enabled to continue their planned work at their home with the remote working model. Remote desktop solution allows them to access everything they need for a productive working day. All the meetings started to be held via teleconferencing and video conferencing. Pre-planned or needed meetings are currently hosting live online conference system. All IP telephones in office call forwarded to GSM number of our staff. COVID-19 awareness trainings were prepared and offered to our staff through our e-learning portal.

ICT Tools

VPN software is used for accessing intranet as for remote working. Applications such as authorized storage environments, communication/video conferencing tools, project management tools are used when working remotely. Our IT department provides esignature or admin tokens to the staff who will use the VPN service. And also all the esignature which needs to be renewed because of e-signature certificates have expired are renewed. All the online meetings fulfil the principles of confidentiality and membership of authorized staff.

Challenges / Partnership / Sustainability / Replicability

We have to take actions against COVID-10 within a limited time. That is the main challenge. We overcome this challenge with an organized working team efficiently and to minimize repeated activities.

Action Lines

AL C6. Enabling environment | AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 34

Title of the project, Contact Organization Name, Stakeholder type, Country

Smart Agriculture Hub

SkyFarms

Other

Netherlands

Beneficiaries

We have an angel investor Dialogue Group, and have crowdfunded within our community. The main benefits have been keeping operations sustainably growing so that we can achieve SDG #2 Zero Hunger by 2030.

Website

http://SkyFarms.io

Description

Let thy food be thy medicine. We are involved in organising community resources and connecting AgTech to areas that are in desperate need of better food security, and to secure future food supply chain strength. Providing access to the tools everyone needs to keep food local and available, which helps populations fight Covid-19 with ample, healthy, fresh local food. Moving consumers to food citizens is crucial for future survival of new outbreaks and crisis preparedness.

ICT Tools

We became data driven organisation after our Hacks Against Hunger participation in WSIS 2018 Geneva. We now have over 800 stakeholders across the world collaborating collectively through a community platform where we match people with the local resources, space, training, volunteers, to remove any barriers that are keeping them from becoming actively involved in community-supported agriculture. Much of the new agriculture technology is appealing to those in the digital world, and our open-source software development guides users to the resources tailored specifically for them.

Challenges / Partnership / Sustainability / Replicability

Main challenge is further funding so we can train new impactors and get more HUBs up and running so the network can scale. We also have an internal team who cannot dedicate full energy and time to the growth because they are not paid. We are actively adding Stakeholders to our AgSphere, a collection of agTech impactors and innovators, businesses, NGOs, universities who can contribute to faming access, and growing anytime, anywhere.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case 35

Title of the project, Contact Organization Name, Stakeholder type, Country

AFLI initiatives

The Arab Federation for Libraries & Information (AFLI)

International Organization

Tunisia

Beneficiaries

Direct beneficiaries are librarians and information professional in MENA region (Middle East & North Africa) as they preserve community culture, protect and provide access to information. Professional Library Associations also benefit directly. Indirect beneficiaries are the Community/users: As Librarians are actively engaged in the community, enabling them to fulfill their roles will require developing their skills, it is imperative in a world in which technological advances and the changing in information-seeking behavior of library users are affecting everything libraries do.

Website

http://arab-afli.org/main/index.php

Description

Initiatives implemented by the Arab Federation for libraries & information (AFLI), coinciding with the Corona virus crisis is a cultural program that includes a series of webinars deals with a variety of topics in the field of libraries, information, knowledge and crisis management. One of the webinars was on the role of knowledge management in crisis management: Corona virus as a model. Eight webinars were conducted until now, and it is still ongoing. The webinars is broadcasting live on AFLI YouTube channel due to the high turnout. We are honoring best active libraries during the period of the Covid-19. Libraries were divided into: large & medium libraries and small libraries. The initiative ends by the end of May 2020. The Knowledge Continues Initiative on AFLI Facebook group, which is a short record of well-known academics and professionals in the Arab world to talk about the importance of continuing knowledge and readership during the period of home quarantine. The number of posts exceeded 25 posts. We are also honoring young children in drawing competition aged from 6 years and less and from 7 to 10 years. Three prizes for each category were dedicated for the winners. Free courses for MENA professionals are under process.

ICT Tools

Different technologies are used like webinar service (zoom) to provide AFLI webinars during quarantine, announcing our activities through different social media channels such as: Facebook to announce the activities and communicate with our beneficiaries. YouTube for live broadcasting of the webinars. Slideshare for sharing the content of the webinars to our beneficiaries. Repository for backup of recorded webinars series on AFLI. Involving in virtual experience improved Arab librarian's ICT skills, readability to engage, and enroll in various professional webinars, courses available on the web. Promoting modern information literacy skills that would support the concept of virtual learning in the community which help in creating a true information society. Building a sustainable learning platform gives opportunities for continuing development and improves access to information resources for library & information professionals all over the Arab countries equally, especially for those how suffer from lack of professional training due to the unstable conditions. Maximizing knowledge sharing among Arab librarians through virtual

meeting, which leaded to generate new ideas ready to be adopted regardless of the cultural context.

Challenges / Partnership / Sustainability / Replicability

Sustainability of the program would be a challenge after the current presidency of the Boards is over.

The initiatives can be sustained. In terms of financial sustainability AFLI voluntary staff works to coordinate and conduct the webinars to ensure a steady flow of maintaining and continuing the program with support from AFLI who will pay for the webinar service. This was not the first time that the Arab Federation for Libraries & Information (AFLI) provides webinars for the Arab Librarians & Information professionals, as AFLI conducted many webinars before during the year 2013, and the webinars are currently replicated again from the year 2019-2022.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Contact Organization Name, Title of the project, Stakeholder type, Country

TaC-Together against Cybercrime International

CyberVictim.help

Civil Society

Switzerland

Beneficiaries

The service is to offer to victims of **cybercrime** a real-time assistance with the first advice on what to do after the problem has been identified. Essentially, the beneficiaries are victims of cybercrime.

Website

http://www.againstcybercrime.org/ & http://www.cybervictim.help/

Description

All human activity has gone online since the coronavirus lockdown began. This has resulted in an exponential rise in fraudulent online activity. TaC International has developed a real-time free assistance for victims of cybercrime. The assistance is offered worldwide by trained Youth IGF (www.youthigf.com) Senior Ambassadors located on different continents around the world and able to assist in different languages (Arabic, English, French, Portuguese, Russian) and time zones.

ICT Tools

An online platform is used to deliver the real-time assistance for victims of cybercrime. An app is foreseen to be developed as well.

Challenges / Partnership / Sustainability / Replicability

The main challenge is to be able to assist all victims who are in need of help. By having a large number of people present online and delivering real-time assistance.

They have received support from industry partners and collaborates closely with national CERTs.

The project has proven to be sustainable as it has been tested during the lockdown in Europe. Sustainability is also based on assistance from the trained Senior Youth IGF Ambassadors located in different countries.

Replicable in that the real-time assistance platform can also be implemented at the national level.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Goal 16: Promote just, peaceful and inclusive societies

Contact Organization Name, Title of the project, Stakeholder type, Country

Administrative Modernization Agency (AMA)

ePortugal webportal (single digital gateway for public services)

Government

Portugal

Beneficiaries

The portal is available to everyone and was developed taking into consideration **usability** and **accessibility** requirements.

Website

https://www.ama.gov.pt/ & https://eportugal.gov.pt/

Description

The Portuguese **single digital gateway** for public services, ePortugal was quickly adapted to provide new information, tutorials and services for citizens and companies. ePortugal is the privileged vehicle to provide both citizen and businesses the services they need in the context of social distancing. The wide range of transactional services that can be performed on the ePortugal portal, include: changing the address on the citizen card, requesting birth, marriage and/or death certificates or requesting over 500 business licenses and permits.

The portal offers specific service channels for citizens and businesses, namely the Citizen Call Center and the Business Call Center (available by phone and email) and SIGMA, a chatbot based on **artificial intelligence** that assists the user and provides him/her with information about the services available on the portal. It's worth mentioning that ePortugal was developed with a focus on accessibility and usability, adapting to any type of device and presenting a simpler and clearer language.

ICT Tools

ePortugal is based on Liferay DXP, with a responsive design that allows optimal access from any device. It has the usability and accessibility silver seal, which identifies and promotes the implementation of best practices in terms of accessibility and usability in websites and apps that are meant to simplify the use of online public services by the citizens, more specifically citizens with disabilities.

Operated by AMA, ePortugal uses several digital infrastructures and platforms, which are at the core of the Portuguese digital transformation efforts:

- National and authentication provider (autenticação.gov)
- Interoperability platform iAP
- The national Catalogue of Entities and Services

The content management system allows the creation, organization, elimination and publication of content in an adaptable and real-time manner.

Challenges / Partnership / Sustainability / Replicability

The main challenge was involving potential users and other stakeholders from the **development phase**. There were also postponements due to the integration of several applications with the portal.

AMA, is the partner entity responsible for coordinating and managing the ePortugal, having the responsibility to obtain, update and upload content of services and entities of all the Public Administration.

The Catalog of Entities and Services (CES) is sustainable and replicable as it can be used in the future to provide information to several other portals regarding the Portuguese public services. The CES, along with the ePortugal portal, is managed by AMA.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 16: Promote just, peaceful and inclusive societies

Case 38

Contact Organization Name, Title of the project, Stakeholder type, Country

Key2enable Assistive Technology Mena Ltd

AaaS - Assistive Technology as a Service

Private Sector

United Arab Emirates

Beneficiaries

The primary beneficiaries are **parents** together with specialists, we indicate what we understand that will work better in each case.

Website

https://key2enable.com/ & https://tix.life/planos/

Description

As a hardware/software company, they schedule a virtual workshop of our complete solution for students and persons with disabilities. They send the hardware equipment to their respective locations. The online platform is configured for that specific student or person with disability along with installation follow ups.

The recording of an **e-learning platform** will be launched for professionals working directly with the children/people. This will be available in English and Arabic.

ICT Tools

They have developed a subscription model called Accessibility as a Service (AAAS) in Brazil since October 2019. In this Platform they are working directly with the END-USER - B2C.

They receive any questions and doubts from the parents through their online platform, and together they understand the best solution for that particular child/person. They coordinate an online training session with the parents who will sign a subscription contract. The results will be sent to their homes by any means of communication of their choice

Challenges / Partnership / Sustainability / Replicability

The challenge in Brazil is the lack of funding within families and their understanding on how to use technology.

Interested in collaborating with companies/entities aimed at providing education to persons with disabilities.

It is sustainable. The subscription plan offered to families allows them to use to use the proprietary Assistive technology with their child(ren). Similar to a **virtual tech caregiver** which allows their child(ren) to communicate, play, and learn with technology.

It is completely replicable. Ability to teach any person with minimum computer knowledge how to use the Assistive technology with the person(s) with disabilities they will attend to.

Action Lines

- AL C7. ICT applications: benefits in all aspects of life E-learning
- AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Contact Organization Name, Title of the project, Stakeholder type, Country

PJSC Rostelecom

Hosting Call center – virtual automatic telephone station (VPBX)

Private Sector

Russian Federation

Beneficiaries

Beneficiaries are B2B companies (big, small and medium-sized businesses) in Russia, private and state-owned companies. An actively developing network of European confectionery houses and restaurants.

Website

https://www.company.rt.ru/en/about/info/ & https://moscow.rt.ru/b2b/telephony/vats

Description

Rostelecom has been deploying call-centers on short notice on the basis of the Virtual Telephone Exchange service (VPBX) with allocation of a nationwide phone number, enabling millions of people to make free phone calls at the allocated number and ask questions of interest to them.

Having in place a high-tech cloud-based solution, the companies are now able to handle much higher order volumes.

Rostelecom has launched a Home Office service. The new offering will enable entrepreneurs to maintain efficient channels of communications with employees, customers and partners, while staying at home.

ICT Tools

Virtual PBX is the organization of telephony via the Internet with the functions of call forwarding, distribution and recording. Connecting Virtual PBX is easy; receive calls to SIP-phone, mobile or computer.

Challenges / Partnership / Sustainability / Replicability

The project is sustainable and can be easily replicated. It is based on a standard solution with settings and customization as required to meet specific needs of business customers, and can be used for both in-office communications and receiving incoming calls made by service users. It is also possible to provide remote workplaces for contact center operators.

Action Lines

AL C2. Information and communication infrastructure

AL C6. Enabling environment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Contact Organization Name, Title of the project, Stakeholder type, Country

Association Eseniors

"Life is not about waiting for the storm to pass, it's about learning how to dance in the rain." - Sénèque.

Civil Society

France

Beneficiaries

The primary beneficiaries are seniors in Paris.

Website

http://www.e-seniors.asso.fr

Description

Eseniors has sent out to several thousands of seniors and professional partner institutions regular newsletters with useful information for physical and mental health.

ICT Tools

The whole team has got accustomed to ZOOM meetings.

We also sent tutorials to seniors about ZOOM and TeamViewer and offer to further help over the phone.

Challenges / Partnership / Sustainability / Replicability

Open to partners providing information about other activities, news or to disseminate our letters to as large an audience as possible.

The information sent is mostly written in English but the same could be done in other countries in their native language.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Contact Organization Name, Title of the project, Stakeholder type, Country

Healthrostrum

Healthrostrum

Private Sector

Tunisia

Beneficiaries

Patients, health care professionals and health enthusiasts.

Website

https://www.healthrostrum.com/

Description

Healthrostrum.com is a **social network for health** that enables people to share their health experience and connect with a caring community.

ICT Tools

Using mainly web technology at the moment.

Challenges / Partnership / Sustainability / Replicability

Primary challenges are marketing and fundraising. This can be addressed by forming partnerships and raising money or having access to grants.

Partners in the field of healthcare, such as: health related companies, associations and medical universities.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Contact Organization Name, Title of the project, Stakeholder type, Country

Foundation for Environmental Education

#YREstayshome challenge

International Organization

Denmark

Beneficiaries

- students ages 11-25 years old – teachers - parents - communities - different stakeholders

Website

https://www.fee.global/ & https://www.yre.global/stories-

news/2020/3/24/yrestayshome-challenge-stay-home-and-stay-active

Description

YRE International is publishing on different social media environmental challenges for students to share their story from lockdown time and environmental improvements. The best stories will be awarded.

ICT Tools

- interactive webinars via ZOOM for students e.g. about indoor photography, YouTube influencers
- computers, laptops, cameras, microphones for interviews (students) for e.g. interviews
- software programmes for making videos from activities

Challenges / Partnership / Sustainability / Replicability

The main challenge is access by students from different countries to tools that can be used to share stories. Working with 45 countries, some being developing countries, not all students have access to tools and internet. Opportunities are provided to attend the webinars via mobile and options to post stories to help them minimize accessibility issues.

The project is aiming to build core skills in students as ambassadors of their environment and influence their community while being at home. As such, they are interested in partners for webinars to develop computer skills for students and to publish stories from students.

It is sustainable in that it can be used by students from every country around the world and challenges are universal and valid for all students.

Action Lines

AL C4. Capacity building

AL C7. ICT applications: benefits in all aspects of life — E-environment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 11: Make cities inclusive, safe, resilient and sustainable

Contact Organization Name, Title of the project, Stakeholder type, Country

Information and Communication Technology Agency

Continuous Education for School Children through multi-channel approach amidst COVID-19

Government

Sri Lanka

Beneficiaries

Long term beneficiaries of this programme are the entire student population in Sri Lanka. Through this they find a medium to continue their studies without interruptions. From the positive reviews received it was apparent the students found this novel attempt useful and user-friendly.

Website

http://www.icta.lk & https://www.icta.lk/covid19-response/

Description

Multiple platforms used to offer online educational content. The most common was the transmission over broadcast media through television channels.

A TV program incorporated to state electronic media and freely available satellite TV networks, included following: live interactive teaching sessions, revision programs, content from National Institute of Education repository and Sri Lanka Rupavahini Corporation (National TV station) repository, Nenasa education TV content, eThaksalawa a Learning Management Solution (LMS)

Information and Communication Technology Agency of Sri Lanka (ICTA), introduced a video conferencing platform to assist the students through an innovative real time learning feature. ICTA also introduced a comprehensive collaboration tool to ensure continuous communication among education authorities and schools.

ICT Tools

- -National TV Broadcasts: dedicated time slots in both state and private media channels to cover all syllabus requirements, supported by the Ministry of Education.
- -Online interactive web platform: eThaksalwa
- -SMART text book which has been developed with the consultation of ICTA by Education Publication department.

Challenges / Partnership / Sustainability / Replicability

Key challenges of this project were:

- -unavailability of online facilities (both connectivity and devices), this created an unequal environment for the students to continue their studies
- -unavailability of material readily available to be broadcasted, shared with students -cost of connectivity

Seeking partnership with government agencies from other countries engaged in education activities or any donors.

There is a clear road to sustainability since the government of Sri Lanka backs all these initiates through the Ministry of Education and ICTA.

All programs initiated can be replicated if: proper engagement models with the private sector are clearly documented and agreed upon, disparity of ownership of devices is reduced, there are equal connectivity facilities for all children.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development.

AL C7. ICT applications: benefits in all aspects of life — E-learning.

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 44

Contact Organization Name, Title of the project, Stakeholder type, Country

Information and Communication Technology Agency Supporting Sri Lanka Technology Startups during COVOD-19 Government

Sri Lanka

Beneficiaries

Technology startups and freelancers in the country. Identification of the market serviced and the maturity of the startup will provide information in order to streamline government relief during and post COVID-19.

Website

http://www.icta.lk & http://www.startupsl.lk

Description

ICTA estimates a thriving startup ecosystem will result in a minimum of USD 1 billion of foreign exchange revenue by 2025 brought in by exports, investments and startup exits. All possible measures taken to save these startups now will determine our socioeconomic development in the next 5 years. There was much synergy between tech startups and tech freelancers but lacked a common platform. With that, StartupSL initiative was born with the objective of gathering technology startups and freelancers to www.startupsl.lk platform enabling representation of their unique offerings.

ICT Tools

Web development tools, social media platforms for activation, SLACK for volunteer coordination, Trello for collaboration, Anydesk for remote support, WhatsApp for communication, JITSI meet for video conferencing, Mailchimp/zoho mail servers for external communication.

Challenges / Partnership / Sustainability / Replicability

The buy-in and recognition from the ecosystem is the key challenge of such a venture. The platform has to be backed by sound initiatives and partnerships in order for the startups and freelancers to gather around it.

We look for organizations involved in similar types of projects for collaboration.

This is an initiative which is imperative for the future of the country. Developing the website with required functionalities for onboarding is stage 1 but the most essential is the **roadmap** of the platform and what it promises for its beneficiaries. This is unique for each ecosystem.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 10: Reduce inequality within and among countries

Contact Organization Name, Title of the project, Stakeholder type, Country

Information and Communication Technology Agency

Sri Lanka's Government meets at meet.gov.lk amidst COVID-19

Government

Sri Lanka

Beneficiaries

Virtually the direct beneficiaries are all state sector employees, amounting to nearly 1.5 million with the entire population indirectly benefiting from the activity.

Website

http://www.icta.lk & http://www.icta.lk/covid19-response/

Description

Since government machinery was expected to continue their operations without disruption, it was essential to facilitate it through the adoption of suitable tools and technologies immediately. In this unprecedented situation Information and Communication Technology Agency (ICTA) has introduced a novel platform based on a popular **open source software**. The usage is free of charge, with telecom companies waving the connectivity fee to the site.

ICTA has continuously facilitated to increase the adoption through dedicated consultation and also produce user guides to use this platform.

ICT Tools

The platform, https://meet.gov.lk as a free and easy to use video conferencing platform based on Jitsi (open-source project) for Sri Lanka's state sector. It allows one to easily build and deploy secure video conferencing solutions. At the heart of Jitsi are Jitsi Videobridge and Jitsi Meet, which let one conduct conferences on the internet, while other projects in the community enable other features such as audio, dial-in, recording, and simulcasting.

This platform associates all features of Jitsi, which includes passing everyone's video and audio to all participants, rather than mixing them first, resulting in lower latency, better quality and, a much more scalable and inexpensive solution. The solution is compatible with WebRTC, the open standard for Web communication and supports advanced video routing concepts such as simulcast, bandwidth estimations and scalable video coding.

Challenges / Partnership / Sustainability / Replicability

The biggest challenge was the state sector not fully prepared for the transformation. Not all employees were tech-savvy. This challenge was addressed by the sheer necessity. Application of a proper adoption strategy which was focused on building trust, dissemination of knowledge and skills with hands on support was implemented to ensure that government officers embraced the transformation.

Interested in collaborating with government agencies from other countries carrying out similar projects.

There is a clear road to sustainability since the government of Sri Lanka backs all these initiates through the Ministry of Education and ICTA.

This project can be replicated easily under similar circumstances if: proper engagement models are clearly defined and agreed upon in the private sector, disparity of ownership of devices is reduced, the stakeholders are prepared for the immediate transformation.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C2. Information and communication infrastructure

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 46

Contact Organization Name, Title of the project, Stakeholder type, Country

KaiOS Technologies

COVID-19 Awareness and Prevention content on KaiOS

Private Sector

Sri Lanka

Beneficiaries

Long term beneficiaries of this programme are the entire student population in Sri Lanka. Through this they find a medium to continue their studies without interruptions. From the positive reviews received it was apparent the students found this novel attempt useful and user-friendly.

Website

http://www.icta.lk & https://www.icta.lk/covid19-response/

Description

Multiple platforms used to offer online educational content. The most common was the transmission over broadcast media through television channels.

A TV program incorporated to state electronic media and freely available satellite TV networks, included following: live interactive teaching sessions, revision programs, content from National Institute of Education repository and Sri Lanka Rupavahini Corporation (National TV station) repository, Nenasa education TV content, eThaksalawa a Learning Management Solution (LMS)

Information and Communication Technology Agency of Sri Lanka (ICTA), introduced a video conferencing platform to assist the students through an innovative real time learning feature. ICTA also introduced a comprehensive collaboration tool to ensure continuous communication among education authorities and schools.

ICT Tools

-National TV Broadcasts: dedicated time slots in both state and private media channels to cover all syllabus requirements, supported by the Ministry of Education.

- -Online interactive web platform: eThaksalwa
- -SMART text book which has been developed with the consultation of ICTA by Education Publication department.

Challenges / Partnership / Sustainability / Replicability

Key challenges of this project were:

- -unavailability of online facilities (both connectivity and devices), this created an unequal environment for the students to continue their studies
- -unavailability of material readily available to be broadcasted, shared with students -cost of connectivity

Seeking partnership with government agencies from other countries engaged in education activities or any donors.

There is a clear road to sustainability since the government of Sri Lanka backs all these initiates through the Ministry of Education and ICTA.

All programs initiated can be replicated if: proper engagement models with the private sector are clearly documented and agreed upon.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 47

Contact Organization Name, Title of the project, Stakeholder type, Country

PJSC Rostelecom

No-touch high-precision IA-based thermal camera system

Private Sector

Russian Federation

Beneficiaries

Currently, beneficiaries are large and medium businesses, as well as governmental enterprises: construction industry, fuel and energy complex, food and processing industry, agriculture, healthcare, transportation, information and control system, communications, housing and utilities, population service industry, administrations, social facilities.

Website

https://www.company.rt.ru/en/about/info/ & https://teplovizor.rt.ru

Description

Rostelecom is Russia's core systemic enterprise with a headcount of over 200 thousand employees, offering telecommunications and digital services across entire Russia. In order to ensure maximum safety and protection of those employees they decided to equip their

offices with **thermal camera systems** to measure visitors' body temperature and reduce the risk of an infected visitor coming inside the office, given that high temperatures is the main sign of COVID-19.

ICT Tools

A stand-alone thermal camera unit enables instant on-site measurements of visitors' temperature and required servicing.

They have integrated thermal cameras with their video-surveillance and data intelligence platform, added access management systems, and connected cameras with a single monitoring center, thus creating a comprehensive solution that enables transition from local temperature measurements to centralized monitoring of the epidemiologic control at the regional and federal levels, and Big Data-based decision-making.

Challenges / Partnership / Sustainability / Replicability

High cost for social entities. Owing to further development of their platform, they will be able to support people detection and taking accurate body temperature measurements using low-cost thermal camera units, thus creating a revolutionary solution based on their software at an affordable price.

They welcome partners in telecommunication operations wishing to offer **thermal surveillance** solutions to their customers, developed by Rostelecom. Also, manufacturers of thermal surveillance equipment.

This project continues to develop and is planned for development in the next 5 years.

Action Lines

- AL C2. Information and communication infrastructure
- AL C7. ICT applications: benefits in all aspects of life E-health

SDG

- Goal 3: Ensure healthy lives and promote well-being for all
- Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Contact Organization Name, Title of the project, Stakeholder type, Country

Ministry of Transport and Communications

Ehteraz -Tracking and Monitoring Smart Platform

Government

Qatar

Beneficiaries

General public. If a case of coronavirus is discovered, the application enables the authorities to track the areas where an infected person was present - from the time of downloading the app until the moment of infection. The authorities can also identify all the persons or a large percentage of who have had contact with the infected. They will then receive messages through the app and have priority in testing.

Website

http://motc.gov.qa

Description

The app uses a GPS feature and Bluetooth to track and control COVID-19 cases. The profile of each user is linked to QR Code by automatically extracting the user's health information from official entities.

ICT Tools

The technology that Ehteraz was based on is the technology of **Analytics**. The latter would use certain inputs and then come up with a customized analysis. In our case here, the inputs were GPS locations. Analytics is a rising technology that is being used and developed more and more due to its efficiency. It is insightful in areas where decisions need to be taken, and in areas which record a lot of data and information.

Challenges / Partnership / Sustainability / Replicability

The main challenge was to persuade the residents of Qatar to download the application and use it on their smartphones. However, this was addressed by educating citizens on the importance of the application in maintaining their safety.

Currently partnering with Ehteraz in cooperation with the ministry of Public Health in Qatar. They would also like to have partners from the technology, marketing and any other sectors that will bring added value to the project.

This project was launched specifically to fight the Covid-19 crisis. However, it is considered to be a sustainable project where it can be used in the future for any similar pandemic.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Contact Organization Name, Title of the project, Stakeholder type, Country

Ministry of Transport and Communications

Al-Asas Security Robots

Government

Qatar

Beneficiaries

Our primary beneficiaries are the people of Qatar and the Qatari Officials. From one end we are ensuring the safety of our officials who should monitor the quarantine.

Website

http://motc.gov.qa

Description

Al-Asas security robots are robots that perform patrols in both residential and public areas of the country to educate the community on the importance of preventing gatherings. The goal of these robots is to spread awareness about Covid-19, and to detect violators of rules and regulations.

ICT Tools

The main technology adopted for this project, was the technology of **Robotics**. The field of robotics has greatly advanced with several new general technological achievements. One is the rise of big data, which offers more opportunity to build programming capability into robotic systems. Another is the use of new kinds of sensors and connected devices to monitor environmental aspects like temperature, air pressure, light, motion and more. Internationally, when a task is dangerous for a human to do, as is the case today in regards to Covid-19, the role of robots comes into place.

Challenges / Partnership / Sustainability / Replicability

The existing robotics technology challenges are mainly related to signal and functionality. It can be overcome by embedding third party technology to avoid the challenges.

The Partners needs will depend on the additional knowledge and technology in the same field of robotics, functionality and transmitting that can add to the existing project. They are keen with an open vision for the future.

The project is sustainable in the sense that it was already used previously and now, it's being used in different types of events with various tasks each time. This has been done by having standardization and guidelines with fixed procedures to accommodate the project requirements and needs.

If the same robots can be procured, then the project can be replicable.

Action Lines

AL C6. Enabling environment

AL C7. ICT applications: benefits in all aspects of life — E-environment

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Goal 11: Make cities inclusive, safe, resilient and sustainable

Contact Organization Name, Title of the project, Stakeholder type, Country

Ministry of Transport and Communications

Drones

Government

Qatar

Beneficiaries

People of Qatar by ensuring their safety and Qatari officials by assisting them in doing their job of monitoring the situation.

Website

http://motc.gov.qa

Description

The goal is to spread awareness related to Covid-19 and prevent gatherings to limit the spread of the virus. Drones were launched in several areas to spread awareness messages through speakers about the importance of aiding by the social distancing measures to limit the spread of the virus.

ICT Tools

Unmanned aerial vehicle technology covers everything from the aerodynamics of the drone, materials in the manufacture of the physical UAV, to the circuit boards, chip set and software, which are the brains of the drone. **Drones** are gaining popularity more and more as they eliminate the need for workers to physically access hostile environments, where factors such as height, wind, waves, weather, and radiation can lead to accidents or health issues.

Challenges / Partnership / Sustainability / Replicability

The existing drones technology challenges are related to signal and data streaming mainly. It can be overcome by embedding third party technology to avoid the challenges.

The Partners needs will depend on the additional knowledge and technology in the same field of drones, connectivity and transmitting that can add to the existing project. They are keen with an open vision for the future.

The project is sustainable in the sense that it was already used previously and now, it's being used in different types of events with various tasks each time. This has been done by having standardization and guidelines with fixed procedures to accommodate the project requirements and needs.

If you can produce the same drones, then the project is replicable.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

AL C7. ICT applications: benefits in all aspects of life — E-environment

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Goal 11: Make cities inclusive, safe, resilient and sustainable

Contact Organization Name, Title of the project, Stakeholder type, Country

Ministry of Transport and Communications

e-Court

Government

Qatar

Beneficiaries

People of Qatar; have access to justice from home during the Covid-19 Crisis.

Website

http://motc.gov.qa

Description

In light of the Covid-19 situation, Qatar leveraged e-Court to ensure accessibility to justice is maintained during the social distancing period. E-Court is a paperless e-case management solution that covers the full court process lifecycle from case filing to issuance of a judgement. It allows parties to file and access case papers and communications with the court and regulatory tribunal. e-court can be accessed from any portable electronic device to retrieve case files, attend virtual court hearings, and send or receive communications from anywhere in the world. Available in both English and Arabic.

ICT Tools

For this project to be implemented successfully Webinar and Appointment Tools were utilized to enable the virtual court hearings. Webinar tools are playing an immense role in the digital transformation of our nation, and especially during these times where personal interaction is risky. Also, clouds play a major role in this project, as they store data of uploads.

Challenges / Partnership / Sustainability / Replicability

The main challenges are: manage provision of budget approval, logistics of delivery for end users devices, applications and tools supply such as: laptops/notepads, networking and internet.

They are currently looking for partners in the remote communication area.

The project is sustainable, it focuses on meeting the needs of the present with compromising the ability of future generations to meet their needs. Their remote communication project includes:

communication via e-communication, conference telephone, video conference, the internet, to enable the office tasks remote for staff/judges/clerks who are not physically present in office to communicate with each other and litigated on a substantially simultaneous basis.

The project is replicable, as it is based on an interface where people can access these services.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Goal 16: Promote just, peaceful and inclusive societies

Contact Organization Name, Title of the project, Stakeholder type, Country

VegaNet

Wikaia mobile application and dashboard

Private Sector

Tunisia

Beneficiaries

Both the public authorities and citizens are considered to be beneficiaries of the solution. Wikaia allows for: keeping track of infected or potentially infected people, helping to ensure economic stability, feeding the Health Authority's database with important data regarding the contamination and the risk of contamination, taking the appropriate steps and measures to limit the spread of the virus.

Website

https://cutt.ly/uymmfqG & https://cutt.ly/3ynmfds

Description

In the context of national ICT initiatives advocated by both Tunisian Ministry of Communication Technologies and Digital Transformation and the Tunisian Ministry of Health, VegaNet has developed a mobile application named Wikaia (in Arabic Prevention) as part of a voluntary initiative.

Wikaia allows any professional who is running a business during this pandemic to check randomly if anyone should have been confined or is declared infected by Covid-19, as recorded in the government database to which Wikaia is linked. Wikaia is proven to be an important tool to control the spread of the virus and keep people aware of their obligations during this pandemic phase.

The check is made by scanning the ID document barcode and the tracking is made by using GPS information communicated through the application.

ICT Tools

Wikaia uses: OTP to secure the account, barcode scanner to make it easy for users to check people's ID documents without having access to any personal data, GPS data: each ID check will lead to recording the GPS data of the person to be able to make later the necessary data matching, big Data processing, mobile application and a web dashboard, webservices with the Government Database.

Challenges / Partnership / Sustainability / Replicability

The main challenges were: **Accessibility**, to the government health database. They overcame this through a joint initiative lead by the Ministry of Communication Technologies and Digital Transformation (MCTDT) and providing appropriate guarantees and technologies to keep all the collected information secure and confidential. **Usability**, they overcame this by developing a very user-friendly mobile application without any prior training. How to address the application to people who do not have smartphones. They overcame this by creating webservices linked to the health database and a USSD code.

Wikaia has the support of the (MCTDT) and the Tunisian Ministry of Health. Also one of the three Telecommunications operators in Tunisia to provide Wikaia freely to users.

This project is replicable to all countries as it addresses global issues related to the pandemic situation and relies on technologies that can be used at large-scale. It is also replicable at a national level, as Wikaia can address national security issues.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 11: Make cities inclusive, safe, resilient and sustainable

Contact Organization Name, Title of the project, Stakeholder type, Country

inABLE.org

Inclusive Design in Africa webinar series

Other

Kenya

Beneficiaries

The primary benefit of the webinar series are government representatives, educators, ICT sector, Fintech, city planners, business leaders and other African countries responsible for digital accessibility policy and implementation. The main benefit of the webinar series is to have a comprehensive discussion about the long-term benefits of digital inclusion, assistive technology and inclusive design by engaging global digital accessibility experts and leaders to share lesson learned and how to tips.

Website

https://inable.org/ & http://inclusiveafrica.org/webinar/april-30-2020

Description

As the global COVID19 pandemic continues, the lives of the global population have been dramatically altered, bringing into sharp focus just how much we rely on digital systems and products for essential services in our day to day existence. Sadly across Africa, many people with disabilities are experiencing a secondary source of isolation—digital isolation. To address this digital accessibility gap in Africa, inABLE quickly launched a monthly Inclusive Design in Africa webinar series that investigates how Africa can prepare to move forward in improving digital access for all people.

ICT Tools

inABLE utilized the Zoom video communications, a cloud platform for video and audio conferencing, chat, and webinars across mobile, desktop, and room systems. Facebook, Twitter and LinkedIn social channels are used to advertise the webinars to maximize attendance. The first-ever April 30th webinar included live sign language interpreters and a professional caption typist to ensure both live and recorded version of webinar were accessible. Also, the recording was uploaded to YouTube and linked to InclusiveAfrica.org webinar landing page.

Challenges / Partnership / Sustainability / Replicability

Ensuring complete **digital accessibility**, the Zoom webinar for every registered participant comes with challenges.

In terms of partnership, corporate support is needed to cover the costs of Zoom subscription, sign Interpreters, profession caption typist and other creative marketing costs. Google supported the April webinar.

With support from charitable and business partners, as well as digital accessibility champions, tech-innovators and advocates this webinar series is very sustainable. Post webinar recorded viewings can be scheduled at live or remote digital accessibility events.

As for replicability, inABLE is working on a production play book that could accelerate the speed of webinar set up and advertising to respond to relevant digital accessibility topics, innovations and advancements in Africa. The online global reach is limited by cultural or

technology barriers, including language (English) internet and computer assistive technology access at this time.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Contact Organization Name, Title of the project, Stakeholder type, Country

CybExer Technologies OÜ

MyCyberHygiene - Building Awareness, Confidence and Security in the Use of ICTs Private Sector

Estonia

Beneficiaries

MyCyberHygiene believes a modern economy requires workers with modern skills. Everyone should have the necessary skills to benefit fully from the Information Society. Therefore, capacity building and ICT literacy are essential. Current and future workers need to develop lifelong cognitive, technical, and socioemotional skills required of a well-educated worker in the 21st century. Workers also need to be capable of processing the ever-increasing information available on the internet.

Website

https://mycyberhygiene.com

Description

MyCyberHygiene builds awareness, confidence and security in the use of ICT. This project helps to counter COVID-19 amid increase in fraud, cybercrime and cyber attacks by raising cyber awareness and cyber hygiene training with a unique free online platform. This is a way of boosting the human element in cyber security at times of crisis. As coronavirus has forced offices and schools to close, the web remains our lifeline. As we are told to work from home and stay away from others, we all growingly rely on cyberspace in getting news, receiving education, in holding conferences, ordering food, or sending emails. Unfortunately, cybercriminals are aggressively making use of the crisis, as we 've seen phishing e-mails & ransomware, DDOS attacks, malware and data stealing apps applied. To help battle this, people need support with cyber security awareness training.

ICT Tools

CybExer offers cyber hygiene risk mapping course with an unique online platform for governments and enterprises. This platform combines e-learning courses for your employees with comprehensive risk assessment for the organization. For the individual user, the course goes through everyday situations in digital world, where ignorance or simple carelessness can bring about many problems

Challenges / Partnership / Sustainability / Replicability

The Cyber Hygiene e-Learning Course is based on a project first implemented by the Estonian and Latvian ministries of defence and the European Defence Agency as a direct response to sophisticated, targeted cyber-attacks against government entities in 2015-2016. The project is replicable and easily scalable as the it is based on CybExer's proprietary Cyber Hygiene e-Learning Course at CybExer's online digital e-learning and risk mapping platform. Following its success in the defence sector, the course has been adjusted for wider use in cooperation with the State Information Authority of Estonia since 2017.

Action Lines

AL C4. Capacity building

SDGs:

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunity

Contact Organization Name, Title of the project, Stakeholder type, Country

CMHS - ICRT

Media

Government

Cuba

Beneficiaries

All people get information from CMHS radial signal and from they live audio at website in Internet. This information have been shared on sites of the national press bodies, such is the case of Cubadebate, Naturaleza Secreta, Casa Editora Abril, company of Construction and Assembly of Granma, CMHW, Santa Mambisa, among others, as well as international sites such as: Rodexo from Spain and Walter Lippmann from the United States.

Website

http://www.radiocaibarien.icrt.cu

Description

Since the first positive cases of COVID-19 were diagnosed in Cuba (March 2020), the Radio Caibarien website started a series of publications using in particular journalistic genres to provide a real information for people about the COVID-19.

ICT Tools

The information provided by the Radio Caibarien website always use all accompanied by ICT linked to the hypermedia journalism and it use in the articles texts, images, audio, etc; all to provide a real information about the COVID-19 in Cuba and in the world.

Challenges / Partnership / Sustainability / Replicability

The principal challenges encountered is work from home, finding day by day the problems with internet connection and work with others journalist to provide information not only for Caibarien but for all Cuba. In essential, media information. We would like to get and set information about the COVID-19, media, science, ICT, all information certificated to provided a real information to our people. CMHS believe they project replica table, because one just needs to copy the information provided from this website for set information for the people, always talking about the source, in this case, about our website.

Action Lines

AL C9. Media | AL C11. International and regional cooperation

SDGs

Goal 9 | Goal 17

Contact Organization Name, Title of the project, Stakeholder type, Country

Zimba Women

Zimba Mart

Other

Uganda

Beneficiaries

Zimba Mart focuses specifically on women. There is no marketplace, physical or online that is specifically targeted to women merchants, yet women form the largest percentage of small scale suppliers of home, agricultural produce and clothing apparel.

Website

https://www.zimbamart.com/ & https://www.zimbawomen.org/

Description

Zimba Women, have introduced the SME E-Commerce and Digitization Resilience Programme through the Zimba Mart e-commerce platform to respond to this challenge by (1) Identifying women-owned or women-led SMEs which have fundamentally sound value propositions but have been severely impacted by COVID-19; (2) Providing dedicated COVID-19 impact analysis and contingency planning to these SMEs through offering business training and digital literacy training via our online platforms; (3) On-boarding SMEs onto the women-owned, women-tailored e-commerce platform to both adjust to the market dynamics created by COVID-19 lock down actions and begin to take advantage of the latent market opportunities offered by e-commerce in Sub-Saharan Africa; and (4) Provide bespoke follow-on support to the women-owners/leaders to enable them to protect their enterprises and take full advantage of e-commerce opportunities. All support is also provided remotely when necessary.

ICT Tools

We have adopted the use of e-commerce digital tools which have presented numerous opportunities. In general, and during lock down, SMEs on-boarded on the Zimba Mart platform have benefited from adopting an e-commerce approach in a number of ways, including lower transaction costs; reduction in advertising and promotion costs; rapid communication between buyers and sellers; ability to reach new customers; shorter supply chains; and eliminating physical limitations. Due to this; we have moved most of our women trainings online to enable the on boarded SMEs learn how e-commerce is enabling their business growth and to encourage them to update their social and business pages to take advantage of the increased traffic to their sites due to the Zimba mart. The Zimba mart has also given us more visibility as we have customers from not only Kampala our main office location, Eastern and Western Uganda but also as far as the US from customers making food orders for their families in Uganda.

Challenges / Partnership / Sustainability / Replicability

Zimba Women is currently working with over 10000 women-owned businesses and women in STEM in Uganda, Kenya, Nigeria, South Africa and other African countries. These women have received business training and digital literacy training through our technology platforms.

Action Lines

| AL C7. ICT applications — E-business and E-employment |

SDGs

Goal 5 | Goal 8

Contact Organization Name, Title of the project, Stakeholder type, Country

#Covid19TechChallenge

D&D International - Digital Democracy

Civil Society

Peru

Beneficiaries

The target beneficiaries of this project is Peruvians. Most proposals were designed for a national scope, even though participants came from 9 regions all over Peru: Ancash, Arequipa, Cajamarca, Cusco, Huanuco, Junín, La Libertad, Lima y Puno. That was a great achievement.

Website

https://www.democraciadigital.pe

Description

#Covid19TechChallenge promoted the creation of digital tools that help national authorities and citizens to face Covid-19 in Peru. Participants registered Apps or online initiatives of various kinds (web, blogs or social networks) that seek to attend, without profit, the current health crisis in Peru as a result of the Covid-19.

ICT Tools

By April 5th we received 70 digital proposals from 9 regions from Peru. Participants registered Apps or online initiatives of various kinds (web, blogs or social networks) that seek to attend, without profit, the current health crisis in Peru as a result of the Covid-19. Most of proposals were designed for a national scope.

Challenges / Partnership / Sustainability / Replicability

At the beginning, the main challenge was to disseminate the Call for participation to #Covid19TechChallenge all over the country, using mainly our institutional online platforms and social media. At the end, the main challenge was related to the support given by the Digital Government Secretary (SEGDI) of the Presidency of the Council of Ministers (PCM) to the digital proposals that won the #Covid19TechChallenge.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C3. Access to information and knowledge |

SDGs:

Goal 3 | Goal 4

Contact Organization Name, Title of the project, Stakeholder type, Country

Track querying APP

China Telecom

Other

China

Beneficiaries

There are beneficiaries for both individuals and the society. Through risk prediction and epidemic forecast, individuals get to know the risk region and probability as well as their own status, which largely helped with reopening the economies, getting people back to work, and continuing to protect the country, which benefit both the economy and the quality of life through open and transparent data.

Website

http://www.chinatelecom.com.cn/

Description

To help reopening the economies, getting people back to work, and continuing to protect the country, China Telecom has launched a product, namely track querying application, to provide the individuals subscribers with five major functions: itinerary query, contact query, epidemic forecast, return to city query and regional risk query. The itinerary query function allows queries to all cities or countries stayed or visited within the last 14 days. The contact query function checks close contact risks with infected person. The epidemic forecast function predicts the cumulative number of infected people nationwide. The return to city query function checks the number of people who have left their residence. The regional risk function calculates the close contact risk regarding the current location. Interfaces to other stakeholders are also provided.

ICT Tools

Big data and open source architecture techniques are applied, through components of zookeeper, yarn, kafka, spark, more than 20 open source components have been deployed in the category of storage, computing, and management. The system provides platforms with capability of cross-domain data correlation based on network data and location data. The SIR model is introduced to analyze the development trend of the epidemic. In the SIR model, seven factors are used: average recovery time, transmission rate, number of people cured, number of deaths, average incubation time, population mobility, and the strength of government prevention and control mechanisms. The spatial clustering analysis algorithm, DBSCAN is used to quickly cluster to pin down key areas and generate risk heat map.

Challenges / Partnership / Sustainability / Replicability

This project is sustainable, the project provides information of risk for individuals during pandemic or crisis, although COVID-19 is not a commonly occurred situation, regional and small-scale contagion emerges ever now and then. It could be applied to daily life as a common tool as well as further utilized as certificate for specific tasks.

Action Lines

AL C2. | AL C5

SDGs

Goal 3 | Goal 8

Contact Organization Name, Title of the project, Stakeholder type, Country

"Call for Articles on the Impact of COVID-19"

Forum for African Women Educationalists - Zimbabwe Chapter

Civil Society

Zimbabwe

Beneficiaries

Primary beneficiaries are FAWEZI beneficiaries, alumni, school children, members, and individuals who follow our sites. FAWEZI is using Facebook, Twitter, blog, and WhatsApp as an effort to reach the different groups. Most of the adolescents have mobile phones and can access Whatsapp. These are the people whose stories we are trying to tell. On the other side, beneficiaries include policymakers, international donors, partners, and stakeholders. These are the people we want to influence with the stories.

Website

http://fawezi.org

Description

The Forum for African Women Educationalists - Zimbabwe Chapter (FAWEZI) has begun seeking out and sharing "statements, poems, and stories" on the impact of COVID-19. We are interested in promoting stories and narratives from marginalized and often un-heard populations such as Zimbabwean women, students, and residents of rural areas. ICT is essential both to the collection, and dissemination of these stories. In addition, these perspectives are from everyday Zimbabwean citizens - not politicians, not NGO workers, not foreign humanitarian workers, not corporate interests (aka all the people who typically get a seat at the 'stakeholders' table) -therefore they are essential to promote so that all the stakeholders who do have power know the struggles and perspectives on the ground.

ICT Tools

ICT has been essential to this initiative in three ways. First, crowd platforms such as WhatsApp have been our main means of collecting stories from across the country, from urban and rural areas alike. Second, we have been using social media such as Facebook, Twitter, and Zoom to share these stories with our international following, made up of donors, supporters, beneficiaries, and partners. Finally, one of the main topics of these stories has been the inaccessibility of ICT to poor and rural communities, and the fear that ICT, which was beginning to bridge opportunity gaps before the pandemic, is now making them worse than ever, with only those with access able to continue with their education and livelihoods.

Challenges / Partnership / Sustainability / Replicability

Our focus as an organisation is to ensure all children access education. Regarding this project, in particular, one of the most common topics - the inaccessibility of ICT tools - is also one of our challenges on the front end since many people we would like to reach to hear their stories cannot access WhatsApp, the internet, or any of our SMS lists. This project is replicable as other organisation can also use ICT to spread messages on the COVID-19. Depending on the target audience some can also use text messages, online calls etc.

Action Lines

AL C3. | AL C10. |

SDGs		
Goal 4	Goal 10:	

Contact Organization Name, Title of the project, Stakeholder type, Country

Muse app

SABAQ

Private Sector

Pakistan

Beneficiaries

Muse's main beneficiaries are primary grade children in Pakistan, who are out of school at present due to the school closures in the face of COVID-19. These children primarily belong to low to mid-income schools that cannot offer online classes to students. As a result, students are missing out on essential studies and falling behind, exacerbating the existing learning gap.

Website

http://sabaq.edu.pk/ & http://muselessons.com/

Description

According to the UNESCO, school closures in Pakistan have led to disruptions in education for approximately 46 m students, including 17 m primary grade learners. In this grave situation, SABAQ has been actively working with the government to ensure the continuity of learning. In light of this, we have made our K-5 app, Muse free for all students to use on the Google Play Store. We have also partnered with the federal government to provide our e-learning content for free to be aired on TeleTaleem, the national TV channel started by the Federal Government to broadcast K-12 educational content

ICT Tools

Muse, SABAQ's flagship product, is an Android-based learning app for the primary grades with over 1,500 digital resources for Math, Science, English, and Urdu. Designed to make learning fun and engaging, Muse has animated story-based video lessons, e-books, interactive quizzes, and learning games. Our content is tailored to the local context and available in three languages: English Urdu, and Sindhi. During the COVID scenario, the use of EdTech is limited only to students in high tier private schools that are conducting online classes. However, students in lower and mid-tier private schools and public schools do not have the necessary resources to deliver eLearning. This is where Muse comes in. Our app is without cost for the COVID crisis and will be offered at a low cost- subscription-based model afterwards, ensuring all children can benefit from e-learning.

Challenges / Partnership / Sustainability / Replicability

One of the challenges that Muse has been facing is how to raise awareness about the use of the app amongst parents and children. To reach users on a wide scale, there needs to be communication to disseminate the message that the Muse app is helpful for children and the use of it to parents since the devices the children will access Muse on are their parents' devices. SABAQ already has a partnership for implementation idea with the Sindh government. It also has the necessary technical expertise in-house to develop the solutions.

Action Lines

| AL C7. — E-learning | AL C8.

SDGs

Goal 4

Contact Organization Name, Title of the project, Stakeholder type, Country

Online Gaming and COVID 19: Alarming increase in Cyber threats against Children Ada Lovelace Software Pvt Ltd

Private Sector

India

Beneficiaries

Online gaming Companies can help protect children parental controls, blocking and reporting annoying user, moderators to monitor online chat and help young gamers safe online. Policy makers, Public and private sector partners, Schools, Parents must take steps to address this issue.

Website

https://adalovelacesoftware.com/

Description

Children are often unsupervised when playing online games increasing predator ability to start a relationship with the child and gain the trust. An online game gives the predator and child a shared interest making a child more comfortable about talking to the stranger. A predator can use this relation to bring the child for a sexual encounter, ask the child to communicate by private chat, instant messaging, Social media apps and exchange of sexual content, even live stream sexual acts as well.

ICT Tools

Online Gaming and COVID monitors social Networks such as

Facebook, Twitter, Myspace. Instant Messaging such as IM, MSN and Chatrooms such as Skype, Yahoo, MIRC.

Challenges / Partnership / Sustainability / Replicability

In Indian subcontinent there is a 300% rise in Cyber Crimes in last two years. Most of the Cyber Crimes against Children have Digital Origins. One of the prominent reason is children's are exposed to technology & the world much before they are mature to understand and handle issues. It is the duty and responsibility of all the stake holders mentioned to act in all capacity to keep children safe online. The virus knows no borders and online perpetrators respect no borders. Therefore, we need to work together collectively and collaboratively across borders for safety and security of the children. This can be done through Child online protection. Child e-safety, Child trafficking protection.

Action Lines

AL C2. Information and communication infrastructure | AL C10. Ethical dimensions of the Information Society

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable | Goal 16: Promote just, peaceful and inclusive societies

Contact Organization Name, Title of the project, Stakeholder type, Country

The reBIRTH on the internet (REviver na Rede)

REviver na Rede

Academia

Portugal

Beneficiaries

The reBIRTH on the internet project (REviver na Rede) is intended to residents in the Madeira Region, Portugal, namely unemployed people. The initiatives we have developed in the context of the coronavirus pandemic (COVID-19) are also intended to all those who were employed, but due to the measures taken by the government to control the pandemic, were forced to suspend their labour activities and were isolated at home in confinement.

Website

http://revivernarede.blogspot.pt

Description

The reBIRTH on the internet project (REviver na Rede) is an initiative to support online social networks to strengthen new forms of active job search and promote employability, social integration, socialization, and social and digital inclusion in the Madeira Region, Portugal. The aim is to help unemployed adults to take advantage of social networks (e.g. Facebook) to improve their employability. These global social instruments can respond to these needs and contribute to the development of local communities. Currently, the various online spaces involve more than 50,000 people, in a region with less than 255,000 inhabitants. In view of the various implications of the coronavirus pandemic (COVID-19), from the social level of individuals to their professional and economic situation, the project has mobilized a number of initiatives to help the relief of social isolation, improve the good use of social networks, strengthen media literacy and digital skills, and promote job search through social networks. These initiatives have a strong pedagogical, social and solidarity basis, relying on voluntary work, in a spirit of social entrepreneurship.

ICT Tools

Although our project privileges Facebook as a practical field of work, including for applied research studies, when we started to address the negative effects caused by the coronavirus pandemic (COVID-19) we decided to expand the presence to other social networks, such as LinkedIn, Twitter and Instagram.

Challenges / Partnership / Sustainability / Replicability

The project has remained sustainable thanks to a strong spirit of social entrepreneurship combined with volunteering, a dynamism that has become a challenge to manage, but has so far ensured the survival of the project. On the other hand, the use of free tools, services and software, as well as the use of open educational resources, contributed to reduce costs.

Thus, the project has maintained its financial sustainability in its application to the community in which it intends to intervene. However, with the crisis caused by the coronavirus (COVID-19), particularly at the economic and social level, the project needs to invest in its structure, either in technical or human resources, to meet the large increased request

Action Lines

AL C7. ICT applications: — E-learning AL C7. ICT applications — E-employment		
SDGs:		
Goal 4: Goal 8:		

Contact Organization Name, Title of the project, Stakeholder type, Country

A voice-based community media platform to support rural and low-income communities in dealing with the fallout from COVID-19

Gram Vaani Community Media (Onion Dev Technologies)

Other

India

Beneficiaries

Our primary beneficiaries are rural and low income communities, those with no internet connectivity and industrial laborers in urban cities.

Website

https://gramvaani.org/?p=3631

Description

Our technology solution empowers hard-to-reach communities (low literacy, rural, without internet) for combating COVID-19 through Awareness building, countering misinformation, seeking community feedback, self-assessment survey and guidance and grievance redressal. Launched on March 23rd, 2020 it has partnered with 27+organisations and received 600k+ calls from 200k+callers, 8k+ user stories. Our solution is fully operational and is being used in 80+ districts in 10 states and through few country-wide programs too. Operated on basic phones, Mobile Vaani (a community media platform) provides not only an option for communities to access information but also contribute towards reporting the ground situation, this is useful for policy makers. MV phone application accessed via smart phones provides an easy option to forward audios to those without internet. We've build more than 150 audio capsules based on technical advisories for issues such as building empathy and understanding among users; keeping children and parents engaged at home during lockdown.

ICT Tools

We are running COVID-19 related services on five state specific COVID-19 IVRS (missed-call and toll-free number) helping access of authenticated information, seeking community feedback, identifying high risk cases and also facilitating grievance redressal amongst the rural communities. COVID related services are also running in our Mobile Vaani clubs present across 10+states in the country and has accumulated 2M+ users, along with being a rich source of learning and innovation in terms of novel processes for content development and field operations, to embed technology based interventions in the day to day life of communities.

Challenges / Partnership / Sustainability / Replicability

Response to the COVID-19 service has been very good in partnership with other organisations including state governments, in geographies where we are working. We are also getting calls from other geographies where our technology can be applied and are exploring partnership with new organizations for a structured response in these areas. Partnership with field response partners in wider geographies will help in local response and will lead to larger impact. A wider publicity of the IVR phone number will also increase uptake of the service across

Action Lines

AL C3. | AL C9.

SDGs

|Goal 8 |Goal 11

Contact Organization Name, Title of the project, Stakeholder type, Country

Digital Mobile Key

AMA - Administrative Modernisation Agency

Government

Portugal

Beneficiaries

The Digital Mobile Key enables both public and private entities to provide a better and simpler authentication method, while decreasing communication problems, lowering operations and development costs and diminishing the human resources needed. This allows them to make available a variety of digital services that they could not previously provide, such as the renewal of the Identity Card, the opening of a bank account, the changing home address, or the request of a medical ePrescription, for instance.

Website

https://www.ama.gov.pt/

Description

The Digital Mobile Key (DMK) is the national mobile eID solution, provided by the Administrative Modernisation Agency (AMA), which serves to authenticate national and foreign citizens when accessing online services. Besides the citizen's phone, whose number is registered during the enrolment process, authentication requires a userdefined PIN to receive a one-time password, which is then validated by the authentication services. There's also a mobile app that allows citizens to receive the code through a push notification. This way, citizens can access digital services anywhere and anytime, in a secure, free-of-charge and user-friendly way. With the outbreak of COVID-19 and as Portugal entered a state of emergency, developments were made to ensure any DMK remains active until June 30, regardless of the expiration date on the physical ID card, to avoid unnecessary travels to onsite services.

ICT Tools

The Digital Mobile Key is implemented over the National Identity Provider and receives SAML requests from external Portal and Systems. This solution is supported in a SQL Server 2008 R2 database and a .NET application that provides services to external components. Digital Mobile Key also uses the national SMS Gateway supported in the national interoperability framework as an external component that is invoked by the application to send SMS.

Challenges / Partnership / Sustainability / Replicability

The Digital Mobile Key source code can be reused by public or private organizations under the EUPL license, and the solution is based on the open standard SAML specification. There are, however, some requirements for full replicability such as authentic sources of information, to provide the required attributes (personal data), an interoperability platform that ensures data exchange between entities (we reinforce that this is only after the citizen consents to it) and an SMS gateway to send the OTP for every authentication/signature.

Action Lines

AL C7. ICT applications: — E-government | AL C7. ICT applications: — E-business

SDGs

Goal 16

Contact Organization Name, Title of the project, Stakeholder type, Country

GAP - SMS Gateway for the Public Administration

AMA - Administrative Modernisation Agency

Government

Portugal

Beneficiaries

The main beneficiaries are the public entities that use a reliable, inexpensive service and, of course, the citizens as end-users.

Website

https://www.ama.gov.pt/

Description

Although not specifically created to address the COVID-19 outbreak, the pandemic has highlighted the importance of solutions such as the Public Administration's SMS Gateway (GAP), a central technology platform that enables mobile messaging (SMS and MMS) between Portuguese public entities from different sectors and citizens.

It was created with the focus of interlinking and streamlining communications between the Public Administration and citizens, enabling informational services (such as alerts and notifications) and transactional ones. Managed by the Administrative Modernization Agency (AMA), the GAP is available for public entities that wish to reuse it for their communication services with citizens, as it is the case of the Ministries of Health, Internal Affairs, and Transportation, among others.

ICT Tools

In technological terms, the Portuguese SMS Gateway – GAP - presents a modular, layered service-oriented architecture distributed across application servers and database servers that support services. The services are designed according to a service-oriented architecture through the provision of SOAP and REST web services. AMA as a provider through VPN or dedicated communications circuits ensures secure communication channels, provides access to the platform and guarantees the operability and reuse of communication software with national mobile network operators, according to their SLA contractors. The connection between the SMS Gateway and the "consumer entities" information system is based on web services developed to that effect. The terms of usage of the Platform are established in the protocols previously signed with AMA. The provision of public services through a simple system (SMS) that is deep-rooted in the Portuguese culture is quite effective and simultaneously addresses the problem of low digital literacy that Portugal still fights. From ePrescriptions to civil security warnings during this pandemic, citizens can count on the government to always be at hand.

Challenges / Partnership / Sustainability / Replicability

The main challenge encountered was assuring the service was financially sustainable, while still offering economic savings to the public administrations that used it. For this end, we needed to bring as many entities as possible to use the GAP, and we've done so by offering the service free-of-charge at the beginning (supported by AMA's budget) until there were enough entities using the GAP the costs truly became competitive.

Action Lines

AL C7. ICT applications: — E-government | AL C7. ICT applications: — E-health

SDGs

ICT Case Repository: The Coronavirus Response: ZERO DRAFT	

Goal 16:

Contact Organization Name, Title of the project, Stakeholder type, Country

Coronavirus and its Impact on the Sustainable Development Goals Outreach Social Care Project- OSCAR

Civil Society

South Africa

Beneficiaries

The beneficiaries of this project are girls, women and older people.

Website

https://www.facebook.com/OutreachSocialCareProjectOscar/

Description

Outreach Social Care Project is a grass-roots non-profit organization based in South Africa and Democratic Republic of Congo since 2008, working with disadvantaged and underprivileged communities in townships and rural areas. The organization has undertaken the initiative that delivered to and supported people affected and infected by COVID- 19, through the provision of prevention, awareness, livelihood as well the psychosocial support. South Africa like the rest of the world is gripped by the coronavirus pandemic. Social distancing, promulgated as the most effective way to curb the spread of infection, is impractical for rural and informal settlements in South Africa, where people live in close-knit communities both physically and socially and lack basic housing, water and sanitation facilities. Many models point to the burden of disease being highest amongst poor people because of higher incidences of TB and HIV and weak and overburdened health services.

ICT Tools

Outreach Social Care Project has addressed immediate needs in the townships and rural areas in KwaZulu Natal, South Africa by collecting data and utilizing innovative approaches with the current technology available: mobile technology, SMS, WhatsApp, internet, etc.

Challenges / Partnership / Sustainability / Replicability

The health, safety and well-being of all people in South Africa and Democratic Republic of Congo, is and will remain a top priority for all. While we continue to advocate for equal opportunities, justice for all, and access to livelihoods and speaking out against all forms of gender-based violence, United Nations Global Sustainable Development Goals and COVID- 19, let's not forget to look out for the women and girls in our circle of influence. Outreach Social Care Project will be unable to contain the COVID- 19 pandemic and manage the cases, and without external support, health infrastructure is likely to collapse, and many lives lost. The virus is rapidly spreading and very complicated to manage as severe cases require isolation and intensive care unit (ICU) services. High prevalence of comorbidities that weaken immune systems like HIV and AIDS, maternal illness and TB are likely to increase risk of infection.

Action Lines

AL C4. Capacity building AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

|Goal 3: |Goal 5:

Contact Organization Name, Title of the project, Stakeholder type, Country

Financial inclusion ecosystems with Digital neighborhood Banking Agents

Proexponente

Private Sector

Ecuador

Beneficiaries

The beneficiaries of this project are people in main cities or towns who cannot access to banking services.

Website

http://idpayer.com/

Description

We help banks and financial cooperatives to process all their operations from each neighborhood business thanks to our biometric devices that allow people to make any payment or transaction with facial biometric validation without contact and with the highest standards of security for citizens.

ICT Tools

We us biometrics as a contactless transaction system beating a card or a cell phone without the need for people to use the internet. Low-cost biometric devices that increase the reach of banks and financial cooperatives, reducing investment in ATMs or physical agencies. We work with Api integration with the Banking Systems.

Challenges / Partnership / Sustainability / Replicability

People who accumulate in bank agencies and fail to use the new technologies because they do not have technological education, access to the internet or they do not have enough education. That is why we chose this project as a collaborative economy alternative so the banking services can be in your own neighbourhood and with biometrics as an inclusive and protective method against the pandemic. This project partners with banks and financial cooperatives and can be replicated in all Latin-American countries in the first stage. The project has a B2B business model for banks and cooperatives that can expand their coverage at low cost, reducing the investment of hhitraditional channels such as ATMs and physical agencies. In addition, the project seeks beneficiaries for 75% of Latin American citizens who have not yet managed to access quality banking services and during the pandemic have been more excluded.

Action Lines

AL C3. Access to information and knowledge | AL C4. Capacity building |

SDGs

Goal 1: End poverty in all its forms everywhere | Goal 3: Ensure healthy lives and promote well-being for all |

Contact Organization Name, Title of the project, Stakeholder type, Country

HUMANITY

GGA,USA,global ambassador,peace and hr,india,SRC

Civil Society

Egypt

Beneficiaries

We are looking forward in making the decision to "move to the cloud of things" technology and it is just a first step and then continue working together in Designing for ICT. We take this opportunity to thank all the Parties. For their efforts, we are looking forward in making. The right decision to "move to the Clout/cloud of everything technology and it is just a first step and then continue working together in Designing. For Cloud of every things global implementation and preparing. Success strategies to help Africa and the entire world for the imperative. "Universal adoption of clout tech in fighting coronavirus spreading in the entire world.

Website

https://www.slideshare.net/assemam or https://www.globalgoodwillambassadors.org/

Description

Universal Adoption of Clout Tech in Fighting Coronavirus Spreading in the Entire World

ICT Tools

This project uses CLOUT(5G,IOT,AI,CLOUD). The internet changed our lives dramatically in the intervening years predating an era of Clout/Cloud of Everything. We can continue to expect more exciting changes. Announcing the launch of its newest technology, Clout/Cloud of Everything, changes the concept of how we use things; with more intelligence, more efficiently and greater accessibility for all mankind. Developing countries in Africa must embrace and promote the spirit of service through the Cloud of Everything efforts in reaching/meeting the 17th and 169th SDG Goals. True success comes when preparation meets the right opportunity by helping others become successful. This is the case for universal adoption of Clout/ Cloud of everything technology in Africa and the entire world. As COVID-19 continues to spread widely and claim lives, Clout technology is helping halt the COVID-19 outbreak. Modern technologies used by Developed countries in CLOUT to combat the Corona virus 19. Clout include advanced tech like IoT, AI, CLOUD, 5G, 3D.

Challenges / Partnership / Sustainability / Replicability

Building a better connected world, in technological, Industrial, business, life style Revolution, Our Better Connected World is a smart world; Smart connectivity between people, between people and things, and between things and other things, is propelling our world on a new journey. The cloud of every things technology, helping elderly and handicapped people and holds the promise of fixing the millennium-old human problems of poverty, disease, violence, and poor leadership in Africa and the entire world The knowledge that we got from cot tech could change the life of a patient, or change the world, Everything Changes with the Internet of Everything tech. "If cloud of things opportunity does not knock, build a door for it" the only impossible cloud of things journey is the one you never begin.

Action Lines

AL C1. | AL C2.

SDGs	
Goal 9: Goal 11:	

Contact Organization Name, Title of the project, Stakeholder type, Country

MonitorFCS App and COVID-19MX App

América Móvil

Private Sector

Mexico

Beneficiaries

The main beneficiaries in the first case are our co-workers and their families, while in the second one is the general population. By providing tools that allow them to monitor their health on a daily basis, we contribute to avoid saturation of the health systems, and we offer peace of mind to people who does not have the disease or, where appropriate, we provide the necessary information so that they can get medical assistance.

Website

http://www.americamovil.com

Description

Since the start of the pandemic, in América Móvil we have been concerned about the health of our co-workers, therefore, as part of the company's actions to deal with COVID-19, in collaboration with the Carlos Slim Foundation, we developed the MonitorFCS App, in order that our co-workers and their families can carry out daily monitoring of their health status and, in case of presenting symptoms related to COVID, receive the necessary attention and information. Moreover, through our subsidiary Telcel in Mexico and in collaboration with two banking institutions, we collaborated in the development of the COVID-19MX App, to help the population to generate a personal and family self-diagnosis.

ICT Tools

With the Apps developed by América Móvil -in collaboration with other institutions- we help people to get a health diagnosis facilitating medical attention if required. By having a previous diagnosis, the Apps also allow doctors to take care of the patient in a faster and more accurate way.

Challenges / Partnership / Sustainability / Replicability

The biggest challenge is that people use the tool, as well as to generate an awareness of the importance of monitoring their health on a daily basis, since this is the only way in which a medical authority can have a complete picture of the person's state of health. The main way to address this, is through communications and outreach efforts, to build confidence in the adoption of these easy-to-use tools that become great allies in stopping the spread of COVID. The MonitorFCS App, collaborates with the Carlos Slim Foundation, whose experts are responsible for the support, monitoring and full operation of the application. In the case of the COVID-19MX APP, the developers are the technical teams of the BBVA Mexico and Santander Mexico banking institutions, the administration of the application corresponds to the health authorities, while for Telcel users, there is no cost of navigation or in the messages (SMS) used by the App.

Action Lines

AL C7. ICT applications: — E-government | AL C7. ICT applications: — E-health

SDGs

Goal 3: |Goal 10: |

Contact Organization Name, Title of the project, Stakeholder type, Country

eKadaiBrunei.bn

The Authority for Info-communications and Technology Industry of Brunei Darussalam (AITI)

Government

Brunei Darussalam

Beneficiaries

The primary beneficiaries are the eCommerce vendors. Since the launch of eKadaiBrunei, the total no. of visitors is 15836 since 5th April. We have received a total of 355 enquiries from MSMEs where 65% are from the food and beverage MSMEs.

Website

https://www.aiti.gov.bn & http://www.ekadaibrunei.bn

Description

eKadaiBrunei.Bn is a directory website that connects the general public and businesses to local eCommerce Platform, eCommerce Vendors, logistic and delivery services. The website serves as a business matching platform between local businesses in adopting eCommerce activities by the Micro, Small and Medium enterprise (MSMEs) especially home base businesses. At the moment there are 14 eCommerce Platforms, 6 eCommerce Vendors and 18 logistic and delivery services registered to the platform since the date of initiation, 1 April 2020. eKadaiBrunei.bn enables MSMEs to select the any available local eCommerce platforms to sell their products or services in accordance to their preference. In relation to the COVID-19 Situation, the website provides awareness to enables general public for online purchasing of their daily need items such as food, groceries, clothing's, home items and many more without any social interaction. This is to provide the general public to experience the ease of eCommerce tractions in daily activities especially to those individual who are in the quarantine period. Meanwhile for businesses, the website provides an alternative solution for businesses to gain more customer and sell their products via online.

ICT Tools

The website uses a website as the ICT tools. The website is created via wix.com. The website comprises of list of local eCommerce Platform providers, eCommerce Vendors, logistic and delivery services including the product from the Village Legislative Councils. The website also includes a contact us tab, it enables the project owners to identify new local ecommerve platform/vendors and also provides a business matching sessions between the MSMEs and the eCommerce Platforms.

Challenges / Partnership / Sustainability / Replicability

The main challenges faced during the project implementation is the how to convince the small businesses especially businesses who are used to traditional selling methods.

Action Lines

| AL C6. | AL C7. — E-business

SDGs

Goal 8

Contact Organization Name, Title of the project, Stakeholder type, Country

On-cloud hospital

China Telecom

Other

China

Beneficiaries

The primary beneficiaries are the hospitals are the patients. The main benefits are as follows: First, IT maintenance in local is reduced, the only work required are to dock and test in the given environment. Second, the deployment of all healthcare applications are accelerated. Third, the solution could be replicated to other hospitals to allow sharing of business and information systems among hospitals.

Website

http://www.chinatelecom.com.cn/

Description

To accelerate the construction of dedicated hospitals for COVID-19, China Telecom launched the on-cloud hospital solution. All medical systems and information systems are deployed on cloud, to save the time consumed on the deployment and installation of required IT equipment. provide computing and storage capabilities for the deployment of core systems such as hospital information systems and image storage transmission systems.

The all-on-could solution accommodates all major business and information system on cloud, including the hospital information system (HIS), laboratory information system (LIS), and picture archiving and communication systems (PACS), as well as the operation management, resource management, knowledge management, and customer service, such as queuing system, and all databases.

ICT Tools

For one hospital, 7 dedicated cloud servers are deployed to support the services and applications, the same type of services are allocated in different underlying servers. A pair of host and backup databases are designed, data are backed up timely to make sure the availability and reliability.

Challenges / Partnership / Sustainability / Replicability

The major challenge of this project are the security and privacy issue regarding the healthy data. The project has a multi-level security mechanism, which prevents user mis operation and dirty data, and ensures data integrity. Security mechanisms are designed for database storage, retrieval, extraction, release, and management at all levels and angles. The project adopts international standard encryption algorithm to encrypt the transmission of sensitive data on the public network to ensure the security of sensitive data. The project has an authority management function, preventing illegal user access, deletion, modification or disclosure of data .

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Contact Organization Name, Title of the project, Stakeholder type, Country

"Permission to leave the house" e-services

National Agency of Information Society

Government

Albania

Beneficiaries

The beneficiaries are citizens, businesses and public administration employees. In terms of impact, this digital revolution of public services in Albania translates into a reduction of service acquiring costs, facilitation of bureaucratic procedures, reduction of time to obtain services, but also enhancement of transparency and improvement of service provision quality. Citizens and businesses are able to apply 24/7 from their homes or offices, which was crucial especially during the pandemic situation, to avoid gathering in state counters.

Website

https://akshi.gov.al/ & https://e-albania.al/

Description

All citizens leaving the house for: 1. Grocery shopping, pharmacies or urgent matters; 2. Working reasons; 3. Health-related reasons; 4. Business-related reasons; are required to obtain a special permission from the e-Albania portal. Interoperability ensures that: The online form with personal vehicle data already prefilled is provided to the citizens who own a vehicle and have it registered under their name. After the real-time validation, the permission is sent immediately electronically to the citizen via email/SMS and the QR code ensures the authenticity of the permission when showed to the police officers. An esealed attestation proving that a particular business is allowed to operate during the emergency situation, is also available for download on the e-Albania portal.

ICT Tools

Albania has long embarked on the public services transformation process and we strongly believe in changing the mind-set of the citizens regarding this inevitable new form of communication with state institutions. e-Albania acts as a front-end point for government institutions to deliver their services, thus operating as a one stop single access point to citizens 24/7. The portal, which currently provides more than 620 e-services, is connected to the Government Interoperability Platform that is the underlying and core architecture allowing the interaction between 53 electronic systems of public institutions.

Challenges / Partnership / Sustainability / Replicability

The main challenge is digital literacy in certain age groups. However, we are trying to address this issue by training the civic employees working in counters to assist citizens who will come at the counters, to apply online on e-Albania. We are trying to partner firstly with Western Balkans economies to enable regional interoperability and recognition of trust services.

Action Lines

| AL C7. ICT applications: — E-government | AL C7. ICT applications: — E-business

SDGs

Goal 3: | Goal 9:

Contact Organization Name, Title of the project, Stakeholder type, Country

Farmer Query System

mPower Social Enterprises Ltd.

Private Sector

Bangladesh

Beneficiaries

Farmers are well aware that as a source of agricultural information service, input retailers have a strong conflict of interest. But more often than not farmers do not have a choice to get a neutral expert consultation before they make a critical farming decision. This is where FQS plays an important role. Our FQS was designed and disseminated to provide farmers with a source of neutral expert agricultural consultation whereby they can verify whatever information service they get from their other usual sources including input retailers. It is geared to be a demand-driven solution with farmers raising a query whenever there is an actual need.

Website

https://www.mpower-social.com/ & https://www.mpower-social.com/agriculture.php

Description

Rural farmers face a lot of challenges in their crop production and they usually seek advice from extension agents (Govt. and private companies), input retailers. Restricted movement due to COVID 19 means these farmers cannot access their natural knowledge source. But getting timely and customized information for their crop problems is crucial. Otherwise, farmers are likely to make choices that will accumulate at higher costs and even produce less than the expected amount of yield.

ICT Tools

Farmers, family members of farmers, or infomediaries (lead farmer/ field staff) can place a query by responding to a series of branched questions with relevant images of the problem. The agriculture expert reviews all the information on a web dashboard and then sends the recommendations and solutions to the infomediary through a variety of digital channels including SMS (Short Messaging Services), Voice Message, or via phone calls which is then passed on to the farmers within 3-6 hours. Because of the solution, professional experts providing the service are no longer limited by geography and can attend many more cases on a given day than in traditional circumstances.

Challenges / Partnership / Sustainability / Replicability

The FQS service is accessible from anywhere in Bangladesh. We are planning to replicate the service for Nepal. mPower is already working with the International Potato Center to make the service accessible from the farmers under their DDBIO project and can receive solutions through an App.Agricultural information service has traditionally been provided to farmers for free- as a result, farmers do not have an intrinsic propensity to pay for agricultural advice. Therefore, in an effort to commercialize FQS and to make the service sustainable, we are looking forward to creating a business model where we can cross-subsidize services to farmers from revenue earned from elsewhere.

Action Lines

AL C7. ICT applications: — E-agriculture

SDGs

Goal 2: |Goal 13

Contact Organization Name, Title of the project, Stakeholder type, Country

Smart Farmer/ Young Exporter: Online Access to Global Markets

New Economy Academy (NEA), The Department of International Trade Promotion, Ministry of Commerce

Government

Thailand

Beneficiaries

Primary beneficiaries are SMEs and agricultural entrepreneurs, mainly in remote Northeastern provinces that are more rural and statistically more prone to poverty. Their products include rice, vegetables, fruit, processed agricultural products (powdered rice drinks, rice cereals etc.) and others such as silk handicrafts and prepared sauces. The majority are exporters.

Website

https://nea.ditp.go.th/

Description

Rural, agricultural SMEs are amongst the most vulnerable during periods of economic stress. They are also experiencing greater inequality. Although a third of laborers are in agriculture, they earn a tenth of GDP. During the spread of Covid-19, agricultural exports tumbled further impacting this sector. Meanwhile, low income drives the rural-urban migration of youths, causing agricultural communities to age rapidly. New Economy Academy (NEA) believes that for rural, agricultural SMEs, education is a path to empowerment, socio-economic equality, financial security and better social outcomes. NEA has created webinars so it can continue to educate agricultural SMEs at the grassroots level. The webinars are hosted by national experts on exports, technology and business and are free.

ICT Tools

NEA uses a variety of technologies to target agricultural SMEs as well as smooth the offline-to-online transition. This allows for greater participation and higher technological literacy amongst its participants, who are concentrated in northeastern regions. Telephone, social media channels and messaging apps are used to target and nurture relationships with target groups prior to and following the webinars.

Challenges / Partnership / Sustainability / Replicability

The NEA believes the webinar model can be replicated in other sectors, regions and across other agencies as well, in particular for grassroots efforts. Thanks to the webinars' online nature, they are relatively saleable, accessible and low-cost. The model is content-agnostic, allowing it to be replicable across a range of diverse topics.

Action Lines

AL C3. Access to information and knowledge | AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 75

Title of the project, Contact Organization Name, Stakeholder type, Country

Better Connections Virtual Consultation

Ministry of Transport and Communications

Government

Qatar

Beneficiaries

Migrant workers Directly and medical staff indirectly; they have access to medical consultations without risking physical contact which can lead to Virus transmission

Website

http://motc.gov.qa

Description

The Better Connections virtual consultation is built on the Better Connections infrastructure (Computers installed and connected to the internet in labor camps) to allow the migrant workers to have a successful virtual consultation with physician and doctors in the health centers through online video session instead of physically visit the health center or the hospital.

ICT Tools

For this project to be implemented successfully, Webinar Tools and Appointment tools were used. These two tools are main pillars of digital transformation. Specially during these times, these tools play a critical role in contributing to the economy of the country by facilitating remote working. It is thanks to these tools that business continuity was ensured, and people were able to conduct it from home.

Challenges / Partnership / Sustainability / Replicability

The main challenges have been faced due to clinical resources to respond to the virtual requests, as it is a change to the current clinical workflow, and needs to be added into the line-up of physical appointment which are still taking place, and this is creating some adoption challenges. It is also difficult to interrupt physical appointments for virtual appointments in the current workflow. This can be overcome with additional dedicated manpower, which can be assigned and ready to respond to virtual appointment requests at any time as and when they present. The other challenge is also related to lack of awareness of the service, which can be overcome with enhanced marketing and awareness plans regarding the new service available for patients

Technology partnerships for additional support may be required.

This project can be sustainable if additional dedicated resources can be committed to the project from the clinical side, it can in the long run support decreased physical appointment load, assuming that workflow challenges can be addressed.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 76

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Transformation of SMEs - DTSME

Ministry of Transport and Communications

Government

Qatar

Beneficiaries

SMEs and providers are the main beneficiaries as this project will help them enhance the way they do business and create opportunities to both parties offering them the chance to generate more revenues.

Website

http://motc.gov.qa

Description

The program has been designed to support SMEs in being at the cutting edge of ICT Development. It offers exclusive content and events, and focuses on three specific areas: clouds, e-commerce, and web presence. The program enhances awareness of the benefits of using modern technology in the business sector, and helps SMEs to connect with the right service providers and begin the business digital transformation journey.

ICT Tools

The technologies used for this project were mainly Clouds and online interfaces and platforms that enable SMEs to connect with providers. Cloud is the ability to host a software platform or service from a remote location that can be freely accessed and used anywhere via Internet access.

Challenges / Partnership / Sustainability / Replicability

Convincing some SMEs to adopt the digital transformation SMEs. We tried to show them the benefits of going digital, and reflected the digital transformation journey the government is embarking on to highlight its importance.

The project is replicable: using the same platform of virtual sessions, it can target other audiences or industries. Going digital is becoming the new way of doing business, and the way we adapted to address this Covid-19 crisis proves its efficiency. By implementing this project, we are future-proofing the Qatari SMEs.

Action Lines

AL C4. Capacity building | AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 77

Title of the project, Contact Organization Name, Stakeholder type, Country

e-commerce Directory

Ministry of Transport and Communications

Government

Qatar

Beneficiaries

People of Qatar: as it will help them buy what they need without going out to comply with social distancing; Shops in Qatar: as it will help them generate revenues during the current crisis.

Website

http://motc.gov.qa

Description

e-commerce Directory was found to provide an easy way for people in Qatar to reach their favorite shops or services easily via online throughout the current situation of COVID-19. It Facilitates the process of searching the retail stores or services by using clear and easy categorizing for the user. The category list includes the following: Electronics / Healthcare / Grocery / Fashion / Apparel & Accessories / Home & Kitchen, etc. Also, it covers the most important services requested by the Citizens and residents of Qatar to prevent them from socializing during these events.

ICT Tools

e-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems. Businesses are using e-commerce as a way to support their digital transformation journey.

Challenges / Partnership / Sustainability / Replicability

The main challenge was to convince some people to choose to buy things online and not physically go to stores. Some of the main points highlighted were security (ex: putting private information on the internet such as CVV of cards). We aimed to ensure these people on the safety of the transactions, and the benefits of shopping online. The current situation around Covid-19 has played a role in encouraging people to shop online. The project is replicable. The project is based on an online platform that can be replicated to different industries as well.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 78

Title of the project, Contact Organization Name, Stakeholder type, Country

Education Sector Response to Covid-19

Ministry of Transport and Communications

Government

Qatar

Beneficiaries

All stakeholders in the education sector, mainly the students; Despite the difficulty to attend schools, students are being provided with the required education to be able to pursue their degrees and certificates without delaying their progression

Website

http://motc.gov.qa

http://QLearning.edu.gov.qa

Description

This project is a combination of two main initiatives. The first initiative is to provide remote learning to all students, and the second is to provide the required technical support to enable efficient learning without disruption. The main goal is to deliver high quality education for all levels in a remote manner while maintaining effective and high quality learning. In order to achieve the required outcome, the ministry provided and distributed 2200 tablets to students for them to access their online courses and assignments. Also, 4100 internet broadband devices were distributed to ensure a fast internet connection for classes to be efficient. On another end, the ministry purchased the required licenses to access remote support tools in order to assist the schools teachers and administrations in case they face any problem.

ICT Tools

This project required the distribution of internet broadband, which adopt high speed transmission technologies. Also, Webinar tools are utilized to be able to conduct remote working in cases of virtual classes. These tools have permitted education continuity, and are being used internationally.

Challenges / Partnership / Sustainability / Replicability

Some challenges were identified in this project. The first challenge was the effective distribution of all devices to students without causing any delay to their participation in the online courses. The second challenge we faced was to procure a system and system infrastructure capable of to accommodate more than 120,000 students. The third challenge was the ability of employees to manage the interaction with the remote support specialists in case of problems faced with the remote working tools. The last challenge we faced, was the ability of some students to access their online courses, and to monitor their actual attendance. In order to address all these challenges, these measures were taken: (1) We assessed the location of each student, then we tried to put into perspective the date of their lessons to be able to come up with an optimal route to deliver all the devices on the right time. (2) We managed to find a solution to this problem by coordinating and cooperating with Microsoft. (3) We provided the right training to our teachers and school administrations to be able to manage the interaction with the remote support specialist to ease the process and make it more efficient. (4) We provided instruction manuals to our students to access their remote courses, and reached out to the parents to make sure the students are attending their classes effectively.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal

Case 79

Title of the project, Contact Organization Name, Stakeholder type, Country

Hack Covid-19

Ministry of Transport and Communications

Government

Qatar

Beneficiaries

The beneficiaries of this project are the people of Qatar. They will benefit from the advancements these projects will offer in facing Covid-19.

Website

http://motc.gov.qa

Description

An online platform to allow innovators to develop their entrepreneurial ideas that will help in dealing with the various problems and challenges posed by the spread of the novel coronavirus epidemic through the online portal. The five winning ideas will receive financing and support of QR250,000 each, to develop and implement their ideas, as well as several services, advisory programs and incubation services that will help the implementation of the ideas. Partnership between QDB and a number of entities and institutions in the country. E.g. MoPH, MoCI, MoTC, Ooredoo, Aspetar Hospital, University of Qatar, Hamad Bin Khalifa University, Virginia Commonwealth University in Qatar, Carnegie Mellon University in Qatar, etc.

ICT Tools

This project was made possible with the use of an online portal that gave access to people to submit their ideas and follow up on their submission. Nationally, and most probably internationally, online portals are being used for governmental websites, as a gateway for people to access Government services digitally during the current crisis.

Challenges / Partnership / Sustainability / Replicability

Choose the right project among many to support and implement it effectively and monitor the progression. Constant communication between both parties is constant to align updates, challenges, and advancements

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C4. Capacity building

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 80

Title of the project, Contact Organization Name, Stakeholder type, Country

Virtual appointments / Medical Consultation & Electronic Sick Leaves Ministry of Transport and Communications

Government

Qatar

Beneficiaries

The beneficiaries of this project are the people of Qatar. More specifically, the people that need to see doctors or physicians, without bearing the risk of getting exposed to the Covid-19 Virus.

Website

http://motc.gov.qa

Description

This virtual service was launched in collaboration between the the Ministry of Public Health (MoPH) and the TASMU Smart Qatar Program (part of the Ministry of Transport and Communications) to provide telephonic/video medical consultation/virtual appointments with physicians to patients with medical queries. This would reduce patients' visits to the hospitals and health centers as much as possible in order to comply with the measures of social distancing and reduce the risk of spread of COVID-19. Basically, services are provided in the convenience and safety of a patient's home.

ICT Tools

For this project to be implemented successfully Webinar Tools and Appointment tools were used. These two tools are main pillars of digital transformation. Especially during these times, these tools play a critical role in contributing to the economy of the country by facilitating remote working. It is thanks to these tools that business continuity was ensured, and people were able to conduct it from home.

Challenges / Partnership / Sustainability / Replicability

For the virtual consultations and appointments, adoption from clinical staff has been varied, as it is a new technology and new workflow, implemented quickly for the Covid-19 response. Also, adoption from patients because it is a new service that takes adjustment. However, adoption is increasing and services are expanding as the benefits are realized. Electronic sick leaves has been widely adopted, as the system is simpler and does not require a new workflow, however challenges have been there due to technology integration at the beginning to integrate with EMRS, but this has improved. Also, what revealed itself as a challenge in this project was actually the accuracy of diagnosis made by the doctor (diseases can have similar symptoms and may require additional tests) since he can't inspect the patient' condition from up close. In order not to put the patient in danger, the video consultation technology was only implemented in primary and secondary care. The project is sustainable, as it supports the provision of accessible and convenient health care services, does not require additional workforce, and actually with time will show additional benefits such as decreased burden to the health system for unnecessary visits that can be provided through self-care and patient empowerment with clinical support when needed.

Action Lines

AL C5. Building confidence and security in use of ICTs | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 81

Title of the project, Contact Organization Name, Stakeholder type, Country

National Food Security Analytics and Supply and Demand Dashboard Ministry of Transport and Communications

Government

Qatar

Beneficiaries

The beneficiaries of this project are the people of Qatar, also, government officials will benefit as it will help them in accomplishing their job in a more efficient way.

Website

http://motc.gov.qa

Description

Ensure the supply of essential food items, hygiene products and medical supplies during the crisis, by supporting government officials with a dashboard that monitors stock evolution, provides alerts, simulates future scenarios, and enables contingency planning. Key information from different sources are integrated in a single platform (e.g. imports data, local production data, stock levels of different key food and hygiene/medical products, etc.). A simple visualization interface provides government officials with an immediate view on actual and projected supply, demand, stock, and potential gaps.

ICT Tools

In order to implement this project, we had to resort to technology as a major enabler to its success. The main technologies used were supply chain analytics and business intelligence. Supply chain analytics can identify known risks and help to predict future risks by spotting patterns and trends throughout the supply chain. Business intelligence comprises the strategies and technologies used by enterprises for the data analysis of business information. BI technologies provide historical, current, and predictive views of business operations. These two are becoming more and more common for all organizations that are going digital, and proved to be essential in many cases such as this one.

Challenges / Partnership / Sustainability / Replicability

The main challenge was ensuring the accuracy of the projections. We are monitoring the projections and comparing them with actual numbers and other factors to make sure of the dashboard's efficiency.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Title of the project, Contact Organization Name, Stakeholder type, Country

National Communicable Disease Surveillance and Vaccination System Ministry of Transport and Communications

Government

Qatar

Beneficiaries

The people of Qatar are the primary beneficiaries as the main goal of this project is to protect the people.

Website

http://motc.gov.qa

Description

This project revolves around a system that has been developed and accelerated to go live during the Covid-19 Crisis. The system enables the accurate recognition of positive infectious diseases based on lab results and case reports received, including Covid-19 cases, their Geo-location based on address, understanding clusters and locations, and allows for contact-tracing of positive cases.

ICT Tools

The project was based on the technology of Analytics. The latter would use raw data as inputs and then interpret meaningful patterns in data. Analytics is a rising technology that is being used and developed more and more due to its efficiency. It is insightful in areas where decisions need to be taken, and in areas, which record a lot of data and information.

Challenges / Partnership / Sustainability / Replicability

The challenges have been faced due to a roll-out plan which was brought forward in a quicker timeline due to emergency requirements for Covid-19 response. Therefore, full and comprehensive implementation and communication plan is still required. Challenges have been with lack of full and comprehensive utilization of all system capabilities due to adoption and training requirements and speed of implementation, however, these are being implemented now, and adoption and utilization is expanding and increasing as the benefits of the national system are being realized. The implementation of the national surveillance system was planned and required before Covid-19 response, and has always been a part of the national health strategy. Timelines were shortened due to emergency response, however, the system will support and make public health work more efficient and effective in the future and therefore sustainable as it is part of ministry national surveillance requirements.

Action Lines

AL C5. Building confidence and security in use of ICTs | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 83

Title of the project, Contact Organization Name, Stakeholder type, Country

C-DERP (Covid 19- Digital Emergency Relief Program)

Digital Empowerment Foundation

Civil Society

India

Beneficiaries

Our beneficiaries and primary target groups are - low-income groups, daily wagers, poor and vulnerable, widow women, elderly, differently- abled, farmers, students, police officers, labors and frontline health workers. DEF is helping availing benefits of entitlements and services.

The lives of migrant laborers who are stuck, daily wagers, and auto-rickshaw drivers have come to a still. They eat what they earn and since there exists a financial crunch, such people are the ones adversely affected. Our digital foot soldiers has provided ration and have helped them. The weavers' community is badly affected with no work. The payments to previous orders have not been made. In order to support them, a new set of order to weave Indigo Saris has been made by our ground team.

Website

https://defindia.org/

https://www.defindia.org/about-the-programme/

Description

As an economic hub with substantial global connectivity and movement of people and goods, India is directly impacted by the COVID-19 pandemic. DEF, keeping this in view, has launched an ICT-enabled and community specific relief programme C-DERP project (COVID-19 - Digital Emergency Relief Program) through virtual community and service facilitation. The priority key areas under the program are Complete Corona Prevention Care, Provision of SOS Food & Livelihood, Information, Awareness & Fighting Fakenews and Access to Government's Covid-19 Entitlements. The 600+ digitally enabled information resource centers and 10,000+ foot soldiers across 25 states and union territories are aid with public schemes, welfare measure Information, entitlement facilitation and delivery, support Tele-health & Tele-medicine, Internet support, Alternate livelihood opportunities in times of distress, Consultation and counselling. The aim is to reach over 60,000 households and 3,00,000 individuals with above needs and facilitation. Simultaneously, DEF will create a cadre of 600 Covid-19 Digital Volunteer Force (C-DVFs) for facilitation and deliverance of the services under the same program.

ICT Tools

In reference to accomplish the program objectives, DEF is using ICT tools like Computer, Cell phones, video conferencing and laptops helping us promoting digital transformation in our organization or at a national and regional level as well.

Challenges / Partnership / Sustainability / Replicability

In these tough times a lot of basic essential items are getting scarce out of which Food Grains ranks at the top with almost 36%, followed by sanitizer at 20%, have stated that it is not available at all. Another challenge that has emerged from this situation is of reverse migration of workers from cities. We are looking for a funding partner to get support for basically across 600 locations. The Crisis Planning Checklist presents key areas that organizations can review to ensure that they are prepared for crisis response and

operational continuity. In addition, the Continuity and Disaster Recovery Plan our Covid-19 relief kit provides the outline for a thorough and highly detailed action plan that can be used to respond to low, marginal and critical situations.

Action Lines

AL C2. Information and communication infrastructure | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | Goal 3: Ensure healthy lives and promote well-being for all

Case 84

Title of the project, Contact Organization Name, Stakeholder type, Country

Enabling IT literacy and health information dissemination in Covid times Spoken Tutorials, Indian Institute of Technology Bombay, Mumbai, India Academia

India

Beneficiaries

The COVID pandemic has hit us hard impacting all domains of our life. This crisis has ushered in a new era of virtual systems. In this direction, the Spoken Tutorial project at the Indian Institute of Technology Bombay, Mumbai, India is working in the domain of IT literacy and health. The project creates audio-video tutorials in local Indian languages which can be viewed on desktop/laptop and smartphones. The tutorials are self-learning tutorials, uses very little bandwidth for access and can be downloaded in a zip format to be viewed for future and offline learning. The tutorials are on average 10 minutes long and uses screencast technology. Tutorials are created for both IT training using Free Libre and Open Source Software and health awareness during COVID. During these COVID times, these tutorials bridge the prevalent gap of lack of information, lack of proper guidance for skill development and IT literacy, lack of infrastructure facilities available, and difficulty in understanding English. The project has also launched a toll-free helpline number where expert guidance is provided for queries pertaining to premature babies, under-nourished infants, child nutrition, breastfeeding and mother's nutrition.

Website

https://spoken-tutorial.org/

Description

The main objective of this project is to promote IT literacy for education and improve the employment potential of learners in India, using FOSS (free and open source software). ICT is an important area that provides jobs to a large number of our students. Software creation, electronic design automation (IC design), numerical computing, and modelling and simulation are some of the ICT areas. We aim to pass on the knowledge of technology and free and open source software (FOSS) through the website to the millions in our country, who lack opportunities and/or access to learn any software.

ICT Tools

The tutorials use screencast technology and is made for self-learning. Our self-paced, multi-lingual courses ensure that anybody with a computer and a desire for learning, can learn from any place, at any time and in a language of their choice. All the content published on this website are shared under the CC BY SA license.

Challenges / Partnership / Sustainability / Replicability

The project aims to bridge the current digital gap. It also addresses the unavailability of good internet access, expensive commercial software packages, and the inability to pay for accessing learning content.

We are looking for partners who can take the tutorials to different countries and cater to the needs of IT literacy and health training. Government agencies, private agencies, individuals and organisations working in this domain can also partner with us. Using Spoken Tutorials, we have trained 5 million students during past six years. Since August 2018, we went for paid model for online tests and certificates. More than 1,000 colleges have participated in it, simultaneously with the completion rate going up three fold.

During the COVID-19 lock down, page views of our portal have gone up dramatically, with about 250,000 page views a day currently. Naturally, our Alexa rank is improving: from about 225,000 three months ago to about 80,000 now, dropping by about 4,000 every day. Our India rank is 4,000, dropping by about 400 every day. Coincidentally, our Spoken Tutorial courses also got included in the SWAYAM portal about a month ago, with an AICTE tag. This project is replicable in any country of the world. We already have the audio-video tutorials. These tutorials are ready of adoption by translating them into the local language of the country. The tutorials are made in such a way that the graphics remain the same and only the audio can be translated. The project has signed a MoU will Afghanistan where these tutorials will be used for IT literacy after translating them.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 85

Contact Organization Name, Title of the project, Stakeholder type, Country

Asia Initiatives

SoCCs Buddies

International Organization

United States of America

Beneficiaries

The primary focus of SoCCs Buddies are **underserved girls and boys** across India. We are currently implementing the program in Lucknow, Bhubaneshwar and Yavatmal in India, and expect to expand this to our project sites soon. Providing opportunities for people to earn and redeem SoCCs for goods and services ensures a continuous buildup of "**social capital**" within communities. Beneficiaries of our program also commit to tutoring three younger children in their neighborhood which ensures a trickle-down of the learning. "Data cards" and digital devices are provided to participants to facilitate this.

Website

https://asiainitiatives.org/ & https://asiainitiatives.groupment.com/

Description

Asia Initiatives launched an innovative program known as SoCCs Buddies, aimed at bettering learning outcomes for the students in under-served communities in India. SoCCs Buddies blends award winning SoCC (Social Capital Credits) system with a pool of mentors to deliver individualized teaching and English Language instruction. The mobile app will allow both teachers and students to login in and track their progress, and earn and redeem "SoCCs" within the app for various goods, services and recognition offered.

ICT Tools

The primary technology used is a mobile app "SoCC App", developed with the help of CampusGroups Inc. and Zoom. With the App, they can consolidate everything into one digital platform. This enhances the ability to manage programs and communicate with partners.

Challenges / Partnership / Sustainability / Replicability

Challenges include transitioning to **distance learning** due to limited student access to suitable digital learning devices and limited availability of reliable broadband connection. Asia Initiatives is addressing this challenge by raising funds to provide devices and data cards for Internet connectivity.

Additionally, to leverage a pool of skilled volunteers and mentors to be trained at short notice. The challenge is further compounded by the **linguistic and cultural diversity** of different regions of India where these schools are located. They are exploring local and multi-sector partnerships to support the existing project and help expand their reach – both long and short term.

Short-term needs include: volunteers to impart training skills to the teachers and field staff, leveraging support of the parents through raising awareness and encouraging parental engagement. Long-term: acquiring low-cost digital devices to ensure continuity of learning, reconfiguring lessons to individualized learning and nutritional requirements for the students. The SoCCs Buddies model is based on a low cost approach to imparting education and it's replicability and flexibility ensures that it is sustainable. The concept of SoCCs is to develop a sustainable non-financial currency - an alternative reward model to encourage social bonding within communities and across the world for the common good of all. With a constant stream of volunteers eager to empower the students in India, they expect teacher availability to remain high. The App is easy to use both for the teachers and students, to schedule the lessons and keep track of the SoCCs points earned and redeemed.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5: Achieve gender equality and empower all women and girls

Contact Organization Name, Title of the project, Stakeholder type, Country

Yagiten Pvt. Ltd

Amakomaya (Mother's Love)

Other

Nepal (Republic of)

Beneficiaries

The beneficiaries of the project are **pregnant mothers** and their family members. By using Amakomaya Content app, mothers and their family members can receive: personalized audio, video and text messages together with timely notification to access available services offered from the nearest health facilities. The latest offers provided from local government in the app as notification. Use self-evaluation danger sign features in app. Toll free dial number to get instant remote support and consultation.

Website

http://www.amakomaya.com

Description

Increasing access to health information for pregnant mothers and infant babies. Since last 8 years "Amakomaya" (Mother's Love) initiative has deployed unique android apps to strengthen the Nepal's health system by empowering both pregnant women and health workers with the improvement of access to needs-based health information with client electronic recording and reporting of data. Due to the COVID-19 pandemic lockdown pregnant mothers are not able to receive Antenatal Care (ANC) and babies are not able immunized. To help mother and child maintaining at least 1-meter physical distance the project has introduced time-based appointment system for the client in local clinic. Through the app, beneficiaries can reserve their time-based appointment. Also, have direct access to the toll free number 16600100046 with the partnership of Midwifery Association of Nepal and Paropakar Maternity and Women's Hospital, Thapathali, Kathmandu.

ICT Tools

The project has used AI based mobile android application that can be used by both clients and health workers. The application is covering all aspects from pregnancy, child birth and immunization. To integrate all the processes in the same platform, the project has developed 3 different app interfaces and connected asingle reporting system which is interoperable with the existing Health Management Information system (HMIS) of Nepal government. Mothers can check their danger sign in critical situations which record GPS data to support instant rescues by 4 wheeler ambulance or helicopters. For health workers, they use QR-Code technology to register and search women from the data. The recorded data are instantly presented in the HMIS report. GSM based fatal heartbeat rate detection system helped to continuously monitor fetus.

Challenges / Partnership / Sustainability / Replicability

Following are the major challenges, lack of: proper training for health workers and higher officials in the Health Ministry, which has caused delay in the expansion of the project. Locally developed maternal and child health related audio/video content. Locally hosted cloud service connected with local networks. Proper electronic health guideline and roadmap of Nepal government have created lots of duplicated in the application

development side. They are interested in the following partners to: develop maternal and child health related audio/video content, build the locally hosted cloud services, provide training to health workers and higher official of the Health Ministry. The project is sustainable because it directly strengths the National health system. Likewise, it is replicable in developing countries like Nepal. It could be replicated in the South Asian Region and African countries.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 87

Contact Organization Name, Title of the project, Stakeholder type, Country

ekShop, a2i

ekShop Phone e Nittoponno

Other

Bangladesh

Beneficiaries

By onboarding volunteers from nearly all districts of Bangladesh, ekShop has aimed to fully utilize its root-level reach (via the rural e-commerce aggregator and Digital Centers) and serve all the **general public** in this lockdown stage. Particularly for those areas that are under strict lockdown outside of the capital and inside.

Website

https://a2i.gov.bd/

Description

ekShop is currently running the nationwide logistics of emergency groceries and medical supplies. ekShop has attained the support of "333", a government ordained national call center to aid the citizens in this trying time. Citizens can order medicines, groceries, and other emergency goods. ekShop will forward the order list to available volunteers, who will buy from the nearest open shops. The volunteers and volunteer organizations are selected locally to the order delivery location, wherein a database has been created according to their delivery range. Orders are also taken through a Facebook page automated chatbot for maximum reach.

ICT Tools

Web and mobile application for order processing - digitizing usual grocery buying and maintaining quarantine measures for all parties involved. Virtual call center to confirm the order - utilizing dormant workforce and managing volunteers remotely. Facebook chatbot - using popular social media to engage more of the population and encourage them to order online instead of going out.

Challenges / Partnership / Sustainability / Replicability

Managing the logistics. Most of the emergency products are groceries and perishable food products, so stocking and warehousing will prove to be difficult. Difficulty in transferring supplies due to lockdown measures. By using ekShop's e-commerce and logistic network, we have been able to source products directly from suppliers and farmers and used the National Post chain to deliver them to the concerned parties. The project is partnered with

all major e-commerce, payments and logistics players in the country. Also, non-profit organizations looking to assist during quarantine with essential products. They are able to merge the initiative with ekShop's existing system and all the local shops within it. It can be easily replicated in similar countries, for example Nepal, India, etc. Since the initiative does not require heavy technology or intricate customization, it can be replicated even in lower economic conditions. All that is required is Facebook connectivity (for the chatbot order) and stable call-center support, with a large group of voluntary workers.

Action Lines

AL C6. Enabling environment

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 88

Contact Organization Name, Title of the project, Stakeholder type, Country

Instituto Bem Estar Brasil-IBEBrasil

Comunidades Digitais (Digital Communities)

Civil Society

Brazil

Beneficiaries

The primary beneficiaries are the **rural and peripheral communities** in North of Rio de Janeiro.

Website

http://www.ibebrasil.org.br & https://portal.comunidadesdigitais.org.br/marrecas/

Description

Digital Communities is a program of IBEBrasil that are running more than 10 years in the North of Rio de Janeiro, in rural and peripheral areas, in partnerships with public universities. This project foresee a Community Portal, that allows the community to access internet and to create a communication channel with the users, associated in the community provider. The community of Marrecas is feeding their local community portal with information about the prevention and fighting the pandemic, posting information to the residents of the community in how to act in face of COVID19.

ICT Tools

The community network is basically a hybrid network (wireless/wired) mixing WiFi 5Ghz AC/M and Switches with Reverse POE to serve users that are more near the CPEs. In the community portal, they are using a Debian 10 Server with Wordpress that are integrated with a router board with RouterOS with Captive Portal for authentication of the users.

Challenges / Partnership / Sustainability / Replicability

A challenge with Community Networks is the **self-management process**, that needs to be improved in the terms of decision making, turning the participation between the local council and all the users widely. In terms of resources (financial and regulatory), the need to adjust the directions of the public policies and funds to attend these initiatives. They intend to implement a decision making platform to involve more users about the issues and solutions about their own community internet provider.

They need partners to help communities in two main activities: access to local engineers to obtain licenses, use licensed spectrum or to create another technical project in their own community networks. More people to make political and regulatory incidence in the telecom national agencies and the international spaces linked to telecom and internet issues.

The project is sustainable through the associative process created by the users to maintain the community network. Sharing the costs, without profit, allows the users to have a cheaper price to the link and maintenance, that is paid collectively.

Community networks are replicable initiatives, as highlighted through the IGF and ITU recommendations. Other repository exist in the APC and ISOC website and on the IBEBrasil site with links and docs about these projects.

Action Lines

- AL C2. Information and communication infrastructure
- AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 89

Contact Organization Name, Title of the project, Stakeholder type, Country

Digital Development Agency

Bureau d'Ordre Digital

Government

Morocco

Beneficiaries

All actors (citizens, civil society, businesses, administrations, etc.) who approach public bodies.

Website

http://www.add.gov.ma & https://courrier.gov.ma/virtualbo/

Description

It is a platform for digitizing the Order Office allowing administrations and public bodies to create Digital Order Offices in order to electronically manage the flow of incoming and outgoing mail. All actors who wish to contact public bodies throughout Morocco could thus deposit, via this central platform, their letters to the bodies concerned with an acknowledgment of receipt.

ICT Tools

In accordance with its missions, the Digital Development Agency is responsible, among other things, for: promoting the dissemination of digital tools and the development of their use among citizens,. Carry out within the framework of e-Gov programs, the implementation of designs relating to electronic administration projects and the development of digital public services.

Challenges / Partnership / Sustainability / Replicability

Among the main challenge encountered is the change of conduct. Solutions to face these challenges are: **awareness** and involvement of senior officials of the public bodies concerned. They are open to partnerships if the potential partners wish to share this modest experience with them. This project is sustainable. The government has adopted a circular through which it urges all public bodies to use this platform. It is also replicable, Morocco, through the Digital Development Agency, is ready to share their experience with fellow countries open to such initiatives.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Contact Organization Name, Title of the project, Stakeholder type, Country

App Covid-19 Uruguay

AGESIC

Government

Uruguay

Beneficiaries

Both citizens and health authorities. The App is associated with a single case assistance tray that is carried out based on a protocol established by the Ministry of Public Health (MSP), and a clinical assistance platform, which provides teleconsultation service to suspected and confirmed cases that do not need other assistance. To unify and have a single database that allows rationalizing the response of clinically suspicious cases and vectors, organizing demand and assistance to the population, there is a unique form. In addition to digital channels, also the telephone exchanges of all the health providers and a line specially created to face the pandemic, which depends on the MSP provide information.

Website

https://www.gub.uy/ministerio-salud-publica/comunicacion/publicaciones/app-coronavirus-manual-usuario-nueva-funcionalidad

Description

The Uruguayan government in collaboration with private sector companies grouped in the Uruguayan Chamber of Information Technologies (CUTI) developed a specific App for attention to the health emergency: Coronavirus UY, which is currently implemented with more than 330,000 downloads. The App not only gives information, but also assists the population from the beginning of their symptoms, they can communicate with their health provider through Telemedicine (Ref. Law 19.869, on Telemedicine. Https://www.impo.com. uy / bases / laws / 19869-2020) . The App is associated with a single case assistance tray that is carried out based on a protocol established by the Ministry of Public Health (MSP), and a clinical assistance platform, which provides teleconsultation service to suspected and confirmed cases that do not need other assistance.

ICT Tools

The project uses custom development made by a private company called Ggenexus technology.

Challenges / Partnership / Sustainability / Replicability

The goal for App Covid-19 Uruguay is to continue evolving the app and attract as many citizens as possible to download it and use it. The app can be applied to any pandemic to control it. Since it is about sending symptom info, mutual care distribution and video calling for doctors.

Action Lines

|AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Contact Organization Name, Title of the project, Stakeholder type, Country

Technology Enabled Academic Learning Developments in Literacy Civil Society Pakistan

Beneficiaries

TEAL learning content was specifically designed to fill the gap in quality education for middle school students, particularly those living in rural and underdeveloped areas of Pakistan. As part of Pakistan's TeleSchool programming, learning videos developed by DIL are being viewed by school aged children across Pakistan. Developments in Literacy (DIL) was founded with the vision that no child in Pakistan, no matter how poor or underprivileged should be denied access to quality education. Today, a total of 131 schools based in the rural vicinities, shanty towns and urban slum areas of Punjab, KPK, Sindh, and ICT, are operated by DIL directly and in partnership with community based organizations and the government. Direct local presence and where necessary, through partnership, enable DIL to accurately identify and include marginalized groups. The majority of children served by DIL schools, especially girls, would not otherwise have had access to education. DIL provides operational cost, curriculum development, teaching and learning materials, teacher support, and meaningful access to technology to enhance learning. The admission criteria for DIL schools ensures inclusion of the community's most vulnerable and marginalized groups. "Children, especially girls, from the lowest income households and students living in the immediate neighborhood will be given admission preference. Each grade will have a maximum of 25 students, 70% of which must be girls, children with disabilities will be accommodated, if possible."

Website

https://www.dilpakistan.org

Description

Developments in Literacy, DIL, is partnering with the Pakistani Government's PTV Tele School Initiative to bring education to children across Pakistan during this time of school closure due to COVID-19. The daily television broadcast began airing early May 2020, which also marked the the beginning of the new academic year in most areas of Pakistan. DIL has contributed locally relevant video lessons giving all children across the country an opportunity to continue learning. These televised lessons from DIL, which the organization has developed and field-tested over the past few years, are especially vital for children living in rural areas who are unlikely to have access to either digital or analog learning materials outside of school. In the classroom the TEAL program, which includes hands-on activities, has effectively boosted learning outcomes across core subjects of mathematics, science, English and Urdu. In addition, DIL is piloting a partnership with a mobile communications service provider to offer free access to its digital content, offering yet another avenue to reach families and children whose education has been interrupted by this pandemic.

ICT Tools

Instructional videos developed as part of Developments in Literacy's TEAL program is being made accessible via Pakistan's first TeleSchool channel made possible by Pakistan Television Ltd and the Ministry of Education. The channel is available nationally via

satellite, terrestrial and cable. On a regional level, this digital learning content is being made available to users free of charge through a partnership with a mobile carrier and will soon be accessible via the DIL website. In the classroom, prior to school closure due to COVID-19, TEAL instructional videos, lesson plans and assessments were delivered via the TEAL app developed through a partnership with Netsol. The TEAL app was designed to function with intermittent internet connection to allow users to download content onto android devices, and was designed to capture user performance and growth on specific learning topics.

Challenges / Partnership / Sustainability / Replicability

Designed for sustainability and sharing, TEAL is embracing an Open Educational Resources (OER) model in which those in need of quality learning content are able to access it for free. By creating high quality content, TEAL lessons are unencumbered by time bound and costly user licensing agreements. The one-time cost of content development is quickly absorbed as more and more users access each lesson. TEAL is replicable. DIL is working to adapt the TEAL model to suit both formal and informal education settings. Applying TEAL videos in response to COVID-19 is an apt example of how TEAL is currently being adapted and replicated.

Action Lines

AL C3. | AL C7. ICT applications: — E-learning |

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 92

Contact Organization Name, Title of the project, Stakeholder type, Country

Taleemkw: Kuwait Portal to Distance Learning

Kuwait University

Academia Kuwait

Beneficiaries

The LMS should support the K-12 pupils that is 683359 total (public and private schools) students according to UNISCO statistics.

Website

http://www.ku.edu.kw & http://taleemkw.net

Description

The scope of this work is to enable continuation of learning and education of public throughout the COVID-19 crisis by supporting a national forum for online education learning management system (LMS) and all the supporting hardware and technical support relating to LMS operation.

The LMS should support the K-12 pupils that is 683359 total (public and private schools) students

Kuwait has 1489 schools with 85949 teachers and 16090 classrooms in government schools.

The Ministry of Education stoped public schools and University till begining of Aug. 2020 to be resumed. Some private schools do not have the needed infrastructure to resume school using distance learning, this portal will service any school need to implement the Emergency Remote Teaching (ERT) using our infrastructure free of charge, this project will

also provide the needed help by providing tutorials and guildes to teachers never used online learning to help them better produce thier materials and post it on the learning management system (LMS).

ICT Tools

The learning management system is based on a widely used LMS called Moodle, We have customized our copy (Taleemkw LMS) and localized it with some added tools such as: a. Communication: chat, forums natively and Streaming Media through plug-ins. b. Interactive Videos: Quiz questions support adaptivity.c. Dialog Cards. d. Documentation Tool: goal driven activities. e. Find the hotspot on images. f. Agamotto image blender: Present a sequence of images that people are supposed to look at one after the other, e.g. photos of an item that changes over time. g. Dictation (for English classes): You can add audio samples containing a sentence for dictation and enter the correct transcription. Your students can listen to the samples and enter what they have heard in to a text field. Their answers will be evaluated automatically. h. Branching scenario: Branching Scenario allow authors to present the learners with a variety of rich interactive content and choices. The choices the learners make will determine the next content they see. May be used to create dilemmas, serious games, and self-paced learning. i. Virtual Tour 360: 360 (equirectangular) and normal images may be enriched with interactivities like explanations, videos, sounds, and interactive questions.

Challenges / Partnership / Sustainability / Replicability

The project is currently running on one server that can support one district, servers with the above specifications are expensive to rent, and external funding or grants will solve this problem. We have initial agreement with Microsoft to support our users to use the introductory package of Microsoft 365 that comes with MS Teams, this will be very helpful to support the online breadcasting of lectures.

This project can be replicated to all countries that use Arabic as the main language for education that include the GCC countries as well as all Middle East Arab speaking contries with Arabic school system.

Action Lines

AL C2. Information and communication infrastructure | AL C7. ICT applications: benefits in all aspects of life — E-learning |

SDGs

Goal 4 | Goal 10

Contact Organization Name, Title of the project, Stakeholder type, Country

Future Gate

Ministry of Education

Government

Saudi Arabia

Beneficiaries

The primary beneficiaries are Student, Teacher, School Leader, Educational Supervisor, Digital Transformation Coordinator and Parents. The tools for beneficiaries to do their work through FG Platform which help implement the digital transformation and support the integration of technology into education, they are: Electronic Assignments, Educational Activities, E-Testing, E-Content, Discussion Forums, Lesson Preparation, Monitoring Attendance, Absence, Virtual Meetings, Direct Messaging

Website

https://www.moe.gov.sa/ & https://fg.moe.gov.sa/

Description

On March 9th, Saudi Arabia closed all schools to prevent the spread of COVID-19 and protect students. The Saudi Arabia's Minister launched Virtual School Program included "Future Gate Platform" to direct students, teachers, school leaders, educational supervisors for flexible and remote learning. During the COVID-19 outbreak, Future Gate Platform proved successful. Over 64,000 teachers have used and created more than 1,000,000 assignments, 400,000 virtual classrooms, 1,700,000 E-Contents, 1,600,000 discussion forums, and 400,000 tests. Over 700,000 students, 3000 school leader and educational supervisor have engaged and used the platform.

ICT Tools

Future Gate Project provides variety of equipment and infrastructure to schools include: 1. A range of systems including LMS, LOR, and SIS. 2. Broadband connection and wireless access points to schools. 3. Devices (laptops) for the teachers. 4. Smart Interactive Projectors within the classrooms. 5. Building an internal computer web for launching and application. 6. 24-hour technical support to all the schools. Future Gate seeks to complete digital transformation in all schools by developing an integrated work plan, starting with preparation and concluding with evaluation

Challenges / Partnership / Sustainability / Replicability

Related to some technical aspects that present challenges for the Future Gate Initiative, linking the SIS with the FG platform has been the cause of some pitfalls and that can be overcome by having a one platform involved the LMS and SIS together. As far as infrastructure goes, poor internet connectivity or lack in equipment in general, has caused delays and implementation problems in a significant number of classes. The Ministry of Education (MoE) collaborated with Tatweer Educational Technologies (TETCO) being a leading educational technology provider in the region to implement and execute the project. The replicability of the project is possible depending on the scale required. In our project we intended to uplift the schools' technical infrastructure, hence, it increased the cost. However, the project could be simplified by providing the Learning Management System to reduce cost.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 94

Contact Organization Name, Title of the project, Stakeholder type, Country

COVID19 Mobile Phone Survey

Centers for Disease Control and Prevention

Government

United States of America

Beneficiaries

The primary beneficiaries are the Ministry of Health and the public. The Ministry of Health will use the information collected to inform policy decisions and communication strategies for COVID19.

Website

https://www.ncdmobile.org/

Description

We implemented a mobile phone survey using Interactive Voice Response in Ecuador. The survey collects information on Knowledge, Attitudes, and Practices, access and availability of testing, and symptomology during the COVID 19 outbreak.

ICT Tools

The survey is utilizing the open-source data collection tool Surveda. In addition, respondents are answering surveys via their mobile phones.

Challenges / Partnership / Sustainability / Replicability

Given that the mobile network operator channel was previously established for a mobile phone survey on non-communicable disease, it was fast and efficient to implement the survey and there were no main challenges. This project can be replicated. In order to send the COVID19 survey to other populations, a mobile network operator channel would need to be established in the new country where implementation is to take place. This project is sustainable because the data collection software, Surveda, is open-source and thus free to use. The only cost for implementation is the cost associated with maintaining the mobile network operator channel and airtime costs.

Action Lines

AL C2. Information and communication infrastructure | AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 95

Contact Organization Name, Title of the project, Stakeholder type, Country

I learn sitting at home(Ghore bose shikhi)

Directorate of Primary Education

Government

Bangladesh

Beneficiaries

The primary beneficiaries for this project are the primary school student.

The main services are:

- 1. Providing financial assistance to the Prime Minister's Relief Fund.
- 2. Providing stipend Through Mobile Banking.
- 3. Delivering nutritious biscuits to children's homes under school feeding activitie.
- 4. Involving primary education families in relief distribution by district and Upozila administrations of primary education.

Website

http://www.dpe.gov.bd

Description

Due to the global outbreak of Covid-19 the Department of Primary Education is conducting home-based learning activities to fill the education gap of primary school student. In this contex, lessons of various subject are being broadcast on Sangsad TV everyda according to the experience teacher. In addition to home -based learning activities for student, digital content is being created and disseminated through YouTube channe, Facebook page, Messenger group. To strengthen this activity, area-wise responsibilities have been given to the teacher, conscious parents in the vicinity of the school and the results are being published everywhere. Beside, a recovery plan has been prepared to compensate the loss of Covid-19 including providing financial assistance to the Prime Minister's Relief Fund, providing stipend through Mobile Banking, delivering nutritious biscuits to children's homes under school feeding activitie, involving primary education families in relief distribution by district and Upozila administrations of primary educatio. Virtual meeting is being held regularly to check the progress and continuity of all these works. The follow-up meeting is going on in the Zoom app while sitting in the office or at home while maintaining social isolatio.

ICT Tools

This project relies on the Zoom app, Sure -Cash app, YouTub, Messenge, Microsoft Excel, Facebook page.

Challenges / Partnership / Sustainability / Replicability

The main challenge of learning at home is to bring all the students and their families under technology. Many families of primary school students do not have satellite-rich television or smart phone. Many of their parents are still illiterate. Beside, there are also slow learners. To overcome these challenge, area-wise responsibilities have been given to the teacher, conscious parents in the vicinity of the school and the results are being published every week.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

|Goal 3: Ensure healthy lives and promote well-being for all |Goal 5: Achieve gender equality and empower all women and girls

Case 96

Title of the project, Contact Organization Name, Stakeholder type, Country

GoCC4All: Using IT to Provide Access to TV and to National and Local Emergency

Information to the Deaf-

Dicapta Foundation

Other

United States of America

Beneficiaries

The primary beneficiaries are members of the deaf-blind community, although the emergency alerts are useful for everybody.

Website

https://www.dicaptafoundation.org

https://gocc4all.dicaptafoundation.org

Description

We are using our app GoCC4All to deliver information and emergency alerts related to the Coronavirus to people who are deaf-blind. The pandemic created a challenging situation for the deaf-blind community since they rely on touch to communicate and their access to news is limited due to the limited TV accessibility. GoCC4All was created with deaf-blind users in mind and delivers live TV captioning and emergency information through mobile devices and Braille displays. Its users can read the information in different ways: on the screen, on a braille display, or using the voice-over feature of their devices. Users can control the pace, and size of the text and configure the format to fit their needs.

Due to the pandemic, we added 2 new caption streams to our app: COVID19 INFORMATION (talks about how it spreads, how to prevent infection, etc.) and COVID19 NEWS (includes recommendations by the National Association of the Deaf about preparing for a hospital visit during the pandemic). Also, places like Puerto Rico are broadcasting a daily coronavirus related civil message. GoCC4All users can receive and access this message as everybody else on the island does thanks to our emergency alerts feature.

ICT Tools

GoCC4All uses pervasive technology to create a system that is accessible and easy to use. It uses geolocation to provide emergency alerts that correspond to the area where the user is

GoCC4All promotes digital transformation at a national level by providing an accessible way for people who are deaf-blind to access TV and emergency alerts.

Challenges / Partnership / Sustainability / Replicability

GoCC4All uses pervasive technology to create a system that is accessible and easy to use. It uses geolocation to provide emergency alerts that correspond to the area where the user is located. GoCC4All promotes digital transformation at a national level by providing an accessible way for people who are deaf-blind to access TV and emergency alerts.

This project can be sustainable by donations provided by those that want to serve the deafblind community. This project is replicable. The TV Captions section of GoCC4All can be easily adapted to be used in other countries that use ATSC and NTSC standards. The emergency alerts could be adapted to other emergency alert systems that use the Common Alerting Protocol (CAP) developed by the Organization for the Advancement of Structured Information Standards (OASIS). The primary beneficiaries are members of the deaf-blind community, although the emergency alerts are useful for everybody.

Action Lines

AL C2. Information and communication infrastructure | AL C3. Access to information and knowledge

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation | Goal 11: Make cities inclusive, safe, resilient and sustainable.

Case 97

Title of the project, Contact Organization Name, Stakeholder type, Country

Apprise Audit

United Nations University

International Organization

China

Beneficiaries

Apprise Audit was developed as a tool to support frontline responders to better identify victims of labour exploitation and forced labour. The app is downloaded on the front-line responders' phone but is ultimately a tool in the potential victims' hands. Apprise Audit enhances workers' voices, improves auditors'work and facilitates data collection and analysis on working conditions in global supply chains.

Website

https://cs.unu.edu/

https://www.apprise.solutions

Description

As the COVID-19 pandemic has disrupted supply chains around the world, stakeholders have been engaging the Apprise Audit team to discuss potential modifications to the application as they adapt and adjust its operational usage in the evolving circumstances. For example, due to travel restrictions between and within countries, some auditors have been unable to complete routine factory inspections where they utilized Apprise Audit. The absence of these inspections may leave workers more vulnerable to exploitation as mechanisms to ensure accountability and compliance are interrupted. Although designed as a tool to be administered by a frontline responder and used by workers, stakeholders have expressed interest in modifying Apprise Audit to allow workers to instead selfadminister the questionnaire. In other cases, local audit teams are able to visit factories, and there has been interest from stakeholders in adding new questions to the Apprise Audit questionnaire to inquire about COVID-19 related matters. These could include questions regarding the availability of hand-washing facilities, mask distribution and usage, adherence to social distancing guidelines and any other protocols mandated by governments or corporations that are applicable in factories. This will continue to support major corporations to understand practices in the factories that comprise their supply chains.

ICT Tools

Apprise Audit is a multi-lingual mobile phone application that was designed to overcome challenges associated with social compliance auditing and to improve frontline responders' detection of indicators of labour exploitation and forced labour during worker interviews.

Challenges / Partnership / Sustainability / Replicability

There are many challenges in the social auditing process such as time constraints during factory visits; lack of privacy during interviews; workers appearing to be coached and not feeling safe enough to speak out; communication barriers; and a lack of consistent analysis methods. Auditors rarely cover ILO indicators of forced labour in a comprehensive and consistent manner during worker interviews. These issues result in an overall lack of frequency, privacy, confidentiality, and consistency in workers' interviews during social compliance audits. These issues deeply affect workers' possibility to speak out and auditors' capability to identify indicators of labour exploitation during factory visits. This results in victims and exploitative factories remaining unnoticed. By providing a summary

of workers' feedback in real-time, the app highlights areas for further investigation. It also allows auditors to reach out to more workers and bridge language barriers through its multilingual audio-questionnaires. Data collected through the app can be collated on a content management system, and screening responses can be accessed, analysed, and shared by authorized users and their organizations. This facilitates efficient and consistent data collection of workers' interviews, enables data retention and tracking of factories' working conditions over time.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C10. Ethical dimensions of the Information Society

SDGs

Goal 5: Achieve gender equality and empower all women and girls|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 98

Title of the project, Contact Organization Name, Stakeholder type, Country

Zen Connect 4 Kids, Families & Teens

Innovative Trauma Relief Access (INNTRA)

Civil Society

Switzerland

Beneficiaries

Primary beneficiaries are children, adolescents, and their caregivers/parents.

Website

https://www.inntra.ch/

Description

We are introducing 2 series of 30 minutes live-streaming episodes performed by our team in response to the COVID-19 outbreak. Each episode proposes 2 carefully orchestrated activities (in art, music, dancing, relaxing body energy movement or singing) of 12 minutes each. This process follows a non-cognitive, holistic, creative, and solutionoriented approach to decrease stress and anxiety. Our episodes will be aired regularly on our website and chosen social media platforms. They are accessible to everyone and are free of charge. The series, led by high-level professionals with global field experience in child trauma, stress-management, and resilience, will benefit a wide range of stakeholders: families, children, teenagers, child health professionals, educators, and any organizations (private, semi-private or state) in charge of supervising children and adolescents. Our series' objective will first, help children and teens to cope with the aftermath of the confinement and the ongoing anxiogenic impact of the pandemic; secondly, help parents smooth out possibly tense interactions with their children. Lastly, on a more global scale, these episodes complement efficiently the work of mental health and well-being professionals who are currently heavily solicited due to the traumatic and multi-level impact of the pandemic on individuals nowadays.

ICT Tools

INNTRA collaborators are all located in various countries, so we rely on the use of personal digital infrastructures (personal and/or professional computers and laptops, relevant application and software programs).

Challenges / Partnership / Sustainability / Replicability

Four main challenges are identified: 1) Weak technical proficiency in video-editing-making to ensure the quality of our video is visually engaging (inserting a soundtrack, additional visual bits to enhance aesthetics as well as subtitles in regional language). We want to avoid our episode to look "home-made" or too "business-like". 2) Funding (staff remuneration, purchasing appropriate technological service to create properly our episodes, operational funds). We are currently fundraising. 3) Understanding the IP restriction(s) when it comes to putting online a video-concept, so our organization is protected, and our model stays sustainable. 4) Implementing an appropriate framework to monitor the impact of our programs on various stakeholders (families, youth, professionals) so we can compatibilize this output in our M&E framework. Partnership building is a key component to our organization as we strongly believe in the multi-sectoral necessity of cross border partnerships. It is our objective to build partnerships following one of those two sustainable models (All Inclusive Business model or the Creating Shared Value model) in order to provide tangible deliverables leading to measurable social impact. Our partnership building need and strategy: -Partnering with a medium or large

international organization in the domain of Child Protection to sponsor our access with local professionals to assist with 1) producing subtitles and translation and 2) replicate our model (once we find an appropriate way to deal with rights). -Partnering with a financial donor either from the private or public sector (we have been operating pro-bono and are currently fundraising). -Partnering with a well-known regional "Ambassador" to facilitate (faster) access to our global youth target audience.

Action Lines

AL C3. Access to information and knowledge | AL C4. Capacity building

SDGs

Goal 16: Promote just, peaceful and inclusive societies | Goal 17: Revitalize the global partnership for sustainable development

Case 99

Title of the project, Contact Organization Name, Stakeholder type, Country

Roteco

École polytechnique fédérale de Lausanne

Academia

Switzerland

Beneficiaries

The project "Robotic Teacher Community (Roteco)" aims at creating a community that enable teachers to independently carry out activities in the field of educational robotics, computer science and computational thinking in class or long distance learning in order to prepare children for the digital society. In this community, teachers find, develop and exchange educational activities related to educational robotics and, more generally, to computer sciences. Furthermore, they are informed with the latest news, events and courses in these fields. The project covers all three major language regions of Switzerland. It is supervised by the University of Applied Sciences and Arts of Southern Switzerland (SUPSI), the Swiss Federal Institute of Technology Zurich (ETH Zurich) and the Swiss Federal Institute of Technology Lausanne (EPFL Lausanne) and is founded by the Swiss Academies of Arts and Sciences.

Website

https://www.epfl.ch/about/fr &https://www.roteco.ch

Description

The digital society requires the acquisition of skills related to computer sciences like computational thinking or competences in coding. Also trans-versal competences like communication, collaboration and creativity are increasingly important. Educational robotics is perceived as a valuable tool to increase such competences and is more and more present in the new school curricula. The Roteco project aims to train school teachers in the field of educational robotics and computer science, to develop a community where teachers can find support and to exchange experiences and educational activities in order to increase the presence of robotics in school classes. A call was made for the community itself to produce activities that can be done at home #learnathome (https://www.roteco.ch/fr/stories/faire-des-activites-educatives-a-la-maison-comment-et-quoi/). The community has remained active in order to best inform teachers about activities that allow children to continue to do robotics, programming and coding activities.

ICT Tools

In the project, a collaborative platform has been developed. The platform allows teachers to contact other teachers or experts. Teachers can easily publish, select and download didactic activities of other pairs with the related materials. The social networks of the project as well as our newsletters have been necessary tools for communication and dissemination of information. In order to keep the teachers' community stimulated, Roteco has participated in numerous online events to inspire teachers. Webinars have been a tool for disseminating information (Ludoviales, Open Education Halfday, Coding from home #4, etc.)

Challenges / Partnership / Sustainability / Replicability

The first results are promising since there are already more than 170 activities that have been shared among around 500 teachers. However, it cannot be excluded that users on the platform are solely the pioneers that share materials among each other. The aim of a community like Roteco is however to engage also the beginners in order to expand the

presence of robotics. These teachers need to be supported and followed in the community. The project is still ongoing and it will be interesting to analyze such questions. During the follow weeks, a survey is planned in order to analyze who are the teachers that are most active in a community, how much they share, how many contacts they build online and what they need in order to foster those elements. We are looking for institutional partners in teacher training such as universities or training centers. We are looking for partners in the educational robotics research sector who want to publish and share their research. We are looking for teachers and schools in the private or public sector committed to change! Some of the activities proposed by the community member are related to the sustainable field. Robotics is used as a tool but the content can be transposed into what the users need. We imagine that this project could be duplicated by educational system or by language according to the needs of teachers.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 100

Title of the project, Contact Organization Name, Stakeholder type, Country

Tunisian government analyzes emergency call data to understand COVID-19 spread and provide more effective emergency response

Targa / Ooredoo

Private Sector

Tunisia

Beneficiaries

Ministry of Health; Medical Emergency Organization.

Website

http://www.targa-consult.com

Description

Established in 2004, the Ministry of Communication Technologies and Digital Economy (MTCEN) is an agency of the Tunisian government focused on improving Tunisia's communications sector and acquiring new technology to serve the country's 11 million people. With the onset of the COVID-19 pandemic, the Tunisian emergency services saw a sudden, dramatic spike in incoming phone calls. They received more than 450,000 calls in the first month of the pandemic—the equivalent of two years' worth in pre-pandemic times. Unable to reach an operator, citizens were calling up to 10 times each. While some calls were placed to a dedicated COVID-19 hotline, many were placed to 1-9-0, the country's general emergency number. The volume of calls put a strain on emergency services, restricting their ability to provide fast, effective care to those who needed it most. The number of virus-related calls to 1-9-0, rather than to the hotline, limited MTCEN's efforts to track the spread of the virus. Greater understanding of their call data was key to organizing a consistent, effective response to the virus. MTCEN worked alongside Targa Consult and Ooredoo, Tunisia's largest telecommunications provider, to create dashboards that provide critical insights into call volumes, times, and geographical variation. Operational in just 24 hours, the dashboards allowed Emergency Doctors to explore and interact with the call data, and make necessary operational changes. The data justified MTCEN developing a public communications campaign that promoted the COVID-19 hotline, while a redirect solution was built to divert non-emergency calls. These improvements provided greater clarity into the call data, and by understanding call density and geographical variation, Local Emergency services can now monitor trends and identify contamination clusters across the country. Additionally, analyzing peak call times allows the government to manage emergency team response and other resources more effectively, helping them stay ahead of the virus. MTCEN also discovered that 57% of calls to the emergency number were under 30 seconds, indicating callers were hanging up before reaching an operator. By visualizing average call length and average number of calls per person, operators can now call people back who were unable to reach the emergency number, ensuring citizens receive the critical response they need.

ICT Tools

Data Anaylsis and Data Visualization dashboards that provide critical insights into call volumes, times, and geographical variation. Operational in just 24 hours, the dashboards allowed Emergency Doctors to explore and interact with the call data, and make necessary operational changes.

Challenges / Partnership / Sustainability / Replicability

Data Cleansing has been the main challenge, Family and friends have been put to contribution to be able to provide the Dashboards in 24h. The Tunisian Medical Emergency Organisation (SAMU) has expressed interest to have access to the tool after the COVID19 to analyse calls and discover patterns. The concept can be replicated in any country provided we have access to the data either thru Telecom or call center companies

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 10: Reduce inequality within and among countries

Case 101

Title of the project, Contact Organization Name, Stakeholder type, Country

Global Teens MeetUps

EduHarbor

Private Sector

Germany

Beneficiaries

9-15-year-old students who can express themselves in English on an intermediate level. Students from Zimbabwe, UK, Spain, France, China, Zambia, South Korea, India, Colombia, Uganda have joined our Meetups so far. They receive support through fun activities and interactions with their peers online, seeing that everyone is in the same shoes right now. We have run 3 MeetUps and each time had up to 25 students registered.

Website

https://www.eduharbor.com/

https://www.eduharbor.com/edu-gtmeeup/

Description

Global Teens Program was created as a branch program of the Global Competence Online Project to give more support to all the students who have been studying from home during COVID-19, as well as support their families by running these weekly free Global Teens Meet-ups, where a professional educator will facilitate a 50-minutes meeting with students from all over the world.

Students from 9 to 15 years old get to meet each other online, play fun games that help them to discover/share how they are feeling in order to unwind and know that they are not alone. Each MeetUp has a Genius Hour where one of the students gives a sharing about something they have experienced or something they like, such as moving to another country, learning to code or teaching each other magic tricks.

ICT Tools

We have used Zoom, Skype and got an offer to use ClassIn as support from the company in China.

Challenges / Partnership / Sustainability / Replicability

The main challenge we have is finding a suitable platform, as well as students' poor internet connection or unstable connection due to weather conditions or individual situations. We have just started the project so we might be looking for partners later on. This project is sustainable. Students only need the internet connection and a device. We also cover SDGs and sustainability as a topic. The project is also replicable. Any educator with experience in online education can gather groups of students and follow a simple flow to create a trustworthy atmosphere for providing valuable support to students.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 17: Revitalize the global partnership for sustainable development

Case 102

Title of the project, Contact Organization Name, Stakeholder type, Country

Evaluating Medicine Delivery System during COVID-19 in Sri Lanka using Mobile Phone Technology

Centers for Disease Control and Prevention

Government

United States of America

Beneficiaries

The primary beneficiaries are the governmental health agencies looking to collect population/sub-population data without the scale of logistical coordination and high cost needed for face-to-face methodologies. Mobile phone surveys are especially useful in situations where face-to-face contact is not feasible.

Website

https://www.cdc.gov

Description

To contain the COVID-19 outbreak in Sri Lanka, an all-island curfew was imposed, causing most of the routine patient care services to be interrupted. Currently, there are access limitations to Non-communicable diseases-related services such as medicine as the health system is struggling to prevent this pandemic. Therefore, Ministry of Health and Indigenous Medical Services introduced a novel mechanism to deliver medicines to the doorstep of patients with NCDs to ensure continuous supply of medicine. A mobile phone survey was launched to assess the utilization and performance of the medicine delivery system for patients with noncommunicable diseases implemented by the Ministry of Health of Sri Lanka.

ICT Tools

An open-source web-based mobile phone data collection tool, Surveda, was used to quickly set up and launch the survey. The survey tool allows for our in-country partners (e.g., ministries of health) to design and conduct a mobile phone survey using various modes (e.g., SMS, IVR, mobile web) and rapidly analyze the data for program and policy decisions.

Challenges / Partnership / Sustainability / Replicability

One main challenge for implementing the mobile phone surveys at scale using Surveda is the requirement of mobile network connections. Contracting with mobile network operators can be labor intensive and time consuming. An alternative is to use the services of an aggregator, where it is easier to set up the channels although the cost may be higher. International partners are welcomed. This project is sustainable given that capacity building and setting up infrastructure for future use are priorities of the project. The in-country partners are trained in using Surveda, so that they are able to field the surveys with minimal assistance if needed. For countries that have conducted a mobile phone survey using Surveda, the infrastructure and capacity would exist to replicate the survey on any other topic. Zambia, Philippines, Morocco, Malawi, Sri Lanka, and Ecuador have all conducted the Non-communicable Diseases Mobile Phone Survey, as a component of the Bloomberg Philanthropies Data for Health Initiative.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 103

Title of the project, Contact Organization Name, Stakeholder type, Country

Clinical Telemonitoring Center for COVID-19

Federal University of Pernambuco

Government

Brazil

Beneficiaries

People who depend on the Brazilian Unified System of Health (SUS) are our primary beneficiaries by Tele-orientation, teleconsultation, and Remote Patient Monitoring. Increasing the population's access to health services in primary and specialized care, providing a rapid response system and improving medical care in SUS. At the same time, we seek to support health professionals and students in prevention, diagnosis and therapy, supporting the management and conduct of suspected or confirmed cases in order to qualify the referral of the patient, to improve the cost-effectiveness and the quality of care through telehealth and telemedicine.

Website

https://www.ufpe.br

http://www.nutes.ufpe.br/coronavirus

Description

This project promotes communication between the general population, which depends on the Brazilian Unified System of Health (SUS), and healthcare professionals and students engaged to help the community to face the pandemic of Covid-19. We deployed a telehealth solution named "Clinical Telemonitoring Center" to provide integrated digital health services to facilitate the tracking of cases and guides patients and the population to face COVID-19, impacting early contingency measures (reducing transmission risks, faster isolation precautions, indicating hospitalization in suspected cases), management of suspected and confirmed cases and prevention in SUS. This is a humanitarian action to help those who need it most: people with no access to healthcare providers, who can't afford medical care, or live in cities with high demographic density or high vulnerability (sites with high spread of coronavirus) or who need specialized consultation (psychiatry, pneumology, geriatrics, etc.) to ensure continuity of care. This project also provides an alternative to healthcare workers in high-risk groups to continue their activities remotely, and to the overloaded and high cost phone-based solutions provided by governments with long waiting lines.

ICT Tools

We provide a responsive hot site (for web and mobile devices) integrated with applications accessed through a single user registration.

Challenges / Partnership / Sustainability / Replicability

The biggest challenge is to reach the largest number of people, especially those at risk and who can't rapidly reach healthcare facilities. This challenge is being overcome by intensifying the publicity of the project through several channels (social media - Facebook, Instagram, website, open media - TV, supporter and partner sites - UFPE, Ministry of Education, Ministry of Health, Hospital Clinics, etc.), and mainly based on our user's experience (word-of-mouth). The second is to incorporate these new digital practices into the routine of health professionals. Awareness and training are being used to overcome this challenge. This project is organizationally and financially sustainable, since telehealth has already proved to be viable and an important instrument to

complement face-to-face healthcare. Partnerships and financial support in the public and private sectors are viable alternatives, due to the scalability of the solution, and recognition of the cost-benefit ratio of digital practices. In addition, our institution is a recognized and solid public university in Brazil, with 73 years of commitment to society, the environment and the country's economy. Our technological strategy can be easily adopted and translate to other languages. However, Internet access must be available, teleconsulting specialist team is according to availability, ethical and regulatory aspects need to be considered, and telecommunications fee can be applied.

Action Lines

AL C4. Capacity building | AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 104

Title of the project, Contact Organization Name, Stakeholder type, Country

Retail Queue Management Solution

Earlyone

Private Sector

Armenia

Beneficiaries

Earlyone's primary beneficiaries are those institutions that have a limit on the capacity of customers that their premises can sustain at a certain time period. The solution will help those institutions to (1) Control entry to premises to limit the number of customers allowed in (2) Limit opportunities for COVID-19 to spread by eliminating crowding outside (3) Minimise waiting time of shoppers by scheduling their entry time beforehand

Website

http://earlyone.com/earlyone-retail-queue-management

Description

Earlyone has released a new solution to battle the outcomes of the coronavirus outbreak. Besides, Earlyone has improved the existing solution by offering a new feature to its users - QR check-in that allows contactless activation of virtual tickets created with Earlyone app.

ICT Tools

Earlyone has released a new solution to battle the outcomes of the coronavirus outbreak. Besides, Earlyone has improved the existing solution by offering a new feature to its users - QR check-in that allows contactless activation of virtual tickets created with Earlyone app.

Challenges / Partnership / Sustainability / Replicability

Due to the COVID-19 outbreak, many Governments around the world are putting restrictions and limits on the number of people that can gather in one place, such as supermarkets, shops, pharmacies or public facilities. Retail Queue Management Solution is designed to help retailers control entry to store letting in only allowed number of shoppers and prevent crowding outside the premises. We are open to new partnerships all around the world as our solution can be implemented anywhere. This project can be replicated to meet the needs of an institution that has unusual type of customer flows. This needs to be discussed.

Action Lines

AL3

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 105

Title of the project, Contact Organization Name, Stakeholder type, Country

Genecoin e-health

Genecoin

Private Sector

Brazil

Beneficiaries

We see the main beneficiary as the individuals tested who gain control over their data. Other relevant beneficiaries are services and industries that need to resume activities, while guaranteeing the safety of their employees and society. The project has been sponsored by the Brazilian government with financial contribution of industries.

Website

https://genecoin.co

https://www.genecoin.co/covid19

Description

Genecoin is a tech startup developing blockchain based solutions to maximize social and environmental sustainability of biodiversity supply chains. As response to the pandemic, we adapted our biodiversity projects so we could further develop them virtually and we created an e-health project to help fight the disease. For the e-health project, we have partnered with the biotech startup Bio Bureau, who is developing technology for massive COVID-19 testing, and the Brazilian research center in telecommunication, CPqD. The goal of the partnership is to develop a blockchain application to safely store COVID-19 test results, guaranteeing both confidence in the information for all stakeholders and ownership and privacy for the patients. We foresee that the platform could later be used as an immunity passport, allowing people return from isolation without endangering others and enabling the resume of some social and economic activities that would benefit all.

ICT Tools

The main tool being used is blockchain technology. We are leveraging it to safely store COVID-19 test results and empower the user (civil society) with control over their data. They are able to share their own data with government authorities in a transparent but private way (anonymized) or even monetize it by giving access to the private sector, if that's their wish.

Challenges / Partnership / Sustainability / Replicability

The main challenges are the availability of massive testing solutions, stakeholder engagement and funding. To be able to safely store data in the blockchain, we first need test results and there is still no massive test solution available in Brazil. Get all stakeholders to agree on the most relevant features for the product has been a challenge as well. Securing funding to allow for the complete development of the solution is also a challenge. We are looking both for more laboratories engaged in massive COVID-19 testing that are interested in empowering the tested individuals and for stakeholders interested in integrating such platform with user facing applications for different economic industries that could benefit from massive test data, such as tourism sector for example. On financial sustainability: we understand that the users' data is valuable to different stakeholders that are willing to pay for it. The platform provides a channel for users to monetize their data and retains a fee in case they decide to do it. The blockchain

platform could be used on the background to support different user facing applications, with different regional reach and characteristics.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 106

Title of the project, Contact Organization Name, Stakeholder type, Country

Going digital to facilitate the global library field response to the pandemic International Federation of Library Associations and Institutions

Civil Society

Netherlands

Beneficiaries

The primary beneficiaries of these activities are members of the global library sector. For some, the digital transformation opened more channels and opportunities to participate in dialogues, exchanges of experience and collaborations. The sector itself of course stands to benefit from this wider pool of engaged participants, from their experiences and insights. Other members of the sector benefitted from the shift to digital because they could access more digital offers and services – webinars, tools, knowledge databases, etc. Naturally, many of these professional communications and initiatives have a strong focus on adapting, maintaining or improving library services and offers to their patrons and communities. As such, libraries' communities and patrons are often the key target beneficiaries.

Website

https://www.ifla.org/

Description

IFLA and its professional units have relied on digital tools and platforms to facilitate professional communication during the pandemic – and help build the global library field's capacity to respond.

A series of scheduled annual meetings by different IFLA Units were shifted online, addressing, inter alia, ways to adapt the Units' goals and working plans to the pandemic. Crucially, this allowed the Units to engage members who would not attend otherwise (e.g. due to financial or logistics constraints) – the Asia and Oceania Committee online meeting, for example, reported a record high attendance.

Second is the use of ICT to develop relevant online offerings to build library response capacity. These include webinars on relevant topics – e.g. information literacy and addressing digital health inequalities in times of COVID. The Document Delivery and Resource Sharing Section launched a web-based platform for interlibrary resource sharing during the pandemic. Finally, IFLA and other actors in the library field relied on ICT to mobilise an exchange of experiences with libraries' response to the pandemic and supporting their communities. A wide number of library pandemic responses rely on ICT - from expanding access to online materials, organising online community events, to expanding library public internet access offers, and beyond.

ICT Tools

To mobilise professional communication, IFLA relied on online conferencing tools and other web platforms, as well as social media.

Challenges / Partnership / Sustainability / Replicability

To mobilise professional communication, IFLA relied on online conferencing tools and other web platforms, as well as social media. While not novel in itself, the use of these platforms - particularly video conferencing - was made easier by software and connectivity improvements over the last few years, and the build-up of members' experience with these tools, especially in those regions most in need of capacity building support. The fairly routine use of many of these platforms pre-pandemic allowed many members to quickly adapt and shift to an all-digital communication, which helped deliver an urgent joint response from regional and international groups. This transformation allowed for increased participation across members and facilitated cooperation (e.g. with collaborative productivity tools or file transfers, easing the tasks of minutes and records-keeping), adding value to their meetings; as well as encouraged a full focus on development of new digital offers and resources. Broadly speaking, there is of course scope for collaboration with representatives from other areas – either as subject-matter experts (e.g. for preparing joint webinars or other materials – for example, with health, digital inclusion or information literacy experts), or as implementation partners. For instance, there are examples of collaborations between library and publishing sectors to enable broader remote access to digital materials; or with other organisations and agencies working to help bridge the digital divide during the pandemic and beyond.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 17: Revitalize the global partnership for sustainable development

Case 107

Title of the project, Contact Organization Name, Stakeholder type, Country

Finding Digital Addresses

Finding Gambia

Civil Society

Gambia (Republic of the)

Beneficiaries

Ministry of Health of The Gambia, Pharmacies, Delivery Companies

Website

https://twitter.com/FindingGambia

Description

In order to tackle the difficulties faced by The Gambian citizens while observing social distancing, Finding Gambia an initiative founded to provide addresses for every Gambian – in collaboration with Gambia Task Force on Plus Code Addressing System – launched a program that would allowed Gambians to find their generate address using google plus codes (which is also their exact addresses) anywhere they are in the country. The initiative provided training for the Centre for disease control and the Ministry of Health COVID-19 emergency team in plus code generation to help locate callers who suspect signs of the virus and need urgent medical attention. We trained volunteers from the ministry of youth using the technology to help them on contact and provision of essential goods for the populations and help ensure social distancing.

ICT Tools

We use Google, Google Plus, and Google Maps.

Challenges / Partnership / Sustainability / Replicability

During the corona virus outbreak, The Gambia, just like other nations across the globe is observing the guidelines recommended by the World Health Organization (WHO) and one of these is the observation of social distancing. Citizens were highly recommended to stay at home, regularly wash their hands and avoid large gatherings. Yet still, people needed essential items like food and medicines.

A part from with Gambia Task Force, we also partnered with the UNDP, Ministry of Youth and EU's Youth Empowerment Office in Gambia and provided training for pharmacies and delivery companies to ensure that citizens stay home and still get their essential goods. We are looking for partners in the tech sectors.

So far, delivery companies have made an improvement of having to drive to a certain area and then make phone calls to ask for more direction to the precise location of the recipient to just getting the direct google plus codes of the recipient and receiving directions from the Google Maps application. Pharmacies now also make deliveries for their customers to stay at home and still receive the essential medicines they need. Hence, allowing Gambian citizens to stay home and observe social distancing, and still getting their essential goods from the comfort of their home.

Action Lines

AL C5. Building confidence and security in use of ICTs |AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation | Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 108

Title of the project, Contact Organization Name, Stakeholder type, Country

AgroRuqsat

"Information and Account Centre" JSC

Government

Kazakhstan

Beneficiaries

Farmers affected by the COVID-19 outbreak.

Website

http://iuc.kz/

https://ruqsat.qoldau.kz/ru/information

Description

During the quarantine outbreak in Kazakhstan, a state of emergency was declared and the government decided to prohibit movement across the borders of all villages, districts and regions. Farmers, whose farm fields can be located in several districts and even regions, encountered difficulties in sowing and field work due to difficulties in obtaining paper passes, which put Kazakhstan's food security at risk. Therefore, it was necessary to implement the solution as quickly as possible so that the sowing took place at the right time. AgroRuqsat is a free online service designed to address the issues of providing transportation permits for farmers and their suppliers in quarantine zones by remotely receiving applications for electronic passes, processing these applications, and maintaining a register of electronic passes. To obtain an electronic pass, you do not need to physically contact government agencies, fill out a lot of papers and collect stamps. The pass is free and valid for the entire period of emergency and quarantine. Within a few minutes to one business day, the applicant receives an electronic document granting the right to cross the roadblocks to proceed to their land plots. The transparency of the service helped solve the problem with fake passes and minimize the risks of the spread of the virus. Data is automatically uploaded to the "Sergek" system installed at checkpoints and made available to all police officers. In addition, upon receipt of a pass, an automatic check is carried out on state databases, which excludes the receipt of passes by those who are not involved in spring field work and ensures compliance with quarantine measures. During the first week, all regions joined the Service, including the capital and cities of republican significance.

ICT Tools

Web technology and integration with government databases are one of the main foundations of the work of the AgroRuqsat electronic pass issuing service, which is based on the Qoldau.kz digital platform, where about 200 thousand users (over 90%) of agricultural enterprises, farms and farms of Kazakhstan are located. Innovation speeds up the process of issuing passes. The AgroRuqsat electronic pass mechanism allows you to speed up the process of transport and farmers crossing the boundaries of quarantine zones. To apply for a pass, you must register on the website www.qoldau.kz and login into your personal account, where the user identifies himself with digital identification key. In addition, the electronic pass of the citizen and the vehicle is equipped with an individual QR code. The pass can be printed or photographed on the phone so that it is easier to pass identification outside the checkpoints.

Challenges / Partnership / Sustainability / Replicability

One of the main difficulties in the implementation of the project was a tight timing. A sudden outbreak of the virus required an accelerated decision-making and implementation of the service. For three days, the specialists of the Information and Accounting Center did a lot of work: from negotiations to methodological, legal, technical support and integration with several databases. In case of any errors or system failures, it is necessary to eliminate defects as quickly as possible so as not to interrupt the service, and thereby allow farmers to complete their field work on time. In addition, the digitalization level of the agricultural sector in some regions of the country is much lower. The service automatically accepts and processes applications, checks against databases, but is not fully automated. The speed of issuance of a pass depends on how quickly employees of local executive bodies work out applications.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 109

Title of the project, Contact Organization Name, Stakeholder type, Country

African Digital Schools Initiative (ADSI)
Global E-Schools and Communities Initiatives-GESCI
International Organization

Kenya

Beneficiaries

In conjunction with Ministries of Education and local education authorities in countries across Africa, GESCI's African Digital Schools Initiative (ADSI) is currently emphasizing aspects of implementation which also address immediate needs in the context of the COVID virus. These features are currently enabling: Secondary school teachers to develop skills in designing and developing both ICT-based exemplary lesson plans and curricular materials for their learners. Their work is shared on a peer to peer basis through our community of practice platform; Teacher Professional Development is equipping teachers with more skills to device and practice new digitally-driven pedagogies ways to make both teaching and learning more flexible and with reduced time constraints. Teachers acquire the professional skills to prepare exemplary ICT-based lesson plans and develop learning resources for online/offline access by their learners; Learners to continue their studies through our online learning resources platform which provides access to subject-specific resources; School management and local education boards to implement a structured and incremental roadmap for whole school ICT development; Ministries to monitor and assess these developments at first hand as possible pointers to new and more flexible approaches to teaching and learning which are increasingly being facilitated by the availability of new and cheaper digital technologies.

Website

https://gesci.org/

https://oer-studentresources.gesci.org/

Description

GESCI COVID-19 Response: https://gesci.org/news-

<u>room/news/single/news/detail/News/gescis-covid19-response/</u> Global e- Schools and Communities (GESCI) is primarily responding to the COVID crisis in education through: Launching a Students' Resources for online learning platform: https://bit.ly/2Lf1uEN
Teacher Professional Development (Coding webinars: https://bit.ly/3cyIT2c Engaging teachers through the Community of Practice: https://bit.ly/3dyvojh The e-Readiness Framework and Costing of ICT Integration Model

ICT Tools

The teachers and students GESCI is reaching out are using mobile phones, laptops, tablets and Internet connectivity to access material provided on Open Educational Resources platforms. This has completely shifted focus on face to face learning as more teachers are now creating content and delivering it to learners through Facebook Live, YouTube live or recording videos and sharing via websites they have developed. This addresses GESCI's key focus on transforming secondary schools into digital schools of distinction through integration of ICTs in teaching and learning.

Challenges / Partnership / Sustainability / Replicability

Given that many teachers and students are now in remote areas of their respective countries, they have limited access to the Internet and digital devices. As a result, not all can access the resources. GESCI has reached out to other educational partners to curate content and package in compact discs, MP3 and MP4 files which can be aired on national radio or Television. The two mediums are easy to access and in doing that, we also reach out to all learners. A new partnership has developed with subject - cluster teachers in skills development for quality lesson planning and learning resource development. Enhanced relationships with partners and donors through the pursuit of a shared mission to contribute to learners in a time of crisis while maintaining longer term programme objectives. Currently, the project is being implemented in Côte d'Ivoire, Kenya and Tanzania. The project, with all its platforms, frameworks and support, is easily contextualized for any country to implement successfully.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 5: Achieve gender equality and empower all women and girls

Case 110

Title of the project, Contact Organization Name, Stakeholder type, Country

Contactless Camera Enabled Infrared Thermal Scanner Birla VIshwakarma Mahavidhyalaya

Academia

India

Beneficiaries

The thermal scanners available right now costs around 7k to 8k. Rupees but the over all cost of making this device(prototype) is around 3000/- and once it is converted into mass production (making it as a full scale device) it can cost around 1500/-, this will be very

cheap and efficient for the government along with supporting the #makeinIndia movement.

Website

http://www.bvmengineering.ac.in/

Description

The contactless infrared thermal scanner is a prototype which is able to scan the body temperature of a person and click its picture as well. With the infrared sensor it will be able to identify the body temperature of a person and as the device is camera enabled the image of a person is captured with temperature annotated. Now here the images will be taken with the temperature recorded and will be sent to the servers and so that it will be easier to identify the people who've had high temperature. As in right now because of Covid-19 to stop further prevention the people who have high temperature are needed to be tracked down and with the images which they already have it will be easy for the government to track down these people.

ICT Tools

The prototype consists of a Raspberry Pi, MLX96014- Thermal Scanner, 7-inch LCD display and a camera to click the image- RasPi Camera.

- As the hardware is set up, the device runs on Linux OS by running the program that has been developed the camera will be enabled and the temperature sensor as well. The sensor here takes a continuous data and it will be able to show the body temperature annotated on the screen.
- As the camera is enabled the person will be able to see it's face on the 7-inch LCD display screen along with the temperature annotated at the bottom of the display.
- As the person's face is kept near to the temperature sensor the body temperature will be displayed. Now the picture has to be clicked and that picture will consist of the person's face and her/his body temperature.
- This picture will be sent to the server database.

Challenges / Partnership / Sustainability / Replicability

Right now, the only option to track the coronavirus patients is to find out with whom they have been in contact where did they go but it becomes quite difficult when tracking down that person. Once the picture is clicked and if that person has high temperature, it will be easier for the government authority to track down that person as they have its photograph and the person's body temperature as well.

I am looking for international organizations working in the field of ICT and Education to support my innovation.

This prototype is a light weight and very durable and sustainable device. It works on normal power supply/ battery so it can be easily. Also further converting into device it can be made using 3-D printed device.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 111

Title of the project, Contact Organization Name, Stakeholder type, Country

Inmarsat support for seafarers

Inmarsat

Private Sector

United Kingdom

Beneficiaries

Crew of seafaring vessels and their families, who are able to stay in touch with each other and access important medical information.

Website

http://www.inmarsat.com

https://www.inmarsat.com/covid-19/

Description

To promote seafarer well-being Inmarsat has formalised a 50% discount for crew voice calling services for three months until the end of June. It is also ensuring that calls made to the SeafarerHelp service provided by welfare organisation ISWAN (International Seafarers' Welfare Assistance Network) are available free of charge over the same period. The discount is available day and night to customers using FleetBroadband voice services. Steps are also being taken to accelerate the launch of ChatCard services for Fleet Xpress, with an introductory discount. Inmarsat's Fleet Xpress retail users will also be able to benefit immediately from the launch of a free of charge COVID-19 video call service with a trained health professional, especially developed in conjunction with crew health management solutions provider Vikand and software platform provider FrontM to help shipping cope with the impact of the crisis. This is a pro bono service over dedicated bandwidth that allows the Master or Chief Officer to connect by video call to a trained health professional from Vikand. This is not a clinical care or emergency service, but it is a vital information resource to help crew at a difficult time for everyone.

ICT Tools

Mobile satellite services are being used to provide voice connectivity to seafarers far away from any terrestrial connectivity. Satellite broadband solutions are enabling seafarers to use video conferencing technology to get important health information.

Challenges / Partnership / Sustainability / Replicability

Seafaring crew spend long periods away from shore-based loved ones and medical services. This can affect their mental and physical health, as well as that of their families. Making connectivity more accessible to them during these critical times can be of great assistance in relieving these stresses. Inmarsat is working closely with international aid organisations and its business partners to deliver this programme.

Action Lines

AL C2. Information and communication infrastructure | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 112

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Response in Burkina Faso and Cambodia Save the Children US International Organization

United States of America

Beneficiaries

The primary beneficiaries of these projects are the people who lack reliable access to information which is important to improving their livelihoods and well-being, due to illiteracy, geographical obstacles, poor Internet connectivity, the high cost of smartphones and computers, gender barriers, etc. and/or those who cannot be reached via traditional communication channels (TV, film, Internet, newspapers and radio). When the global COVID-19 pandemic hit, Viamo acted quickly to add messages, based on WHO messages, on all of their 3-2-1 Services. As of May 20th, more than 5.7 million listeners have listened to over 15.8 million key messages related to COVID-19 (updated impact statistics: https://viamo.io/covid-19-response/).

Website

https://www.savethechildren.org

Description

In Cambodia and Burkina Faso, through the USAID Breakthrough-ACTION project, and in partnership with each country's Ministry of Health, Save the Children, and Viamo have coordinated communication campaigns using Viamo's 3-2-1 Service to quickly disseminate essential information related to COVID-19 nationwide, for free. In Burkina Faso, Save the Children and Viamo developed twenty key messages, including those addressing local misconceptions, a COVID-19 knowledge quiz, and a remote training curriculum for community health workers. The content was validated by the Ministry of Health, recorded in five languages (Moore, Dioula, Fulfulde, Gulmancema and French), and made available to anyone with a mobile phone, simply by calling '321'. From March 26th to May 20th, approximately 15,000 unique callers listened to 120,000 key messages on the Service in Burkina Faso. In Cambodia, Save the Children and Viamo developed ten messages to promote understanding, prevention, and treatment of the diseases as well as an interactive audio game to test COVID-19 knowledge.

ICT Tools

Partnering with Viamo, Save the Children is focusing on access to evidence-based information via basic mobile phones. Through even the most simple mobile phones, users can access the 3-2-1 Service. By adding COVID-19 information to the Service, callers can easily find the specific information they need at the time when they need it, in a language they understand. The Service is currently available to 200 million mobile subscribers in 18 countries worldwide.

Challenges / Partnership / Sustainability / Replicability

The main challenge is to develop and validate content even while scientific knowledge about the virus continues to evolve, and ensure that the content is comprehensible for lower-literacy people who have little access to other sources of trustworthy information. This challenge can be overcome by continuously adding and adapting content, which we are well-positioned to do through this partnership with the MOH and Viamo. Both Viamo and Save the Children are always looking for partners to expand our work. All content

experts are able to partner with Viamo to develop content, either related to COVID-19 or any other relevant theme or topic, for the 3-2-1 Service in any of its 18 operating countries (Afghanistan, Botswana, Burkina Faso, Cambodia, the DRC, Ghana, Indonesia, Madagascar, Malawi, Mali, Mozambique, Nepal, Niger, Nigeria, Rwanda, Tanzania, Uganda and Zambia). This project is sustainable. The 3-2-1 Service was launched nine years ago in Madagascar and has been replicated in 17 other countries since, with all of them still running successfully. The unique value-add of the 3-2-1 Service is that it is free to the user. For the current partnership, the project is focused on COVID-19 information, but the team has experience developing behavior change campaigns across a wide spectrum of topics, so could replicate the project within its footprint of 120 countries either to address the COVID-19 outbreak or other topics.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case 113

Title of the project, Contact Organization Name, Stakeholder type, Country

Inmarsat supports aid and NGO sector during Covid-19 crisis

Inmarsat

Private Sector

United Kingdom

Beneficiaries

Aid and NGO organisations involved in relief efforts related to pandemic, natural disaster, or other humanitarian operations. Making Inmarsat's satellite communications services more accessible will allow the humanitarian community to continue safely coordinating emergency relief operations, saving lives and helping to rebuild communities.

Website

http://www.inmarsat.com

https://www.inmarsat.com/covid-19/

Description

Inmarsat is providing further enhanced support to the vital aid and NGO sector during the Covid-19 pandemic, ensuring emergency responders can continue delivering critical aid and relief. Inmarsat's Broadband Global Area Network (BGAN) and IsatPhone 2 services are crucial connectivity tools for land-based organisations, especially for aid agencies and NGOs.

The new initiatives include enabling Inmarsat's BGAN Link plan for usage globally. This means that the normally static, geo-specific service can offer organisations the capability to operate cost-effectively and without complexity within a wider geographic range as they carry out their vital operations. Inmarsat will also offer its BGAN Pro Plan, with a new discount of 50% on the cost of any data usage over the monthly allowance. To support IsatPhone 2 pre-paid users, Inmarsat introduced an emergency voucher including 50% more airtime allowance and a longer validity period for users. Additionally for the IsatPhone 2 GSPS Standard plan, a 50% discount on calls over the monthly limit will be applied.

These new initiatives will ensure aid and NGO organisations have access to the connectivity they need to do their job, wherever they are.

ICT Tools

Mobile satellite service handsets and broadband terminals enable reliable connectivity to ensure that relief actions are informed and make the maximum impact.

Challenges / Partnership / Sustainability / Replicability

Covid-19 is affecting the operation of aid and NGO organisations, and the need for reliable connectivity, in a variety of ways. Many are at the forefront of the medical response, supporting health services through telemedicine in remote or developing areas. Elsewhere, the impact of the disease has caused many other issues to the wider economy and people's day-to-day lives, which are also being addressed through the work of NGOs, such as distributing food and other resources. Covid-19 is also adding increasing complexity to the daily operations for aid and NGO organisations as they respond to unrelated-crises, such as natural disasters or humanitarian events, causing remote connectivity to be more critical than ever. Effective emergency response depends upon reliable connectivity. Ensuring accessibility of reliable and robust communications technology can help these organisations perform their critical missions and coordinate amongst themselves and with local governments to create the greatest positive impact for affected populations.

Inmarsat works closely with aid and NGO partners, including through collaboration with the ITU, as a signatory of the United Nations Crisis Connectivity Charter, and its longstanding support of front-line response organisations like Télécoms Sans Frontières.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 16: Promote just, peaceful and inclusive societies

Case 114

Title of the project, Contact Organization Name, Stakeholder type, Country

Remote surveying of child caretakers in Rwanda Save the Children US International Organization United States of America

Beneficiaries

The primary beneficiaries or this data will be Rwandan children, ages 0 to 12, who have been displaced from school due to the COVID-19 outbreak, along with their families, schools, community-based child services organizations and the Ministry of Education. The survey will allow Save the Children, community-based organizations and the Rwandan government to identify the difficulties that caretakers face when caring for children in their homes during the day and to address any resulting child welfare issues by tailoring services to meet those needs.

Website

https://www.savethechildren.org

Description

Save the Children Rwanda is working to ensure that girls and boys (with or without disabilities) are safe in their homes and are able to exercise their rights to learn, survive and be protected. As a key part of that effort, Save the Children has teamed with GeoPoll to use that company's software platform to conduct a 2-way SMS survey of adults caring for children in Rwanda. The goal of the survey is to establish the extent of caretakers' support for their children's learning and well-being while schools are closed due to the pandemic in order to respond with appropriate services and interventions.

ICT Tools

Save the Children teamed up with GeoPoll, a developer of innovative mobile data collection to conduct remote surveys of adult caretakers on the welfare of children at home due to lockdowns. GeoPoll specializes in difficult-to-reach populations that often can only be reached via mobile due to safety, transportation or other issues. GeoPoll has pre-existing partnerships with the mobile network operators in Rwanda and was able to quickly collect data from 500 households using 2-way SMS surveys following a script designed by Save the Children technical experts. GeoPoll surveys are undertaken at no cost for respondents and offer an integrated technology that delivers phone credit incentives upon a survey's completion. GeoPoll's technology can be used without Internet access or smartphones, allowing access to an ever-growing population of individuals who only have a basic mobile phone. Surveys can be conducted in multiple languages and allow an interaction with respondents, which is collected and reported anonymously with adherence to data security and internationally-accepted research standards.

Challenges / Partnership / Sustainability / Replicability

The message content must be carefully designed by the Save the Children project team. There can be challenges attaining the ideal number of competed surveys based on the eligibility requirements for respondents. Both GeoPoll and Save the Children are always looking for partners to expand our work. GeoPoll's software and services can be used around the world to support the mobile data collection needs of both local and international NGOs by offering several ways to monitor, engage and inform priority populations both on- and off-line. Save the Children is always expanding its network of

community-based and international partners both in Rwanda and across its 120-country footprint. The project is sustainable. The COVID-19 outbreak is not only making it clear that traditional face-to-face data collection activities are temporarily impossible, it is spurring NGOs and other entities to undergo a digital transformation of their data collection methods. The project is highly replicable. This type of rapid data collection can be undertaken in dozens of countries globally. For the current partnership, the surveying is focused on the care of students at home due to COVID-19, but the surveys could be designed to gather information about any topic and GeoPoll's platform could also be used for sending messages to support those campaigns based on the data gathered.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health | AL C11. International and regional cooperation

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 115

Title of the project, Contact Organization Name, Stakeholder type, Country

Testing how much you are at risk by Live Corona Online Based Testing System IUSOFT Technology

Private Sector

Bangladesh

Beneficiaries

People who want to know whether they are at risk of being infected with the Novel Corona virus.

Website

http://iusoftbd.com

http://livecoronatest.com

Description

With this software you can assess for yourself whether you are at risk of being infected with Covid-19 or Novel Corona virus. It will be used to provide users with self-motivated information, future corona virus data analysis, big data and artificial intelligence technology.

ICT Tools

We use Big Data Analysis and Medical Research.

Challenges / Partnership / Sustainability / Replicability

It will be used in data analysis, big data and artificial intelligence technologies.

Our partner is ICT Division, Bangladesh.

Please be aware that the results obtained from this software cannot be considered as health advice by an experienced doctor.

The project can be implemented all over the world.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 17: Revitalize the global partnership for sustainable development

Case 116

Title of the project, Contact Organization Name, Stakeholder type, Country

YEEP project

Job In Rwanda Foundation

Other

Rwanda

Beneficiaries

Our primary beneficiaries are students, employees and employers who wish to keep their mind busy in learning on line. The main benefit is to give be useful in this period and the main service are those course.

Website

https://jobinrwanda.org/

https://campus.jobinrwanda.org/

Description

The main project is to create and put online courses in different areas which helped and still help the Rwandan population, students, employees and employers to keep learning while staying home.

ICT Tools

We are using internet and applications that allow us to create course and social media to promote our courses and spread the information to the whole country.

Challenges / Partnership / Sustainability / Replicability

The main challenge is to get people who can help us to create courses and put them on line. We would like to have some funds so that we may hire some people who can be in charge.

We are looking for partners; we already created https://campus.jobinrwanda.org/ which is the platform where people can get courses we would like to get funds to empower that platform.

This project is sustainable in terms of its importance to the Rwandan people. It is very important that people keep empowering themselves even they are not allowed to move. This project can be replicable in any other situation that demands people to stay or work at home, in a situation where people cannot be allowed to move.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 5: Achieve gender equality and empower all women and girls | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 117

Title of the project, Contact Organization Name, Stakeholder type, Country

Expanding Access to High-Impact Social, Economic Education Resources across Africa during COVID-19

Intelsat

Private Sector

United Kingdom

Beneficiaries

Thanks to the extension of this partnership students, out-of-school youth and teachers across Africa have access to high-quality and free educational television and online content. Since 2002 this partnership has benefited 1,600 schools and 1,025 healthcare facilities across just South Africa. Today, governments, departments of education, broadcasters and nongovernmental organizations across Sub-Saharan Africa within Intelsat's satellite coverage area can downlink and redistribute Mindset's Learn channel.

Website

http://www.intelsat.com/

http://www.intelsat.com/wp-content/uploads/2017/02/5376-CS-Mindset-2016.pdf

Description

Intelsat and Mindset Network NPC, an award-winning developer and distributor of educational materials in Africa, announced they have formally extended their partnership to ensure students, out-of-school youth, teachers, healthcare professionals and patients across Africa have access to high-quality and free educational television and online content. Intelsat has partnered with Mindset since the non-profit was founded in 2002, providing free access to satellite capacity and technology that allows Mindset to rapidly and efficiently broadcast and IP multicast its educational content to over 1,600 schools and 1,025 healthcare facilities across just South Africa. This partnership extension comes at a time when nearly 300 million students throughout Africa have been impacted by school closures and other learning disruptions due to the novel coronavirus (COVID-19), according to UNESCO.Mindset educational resources focus on topics such as COVID-19, HIV/AIDS, tuberculosis, Ebola, child survival, science, mathematics, information technology and English. In addition to the broadcast, and IP streaming and multicasting distribution that Intelsat assists with, Mindset also delivers its educational content through multimedia, DVDs and print materials and their newly launched App.

ICT Tools

As the foundational architects of satellite technology, Intelsat operates the world's largest and most advanced satellite fleet and connectivity infrastructure. We apply our unparalleled expertise and the global scale of our network to connect people, businesses, and communities – no matter how difficult the challenge. With an integrated space-terrestrial network reaching 99% of the world's populated areas, Intelsat is uniquely positioned to help communities and business digitally transform. In Africa alone, Intelsat technology has played an integral role in bringing critical information and education content, and in connecting people throughout the continent for decades. For this project, Mindset broadcasts their health and education channels to clinics and schools across Africa using capacity on Intelsat 17 at 66°E.

Challenges / Partnership / Sustainability / Replicability

Distributing content and information across the African continent can be challenging because there are many communities in remote and rural areas that lack infrastructure and connectivity. The Intelsat-Mindset model makes it easier to overcome these content-distribution challenges and get important information in the hands of more people who need it. For this project, Intelsat has partnered with Mindset Network NPC, an award-winning developer and distributor of educational materials in Africa. Mindset is an independent, non-profit organization aimed at the personal, social and economic development of Africans by creating, sourcing and delivering educational materials through appropriate media to the primary and secondary education community, the health community and other underdeveloped and under-resourced communities where development can be achieved through education. This project has endured for 18 years, and we anticipate sustaining it for years to come. Intelsat's network covers 99% of the world's populated areas — even those in remote and hard-to-reach places.

Action Lines

AL C2. Information and communication infrastructure | AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 10: Reduce inequality within and among countries

Case 118

Title of the project, Contact Organization Name, Stakeholder type, Country

Senior Management Connectivity

Ministry of Foreign Affairs

International Organization

Liberia

Beneficiaries

All Ministers Deputy Ministers, Assistant Ministers, Directors and Essential staffs are beneficiaries and their primary services is to receive and share information on COVID - 19.

Website

http://www.mofa.gov.lr/public2/index.php

Description

The Division of Information & Communications Technology (ICT) through this project has connected all senior staff or senior management phones and personal laptops/tables/iPad to the internet to enable them have access to information or updates from stakeholders to promptly respond to the COVID-19 outbreak. This connectivity have allow senior management to create what'sup groups, virtual meetings via zoom among other social groups for information sharing which is presently helping stakeholders to adequately contain the spread of the virus.

ICT Tools

The Division is using Cisco Routers, Switches, Wireless Controller, Uninterruptible Power supply, zoom software, internet protocol (IP) addresses, Polycom virtual equipment for communications.

Challenges / Partnership / Sustainability / Replicability

Finance is one of the main challenges and this can be overcome when the Division of ICT is empower financially.

The Ministry of Foreign Affairs needs partners especially in the area of Information & Communications Technology (ICT). As it stands, the Ministry's network infrastructures need equipment to replace the old or damaged ones.

This project is sustainable. This is because the Division of ICT has competent and professional technicians who are capable to have this project running until the deadline. This project is only focused on the COVID-19 pandemic

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 119

Title of the project, Contact Organization Name, Stakeholder type, Country

Cybersecurity Awareness and Development in Responding to the COVID-19 and Continuous Capacity Building for the post Movement Control Order(MCO) CyberSecurity Malaysia

Government

Malaysia

Beneficiaries

Beneficiaries are the Malaysian general public, Malaysian government, Cybersecurity Training developers, Cybersecurity training providers and trainers, Working adults, Students, Women, and Others.

Website

https://www.cybersecurity.my/en/index.html

https://cyberguru.my/web/guest/online-training

Description

CyberSecurity Malaysia has constantly prepared materials related to cybersecurity awareness and development, to assist the community in responding to the COVID-19 ensuring the impactful use of the WSIS Action Lines in advancing SDGs. These materials are categorised as Infomedia, Webinars and Online Training programs, released to the public at least once per week.

ICT Tools

We use Social Media, Government channel, Online training platform, Radio, Television and printed publication materials.

Challenges / Partnership / Sustainability / Replicability

Community practices in responding to the message calls are part of the challenges we face.

We are ensuring our sustainability through the online training and some sessions of paid webinars.

Materials delivered are general for the cybersecurity sector. Is very applicable to the WSIS stakeholders. CyberSecurity Malaysia is more than happy to replicate this information to others within the WSIS social sphere.

Action Lines

AL C4. Capacity building | AL C5. Building confidence and security in use of ICTs

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable | Goal 17: Revitalize the global partnership for sustainable development

Case 120

Title of the project, Contact Organization Name, Stakeholder type, Country

Closer than ever

Association for Progressive Communications (APC)

Civil Society

South Africa

Beneficiaries

APC members, partners (women's rights and sexual rights groups, LGBTQI activists, civil society organisations working in human and digital rights), community network peers and the communities they work with.

Website

https://www.apc.org

https://www.apc.org/closerthanever

Description

'Closer than ever' is APC's collective response to C19 - about tools, human and community support, research and policy advocacy, collectively building our network's capacity to connect and share during this pandemic, and to prepare for the future. Highlights: • A guide for social change organisations wanting to work online with recommendations on the human aspects, tools, processes and support, based on APC's 30 years of experience. • Resources and solutions from our community supporting human rights online in response to the pandemic, from a community, care and decentralized perspective. • Policy positions and recommendations

ICT Tools

- FOSS tools for online working with safety and security. A suite of tools andguidesin the 'Closer than ever: working online' guide. Knowledge-sharing platform based on 'Discourse'responding to our network needs to discuss responses to the pandemic, patricularly contact tracing, mis-information, increasing gender-based violence and secure solutions for online meetings and collaboration. Sharing infrastructure 'matching up' those who have capacity to provide critical infrastructure services (such as web hosting, Mattermost, NextCloud, pad and Jit.si) to those who need these services. The system will facilitate 'matching' offers and needs among members and partners. Online meeting platforms working with partners to implement 'BigBlueButton' as our network's video conferencing solution that can be locally hosted and shared with members' and partners.
- Re-imagining face to face meetings ideas for how virtual meetings can be conceptualised and implemented in ways that increase participation in meaningful caring ways, and don't exacerbate digital exclusion. Webinars: What does 5G mean for global connectivity efforts? In the midst of the COVID-19 crisis, the importance of basic connectivity in staying informed and reaching marginalized communities has been a focal point for those working in community networks and on the issue of universal connectivity.

Challenges / Partnership / Sustainability / Replicability

• Changed work and life environment. The threat, uncertainty and fear have resurfaced trauma, wariness and anxiety. • Diversity of contexts with members and partners in 80 or more countries. Universality of affordable and quality health care, education, connectivity, clean water, food, etc., vary enormously. Levels or severity of lock-down, increasing gender-based violence, oppression of people's speech and movement,

monitoring and surveillance. • Navigating decision making and policy processes in new virtual configurations being adopted. Guides: We welcome offers to assist with translation, develop case studies, and provide contextualisation of the guide for regional specificities. Hosting services: We are interested to hear from organisations who can make some of their ICT infrastructure, including data, available to those who need. Testing of applications (BBB): We are interested in hearing from organisations who are committed to development and hosting of the Big Blue Button video-conferencing software. Policy advocacy: We are interested to work with organisations thinking about navigating decision making and policy processes in the new virtual configurations being adopted, and developing new ways of engagement.

Many of the tools suites and guides can be easily replicated and improved through creative commons licensing. Sharing infrastructure and data to those who need is also replicable.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 5: Achieve gender equality and empower all women and girls

Case 121

Title of the project, Contact Organization Name, Stakeholder type, Country

Expanding Access to High-Impact Social, Health, Education Resources across Africa during COVID-19

Hellas Sat

Private Sector

Cyprus

Beneficiaries

Thanks to this partnership, 127 public clinics and hospitals around the country are benefiting from broadband connectivity. This collaboration has also allowed Africom Holdings to resuscitate connectivity to infrastructure that was initially set up in 2016 at various clinics and hospitals but due to challenges in accessing adequate foreign currency to pay monthly rentals the sites have been idle.

Website

https://www.hellas-sat.net/

Description

Hellas Sat has partnered with Africom Holdings to assist the efforts of the Government of the Republic of Zimbabwe in the fight against the spread of COVID-19. Hellas Sat is providing free unlimited broadband connectivity to 127 public clinics and hospitals across the country. The deployment was undertaken by Africom Holdings which resuscitated connectivity to infrastructure that was initially set up in 2016 at various clinics and hospitals but due to challenges in accessing adequate foreign currency to pay monthly rentals the sites have been idle.

ICT Tools

The connectivity service is provided through satellite (Hellas Sat 3 satellite @39°E). The satellite broadband gateway that used is installed and operated in HELLAS SAT Teleport facility in Cyprus. At the remote sites (hospitals and clinics) a satellite modem and small

VSAT antenna is installed for the reception and transmission of the internet broadband traffic. The network is operating in star network topology.

At the remote sites (hospitals, clinics), telephony and Information Gathering tools are interconnected to the satellite modem for the use of the broadband service provided. Information gathering provides faster times in collecting data and moving it to policy makers. Telephony aids faster coordination and lowers communication cost.

Challenges / Partnership / Sustainability / Replicability

Key challenges were the set up of the modem/remote terminals and interconnection of the ICT tools at the hospital and clinics, during the lock-down. Local technical personnel undertook this task successfully.

Another challenge is the funding of such project. The requirement and need for such service is a fact, and it is a service that it is greatly required. The health communities in these remote areas of Africa rely on institutional funding like UNPD and World bank and other funding to financially support these must-have services. For this project Hellas Sat has partnered with Africom Holdings, a leading converged communication service provider. A licensed telecommunications operator; Africom is the first company in Zimbabwe to challenge all convention by offering converged communication solutions. With all other telecommunications operators offering traditional products, Africom is the first company to integrate data, voice and video over broadband as well mobility into a single solution.

The gains and benefits offered by this project and its impact on the operations of the hospitals and clinics is a great mean for its sustainability. Equipment needed for the provision of the service are already in place and available. The benefits for using them in combination with satellite broadband will eventually create the required resources (financially) for the continuation of the project.

The project that includes the provision of broadband connectivity over satellite as well as the integration of ICT for the provision of services to Hospitals and clinics can be replicated and implemented also to other countries with low penetration of terrestrial connectivity.

Action Lines

AL C2. Information and communication infrastructure | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 10: Reduce inequality within and among countries

Case 122

Title of the project, Contact Organization Name, Stakeholder type, Country

Www.k-12math.info

K-12math.info inc

Other

United States of America

Beneficiaries

The website helps anyone "... to help a 7 year old to add whole numbers". Be they classmates, parents of, teacher of, school content coordinator, reference librarian, materials developer, and others.

Website

http://k-12math.info

Description

The project continues to help a learner and those who help a learner to learn and understand elementary and secondary school mathematics without a classroom.

ICT Tools

A simplified user interface is used. Information is displayed in a "calendar style" format with over a 1,000 "months" of links to elementary and secondary school mathematics resources.

Challenges / Partnership / Sustainability / Replicability

To improve global understanding of mathematics. This is being achieved by providing an age appropriate information searching resource.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 123

Title of the project, Contact Organization Name, Stakeholder type, Country

Sustainable @EDU CONTINUITY PLAN

Millennium@EDU SUSTAINABLE EDUCATION

Other

Switzerland

Beneficiaries

Ministries of Education, Ministries of ICT, Telecom Operators, Students and Teachers

Website

https://millenniumedu.org

https://millenniumedu.org/sustainableedu-continuity-plan/

Description

The project is launched to provide support to design and implement EDUCATION CONTINUITY PLANS to face the challenges of wide-scale remote learning using ICT Tools.

ICT Tools

Devices, Platforms, Connectivity, Management Tools

Challenges / Partnership / Sustainability / Replicability

One of the challenges is coordination between stakeholders. Our partners are Telecom Operators, Ministries responsible of ICT and Education. 1. The Sustainability of the project is assured by the participation of telecom operators and the integration in their business models; 2. The Sustainable@EDU CONTINUITY PLAN are linked to a Sustainable@EDU MASTER PLAN https://millenniumedu.org/sustainableedu-continuity-plan/

The development of Sustainable@EDU CONTINUITY PLANS are applicable to any country and are based in international frameworks created by the most relevant organizations.

Action Lines

AL C2. Information and communication infrastructure | AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 17: Revitalize the global partnership for sustainable development

Case 124

Title of the project, Contact Organization Name, Stakeholder type, Country

Covid-19: Policy Briefings

World Wide Web Foundation

Civil Society

United States of America

Beneficiaries

Governments, companies, and civil society.

Website

http://www.webfoundation.org

https://webfoundation.org/research/covid-19-policy-briefings/

Description

The Web Foundation has produced a set of policy briefs in response to COVID-19 to ensure the web/the internet stays open and serves as a lifeline during this public emergency. The topics are misinformation, internet access, and data rights. They can be found here: https://webfoundation.org/research/covid-19-policy-briefings/

ICT Tools

We focused on ICT policies.

Challenges / Partnership / Sustainability / Replicability

We focused our challenges around combating misinformation during this emergency, as well as internet access and affordability.

Action Lines

AL C6. Enabling environment | AL C10. Ethical dimensions of the Information Society

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 125

Title of the project, Contact Organization Name, Stakeholder type, Country

Educadigital Institute Instituto Educadigital Civil Society

Brazil

Beneficiaries

We've been trying to support educators and public managers to understand how it is important to promote data protection, specially related to kids and teens.

Website

https://www.educadigital.org.br

https://www.educacaovigiada.org.br

Description

I'd like to introduce you to our new project Education under Surveillance https://aberta.org.br/mapping-surveillance-capitalism/

ICT Tools

Only open source: jitsi.meet, Big Blue Buttom, Mumble, Etherpad etc

Challenges / Partnership / Sustainability / Replicability

We want to call attention to the lack of transparency and regulation in public-private relations in technological platforms and services, compromising users' rights such as privacy and the protection of personal data. UNESCO Chair on Distance Education at Brasilia University and Federal University of Para are our partners. We got a first small grant from Derechos Digitales and now we are trying to amplify the geographical coverage to Latin America. We applied for some international funds and we are waiting for the return. We created a program (script) to access the e-mail server of educational institutions and know whether the servers are allocated to external addresses of companies, or under the control of the educational institutions themselves.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-science | AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 126

Title of the project, Contact Organization Name, Stakeholder type, Country

Tarassud Plus

Ministry of Health

Government

Oman

Beneficiaries

Infected person and quarantined individuals through a medical algorithm that can analyze an individual's condition through questions. It guides them whether to stay at home in quarantine, establishes/schedule communication with one of the specialized medical institutions, or refer them urgently to the nearest medical institution, if needed.

The system is used during primary infection indicators by spotting only the cases that require medical care and directing them to medical institutions. So, it supports the overall medical system by minimizing and scheduling visits to medical institutions, focusing only on cases that need a medical examination.

Website

https://www.moh.gov.om

Description

Tarassud Plus is an integrated platform having International Standards developed by highly qualified local SME. The monitoring platform enhance the Ministry of Health's current monitoring system by diagnosing, following up, and tracking the medical condition of individuals infected with COVID-19, who are under quarantine, by using artificial intelligence technology and advanced tracking technologies. The platform consists of two main systems – the medical test program and the registration and follow up system to check their medical condition on a daily basis. It also monitors the spread of the pandemic and sets priorities by using Artificial Intelligence technology to minimize the intervention of medical personnel in early quarantine stages.

ICT Tools

The authorities in charge of the app can identify the infected persons once they get near them. The system also allows the authorities concerned to automatically identify the quarantined person through face detection technology.

Challenges / Partnership / Sustainability / Replicability

Our partners are Information Technology and Communications Group, eMushrif company, and Oman Broadband company. It comes as part of initiatives supervised by the State's General Reserve Fund.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

ICT Case Repository: The Coronavirus Response: ZERO DRAFT

Case 127

Title of the project, Contact Organization Name, Stakeholder type, Country

AITI Business Continuity Plan for COVID-19

The Authority for Info-communications and Technology Industry of Brunei Darussalam (AITI)

Government

Brunei Darussalam

Beneficiaries

AITI employees and relevant stakeholders such as customers, vendors, licensees, dealers and ICT businesses.

Website

https://www.aiti.gov.bn

Description

It is a guideline for the preparation and prevention of COVID-19 in AITI that needs to be implemented according to the directions of the Prime Minister's Office. It is also to assist the AITI Management in the business continuity planning in response to the COVID-19 outbreak.

ICT Tools

Microsoft Teams, VPN and AITI Online Services.

Challenges / Partnership / Sustainability / Replicability

- •Internet connectivity for Customer Services front-liners when scheduled to Work from Home (WFH) to ensure business operations are uninterrupted for for licensees and dealers applications. The unit is provided with Internet Broadband for this purpose.
- •Adequate supply of medical equipment for front-liners (e.g. thermometers, surgical masks and disinfectant). The relevant units had contacted various vendors to procure and secure the order as the stocks are very limited at the time.

The Prime Minister's Office had prepared a document on the Guideline for Business Continuity Plan on COVID-19 for Civil Service.

Action Lines

AL C2. Information and communication infrastructure

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case 128

Title of the project, Contact Organization Name, Stakeholder type, Country

Business meets Technology

Women Economic and Leadership Transformation Initiative

Other

Nigeria

Beneficiaries

Our beneficiaries are young women aged 14-30 who are tech business start-ups trying to find their feet to be entrepreneurs. We through this webinar series taught them to come up with disruptive tools.

Website

https://welti.org.ng/

Description

The Awesome entrepreneur applying Critical thinking (No.1 skill to sail through COVID-19 and the New future). This webinar series developed their minds, showed them technological start-up tools, etc.

ICT Tools

These were the tools we taught them how to use-GOOGLE MY BUSINESS

Challenges / Partnership / Sustainability / Replicability

The epileptic network was a major problem. Most of them needed monetary support to wade through the storm while trying to start or improve on their already existing tech. businesses.

We are looking for partners who can help them to keep leveraging other tech tools that may be easier for navigation and venture capitalists who may want to fund these start-ups and support them.

The project is sustainable because we've seen how far the women in the past have created jobs, and also increased their capacity, literacy and adoption of new technology into their businesses in the past.

Action Lines

AL C4. Capacity building | AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 5: Achieve gender equality and empower all women and girls | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case 129

Title of the project, Contact Organization Name, Stakeholder type, Country

Situational Awareness Builder

G2K Group GmbH

Private Sector

Germany

Beneficiaries

We can integrate existing infrastructure and bundle it with our own and third party algorithms to make a building or several locations (smart cities) more intelligent

Website

https://www.get2know.com

Description

Our core product, the Situational Awareness Builder (SAB), is based on the principle Fast Detection, Fast Action. During a 3-week sprint in March we have managed to optimise our technology for the fight against COVID-19.

ICT Tools

Our software is an Intelligent IoT platform enabling a sustainable and holistic business digitization. We bundle several use cases of complex infrastructures (video systems, access control, bms, etc.)

Challenges / Partnership / Sustainability / Replicability

We overcome challenges by improving our technology and integrating algorithms to provide a tailor-made solution. The SAB is a scalable solution as additional use cases can be simply extended anytime.

We are able to support the client directly but in certain regions we need a local partner to support the installation.

It is an extendable modular software platform. Any use case can be implemented to improve workflows, security, processes and provide business intelligence.

The project is replicable. We are providing a software platform only. Local partners or clients are able to provide their own hardware.

Action Lines

AL C4. Capacity building | AL C6. Enabling environment

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation | Goal 11: Make cities inclusive, safe, resilient and sustainable

Case 130

Title of the project, Contact Organization Name, Stakeholder type, Country

Internet awareness and capacity building

RayZnews

Civil Society

Nepal (Republic of)

Beneficiaries

- 1. International Community
- 2. Grassroots community
- 3. Next generation leaders

Website

https://www.rayznews.com/

https://learninternetgovernance.blogspot.com/

Description

1. Toolkit on Fact checking

https://learninternetgovernance.blogspot.com/p/fact-checking-toolkit.html

2. Internet awareness and Capacity building program

https://www.youtube.com/watch?v=N0Yu3eAr7Cw&t=314s

3. Report on Data Breach and PRIVACY in Nepal During COVID19 by Shreedeep Rayamajhi https://www.slideshare.net/ShreedeepRayamajhi/report-on-data-breach-and-privacy-in-nepal-during-covid19-by-shreedeep-rayamajhi

ICT Tools

We used Zoom account for reaching out to youth and have used social media as a major part of our outreach and engagement.

We are zero funded and the work that we have done is an example of the next generation leadership that we want to evolve from LEARNIG.

https://www.youtube.com/channel/UCiXNaOcnMs1t6fUj71Z4m2Q

Rayznews is an internet organization working towards bridging the gaps of internet awareness in Asia pacific and Learn Internet governance is a community collaboration concept where we have developed various toolkits and resources to facilitate the community.

https://learninternetgovernance.blogspot.com/p/documents-and-research-paper.html https://learninternetgovernance.blogspot.com/p/child-safety-online.html https://learninternetgovernance.blogspot.com/p/multistakeholderism-toolkit.html

Challenges / Partnership / Sustainability / Replicability

The main challenges are resources like ZOOM, lack funds for domain hosting and management, transportation and communication.

We are looking for funding opportunity as we lack funds we have recently designed our google beginners class for internet governance which we will be launching soon.

Google class room: https://classroom.google.com/u/0/h

Code: 3rfnllr

Action Lines

AL C3. Access to information and knowledge | AL C11. International and regional cooperation

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 131 Project topic: __E-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Tigo Eschools Platform

Apps and Girls

Civil Society

United Republic of Tanzania

Beneficiaries

Secondary schools and primary Schools

Higher learning institutions.

Website

https://www.appsandgirls.com/

https://tigoeschools.co.tz/

Description

Tanzania has approximately more than 14 Million pupils in pre and primary school level and more than 7 Million students in secondary school enrolled in school (UNESCO 2016), who are out of school due to the pandemic. Even before the pandemic crisis, we were already experiencing an education crisis, as many learners were not learning fundamental skills needed in life, increased school dropouts rates, lack of enough learning materials in schools and the very high ratio of teacher to learners. This is a difficult situation for parents who are unable to support their children's learning materials/content at home, with the unequal livelihood in Tanzania. These negative impacts will be felt disproportionately by poor

We have created the eschools web-based platform to provide interactive and continuous learning opportunities to children in both rural and urban areas across Tanzania during COVID-19 and after, by connecting learners, parents and teachers while improving the educational opportunities for learners at home. The learners are able to attend virtual classes conducted by teachers, ask questions and attempt quizzes during the lessons. Moreover, they can revisit their teachers' lessons since it can be auto-recorded by the platform.

ICT Tools

Through the Eschools website, teachers are able to conduct video and audio sessions with a single or group of students using their computers/smartphones. These sessions can be recorded and uploaded to the platform for his /her students' revision and learning. Teachers are also able to measure understanding of the class and track progress through live polls and white board privilege (this is when a teacher gives a student the access to the virtual board where teacher's presentations are displayed and annotated). The platform also provides a Question and Answer service via SMS for students who don't have access to the internet. And the platform has extracurricular classes of coding, web, game development, robotics, business, and STEM & tech-entrepreneurship mentorship via the Codegalaxy system. Internet penetration in the nation of around 52 million people ticked up to 45 percent in 2017 from 40 percent a year before (Reuters 2018), this means at the moment, most households in Tanzania have access to a mobile phone or a smartphone. These might seem as just communication devices, and maybe for the use of social and access to information to those with smartphones but now it's time for more through Eschools.

Challenges / Partnership / Sustainability / Replicability

We had to mobilize teachers across the country for the testing of the platform, since Apps and girls have connections with a number of schools in almost five regions, the start of execution of this activity wasn't difficult. We also utilized District educational officers who shared their teachers contacts and helped to connect with teachers in their districts and sometimes arrange the testing with our team too. We wish to roll out Eschools services Nationwide to make sure we reach every student in the country and with the right help from the Educational officers, government and private schools and teachers. We are committed to make these services readily available to every student and every household during the Covid-19 crisis regardless of their financial status. That is why the services are free at the moment and they will also have zero-rating meaning no megabytes needed to access the platform -- this will be done by our partner Tigo Tanzania. In the future, we are anticipating to use a tutoring approach where students can pay to have private lessons and be tutored by teachers of their choices and at their own preferred times.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case 132 Project topic: __e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Mwajuma Simama!

Our Voices Against Harassment (OVAH)

Civil Society

United Republic of Tanzania

Beneficiaries

We are targeting girls and young women within the age range of 5 - 19.

Website

http://www.ourcries.org/

Description

As children and young adults in Tanzania are forced to stay home after the National schools closure to prevent the spread of the novel Coronavirus (Covid-19), there are now more subjected to frequent harassment and abuse from their family members and neighbors. During this time more children and young adults especially girls and women are subjected to violence, trauma and psychological stress. We have already observed in Ruvuma, 100 girls have been impregnated in these three months of school closure. If the issue of sexual abuse and harassment continues, we will see the rise of child pregnancies, child marriages and school dropouts rates exponentially. Mwajuma Simama is a series of animation that aims to educate girls and young women about Sexual assault&abuse and how to deal with it. Our content will educate girls and young women about what sexual abuse is in a simplest and relatable manner possible.

ICT Tools

The animation will show a teenage girl main character called Mwajuma who experiences sexual abuse in her homes and her community. The series of events of the animation script will focus to educate about what constituents and is defined as sexual abuse, discuss important topics such as consent and discourage victim blaming. It will also encourage youths to speak out and engage their parents and guardians who can help. We plan to display the content of our animations through OVAH website (www.ourcries.org), social media platforms, and partner with e-learning platforms, TV programs and Radio Channels programs as we also plan to tailor our content to audios. However, we realize that only awareness and education aren't effective enough to combat the problem of sexual abuse. OVAH will expand to provide an online and offline reporting service for sexual harassment such that the victims can be able to report these abuse and harassment in order to get the right help.

Challenges / Partnership / Sustainability / Replicability

Animation Development – We anticipate the animation series to contain twelve episodes, animation is very costly and this is one among the main reasons we are applying for funds to help us to execute this project. At the moment, we already have a promised partnership from Apps and Girls Organization to stream our videos in their e-learning platform that they have developed in partnership with Tigo. The platform and content are also available with zero rated internet meaning one doesn't need to have internet bundles to access the platform. The platform will also be rolled out across the country, targeting primary school students to advance level secondary school students – reaching most girls and young women in our target group. We are also looking forward to creating partnerships with TV

Programs and Radio Channels to enable us to reach more girls and young women across Tanzania.

It's easy to attract business to advertise if there is an audience. Ads can be used as a revenue model for Mwajuma Simama! A 2004 WHO review of research estimated the global prevalence of childhood sexual victimization to be about 27% among girls (WHO 2012). If financially equipped, we can make the animation multilingual and roll it in other countries.

Action Lines

AL C3. Access to information and knowledge | AL C9. Media

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 5: Achieve gender equality and empower all women and girls

Case N °__133____ Project topic: __e-health _____

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Contact Center for COVID-19 at 19819

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Primary beneficiaries are Serbian citizen. The support line is also available to all persons in the Republic of Serbia, including foreign citizens.

Website

https://ite.gov.rs

https://www.srbija.gov.rs/specijal/en/152298

Description

As COVID-19 started to spread, the Government of Serbia established several contact centers and information platforms to provide its citizens with accurate and timely information and guidance. A dedicated integrated COVID-19 contact center designed to respond to all their questions related to the novel coronavirus disease COVID-19 has been made available at 19819. By calling this number, citizens can obtain reliable and up-to-date information and advice regarding precautionary measures and receive recommendations in the fight against coronavirus, as well as contact the competent professional services from different fields of expertise and throughout the country. Operators are available daily from 8am to 10pm, whereas citizens have the opportunity to obtain information on COVID-19 24 hours a day. Calling the Contact Center at 19819 is free of charge for users of all landline and mobile networks. Up to mid-May 2020, more than 8 thousand calls had been received, and the most sought-after operator services by citizens had been those of the Ministry of Health, Institute of Public Health "Dr Milan Jovanovic Batut" and City Secretariat for Public Health Belgrade (around 6,000 calls to these institutions alone).

ICT Tools

COVID-19 Contact Center offers support and advice regarding a wide range of the coronavirus related questions. Due to an unprecedented demand, the novelty of coronavirus and cross-sectorial nature of questions and inquiries, Contact Center operators needed a sophisticated software tool to receive and redistribute calls and inquires across numerous institutions and throughout the country as well as prioritize them so to address the most critical inquiries first, and to provide well informed and timely responses. On the other hand, aside from its duty to respond to the needs of its citizens and keep them informed during the crisis, most of public services had to undergo rapid shift to work-fromhome arrangements in order to keep the operators safe. Therefore, COVID-19 Contact Center operations are supported by a sophisticated web-based contact center software, CRM and ticketing application. Since it is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces - they can stay safe at home and remain equally productive and efficient in responding to citizens questions and inquiries.

Challenges / Partnership / Sustainability / Replicability

The first group of challenges was related to the need to establish operational COVID-19 Contact Center in just a few days. The contact center was designed as a single contact point to a complex network of institutions across sectors and throughout the country, and it had

to support calls and inquiries, their redistribution, as well as to allow for remote work operations. Aside from that, the contact center operators in some cases did not have any contact center nor customer support experience prior to the pandemic; they usually had to undergo training on the use of contact center tools and applications first. The second group of challenges emerged once the contact center became operational, when its operators faced sudden, unprecedented demand, that is, a great volume of calls, and were struggling to respond effectively and on time. Immediate decisions and actions were implemented to build capacity and meet high demand, including ensuring additional staff, deploying additional contact centers dedicated to COVID-19 pandemic related sector-specific problems (e.g. assistance to the elderly, or report problems to bodies in charge of inspectorial supervision duties, etc.), as well as introducing multichannel service delivery, through information platforms, Al-driven Chatbot solutions, etc.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °__134____ Project topic: ___e-government__

Title of the project, Contact Organization Name, Stakeholder type, Country

"Be a Volunteer" National Volunteer Application Platform

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Persons applying for volunteering are young and healthy Serbian citizens having a good will and some spare time to help their neighbors with things such as an essential grocery and medication shopping. For persons from vulnerable groups who have to stay at home and do not have other support networks available, grocery and medication provision is essential, as well as other forms of support that volunteers provide, such as digital support to help them keep in touch with family or friends, or a friendly conversation.

Website

https://ite.gov.rs

https://budivolonter.gov.rs/

Description

Solidarity and empathy for the most vulnerable during the coronavirus pandemic is crucial. In the days when it was necessary for the most vulnerable to stay at their homes in order not to become infected with the coronavirus, the help of volunteers was of the utmost importance. The government has set up a national volunteer application platform at www.budivolonter.gov.rs and issued a public call to all citizens who do not belong to population groups at risk due to their age and/or medical condition, and wish to help, to volunteer for this duty. All non-at-risk citizens who wish to help our oldest fellow citizens and other at-risk population groups can apply by filling out an application form at www.budivolonter.gov.rs by themselves, or by calling the Unified COVID-19 Contact Center operators to fill out the form for them. Operators can be reached at 19819 free of charge every day from 08 am until 10 pm. All applications submitted are inspected in order to prevent even the slightest misuse. Once the application is approved by the competent services, volunteers will be contacted by city and municipal centers with detailed instructions and first tasks. Up to mid-May 2020 almost 8,000 volunteer applications had been received.

ICT Tools

National volunteer application platform available at www.budivolonter.gov.rs makes it easy to apply for volunteering with a few clicks and enables the government to keep all relevant information about available volunteers at one place, for example, the number of volunteers owning their own vehicle in a specific municipality/ city, thus the coordination of volunteers becomes more efficient.

Challenges / Partnership / Sustainability / Replicability

The platform has been established with an aim to match persons offering their help with vulnerable persons who need help. While performing the matching, we have to ensure adequate level of safety of vulnerable persons since most of them are 65 and older and live alone. It is very important to conduct some kind of volunteers security check before providing them with the address of people who need help. The challenge has been addressed by the platform design because it has enabled the collection of the volunteers' personal information as well as their consent for its processing for the purpose of this

volunteering initiative. In collaboration with the Ministry of Interior, every volunteer application is being processed and every volunteer has to undergo security check. The national volunteer application platform "Be a Volunteer" has been implemented by the Office for Information Technologies and eGovernment and the Emergency Sector of the Ministry of Interior, in collaboration with the "Serbia Creates" platform and COMTRADE as one of the leading software development companies in Serbia, and with the support of the United Nations Development Programme in Serbia (UNDP Serbia).

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | Goal 3: Ensure healthy lives and promote well-being for all

Case N °__135____ Project topic: ____e-health___

Title of the project, Contact Organization Name, Stakeholder type, Country

"Be a Donor - Donate Plasma"

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

People who have fully recovered from COVID-19 for at least three weeks are encouraged to consider donating blood plasma, because it contains COVID-19 antibodies developed by their immune system to fight the infection, and now may help in the treatment of newly infected persons. Convalescent plasma is being investigated for the treatment of patients with serious or immediately life-threatening COVID-19 infections, or those judged by a healthcare provider to be at high risk of progression to severe or life-threatening disease.

Website

https://ite.gov.rs

https://www.donirajplazmu.gov.rs/

Description

The service is intended for all citizens who have been recovered from the novel coronavirus disease, COVID-19, caused by the virus SARS-CoV-2, and who can donate their blood plasma, so as to help in the treatment of newly infected patients. Convalescent plasma is the liquid part of blood that is collected from persons who have recovered from COVID-19. COVID-19 patients develop antibodies in their blood against the virus that might help fight the infection. Convalescent plasma is being investigated for the treatment of COVID-19 because there is no approved treatment for this disease yet there is information that suggests it might help some patients by shortening the duration and severity of the illness, reducing morbidity or preventing death associated with COVID-19. The process of digitizing the procedure for administering COVID-19 plasma and digitizing the COVID-19 plasma bank in Serbia is ongoing, which is very significant in the current pandemic as well as in case of the second wave of COVID-19 pandemic in the fall or winter.

ICT Tools

To encourage persons recovered from COVID-19 to express their will to donate plasma, a web platform https://www.donirajplazmu.gov.rs/ has been launched. Individuals who had a prior diagnosis of COVID-19 documented by a laboratory test and had two consecutive negative tests are encouraged to apply via electronic form. The digitalization of the procedure for administering plasma containing COVID-19 antibodies and the establishment of the COVID-19 plasma bank in Serbia is ongoing. In mid-May there were about 800 potential donors in the database.

Challenges / Partnership / Sustainability / Replicability

Convalescent plasma is being investigated for the treatment of newly infected persons because there is no approved treatment for this disease yet there is some information that suggests it might help some patients recover from COVID-19. However, further investigation is still necessary to determine if convalescent plasma is safe and effective as a treatment for COVID-19.

"Be a donor - donate plasma" platform has been implemented by the Office for the Information Technologies and eGovernment, in partnership with the Heath Insurance

Fund, the Institute for Blood Transfusion Serbia, and in cooperation with COMTRADE as one of the leading software development companies in Serbia. Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbia's citizens until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. Progressive enhancement of "Be a donor - donate plasma" platform will certainly continue, since such a solution can be used for purposes other than COVID-19 with minor modifications, as well as in case of the second wave of the COVID-19 pandemic.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-health | AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °__136____ Project topic: ___e-health____

Title of the project, Contact Organization Name, Stakeholder type, Country

Viber Automated COVID-19 Chatbot Serbia

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Primary beneficiaries are Serbian citizens yet COVID-19 Chatbot Serbia is available to all Viber users, including foreign citizens. Main benefit of this Chatbot info service, aside from facilitating communication and information flow and being available to a large number of citizens 24/7 for all necessary information with regard to COVID-19, is that it helps citizens obtain reliable information without waiting, and at the same time relieves contact centers and experts so that their focus can be on the most important topics during the SARS-COV2 pandemic.

Website

https://ite.gov.rs

https://chats.viber.com/covid19info

Description

In cooperation with Rakuten Viber, the Government of the Republic of Serbia and its Office for Information Technologies and eGovernment launched an automated COVID-19 chatbot info service on the Viber platform, in order to provide citizens with verified information, important news and answers to questions regarding COVID-19. This service provides medical info on the virus, real-time data, precautionary measures and guidelines, important numbers and government decisions with regard to the state of emergency and relaxation of measures. Automated COVID-19 Chatbot answers all potential citizen questions regarding COVID-19 and it is available 24/7 at official COVID-19 dedicated government website https://covid19.rs/ and through Viber application. Citizens can get the information by entering text questions or choosing one of the categories offered. Initially it covered 65 scenarios and topics related to the virus itself, symptoms, prevention measures, important phones, current data and the Government decisions. In the second phase of the project implementation, based on user inquiries, the number of scenarios has reached more than 80, and the chat bot can now provide information on the rights of employees in isolation, student exams, on raising a pension, electronic application for preschools, online cultural content, how to become a volunteer, and many other questions.

ICT Tools

An automated COVID-19 Chatbot info service on the Viber platform is an Al-driven virtual assistant that answers all potential citizen questions regarding the novel coronavirus disease COVID-19 in Serbia. It covers more than 80 scenarios and topics related to the novel coronavirus, and it is available to citizens 24/7. This virtual assistant solution has been developed by the private company SAGA New Frontier Group within its Intellectual Property Solution department in a very short time, and launched by the Office for Information Technologies and eGovernment in cooperation with the company Rakuten Viber CEE and the Belgrade Business and Arts Academy of Applied Studies.

Challenges / Partnership / Sustainability / Replicability

The main challenge addressed by the implementation of automated COVID-19 chatbot was unprecedented demand for authoritative source of information at the beginning of COVID-

19 epidemic in Serbia. Contact centers were overwhelmed by a sudden and great volume of calls and were struggling to respond effectively and on time. Automated COVID-19 Chatbot has proven to be an effective tool for overcoming this challenge, since it provides answers to a wide range of questions citizens usually ask, is easily accessible and available to most citizens at any time and free of charge. Viber Automated COVID-19 Chatbot Serbia was launched by the Government of Serbia and its Office for Information Technologies and eGovernment, in cooperation with Rakuten Viber CEE. SAGA New Frontier Group has donated this virtual assistant solution to the Government of Serbia. The scenarios and topics supported by the chatbot have been elaborated in cooperation with the Ministry of Health and other relevant institutions.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °_137__ Project topic: ____e-government____

Title of the project, Contact Organization Name, Stakeholder type, Country

Single Contact Center for Elderly Assistance at 19920

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Primary beneficiaries are persons considered vulnerable due to their age who have to stay at home and do not have other support networks available, yet support is available to persons considered vulnerable due to their medical conditions as well. For these groups-at-risk, groceries and medications provision during the COVID-19 outbreak is essential, as well as other forms of support that volunteers provide, such as digital support to help them keep in touch with family or friends, or a friendly conversation.

Website

https://ite.gov.rs

https://www.srbija.gov.rs/specijal/en/152298

Description

In the days when the nationwide State of Emergency was declared over the novel coronavirus epidemic in Serbia and when the movement of our oldest citizens had to be restricted, it was necessary to establish a single contact point through which they can ask for assistance and ensure adequate support network and coordination. The Government of the Republic of Serbia has established a single contact center for providing assistance to the elderly that can be reached by dialing 19920, and a network of volunteers. By dialing this number, the elderly can turn for assistance with regard to food, medicines and other needs, to the city and municipal centers where volunteers who provide their assistance are engaged. Calling the contact center at 19920 is free of charge for users of all landline and mobile networks. Nearly 20,000 calls had been received from March 24 up to mid-May 2020.

ICT Tools

The Contact Center's operations are supported by a sophisticated web-based contact center software, CRM and ticketing application. Since it is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces. Operators can stay safe at home and remain equally productive and efficient in responding to our oldest citizens and distributing their inquiries to the city and municipal centers.

Challenges / Partnership / Sustainability / Replicability

As COVID-19 started to spread, it was important that citizens older than 65 and other vulnerable persons stay at home, yet many of them did not have their own support networks that could ensure either regular or urgent provision of essential groceries and medications in case of need. The Office for Information Technologies and eGovernment and the Government of Serbia established a contact center that serves as a single contact point for the elderly assistance to ensure that the elderly have everything they need while remaining safe from COVID-19 by staying at their homes.

This contact center has been implemented by the Government of Serbia and its Office for Information Technologies and eGovernment, in cooperation with local self-government units, i.e. the city and municipal centers. Solutions implemented during the first wave of

the novel coronavirus outbreak remain active, and will certainly continue to serve Serbia's citizens until the end of the pandemic. As for now, there is no vaccine to treat the coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. Contact Center for Elderly Assistance can once the pandemic is over be used as a part of a general support network for the elderly and purposes that are not COVID-19 related.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | Goal 3: Ensure healthy lives and promote well-being for all

Case N °__138____ Project topic: __e-government_____

Title of the project, Contact Organization Name, Stakeholder type, Country

Unified Contact Center for National-Level Inspection Bodies

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Beneficiaries are citizens and businesses that can file complaints and in that way protect themselves from unscrupulous behavior yet this contact center help inspection bodies increase their efficiency and transparency of inspectorial oversight through timely and responsible actions. Citizens and businesses can report irregularities in one place that apply to all inspections without having to know the responsibilities of the individual inspection bodies. The contact center allows for easier reporting business operating in the grey area, unfair competition, violations of consumer rights, doubts regarding the quality or safety of goods and services, and other issues within the jurisdiction of all 44 national-level inspection bodies. Municipal and city authorities remain competent for reports regarding local public utility issues. The contact center deployment was initiated before COVID-19 outbreak and is one of the key measures set out in the National Programme for Countering Shadow Economy.

Website

https://ite.gov.rs

http://www.inspektor.gov.rs/

Description

Serbia launched an unified contact center for national-level inspection bodies that can be reached at 011/6350-322, with an aim to mitigate the negative effects of the pandemic on the growth of the shadow economy. By dialing 011/6350-322, citizens and business entities can report abuses and unfair practices, such as an illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment during the COVID-19 pandemic. Operators are available from 9 am to 4 pm, yet it is possible to file a report outside of business hours by leaving a voicemail, and to submit online complaints via an eform at www.inspektor.gov.rs. Complaints may be submitted anonymously, but those who leave contact information will receive feedback within 72 hours, since national-level inspections have a legal deadline to notify of the process's course. It is also possible to file a complaint regarding the actions of the national-level inspections' officials. In case of complaints within the provincial and local inspections' jurisdiction, the operators refer them to the competent provincial or local inspection.

ICT Tools

Sophisticated, web-based contact center software, CRM and ticketing application support the contact center operations. Each complaint is recorded in the CRM system and sent electronically, with a degree of urgency, to the competent inspection body and recorded in the e-Inspector information system. Since the application is web-based, once trained and equipped, contact center operators do not need to work from their physical workplaces - they can stay safe at home and remain equally productive and efficient in responding to citizens questions and inquiries.

Challenges / Partnership / Sustainability / Replicability

Main challenge addressed by the implementation of this solution was to mitigate the negative effects of the pandemic on the growth of the shadow economy, such as illegal price gouging, i.e. raising of the prices of food, medications, medical devices and protective equipment, consumers' or workers' rights violation, or questionable safety of products or services offered. Constant aim that will remain once the COVID-19 outbreak passes, is to increase satisfaction of citizens, to offer a level playing field for businesses, increase transparency, effectiveness and efficiency of inspectorial oversight, and counter grey economy and corruption. The contact center was launched by the Office for Information Technologies and eGovernment and the Ministry of Public Administration and Local Self-Government, in cooperation with NALED, and with the support of the European Bank for Reconstruction and Development (EBRD). EBRD supports the inspections reform in Serbia within a two-year project.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government |

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Case N °__139____ Project topic: ___ e-business _____

Title of the project, Contact Organization Name, Stakeholder type, Country

E-GREENMARKET

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

The e-Greenmarket solution is used not only by individual buyers, but also by companies that supply retail chains and cooperatives. Every buyer can directly order goods from "e-greenmarket" by searching for desired products or contacting the manufacturer by phone or e-mail. The delivery is done directly to the home address, or through courier services. One of the main accomplishments was the fact that several retail chains had included products offered by e-Greenmarket farmers on their shelves.

Website

https://ite.gov.rs

https://pijaca.minpolj.gov.rs/

Description

e-Greenmarket ("ePijaca") is a web portal that connects those who want to buy, those who want to sell, but also those who deliver those goods from point A to point B. If a producer has something to offer, he can register it electronically. All interested citizens can, after completing a simple registration process, buy online a wide variety of fruits, vegetables, meat, cheese, milk, eggs, honey, as well as a variety of other traditional Serbian food products. Ordered goods can be shipped directly from the producer, as well as through a number of courier services. Call center operators provide assistance with the registration process free of charge at several phone numbers.

ICT Tools

web portal

Challenges / Partnership / Sustainability / Replicability

During the novel coronavirus pandemic, the portal proved that online sale was an ideal solution for many producers; yet, sustainability, logistics, and food safety remain the challenging aspect of such online platforms. However, expectations that even when green markets open again, the retail chains will continue to use the portal for procuring goods from domestic producers proved to be true. Now, a month after the declared state of emergency over coronavirus has ended, there are about 1300 producers active on the portal. The end of the coronavirus emergency did not mean the end of the e-sales of farm products in Serbia.

The e-Greenmarket platform was launched by the Ministry of Agriculture, Forestry and Water Management of the Republic of Serbia in partnership with the Office for Information Technologies and eGovernment. Initially, e-Greenmarket was established to serve as a substitute for traditional green markets, yet the end of the state of emergency over coronavirus did not mean the end of the e-sales of farm products in Serbia. Expectations that even when green markets open again, the retail chains will continue to use the portal for procuring goods from domestic producers proved to be true. Now, a month after the

state of emergency over coronavirus ended, there are about 1300 producers active on the portal.

e-Greenmarket solution is highly replicable. The Ministry of Agriculture, Forestry, and Water Management informed the public that the World Bank is willing to support the project financially and to "copy" the comprehensive e-Greenmarket solution implemented in Serbia to the surrounding counties of the Western Balkans.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-business|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-employment|AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture | Goal 3: Ensure healthy lives and promote well-being for all

Case N °_ 140____ Project topic: __e-health____

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Self-Assessment Tool

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Primary beneficiaries are people worried because of the exposure to the virus and those experiencing COVID-19 symptoms. COVID-19 self-assessment tool was of a great importance in days when the healthcare institutions faced sudden and unprecedented demand for testing since it provided some sort of initial triage and helped worried citizens determine if they were good candidates for testing, should they self-isolate themselves or should they seek medical care.

Website

https://ite.gov.rs

https://e-zdravlje.gov.rs/landing/

Description

As the novel coronavirus epidemic started to spread throughout Serbia and put healthcare institutions and laboratories performing COVID-19 disease testing under increasing pressure, the Ministry of Health and the Office for Information Technologies and eGovernment decided to launch an online COVID-19 self-assessment tool and to encourage citizens to use it. Serbian COVID-19 Self-Assessment Tool has been developed to help citizens worried because of the exposure to the virus and those experiencing COVID-19 symptoms determine if a COVID-19 test is recommended for them and to refer them for testing. It offers guidance on when to seek medical care and what to do in the meantime. Concerned person should access Self-Assessment Tool either by logging in or registering at Serbian e-Health portal, fill out an electronic question form, and follow the guidelines that are provided based on their answers. If their answers are indicating a possible case of COVID-19 infection and they leave their phone number, a physician will contact them to arrange their testing in one of the dedicated healthcare institutions.

ICT Tools

Interactive COVID-19 self-assessment tool is accessible via e-Health web portal ("portal eZdravlje" in Serbian language). The easiest way to access the self-assessment electronic question form is by using a personal health insurance number printed on each Serbian health insurance card to log in without registering personal account. Non-registered users can access the COVID-19 self-assessment tool but have limited access to the portal features. Single Sign-On is supported through the national portal for eGovernment users identification and authentication (https://eid.gov.rs), and it is also possible to register account at the e-Health portal (https://ezdravlje.gov.rs) separately.

Challenges / Partnership / Sustainability / Replicability

In the time of the novel coronavirus pandemic, the declaration of state of emergency followed by the country lock-down and the healthcare system under great pressure, the biggest challenge was to determine who of the thousands of worried citizens is at the biggest risk and should get the medical care within the shortest possible time. COVID-19 Self-Assessment Tool proved to be of a great help and was widely used among citizens. In the first 6 days after the roll-out, more than 4,000 citizens completed the test. Serbian

government and the Office for Information Technologies and eGovernment firmly believe that solidarity and responsibility are crucial and that only together we can and must be a better and more responsible society. A call has been made to all companies and organizations that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-learning | AL C7. ICT applications: benefits in all aspects of life — E-employment | AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all | Goal 10: Reduce inequality within and among countries

Case N °__141____ Project topic: _e-government_____

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Solidarity Portal

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Primary beneficiaries are citizens, yet some solutions offered, such as Microsoft Teams, can be used by businesses, civil society and public organizations.

Website

https://ite.gov.rs

https://digitalnasolidarnost.gov.rs

Description

The Office for Information Technologies and eGovernment launched the Digital Solidarity Portal, available at www.digitalnasolidarnost.gov.rs, intended to improve the quality of life to all those who are staying at home due to the novel coronavirus pandemic. Www.digitalnasolidarnost.gov.rs is the first government-launched crowd-sourcing platform. It compiles information about free platforms for distance learning, working from home, as well as free books, courses, music, films and other educational and entertaining content during the COVID-19 pandemic. A call has been made to all companies and organisations that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form. The Office for Information Technologies and eGovernment publicly promoted those who applied and showed their willingness to participate in this joint venture so that citizens could use the free solutions of these companies as much as possible. Up to mid-May 2020, there had been 100,000 visitors of the Digital Solidarity Portal, with citizens being most interested in work-from-home platforms, but also theater plays and virtual museum tours.

ICT Tools

Digital Solidarity is a web portal available at https://digitalnasolidarnost.gov.rs. Companies and organisations willing to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries can apply by filling out an e-form, whereas interested individuals can browse the portal by desired content category (virtual museum tour, education, online books, communication platforms, work-from-home, TV content, art and culture).

Challenges / Partnership / Sustainability / Replicability

Main challenge with regard to the Digital Solidarity portal is its sustainability after the coronavirus pandemic. The Digital Solidarity Portal will remain active as long as there are companies and organizations willing to offer their solutions and content free of charge. Serbian government and the Office for Information Technologies and eGovernment firmly believe that solidarity and responsibility are crucial and that only together we can and must be a better and more responsible society. A call has been made to all companies and organisations that are ready to enable a free-of-charge use of their digital platforms, content and solutions to citizens, businesses and countries to apply and fill out a form. A number of socially responsible organisations, such as Microsoft, IBM, Telekom Srbija, IT4BIZ, PKS Partner, VIP, Semos, Petlja, Nutanix and many more supported the initiative by filling out a form and making their resources available to the Serbia's citizens free of charge

through the Digital Solidarity portal. The Digital Solidarity Portal project has been supported by the United Kingdom's Good Governance Fund and the United Nations Development Programme in Serbia. Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbian citizens until the end of the pandemic.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-learning | AL C7. ICT applications: benefits in all aspects of life — E-employment | AL C10. Ethical dimensions of the Information Society

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all | Goal 10: Reduce inequality within and among countries

Case N °__142___ Project topic: _ E-learning_____

Title of the project, Contact Organization Name, Stakeholder type, Country

Expression of Interest for Enrollment in Schools (Interim Service to e-Enrollment)
Office for Information Technologies and eGovernment of the Government of Serbia
Government

Serbia

Beneficiaries

The service was intended for all parents on the territory of the Republic of Serbia planning to enroll their children in the first grade of elementary school this year, yet it was of a great importance for elementary schools as well, since it provided them with an opportunity to continue some of their regular activities with regard to enrollment, and plan ahead.

Website

https://ite.gov.rs

https://euprava.gov.rs

Description

The enrollment of children in the first grade of elementary schools, which traditionally begins on April 1, started later this year due to the novel coronavirus outbreak and the state of emergency. As of Wednesday, April 1, 2020, instead of enrollment, parents and other legal representatives were encouraged to use the interim service, called "Expression of interest", through the redesigned e-Government portal. The aim of this service was to establish the "initial" parent-school contact and to assure the parents that the school is aware of their intention to enroll their children. On the other hand, the service helped the schools to optimize the number and classes and to better prepare for the next school year. In the 6 days of its availability on national e-Government portal, the "expression of interest" service had been used by 11,000 parents.

ICT Tools

"Expression of interest for enrolling in the first grade of elementary schools" is a service that uses national e-government infrastructure, that is, the national e-government portal "eUprava" (available at https://euprava.gov.rs), the government service bus central platform for information sharing and reuse, and the national portal for identification and authentication e-government users. Parents did not have to register themselves separately in order to use this service, it was available to them by logging in with their existing accounts at national e-government portal. Serbia aims at ensuring multichannel approach to all public services, therefore the service "Expression of interest for enrolling in the first grade of elementary schools", was available by telephone as well.

Challenges / Partnership / Sustainability / Replicability

Main challenge that both parents and educational system encountered was the COVID-19 pandemic itself and the country lockdown at the time of the year when the communication with regard to enrollment usually begins. That challenge was successfully addressed by the launch of this digital service.

This service was designed and implemented by the Office for Information Technologies and eGovernment and the Ministry of Education, Science and Technological Development, in partnership with all elementary schools throughout the Republic of Serbia since their cooperation was of a great importance.

"Expression of interest" as an interim service had been available until the Ministry of Education, Science and Technological Development officially rolled out the eEnrollment service, on May 28, 2020. "Expression of interest" service, as a tool which allows for planning and allocating resources ahead in a state of unprecedented emergency and the country lockdown proved to be a precious tool and is highly replicable, both in the light of a possibility of the second wave of the COVID-19 epidemic, but also, slightly modified can be used for other purposes. Aside for providing schools with an opportunity to plan ahead, it also provided parents with some certainty during the crisis.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government |

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °__143____ Project topic: __e-health_____

Title of the project, Contact Organization Name, Stakeholder type, Country

National COVID-19 Integrated Information System

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Health care institutions at the primary, secondary and tertiary level, as well as laboratories that perform sample testing, public health institutes, sanitary inspectors and the Ministry of Health.

Website

https://ite.gov.rs

https://covid19.rs/

Description

National COVID-19 Integrated Information System represents a software support for performing epidemiological surveillance related to the COVID-19. The system enables registration of all persons tested for the SARS-CoV-2 virus on the entire territory of Serbia. It enables aggregation of data from the official records kept by healthcare institutions in which persons suffering from COVID-19 are hospitalized and data from the institutes of public health and laboratories that perform testing and enter data into the system. Data are kept at the level of one or more local self-government units, in accordance with the territories of local and regional institutes for public health. Tested persons can also receive a confirmation of the test results in electronic form by e-mail. The Institute of Public Health has to submit data on a daily basis, until 2 pm for the previous 24 hours to the Ministry of Health, as well as anonymized data to the Office for Information Technologies and eGovernment that publishes them as open data. The application is designed to support automated data submission to the above-mentioned authorities, as well as to the self-isolation software of the Ministry of Interior used for supervising the implementation of the imposed home-isolation measures.

ICT Tools

National COVID-19 Integrated Information System is a web-based application that supports: (1) Online registration of all persons tested for SARS-CoV2 virus on the entire territory of the Republic of Serbia; (2) Aggregation of data from the official records kept by healthcare institutions where persons suffering from COVID-19 are hospitalized, data from institutes for public health and laboratories that perform testing; (3) The provision of data necessary to supervise the implementation of imposed home-isolation measures to the Ministry of Interior; and (4) The provision of anonymized statistical data to the Government of Serbia, the Ministry of Health and the Office for Information Technologies and eGovernment, on a daily basis.

Challenges / Partnership / Sustainability / Replicability

Main challenge addressed by the rollout of COVID-19 Integrated Information System was ensuring an adequate level of inter-institutional and cross-sectorial coordination and collaboration with regard to data sharing and data aggregation, and automated reporting and submission of data on a daily basis. COVID-19 IIS has proven to be a valuable tool to overcome this challenge. The National COVID-19 IIS is established and managed by the Institute of Public Health, with a technical support of the Office for Information

Technologies and eGovernment, Health Insurance Fund and the Ministry of Health. Solutions implemented during the first wave of the novel coronavirus outbreak remain active, and will certainly continue to serve Serbian administration and healthcare system until the end of the pandemic. As for now, there is no vaccine to treat coronavirus disease, therefore we do not know for how long will we have to stay alert, will there be a second wave and for how long will we remain threatened by COVID-19. In any case, the National COVID-19 Integrated Information System has proven to be an excellent tool for cross-sectoral and inter-institutional data sharing and reuse, and with some modifications, it can be used for other purposes as well. National COVID-19 Integrated Information System is highly replicable, since, during the COVID-19 outbreak most countries have to ensure interinstitutional and cross-sectorial collaboration, information-sharing, aggregation of data and automated reports generation/data provision on a regular basis.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °_ 144_____ Project topic: _e-learning_____

Title of the project, Contact Organization Name, Stakeholder type, Country

e-KINDERGARTEN 100

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Beneficiaries of this digital public service were parents who wanted to enroll their children in kindergartens, but the regular non-digital procedure was not available as the kindergartens were temporarily closed due to the novel coronavirus outbreak, the state of emergency and the country lock-down.

Website

https://ite.gov.rs

https://euprava.gov.rs

Description

The Office for Information Technologies and eGovernment rolled out digital public service that enabled an end-to-end electronic registration of children in preschool institutions through the national e-Government Portal, available at https://euprava.gov.rs. The service was available to registered users of the e-Government portal, in all municipalities and cities throughout Serbia. The service was intended for parents who wanted to e-enroll their children in kindergartens, since regular non-digital procedure was not possible as the kindergartens were temporarily closed due to the novel coronavirus outbreak, the state of emergency and the lockdown. Parents did not have to provide and submit documents by themselves, but these were automatically obtained ex officio. The recommendation for all preschool institutions in case they needed any additional documents which they could not obtain by themselves, was to allow parents to provide these documents by e-mail, and not to ask them to pay visits to the preschool institutions or post offices to physically submit the documents. 2020 was the first year the service was 100% electronic, end-to-end (without the need for parents to visit various counters and obtain other documents), available in 100% of the kindergartens nation-wide, and that 100% children have been enrolled online.

ICT Tools

"eKindergarten 100" is a digital public service that uses existing national e-government infrastructure, that is, the national e-government portal "eUprava" (available at https://euprava.gov.rs), its government service bus for information sharing and reuse, and the national portal for e-government users identification and authentication. Parents do not have to register separately in order to use this service, it is available to them by logging in with their existing accounts at the national e-government identification and authentication portal.

Challenges / Partnership / Sustainability / Replicability

Main challenge that both parents and preschool institutions encountered was the COVID-19 pandemic itself and the country lockdown at the time of the year when the communication with regard to enrollment usually begins. That challenge was successfully addressed by the launch of this digital service. This service has been designed and rolled out by the Office for Information Technologies and eGovernment in cooperation with all municipalities and preschool institutions in Serbia.

eKindergarten 100 is a digital public service that is relevant only at the time of the year when enrollment to preschools usually occurs. Nevertheless, the service is completely sustainable since digital service delivery should remain default even under regular circumstances and the service will certainly be used in Serbia again next year and in the future. In a state of unprecedented emergency and the country lockdown this service proved to be a precious tool and is highly replicable, both in the light of a possibility of the second wave of the COVID-19 epidemic, but also, slightly modified, it can be used for other purposes.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °__145____ Project topic: __e-learning____

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Education: Leave No One Behind

Office for Information Technologies and eGovernment of the Government of Serbia

Government

Serbia

Beneficiaries

Beneficiaries were eight-grade students from elementary schools who had to prepare themselves for the final exam. In the first phase of the project implementation, a special focus was on students from underprivileged families, about 5% of students, who had to have their access to education resources ensured, in order to prepare for the final exam. All three telco operators and some of the biggest IT companies in Serbia responded immediately to the government request and donated a large number of devices that enabled children to follow online education and practice for the final exam.

Website

https://ite.gov.rs

https://www.mojaucionica.gov.rs/

Description

From the day one of the declared state of emergency, the entire primary and secondary education system in Serbia was transferred from classrooms to homes. The classes were taught through the national broadcaster Radio Television of Serbia, and online education, through several platforms. The government of Serbia decided to launch an online self-assessment test for eighth-grade students, which would be organized electronically for the first time and allow eight-graders to better prepare for the final exam. In order to enable children to follow the online education and to practice for the final exam, the government formed a coalition with the private sector and provided smart phones, tablets and internet for 2,800 eight-graders coming from the disadvantaged families. The entire operation was executed in just few days, as several companies responded immediately and showed social responsibility by donating a large number of devices for eighth-graders. The first trial final exam was conducted from April 22 to 24 2020, with an aim to use the previous results of digitization in the system of education to provide eighth grade students in emergency conditions with additional opportunities to practice and prepare for the final exam, as well as to check the potential for implementation in the coming years.

ICT Tools

Given the epidemiological situation in the country at that moment, the experts from the Cabinet of the Prime Minister, Ministry of Education, Science and Technological Development and the Office for Information Technologies and eGovernment had set up a digital platform "My Classroom" to help them gain insight into how far they had progressed and, where necessary, give additional attention to particular areas of these subjects. Online testing was conducted from April 22 to 24 2020. The tests had been available to students for 12 hours a day, i.e. from 8.00 to 20.00, and in several languages. The correct answers to the tests were published 12 hours later, and analyses of tests broadcast on TV.

Challenges / Partnership / Sustainability / Replicability

Main challenge that both students and education system encountered was the COVID-19 pandemic itself, and the temporary closure of educational institutions in an attempt to contain the spread of the novel coronavirus.

The project "Digital Education: Leave No One Behind" was a result of the government effort to mitigate the immediate impact of school closures for students, particularly eight-graders and from disadvantaged families, and to ensure education continuity for all. The "Digital Education: Leave No One Behind" project was implemented by the Ministry of Education, Science and Technological Development and the Government of Serbia Office for Information Technologies and eGovernment, in cooperation with telco operators and private companies, such as Telekom Serbia, Telenor Serbia, Vip, Comtrade, and Huawei.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °__146____ Project topic: _E-learning_____

Title of the project, Contact Organization Name, Stakeholder type, Country

Education Non-Stop - Integrated Education Response Serbia

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Main beneficiaries were students attending schools in Serbia, and the project aimed at enabling them to continue with their schooling and successfully complete their school year.

Website

https://ite.gov.rs

https://www.mojaucionica.gov.rs/

Description

From the day 1 of the declared state of emergency, schools in Serbia have been closed. However, the classes for all elementary and high school students continued through distance learning. Classes were broadcast on national RTS2 and RTS3 TV channels, and were available on the RTS Planet online platform. Remote teaching in national minority languages was broadcast on RTV, as well as on the channel's online platform. In the first 2 weeks, RTS teams had recorded over 1,200 classes, and RTS Planet app had received over 300,000 new users. Together with Telecom, Vip Mobile and Telenor, we provided all users of mobile internet with free internet access to this platform, to enable students to attend classes via mobile phones and tablets free of charge.

Moreover, a unique place "Raspored nastave" (Eng. "Classes schedule"), has been established, where all students and parents could access class schedules, shortcuts to specific classes, as well as online learning tools and tutorials. The Viber Community "My School" has also been created, where parents and students received notifications on a daily basis. The community consists of nearly 120,000 members. In addition to this, Tesla EDU platform for online education has been rolled out, with more than 68,000 students taking self-assessment test for 8th graders.

ICT Tools

A website "Raspored nastave" (Eng. "Online Classes Schedule"), where all students and parents can access class schedules, shortcuts to specific classes, as well as online learning tools and tutorials; Viber Community "My School", where parents and students receive notifications on a daily basis; Tesla EDU platform "My Classroom" for online education; Online classes are available at http://mojaskola.rtsplaneta.rs/.

Challenges / Partnership / Sustainability / Replicability

Main challenge that both students and educational system encountered was the COVID-19 pandemic itself and the temporary closure of educational institutions in an attempt to contain the spread of the novel coronavirus. The project was a result of the government effort to mitigate the immediate impact of school closures for students, and to ensure education continuity for all. This project has been implemented by the Ministry of Education, Science and Technological Development and the Office for Information Technologies and eGovernment, and the public broadcaster Radio-Television of Serbia (RTS), in partnership with educational institutions.

Most of the solutions deployed as a part of the integrated response to the COVID-19 pandemic in Serbia will remain active, and can be used both in case of the second wave of epidemic, as well as under regular circumstances. The project and its components, solutions and activities are highly replicable and can be implemented in other countries, as well as in Serbia under different circumstances and for other purposes, with minor modifications.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government|AL C7. ICT applications: benefits in all aspects of life — E-health|AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °__147____ Project topic: ___e-government_____

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Open Data Serbia

Office for Information Technologies and eGovernment of the Government of Serbia Government

Serbia

Beneficiaries

Beneficiaries are citizens who are looking for a reliable source of information regarding the COVID-19 pandemic in Serbia, but also researchers, scientists and businesses that can offer valuable insights or come up with some ideas and solutions.

Website

https://ite.gov.rs

https://covid19.data.gov.rs/

Description

During times of crisis, it is vital that governments provide accurate, useful and up-to-date information. Publishing statistics about the outbreak helps people make informed decisions about their daily routines, builds public trust, as well as enables public authorities to make informed decisions and act decisively to flatten the curve. A dedicated subdomain on Serbian COVID-19 website, namely covid19.data.gov.rs, was established within the national Open Data Portal (data.gov.rs) for publishing covid19-related open data. To make machine-readable data sets suitable for further analyses and "reading" by the general population (not only by machines), we have visualized the data so that citizens can follow the reports themselves. Data sets published include daily data on infected persons by a local self-government unit, the number of individuals who are in mandatory self-isolation, the number of tested, hospitalized, and deceased individuals, as well as the number of persons who are on a respirator, as well as the number of those who have been cured. Information on special COVID-19 outpatient clinics, their working hours and contact information is also available on the Portal.

ICT Tools

A dedicated subdomain on Serbian COVID-19 website, covid19.data.gov.rs, has been established within the national Open Data Portal (data.gov.rs) for publishing covid19-related open data. Aside from publishing COVID-19 data sets in machine-readable form, the Office for Information Technologies and eGovernment in charge of the Open Data Portal infrastructure, has implemented data visualization tools so as to facilitate "reading" and analyses of information contained in the data sets. Citizens have been invited to use the data and to contact the Office for IT and eGovernment if they come up with some interesting insight or solution.

Challenges / Partnership / Sustainability / Replicability

In Serbia, COVID-19 related data is provided by the reliable source, and is available on national open data portal as open data, therefore the data sets are findable, accessible and reusable, though a need for specific international standards for COVID-19 data has been recognized at international level, so as to facilitate international research of the novel coronavirus. Establishment of the dedicated subdomain and the continual provision and publishing of COVID-19 related open data in Serbia has been ensured by the Government of Serbia's Office for Information Technologies and eGovernment as the government body in charge of the national open data initiative and the open data portal (data.gov.rs) design,

development and operating, and its partnership and cooperation with the Institute of Public Health of Serbia "Dr Milan Jovanovic Batut" that provides anonymized data on a daily basis, and the Ministry of Health. The dedicated COVID-19 subdomain will surely remain available until the end of the COVID-19 epidemic in Serbia, as well as in case of the second wave. Yet, even after the introduction of approved treatment or vaccine, some mechanism for the utilization of historical data will remain available to serve national and international researchers, i.e. to enable the use of these data sets for scientific purposes. This project is highly replicable, since during the times of crisis all countries need to ensure their citizens, as well as national and international researchers, a reliable source of information, that is, in this case, reliable information regarding the COVID-19 situation in their countries.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-health | AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N°	148	Project topic:	e-health	

Title of the project, Contact Organization Name, Stakeholder type, Country

Rapid Response to Community COVID-19 queries through an online counselling service. Halley Movement Coalition

Civil Society

Mauritius

Beneficiaries

Beneficiaries include: children, single parents, women and girls, working parents, disabled population, the elderly and social & religious leaders. Benefits to the beneficiaries include: expert answers to queries, quick responses, all issues are tackled including Covid-19. Specific issues/questions deal mainly with sexual exploitation (both physical and online), child abuse, elderly abuse, corporal punishment, gender violence, inappropriate materials on internet, education and health (both physical and mental) and referral services, among others.

Website

http://www.halleymovement.org

http://www.helplinemauritius.org

Description

- 1. Online counselling service through live chat, email and short code telephone
- 2. Accessibility to all users through the free platform: www.helplinemauritius.org
- 3. Professional advice and guidance by trained & expert counsellors working for the service since years now.
- 4. Awareness campaign of the service through social media: FB-helplinemauritius
- 5. Community dialogues in marginalized and "difficult to reach" areas.

ICT Tools

- 1. Internet access to seek counselling, advice or guidance
- 2. Live chat through the free platform
- 3. Email queries
- 4. Short code telephone access.

Challenges / Partnership / Sustainability / Replicability

The main challenges include the following, among others. The NGO needs funds.

- 1. Recruitment and training of additional counsellors and staff
- 2. Increase of logistics costs to run the service
- 3. Expenses to cover community dialogues in specific areas
- 4. Secretariat costs to monitor advertising, social media and internet connection expenses, etc.

This project is sustainable as it is operating since 2012 in Mauritius. Its data and information are being used to submit NGO reports to the United Nations and African Union Commission , e.g. UN UPR in 2013 & 2018.

It's also replicable. Our network partners in Africa-Indian Ocean Island States are requesting the NGO to help them replicate same in their countries.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

SDGs

Goal 1: End poverty in all its forms everywhere

Case N ° 149 Project topic: E-employment, E-environnent, E-agriculture

Title of the project, Contact Organization Name, Stakeholder type, Country

Leveraging Information and Communication Technology for Irrigated Agricultural Information

8villages Indonesia

Private Sector

Indonesia

Beneficiaries

Indonesian farmers. We're starting from collecting data from farmers to registration in our platform, so farmers can get access to 8villages services easier and farmers can get information access, access to experts, up to online market access to sell their crops with the end consumer. We also provide an innovative service of question and answer among villagers and experts in the world of agriculture, livestock, and fisheries with the use of information-based application technology that is integrated with the use of SMS, websites and android.

Website

https://8villages.com/

http://lisa.id/

Description

Our project promotes the use of technology to reduce the face-to-face activity on the ground of the irrigated farmers in Garut (West Java) and Lombok (West Nusa Tenggara). The conventional activities among farmers and extension worker are usually conducted by face-to-face to exchange information and extract solution from the extension workers. But since the Covid-19 Pandemic, people will reduce the conventional way of exchanging information as much as they could. In result, farmers have to find alternatives to communicate better to get needed information regarding farming.

Through our platform, it will be possible for farmers to get information not only from their designated extension workers, but also from many extension workers and farmers with the similar problem with them from all over the country. It even made possible for extension workers to act as the surveyor and extract crops data from farmers without jeopardizing the health of both parties; the farmers nor the extension worker. It also has been proven that the exchange of information in the platform is more effective and more efficient than the conventional way, since we also provide information in the form of articles, videos, crop calendar, price information and so on.

ICT Tools

Smartphone, farmers will get the free access of reliable information on how to cultivate their crops better. They will also be able to interact with experts from universities and each other to discuss their problems in the field.

Challenges / Partnership / Sustainability / Replicability

Since March-April 2020, our data acquisition increase up to 100%, but on April-May 2020 becomes the main challenges that encountered. Our acquisition data has declined up to 60% since enactment the Large-scale social restrictions on this Pandemic. We are looking the potential partners collaboration in Indonesia.

"Our project seems to have significant benefit for both farmers and stakeholders. In the farmers' side, they have been able to get reliable information regarding their problems on the field freely, where they can also get the information about crop calendar, market price, fertilizer information and many more through just one app on their phone. They can also give stakeholders more accurate data through the surveyor (extension worker) that shows what kind of crops do the farmers cultivate, cultivation method, farm size, all the way to the productivity prediction. This way, stakeholders can predict how much money the farmers' need for the initial capital, what kind of fertilizer do they need to cultivate, what kind of pesticide, until how much crop the farmers can produce in order to be marketed in certain markets. This benefits shown that this project is sustainable because we deliver sustainable community chain between farmers and stakeholders. Not only that, we also broaden farmers' knowledge to be able to interact with each other and act as digital community in our platform."

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case N°	150	Project topic:	e-learning	

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID 19 SCHOOL DIGITAL REGISTER

Universal Access Service Fund

Government

Botswana

Beneficiaries

1.Schools

Avail a stress free screening alternative as compared to using paper registers that cannot instantly find records.

2.Local Clinics

We avail reports of any temperatures above 37.5 for tests.

Website

http://www.uasf.org.bw

Description

Our core activities are to reduce queue times, enforce social distancing within our schools and avail instant data to local clinics. SHE officers and teachers team up to screen students temperatures.

ICT Tools

- 1.Web based technology
- 2.Offline Technology

These technological approaches are meant to increase usage and coverage of all our regional schools. The hardware tools in use are laptops and tablets.

Challenges / Partnership / Sustainability / Replicability

Our challenges:

- 1.Lack of ICT Gadgets in some schools
- 2.Lack of internet connectivity
- 3.Technophobia

Solutions to challenges:

- 1. Government to avail laptops/tablets and routes
- 2.Offline Solution
- 3. System user training

This project is sustainable. Because it has opened a door for our schools to transition into the 4 industrial revolution as it also acts as class digital attendance register which was previously paper based. Our project is also replicable as we designed the application in such a way that it can be available both online and offline. Currently the project is in use in 3 regions in Botswana (Gantsi, Kgalagadi, Mabutsane).

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N '	° 151	Project topic:	7. promotion of I	CTs for development

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 in SDGs: Adaptation Priority - Objectives & Broadcast Contents through

Community Radio & Community Visual Radio in Bangladesh Bangladesh NGOs Network for Radio & Communication

Civil Society

Bangladesh

Beneficiaries

Beneficial to rural people around 6.5 Million

Website

http://www.bnnrc.net

https://bnnrc.net/bnnrc-covid-19-adaptation-priorities-objectives-broadcast-contents-through-community-radio-community-visual-radio-in-bangladesh/

Description

Bangladesh NGOs Network for Radio and Communication (BNNRC) has been struggling for the last 20 years for opening up and strengthening the community media sector including Community Radio and giving focus on its vital role as voices of the voiceless rural people from 2000.

ICT Tools

Community Radio and Social Media | Mobile set

Challenges / Partnership / Sustainability / Replicability

Community Radios have been broadcasting COVID-19 related life-saving information since March 2020 with their own resources but without emergency grant community radio stations are facing difficulties. Last couple of months the total situation has not been easy for community radio stations. Among the cancellation of advertisement, cut down of grant-funded projects and stopped other income sources increased the challenges significantly. / This project can be replicated in the same stream where all stakeholders are running the same structural processes and implementations around the world. / This project ensuring reliable community infrastructure and equitable access to information and communication technology throughout the country. As such, it promotes the effective use of ICT, facilitate lifelong learning and skills development, creating enabling environment for digital innovations as well as boosting the investment in rural communities. which will propel the nation toward the stability, prosperity, and sustainability. With these results achieved, project is a driving force that propel country toward a path of long-term stability, prosperity, and sustainability.

Action Lines
AL C9. Media
SDGs
Goal 16: Promote just, peaceful and inclusive societies

Case N° 152 Project topic: 2.e-learning	Case N°	152	Project topic:	2.e-learning	
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Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Essay writing contest 2020

Edified Generation Rwanda

Civil Society

Rwanda

Beneficiaries

COVID-19 Essay writing contest 2020 was designed to respond to the COVID-19 especially supporting the scholars who are in lock down by expressing their knowledge on Corona Virus

Website

https://edigenrwanda.org/

Description

COVID-19 Essay writing Contest 2020 seeks to promote and maintain reading and writing culture as well as promotion of Book industry in Rwanda. The contest will not only provide assistance to the winners necessary to go to schools in September 2020 but also will strongly focus on the following: We need to understand how they perceive this unprecedented lock down caused by COVID-19; Engaging children and youths in the art of reading and writing and promotion of reading and writing culture in Rwanda; Exposing and nurturing young children/youths into digitally literate by applying through the platform; Integrating them into the journey of the government of Rwanda to curb the spread of the Corona Virus.

ICT Tools

Students will visit https://edigenrwanda.org/ and choose COVID-19 Essay writing contest 2020, children must decide a language to be able to proceed to the instructions and guidelines then to the application forms.

Challenges / Partnership / Sustainability / Replicability

The Main challenge was budget limitation which finally restricted the contest by only 5 Districts out of 30. / The program is looking for partners to build its financial muscles . Once funds are available the contest will be extended to the national scale . the gape Area of investment are: 1.Implementation of the Online platform 10,000\$ 2. Children Books Publishing and Exhibition in the end 20,000\$ 3.Awards for the best work , Project Execution including Monitoring and evaluation budgets 20,000\$. / The project will be Extended to the national scale and will target other groups of people in the nation. / Books are the best way we can save the right information , by recording the memories brought by the unprecedented outbreak . we shall be preserving the history and lessons in a consistent way since all work will be uploaded online.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °___153___ Project topic: ____ 5.access to info and knowledge _____

Title of the project, Contact Organization Name, Stakeholder type, Country

TEACH FOR FUTURE – Educational Transformation of Adults through Innovation, Technology and Entrepreneurship, The National Association of Public Librarians and Libraries in Romania, Private Sector, Romania

Beneficiaries

Target group: adults, employees / volunteers of partners and / or volunteer members of libraries in Romania, Bulgaria and Greece.

Indirect beneficiaries: 5000 librarians, 10,000 adults, 2 authorities, 5 economic agents, 5 NGOs, 3 universities, from the 3 countries and the EU, who will be informed and access the innovative results.

Website

http://www.anbpr.org.ro + http://www.teachforfuture.ro

Description

- "- STRATEGIC ANALYSIS understanding of the methods, approaches and tools used to promote the acquisition of ICT, innovation management and entrepreneurship competences.
- CURRICULUM DESIGN design of methods of adult education that include both the expertise of the consortium members and the expertise of other entities recognized in the field.
- TRAINING MATERIALS learning support materials for trainers and trainees based on good practices and case studies in the field, to optimize the training process and results. -PILOTING & TESTING in 3 countries (Romania, Greece, Bulgaria) with the participation of 210 adults in 3 countries"

ICT Tools

We initiated a Center of Excellence in Romania for testing and certifying the competences in the IT field and the transfer of good practices in order to host a mentoring campus in the field of 3D modeling and printing, a Center of Excellence in Bulgaria in order to host a mentoring campus on entrepreneurial and leadership skills, and a Center of Excellence in Greece in order to host a mentoring campus on innovation management & network collaboration.

Several online channels are used for communication and cooperation between partners, including: Facebook, Skype, Google Docs, Google Drive, Webex, GotoMeeting

Challenges / Partnership / Sustainability / Replicability

Taking into account the COVID-19 effects on the "TEACH FOR FUTURE" activities and the impossibility of organizing face-to-face activities, some project activities were or follow to be postponed. The main problem was the lockdown situation. Due to the COVID-19 pandemic all our activities moved Online. / - / - By distributing the batteries of personalized information post-implementation to a complex database that will contain all the persons interested in the field of action of the project.

- During the project sustainability period, ANBPR and its partners will ensure the availability of resources and will ensure that they will be used by other interested organizations that it works in the field of adult education (NGOs, educational institutions, libraries, companies, etc.). / - Based on the strategic partnerships of the Applicant and its partners with entities active in the field of adult education, good practices will be shared regarding adult learning mobility and intellectual products; - Partners will ensure that

libraries or organizations involved in educational activities will use the innovative results obtained as a result of carrying out this project in their own adult training activities; - Partners will encourage the libraries or organizations participating in the dissemination events to capitalize on this important opportunity for adult education, for their involvement in learning activities and for recognizing learning outcomes;

Action Lines

- AL C1. The role of governments and all stakeholders in the promotion of ICTs for development
- AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 10: Reduce inequality within and among countries

ICT	Case	Reposit	ory: Th	e Coro	navirus	Response:	ZERO	DRAFT
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Case N ° 🗀	154	Project topic:	3.e-health
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Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Research in Arabic, Arabic Digital Reform Institute (ADRI), Private Sector, New Zealand

Beneficiaries

We are aiming to make the content primarily available for the Health Ministries and all the health sectors of the MENA states. Our secondary targets would be the universities and health NGOs who're currently involve in the COVID 19 response across the region.

Website

https://Adri.co.nz

Description

Our project aims at providing credible and reliable literature and content in relation to COVID-19 in Arabic. There's currently very little research currently existing in Arabic and therefore, all Arab communities revert to social media platforms for seeking information on COVID-19. ADRI has partnered with Cambridge University Press, to translate to Arabic a large number of COVID-19 related research from open access publications, to Arabic and then make available online for the public across the MENA region. Our translation is particularly cost-effective as we utilize AI and machine learning to reduce the human efforts to 5-10% of the traditional translation practices.

ICT Tools

ADRI's systems, comprise a distributed architecture of functional applications, which combined create a fully automated translation and editorial practice with minimal human interaction. The involved technologies in these systems, include, primarily, AI, Machine Learning, Neural Networks, Cloud, We and Mobile Technologies.

Challenges / Partnership / Sustainability / Replicability

The primary challenges are funding and awareness. Despite utilizing technology has reduced the cost of translation to the fraction of the traditional practices, nonetheless, the project will bear an initial requirement for financial resources. This issue could be resolved via partnering with international corporates who'd like to effectively invest their CSR funds towards real impacts in needful communities. And to overcome the awareness challenge ADRI requires an extended outreach into all the Arabic communities and access to the policy-makers and decision-makers of those states. / We look forward to partner with organisations that have an interest in the peace and well-being of the Middle Easter and North African communities and would like to make a tangible contribution to raise the capabilities of these communities. We welcome interest from, Government agencies, international organisations, banks and academia. / This project is particularly targeting the Arabic research and is replicable across all the 22 Arab countries. Nonetheless, We are also able to replicate this project across other non-English communities across the globe where needed. The only challenge is that the cost could get higher as ADRI would need to higher new academic team in that particular language to conduct the quality assurance process of the translated literature. / ADRI will be delivering the translated research material via subscription. The subscription fees are intentionally low to ensure our content could be available to the larger community.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °___155___ Project topic: ____7. promotion of ICTs for development_____

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Hope, B-Gifted Foundation of Sierra Leone / Maryland University Francis King Carey School of Law,

Civil Society, Sierra Leone

Beneficiaries

The project currently serves 1500 people, in a year it will serve 5000 people and in 5 years it will serve 25,000 people. The project is targeting an approximately 20,000 amputee war victims use ICT as well as gain the level of information and awareness to prevent the spread of Covid19 in their marginalized communities, The project is also giving war amputated victims the tools and a way to learn skills with a potential for employment and empowerment.

Website

http://www.b-gifted.org + https://digitalhopesierraleone.blogspot.com/

Description

We are using modern technologies to reach vulnerable, marginalized amputees to access information about Covid19 through their cellphones and via public address systems in the communities. The initiative assists those who are doubly marginalized as a result of their physical indifferences knowing that their situation will become even challenging during the Covid19 epidemic. Persons with Disabilities are traditionally left behind and this is true of Amputees and War Wounded who face a lot of discrimination within the communities they live. The project offers innovative programs that will help them gain useful information during the Covid19 epidemic, attract humanitarian support, develop their residual skills and day to day functional abilities and free PWDs from being dependent on others and access gainful livelihood opportunities through innovative skills. The project will help eliminate these discrimination by providing the tools that Amputees and War Wounded need to over leap the discrimination and neglect they face in the areas of access to innovative tools, employment, grant and access and other support.

ICT Tools

The initiative is using smartphones, computers, radio, internet, TV, scanners, printers, laptops, and other means of broadcasting information and sharing content to raise awareness for those who face challenges during the war and are part of the most vulnerable population in the country.

Challenges / Partnership / Sustainability / Replicability

Challenges are access to funding and other technical tools to carry out the project. We intent to expand the project to other amputee camps and continue to use ICT to provide information, raise awareness and help in skills development. Going to amputee camps where amputees have faced unbridled terror, where expectations are high, frustrations rife, and people who are just daily expressing frustrations of being left out was a challenging one for me. / I am looking for partnerships in ICT for development, ICT for disability, ICT for Peace, ICT for humanitarian support, technical and development partners, and funding partners who can help leverage and scale the program / The project is currently being replicated in Liberia and we hope to expand to Guinea and other countries. / The project has been self-sustainable for sometime now since winning the UN ITU awards and the Pan African Awards for entrepreneurship in education shortlist. The project volunteers and the amputee camps and communities has been working on local

efforts to carry out the programs through the funds initially provided for setting up the pilot phase.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case N °___156___ Project topic: ____ 5.access to info and knowledge _____

Title of the project, Contact Organization Name, Stakeholder type, Country

Online Agribusiness Directory, Agasha Group Ltd, Private Sector, Uganda

Beneficiaries

Farmers and agribusinesses in rural areas along the agricultural value chain can access reliable information in real time and network with urban based buyers and suppliers.

Website

https://www.scribd.com/user/304891492/Agribusiness

Description

To publish digital version of AgaSha's Agribusiness Directory which can be accessed via website and through USSD. This will connect farmers to their markets and partners everywhere at any time.

ICT Tools

Use website for smartphone users and USSD for simple featured phones to disseminate information.

Use mobile money gateways to receive payments.

Use WhatsApp & Telegram groups to market the website.

Challenges / Partnership / Sustainability / Replicability

COVID-19 lockdown led to restrictions on movements and physical networking events. It is difficult to access contacts of former and new clients and suppliers. Using digital database is a solution. / IT expertise in developing the website whose information can be accessed by paying a monthly subscriptions and it is connected to USSD system. The web can have downloaded PDF and Excel documents. / It can expand to other East African countries. We already have Agribusiness database for Kenya, Tanzania, Rwanda, Burundi and Ethiopia which have also been affected by lockdowns./ Members will access information on website by paying a subsidized monthly access fee. The USSD text will be charged & there will be revenue sharing with the Telecom companies. Advertisements too

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 1: End poverty in all its forms everywhere

Goal 17: Revitalize the global partnership for sustainable development

ICT Case Repository: The Coronavirus Response: ZER	ERO DRAFI	
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	Case N	° 157	Project topi	c: 5.access to info and knowledge
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Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Radio Response, Farm Radio International, Civil Society, Canada

Beneficiaries

Our ultimate beneficiaries are rural listeners that gain access to relevant, timely and accurate information about COVID-19 on the radio and through our ICT platforms. This is achieved through the capacity building and enabling of intermediaries: radio broadcasters. These broadcasters serve their communities through regular programming on the health and social effects of COVID-19 and other issues.

Website

https://www.farmradio.org + https://farmradio.org/our-work-on-covid-19-so-far/

Description

At a time of physical distancing, radio is often the only source of information for marginalized communities. We are working with our network of more than 1000 radio stations across Africa on supporting communities with COVID-19. We are providing critical information to journalists across 41 countries to allow them to combat misinformation, answer frequently asked questions, and stay safe while reporting. We have also rolled out an emergency IVR hotline and a companion chatbot on Telegram and Facebook Messenger to arm journalists with the correct, up-to-date information on the pandemic. We have facilitated more than 50 social media discussions on WhatsApp and Facebook so far across ten countries where we work.

ICT Tools

We are leveraging the power of radio with our network of more than 1000 radio stations, many of which are actively broadcasting critical information during the pandemic. FRI helps radio station partners to develop interactive programs that not only leverage radio, but also modern digital technology to facilitate interactivity with listeners.

Challenges / Partnership / Sustainability / Replicability

One of the main challenges we are seeing is the availability of radio stations to access resources to continue their critical work. We are hoping to help solve this problem through our COVID-19 Support Fund for broadcasters to cover basic costs while the pandemic wreaks havoc on advertisement support that stations rely on. / FRI is definitely looking for partners. First, we are looking for funding partners to invest in robust communication services in the countries we work in. Second, we are looking to partner with NGOs and other civil society groups that may need help in delivering their work during the pandemic. Due to the nature of our work being largely at a distance already, we are able to offer connections to communities that have largely been cut off from the development community during COVID-19. / There is a major need for programs that support communication services even outside of the context of the COVID-19 pandemic. But right now it is even more critical to replicate this kind of approach, as the world moves on to recovery from the pandemic. / Because this is largely an emergency response project, it is time-bound and limited. However, the ideas behind the project point to an ability to sustainably offer these services: enabling local actors to sustainably produce critical information broadcasts, leveraging the scale-up capability of ICT channels, and enabling the participation of both governments and civil society.

Action Lines

AL C4. Capacity building

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 3: Ensure healthy lives and promote well-being for all

ICT	Case Repository:	The Coronavirus	Response:	ZERO DRAFT

Case N°	158	Project to	pic: 3	.e-health
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Title of the project, Contact Organization Name, Stakeholder type, Country

Re -use Waste Restoring Health, Last Mile Medicine, Private Sector, Kenya

Beneficiaries

Under insured or Uninsured who have exhausted their option in financing their prescription medication in need for life saving medicine and suppliers.

Website

http://lastmilemed.org/

Description

Disrupting pharmaceutical supply chain by redistributing unused, unexpired medicine that would otherwise be destroyed through an online platform matchmaking from health facilities, manufacturers & wholesalers with the needs of patients in safety-net

ICT Tools

Cloud computing, Big data, Machine Learning and Artificial intelligence. This would in turn help with making predictive, qualitative and quantitative prediction for the solution to be developed hence making the solution as robust as possible as all assumptions are tested while the data is processed and regular reviews are done to ensure most optimal quality/output.

Challenges / Partnership / Sustainability / Replicability

Regulation barriers in health for entrepreneurs this can be overcome by close collaboration between government and entrepreneurs who are coming up with solutions to solve health issues. / Pharmaceutical companies producing medicine in non-communicable disease, Funders , Agencies, corporation and collaborators in health sector and human rights organisations. / We are building a platform software which we aim at outsourcing thus being able to be replicable and adaptable in other country or context but serving the core purpose. / We are sustainable in the sense that we don't prescribe we work with doctor's to do this, reducing our human resource. On the other hand our platform offers a matchmaking thus reducing on expenses.

Action Lines

AL C6. Enabling environment

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 12: Ensure sustainable consumption and production patterns

Case N °___159___ Project topic: ____ 6. e-employment, e-environnent, e-agriculture ____

Title of the project, Contact Organization Name, Stakeholder type, Country

Amelioration of Agriculture Advisory services through ICT during Covid 19, ENJEAL NYS AGRO, Civil Society, Cameroon

Beneficiaries

Advisory services workers have a platform of short messages for distance counseling of farmers of farmers.

Smallholder farmers receive messages on good Agriculture practices via mobile phones

Website

https://www.enjealnysagro.wordpress.com +

https://enjealnysagro.wordpress.com/ict4agd-projet-mefoup/

Description

Develop an online platform where Agriculture extension and Advisory services worker can find short messages on good Agriculture practices to share with Smallholder farmers.

ICT Tools

The online platform is been developed via worldpress, any practician can have access to it. Smallholder farmers receive counseling through their mobile phones in form of short messages system (SMS)

Challenges / Partnership / Sustainability / Replicability

To touch an important number of farmers. Agriculture Advisory services workers can create a data base of phone numbers of Smallholders that they work with regularly. / in telecommunications, this system can be more effective if a USSD service is developed. A partnership with a telecommunications operator can facilitate the development of the service. / This project can be replicated in sub-saharan country where internet connexions and telecommunications networks is a problem. It was first developed for a specific now many village a benefiting it. / Agriculture Advisory service in Cameroon need a tool like this to be more effective. USSD is to be put in place so that the service will be automatic for Smallholder farmers.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-agriculture

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Case N° 160) Project	topic: 5.a	access to info a	and knowledge
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K-12math, K-12math.info inc, Academia, United States of America

Beneficiaries

MERLOT reviewers who evaluated the website indicated that the "Target Student Population would be: College Upper Division, Graduate School, Professional". The developer of the website also believes it exists to help anyone (or anything) "... to help a 7 year old (second grader) to add whole numbers". Be they classmates, parents of, teacher of, school content coordinator, reference librarians, materials developer, curriculum designers, undergraduates and graduate students who are preparing to help and artificial intelligence applications.

Website

https://www.k-12math.info/history.html + https://www.k-12math.info

Description

With many of us waiting out the storm (COVID-19), k-12math.info [a 5 star MERLOT Open Access educational resource and twice recognized by the United Nations] has seen a doubling of global users and in response has added 2 398 age appropriate links to math projects in India and South Africa.

ICT Tools

A simple [no typing needed] user interface to accelerate searches is used. Information is displayed in a "calendar style" format, with over 6 500+ age appropriate links to OER and Open Access resource materials. Some of the series are NCERT (India), Ukuqonda Math (South Africa), CK-12(USA), A+Click (United Kingdom), Khan Academy (USA), AAAKnow (USA), and other OER/Open Access materials.

Challenges / Partnership / Sustainability / Replicability

In order to reach learning communities which can not afford books or computers, learning needs to be made to function on handheld devices. Low cost "Phones" with internet access need to be developed and made available globally. / Language, especially globally in the age range of 4 to 8 years; and programming, too much time has been spent on "function" and not enough on "form". / K-12math.info uses a set criteria to catalog materials. The 1 000+ spreadsheets can be easily copied and pasted in Excel, Numbers and other spreadsheet to serve user's needs. / without continued cataloging of information on the latest developments in elementary and secondary school math materials, global mathematics learning, understanding and development would suffer.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 10: Reduce inequality within and among countries

ICT Case Repository: The Coronavirus Response: ZERO DRAFT					
Case N°	161	Project topic:	4.e-government		

The United Arab Emirates Telecommunications Regulatory Authority Initiatives in response to COVID-19, Telecommunications Regulatory Authority, Government, United Arab Emirates

Beneficiaries

The initiatives taken by TRA spans across different sectors thereby including a large number of primary and secondary beneficiaries. The main beneficiaries are the UAE government entities; the TRA assisted the federal government entities within the UAE to enable them to work from home, by:

- Provide suite of services to enable government entities to work from home including collaboration, video conferencing tools and cloud services.
- Increase the infrastructure capacities.
- Create and circulate guidelines and policies on how to securely deploy and use collaboration tools.

Website

https://www.tra.gov.ae

https://www.tra.gov.ae/en/about-tra/tra-initiatives-in-response-to-covid-19.aspx

Description

In the context of its role in supporting the government's precautionary efforts during COVID-19, the TRA launched several initiatives to enhance the ICT sector and ensure the safety of citizens, residents and visitors on the UAE territory.

- Education and Business Continuity:
- Free Internet Data via Mobile phone to enable Distant Learning and the provision of 14.000 students in public schools with tablets by TRA's ICT fund
- Healthcare:
- Supporting the provision of remote healthcare services
- Customer welfare:
- Online training:

ICT Tools

Digital Identity & Signing Platform (UAEPASS)

In order to ensure that individuals & entities are able to offer services digitally, TRA developed UAEPASS, which is the first National Digital Identity, was put to real practice.

Online grocery

In its effort to encourage people to stay at home and practice social distancing, the TRA announced a list of purchasing apps used in the UAE for consumers to use instead of physically performing daily grocery shopping.

Challenges / Partnership / Sustainability / Replicability

The challenges faced in terms of provisioning the students with free internet data included the timely update with respect to the list of students provided by the Ministry of Education. However, service providers swiftly took action in providing the service to those in need and a smooth process was put in place once the points of contacts from each stakeholder were identified. / The above mentioned initiatives would not have been successfully implemented without the close corporation and support from the various strategic partners, such as but not limited to, UAE's service providers, the UAE's Ministry

of education, and the Ministry of Health and Prevention. / The mentioned projects were highly impactful and could be applied with ease. / - /

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 11: Make cities inclusive, safe, resilient and sustainable

ICT	Case Repository	y: The Coron	avirus Resp	oonse: ZER	O DRAFT

Case N°	162	Project topic:	1.e-business	
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Conectadas by Sheva and Tigo Guatemala, SHEVA, International Organization, Guatemala

Beneficiaries

Women in Guatemala from 15 years up. We have trained 4,360 women during COVID trainings who have learned how to have virtual meetings, how to work remotely, how to promote their businesses, and how to learn new during, all using mobile technology.

Website

https://www.sheva.com/

Description

During COVID we have taught more than 4,000 women how to take advantage of mobile technology to stay connected, learn new things, and promote their businesses.

ICT Tools

We are paving the road for digitalization in Guatemala. We teach from basic level what are mobile tools, including Facebook, Instagram, Zoom, Google Drive, Canva, Google Calendar, and Google Hangout.

Challenges / Partnership / Sustainability / Replicability

Our main challenge was finding participants. We had a goal to reach 250 women. We were amazed with the amount of support we had from the media, and we were able to train 4,000 women. / We are looking for more women who would like to be trained and participate in the virtual program. / Tigo El Salvador and Tigo Colombia are looking for virtual projects where they can also use ICT tools. We have provided with our steps so they can understand how they can replicate it as well. / The program has been sponsored by Tigo Guatemala, the biggest telecom company in the country. We are now looking for new companies and partners who would like to sponsor or get trainings.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5: Achieve gender equality and empower all women and girls

ICT	Case	Repositor	y: The	Coronaviru	is Response:	ZERO DRAFT
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Case N '	° 163	Project to	pic: 1.e-business	
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Zimba Mart - SME E-commerce and Digitization Resilience Programme, Zimba Women, Private Sector, Uganda

Beneficiaries

Zimba Mart focuses specifically on women. There is no marketplace, physical or online that is specifically targeted to women merchants, yet women form the largest percentage of small scale suppliers of home, agricultural produce and clothing apparel.

Website

https://www.zimbawomen.org/ + https://www.zimbamart.com/

Description

Women-owned Small and Medium Enterprises (SMEs), which make up an estimated one fifth of the Ugandan economy in terms of employment, are likely to suffer disproportionately as a consequence of this outbreak. As Zimba Women, we have introduced the SME E-Commerce and Digitization Resilience Programme through the Zimba Mart e-commerce platform to respond to this challenge.

ICT Tools

We have adopted the use of e-commerce digital tools which have presented numerous opportunities. Africa is a massive market, with a growing population of 1.28 billion people, a network of over 15 million SMEs and merchants and a rising internet connection of 453 million users. Research firm Statista estimates that the e-commerce sector in Africa generated \$16.5 billion in revenue in 2017 and forecasts that to grow to \$29 billion by 2022.

Challenges / Partnership / Sustainability / Replicability

Technology both hardware and software: As we grow our vendor database, obtaining technology to achieve growth so that we are able to accommodate more vendors onto the platform is still a challenge such as address system software and using the appropriate shopping cart solution that shall boost growth on the platform. / currently we are looking for partners who are intent on raising bars to enable the empowerment and development of women entrepreneurs in Africa by adopting digital transformation such as Online Payment System providers such as PayPal, WePay, Logistic support partners like DHL, Safe boda, Internet providers like MTN, Airtel, International organizations such as International Trade Center, International Council for Small Businesses, USAID, Cross border trade organizations for our exporters and Fulfilment centers/warehouses. / this project can be replicated. Zimba Women is currently working with over 10000 womenowned businesses and women in STEM in Uganda, Kenya, Nigeria, South Africa and other African countries. These women have received business training and digital literacy training through our technology platforms. Through the Zimba Mart e-commerce platform powered by Zimba Women,70% of women have been able to earn additional income for their families because they can market to buyers outside their community. / this project is sustainable in the sense that the different Small Medium Enterprises (SMEs)on boarded onto the platform shall continue to receive businesses development trainings from the Zimba Women consultants and professionals.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 5: Achieve gender equality and empower all women and girls

Goal 8: Promote inclusive and sustainable economic growth, employment and decent

work for all

Case N °___164___ Project topic: ___6. e-employment, e-environnent, e-agriculture _____

Title of the project, Contact Organization Name, Stakeholder type, Country

AAAMeet.in, QRCrypto SA, Private Sector, Switzerland

Beneficiaries

All persons looking to work, or otherwise connect remotely, in a safe and secure environment, where they know for sure their data will not be resold!

Website

https://grcrypto.ch

https://aaameet.in

Description

Providing a safe and secure way for videoconferencing in India and the world. AAAMeet.in is free to use on PC/MAC and only 1\$/CHF under the form of its companion app Devaaa available on Android & iOS.

ICT Tools

Videoconferencing, to enable remote working

Cryptography, to enable doing it securely

Challenges / Partnership / Sustainability / Replicability

Branding and marketing; could be overcome with the ITU's support (as ITU-T members, we are expecting that as a possibility provided to members who actively develop ICT solutions for COVID19 response). / Beyond the ITU, we are looking for organizations interested in developing similar solutions for their own needs, likewise possible partnership with the ITU on developing big blue button for big events / aaameet.us and the Devaaa app is also available in the USA, and we are gradually making it available to the rest of the world. As a cloud-based service, it can be further extended and replicated. / We strive to use reputable cloud providers in order to ensure sustainability, as part of an ever-evolving process towards increased performance and efficiency.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-employment

AL C11. International and regional cooperation

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 10: Reduce inequality within and among countries

ICT Case Repository: The Coronavirus Response: ZERO DRA	FΤ
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Case N '	° 165	Project topic:	4.e-government

COVID19 emergency response: Venezuelan Migrants, Fundacion Abba Colombia, International Organization, Colombia

Beneficiaries

Primary beneficiaries: Venezuelan migrants

Main benefits and services they received:

- Each person is subscribe to our database
- After registation they are able to received a sanity kit during this emergency
- We give priority to mothers with children so they can received sanitary assistance
- Connecting them with national autorithies so they can received in hand solutions to return to their country

Website

https://www.abbacol.org/

https://abbacol.org/index.php/emergencias/

Description

With the use of ICTs, together Fundación Abba Colombia with the pertinent authorities in Colombia: police, red cross Colombia and migration Colombia are responding during the emergency the country is facing. the use of mobiles and other technology equipment has enable us to have effective response and help in an immediate way the migrants who are at the bus terminal in north of Bogota to return to Venezuela.

The social impact that Abba Colombia has done so far is possitive, helping during this emergency, and at the same time building stong connection with other entities so we can achieve together the goals.

ICT Tools

To promote digital transformation in our organization to develop our proyects in a national, regional and international level, we use different types of technologies, computers and mobiles are the main ones; different programs like: social media, digital media, graphic programs are essential for our work.

Creating a database to have information of the venezuelan families who are receiving help is also an ICT tool that give us effective response.

This are ways to promote the work we are developing, and at the same time have effective results.

At a regional level we use our website and social media which enable us to be recognized as well be more effective in emergencies like covid19.

At a national level, as well, we have our website platform that give us access to connect with other entities in Latin America.

At an international level, as mention before our staff uses international mobiles and computers that enable us to connect with other countries.

Challenges / Partnership / Sustainability / Replicability

The main challenges encountered are the resources that our organization does not have at the moment to give support to all the migrants who requiered assistance during the covid19. - To overcome this challenge we are looking to partner with other entities to develop an effective work. Another main challenge encountered is the lack of ICTs tools. - To overcome this challenge we are looking to partner with entities working in this area. / as mention before in the area of technology, as all our registration process is via online on

a database, as well the emergency assistance planning is being develop with the help of ICTs and technology tools. / this project can be replicated in a regional level the different areas of Colombia where Venezuelan migration is at its top. At the same time is can be replicated at a national level, not only in Colombia but other south american countries where the covid19 is increasing and migration as well. / This project is based on the sustainable development goals, and yes it is sustainable as well. The project is sustainable as together with national institutions we are providing access to migrants so they can be included in society, receiving first aid during covid19, but providing them tools so they can have access to sanitation, education and work.

Action Lines

AL C4. Capacity building

AL C10. Ethical dimensions of the Information Society

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Goal 17: Revitalize the global partnership for sustainable development

Case N°	166	Project topic:	3.e-health	

Title of the project, Contact Organization Name, Stakeholder type, Country

Child helplines and the COVID-19 pandemic, Child Helpline International, International Organization, Netherlands

Beneficiaries

Children and young people in over 100 countries where child helpline operate

Website

https://www.childhelplineinternational.org/

https://www.childhelplineinternational.org/child-helplines/tools/coronavirus/

Description

Child Helpline International has created a repository of information on how child helplines are responding to the pandemic.

Child Helpline International is committed to providing support to child helplines as they navigate through the COVID-19 pandemic. we have collection a selection of tools, articles and other resources being shared across the international community of children's rights practitioners. We are gathering resources from our child helpline members about ways child helplines are adapting to the COVID-19 pandemic. We have set up a Dropbox folder for our child helpline members that brings these resources together.

ICT Tools

Web-based communication tools, social media, zoom. we have been forced to more our operations to remote working, providing many lessons along the way. This experience is transforming the ways in which child helplines operate, increasing their web-based service delivery to reach more children and young people in need.

Challenges / Partnership / Sustainability / Replicability

Internet connections are not reliable in many countries. Remote working of child helpline. / We are working with numerous partners and stakeholders. / This is not project but an ongoing effort to ensure that child helplines are accessible throughout the pandemic. / The network model has proven to be self sustaining for over 17 years.

Action Lines

AL C4. Capacity building

SDGs

Goal 16: Promote just, peaceful and inclusive societies

Goal 17: Revitalize the global partnership for sustainable development

Case N	° 167	Project topic:	7. promotion of	ICTs 1	for deve	lopment	

Title of the project, Contact Organization Name, Stakeholder type, Country

Feminist organizing toolkit – planning virtual meetings, Women Engage for a Common Future (WECF), Civil Society, Netherlands

Beneficiaries

The activists in the feminist advocacy networks: Women's Major Group, Women & Gender Constituency, Women's Rights Caucus, and our local Women2030 partners who came together and formed a new unofficial network called "Feminist Response to COVID-19"

Website

https://www.wecf.org + https://www.wecf.org/feminist-organizing-toolkit-planningvirtual-meetings/

Description

Together with WEDO, at the outset of the COVID-19 outbreak, we quickly realised that there was an urgent need for training on how to use online meeting tools such as Zoom by the members in our advocacy networks that we are part of. As a pro-bono initiative we quickly set up 3 training sessions (on accessibility & methodology, nuts & bolts, and safety). We had more than 200 people registering for each event and about 120-150 people attending. These were followed by the development of a toolkit in English which has been translated into Spanish and French, and which we aim to translate into Russian and Arabic as well.

ICT Tools

Feminist organizing toolkit – planning virtual meetings

Challenges / Partnership / Sustainability / Replicability

Time zone for the calls, it was very difficult to find times that suited everyone, that's why we decided to upload the videos to YouTube, and to produce the toolkit, so for those who couldn't follow the trainings could at least read the tips in the toolkit. We have also continued to mentor members of the feminist response to COVID-19 network. / This was not a project, but more a pro bono activity for the many members and partners in these advocacy spaces. / We have made it open for others to use it freely, as long as they credit us. But we encourage people to use it and train folks in their networks on the contents that is applicable to them. / We are constantly listening to our community to see if more training is needed, so we might have a few more teach-in in the future.

Action Lines

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 5: Achieve gender equality and empower all women and girls

ICT	Case Repository:	The Coronavirus	Response: ZER	O DRAFT

Case N°	168	Pro	ject to	pic:	3.e-health	
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Pacific Disaster Center and COVID19 Innovation, Pacific Disaster Center, Academia, United States of America

Beneficiaries

Beneficiaries include UN and NGO partners, local, provincial and national health stakeholders and the general public who leverages our DisasterAlert mobile app (1.5 million downloads)

Website

https://www.pdc.org/contact/

https://www.pdc.org/wp-content/uploads/2018/10/NDPBA-Program-Brochure-English.pdf

Description

PDC leverages global UN and NGO partnerships and use of mapping, GIS, Satellite imagery, AI and Open Data for the COVID19 response - https://www.pdc.org/major-hazard/covid-19/.

ICT Tools

The objective is data-driven situational awareness for government, UN and NGO partners via our DisasterAWARE application - https://disasteralert.pdc.org/disasteralert/ .

Challenges / Partnership / Sustainability / Replicability

Challenges include proprietary data and formats, non-normalized COVID19 data streams for case counts, hospitalizations etc. / We are always looking to partner more so with .com, .int, .org, .edu and NGO partners globally v a v innovative use of GIS, satellite imaging, big data, open data and citizen science. / PDC works closely with Open Street Map and HOTOSM to ensure open data and reproducibility. / PDC has been in existence for 25 years and sustainable projects are the core of our efforts.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 17: Revitalize the global partnership for sustainable development

Case N	° 169	Project to	pic:	5.access to info a	and knowledge
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Afya Rekod Covid-19 Initiative, AfyaRekod, Private Sector, Kenya

Beneficiaries

The shift from organizations to individual users will expand our target market, virtually every person in the continent is a targeted patient for AfyaRekod, including the doctors. We have segmented our user into three broad categories

- 1.Patients
- 2.Governments
- 3. Private Clinics & Hospitals
- 4. Health providers ie Insurance companies

Website

https://afyarekod.com/

Description

The Afya Rekod platform will enable users to capture real-time data that will heat-map areas where COVID-19 infections are growing, and monitor the growth in real-time, by collecting user-generated information from users, across multiple geographic locations, to allow for sufficient data analysis. Its decentralized nature, that enables people to update their own records, anytime, anywhere, and in multiple formats, will support the relevant health authorities with the efficient general management of the spread of the disease, resource mobilization, and patient support, where required.

ICT Tools

The Afya Rekod platform was developed, in light of the coronavirus pandemic, to support global efforts to curb the disease. It is a centralized, multilingual, intelligent health data platform, built with Artificial Intelligence (AI) modules and blockchain technology, to ensure that it is adaptive, dynamic, and secured for public usage.

Challenges / Partnership / Sustainability / Replicability

Africa has limited doctors and limited access to health care services.

The lack of data disproportionately affects low and middle-income countries globally with 60 percent of these countries not reporting any data, covering 2 billion people. / We already have commitments from a number of partners in the ecosystem, including Governments, NGOs, and private clinics in Kenya, Zambia, Cameroon, and Nigeria. Our partners are critical in allowing us to successfully deploy in local markets.

Some of the partners we are looking for include: Governments, Hospital partners, NGO's, Service providers, Doctors, Social Health workers. / While we are initially piloting in Kenya, the plan is to expand to 3 other African countries, including Zambia, Cameroon and Nigeria by the end of 2020. / We are working with local partners who want to support their communities, while our current partners have allowed us to provide the platform for free during this Covid-19 pandemic we do however have a dynamic business model.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

ici case k	reposito	ry: The Coronaviru	s Response: ZERO DRAFT	
Case N°	170	Project topic:	8. remaining projects(for any other topics)	

CONNECT & STOP VIOLENCE, WOMENVAI, Civil Society, France

Beneficiaries

- girls, boys, who suffer violence at home and at school/high school/ university;
- women suffering from domestic violence including rape;
- anybody suffering from sexism and discrimination in the public arenas.

Website

https://www.womenvai.org

Description

A device based on IOT that will be disseminated to end violence (sexism, rape, racket, violence at home, on campuses, in public and private transportation etc) and collect legal proof.

ICT Tools

- iot, 4G, block chain and Artigicial Intelligence are used in this project;
- it is being piloted in two geographical areas in France (Paris suburbs and geneva border /french side)

Challenges / Partnership / Sustainability / Replicability

Key challenge is to design a discreet and small device to hide in our underwear for ex. A Patent is being designed and we are eager to co-produce with ethical industrial players with a circular economical approach. / - codesign, coproduction, comarketing - focus on low income countries - financial ethical partners. / Worldwide as long as you have 4G or any high speed internet connection. / Sustainable in many Ways. From technology point of view, we use very limited components which can be recyclable. From economical perspective we are looking at a circular economical scheme. Socially it is a device that can be adapted and passed to another person.

Action Lines

AL C7. ICT applications: benefits in all aspects of life - E-health

AL C10. Ethical dimensions of the Information Society

SDGs

Goal 11: Make cities inclusive, safe, resilient and sustainable

Goal 16: Promote just, peaceful and inclusive societies

Case: N °171 Project topic: Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

FANR Guidance during COVID-19

Federal Authority for Nuclear Regulation

Government

United Arab Emirates

Beneficiaries

The two main beneficiaries would be the FANR Operation Department and FANR Licensee. Benefits would come by allowing Faster responses to the FANR Licensee during COVID-19, Support National Covid-19 Eradication Measures, Maintaining an Effective Oversight of Nuclear Safety and Radiation Protection, creating Documentation of compliance with regulatory requirements as well as Documentation of modification of Conduct Of Regulated Activity.

Website

https://fanr.gov.ae

https://www.fanr.gov.ae/en/services/others/fanr-guidance-during-covid-19

Description

The Project aims at providing guidance to a FANR Licensee during COVID-19 and maintain the full scope of its regulatory responsibilities and functions. Some of these include Guidelines on Radiation Protection, Safeguards, and Nuclear Safety. Additionally, the project will give Advice on the Use of Mobile Medical X-Ray Equipment Outside Licensed Facilities as well as Provide responses to Modify Conduct of Regulated Activity Due to Covid-19 Impact.

ICT Tools

ICT in collaboration with Operation departments, developed an integrated web portal to help a FANR Licensee with guidelines, advice and responses to Modify Conduct of Regulated Activity Due to Covid-19 Impact.

Various tools were integrated together for this project. These tools include a Web portal to provide necessary information to FANR Stake owner, an Online Workflow to review FANR Response by different internal departments before providing it to FANR Licensee, a Task Management Application (FANR Staff Work from Home Portal) to track and review request, an Online Chat to provide quick response to FANR Licensee Queries, an Automated Travel Authorization letter for FANR Inspectors to travel across emirates during travel restrictions, a Digital Signature to provide authorized and secured document response, and a Helpdesk for register all queries or complaints

Challenges / Partnership / Sustainability / Replicability

The main challenges with the project were the Project Timelines - Project was developed in phased manner to provide necessary information to FANR Licensee as soon as possible; Working from Home for FANR Staff and Visitor Restriction - Use of Task Management application, Online Chat; Workflow & Digital Signature helped in overcome this challenge and Travel Restriction for Inspectors - Collaboration with Government agencies helped to automate and issue travel authorization letter.

"FANR Guidance during COVID-19" portal is sustainable as it supports FANR's mission of ensuring the peaceful uses of Nuclear Material, Nuclear Items and Nuclear Related Dual-Use Items through its licensing and controlling systems. The system is built with a strong infrastructure and is being placed with 2 servers to ensure continuity. The portal underwent several improvements to support its sustainability like ensuring application integration within the system.

"FANR Guidance during COVID-19" portal is replicable for any nuclear regulatory authority responsible for conducting nuclear regulatory programmes in safety, security, radiation protection and safeguards. Following Project activities during COVID-19 are applicable for any nuclear regulatory authority.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Case N °172 Project topic: Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

TLAYOLCHIKAWALIS (ACTIONS TO PROTECT THE HEARTS) CAMPAIGN

Redes por la Diversidad Equidad y Sustentabilidad AC

Civil Society

Mexico

Beneficiaries

The main beneficiaries are the members of "Union of Cooperatives Tosepan" that brings together 395 Indigenous communities of the Sierra Norte of Puebla

Website

https://www.redesac.org.mx/

http://tayolchikawalis.org/

Description

The TLAYOLCHIKAWALIS (ACTIONS TO PROTECT THE HEARTS) CAMPAIGN is aimed at making effective the right to know of the masehual people of Cuetzalan in order for them to help each other. With very scarce access to infrastructure, services and information in their own language, there has been a worrisome trend of misleading information and fake news, and the need for a campaign which not only provides reliable information but enables the community to organize themselves to help and see for each other, In order to mobilize and organize community members for the provision of supplies and other economic relief in this economic crisis in Cuetzalan, the campaign is absolutely necessary.

The campaign is being led by a long established local "Union of Cooperatives Tosepan" that brings together 395 Indigenous communities of the Sierra Norte of Puebla, but we need help for the campaign costs in Cuetzalan del Progreso and surrounding communities. Currently, TOSEPAN is being accompanied by the Mexican NGO Redes por la Diversidad, Equidad y Sustentabilidad A.C. in a very important indigenous telecommunications network project together with Telecomunicaciones Indígenas Comunitarias A.C. and Rhizomatica.

ICT Tools

broadcasting, internet, dissemination via social networks of the campaign.

Challenges / Partnership / Sustainability / Replicability

Very scarce access to telecommunications infrastructure, services and information in their own language, fake news, poor access to healthcare.

We're looking for donors that can contribute to our campaign and action plan.

Action Lines

AL C3. Access to information and knowledge

AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 16: Promote just, peaceful and inclusive societies

Case N °173 Project topic: Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Hygiene Promotion and Education for Informal Workers

Saujana.org

Civil Society

Indonesia

Beneficiaries

The primary beneficiaries are informal workers and micro-enterprise holders who are often forced to disobey work from home regulations due to the nature of their work. They are at high risk because they are often overlooked by government regulations and are not necessary the recipients of any fiscal incentives. Hence, the only way to for them to survive is to continue working in high-risk places.

Website

http://saujana.org

https://kerjacovid.org/

Description

We initiated a hygiene promotion and educational project to reduce the levels of risk for informal workers and micro-enterprises from being infected or infecting people with COVID-19 in relation to their livelihood activities.

ICT Tools

We develop various hygiene promotions and COVID-19 prevention protocols in various digital formats including digital flyers and videos. We use a website (kerjacovid.org) as a main channel of distribution, along with the use of social media.

Challenges / Partnership / Sustainability / Replicability

The main challenge we faced was reaching the end-users/beneficiaries of the project as most of them have limited access to ICT's. We solved that by using influencers and volunteers to help our initiative through media received by the end-users.

For the project we would like to work with partners who can provide a small investment to help us continue the work i.e. producing more protocols for different workers and maintaining our website to at least until the end of December 2020.

Sustainability is not necessarily the priority, rather the focus is how it can reach out to the larger community as the project objective is to provide informal workers with detailed protection protocols to COVID-19. The project is therefore sustainable until the pandemic ends.

The project is replicable especially in another country that has a large number of informal workers like Indonesia. This is attributed to the fact that informal workers are often unregulated and therefore are at a greater economic and health risk during the pandemic.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °174 Project topic: e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

KaiOS

KaiOS Technologies

Private Sector

China

Beneficiaries

The Roducate app gives students access to full curriculum-based lecture notes, assignments, tutorial videos, podcasts, and mock exams with answers for state and nation-wide exams at all levels. The content can be downloaded onto the KaiOS phone and used online or offline.

Website

http://www.kaiostech.com

https://www.kaiostech.com/lagos-state-government-kaios-robert-john-team-enable-students-nigeria-continue-education-covid-19/

Description

KaiOS Technologies has partnered with the Lagos State Government in Nigeria and Robert and John Limited (a Nigerian company in the space of providing digital solutions in education and healthcare), to distribute smart feature phones to help school children continue their education during the COVID-19 lock-down period — and supplement their learning once schools re-open.

ICT Tools

These smart feature phones running on KaiOS will have the Roducate app – and a handful of other useful apps available in the KaiStore. Designed and developed by Robert and John, Roducate is the first mobile learning app in Nigeria with all the approved curriculum materials for Primary, Secondary and select University courses.

Challenges / Partnership / Sustainability / Replicability

To get the project started, financial resources had to be secured to enable the devices with activated data SIM cards could be delivered. The project was endorsed by The First Bank of Nigeria Ltd, which sponsored the first batch of 20,000 KaiOS-enabled devices. These devices then had to be distributed to school children from low-income families, typically earning below US\$100 a month. Because the students came from remote areas, the State Government enabled communal solar panels to be installed, at central places within the villages, so that the devices can easily be charged.

We have learnt that having the right product to resolve a problem is not all; It is necessary to create the conditions in which the target audience face as few hurdles as possible, when adopting new technology.

We are continuously looking for partners to provide the right content and materials to deprived communities, partners that can assist in enabling the training and adoption of new technology in those communities, hardware and software partners that can customize their products for a specific use like Education, partners that may provide the legal and policy support to carry out such a project and provide the financial resources for the initial outlays.

Sustainability in the project is attained because mobile devices and internet are the most energy efficient forms of attaining information and education; Furthermore, the solar panels at community centres have positive spill over effect that benefit the welfare of all

villagers. Through using the device, students not only benefit from continued education, but also take their first steps on the technology ladder, which enable them to become sophisticated digital citizens in future life.

KaiOS is looking to replicate the model to other deprived communities in emerging markets, in areas not just limited to education, but healthcare, financial education and digital literacy. Because the barrier to adopting smart feature phones is significantly lower than other digital devices, we believe the project is highly replicable.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Goal 16: Promote just, peaceful and inclusive societies

Case N °175 Project topic: e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital initiatives for solidarity: how to support senior citizens in times of health crisis

E-Seniors Civil Society

France

Beneficiaries

All the activities proposed by E-Seniors are meant for healthy and independent seniors, from 55 to 85+ years old. The activities set up during the coronavirus crisis were designed for everyone: receiving the newsletters involved just having an email address and was accessible to beginners, the English conversation workshops were more for seniors with medium to advanced competences to be able to use Zoom, and finally, the ICT trainers were available for everyone with the computer assistance in case of a problem. With its different activities, E-Seniors aims at fighting e-exclusion, to bridge the digital gap between generations, and to foster seniors' social participation.

Website

http://www.eseniors.eu/

http://www.e-seniors.asso.fr/

Description

E-Seniors acts, in normal times, as a local actor by proposing to senior's collective computer workshops in different places of Paris, thanks to partnerships with social canters and the districts' town halls. When lockdown started, E-Seniors had to reinvent its activities in order to offer alternatives to its members, keeping in mind that this target group is a vulnerable population.

ICT Tools

E-Seniors uses mostly ICT communication tools. Indeed, the newsletters are sent to seniors via email (around 1,200 contact in the mailing list) and the different activities gathered give free resources online to stay occupied such as gym classes, online books and films, online visit of museums, information about health, activities to do with children, etc. E-Seniors uses Zoom, a well-known video conference tool, for the English conversation workshop. This allows seniors to reunite together, to share a friendly moment, and to discuss whatever they want, despite the sanitary situation. Finally, ICT trainers' resort to phone and Zoom for the computer assistance, and when necessary, they use TeamViewer to take control of the computer remotely and solve the problem

Challenges / Partnership / Sustainability / Replicability

The main challenges to the implementation of these activities is the difficulty that some seniors might have in accessing the content developed. This is why the E-Seniors' team thought of creating several tutorials (Zoom for English conversation and TeamViewer for computer assistance), allowing seniors to learn how to use the tools.

E-Seniors imagined this initiative by itself and is not particularly looking for partners as it has already strong partnerships with local actors in Paris. However, E-Seniors is always open to suggestions and wouldn't be closed to the idea of replicating the project at a European level.

The newsletters produced during the lockdown period are stored on E-Seniors' website for an indefinite period of time and are therefore accessible to any interested person. The new

tutorials would also be made available on the website so the greater good can benefit from it.

In case of another pandemic situation, E-Seniors' could replicate the project by maintaining the activities proposed from March to September 2020, but also develop the project more. Given the success of the initiatives mentioned above, E-Seniors would like to go further and offer seniors, without geographical limits, other tools to help them spend this particular period as serenely as possible. Of course, E-Seniors' project could be replicated in another location, at the European level for example as the organization is involved in many European projects and have a wide network of partners.

Action Lines

AL C5. Building confidence and security in use of ICTs | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °176 Project topic: e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

CommunityHeroes

Scrypt.Media

Private Sector

France

Beneficiaries

For community members, we facilitate requesting, matching and exchange of hour-based services. Community members can also dedicate their time to volunteering causes. The benefits: Our research shows that while many community members are willing to help others, most are hesitant to request help, and do not know where to direct their engagement. For non-profit organizations (and their end beneficiaries), we provide an easy solution to find skilled additional volunteers to temporarily support causes when needed. At the same time, we provide analytics of time spent and impact made. For organizations, we provide opportunities for volunteer placement of employees, and the option to create campaigns around causes. We also provide valuable insights into the causes and engagement of local communities.

Website (Organization Website + Project Website). It's ok if they have only organization website.

https://scrypt.media

https://communityheroes.eu

Description

CommunityHeroes is an application enabling digital connections for a better offline world. The solution facilitates the exchange of hour-based services and support within communities and links community members to non-profit organizations and causes in their area. At the same time, it enables organizations to build campaigns around causes and to recognize community engagement, creating a new form of cross-sectoral engagement.

ICT Tools

For this project, we are building a web-based application, supported by accessibility features to include vulnerable groups and community members (voice-to-text, SMS integration). Beyond that, our aim is to further enhance our solution by integrating Machine Learning for more immediate and private matchmaking between skills and user requests, and Blockchain for certification & transparent exchange of hours spent (which can serve as a certification of work to increase employability).

Challenges / Partnership / Sustainability / Replicability

The main challenge for us lays in providing a truly inclusive solution that is accessible to all community members. Very often, comparable solutions do not provide accessibility for those groups that might be heavily benefitting from a solution like this. Another challenge lays in creating sufficient engagement and interaction to make this a meaningful solution. On this end, we are working on improving the usability of the solution to make it as easy and comprehensive as possible.

At the moment, we are mainly looking for cities, municipalities, governments or local/ regional innovation centers that would like to work with us to make the solution available at a local level. We are also highly interested to partner with organizations that would be interested to become early users and refine our organizational offerings together with us. At the same time, we are interested in development partners that can help us accelerate our roadmap, and in adjacent solutions and projects for a joint go-to-market.

Our long-term goal is to build a sustainable model of engagement that involves communities and public/ private organizations alike, working towards common goals. We are setting this project up as an impact-first initiative, which is guiding the decisions on how we will grow the user and customer base and has important implications on e.g. user privacy considerations. Sustainability is also engrained in our platform – for example, our initial badge system links community engagement and activities to sustainable development goals, and our aim is to further build these links through tailored impact reports for both communities and organizations.

We are building a solution that can be used by communities and organizations globally.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning | AL C7. ICT applications: benefits in all aspects of life — E-employment |

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all|

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case N °177 Project topic: Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Knowledge and Data Hub

Institute of Geographical Sciences and Natural Resources Research (IGSNRR), Chinese Academy of Sciences

Private Sector

United Kingdom

Beneficiaries

The primary beneficiaries are sciences, professors and students, as well as decision makers. Many local communities and citizens in China also benefit.

Website

Organization Website: http://english.igsnrr.cas.cn/

Project Website: http://geodoi.ac.cn/covid-19/en/index.aspx

Description

Only a few hours after WHO announced the COVID-19 as PHEIC on the morning of 31 Jan. 2020 - Beijing time, we (CCIT/CCLH-CAST and IGSNRR/CAS) started the joint action to establish a platform on COVID-19 knowledge and database system based on the hub methodology. More than a hundred scientists and students participated the activities at home though online cooperation. 16 groups of the knowledge and data were identified. The radio reported on the pandemic, vaccines, virus medicine, clinical medicine, Chinese medicine, and new technology applications in China are also online. More than 16,000 computer IP users from 97 countries accessed this data and information.

ICT Tools

The technology of online data search tool, initial AI technology for information and dataset classification, GIS data mapping and visualizations.

Challenges / Partnership / Sustainability / Replicability

The main challenge is how to make the data and information trustworthy and of a high quality. Another one is how to ensure that the data is updated in timely manner. To tackle these challenges, we employed methods using both AI technology, human interaction and peer reviews.

We are currently working with the CODATA Task Group in Developing Countries, World Data System (WDS) of International Science Council (ISC) and the World Federation of Engineering Organization (WFEO). We are still looking for partners from Indian, Brazil, USA and South Africa, where cases are highest.

From a scientific research aspect, the knowledge and data about COVID-19 may last up to 2025, although we hope it ends as early as possible. Programs birthed in 2020 from the pandemic include the IGSNRR/CAS based on the Academic Journal Support Program, MOST (Ministry of Science and Technology of China) based on the National Data Centre program and CAST (Chinese Association for Sciences and Technology) based on special program on COVID-19 and Outstanding Journals Program.

The digital knowledge and data are replicable by mirror sites, inter-operational methodologies or networking systems. We are currently networking with 52 Journals.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °178 Project topic: Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Jasmeen Talks Jasmeen incubator Private Sector

United Kingdom

Beneficiaries

Women and young females from different backgrounds and sectors.

Website

Organization Website: https://www.jasmeen.co **Project Website:** https://www.jasmeen.co

Description

The purpose of the project is to encourage diversity and inclusion from women in all sectors. We want to support women globally and encourage them to collaborate and communicate together through Jasmeen talks, sharing their knowledge and experiences. These talks are vital to ensure empowerment and engagement from women all around the world. We want to empower and help women adapt the necessary digital skills needed for a better future through the power of touch and communication.

ICT Tools

For the project we are using various ICT tools such as digital conferencing tools to facilitate interactions between the users as well as digital marketing tools to help guide women on how to migrate their businesses and platforms online. Additionally, we are using email marketing strategies to keep help retain customers as well as reach out to new ones. And lastly, we employ social networking services and sites to help the women build and maintain an online presence

Challenges / Partnership / Sustainability / Replicability

Our main challenge is investment. It is really difficult in the middle east to secure investment especially for women as they are underrepresented and have less opportunities to have the secure the adequate funds.

We would be open to partnerships primarily in the technology sector. Further still, we would like to collaborate and work with investors and organizations interested in the project.

The project is sustainable as it aligns with sustainable development goal 5 (SDG 5) which works to aachieve gender equality and empower all women and girls.

The nature of the project allows it to be replicated globally.

Action Lines

|AL C5. Building confidence and security in use of ICTs|AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

|Goal 5: Achieve gender equality and empower all women and girls|Goal 10: Reduce inequality within and among countries

Case N °179 Project topic: e-business

Title of the project, Contact Organization Name, Stakeholder type, Country

Food for Nation

Aspire to Innovate (a2i) Programme

Government Bangladesh

Beneficiaries

The platform can be used by everyone involved in the agricultural value chain, from farmers, agri-merchants, warehouse keepers, mokams, large super shops, small retailers to consumers. Farmers, marketers, stockists, marketers, and institutional consumers can check the price and quality of products on the same platform. Apart from this, they will also get the opportunity to direct commercial communication.

Website

Organization Website: https://a2i.gov.bd/ **Project Website:** https://foodfornation.gov.bd

Description

The pandemic has disrupted the normal transport and proper marketing of vegetables, seasonal fruits, and other agricultural products. Currently, farming is the most widespread source of income for the majority of Bangladesh's population. In this context, the 'Food for Nation' platform has been launched to enable marginal farmers to get fair prices as well as consumers to get the required food grains and agricultural products as per their demand easily, in a short time and at the right price.

ICT Tools

Buyers and sellers can register on this platform with an easy and mobile-friendly interface across the country and select all the categories of agricultural crops or vegetables and can advertise and buy. All types of buyers and sellers involved here can buy all agricultural products including vegetables or collect information by contacting the mobile number given in the profile. It will also have a database of agri-traders, daily market prices of crops and agricultural products, and contact numbers of field level officials of the Department of Agricultural Marketing and the Department of Agricultural Extension for cooperation. To enable a wider reach, a GIS map has been attached to the platform, where information regarding the sellers' location and contact has been set, along with what sort of products they are selling.

Challenges / Partnership / Sustainability / Replicability

Retail vegetable and fruits sellers had to keep an empty stock for regular sales due to the wholesaler's unwillingness to take the risk with perishables. Delivery charges and product prices differ from one district to another and are dependent on the mode of transport used, hence the consumers face a disjoint among similar products because those are from different sellers. The platform does not support tracking any sales that takes place, hence service cannot be properly assured. This may be handled by allowing a third-party regulation and adding a payment gateway/cart service. Farmers are not comfortable with the technologies. Still onboarding them is challenging, district-level govt officers are working.

At the moment we are not looking for partnerships. Although the platform is open and free to all (registration does not require money), the model is uplifted by both the buyers and

sellers. As long as the demand for products exists and sellers are willing to buy, the platform will work. Furthermore, it can be used as a nationwide product data repository, a rare accumulation of farmers and their products online. It can also be used similarly to other products.

The platform acts as a bridge between buyers and sellers, wherein there is no middleman, and the buyers contact the seller directly to negotiate. The products are listed as advertisements, detailing the prices and descriptions. This model can be applied for any other service such as clothing, crafts, and intangible services as well.

Action Lines

AL C5. Building confidence and security in use of ICTs | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °180 Project topic: e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

UniConnect – ICT Tools and Digital Learning during COVID-19

Unistream Civil Society

Israel

Beneficiaries

Primary beneficiaries are disadvantaged Israeli youth – Jewish, Arab, Druze, etc. – ages 14-18 hailing from marginalized communities in the socioeconomic and geographic periphery and youth from the United States. Unistream works primarily with youth from struggling communities that lack opportunities for social mobility and are therefore excluded from the global stage. By forging this virtual exchange and utilizing ICT tools for online learning, the program transforms youth into agents of change with resources to alter their life trajectories and a commitment to give back to society, building each other up and nurturing meaningful relationships based on mutual growth.

Website

Organization Website: https://unistream.co.il/ Project Website: https://unistream.co.il/ Description

UniConnect — ICT Tools and Digital Learning during COVID-19 harnesses business and entrepreneurial education and practical applications as a mechanism for cultivating meaningful relationships between youth in the United States and disadvantaged youth in Israel through utilization of ICT tools and online digital platforms. The program activities foster a commitment among youth towards social activism while endowing them with the skills, knowledge, tools, and networks to advance professionally and personally.

ICT Tools

Within the framework of UniConnect, ICT tools compromising of computers, web cams, microphones, and more, are crucial elements in enabling disadvantaged youth participants working on their joint COVID-19 related start-up regardless of physical distance. Each group will create their own product, working closely with mentors from the business sector and a specially- trained Group Leader, in addition to taking part in larger group sessions — within Zoom sessions, each group will be divided into digital breakout rooms controlled by the Group Leader. Other tools such as Padlet and Coogle will be utilized.

Challenges / Partnership / Sustainability / Replicability

Challenges: The emergence of COVID-19 necessitated that Unistream transfer all of its programming online with pedagogical adaptation to best fit digital platforms, as in person activities were no longer feasible, creating a major operational and programmatic challenge for the organization. In addition, COVID-19 has forced us to evaluate priorities, with significant emphasis placed on programmatic continuity, adapting current operations for a digital environment, redesigning physical events for online application, and addressing pressing needs of beneficiaries and staff. Unistream harnesses a unique cross-sector, holistic partnership-based ecosystem and engages relevant stakeholders in such a way that each party brings its most efficient benefit to the partnership: The Innovation Authority, Israel Ministry of Economy (the primary partner that recruited Unistream to launch the pilot iteration of the program), municipalities, and schools that provide access to participants as well as the space and consideration for the after school implementation of the program, in addition to the business sector which will contribute professional mentoring and/or host participants for special events

and/or are funders. In order to connect youth over ICT tools and infrastructure, Unistream relies on partners on a local level – municipal, educational, and business. Unistream will support the program activities with both in-kind and financial support garnered by our Resource Development team. Currently, we have strategic, long-term partnerships with several Jewish Federations, local/international banks, foreign governments (including the USA), various Israeli Government Ministries, and successful companies and other organizations from a variety of sectors. This project utilizes digital platforms and ICT tools in an innovative way, making it accessible to a global audience with access to technological infrastructure, with an emphasis on English speakers. In the past, Unistream has exported its flagship programs to the United States and Europe. We are able to do this because the basic pillars of the program – business, entrepreneurship, social activism, technology, and leadership, are transferable – are universally relevant.

Action Lines

AL C3. Access to information and knowledge

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °181 Project topic: e-government

Title of the project, Contact Organization Name, Stakeholder type, Country

GDS support to the UK's digital COVID-19 response

Government Digital Service (GDS) - GDS is a unit of the Cabinet Office

Government

United Kingdom

Beneficiaries

As the leader of the UK government's digital function, the services that GDS provide are offered to citizens, businesses and civil society. A vast majority of the services created have been aimed at the general public, however, GDS also developed services tailored to meet the needs of the most vulnerable, for example through the Shielded Vulnerable People Service (SVP). GDS rapidly responded to urgent instructions from the Prime Minister's Office to stand up a service for clinically extremely vulnerable people - the SVP.

Website

Organization Website: https://www.gov.uk/ Project Website:

https://www.gov.uk/coronavirus

Description

GDS have been at the forefront of the UK's response to COVID-19. Over 90 new user facing digital services have been developed as part of our COVID-19 response, with a further 43 in the pipeline, in addition to our existing services. A majority of these services can be found on GOV.UK, which has delivered an extensive programme of activity to host and consolidate all government guidance, tools and live streams of press conferences. Our GOV.UK content team has been working closely with the Prime Minister's Office to organise the management and improvement of all coronavirus content as well as managing the newly spun up services. At its peak, GOV.UK had 158 million-page views in a single week.

ICT Tools

Much of the UK's COVID-19 response effort is layered onto years of hard-learned lessons and battles for funding of common components and standards. The UK government's ability to respond quickly and effectively was therefore a consequence of the existing digital leadership and processes that already existed prior to the outbreak of COVID-19 and demonstrate that one of the benefits of a strong digital function is the ability to respond rapidly and flexibly to meet urgent needs.

Challenges / Partnership / Sustainability / Replicability

To be able to meet the demand for our existing and new services, we've had to reprioritize and adapt our ways of working by redeploying large numbers of staff from across the organization to the frontlines of new and existing services during the initial phase of the outbreak, all whilst transitioning into a remote setting. We have ensured that Digital, Data and Technology skills are accessible by other government departments through establishing a DDaT COVID-19 Working Group. This platform has enabled all departments and devolved administrations to have a single, forum to articulate needs, risks and issues.

The COVID-19 crisis is an unprecedented situation requiring a coordinated response and large scale, cross-government wide collaboration in the Digital, Data and Technology Profession. We have also built new relationships with private sector entities and non-governmental organizations. For example, GDS developed a new service allowing businesses to inform government what support they can provide.

Our work on COVID-19 is going to continue for some time. The UK's digital response to Covid-19 was a result of 10 years of investment in people, governance and technology. The ability to respond quickly and effectively was a result of the existing digital leadership and processes that already existed prior to COVID-19. Because of that, the sustainability of what we have done is grounded in the fact that the bulk of our response has been built from existing digital services, standards, skills and policies ('digital foundations').

The government's response to COVID-19 is going to develop and change over time accordingly with our citizens' needs. However, at its core our services are built on our existing digital infrastructure and existing components which have enabled rapid service delivery in the context of the crisis. With help from our existing service standards and guidelines, the newly spun up services follow the same process and structure as any of our other services. This means that everything that has been done, can be done again, at scale and at pace.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-government

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N ° 182 Project topic: e-business

Title of the project, Contact Organization Name, Stakeholder type, Country

AReality - AR that sale

Reality Unit sp. zo.o.

Other

Poland

Beneficiaries

Benefices of this project are Producers, retailers and eCommerce platforms; in a word each and every company that is selling products or services.

Website

https://www.realityunit.one/

https://docs.google.com/presentation/d/1t

blsjN401Kqu2nWidEjPol3g3pth2dOH2iQdpbonKs/edit?usp=sharing

Description

AReality - AR that sale is a project that uses Augmented Reality (AR) as a tool that allows eCommerce and retailers visualize real-life view of products before buying them.

ICT Tools

ICT tools used in the project are augmented reality and machine learning

Challenges / Partnership / Sustainability / Replicability

AReality is supporting businesses in overcoming threats that come with COVID. Mainly lockdowns of retail businesses, and problems with ordering items without witnessing their real-life views.

As a startup partnership would be beneficial in the growth of the project. We're looking mainly for companies, that would like to implement our solution, from a variety of industries, but our main focus is on eCommerce.

Sustainability in the project is assured as it involves a wide range of users as well as a vast range of industries that can be used later on in the future.

The project is replicable as AReality works as Stripe-instead of transferring payments, we transfer AR experiences, and give our partners an access to them by API or SDK.

Action Lines

AL C9. Media

SDGs

|Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

|Goal 12: Ensure sustainable consumption and production patterns

Case N °183 Project topic: e-health & access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Covid19-Rapid diagnostic & database

SIWAK

Private Sector

Poland

Beneficiaries

The beneficiaries of the project are medical staff and the government. This comes by shortening the time for diagnosis and referring the patient to proper therapeutic procedures which in turn, improves the safety of patients and their caregivers as well as relieve the medical staff by limiting the influx of patients. The medical sector and government both benefit as they are able to track the course of assistance provided by services and patients and help incControlling the spread of the epidemic by collecting the real-time data of the suspected and confirmed COVID-19 patients with their exact location.

Website

https://www.siwak.pl

https://www.guaana.com/challenge/dSvc4QnSmsSvmDG5k/results/DGDe3gvtFB9Ngi6Ns

/soCCMj2HPxb9btFmp/main

Description

The project idea is a system that quickly validates the risk of being infected by analysing the symptoms and epidemiology of the patient. After that, the system quickly redirects the patient to the proper medical treatment. It quickly leads to address the patient needs, and shares real-time data to many other systems.

ICT Tools

ICT tools in the project consist of pure html, vanilla js and some pure math; Simple (no framework, min.css, vanilla) and fast. Full scalable.

Challenges / Partnership / Sustainability / Replicability

The main challenges come in minimizing the spread of the epidemic by identifying new cases and leading the infected in the shortest time possible to the appropriate medical care thus, lowering the risk of transmitting the virus to other people. In addition, more challenges come in the form of monitoring exact locations of infected people – which would allow early detection in growing concentration of cases in specific areas, and predicting the spread on surrounding areas - as well as monitoring the health of the patient qualified for home observation. Further still, challenges are brought about by the implementation of procedures allowing for the decongestion in an overworked medical care system (through quick diagnostic paths) and the transmission of data collected by the system directly to specific services (e.g. ambulance crew, epidemic supervising agencies, hospital reception staff).

Partnerships with project include the Polish government digital platform of the Ministry of Health and integration with it; or any other country's DP;

The project has potential to be used even after the pandemic, where a quick diagnosis and collection of information about other epidemics, infectious diseases and more are needed. The project can be replicated in any country allowing them to benefit from it.

Action Lines

|AL C2. Information and communication infrastructure| AL C3. Access to information and knowledge

SDGs

|Goal 3: Ensure healthy lives and promote well-being for all

Case N°184 Project topic: e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Saksham Project

Saksham Trust (and its subsidiary Saktek Foundation)

Civil Society

India

Beneficiaries

The projects primarily benefit PVIs in India across different age groups, gender, class-division and its different regions including those in tier-two and three cities.

Our services are part of larger accessible-ecosystem of India and in that sense, we work closely with Government of India, NGOs, boards and universities and publishers. Our projects therefore not only benefit PVI but also their immediate-circle of influence including family, education-stakeholders such as schools, employers et cetera.

Website

Organization Website: http://saksham.org/ Project Website: http://saksham.org/

Description

Saksham empowers persons-with-print-disabilities (PVIs) through technology-solutions, education and skill-development by using ICT-infrastructure/devices to remove environmental and attitudinal-barriers:

ICT Tools

Saksham uses variety of A.T./ICT tools for promoting digital-transformation of PVI:

We provide mainstream-technologies like laptops, tablets, smartphones at subsidized cost to enable active PVI participation in education and employment irrespective of their socio-economic background. Dotbooks and RBDs offered under subsidized-devices allow users to read-books, create/edit word-documents, browse-Internet, manage emails, connect directly to online-libraries through built-in applications, in addition to connecting with PC and phone through NVDA and talkback screen-readers through USB and bluetooth.

Challenges / Partnership / Sustainability / Replicability

Two main challenges are presented. The first challenge dealt with was reaching teachers with poor connectivity conditions and/or lack of experience with technology. This was overcome by designing resources and training opportunities that could be attractive and easily accessible, even for teachers under those conditions. For example, live events through social networks such as Facebook, virtual workshops and live tutorials through Microsoft Teams were used as tools for teachers to participate and get clarification on their questions and doubts. The second challenge dealt with was how to obtain information and data on the extent of which teachers are using digital and online tools to reach their students, and providing them with useful learning experiences and ongoing support.

Under the Accessital project we have partnered with local NGOs in Bangalore who are providing employment to PwDs for supporting Saksham's work in accessible-book creation. Our aim is to further expand this programme to meet the goal of book conversion while also offering employment to PwDs who may have lost employment due to the lockdown. We are therefore looking for civil society organisations to partner with for this project.

The World Blind Union estimates that less than 1% of published books are ever made into accessible-formats in the developing-countries. There is a significant demand for accessible books in India. The Sugamaya Pustakalaya is filling this gap and is powered by TCS Infinity

which made the technology available to the DFI consortium of 190+ entities including government bodies, educational-boards and universities, publishers and NGOs involved in providing accessible-books available to PVI with a perpetual license at zero-cost.

Saksham has always believed in ensuring that devices are provided along with content and training to users as a holistic solution ensuring ease of access and one-stop solution for users. We believe this methodology is replicable and can be adopted by schools, organisations and institutions working for PVI.

Action Lines

| AL C7. ICT applications: benefits in all aspects of life — E-learning | AL C8. Cultural diversity and identity, linguistic diversity and local content

SDGs

|Goal 3: Ensure healthy lives and promote well-being for all |Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °185 Project topic: e-learning & access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Support provided by the Omar Dengo Foundation (FOD) to the Costa Rican public educational system in response to the COVID-19 crisis

Omar Dengo Foundation (Fundación Omar Dengo)

Civil Society

Costa Rica

Beneficiaries

The beneficiaries of the project activities are Costa Rica's public educational system.

Website

Organization Website: http://www.fod.ac.cr Project Website: http://www.fod.ac.cr

Description

Since March 16, 2020, schools closed in Costa Rica, cancelling in-person classes and moving the educational system to at-home schooling. The Omar Dengo Foundation, in coordination with the National Program of Educational Informatics Ministry of Public Education – Omar Dengo Foundation (PRONIE MEP-FOD), offered the following services: Teacher training activities through FOD's virtual training campus "Upe" and other online training services such as Cisco Networking Academy. Including the offering of online courses, workshops and tutorials in subjects such as learning with mobile technologies, computational thinking, programming, electronics, cybersecurity, digital citizenship and entrepreneurship. Encourage the use by teachers of Microsoft Teams through social networks. Digital resource toolbox "LIE++ from home", to guide online, at-distance and offline educational informatics learning, by primary and secondary school students. Provision of alternative communication tools, such as Cisco Webex licenses. Home access to PRONIE MEP-FOD's laptops so that students could continue with their educational processes through at-distance and virtual schooling.

ICT Tools

The ICT Tools used in the project include Online Virtual Campus "Upe" (www.upe.ac.cr), "LIE++ from home" digital toolbox (lieencasa.fod.ac.cr), Microsoft Teams, the communication platform selected by Costa Rica's Ministry of Public Education to be used within the country's public educational system, Cisco Webex, WhatsApp messaging, Email services, Social networks, used to share learning capsules and to organize live training events on subjects related to new strategies towards online learning at home.

Challenges / Partnership / Sustainability / Replicability

FOD addressed two main challenges. The first challenge dealt with was reaching teachers with poor connectivity conditions and/or lack of experience with technology. This was overcome by designing resources and training opportunities that could be attractive and easily accessible, even for teachers under those conditions. For example, live events through social networks such as Facebook, virtual workshops and live tutorials through Microsoft Teams were used as tools for teachers to participate and get clarification on their questions and doubts. The second challenge dealt with was how to obtain information and data on the extent of which teachers are using digital and online tools to reach their students, and providing them with useful learning experiences and ongoing support. Our partners include Costa Rica's Ministry of Public Education (MEP), Cisco Systems, institute for Training and Studies in Democracy - IFED (from the Supreme Electoral Court of Costa Rica), Profuturo Foundation, Microsoft

The support activities undertaken to respond to the Covid-19 pandemic rely on the long-standing multi-stakeholder partnership that has allowed the Ministry of Public Education and the Omar Dengo Foundation to establish a solid National Program of Educational Informatics benefiting 92% of K-9 public school students nationwide. New modalities of training and support activities can be embedded into the educational practices at public schools. Virtual environments provide an opportunity for teachers to learn, in a hands-on manner, about the methodologies and contents on how to use technology. This can help them to better understand technological tools, and enable them to use available resources with a wider reach.

The project's activities can be replicated by other public and private educational systems, by following the methodological strategy of training the educators first, and then provide them with continuous advice and support.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N °186 Project topic: e-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Konnect: An adolescents' education, soft skills, and counseling platform

Aspire to Innovate (a2i) Program

Government Bangladesh

Beneficiaries

Adolescents and youth who are in the age group 10-24 are the primary beneficiaries of Konnect. In this regard, relevant education departments circulated notices for field level officers and teachers to inform students for watching lessons broadcasted on television or konnect. Teachers are communicating with students and their guardians and then instructed them to watch the programs on the konnect website.

Website

Organization Website: https://a2i.gov.bd/ Project Website: http://konnect.edu.bd/

Description

Konnect is an online platform which is working to transform 36 million adolescent and youth into the future-ready workforce through skills, education, and counseling in Bangladesh. The country-wide educational institutions shut-down implemented in Bangladesh on March 17 2020 due to pandemic, affecting the 30 million students across the country.

ICT Tools

To continue education in this pandemic situation, the Ministry of education has taken the following alternative measures instantly with the technical support of Konnect to expand the digital transformation in Education. The ICT tools would be the Konnect website as a repository platform, Psychosocial Counseling Konnect FB page, Live and Recorded classes Social Media and Recorded classes on TV.

Challenges / Partnership / Sustainability / Replicability

Challenges: In imparting the lessons through a remote learning platform, challenges have been encountered related to infrastructure and connectivity issues. To overcome all the challenges and broaden the scope of the distance education program, MoE and Konnect have thought about telephone-based education. Due to the high bandwidth cost and long duration of online classes, many students cannot afford it though they might have internet access. Most of the parents and students have only a feature phone. So, 3336 will help marginal and remote learners to get 5 minutes lesson by a teacher directly.

Konnect has broadened collaboration and partnership with different government departments and organizations, non-government organizations, and development partners for distance learning purposes. Konnect is also looking for partners who can support and fund the implementation and scale-up of the programs at the grassroots level. At the same time, konnect is interested in the partners who can develop and assess soft skills like problem-solving, critical thinking, etc. of the learners to make them ready for the job market.

The 'konnect' technical part is managed by a reputed public university named Shahjalal University of Science and Technology (SUST). Computer Science and Engineering department of SUST maintain the system. Thus, government organizations are directly involved as technology and content partner. Also, the private sector and development partners play the role of content production and activity design. A decade long initiative

called 'Generation Unlimited' in Bangladesh hosted jointly by UNICEF, a2i, BRAC and World Bank also addressed Konnect as a soft skills development platform within GenU activities.

This initiative is a comprehensive online and offline platform for adolescents and youth to promote future-ready workforce through skills, education, and counseling. It could be replicated in other countries with similar contexts for developing human resources in different sectors using ICTs as enablers. This initiative is self-evolving and a platform to generate new ideas. So, replicating this initiative could bring some changes in other countries.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development | AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all Goal 5: Achieve gender equality and empower all women and girls

Case N °187 Project topic: access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Pandemic Control Tool Kit (PCTK)

China Mobile Information Technology Company Limited

Other

China

Beneficiaries

PCTK is designed for individuals, communities, enterprises to help evaluating infection risk and guide social distancing during pandemic time such as COVID-19.

For individuals, this project provides a standard and easy way to check close contact risks and gives health and isolation suggestions. For communities, this project reduces panic and suspicion during pandemic and offers additional information for quarantine decisions. For enterprises, this project helps bringing people back to offices and bringing business back onto its feet.

Website

Organization Website: http://www.10086.cn/ Project Website: http://www.10086.cn/ Project Website:

Description

As work resumption carried out across the country bringing up infection risks, China Mobile released a series of pandemic control tools (PCTK) in order to help tracking mobile phone users' history access to high risk areas, provide infection contact risk alert and guide social distancing.

PCTK consists of high-risk area access query, health codes, close contact risk alert, and student online check-in. The tool kit is based on China Mobile network signalling data, from which provinces and cities that mobile phone users visited in 14 days can be recorded. As to data security and user privacy, all data analysis and transmission process is strictly encrypted and protected against intercept. Moreover, detailed user track is not displayed, exposing less security risks.

PCTK was launched in China Mobile APP, WeChat applet and HTML5 websites in February 2020. It has 5,730 billion PV and 3,000 billion queries until July 2020, serving 31 provinces, 21031 organizations and government agencies. Health code for enterprises was used in 144 companies. Health codes for individuals and communities have totally 13.73 billion queries. Close contact risk alert has 230 million queries, serving 12,534 communities and 180 school classes.

ICT Tools

About high risk area access query and close contact risk alert, risk assessment is based on mobile phone network signaling data and current infection/close contact case distribution. In addition, base station locations and data roaming are taken into consideration to refine the contact risk model.

About accessibility, PCTK support auto-login in 4G network with user's consent.

About data security, data requests and responses are strictly encrypted. Detailed user track is not displayed, and mobile phone number is obfuscated in display.

Challenges / Partnership / Sustainability / Replicability

Main challenges are about data accuracy, data security and short development time. User tracks are highly dynamic. Inaccurate user track may cause confusion and misunderstanding. Lots of effort were put in getting the most accurate positions that were closest to user's real

time positions from network signaling data. Base station locations and data roaming are also taken into consideration to refine the contact risk model. About data security and privacy, data requests and responses are strictly encrypted and detailed user are were not displayed. There are tools created to generate applets and the tool kit were launched in days.

Our partnerships include the National Health Commission of the PRC and China Academy of Information and Communications Technology (CAICT)

This project is sustainable as the signalling data is a crucial part in China Mobile business support systems and it will be continuously updated. The tool kit will serve as long as social distancing is needed and travel risk needs to be evaluated.

This project has been replicated in an APP CAICT created and get more widespread. It could also be implemented by companies with possession of mobile phone network signaling data. It could also be used in travel passes and other scenarios.

Action Lines

AL C5. Building confidence and security in use of ICTs | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N °188 Project topic: e-health & Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Bloom

Chayn

International Organization

United Kingdom

Beneficiaries

People experiencing abuse, as well as those still healing from abuse or sexual trauma may not be able to go to their trauma-group or therapy due to lockdown measures. Being in an abusive environment during self-isolation may also limit their ability to participate in calls or online conversations which can be traced by their abusers. Whilst adaptations and extension of support across the sector take place, our network of volunteers have developed and launched a web-based community support service which aims to provide a high impact, accessible and scalable solution for those experiencing domestic abuse.

Website

Organization Website: https://Chayn.co Project Website: http://bloom.chayn.co

Description

Bloom is a web-based trauma support, run by Chayn for abuse survivors. Our vision was to recreate a physical group setting into an online one. The content offers the best from Chayn's experience, Women's Aid's Power To Change, Rockpool's Sexual Violence Recovery Toolkit and validated by leadings experts in the field.

With digital transformation affecting many industries during Covid, there is an urgent gap with regards to online trauma groups for survivors that we are working to bridge through this project. Bloom recently concluded their 10-week pilot program, delivered to participants via the messaging app, Telegram. This program saw a direct impact on participants by providing tips, tools, and support.

ICT Tools

Through the use of Telegram, an end-to-end encrypted chat app like WhatsApp, as our main form of communication, we were able to reach a global audience and create a group-setting completely online. Social media posts on Instagram, Facebook, and Twitter were integral to the promotion of our groups and were in large part responsible for sign-ups to participate in Bloom. We also utilized a crisp integration with Slack so that group members could chat directly with a Bloom team member without the group member leaving Telegram and disrupting the experience, while simultaneously allowing the Bloom team to communicate through Slack and share conversations within our shared workspace.

Challenges / Partnership / Sustainability / Replicability

Initially, one of the main challenges we faced was that users did not check Telegram regularly and would fall behind on course material. Despite this, it was still necessary for us to provide Telegram as an option for participants because of its security, safety, and anonymity features. To overcome this issue, we are also introducing Whatsapp as an option for group participants. This is a more widely used app so users will be more likely to receive our messages.

We're looking for 5 organizations in the UK and 5 from outside the UK to be part of our learning programme. This programme is open to any organization working with adult survivors of child abuse, domestic abuse, sexual violence and any other form of gender-based violence. Though our work is designed around the needs of women and non-binary people, we are open to

working with organizations of any gender. We especially welcome those focusing on marginalized communities.

This project is environmentally sustainable as it is run entirely through web-based applications. Having secured funding, we're now developing income-generating streams where we can train corporate organisations and large social enterprises in delivering such programmes of their own. We're going to continue applying for grant funding too to ensure this project can continue growing and innovating, and sharing our learning with the global violence against women space.

Bloom has structured its courses and support platforms to be replicable by anyone looking to run similar online based support groups. All courses are openly licensed and we've documented how we run it. We have also built an accessible website where organisations can sign-up to run their own tech back-end for supporting confidential group therapy using existing systems. Findings from our six-month long learning programme will also make replication easier for other organizations.

Action Lines

AL C3. Access to information and knowledge | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 5: Achieve gender equality and empower all women and girls

Case N °189 Project topic: e-health

Title of the project, Contact Organization Name, Stakeholder type, Country

Mapping the Spread of Covid-19

Dalberg Data Insights

Private Sector Belgium

Beneficiaries

In Belgium, we worked with the Prime Minister and National Security Council in their Covid-19 response. We develop our data products in close collaboration with, and with continuous feedback from, the end-users. Our team has the skills and experience to effectively engage end-users, understand their data needs, and identify key barriers and opportunities that might limit the potential impact of the data analytics tool. The main benefit for our end-users is that they receive an easy-to-use tool that offers a defining overview of what is happening in their respective countries, and where it is happening at a highly granular level. This allows them to act upon the pandemic in a more effective way with limited resources.

Website

Organization Website: https://dalberg.com/what-we-do/dalberg-data-insights/
Project Website: https://dalberg.com/what-we-do/dalberg-data-insights/

Description

Ministries of Health need data-driven insights when facing a pandemic. High geographic resolution maps and data analysis reports on the spread of the virus can help make more informed decisions, particularly regarding prioritizing resources and influencing the economic development of a nation or region during these crises. Our data products analyse and visualize both public and private data from different sources in order to provide actionable insights for a more evidence-based response to COVID-19 and beyond. In Belgium, we implemented the data product, called ESTER, to support both the Prime Minister and the National Security Council in their national response to the outbreak. We leveraged aggregated and anonymized telecom to monitor mobility patterns within the population and assess the impact of governmental restrictions on population movements at national and sub-national levels. This information served to forecast the spread of the disease and prioritize interventions, while empowering the public with the right information.

ICT Tools

We first developed ESTER to monitor the impact of the Ebola and Zika outbreaks in Guinea and Brazil, respectively. It integrates data on incidence and mobility to combine with public health records from different sources. An agile collaboration between government, telecoms companies, and data regulation agencies gives us access to aggregated and anonymized data that can be leveraged for effective epidemic responses to limit the propagation of the virus. Our data product creates visual representations of the data to synthesize the necessary information in a format that can easily be interpreted by all the beneficiaries.

Challenges / Partnership / Sustainability / Replicability

We've encountered several challenges associated with the use and adoption of data and digital products within the public sector. These challenges are typically three-fold: ensuring the interoperability of our data and digital products within existing systems and solutions, ensuring proper maintenance and sustainability, and determining the actionability of the data products.

We are always looking for similar partners to deploy the same solutions to countries in need. Specifically, we seek partnerships with more telecom operators and Ministries of Health to provide these data insights on a greater scale.

The long-term implementation of the data products relies on the capacity building and handover from Dalberg Data Insights to the Ministry of Health. This includes ensuring the integration within their existing systems, training the stakeholders involved on utilizing the model, and handing over all analysis to the end-user. After developing the analysis on the mobility use-case, we handed over the data product to the Belgian government in order to ensure the sustainability of the product for the entire Covid-19 response.

There are three modules necessary for the scaling and replicability of the data products in different countries: regulatory, technical, and support modules.

Action Lines

| AL C7. ICT applications: benefits in all aspects of life — E-government | AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all | Goal 17: Revitalize the global partnership for sustainable development

Case N °190 Project topic: e-learning & Access to info and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Supporting radio journalism during COVID-19

Farm Radio International

Civil Society

Canada

Beneficiaries

Beneficiaries of the project are radio stations and broadcasters who serve millions of rural dwellers with much-needed fact-checked information on COVID19

Website

Organization Website: https://farmradio.org

Project Website: https://farmradio.org/supporting-radio-journalism-during-covid-19/

Description

We are the only international non-profit organization focused on using radio to help African farming communities help themselves

ICT Tools

ICT Tools used in the project are a blending of radio with IVR, SMS, WhatsApp, hotlines for scale, reach and interactivity - West Africa and East Africa

Challenges / Partnership / Sustainability / Replicability

During the project some of the challenges we encountered were ensuring the accuracy of information, responding quickly to myths and fake news.

Radio station partners and health partners always welcome

Radio stations will continue to broadcast, and will have many tools, partnerships and skills in place to sustain, but as the problem will also sustain, budget for response and solutions will need to be sustained also

With this project being remote led, and run through existing radio stations, it can be replicated worldwide wherever there are radio stations and commitment (and budget)

Action Lines

AL C2. Information and communication infrastructure | AL C3. Access to information and knowledge

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

|Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N° 191 Project topic: E-health

Title of the project, Contact Organization Name, Stakeholder type, Country

Rise multiplayer – Open science multiplayer game to foster mutual care (respiratory and mental health)

Breathing Games Association

Civil Society

Switzerland

Beneficiaries

Contributors in IT, Health, Clinical Researchers, Game players and Individuals.

Website

https://www.breathinggames.net

https://breathinggames.net/jeux/rise

Description

To combat the COVID-19 virus, various governments put in place restrictions to human and social interactions through lockdowns and quarantines. These measures to a great extent affected all of us and also affected our mental health. People during these times felt depressed, lonely, and did not know how to take care of themselves. Playing is a natural way to experiment, socialize, ease stress and learn. We thus developed a multiplayer game to reduce stress, increase the feeling of belonging, and foster mutual care in a fun and constructive mindset. This game can be played by people of all ages and health conditions. The story in the game involves two to four characters who collaborate to overcome obstacles on a pilgrimage to a mountain top.

ICT Tools

Digital, research-backed multiplayer game, game controller to transform the breath into a digital signal (currently research projects, clinical studies planned).

Challenges / Partnership / Sustainability / Replicability

The challenges we face with respect to this project is the ability to mobilize a broader community to collectively create game levels combining people's experience of respiratory and mental health knowledge from the literature, and also raising funds to have a professional, full-time coordination team to ensure that the game and controllers increase in quality and compliance thanks to open, rewarded contributions.

We are interested in mobilizing a broader community to collectively create game levels combining people's experience of respiratory and mental health and knowledge from the literature.as well as partners to help us raise funds to have a professional, full-time coordination team to ensure that the game and controller increase in quality and compliance thanks to open, rewarded contributions.

This project is sustainable because, the source code we developed is available under an open-source licenses (not the code of the game engine and third-party libraries). We use

an inclusive co-creation process. Links to documentation and videos: https://breathinggames.net/jeux/rise.

This project is also replicable since we mutualize resources accross countries, and ensure people can use, reproduce and adapt our work. We rely on existing infrastructure (IT, spaces, etc).

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-health, E-science

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Case N °192 Project topic: Promotion if ICT's for Development

Title of the project, Contact Organization Name, Stakeholder type, Country

Bacolod Barter Communities

Global Barter Communities

Civil Society

Philippines

Beneficiaries

Locals in Bacolod, Negros Occidental and Filipinos overseas.

Website

https://jocellebatapasigue.com

Description

The Bacolod Barter Community was started in May 8, 2020 during the Coronavirus crisis as a Facebook Group by a local innovation leader Jocelle Batapa Sigue. The objective of the group is to alleviate the growing poverty, unemployment and food scarcity among resistance of Bacolod and Negros Occidental by providing an online platform for people to use items, goods and services instead of cash to exchange for other goods and services they needed.

In less than 3 months, locals from almost 200 other cities and provinces, as well as Filipinos overseas created barter communities on Facebook and continuously helped communities during this pandemic.

The revival of barter system helped thousands of Filipinos around the world and in the Philippines secure their basic needs such as rice, eggs, medicines and other essential items.

Two weeks after creating the Bacolod Barter Community, Batapa-Sigue established the Global Barter Communities, a group page of founders, administrators and moderators of various barter communities around the country and overseas as a venue to exchange notes and share best practices.

ICT Tools

The online or digital barter communities use a combination of Facebook Groups, Canva, Photoshop, Excel, and mobile technologies to address the whole value chain of bartering.

Challenges / Partnership / Sustainability / Replicability

Since the revival of bartering is recent and the platform is online, the main challenge we face is getting citizens to learn how to navigate social media and digital tools, and act and behave accordingly on social media.

Global partners are needed to help us as founders maintain and sustain what we have started as well as recognition of agencies and communities about the importance of bartering as a means to survive the impact of COVID-19.

The project is sustainable as continuous improvements of the barter communities are being made and the observance of the Global Barter Communities Handbook as a guidepost for all founders is being ensured.

This project is replicable because just two weeks after creating the Bacolod Barter Community, Batapa-Sigue established the Global Barter Communities, a group page of founders, administrators and moderators of various barter communities around the country and overseas as a venue to exchange notes and share best practices.

Action Lines

AL C6. Enabling environment

SDGs

Goal 1: End poverty in all its forms everywhere

Case N° 193 Project topic: E-business

Title of the project, Contact Organization Name, Stakeholder type, Country

Creamy.pl. Implementation of personalized cosmetics recommendations tailored to the client's needs

Innect feeCOMPASS sp. z o.o.

Private Sector

Poland

Beneficiaries

Companies involved in e-commerce

Online retail customers

Website

https://feecompass.com/en/

https://feecompass.com/en/2020/06/18/creamy-pl/

Description

Due to the closure of the brick-and-mortar store and the cancellation of the fair and SPA activity, the client was deprived of the possibility of an individual conversation and the selection of cosmetics that would meet his/her needs.

The project is a response to market challenges and an important tool for building a competitive advantage in the face of Covid-19. The goal is to implement an innovative recommendation engine on the website (stage 1) and a conversational interface - chatbot (stage 2). As a result of the implementation of this tool, the client will receive personalized advice, which he could count on as if he or she was at a stationary shop. By answering a few questions, they will receive personalized recommendations according to their needs; time saving - the tool communicates in an understandable language, the minimum set of answers gives recommendations for matching products. The goal is to further improve e-commerce sales.

ICT Tools

The needs survey, powered by feeCOMPASS, allows you to overcome the disadvantages of uncertainty associated with common filters and search engines by combining the seller's knowledge with AI solutions. The solution uses information about needs and preferences - collected and expressed in a language understandable to the customer, and an intelligent algorithm that creates a personalized ranking for each customer, based on the knowledge obtained from the seller.

Challenges / Partnership / Sustainability / Replicability

The biggest challenge was working on increasing the accuracy of recommendations, which was especially emphasized by our client.

We are looking for distributors, especially among e-commerce agencies that deals with e-commerce directly.

By recommending products in a responsible way that matches customer needs we decrease the level of returned products/wastes.

Our project is sustainable and replicable because of the innovative nature of its solutions as well as the flexibility and ease of its implementation in a different business environment, in particular the possibility of adapting to a specific entity or industry. It can be also

implemented as advisor augmentation application for banks and energy distributors which wants to effectively highlight their edge (price/scope) for each customer.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

AL C10. Ethical dimensions of the Information Society

SDGs

Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Goal 12: Ensure sustainable consumption and production patterns

Case N °194 Project topic: E-business, Access to Information and Knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

IDENTT Vision

IDENTT

Private sector

Switzerland

Beneficiaries

Any entity required to confirm user identities to minimize fraud risk. Industries that includes; Banks, Lenders, Telecommunication, Government offices, Sharing industries, Esignatures issuers, Legal offices, Health.

Website

http://www.identt.info/

Description

The Coronavirus pandemic has led to minimized physical contact as individuals are asked to socially distance themselves to avoid increased infections. Thus, the projects allow to confirm identity remotely - which is crucial to continue usual business processes, promote business continuity and social distancing while provided highest security levels.

ICT Tools

Using AI and Deep Neural networks, on redundant and scalable infrastructure, we make it possible to securely onboard endusers any time, any where, across a number of industries and use cases.

Challenges / Partnership / Sustainability / Replicability

The main challenge we faced was that of managing the complex task of remote identification by applying our knowledge, technology and consultation.

IDENTT actively seeks partners with whom we have a natural synergy through shared values and complimentary solutions to deliver added value to end customers.

The project is sustainable, and it is intended to be replicable over global server networks, local networks as needed. The process is fully automated. It can be scaled without the need to involve more personnel. In the march toward paperless, friction free onboarding, we are eliminating physical barriers to the digital last mile, the end user.

Action Lines

AL C5. Building confidence and security in use of ICTs

AL C7. ICT applications: benefits in all aspects of life — E-government, E- business.

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Goal 11: Make cities inclusive, safe, resilient and sustainable

Case N °195 Project topic: E-Learning, Access to Information and Knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Handheld Library

Kenya National Library Service-Kibera Branch

Government

Kenya

Beneficiaries

The children and youth in informal settlements

Website

https://www.knls.ac.ke/index.php/home

Description

The Coronavirus situation has made it very challenging for children especially those who live in the informal and rural areas of Kibera as compared to children who live in the urban areas as most of them belong to the middle-income brackets and come from affluent homes. As such, they are able to have access to online lessons since they can afford smartphones and data for internet connection. However, children who live in Kibera slums have no access to ICT and cannot afford data for internet connection. As a librarian, I believe every child deserves the chance to learn. The children and youth need to continue reading despite the Covid-19 pandemic.

In this case, our focus as a community library in the midst of school and library lockdowns is to ensure digital access and inclusion for children living in remote areas and who are also socially and economically deprived. We did this by using electronic devices we managed to acquire through friends. We downloaded the ASb Reader App, educational games, and revision papers on each phone or tablet and lent it out to the children. Phones are loaned out to the children in the company of their parents and they are supposed to return it to the librarian after one month to assessment, monitoring and evaluation. We also printed stories and revision papers for those whom were not given either phones or tablets.

ICT Tools

Smartphones, Tablets, Laptops, and Printers.

Challenges / Partnership / Sustainability / Replicability

The main challenge is the lack of devices. This is because we source from friends. A stable and reliable internet connection is also an issue. As such we sometimes print materials at home and later go to the slum to distribute since the library is closed. Also, due to the issue of social distancing we have to mee the beneficiaries one at a time and it is really time consuming sometimes scheduling a meeting place becomes an issue.

We are mostly looking for partners and individuals who can donate ous some of these devices and ICT tools we use.

It is cannot be replicated. It's an innovation we thought about after the library was closed due to Covid-19.

It is sustainable if we can get support and donations to buy more devices and once the pandemic is over and the library is opened some of these challenges will be sorted out.

Action Lines

AL C3. Access to information and knowledge

AL C5. Building confidence and security in use of ICTs

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N° 196 Project topic: E-Health

Title of the project, Contact Organization Name, Stakeholder type, Country

SwissCovid app

Federal Office of Public Health (FOPH)

Government Switzerland

Beneficiaries

Residents of Switzerland

Website

https://www.bag.admin.ch/bag/de/home.html

https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/swisscovid-app-und-contact-tracing.html

Description

To help contain and reduce the spread of the coronavirus, the SwissCovid app for mobile phones (Android/iPhone) was created and it is helping to contain the new coronavirus. It complements the conventional contact tracing carried out by the cantons — and thereby helps to break chains of transmission. Anyone who spends a certain amount of time in close proximity to a person who subsequently tests positive for the new coronavirus, will be notified via the app that they may have been infected, and are advised on what to do next. The person's privacy remains protected at all times. Using the app is voluntary and free of charge.

ICT Tools

The app uses the new exposure notification framework from Google and Apple, which has been developed for proximity tracing apps like ours.

Challenges / Partnership / Sustainability / Replicability

Since everything had to be done hastily to help control infections, the major challenge we faced creating this app was the assurance of its efficacy on the technical side as well as its alignment with the legal standards.

Our app is sustainable and replicable since the necessary software components (e.g. the system for generating the activation codes by the cantonal doctors or the contact tracing team) has been created as an open source project. This means that anyone can view our software code and also use it free of charge, as long as they comply with the license terms.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N ° 197 Project topic: E-Learning, Access to information and Knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Teachers' Portal: A web platform for Teachers' Training and Continuing Professional Development

Aspire to Innovate (a2i) Programme

Government

Bangladesh

Beneficiaries

Teachers from primary to higher secondary level are the main beneficiaries of Teachers' Portal.

Website

https://a2i.gov.bd/

https://www.teachers.gov.bd/

Description

The Teachers' Portal is a collaborative, co-creative and problem solving CPD platform. It is very popular among teachers to create and share digital content for all subject areas. Due to COVID-19 pandemic education institutions got shut down on 18th March 2020 in Bangladesh. From 25th March 2020, Teachers from all divisions had started to continue education online using ICT. They first chose facebook, zoom, google meet and other platforms as a first response to the emergency situation to continue education in an alternative way. These ICT4E District Ambassador Teachers boosted the online education system in Bangladesh. Now Teachers' Portal is coordinating divisional, district, upazila and institutional level online school from primary to higher secondary classes.

These highly motivated teachers are also promoting government initiatives to reach students as per instruction and planning from institutions' head. Teachers' Portal has developed a new feature 'Online School Dashboard' which counts real-time data in field level. Teachers' Portal has successfully done few online teachers' training with the consent of Ministry of Education and other development partners. This platform has successfully provided exclusive training on 'Interactive Online Class and English Language Proficiency' and planned to start many more very soon.

ICT Tools

Online platforms like Facebook, Zoom, School dashboard and Local television stations.

Challenges / Partnership / Sustainability / Replicability

The major challenges our teachers are facing are internet connection issues, constraints of devices, and studio connectivity to the learners. Another challenge is the communication gap between teachers and students.

Teacher's Portal is also looking for partners who are interested in teachers training and professional development.

This initiative is a comprehensive online and offline platform for teachers' training and continuing professional development. It could be replicated in other countries with same contexts for teachers training and their professional development using ICTs as enablers.

Action Lines

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N° 198 Project topic: Promotion of ICT for Development

Title of the project, Contact Organization Name, Stakeholder type, Country

IEEE HAC-SIGHT COVID project program

IEEE Standards Association

Other

United States of America

Beneficiaries

The primary beneficiaries are residents in rural areas of underserved communities in developing countries around the world.

Website

https://www.ieee.org

https://hac.ieee.org/funding-opportunities/covid-19-projects

Description

The COVID-19 pandemic has affected the world in an unprecedented manner, and as such, the IEEE Humanitarian Activities Committee (HAC) has adapted its requirements to better enable IEEE volunteers to contribute. For that reason, HAC and IEEE SIGHT (Special Interest Group on Humanitarian Technology) Projects have joined forces to prioritize grassroots proposals that have a strong potential for immediate impact in the fight against COVID-19. Ideally, projects will have good connections with local IEEE organizational units (OUs) and engage a significant number of IEEE members. IEEE received over 100 applications by its members.

The IEEE Selection Committee awarded 73 projects from 25 countries with financial funds used to support the projects, ranging from supporting online education and digital literacy, health diagnostics and monitoring, teleworking platforms for essential institutions such as hospitals, interactive webGIS-based pandemic vulnerability mapping, to train women in engineering with information literacy skills to prevent the spread of misinformation.

ICT Tools

The COVID-19 projects awarded by IEEE propose a number of different ICT tools for digital transformation, such as blockchain technology as it allows for a secure and transparent supply chain platform, reducing logistics time; access to technology and education by allowing people to receive academic content online via tablets or computers. In addition to these ICT tools, IEEE volunteers will serve as content developers and deliverers.

Challenges / Partnership / Sustainability / Replicability

It is too early to determine the main challenges that may be encountered along the way.

Partners are needed in collaborating in any of the ongoing projects

IEEE's grant program supports selected projects vetted by engineering experts that show particular promise, however, it is too early to determine the sustainability of these projects.

Action Lines

- AL C3. Access to information and knowledge
- AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 5: Achieve gender equality and empower all women and girls

Case N ° 199 Project topic: E-Health

Title of the project, Contact Organization Name, Stakeholder type, Country

Management System for Isolated Patients by COVID-19

Universidad de las Ciencias Informáticas (UCI)

Academia

Cuba

Beneficiaries

The main beneficiaries are the Cuban Ministry of Public Health, government officials, patients and health workers.

Website

https://www.uci.cu

Description

The web application Management System for Isolated Patients by COVID-19 consists of 3 fundamental modules: Patients, Travelers, Administration. The system is designed to monitor the patient from their admission to the isolation center, allows planning for the implementation of PCR in real time and taking into account the result of the test, the patient can be discharged or referred to a specialized hospital. The primary data of each patient is stored, as well as the necessary medical data such as: last contact date, admission date, contact person and personal pathology history. From the Patients module, data can be filtered for analysis, taking into account race, gender, age, city of origin, among others. During the use of the system in the isolation center, more than 4000 ssuspected patients were treated for COVID-19.

ICT Tools

Framework Symfony v.3.4 based on the PHP v.7.0 programming language. It was used for the Metronic and Bootstrap web layout. For immediate consultation of the data stored by the management system, a dashboard was created in Grafana.

Challenges / Partnership / Sustainability / Replicability

The main challenges found corresponds to the process of data entry, due to the active flow and high number of patients.

This project is replicable. The project can be used in any isolation center, it just needs to be deployed on a web server to be used.

This project is sustainable. Considering the high propagation of Covid-19 and the daily increase in the number of infected people, it is likely that the isolation centers for suspected patients will persist over time. It can also be used for other pandemics.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-government, E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N° 200 Project topic: E-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

InABLE's- COVID-19 Response Project

InABLE

Civil society

Kenya

Beneficiaries

Primary and secondary school learners with disabilities and youth living with disabilities in Kenya

Website

https://inable.org/

https://inable.org/index.php/projects/

Description

The InABLE Home Schooling Project was created as the lack of access to computer technology or reliable Internet connectivity is an obstacle to continued learning for many students, including special needs students during this pandemic. To create the right remote learning, inABLE is working to deliver educational resources to the blind and visually impaired students using Internet access, computer assistive technology and an educational support team.

To improve the learning opportunities for learners and young people with disabilities and ensure their rights under the UN Convention on the Rights of Persons with Disabilities this project will: develop interactive digital accessible learning materials in a variety of media formats (EPub4 and DAISY) for learners with disabilities in Kenya and increase access to relevant interactive digital learning resources for persons with disabilities.

This is a research project involving a collaborative effort to begin to document the experiences of Kenyan students with disabilities in these challenging times of learn-from-home due to the COVID-19 pandemic. The main output of is a technical report that will inform decision-making at local and national levels.

ICT Tools

Laptops, Headphones, Screen reader software, Learning software, Online learning platforms

Challenges / Partnership / Sustainability / Replicability

The challenges of this project are, the Chromebook laptops come with a chrome operating system and keyboard shortcuts commands different from the Windows Operating System that the users are accustomed to, poor internet connectivity where the users are domiciled, and most online reading materials are in an inaccessible format.

We need partners who can provide us with computer hardware and software, internet service providers and accessible content developers and providers.

The project can be replicated to include all the students in the special schools and eventually in all 16 schools for the blind in Kenya.

To sustain our program, resources are placed for both present and future programming, while equally ensuring that plans are in place for additional funding as well partnerships with Internet providers and computer hardware suppliers.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 10: Reduce inequality within and among countries.

Case N ° 201 Project topic: E-business, E-employment

Title of the project, Contact Organization Name, Stakeholder type, Country

BOWWE

BOWWE

Private sector

Poland

Beneficiaries

Medium and Small-scale companies in Poland.

Website

https://bowwe.com/

Description

The coronavirus pandemic has led to a lot of restrictions and the abrupt stop of business activities. Most business in the wake of this pandemic have been asked to close their physical shops and businesses.

The Bowwe project helps to sell products and services online. We helped SME owners to start their business online during the pandemic. It suggests how to do it more efficiently and monitors the results. Everything is supported by easy to use a website builder for users with no IT or e-commerce experience.

ICT Tools

BOWWE was made by using these technologies: Microservices, Java 1.8, Spring, Cassandra, Redis, MySQL, Big Data, Javascript ES6, TypeScript, Vue.js, Webpack2, Sass, PHP, Laravel, and RESTful API.

Challenges / Partnership / Sustainability / Replicability

Effective online customer acquisition is a complicated process that requires IT and e-commerce knowledge, a marketing team, a lot of time, and tools that are not integrated and they are very expensive. Small businesses usually complete this process with the first step of creating a website, but that's just the beginning. They do not have enough resources and knowledge to complete all steps. Most business owners complain they don't have internet customers despite having their own website.

The project is sustainable because we have a mobile application, which helps you to run your business from one place and just one device. You don't need to waste your time, gas or money to check how is your business going every day.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case N ° 202 Project topic: E-health

Title of the project, Contact Organization Name, Stakeholder type, Country

Project 'FreedomCOVID-19'

ZMQ

Civil society

India

Beneficiaries

Community Health Workers (CHWs) who work in the rural communities.

The general public in the rural areas, marginalized communities, women, children, adolescent girls and boys, TB patients, and pregnant lactating mothers

Website

http://www.FreedomCOVID19.com

Description

FreedomCOVID19 is an initiative of ZMQ. The crisis has impacted the work on the field. We have been using technology in our field interventions for years. The pandemic has accelerated our approach to use technology is more ways as there are restrictions in movement. Our Frontline Health Workers are now more equipped in using technology. ZMQ's has readjusted its existing projects to like MIRA, FreedomTB and YourStoryTeller Projects to respond to COVID-19.ZMQ has developed an 'Integrated COVID mHealth System' for last-mile communities community health workers (ASHAs and VHTs), subcenters (HC-II), PHCs (HC-III) and CHCs (HC-IV). The solution is focused on diagnostics, case finding, tracking, referral, treatment and prevention in India, Uganda and Rwanda.

It has also developed a dedicated COVID-19 program to address needs of rural and migrant communities. ZMQ has also created a 'COVID Vector Pathways' project seeing exodus of migrant workers walking back to their villages on fixed pathways. ZMQ is working on this vector pathway to screen these vulnerable people on parameters like Thermal screening, Cough, Symptoms, providing them RFID card with all details of the worker.

ICT Tools

ZMQ's Mobile phone based digital channels.

Challenges / Partnership / Sustainability / Replicability

The pandemic has shaken the world but in LMICs it has especially affected poor—slumdwellers, daily wage workers, refugees and under-privileged especially those living in low and middle income countries. The immediate challenge faced was to provide right communication to marginalized communities.

Yes we are looking for partners in two ways. This support is in two forms – to increase the reach of beneficiaries, we need more resources to take it to these countries and also we want implementation partners respective countries.

Yes FreedomCOVID-19 is a replicable project. It started in India and is now being replicated in Uganda and Rwanda. We are looking for partners to support us to replicate this project in Ethiopia and Afghanistan; and also in 2-3 Francophone countries namely Senegal, Burkina and Cote d'ivoire.

FreedomCOVID-19 is a sustainable project. It can be adapted and customized to any country.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N ° 203 Project topic: E-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Blended Learning Systems

Daffodil International University

Academia

Bangladesh

Beneficiaries

The above initiative has been taken considering the benefit students and teachers

Website

https://daffodilvarsity.edu.bd/

https://elearn.daffodilvarsity.edu.bd/

Description

As soon as the COVID-19 pandemic took picture, DIU suspended regular classes on campus, started online classes and virtual offices hours for staff. To face the challenges of COVID-19, Daffodil International University took several initiatives to keep academic operations uninterrupted using ICT. Most importantly DIU has changed the teaching and learning techniques so that the students can learn from home and avoid the disruption of studies.

DIU initiated the Blended Learning Center, the centre already has over 29000 users, over 4000 courses and over 20000 classes are held on these platforms. To promote other educational opportunities for the students, the University offered free learning scope through Goedu.com.

The staff were given virtual training and mental health sessions were held by the university to help students and teachers overcome any anxiety caused by the pandemic.

ICT Tools

Google Class Room, Google Meet, Moodle, Live stream, G suite, Zoom. Go.edu is another developed solution by which we are helping students and professionals to develop their skills.

Challenges / Partnership / Sustainability / Replicability

The main challenges we faced were helping students adapt to the new way of online classes as compared to the traditional learning that they were used to as well as issues with internet connection.

DIU would welcome any opportunity to help develop the systems following the best practices through expert suggestion or technological integration. The project is replicable and can be used by any educational system in the world.

Action Lines

AL C2. Information and communication infrastructure

AL C4. Capacity building

SDGs

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N ° 204 Project topic: E-health, E-government, E-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Anti-COVID-19 Hackathons

GovTech Polska

Government

Poland

Beneficiaries

Primary beneficiaries are Polish citizens and residents.

Website

https://www.gov.pl/govtech

https://hackyeah.pl/https://fakehunter.pap.pl/en//https://www.gov.pl/protegosafe/https://www.github.com/protego-safe/https://esesja.pl/https://www.gov.pl/zdalnelekcje

Description

In response to the pandemic, we organized three hackathons, bringing many solutions to the public sector's challenges. We came out with these projects;

Fake Hunter, a community-based project for verifying content on the internet, launched by the Polish Press Agency and GovTech Polska. It aims to demystify and refute fake-news about the SARS-CoV-2 virus.

In order to better support, we engaged with the Polish digital SMEs who, in collaboration with healthcare experts and security professionals, have created one of the world's first apps for contact-tracing which have open-sourced code. This app is known as ProteGo Safe which helps in combatting the pandemic by contact tracing using the Bluetooth protocol.

E-Debates an online platform was created to give the chance to citizens to participate and observe democratic processes from home. During the pandemic, tens of thousands of councils, teams and other bodies were left unable to meet and make decisions. We introduced legislative changes and collaborated with the "eSesja" program to enable 35,000 unique users to hold discussions and cast their votes remotely in a transparent and secure way.

We launched a platform known as action-education where students, teachers and school headmasters have access to educational contents, lesson plans a catalogue of tools to build a "remote class". We assisted schools in the process of adapting to online learning.

ICT Tools

We engaged the technology of anonymous contact tracking by the use of the Bluetooth protocol. GovTech Polska with PAP created an application where fake checkers can check the information reported by users of the internet (via a browser plug or via a form) for confirmation.

Challenges / Partnership / Sustainability / Replicability

Our main challenge was giving undeveloped teams a chance for development by creating innovations that support the public sector and the use advanced technologies.

These projects are in need of partners as we are interested in expanding these IT solutions other government technology (govtech) agencies and institutions

Yes, our projects are replicable and can be developed. Most of our solutions are based on the open source code, so the entire global community can use and improve them.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N ° 205 Project topic: Promotion of ICT's for development

Title of the project, Contact Organization Name, Stakeholder type, Country

Geneva Internet Platform Digital Watch Observatory COVID-19 webpage Geneva Internet Platform

Civil society

Switzerland

Beneficiaries

All users.

Website

https://www.giplatform.org/

https://dig.watch/trends/covid-19-crisis-digital-policy-overview

Description

The Geneva Internet Platform (GIP) Digital Watch Observatory has developed the COVID-19 webpage on its website as a one-stop shop for the latest developments and overviews on the interplay between COVID-19 and digital policy.

The webpage contains a mapping of the COVID-19 outbreak per the GIP Digital Watch Observatory taxonomy of digital issues. It describes in detail the intersection between COVID-19 and artificial intelligence, cybercrime, human rights online, data governance, ecommerce, capacity development, content policy, online education and digital divide.

The webpage also contains updates (global, regional and local developments which have an impact on how digital policy is developed around the world) related to the interplay of COVID-19 and digital policy.

ICT Tools

The Internet, dig.watch website, Google Documents, Google Spreadsheets, data analysis and visualisation, artificial intelligence.

Challenges / Partnership / Sustainability / Replicability

The main challenge is the high volume of news regarding COVID-19.

The GIP is looking for partners to help promote and contribute to the content published on the observatory.

The webpage is sustainable due to the team of experts who curate the content accessible on the entire observatory, as well as the COVID-19 webpage in particular.

Action Lines

AL C3. Access to information and knowledge

AL C4. Capacity building

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Case N ° 206 Project topic: E-health, Promotion of ICT's for development

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Hygiene Hub

CAWST (Centre for Affordable Water and Sanitation Technology)

International Organization

Canada

Beneficiaries

The COVID-19 Hygiene Hub is a free service that supports actors in low- and middle-income countries (LMICs) to rapidly design evidence-based hygiene interventions to combat the coronavirus.

Website

https://www.cawst.org/

https://hygienehub.info/

Description

The COVID-19 Hygiene Hub is a free service to help actors in low- and middle-income countries rapidly share, design, and adapt evidence-based hygiene interventions to combat COVID-19. We bring together governments, international agencies, and NGOs along with technical advisors and researchers in public health, behaviour change, and implementation science to enable effective hygiene programmes that curb human-to-human transmission of the novel coronavirus (SARS-CoV-2) responsible for COVID-19 in homes, communities, schools, health care facilities, and other public spaces.

This initiative was developed by individuals from LSHTM, the Centre for Affordable Water and Sanitation Technology (CAWST), and the Wash'Em team.

ICT Tools

Our interactive online map. The COVID-19 Hygiene Hub answers common questions on COVID-19. The chat feature on our homepage further supports with developing effective hygiene behaviour change projects for COVID-19.

Challenges / Partnership / Sustainability / Replicability

In outbreaks and crises, implementing organizations are often under pressure to act quickly and begin project implementation right away. Sometimes this urgency results in choices that compromise the way projects are designed and implemented with potential negative effects on the acceptability, effectiveness and sustainability of projects.

Each context is different and therefore the determinants of handwashing behaviour will also be different in each context. That means that there is no one-size-fits-all approach to handwashing promotion. We connect with humanitarians in diverse settings and offer a summary of what works to change handwashing and hygiene behaviours.

We bring together technical advisors and resources, governments, international agencies, and NGOs for effective hygiene programming. We welcome participation of global stakeholders! Please connect with us and let's find a way to collaborate.

Action Lines

AL C3. Access to information and knowledge

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Goal 10: Reduce inequality within and among countries

Case N ° 207 Project topic: E-health, Access to information and knowledge

Title of the project, Contact Organization Name, Stakeholder type, Country

Using Talking Books to Strengthen Health Education and Service Delivery in Northern Ghana during the COVID-19 Pandemic

Ampolio Network

International Organization

United States of America

Beneficiaries

The project supports community health nurses (CHNs) and volunteers (CHVs), households and community members in these media dark and rural areas.

The project is being implemented in 8 districts in the Upper West Region of Ghana. The current beneficiaries include the 179,176 people that interacted with Talking Book messages between April and July.

Website

https://www.amplio.org

https://www.amplio.org/2020/04/29/covid19-response-webinar-qa/

Description

In Ghana, the government's COVID-19 response is focused on two major cities. In rural remote areas, vulnerable populations are at risk. Even in the best of times, community health workers struggle to provide basic health education and services. In northern Ghana, limited access to mass media means that thousands of citizens do not have access to reliable information on COVID-19.

In response, Amplio and its affiliate Literacy Bridge Ghana (LBG) are partnering with Ghana Health Service (GHS) and UNICEF on a COVID-19 awareness campaign. Community health nurses (CHNs) and volunteers (CHVs) are using the Amplio Talking Book audio device to share consistent and accurate local language health messaging on COVID-19, meningitis, and other health issues.

The project is currently being implemented in 207 Community-Based Health Planning and Services (CHPS) zones in eight vulnerable districts in the Upper West Region. This poverty-stricken region faces increased risk of the virus spreading due to cross-border trading activities with Burkina Faso. Most big organizations in the area have shut down. Our project is the main intervention reaching these media-dark, rural remote communities.

ICT Tools

This project is using the Amplio Talking Book, a rugged, battery-powered audio device for low-literate users.

Challenges / Partnership / Sustainability / Replicability

Our main challenge is the high turnover rate of community health workers and volunteers.

Yes, we are seeking funders to further expand the project to other regions.

The project is sustainable and replicable, while the initial project has focused on COVID-19 and a recent meningitis outbreak in the region, more funding would allow GHS to purchase their own Talking Books, so that they can continue to update content and share important health education messaging in the future.

Action Lines

AL C1. The role of governments and all stakeholders in the promotion of ICTs for development

AL C7. ICT applications: benefits in all aspects of life — E-health

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N° 208 Project topic: E-learning

Title of the project, Contact Organization Name, Stakeholder type, Country

Digital Skills for Women, Girls and Teachers

Women in Technology in Nigeria (WITIN)

Civil Society

Nigeria

Beneficiaries

Women, Girls and teachers

Website

http://wit.ng/

Description

To help teachers teach effectively online due to pandemic they were equipped with digital skills via our teachers.ng network. They were taught skills like how to record and edit audios and videos for E-learning, how to create simple website, blogs and WIKIS how to manage E-learning platforms as well as how to create digital quizzes and online assessments.

Local women during this pandemic were also provided with digital skills and entrepreneurship opportunities via our wit.ng network.

Young girls through our icamp.ng projects are being equipped with up to date 4IR modules. These modules include: Coding, Robotics, Video Editing, Cybersecurity, Web development, Digital Story Telling, Artificial Intelligence, Mobile Apps Development, Leadership & Entrepreneurship Graphics, Drawing and Animation Design, Computational & Critical Thinking

ICT Tools

To reduce cost, we rely heavily on open source programmes. For icamp.ng, during this pandemic, we are using Python, HTML/CSS, Scratch, WordPress, App Inventor, Blender. We also use other free resources provided by other organizations online.

Challenges / Partnership / Sustainability / Replicability

The main challenge for us is getting or raising funds to support the project. We realized that we have not spent enough time online to attract funding. We are currently rebranding and re-structuring and putting in place measures to generate more funds and create awareness of our organization.

We need partners in more digital programs for women and girls.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all

Case N ° 209 Project topic: E-business

Title of the project, Contact Organization Name, Stakeholder type, Country

COVID-19 Toolkit

SoftServe

Private sector

United States of America

Beneficiaries

Primary beneficiaries will be anyone who has a need to implement controls in their business related to preventing/minimizing the number of coronavirus infections.

Website

https://www.softserveinc.com/en-us

https://demo.softserveinc.com/people-counting/

Description

Anti-COVID solution people counting is a toolkit we have developed that can be used to prevent further spread of COVID-19 as businesses re-open safely.

SoftServe in collaboration with Anker created a solution to help maintain social distancing. The new camera-based system informs customers and staff if it's safe to enter the premises without infringing on privacy. This toolkit helps control visitor in flow and adjust workload to prevent long queues. It also helps to maintain social distancing with the new camera-based approach that counts people inside the shopand detects spots where visitors are crowding to reorganize the space correspondingly.

ICT Tools

The tool kit was developed using various commonly available technologies - java/.net/html5 and supports widely available platforms like desktop and mobile screens (windows, IOS, Android).

Challenges / Partnership / Sustainability / Replicability

The main challenges encountered relates to the proper understanding of the rise of COVID-19 cases, and then being able to appropriately test and validate our asssumptons.

We are always seeking partners to fund additional development, or provide collaboration in all aspects of software development.

These components can all be replicated, and extended into new or different domains, and used for different cases or other contagious and infectious viruses. These projects are sustainable in that they are softwares.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-business

SDGs

Goal 3: Ensure healthy lives and promote well-being for all

Case N ° 210 Project topic: E-learning, E-employment

Title of the project, Contact Organization Name, Stakeholder type, Country

Ayni Learning Platform - My first job online!

Ayni Bolivia

Civil Society

Bolivia

Beneficiaries

Teachers and students of ten (10) secondary public schools of the urban and rural area of Tarija and Oruro, parents and/or family members.

Website

https://redayni.org/

https://aprendebo.net/

Description

Ayni is committed to face-to-face education, but due to COVID-19 we were challenged to reinforce our technological tools that have proven to be great. The objective of this project is to create a virtual teaching-learning model that facilitates the integration process between the creation of own content, the investigation of internet content, evaluations and diverse digital tools.

We created an online learning platform according to the needs of students and teachers in online and offline formats to improve access to formal education for students and teachers, we trained teachers and students in the management of online learning platforms, virtual learning techniques and dynamics, evaluations and other functionalities, we generated a digital learning content according to the official school curriculum, using digital tools such as: scratch, canvas and video editing.

Finally, we hope that the best students will know how to manage an online learning platform and help provide technical support to other students with the supervision of Ayni staff (My first job online!) after they are trained, and this will earn them a small salary.

ICT Tools

This project aims on guaranteeing quality education in the post-COVID-19 context and giving learners the possibility to experiment their first job online. We used tools such as Zoom and Moodle mainly, other tools such as Google classroom, scratch, Canva, telephone and chat software, and video editing tools were complementary.

Challenges / Partnership / Sustainability / Replicability

Inequality has increased to the point where majority of Bolivian students face economic, social and educational gaps. This gap will continue to increase if decisions are not made focused on fulfilling the rights of children and adolescents to quality education. The challenges we faced were; lack of local and useful online content adapted to the Bolivian context, the lack of knowledge of online platforms was the biggest challenge as well as lack of connectivity in rural areas.

We will need the collaboration of the government and the CSR as well as telecom companies to offer their services at low costs and reach also the rural areas.

This initiative is replicable in any public or private school in Bolivia, since the online learning platform is already designed. What is required in order to implement it, is the development of capacities for teachers and student. The project is sustainable. This project facilitates the development of skills and abilities acquired by teachers and students. The only costs are the subscription to the hosting and the domain. For both, an annual amount of approximately 215 USD, which schools would have to pay to maintain their online learning platform.

Action Lines

AL C7. ICT applications: benefits in all aspects of life — E-learning

AL C7. ICT applications: benefits in all aspects of life — E-employment

SDGs

Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all