

2nd Infopoverty Webinar

e-Learning and Telemedicine – Relaunch of the UN Millennium Village of Sambaina

15 July 2020

Report

Pierpaolo Saporito, President, OCCAM and Infopoverty Programme

“This is an approaching to the next conference because we need to postpone it to December. As you saw, this year we have chosen “Toward Digital Society, inspired by SDGs”. Of course, the coronavirus is changing very deeply our life and we think it is accelerating the process of digitalization. We have 20 years of Infopoverty meetings. In 20 years, we have explored all the different opportunities, always focusing on fighting poverty. Digitalization must involve the people. It is a new perspective that we are discussing in 2012 and the title was “Who drive the digital revolution?”. We clarified the driving role of industry and the inertia of the government to pilot toward the policy of development. We suggested that the UN system must drive the process, orienting the new technological solutions in order to meet the people needs in the respect of human rights. Now we are in the early phase of the new society that is open to all directions. With the all world situation that nullifies something but opens new world, we understood many initiatives that changed the paradigms in education, welfare and environment. The item of this meeting, 3 points: e-welfare for all. Digital service is possible at lower cost. This can be great change, in Africa mostly. The second is clean energy. There is a great mobilization now. It is also connected to the circular economy, which becomes a new paradigm for the society, the industry and consumers. It’s a new vision. The virtuality is transforming the real world. Therefore, it is very important to understand what happens and how to move, which are the rules and structures. The new society, we call entelekia, it is a word from Aristoteles. It means when a process is ended. I am very proud to have all of you, to work together and to suggest some solutions or some practical way to act. Now we give the floor to Professor Enne to illustrate the EWABELT and the food security.”

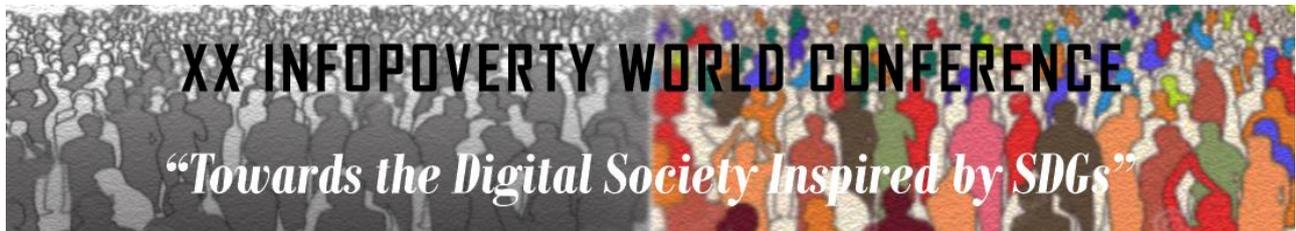
Giuseppe Enne, Founder, Desertification Research Centre, University of Sassari, Italy

“Thank you so much Pierpaolo. Hello to everybody. I had the opportunity to interact with OCCAM initiative on ICT since 2012. One reflection is that after decades of researches and cooperation with developing countries and following the digital revolution of the past 15 years, our approach and attitude have changed. It is clear that it is more sustainable and convenient to transfer and exchange ideas, expertise and knowledge than move groups of technicians or experts, travelling in different continents to support and guarantee the food security. The paradigm [always moving knowledge and ideas rather than scientist was conceptualized several years ago by OCCAM, designing a platform named world food and health security Eternet. This digital platform was launched during the EXPO 2015, held in Milan, and was presented by me thanks to ICT systems during the XVII Infopoverty Conference, realized in New York in 2017. Starting from the primordial

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design of this world food and health security e-center, the desertification research center of the University of Sassari, in Sardinia, submitted one half year ago to the Horizon 2020 program a new project, focused on SI, sustainable intensification of agriculture. This project is strongly characterized by the adoption of ICT systems. I would like to underline some points. The first one is that one of the most significant initiatives is the realization of OCCAM platform allowing for an interoperability between the various components and activities of the overall proposal. It will guarantee the optimal performance of the work packages and the best and quickest way possible. The platform will be able to homologate all the different e-languages resulting from the different packages. Another specific second very relevant ICT based activity is the realization of a remote plant health diagnostic network in Africa, denominated planted. It is able to promote real time diagnosis, aiming at applying innovative services on large scale, at assisting and developing food security policies. I would like to remind that 45% of the production in Africa is lost in the fields or during the storage due to insects or other pathogens. The acronym of this project, as anticipated by Pierpaolo, is EWABELT. EWA means East-West Africa. However, it is the full title of the project that gives us the real dimension of its impact on food security. The title is: link East and West African farming system experience into a belt of sustainable intensification. All research activities will be mediated by innovative ICT tools or systems regarding 38 areas, 147 villages, more than 6500 potential farmers, more than 180,000 potential farmers indirectly. This EWABEL project will be realized by 20 partners, 17 are scientific institutions, NGOS and one very big international electronic industry. The project involves 6 African countries and 4 European countries, France, UK Greece and Italy, as coordinator. Altogether we will work during the next 4 years to investigate new digital solutions for food security in Africa with total support of European Union Horizon 2020 of 7.5 million of euros. The goal is to solve in real times, thanks to the ICT systems, crucial questions related to the sustainable intensification of the agricultural production inside the belt going from East Africa, represented by Ethiopia, Kenya and Tanzania, to West African countries, represented by Ghana, Burkina Faso and Sierra Leone. This is all, thank you so much.”

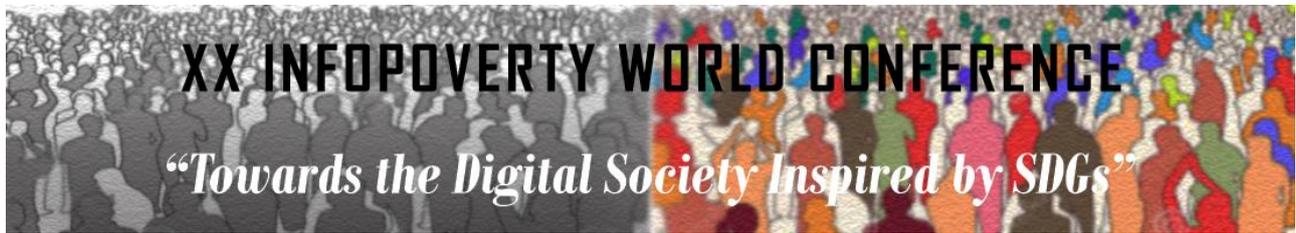
Toky Ravoavy, Ligne Verte NGO

“Je m’excuse de ne pas parler très bien Anglais. Donc je vais parler en Français si vous pouvez me traduire petit a petit. Je facilite un peu le projet a Sambaina. Sambaina, c’était le premier village en Madagascar de Millenium Village. Je vous remercie tous d’avoir contribué à la relance de ce projet de Madagascar. Le COVID19 n’est pas seulement un problème sur l’économie mais aussi c’est un problème sur l’éducation en Madagascar et, je pense, par tous les pays pauvres. En première, la directrice de l’école de Sambaina ne peut pas venir parce que maintenant en Madagascar il y a un confinement total donc on ne peut plus sortir de la maison à partir de midi donc la directrice ne peut pas sortir pour participer à cette présentation. Madagascar c’est la superficie comment la France avec la Lussemburg et la Belgique. Il y a 25 millions d’habitants. Il y a très peu de infrastructures. Madagascar est le pays le plus pauvre du monde actuellement donc ils y avaient problèmes d’éducation avant le COVID19. Avec le COVID19 il y a une augmentation de problèmes d’éducation. Le nombre de personnes en âge scolaire est 12,8 millions. Il y a un fort abandon de la scolarité et les enfants en Madagascar, quand ils ne peuvent plus aller à l’école, ils sont obligés de travailler dans le secteur informel. Le 62.3% de la population a moins de 25 ans donc la population est très jeune. En Madagascar l’éducation de base, avant l’université, il y a trois niveaux. Jusqu’à l’âge de 10 ans on fait l’école primaire public. Après il y a le collège d’enseignement général (jusqu’à 17 ans). Enfin, il y a le lycée. Sambaina est une petite localité qui se trouve à côté du capital du Madagascar. Les enseignants son payés par les parents de l’élèves. Actuellement le gouvernement

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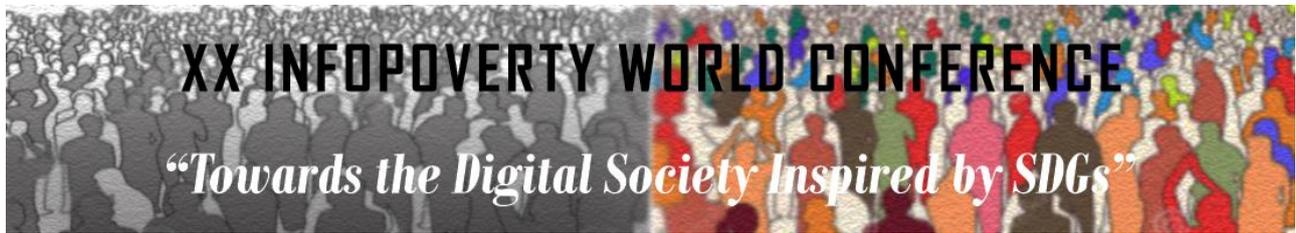
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voudrait atteindre les Objectifs de Développement Durable, le numéro 4. Mais c'est très difficile pour problèmes de infrastructures, d'enseignement, de conditions de travail, il y a beaucoup d'absence, problèmes de fourniture...Le projet de Sambaina est l'éducation par les nouvelles technologies. On remercie beaucoup ST Fondation parce que la connaissance de l'informatique de jeunes de Sambaina était très bas mais grâce à leur confiance de former des jeunes qui sont des analphabètes de l'informatique. C'est la première fois qu'on commence à faire de cours de formation par le Zoom.

Mauro Decca, Board of Directors, ST Foundation

“Thank you to everybody. I am Mauro Decca, I am a member of the ST Foundation since 2011. I was former director Memory Division of STMicroelectronics, where I spent 45 years. Now I try to make something for Africa. As you can see from the chart, the problem is that the majority of the population in the world is more or less 5 billion; 2 millions of them are using digital while the other 5 are not using digital. The problem is that Africa is the worst country. For that reason, STMicroelectronics Foundation has been created in 2001 in collaboration with the United Nation. The mission is to promote the fight against the digital divide. We do that in partnership with ST, as it is our main sponsor. We have volunteers that collaborate with us. Only volunteers make the ST Foundation, nobody is paid. We use sustainable technologies like solar panels. We are able to replicate several times the same approach. We try to put our labs in remote areas, no difference between religions. We try to go where the poverty is present. Ewe are providing free of cost so nobody will pay to have this center. We are active in 20 countries. We have over 170 operational center. We are able to train with the system that we have put in place over 9,000 people per month. The last 2 years we have trained more than 1,000 people per year. Presently we offer the Informatic Computer Basic course, the Tablet for Kids course and an advanced course. We are also developing a course for seniors and for visually impaired people. The Informatic and Computer Basic course lasts 20 hours. We try to teach to use Google, Wikipedia, to send emails and simple calculations with Excel. This course is offered in several languages. It is to be used almost in the entire world. Tablet for Kids is a course where we teach to children to use tablets. We have Advanced course in Excel, Word and Power Point. We have decided to have a standard approach in order to be able with the maximum efficiency and less cost possible to make a lab everywhere. There are 11 laptops because they are easier to use and to transport, 11 keyboards, 11 mouses, 11 Bar anti-theft, 1 Wi-Fi, 1 monitor, 1 HDMI cable, 1 printer...This is the typical lab, same everywhere. The majority of the centers is affected by the power supply problem. We use solar panels and batteries. A we just 27 square meters room.in 2006 the Millennium Village was created. In July 2020 we have completed the “Train the Trainers” online seminar. Because of the coronavirus, we were obliged to make the course online. For sure, this is not efficient like doing in person but it shows that Sambaina can use this system. I would like to add 2 things. These tools could be used also by the professor. With the Internet connection that Telma provides you can really do a quality step in teaching. I will be able to make a center like Sambaina at the cost of 10 dollars per student. We have a budget of 1 million dollars and we are able to train 100,000 people. The cost of this operation is less than 10 dollars. Our system could be replicated with a cost 5 dollars per person trained. if somebody could use our system to do that we would be very happy to replicate the Sambaina project somewhere in the world. Thank you.”



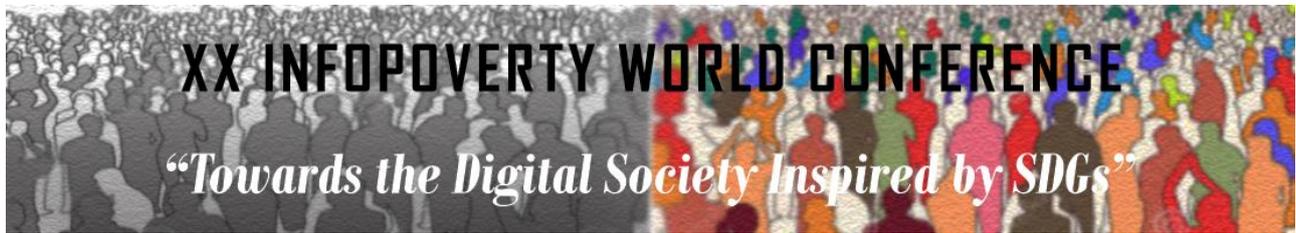
Hassan Ghazal, Founder and President, Moroccan Society for Telemedicine and eHealth

“Good afternoon everybody. Thank Mr. Saporito for inviting me once again to contribute in this important meeting for me and the audience. I will talk about telemedicine in Africa. As you know, I represent the Moroccan Society for Telemedicine but also the International Society for Telemedicine and eHealth. In brief, to talk about Africa, let us first define what the challenges for health in Africa are. So we can summarize these challenges in 5 main categories: lack of leadership and governance, extreme shortages of health professionals, financial issues, lack of effective management of health services and dearth of information and communication technologies. Let us first define what is Digital Health. It can be divided in 3 main components: telehealth, that include also telemedicine and mobile health, health informatics and technology enhanced. Good governance will facilitate the implementation of Digital Health. It needs good governance. When Digital Health is improved, in turn it improve the health system and governance in the health system. Telemedicine is surely a new opportunity for Africa. Yet, there are many challenges before it can be fully implemented and exploited. Let us mention some of these opportunities. In Africa most of the people lives in rural areas, very remoted and isolated. There is a gap in facilities between research hospitals in big cities compared to the rest of the country. This gap is very huge because specialists do not want to live in remote areas. There will be never enough health practitioners to access all the people who need it. Yet telemedicine can make a very huge impact, as it is low cost. Telemedicine can enable doctors to follow the latest developments in treatment. Application of e-health in Africa includes many aspects: increasing access to primary healthcare, providing real-time diagnosis and treatment, conveying health education to healthcare workers and to patients, assisting in emergency medical response, assisting in disaster response and enabling data collection. Mali is one of the most advanced countries in Africa, it already has a National eHealth Agency because its President promoted it. In Morocco many pilot projects started but always faded away because of lack of funding and vision. Recently there is a large Telemedicine Program for rural remote isolated Areas. Then COVID19 came and we realized that even in big cities we need telemedicine. No patient wanted to visit hospitals. Everything was dedicated to COVID19. All medical doctors realized that telemedicine is for everybody. COVID19 thought us this. We are now in the process of preparing a new legal framework, as the previous one was incomplete, so we are working to this and to collect new best practices for telemedicine. What happened during the pandemic is that many platform emerged because of the emergency, and now we are waiting for the legal framework to be completed. I want to mention that we started a master program on health technology and telemedicine, now three years ago, with the help of National Institute of Health and IIT of Prof. Sicurello, but the program did not start because of lacking of candidates. Now, after Covid-19, everyone wants to start this program, just this morning the will to go on with this project was confirmed by the Minister of Higher Education. Finally, I want to mention this project with OCCAM and President Saporito, including North African countries, which we are relaunching after Covid-19. Now there are various experts in many countries, for instance in Ethiopia, which is one of the most advanced countries in Africa for telemedicine. But you have skill gaps and problems with the distribution of technology, like computers which are not enough. But we need training, training is the keyword. To summarize, the main obstacles are lack of knowledge and skills, lack of policy, resistance of health workers - who still don't see telemedicine as something to integrate, but as a competitor for them - poor initial planning and research, a lot of management change. We need assessment of the needs of the patients, the workers and the resources. Lastly, I took part to this program in Egypt on innovation of telemedicine and e-health, that proposes a strategic framework and contributes to build consensus through evidence based investments in digital health technology. I discovered during this meeting that many countries in

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Africa and Middle East lack of a legal framework. Telemedicine is not only about technical difficulties, but also has lot of legal policy implications that are often neglected. Thank you for your time.”

Saurabh Dani, Senior Disaster Risk Management Specialist, World Bank

“Thank you, thanks a lot to the organizers. For the audience, I briefly describe how the World Bank operates: we lend money to the governments, and they implement the programs, and we support, monitor and safeguard the programs. So the major difference with the UN and the NGOs is that we do not implement our programs, we help others doing it. At the same time, in these times of Covid I have been asked frequently how is the WB development agenda changed. Something that we have been challenged with is not being able to work on field, as everyone is doing smart working. What we are learning is that all these years working in conflict and difficult areas, we haven’t fully exploited the potential of monitoring: remote cameras, drones, satellite images, community platforms. Even the governments and WB can use these for progress. Another thing we have looked at because of Covid is the interesting part of WB agenda, I will give you an example. I work a lot with Dominican Republic, which was hit by the hurricane in 2017. Dominican Republic had to shut down completely because of Covid, but its major economic reliance is on tourism. So what they said is “we want to further enhance public infrastructure in a project that can employ a lot of local people”. This is interesting, infrastructure became a major employment generator. But now, when this happens, monitoring needs to happen as well, and so I come back to what I was saying about using technology to this purpose. It is an interesting lesson, moving forward a lot of these technologies can help us to monitor actively without being “on the ground”. The other thing I can tell you is that my team was working on developing a game, similar to Minecraft, called “Resilient Wall”, and what we are doing is we are creating a wall to prevent disasters, the whole idea is for kids to understand disasters, how to impede them and how to protect themselves during disasters. Hopefully down the years everyone will have digital access and can start learning using these technologies to learn through gaming. Gaming is a very strong tool. We are exploring how to compel with the SDGs agenda through gaming. Finally, again coming to disasters, I work a lot in the Caribbeans, and this is the hurricane seasons. Now that we can’t travel, we have to be prepared to have nonetheless assessments of damages and needs, what is going to be the reality on ground, build protocols so that people are not reunited together in case of disaster. So I think what Covid has done is definitely highlighted the whole aspect of digital technology and all the technologies in play to help people, monitoring, reaching out people, etc. I think it will be a huge change that will stay even after Covid. Thank you.”

Aliye Çelik, Vice President, Consortium for Sustainable Urbanization

“Thank you so much for inviting me, I was listening and I was very impressed. Your comments and Mr. Dani’s speech were very relevant for what I will talk about. When we turn on the news we here about covid and economics, and I want to say first that what we are maybe neglecting is inequality and poverty. Studies have been made in China showing that the relation between covid and density wasn’t standing, it was more related with travel and people moving. Cities will remain and be stronger than ever because of their economic cruciality, even if people are working from home. Digital technology is a perfect tool to help everyone in every situation. Even in NY to fight malaria in XIX century they built Central park, that now is not fighting covid, but is helping the citizens having a relief from the restrictions. Contagion exists as long as humanity exists. So what needs to be done? It has been many years that UN and UNHABITAT have said that to improve societies and

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for development, countries need to improve the living conditions in the cities: ensure that no one is homeless, create resilience, sustainable urbanization, invest in public education and healthcare, reduce inequality and enfranchise the poor and the minorities. What is interesting is that SDGs and the new urban agenda, adopted 5 years ago by all 193 countries, were not implemented or achieved. I believe that many deaths would have been avoided if these were implemented. Fortunately, there is no need to be a genius to solve problems like these: if SDGs were implemented seriously, there would have been thousands of deaths less. The contagion will not be fought with solutions like moving to the suburbs. Even digital technology gives a lot of useful tools, but these are tools that are not enough to be a solution. If there was a moment in humanity where community becomes central is today. We are all human beings trying to do what the doctors tell us to do. But many people don't have the water and soap to wash their hands, a home to stay at, enough space to social distance. This is the reality of the world, and we have to change the quality of life for the poor and disadvantages: better facilities, healthcare, education. We cannot solve neither covid 19 neither other contagion in this world. If one gets sick, everyone gets sick. There are no winners or losers. There is no us and them, and we should be there for each other, respecting every human being, despite of race, religion, etc. The privileged have to take care of the unprivileged and they have to do it seriously. The role of partnership has been proved many times. Scholars like Jeffrey Sachs have been proving that the fundamental determinant of stagnant progress or no progress in society is poverty and sickness, and they are very related. There was no time probably in the history of the world where the relationship of economics and sickness was so strong. Today politics cannot protect people, but the ramification of political and economic decisions can and do kill people all over the world. Pandemics, terrorism, climate change, have showed that the global challenges have no boundaries. The only boundaries are the one between rich and poor, privileged and disenfranchised. Without freedom from poverty, hunger and diseases, without access to health, education and housing, contagion cannot be prevented. The concept of solidarity has to go to the heart of our community. As Michelle Bachelet of Chile, the High Commissioner for Human Rights Office said, like covid 19, racism and xenophobia are contagious killers, it is time that humans control their violent destructive capacity as well as their greed, and fight for justice, equality and climate change and threat to humanity, rather than themselves. Thank you."

Toshihiko Murata, Representative of OCCAM to the United Nations in New York

"Thank you Pierpaolo. We really appreciate the chance to participate in this second webinar organized by OCCAM. From now, you can hear in a very rare and valuable opportunity Mr. Ikeno, which currently serves as President of NEC America. He has been working with OCCAM long time, not only supporting us, but also working together with many major UN organizations which he visited himself, like WFP, for whom NEC created a procurement system with the funding of the Japanese Government, I think 2 years ago. Not only that, NEC is a front company for facial recognition. In Tokyo airport you don't need to show up to the officers, you just put your passport on a machine and show your face. Automatically you are in. A highly sophisticated technology with great security implications, not only in Tokyo Airport: even JFK in NY is using it. Here today, Mr. Ikeno will present how NEC is taking leadership in this Covid situation. Please, Mr. Ikeno"



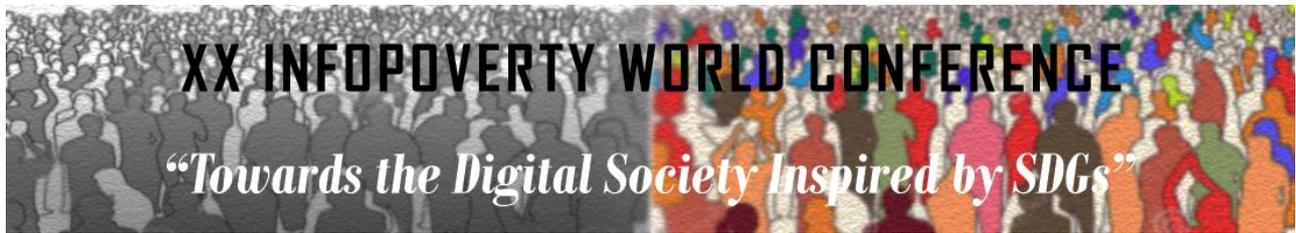
Masahiro Ikeno, President, NEC Corporation of America

“Thank you very much for inviting me. Today, I would like to speak about biometric technology and its uses. First I will explain how these technologies are used for commercial purpose in the US, and then how they are used in the field of organizations, like in the case of the UN. Our mission is to improve safety and security with the power of ICT. Our target corresponds to the SDGs, so we have to be social value creators. NEC is doing many biometrics technologies, from finger print recognition to matching, face recognition, iris technology, voice print. We have been doing biometrics technology for the government for 20 years now. Regarding face recognition we have been ranked number one in the world for the last 10 years. We are very proud of our technologies. We are aware of the potential use of biometrics technology to contribute to public safety, we implement thousands of systems worldwide to help with national IDs, border management or ministries of justice, national police. In the US, face recognition is used for border management, and 2 years ago they decided to standardize it. Now the face ID technology used by the US for border management is made by NEC. So, this is the usage of our technologies in governmental area. Speaking instead of the commercial usage, you know Delta Airlines has HQ in Atlanta. In December 2018 we implemented all face technologies in airports for them, like check in with face ID, security controls with face ID, boarding, etc. So basically you don’t need documents. Last year we expanded this operation to Detroit, JFK, Boston, Minneapolis, Portland, South Lake City, LA.

Combining face ID and body tracking we can make it more convenient to have this. Then, let me talk about activities with international organization. I think that with COvid is becoming more important to work together as public and private sectors. The UN utilize new technology like e-voucher or biometric technologies to facilitate logistic. WFP already signed an agreement with us for supply chain management. FAO: we are providing e-voucher in order to support people engaged in agriculture, providing voucher for financial support. E-voucher can increase productivity. With IOM, we are enhancing technology in the security area, especially in Kenia. We are also collaborating with the vaccine production industry in emerging countries, where the problem sometimes is that there are no family registers or national IDs, but we need to identify infants to provide them proper vaccine. So we are using finger print for this purpose, as the problem with face ID is that face is changing for infants. Fingerprint is easier and we are using it with Vaccine alliance. What does Covid means? Maybe covid is accelerating digitalization and now partnerships are more important and we need to invest in solutions for social equity. Not only technologies, maybe we need to move to new economic models and value creation, shared values. We may need to consider financial capital. When people hear about technologies, AI, biometrics, people fear them. People think about control of the society. We don’t want to control societies. Many people have the image of dark society. But society is going to adapt to new direction, but we need to have a clear image. As a compay is important for us to show positive example, like the smile one of Delta Airlines. People have to focus on more important things: human interaction, communication, creating values. We need to go in this direction. Thank you”

David Neely, President, Affecting Change International

“Thank you. I have been collaborating with Pierpaolo since 2005 with the University of Oklahoma and the Public Service Institute. In light of the time I want to give you a view of an empowerment strategy for developing communities that is working in western provinces of Kenya. ACI has developed a partner organization, called UTN. We equip local churches to be the basis for



local communities transformation. They already have connections in most communities, especially in East Africa, and often provide sense of identity and message of hope, caring for the whole community. Our strategy is to equip the churches to reach out all the person and be prepared to act for the community, empowering and developing the communities, helping people. To that end we utilize the asset based development model, that focus on what people have rather than don't have. I have been doing this in Africa since 1994. It's not about what people need because they are lacking it, asset based development model tells you that God provided everyone with something, putting the emphasis on what people already have, encouraging them to consider what they have that can be used to improve their lives and of the community. First level: church working for the community, it does the work itself, the community members are only beneficiaries, they are not involved as decision makers. Next level: church working with the community, as facilitator and mobilizers, then church and community form a committee, but everything is still led by church. The most effective is the next level: the church is working as a catalyst for the community, the role of the church is not implementer, not decision maker, but catalyst. It gets people to transform the community. The members of the church are already part of the community. The more the community is involved, the greater the results. I hope the asset based development model can be an encouragement to you and that you can use the faith based community wherever you are working in the world as part of your development projects in the future. I appreciate, thank you very much."

Pierpaolo Saporito, President, OCCAM and Infopoverty Programme

"I thank you all, this has been a very important meeting, we overcame the difficulties to meet physically. Also, it is a great opportunity to work together during the whole year instead of only meet once a year. I encourage you to always update us on innovations. Now everyone is needing innovation, everywhere, it is something everyone is realizing. We are searching together solution, for that reason we are proud of relaunching Sambaina with STFoundation and Telma Foundation. In that sense, also all the other programs and solutions are very important to enrich and share the knowledge. Sharing the knowledge we will find the capacity to go ahead, passing something important and useful to the next generation, so that they can live in a global vision. Education is now exploding in a positive sense, the world is connected. We are always active and proposing. We thank you for your proposals and help, and for your contribution. This is my great thank to everyone of you. I thank everyone, see you next time, I think in September/October near to the General Assembly, we will have another chance to meet. Thank you very much to everybody."