



SPIDER

Annual Report
2016

Executive summary

These are some of the main achievements for Spider in 2016.

Expanding in new countries

Spider begun project work in two new countries: **Zambia** was one of the countries chosen for needs assessment in the “Telehealth for Cervical Cancer Screening and Care” research project.

Transparency and Accountability expanded to **Myanmar** with support to Phandeeay: Myanmar Innovation Lab and the Open Development Myanmar platform.

Open calls for projects in health and education

Spider had three open calls for proposals in 2016. Two calls were for Education projects: the first focused on disabilities and primary and secondary schools in refugee camps. The second focused on vocational skills, targeting heads of women- or children-headed households. The third open call was for ICT4Health projects. All three calls had good response and a large number of submitted concept notes.

Pilot programme for Capacity building of ICT Regulators

Spider cooperated with the Swedish Post and Telecom Authority (PTS) in a pilot for a programme to capacity build ICT regulators. Participants from regulators in East Africa as well as representatives from EACO (East African Communication Organisation) received training from regulatory and ICT experts from Ericsson and other Swedish organisations. As a part of the programme they worked on individual change initiatives within their organisations. The pilot was very successful and will get support from Sida for three years of programmes starting in 2017.

Tanzanian bilateral projects: review and preparations

The three bilateral projects with Tanzanian research institutions were reviewed in November 2016. Despite initial delays to the project start, efforts to catch up on activities have given result. Spider spent the latter half of 2016 to do the groundwork and coordinate project activities scheduled for 2017.

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Introduction

Spider has the mission to decrease the differences in the use of ICT and our work includes support to projects, research and capacity building. Spider also acts in networks and actively brings together actors within in the ICT-arena from Civil Society Organisations, Universities, Private Companies and Governmental Agencies both in Sweden and in partner countries.

Spider runs projects, supports research and builds networks and capacity in Sub-Saharan Africa, South-East Asia and South America within the areas of Health, Education and Transparency & Accountability.

To be an organisation within ICT4D the history of Spider goes back a long time. The organisation was created in 2004 and has since then worked to promote the use of ICT in developing regions. Hosted by the Department of Computer and System Science (DSV) at Stockholm University, Spider has a unique possibility to promote research that contributes to the understanding how development projects use ICT and what results it leads to.

Spider's work within Health, Education and Transparency & Accountability strives to decrease the global digital dividends and to make ICT based solutions safely useful for everyone. Today Spider financially supports 10-20 projects in our focus areas.

Spider's mission is to disseminate knowledge and to bring actors together, coming from different types of organisations– Civil Society, Private Companies, Universities or Governmental Agencies. We do this by supporting networks, arranging seminars and discussions or by giving lectures.

Agenda 2030 gives the global society a unique possibility to work on some of humanities issues. We at Spider are convinced that the possibility to reach these goals are highly depending on the ability to use ICT in a creative and secure way. Spider looks forward to be a part of that development!





Projects

Introduction

Spider has a history of support to various types of ICT projects around the world. The project part gives a continuous contact with local partners and their challenges when using ITC in their developing projects. Each project gives new information on how the full potential of ICT can be released and how to apply ICT solutions in various environments. Spider has aggregated and disseminated a considerable amount of learnings around implementation of ICT within our thematic areas.

Spider seeks cooperation with local partners that have the capacity to achieve results that are in line with Spider's programme goals. The results follow up component of Spider's research programme follows up on the assumption of how a particular project will lead to the expected result.

Over the years, Spider has had a strong focus on projects run in the African continent, but are also present in Asia and Latin America. We are happy to welcome new partners from other parts of the world and looking forward to the possibility to moderate knowledge and competences between different partners.

Project work 2016

Spider's projects revolve around the use of ICT in three thematic areas: Health, Education & Learning and Transparency & Accountability. Our partners are locally grounded organisations that know their settings and understand what types of challenges there are to their work in general and what to consider when using ICT as a tool.

In 2016, open calls within the thematic areas Health and Education created great interest and resulted in a high number of concept notes submitted. These resulted in two short lists of organisations invited to write full proposals for projects scheduled to start in 2017. Spider also announced a second open call for ICT4Education projects, focusing on vocational skills, with deadline for concept notes at the end of January 2017.

Transparency & Accountability expanded into a new country – Myanmar. First project off the ground is Open Development Myanmar, a sibling to Open Development Cambodia. Local organisation Phandeevar has adopted the platform and tool created and further developed by East West Management Institute and ODC to make public information both available and accessible in Myanmar.

Open Development Cambodia started work on collecting information regarding public service delivery. The project aims not only to make this information easily available on the platform but also accessible by compiling and explaining the information gathered in for example infographics, instructions and overviews.

InSTEDD iLab SE Asia open the ICT4D solution incubator to civil society organisations to provide training and workshops to encourage organisations to use ICT in their work. 20 organisations received strategic advice on ICT solutions to integrate into existing or new programs through Open Thursday and iCamp events. Two organisations had concrete discussion on potential collaboration with iLab, four organisations received prototype design support. One received support to incubate their prototype idea: “Khmer Early Grade Writing App”.

In Uganda, Women of Uganda Network set out to investigate and systematise their efforts on service delivery monitoring to ensure accountability in rural communities. This investigation takes place in parallel to WOUGNET training volunteers, duty bearers and the media in the use of ICT to monitor service delivery and be able to report on issues in their communities.

Toro Development Network expanded work into Kenya, performing a baseline study to understand the prevailing conditions and attitudes of citizens and citizens' groups towards a proposed eParticipation system for selected pilot regions in Uganda and Kenya.



ICT in education is a broad field. The projects started in 2016 approaches it in different ways, where one capacity builds teachers to use ICT as a teaching tool and the other promotes open access publishing in higher learning institutions.

Bolivian partner Fundación La Paz is a well-established Spider partner that trains teachers to use ICT. This project both overcomes the knowledge gap between teachers and students, as many students are more comfortable users of ICT than their teachers are, and inspires teachers to use ICT as a tool when teaching.

Fundación La Paz has held workshops on how to use the platform that the ministry of education has made mandatory for teachers to use and how to make ICT based teaching materials. In 2016, 196 teachers were trained and certified, and a group of 245 teachers have attended trainings that are scheduled to end with a certification in March 2017. The project has a special point as it complements the Bolivian policy decision to give all public school students access to computers – and by training teachers, there is a greater chance that these are used as intended.

Electronic Information for libraries – EIFL has continued its work championing open access. Spider supports a project that works to create open access policies and repositories at universities in East Africa. Sixteen universities are involved in the project; all have written policies for open access publishing. Vice-Chancellors or university boards have already approved three of these policies, the remaining are up for approval in 2017.

This effort creates several results: the results of research at the specific university becomes freely available, which increases visibility of the university and its researchers. It also makes it possible for other researchers, and students, to learn from the work done and take it further by adding their own work to it. Practitioners and policy makers can also use the research and in their line of work. This gives research an opportunity to feed into societal development.

To find new project ideas and partners, two open calls were held within thematic area Education & Learning. The first open call for 2016 focused on disabilities and primary and secondary schools in refugee camps. The call resulted in over 150 concept notes from 12 countries in 3 continents. 18 proposals were short-listed and out of those 5 have been selected. The second call focused on vocational skills, targeting the heads of children-headed households or, heads of women-headed households, widows or youth in rural-, urban settings and refugee camps. The deadline for this second call was January 31st 2017 and it resulted in over 450 concept notes.

Thematic area Health has started investigating the possibilities of using telehealth for cervical cancer screening and care. The first step is to research system readiness and attitudes towards telehealth within three selected settings, more information follows in the research section of this report.

Lessons learned

- Time consuming project preparation makes for a slow start of work.
- Balance between due diligence and get projects that are ready to start work.
- Ensuring that partners receive funds when they need them is another matter of importance to avoid delays.



Research

Introduction

A significant amount of research exists within the field of Information and communication technologies for development (ICT4D). The impact these findings have on the lives of those that have contributed to the empirical results is much less significant.

Spider makes a direct link between research and practice in the project result follow up part of Spider's research programme. Spider claims a role not only to support research within the area of ICT4D, but also to disseminate and validate the projects ability to reach sustainable results in an efficient way. This approach makes use of Spider's unique position with links to both academics and practitioners within the ICT4Development field. Spider also has a coordinating role in several bi-lateral projects aiming to capacity build universities and their staff in Bolivia and Tanzania. The third part of Spider's research programme consists of networks that connect researchers with a common interest in ICT4D.

Telehealth for Cervical Cancer Screening and Care - exploring telehealth solutions for earlier detection and better treatment options of cervical cancer

Cervical cancer mortality rates in East and Southern Africa are among the highest in the world. One of the reasons is that the disease is detected late, which means that treatment options are more limited and less effective. This project will develop a framework for telehealth solutions to use in low-resource settings.

The first phase assessed needs and identified possible telehealth solutions to use for cervical cancer screening in selected sites in Kenya, Rwanda and Zambia. Local researchers in cooperation with researchers from Stockholm University gathered views of local stakeholders on the existing opportunities and the necessary resources required for successful application of telehealth in cervical cancer screening. The data will be analysed and reported back to participants during feedback sessions that will further inform the work towards developing a framework for implementation. Spider will publish reports from the needs assessment studies in 2017.

The second phase will map stakeholders and present the findings from phase one to solicit interest in Telehealth application in the selected countries, or other low resource settings. Phase two will also look for funds to finance the implementation of telehealth in cervical cancer screening based on the developed framework.

CERVICAL CANCER

Mortality rate per 100,000, female

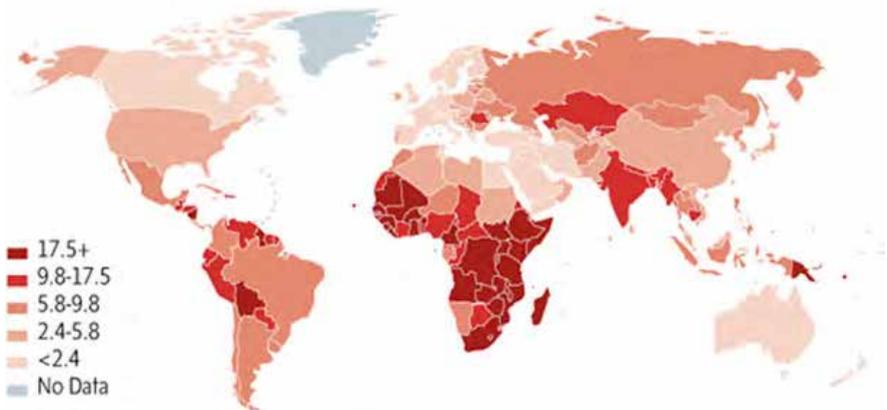


Image from globalcancermap.com

Lessons learned

- Data collected indicates a positive attitude towards telehealth solutions as a part of the cervical cancer care package in all groups represented in the study.
- Main concerns raised discussed the sustainability of such an initiative, funding structure and equipment maintenance and care.
- Multi-site research has coordination challenges - delays in one area may affect the others.

Project result follow up

Using research methods to inform and improve project work

Spider's placement in an academic setting made the idea to connect research to ongoing projects quickly conceived and put into action. The experience gained from these first projects led to us further evolving the Spider results follow up model.

Each Spider project has an integrated research component that will provide quality assurances or checks at periodic stages of the project. This ensures the participation of the target groups, whose opinions and objections can be valuable input to the ensuing stages of the implementation process.

This also means that monitoring and evaluating the project take place during and after the project life cycle. An integrated research approach entails baseline studies and needs assessments of the target groups that will benefit from the initiative. This monitoring and evaluation in real-time also gives an opportunity to understand and overcome challenges that can make ensure project success or make the impact greater.

Results from the baseline and needs assessment serve as benchmarks for evaluating the impact of the initiative through the project life cycle and beyond. Researchers and/or Monitoring and Evaluation experts from partner countries carry out the results follow up on commission.

Lessons learned

- The contracting model chosen for the results follow up agent may affect the independence of the follow up.
- Ensuring a collaborative environment is important, both to give the researcher access to the project and to make sure the researcher shares findings with the practitioner.
- Background and training of the person doing the results follow up affects the methodological approach and also the analysis and conclusions drawn.

Bi-lateral programmes

Bolivia

Spider cooperates with two of Bolivia's largest universities to strengthen their ICT development. Spider and UMSA have been partners since 2005, cooperation with UMSS started in 2013. This longstanding partnership has given a thorough understanding of the challenges for ICT implementation at these universities.



Universidad Mayor de San Andrés

Spider's cooperation with Universidad Mayor de San Andrés (UMSA) is divided into two parts. One part focusing on the generation of an ICT Policy and Master Plan defining strategies, policies, guidelines, objectives and actions needed for an appropriate ICT-development at the university. UMSA's University Council approved the completed Policy and Master Plan in 2016.

The second part strengthens the research management at the university. This has involved developing a research information management system. In the beginning of 2017, the University of Dar es Salaam (UDSM) will start using the same open source system and continue to develop it. Two UMSA developers will go to Tanzania and give UDSM staff training to use and further develop the tool. Developments made by UDSM will then in return be shared with UMSA.

Universidad mayor de San Simón

The main objective for UMSS is to formulate an ICT policy and Master Plan for development of ICT at the university. Both UMSS and Spider have been able to use the experiences gained from the work done at UMSA.

UMSS' ICT Policy and Master Plan was complete and approved by the University Council in 2016. The plan defines the strategies, policies, guidelines, objectives and actions to carry out for a proper development of ICT at the university.

Bi-lateral programmes

Tanzania

Spider cooperates with three Tanzanian research institutions in bi-lateral projects. In all three, Spider has a coordinating role and provides expertise to support the Tanzanian partner to enable successful projects.

For all partners, most of Spider's efforts in 2016 was groundwork and preparations for activities that will take place in 2017. Spider was present for the half-time review that Sida, the main funder of these projects, held in November 2016.

COSTECH

Tanzania Commission for Science and Technology

Spider contributes mainly to the subprograms for research communication and research management. COSTECH seeks to improve research management with a national framework for research integrity that has guidelines for monitoring and evaluation. They also wish to create a framework that assess and monitor investments and outcomes in science, technology and innovation to determine how and to what extent these investments improve Tanzania's socio-economic development.

The research communication subprogram will ensure that research and innovation data and information management practices allow reliable verification of results and permits new and innovative research built on existing information to benefit the full value of public investment in research. COSTECH has internal guidelines and systems for research communication and information management but there is a need to enhance national systems for better coordination and harvest research data and information across R & D institutions. Furthermore, better managed data and information will enable impact evaluation that feeds into the use of research for policy and decision-making.



MUHAS

Muhimbili University of Health and Allied Sciences

Spider is a partner in the subprogram for collaborative engagement between MUHAS and its directorate of Library services and ICT. This will establish and upgrade existing ICT infrastructure to support all university functions by improving network connectivity. MUHAS also seeks to integrate the management of information systems with a centralised user management system that will include academic records system and library system. This programme will also capacity build MUHAS staff with basic ICT skills, and the library and ICT staff with skills to design, develop, implement, manage and maintain ICT infrastructure, systems and services.

The activities in 2016 prepared for a full systems audit that took place in January 2017. ICT experts from KTH and Stockholm University were contracted to visit MUHAS, review systems and equipment currently in place and interview ICT staff to review the current status of MUHAS ICT infrastructure. A draft of the findings was presented to the MUHAS vice-chancellor and the university board before the team left Tanzania, an important step towards ownership of ICT questions for MUHAS at top management level.

University of Dar es Salaam

The sub-program that Spider is working on with UDSM is the research management with the directorate of research. The goal is to improve research management efficiency and enhance research capacity and outputs as well as research networks and collaboration with key stakeholders.

The work includes developing a research information management system. Spider partner UMSA in Bolivia had already developed a similar system. UDSM learned of this system at a meeting for bilateral partners in Stockholm and discussions on the possibilities for UDSM to take advantage of the work already made started. Spider coordinated and facilitated this collaboration, creating an MOU to facilitate the transfer process and prepare for staff from UMSA to come and have workshops to train UDSM staff to start using and further develop the system.

This training took place in March 2017. The universities have also agreed that UMSA will get access to system developments that UDSM makes.

Preview of activities in Tanzania early 2017



UDSM and UMSA cooperation



MUHAS technical audit



Costech Workshop

Networks

Introduction

The creation of and support to networks are key elements in Spider's way of working. Spider believes in the willingness to share information and competence and to cooperate to achieve common goals. Networks are both smaller groups of selected partners supporting each other around common objectives or bigger and looser networks that for example give students a platform to reach out to a bigger audience.

Spider organises events and forums to create an arena to share experiences. We welcome actors from all different parts of society – academia, private sector, civil society and public sector. We believe strongly in the learning process created when gathering different experiences and backgrounds.

As a small organisation, we are happy to be able to disseminate our learnings and our partners' learnings this way. It gives a possibility to display the achievements of our partners and to disseminate our common learnings further.

IPID

International Network for Post-graduate Students in the area of ICT4D

Ipid has become the largest postgraduate network doing ICT4D research in the world and has 900 registered members from universities and research organisations worldwide. Ipid was established in 2006 with ambitions to be a meeting place for students interested in ICT for Development to connect both socially and for research purposes.

Ipid hosted an open session on Writing, publishing and careers within ICT4D at the ICTD conference in June 2016. Spider's Caroline Wamala Larsson was one of the experienced researchers who shared knowledge with interested students.

The network also had their own conference track at the 5th International Conference on Mobile Communication Technology for Development (M4D2016), which gave participating students a publishing opportunity.

Ipid has also begun to set up national chapters for network members, Uganda and Malaysia chapters opened in 2016.

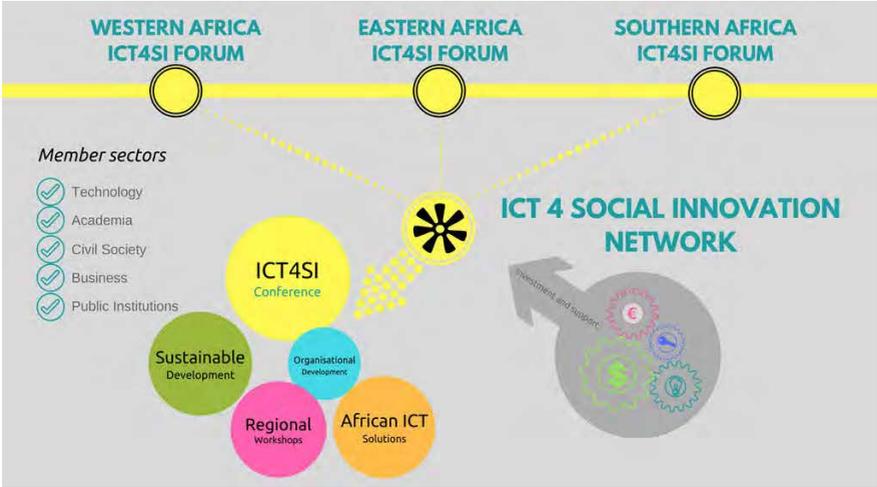


ICT4 Social Innovation

Spider established the Pan African ICT for Social Innovation Network in November 2015, with iHub Research Kenya. The Network aims to unite sectors in Africa that develop, use, and support African Information Technology for innovation and social change within the areas of education, health and advocacy for rights. The network holds an annual conference each year to highlight the need for political support, financial sustainability, needs based implementation, technical opportunities and the strength of networks to underpin key innovations.

Today the Network has over 35 member organisations that benefit from Network activities at the Annual Conference as well as member driven activities in three regional forums in western, eastern and southern Africa.





Highlights from other networks



ICT4D Cambodia Network

Revised their strategy so the network can benefit from the changes in the Cambodian ICT4D landscape.



ICT4 Democracy East Africa

Capacity building workshop on Human Rights Based Approach and Results Based Management has improved member skills on planning and reporting



Network for ICT in Education

EIFL selected as new network coordinator to lead the network forward starting from 2017.

Capacity building



ICT Regulation

pilot round of capacity building programme

ICT regulation is of great importance to give reliable and affordable ICT access. As the ICT field is under constant evolution, there is great need for capacity building of regulators to ensure they are equipped with knowledge and appropriate tools for efficient work that serves the public good.

A Sida funded pilot for an international training programme for ICT regulators started in April in 2016 for 17 participants from three East African countries. All participants came from the national regulatory bodies or the regional regulatory organisation, EACO. These persons came to Stockholm for training, study visits and coaching sessions. Experts from PTS – the Swedish regulatory body, Ericsson and other regulatory experts contracted by Spider gave insights and examples from Swedish regulatory challenges to inform and inspire participants.

Change initiatives drive this programme. The initiatives are in line with each organisation's strategic direction and approved by higher management, who also suggests which person will participate in the programme and manage their change initiative throughout the programme period. It starts with two weeks

training in Stockholm, where students get study visits, lectures, seminars and coaching sessions with a number of experts on all types of matters connected to ICT regulation. The coaches had follow-up sessions with their programme participants throughout the programme to continue supporting the change initiative work.

A regional follow-up meeting took place in Kenya mid-way through the programme, where participants gathered to share progress on their change initiatives and to get new input from regulatory experts, both Swedish and East African.

Change initiatives covered several regulatory issues, including spectrum management, licencing frameworks and procedures, online dispute frameworks and development of information portals for regulatory resources.

Spider used the input from the pilot when applying to Sida for an established programme for ICT regulators. The programme “ICT Regulation – Policy and Practice” starts in 2017 with two programme rounds per year for three years.

Guest lectures

Spider shares ICT4D knowledge in several ways, one of these is guest lectures and a Spider guest lecture has become a recurring event at several university courses and the International training programme “ICT & pedagogical development”.



Events



Nordic ICT4D fair

The Nordic ICT4D fair brought together ICT4D enthusiasts in the Nordic region to share experiences and network during a two-day event. Participants came from different parts of the ICT4D field: academia, development cooperation agencies, civil society organisations and businesses with a common interest in using ICT as a tool for development. This diversity of participants gave a multitude of aspects on the application, evaluation and theorising of ICT for development. The event provided a forum to network, share experiences and innovate, working with ICT in developing contexts.

Anna Rosling Rönnlund from Gapminder gave the keynote speech “Using photos as data to show how people live”, giving participants a preview of “Dollar Street” - a Gapminder project launched publicly in October 2016.

Sessions provided a multitude of insights that reflected the diversity of the group brought together: academic panel discussions followed by demonstrations of applications, presentations of projects and networks with speakers being entrepreneurs, ICT advocates, technical developers, development practitioners, teachers and researchers.

The 2017 edition will take place in Kristiansand, Norway, in collaboration with the University of Agder.

ICT4Social Innovation

The ICT 4 Social Innovation Conference and Network (ICT4SI) was established in 2015 by iHub Kenya and Spider to set up a network connecting organisations working in the education and health sectors across Africa. The network has 34 member organisations, representing 10 countries.

The second conference took place in Nairobi, with one day exclusively for members and one public. Three sub-regional forums will be set up in 2017: Eastern, Western and Southern Africa. These will enable members to collaborate closer within their region between the annual conferences and bring forth projects to show-case for the larger network at the annual conference.

The 2017 ICT4SI conference will be held in Abuja, Nigeria in October .

Events Spider took part in e-Learning Africa

Two Spider Programme Managers attended the 11th e-learning Africa in Cairo, on May 24-26. Spider chaired a session on “Maximising Learning for Health Workers” at the eLearning Africa Conference on Wednesday May 25.

The event brought together decision makers and practitioners from education, business and public sector.

Capacity Building Symposium – CBS 2016, Nairobi

After the regional phase of the regulator programme pilot, Spider, PTS and Sida participated in the capacity-building symposium CBS 2016 arranged by ITU and CA. This symposium gave Spider the opportunity to meet with ministries and regulatory authorities from several countries that may be the target for future rounds of the programme. Spider also met Mr. Brahima Sanou, Director of Telecommunication Development Bureau at ITU.

Africa Day

Magda Berhe Johnson attended the Africa Day conference in Abidjan, Ivory Coast on November 22 2016. The event focused on creating good jobs for the African youth with a special focus on innovation and sustainable development. Programmer Manager established contact with the European Investment Bank and one output from the meeting with African Development Bank is a workshop focusing on vocational skills during the spring of 2017.

Mobiles for Education Alliance Symposium

The sixth annual Mobiles for Education Alliance Symposium was held in October with a special focus on education in emergencies

Spider became a member of the mEducation Alliance Steering Committee to identify priority areas and areas of collaboration. The steering committee consists of donors such as Norad, DFID, GSMA and others.

In 2017 the group will announce a collective call to action to attract more funding for research of promising technologies for education initiatives.

Digital Health and Interoperability Working Group

Spider joined the Digital Health and Interoperability Working Group (DH&I-WG) in December 2016. WHO and USAID initiated this group and PATH International coordinates it. This Health Data Collaborative working group is dedicated to increasing the interoperability of digital health systems in order to reduce the fragmentation and inefficiencies of existing digital health investments and infrastructure. Spider channels information to and from the WG and is also part of developing guiding documents within the WG with key actors in the field, such as Bill & Melinda Gates Foundation, John Hopkins University – School of Public Health, government representatives from Nigeria, Ethiopia, Tanzania and Sierra Leone, among others.

Spider was welcomed to take part in panel discussion on Sweden's efforts to achieve Agenda 2030. Our role was to highlight how digital health tools could accelerate the delivery of health services if people centred ICT is applied and inclusive models of engagement are adopted, which consider the many factors affecting public health and wellbeing.

Despite some organisations or advocates being sceptical about technology serving public health, Spider maintained that ICT is merely a tool to make certain aspects of provision of information, diagnosis and care more precise, accessible and effective. A tailored ICT solution furthermore has the ability to capture key health data, or serve a range of national priority programmes within the same tool, and that can give great cost benefits.

Highlights from other events



Swedish launch of WDR 2016



DI Africa Day

“ICT4D in Africa”:
Tendencies, Challenges and
Opportunities for Lithuania.

GU Seminar



Almedalen



SI Alumni Event



ICTD 2016



GIZ Lab of Tomorrow
Workshop on Sustainability in
the Cambodian Garment Sector



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