COLLECTIVE CREATIVITY AND DIGITAL INNOVATION: FORGING INCLUSIVE PARTNERSHIP TO SUSTAIN PEACE AND DEVELOPMENT

IWC18 FINAL DECLARATION

The participants thank
The President of the Italian Republic, H.E. Sergio Mattarella, for the conferment of the Official Plaque of the Italian Republic to the Conference; the Prime Minister, Mr Paolo Gentiloni, for the High Patronage; the European Parliament, represented by Hon. Brando Benifei, Hon. Marco Valli, and Mr Bruno Marasà, Director of the European Parliament Office in Milan; President of Rwanda and African Union, H. E. Paul Kagame for his message and invitation to Smart Africa 2018,

The Representatives of the Governments of:
Italy, H.E. Amb. Sebastiano Cardi; Japan, H.E. Amb. Toshiya Hoshino; Vanuatu, H.E. Amb. L. V. Lierop; H.E. Amb. Paolo Zampolli; Zambia, Minister of mines and minerals development, and Richard Musukwa for their active participation, their valuable contributions and commitments;
The representatives of UN-DESA, FAO, IDLO, UNESCO, CICT-UNESCO, UNWTO, UNSDGF, the Smithers Foundation for the support, and OCCAM for organizing the Conference.

Taking into consideration the statements summarized in the attached **Report**

The participants agree on the following

DECLARATION

The Conference highlights how the digital revolution has induced several irreversible processes currently leading to new anthropological and social frameworks.

The new generation, are discovering the great potential opened up in all areas of knowledge and living thanks to mobile devices, thus paving the way for a new Digital Society inspired by human rights and built upon SDGs, which can be achieved through deeper involvement and strong stimulus of collective creativity.

At present, the best solutions can be found not in the masses but in individuals linked to contingent issues, using all digital and mobile tools, that nowadays are largely possessed and interconnected, in terms of social and not speculative purposes.

This is crucial for fighting the poverty that is still affecting a large part of the human population, to support peace, as war destroys any chance of development, and to eradicate the cult of violence that is constantly fed by old and new media that keep on selling crimes for kids' entertainment.

Promoting systems which encourage social sharing rather than those directed at the financial field—such as new digital technologies (e.g. blockchain)—permits the mitigation of socio-economic inequality. It's now clear that the driving force behind development is not only financial contribution - often a source of corruption - but the transfer of knowledge and adequate technology. In this way, it will be possible to guarantee transparency and sustainability in the construction of social infrastructures and in improving the well-being of the vulnerable population.

Many valid suggestions on how to transform these premises into reality emerged from the discussion. Concrete proposals have been launched in order to provide basic digital services and initiatives in the fields of telemedicine, food security, e-learning, e-money, distant learning, e-commerce and governance, all coordinated by high performance platforms and apps, able to help communities and disadvantaged people immediately.

The participants' great convergence drew up new strategic paradigms for future actions:
1. To build flexible infrastructure, to promote inclusive and sustainable industrialization and faster innovation, improving the well-being of vulnerable groups, for inclusive social and economic development in both developed and developing countries – says **Daniela Bas,** Director of DESA's division for Social Policy Development.
2. New institutions 4.0 able to share digital services, bridging the knowledge from Universities and Labs to people and communities', in order to strengthen skills and create a basic welfare system in the last developing countries, states **Pierpaolo Saporito**, the founder of Infopoverty, emphasizing the relaunch of the UN Millennium ICT Village of Sambaina (Madagascar), thanks to the support of ST Foundation.
3. Public interest capitalism is the concept proposed by **George Hara** – senior advisor of Japan's Prime Minister - defining the company as a public institution, that contributes to the society through its business
4. Climate Change ICT applications are indicated by **Mayor Mine** of Karatsu, for forest preservation; while **Mayor Grant**, of Seat Pleasant City, proposed the Connect Government Solution for sustainable urbanization together with the Building Academy of **Ivan Shumkov**; the proposals of **Andrea Cuomo**, **Irritec** and **Acra** are for clean water and irrigation solution.

5. Expand Broadband connectivity, e-health and blockchain, are supported by **BrackNet**, **Naiyer Imam**, and **Rehan Chaudri**
6. Promoting Peace, actions proposed by the **International Council of Cinema and Television at UNESCO,** and the AllHumanity Network, by **Robert Cipriano.**

In order to ensure the realization of these premises, the following initiatives have been recommended to be adopted by Government managers, main donors and the UN system

The **World Food Security e-Center**, created by OCCAM with a network of Universities and Scientific Societies as the Legacy of Milan EXPO 2015, aims to provide digital services in the field of food security, telemedicine and education to communities and institutions in the least developed Countries, extend the competences to achieve their well-being, strengthening their capacity to take advantage of still unexploited resources, stimulating the development of bottom-up welfare infrastructures, promoting job creation using a high performative platform, was presented by Giulio Valeri, Paolo Giancane and Gianbattista Parigi.

The **World Alliance Forum,** founded by George Hara, is a non-profit organization which aims to identify advanced technologies, encourage sustainable, social and industrial development, and promote social change for the advancement of society.
Since 2013, the World Alliance Forum has focused on the commercialization and industrialization of new healthcare technologies such as regenerative medicine, gene therapy, cancer immunotherapy, and digital health. 2018 WAFSF highlights dramatic new innovations in the lab for dealing with chronic diseases, such as new laws and regulatory pathways designed to deliver better healthcare. Immersion in active discussions by leading visionaries, and unique attendee composition at WAF, encourages cross-industry, cross-sector, and cross-border collaborations, making the Forum an important destination for business development.

The **AgriNET** platform, presented by Makoto Goda, connects farmer groups with agrimarkets. In addition to it, Nippon Biodiesel Fuel Co. provides e-money services, in the form of e-vouchers, in order to make payments safer and more transparent.

Self Help Africa, presented by Will Galvin, is a non-profit organization which digitalizes money transfers to give liquidity on a virtual basis in the form of mobile money to traders, helping farmers to reach markets in order to sell their products. This is a feature that prevents losses in the trading system.

Artificial Intelligence Initiative, presented by H.E. Amb. Paolo Zampolli, will help medicine and education, preventing epidemics, optimizing resources and considerably reducing health and care costs.

The Millennium Villages project, presented by Sonia Sachs, is a program—put into action in 2006—that aims to empower African villages, bringing health and educational systems, food security and infrastructures into the remote areas of Africa. It looks at the root causes of extreme poverty, taking a holistic, community-led approach to sustainable development.

Pride SSa, presented by the Christopher Smithers Foundation, is a research aimed at implementing and broadcasting sustainable and accessible evidence on mental health assistance in Sub-Saharan Africa.

UST Global, presented by Norma Denise Mitchem, is willing to bring e-learning to Africa to reach those who are excluded from the education systems. Furthermore, UST Global will be rewarding students from Africa with 200 fully paid scholarships for attending schools at Florida University.

To implement these projects, the participants agree to intensify their cooperation in order to integrate and make their applications more efficient and easier to use for the large masses of disadvantaged populations, working alongside governments and the UN system, to stress the social implementation of ICT for all, and accelerate the achievement of the SDGs, as well as the affirmation of a culture of peace.

Finally, by giving mandate to OCCAM to continue as the Permanent Secretariat of the Infopoverty Conference and Program it will be easier to implement the IWC18 Declaration and to organize the IWC in April 2019 at the UNHQ, with the proposed title: "*Urban communities: how a smart city can fight poverty and eliminate slums*".

IWC18 REPORT

FIRST SESSION

Mr. Patrizio Civili, IDLO Permanent Representative to the UN, welcomes the speakers and the guests both at the United Nations headquarters in New York and at the European Parliament Office in Milan to the 18th Infopoverty World Conference.

Marco Valli, European Parliament

"This is an important moment for the history and I think that all the international policies should act in order to try to solve the big problem of poverty in the world and the big problem that we have on pollution in the world. I think that the theme of fighting poverty and inequality is one of the main challenges of the global politics: digital and technology's evolution today, offers a new tool to solve problems that until few years ago seem unsolvable.

I'm representative of the M5S movement, a movement that grown thanks to technological evolution and we are strongly convinced that innovative tools can solve the problems so we think that is only necessary to give space to new ideas in a concept that has the key in an only one principle: the social and not speculative use of innovation. The only way to make this happen is through an extremely transparent and sure system to mobilize money and information.

Transparency is the only tool to give credibility in what we do as politicians and without it we can never face the challenges of today, involving billions and billions of people in the world. Therefore, I invite all the political forces of all nations to take the opportunity given by the innovation to create this winning best practice together and through us together towards a future with more sustainability and technology as the service of human needs."

Daniela Bas, Director of the division for social policy development DESA

"Digital innovation is the theme and it is an important enabler of sustainable, inclusive, social and economic development in both developed and developing countries. It has a great potential to accelerate human progress, promote peace and bridge the digital divide. The 2030 Agenda for Sustainable Development recognizes the need to develop knowledges' societies with opportunities for all to learn and engage, which highlights the need for access to information and communication technologies (ICT) as it is said in the sustainable development goal N° 9: the calls on member States to build resiliently infrastructure, promote inclusive and sustainable industrialization and faster innovation. However, there is a risk that technological developments might contribute to increase existing inequalities and more than half of the world's population is not using the Internet, around 3.9 billion of people.

In developed countries, 94% of young people aged of 15-24 use Internet compared with the 67% in developing countries and only 30% in the least developed countries. The inequalities in access to a use of ICT can also worse an existing inequality in other dimensions such as inequalities in income and in access to education, health services, productive assess, markets and decent jobs.

Our work at the United Nations on Digital Innovation has focused on its potential for promoting the empowerment of all people and for improving the well-being of vulnerable groups including persons where old, or persons with disabilities, or youth, or indigenous people. Therefore, by pursuing the right policy and institutional options, digital innovations can be leverage for inclusive social development. We

need to ensure that the benefits of technology are shared equitably, while protecting people from potential risks.

The all of society approaches vary to protect those who may be left behind; this requires actions at global and national levels. Events like the IWC today can help to share knowledge and expertise on what has been done, on what can be done to ensure the digital innovation helps to build inclusive societies. By working together in partnership, we will become stronger and better equipped to build sustainable and resilient societies for all."

H.E. Amb. Toshiya Hoshino, Deputy Permanent Representative of Japan to the UN

"It has been now three years since the adoption of 2030 Agenda for Sustainable Development and I cannot stress enough the importance of science and technology, particularly the Information and Communication Technology as close-cutting driver and a mean of the implementation of the Agenda. We must always consider how they are applied in the field and how they are incorporated into the economy, or society, or each individual country's context in a sustainable manner and to that end national and international efforts are necessary. And we must also mobilize all stakeholders and promote their cooperation. Furthermore, it is important to realize not only the newest and the most advance technologies but also existing science technology solutions to achieve the SDG's and the society that leave no one behind. From the very beginning of the SDG's goals and implementation, science technology and innovation are already incorporated as a part of technology facilitation mechanism. There is a related event to this IWC that is the STI Forum which is scheduled from the 5th to the 6th of June which talks about the role of science technology innovation for advancement of the SDGs in which not just the governments but also the private sector, academia and civil society, all discuss the role of STI for the advancement of SDG. They will talk about water, energy, sustainable cities, responsive consumptions and ecosystem"

Brando Benifei, European Parliament, Committee on Foreign Affairs

"Good Morning Ladies and Gentlemen and thank you for inviting me to this year's edition of the Infopoverty World Conference, organized by OCCAM with the patronage of the European Parliament Information Office in Milan. Unfortunately, today I cannot be with you at the UN Headquarters in New York. Nevertheless, I would like to give my support to this important initiative.

This is the second time I have participated into an Infopoverty World Conference and I thank OCCAM for the great work it has been carrying out, for more than fifteen years now, with the organization of this event, and more generally with the ability to foster the debate on major problems of contemporary societies and to contribute to the imagination of the future of the world.

I share the overall focus of this edition: the time has come to take a further step forward and apply on the largest possible scale low-cost digital solutions that have already been successfully tested, in order to fight against poverty more effectively and to develop disadvantaged populations, often forced to risky migrations. I also appreciated the structure of the Conference, divided into five sessions dealing with different issues but all inspired by two key-concepts: digital innovations and reduction of inequalities.

Nowadays, there is an acceleration, in some ways even abrupt, of the digital revolution and it is necessary to direct its development now, before we realize the negative effects. In my opinion, not only institutions must assume a guiding role of such complex phenomena. Of course, institutions must play a central role in terms of guidance and supervision; nevertheless, a more proper understanding can only be achieved through the actual involvement of all operators and stakeholders.

The impact of digital innovations and the role of younger generations are two paramount elements for the construction of the society of the future: it also depends on them, whether inequality will grow again

or decrease. I am glad that this year's debate involves high-level representatives from African and developing countries to define a digital action plan according to the UN Agenda 2030 and Africa 2063, which must aim to fill an enormous gap in terms of poverty and lack of competence.

I would like to recall a couple of concepts I dealt with last January in my message to the Conference, on the occasion of the launch of the World Food Security e-Center, considering that one of the major projects of the Infopoverty Conference is the World Food Security e-Center.

Digital revolution has a significant impact on the food security pillars identified by FAO and the availability of food depends, for example, on several factors affected by technological evolution, such as the methods of production and trade. Access to food and its use also change in the digital era: it is enough to think about the different information flows and about all elements that modify conditions for purchase, as well as methods of preparation and consumption.

Finally, I would like to highlight an apparent paradox: on the world scenario, the populations mostly suffering from hunger or malnutrition, are those who live in regions traditionally devoted to agriculture and production of food! Developed countries, being able to exploit the new tools of the digital era, manage to impose unfair conditions in trade with the risk of an exponential growth of inequalities and ending up - also here paradoxically – depending increasingly on the external support of international organizations!

Today, we try to find digital solutions for these crucial issues: poverty, migrations, inequality. I am sure we will continue to work together to seize what can be a great opportunity to improve many lives and contribute to a better world.

Therefore, I would like to thank OCCAM and the European Parliament's office in Milan once more for inviting me to this very stimulating Forum.

I wish you a very fruitful discussion and I am looking forward to the outcomes of this year's Conference. Thank you very much!"

Pierpaolo Saporito, President of OCCAM and Infopoverty

"Eighteen years is quite a lot but it's also our story, the story of digital revolution. In 2000 UN launched the MDGs. We have created some villages in Honduras with a huge connection and with many services like telemedicine, food security, with a great capacity of connectivity because the first satellite starts exactly in 2000 with 100 mb/s. Data are really important because they teach us how great potential data have in linking and empowering the community. We start with possible solutions then we pass to actions that is improve the capacity to be linked with the poor communities, after new tools and best practices because technology started to give more than a simple sell or a simple computer. Than we drive an important session in 2005, which is very important because of the UN Summit for information societies held in Tunis. ICT villages mean to have a capacity to connect and give the services to interchange: during the summit we create a village by the Tunisian government that has been very effective.

In 2006 *Fighting poverty to create prosperity* was very important because we had been called by Madagascar government to build some villages in Sambaina which become after one year UN Millenium Village. Every year we discuss here and that is a great moment of sharing and also a chance to launch new projects, for instance, in 2012 we discuss about *Who drives the digital revolution* which is a crucial question.

We are for social use of ICT not for speculative one, that is basic because until now is not so clear that. It's important to understand that the use that we make of digital technologies is social not speculative, because it's devoted to help populations in need, and with all that innovations we can do that. Many innovations have been realized in these years and we can just resume that in few other images the different applications and actions we've done: villages, telemedicine which has been possible because

we have micromised the machine for the hospitals like the Ultrasound that was very useful to help with the maternal care.

Last year the discussion was about transferring knowledge and adequate technology: we have 10 initiatives launched from all over the world. The concept on which I want to focus is that now we talk about smart cities but it's very important to talk also about smart villages, because Africa is a villages country, and if we don't link the territory and land with the city we risk to have a real disequilibrium and the community would be left alone. ICT villages is a very good model for smart villages. Nowadays, all the people have the cellphones so they are connected: the base is to consider the device cellphones as very important tools to improve and to work, because if you receive information or assistance you can improve your capacity.

This is the image of our platform: in the red circle you can see the services provided: hospitals, universities and laboratories all connected. In the yellow circle you can find the user provider at local and governmental level. The most important is the center of the platform where there are the people, the communities and the villages: the people are connected with a cellphone to express and show their needs.

In order to connect all the patrimony of knowledge and to start to understand how to share this knowledge with the population in need there's the WFSEC, created in 2015 on the occasion of EXPO. It is open to all and it regards different fields and issues: training and job creation for the Human Resources field, Services Providing for the Economic Resource field, increasing global development for the Social Resources field, foster creativity for the Cultural Resources field and sharing data and knowledge for the Technological Resources field.

Yesterday we had a great news because the ST Foundation signed an agreement with community for a donation of digital unit platform very advanced.

Now we are facing the digital era because SDGs is a road map but we need to think about what will happen because it will be a key in the next future. At the same time, we must be aware because we have to think that most of the transformation will be not in the real world but in the virtual one and for this reason, it's important to understand how this virtual world works and can be managed."

Mr. Patrizio Civili thanks Mr. Valli, Ms. Bas and H.E. Amb. Hoshino for their actions and for emphasizing the use of ICTs and Mr. Saporito for his commitment to the social use of ICTs and in promoting to advance the United Nations' Sustainable Development Goals.

Mr. Bruno Marasà, Director of the Office in Milan of European Parliament, expresses his pleasure in hosting again the Infopoverty World Conference at the European Parliament Office in Milan in streaming video with the UN headquarters

Marco Valli, European Parliament

"I think that all these issues are really important to address, and the work that Mr Saporito is doing is something really important not only for all the nations. As I tell you before in my speech I think that the use of innovation should be social and not speculative and on that think the 5star Movement had the idea for bringing the innovation in this sense. Following us and our leader Beppe Grillo you can find a lot of information that now you are sharing and about what we are trying to do in Italy. Besides you can try to involve people in the direct democracy and try to involve this process to use technology for the social and not speculative use. I think that this is the key issues on which focus your speeches today and try to find a solution to all the problems such as poverty or climate change."

Michael Jacobson, Chairman of the Board of Directors "Montessori Model United Nations"

"Digital innovation opens the door to education but also opens the door to transparency, which is so very important. Good education is not just a victim of pro communication it is also a victim of corruption. Digital transparency such as provided under the agreements herein can be used to shine a light on corruption and helped in that penalty that is imposed on the children. Academic communities are pledge to help support the world and to help to achieve success against poverty."

Gian Battista Parigi, Pediatric Surgery Professor at University of Pavia

"In the EXPO that was having the motto *Feeding the planet: energy for life*, was signed an extremely important charter that is "The Milan Charter" in which are included some passages which are very important not only because they emphasize what is our duty in this sense but also because is a fantastic introduction of what OCCAM is doing in this sense. In the Milan Charter you can read that *one of the greatest challenges to humanity is that of feeding a constantly growing population without harming the environment, so as to preserve resources for future generations* and *that only one collective* (a group/network of stakeholders) *action will make it possible to overcome the major challenges related to food: combating undernutrition, malnutrition and waste, promoting equitable access to natural resources and ensuring sustainable management of production processes.* These are general items, but how can we perform these tasks?
- Investing in research: we have to invest money, interest, goal matter;
- Using innovative processes;
- Transferring the results;

All these issues put together stress what OCCAM and Infopoverty is doing and refer to the WFSEC, which *aims to implement development in emerging countries, mitigate migrant emergency and empower local structures to fight poverty and hunger in the spirit of UN Sustainable Development Goals*. Practically we have the different thesis of a puzzle, just to put them together, there's nothing new to invent. There is the idea of getting what is there already and building something together, for instance, we have to consider, speaking about Africa, if we are aware that in Africa there are more mobile phones than in Europe, in Africa they can have a hunger. There's a new factory in Burkina Faso in which there are two young boys and one them, biking a lot, charge the mobile phones of the other people in the village, and the village has no energy at all. So, we have to think about Africa as covered by 55% of the Internet, excluding the desert zones like the Sahara and the Kalahari. Therefore, there's the huge possibility of realizing what is the idea of the WFSEC: putting together all this things in order to apply all the innovative services that can be done and, speaking of this, we can refer to telemedicine. The hub architecture is a platform to which belong universities, providers, from the two sides of the Mediterranean area, connected by all the numerous kinds of devices ICT over us, and then we use these kinds of possibilities of interaction between the group of providers and all the other stakeholders who need this expert advice in the field of agriculture, animal feeding, telemedicine, human nutrition, all that areas that can be covered. The system works through a mechanism of workflow from the End User, which give an act on the mobile phone to get in touch with the district and the national center, the national center will then get in touch with the service providers which will give expert advice about the best practices that can be realized. Is a network already involving many different universities center in Italy and in other areas in Europe, already connected with many countries as Congo, Chad, Madagascar and so on and, as typical for this network, it's open; therefore, my final proposition is *Let's join us!*".

Bruno Marasà, Director of the Office in Milan of European Parliament

"I'd like to say that what we could of in the next future is to relaunch the ideas that were presented in a very excellent way by Parigi. We'd like to widespread these ideas and these projects more than we did until now. There are many opportunities, in the UE as well, to address to Africa, and I think we could engage ourselves to present the results of the IWC to the MEPs and the European Commission in Bruxelles, in order to draw the attention of these great institutions and to sustain the development of these projects."

Discussion

Gian Battista Parigi, Pediatric Surgery Professor at University of Pavia

"Peacekeeping is absolutely fundamental: I've been in Mogadiscio where we are trying to reconstruct the national universities of Somalia in order to give them doctors, lawyers, people speaking Somali - which is an important issue considering that it's difficult to make peacekeeping projects in a country where nobody knows the language of the country itself. Therefore, education is one of the most important thing for peacekeeping and for keeping people in good status from, for example, the health point of view. Speaking from another point of view of peacekeeping, we have to consider the immigration issue: it's absolutely crazy to think that is possible to block immigration building walls, by contrast, we have to block the cause of immigration, that is helping these people not to die of starvation in their country, to help these people to have a good health system in their country, to decrease the poverty and to remove all the causes of war."

Intervenant (The Special Adviser to the International Crisis Group)

"I want to address what is a possible challenge you may already thinking about, experienced not only in Malaysia but also in Indonesia applying ICTs to education, telemedicine and so on. There's a kind of early optimism that we have about what technology can do and we know now the very sociality and not the speculative purpose of this issue. We are not passive about the particular technology and about their development that we don't take as determined by the commercial. Internet is something that is changing and the future of the internet it's commercialization and manipulation of sociality itself. The very thing that you value (collaboration, sociality, transparency) are manipulated, commercialized. Considering that, what do you think mobile phones are doing in areas like Africa or what people are doing on that. So, unless we are aware of the other dimension, we can catch in a kind of techno optimism which is exploited by a commercialized, capitalized system. It's not just a matter of digital but it has to be considered also the social, economic and political issue.

Firdaus Kharas, Media Producer

"I'm going to give you three examples of how technology and mobile phones in Africa are being used with my work right now. It doesn't need 5G; we are already using phones in very practical ways in Africa:
- I notice that the actual change came about three years ago when the Ebola crises happened in West Africa. I created three animated shorts, which we put on mobile phones. That was the first time I noticed that Africans in countries like Liberia were using their cell phones to get life saving information

- The second example is going on right now in Congo where I have created an animated short to change the attitudes towards victims of rape. We put the animation on WhatsApp, which does not need data. We created a group to get the video out, particularly to women.
- The third example is a video on digital birth registration because there are millions of children, particularly in Africa and South Asia, which are not registered at birth with the government, which leads to lots of problem later in life (e.g. they can't go to school, get passports). Therefore, we created a system which countries are implementing using cellphones when a child is born in a remote village to register the child with the local authorities."

Intervenant

"There's a big possibility that digital technologies could actually lead to future several arrests because more educated populations become more instructed. The educational programs can actually create also a very important tool to address that."

Claudio Azzolini, direttore istituto Oftalmologico Ospedale di Varese

"I'm a physician, who was involved in telemedicine in Bosnia, Italy, Lybia and other countries in private projects for many years. I wonder what your idea about telemedicine, involving many centers of your network, is. Is there a platform or do you thinking of creating a platform for telemedicine?"

Gian Battista Parigi, Pediatric Surgery Professor at University of Pavia

"I'd like to introduce to you a project that we developed some years ago in Malawi, which unluckily didn't succeed because of the death of Malawi's President Bingu Wa Mutharika that stopped the process.
The project was called *The thought of the week*. A commission, made by the Ministry of Health, had to proffer an educational thought, sent on every Sunday to all the mobile phones of the country. These 5-6 lines of educational thought had to be discussed again in schools during the week. It was devoted to dismantle some wrong ideas about HIV."

SECOND SESSION

George Hara, Chairman of the Board, Alliance Forum Foundation

"Assume you're the president of a company and you make 1000 million dollars; would you give that money just to the shareholders? On the top of the 100 million dollars, the company borrowed 68 million dollars form the bank and distributed them to the shareholders. The name of the company is HP. Another example is American Airlines: in 2008 the company was facing bankruptcy, the employees agreed to a pay cut of 340 million $, while the management received 200 million $ in stocks as bonuses, because they reduced the liabilities of the company. This is happening everyday in the US, while in Japan this would be unacceptable.
In shareholder capitalism, when companies are failing, management asks the employees for a pay cut or fire them, so that the value of the company can rise, and management can sell their stock options. This is creating a vicious cycle in capitalist economies.

What should happen is that, since the management has made a mistake, they should cut their salaries first; employees compensation shouldn't be touched, and shareholders should suffer from not receiving any dividend. This is what happens in Japan. So, we have some issues in the capitalist mechanism.

In America people say that companies are owned by shareholders, so responsibilities for CEOs and Board of Direction is simply maximized shareholders values. That is one way to define capitalism.

Another way to describe capitalism is that the company is a public institution, so when the company makes money, the profit has to be distributed among the members of the company.

One of the consequences of shareholder capitalism is that the middle class is disappearing. The major problem is that, since we rely on the middle class, democracy works well; without the middle class, democracy doesn't function. As a result, irrational decisions are made, like UK leaving the EU. In many parts of the World populist parties started to get elected, because many citizens, since they became lower, they just like the politicians that listen to their complaints.

How to fix it?

Public interest capitalism is the idea that we started. We define the company as a public institution. a company refers to members that support a corporation: employees, customers, suppliers, shareholders, communities and even the Earth. In order to be prosperous, the profit has to be shared among the members; management has to have a long-term thinking.

"Public interest" refers to economic and general well-being of ourselves, our children and their children. A company should be a public institution that contributes to the society through its business. Under public interest capitalism, we believe that the value of a company increases only when it successfully contributes to all its members of the company such as employees, customers, suppliers, local communities, larger society and the environment, all of which will then benefit its shareholders. It's a "all members win".

People supporting public interest capitalism are Mr. Toyoda, CEO and President of Toyota Motors, Mr. Nikkaku, CEO and President of Toray, Mr. Yamada, CEO of Rohto Pharmaceutical and Mr. Kobayashi, Chairman and CEO of Mitsubishi Chemical HD. These are the people, among more than five hundred people, that are supporting these ideas. Also, if you look back at Japan 250 years, you'll see that public interest capitalism was a natural behavior of the management. Furthermore, about 80% of corporate officers in Japan support these ideas, and Japanese Prime Minister as well. He says that when people work in a company, profit has to be distributed among the members who made the company successful. Prime Minister Abe is so much keen in asking the companies' presidents to raise employees' salaries, and this is currently happening in Japan. From a long-term point of view, shareholders can benefit a lot.

In the 1960s, if we picked up the 100 biggest countries and the 100 corporations, only 4 companies would make the top 100 overall. In 2000 the number of nations and the number of corporations become almost the same, while today we would've much more corporations than nations. This means that corporations became much stronger and much more important.

Nations are important, but now we need the 193 biggest corporations to discuss about the future of the World. Though, we must notice that innovations do not materialize in short-sighted corporation management.

Let's define corporate profit. Corporations' profits depend on salaries for their employees, education spendings, contribution to the societies, environmental protection spendings, product safety for customers. Today, companies' problems are minimizing all these factors in order to increase their profits; this profit is therefore the equity holders, that we called ROE, Return On Equities. if the ROEs are high, the share price is high, so management is inclined to minimize the various additive factors, other than shareholders, to be paid, to be compensated; this is a fundamental problem that has to be fixed, because education for the employees is sometimes seen as a cost that needs to be cut, but in Japan, for example, it's seen as an investment.

In Japan we are trying to make a very interesting challenge. If we can coordinate the share price with this new definition of the profit, then what happens? The CEO is motivated to increase value added

factors for every member of the company. Investors would like to see the highest stock price, and it works. This kind of mutual fund is now being designed in Japan and we are talking to GPIF (?), largest pension fund of the government fund of Japan.

Company is a public being, it contributes to the society through its business. We can do a lot of things, as I explained: we can make meaningful products, creating a robust middle class and a social and economic growth. That's a good cycle!

In ROC, Return On Companies, all the members are a kind of company, which means that the profit allocation of the company is on the "Shachu", which means "members" in Japanese.

The followings are the policy ideas that I'm implementing in Japan, with the government:
- Taxation frameworks that encourage long-term shareholders
- Taxes on speculative, short-term trading activists, because they make money, but don't contribute to society
- Abolish corporate quarterly reports, which are useless because they are a waste of time and money
- Allow companies to treat long-term shareholders better; for example, for first-year shareholders, dividends are at 10 cents per stock, while for fifth-year shareholders, 50 cents per stock, and so on
- Activist investors have to behave well
- Linking shareholders returns to wage increase. Two years ago, in Japan, the stock buyback was more the 90 million $ for a year, but it increased to 5 billion $

We can do public interest capitalism to build a more robust middle class. This is the most important goal for the 193 members nations. This is a key, instead of sending our troops, to create a stabilized world. And also, it is very important to encourage long-term investment.

(shows a video of a mouse with a broken spinal cords). His legs are paralyzed because his spinal cord is damaged, and spinal cords cannot regenerate by themselves, therefore people with a damaged spinal cord end up being in wheelchair for the rest of their life.

(shows video of a healthy mouse) this the same mouse treated by regenerative medicine, which regenerates spinal cords. This has been already tested on mice, ducks and monkeys, and will be implemented on humans this year. It was invented by Professor Okano of the Keio University Medical School.

In addition to that, the heart, the pancreas, the eyes, the liver and the kidneys are the regions where medicine has to focus on to make sure people live a healthy life until their last moment. It takes 10, 15 or 20 years and many companies don't want to make investments in such a long term. As a result of the Bio Venture Fund for Basic Research of the United States, the total amount has been diminishing every year; they don't want to make investments in the longer term; they want to get the result in a shorter time.

In 2014, at the World Alliance Forum in San Francisco, exponents from the US, Japan, Italy, Switzerland, Israel and France gathered to discuss about today's shorter times (?), because funds do not want to make investments in the long-term research for medicine.

We can also fix the disparity in the world. This is an actual example in Bangladesh: in 2004 I founded bracNet, a company which intentionally has NGOs as shareholders, they own 40%, so when the company makes money, 40% of that goes to the NGOs. NGOs themselves don't have shareholders, so the entire dividends can be distributed to the education and healthcare in remote areas. The purpose is that Bangladesh has 170 million people, but more than 50 million cannot read and write. It's quite important to empower those people, but the government cannot do it, therefore private entities have a very important role.

(shows a map of Africa, where countries like Burundi, Comoros, Djibouti, DR Congo, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Sudan, Swaziland, Uganda,

Zambia and Zimbabwe are highlighted) These nations are member of the COMESA (Common Market for Eastern and Southern Africa).

In this century alone, an increase of 3 billion people is expected in Africa alone. 40% of the babies will suffer of malnutrition, which causes brain damages. If we cannot solve this problem before the babies become two years old, or at latest by five years old, these brain damages continue. 40% out of 3 billion is more than 1 billion people; if those people cannot become middle class, it'll be a disaster not only for Africa, but also for the entire world. All the corporations have the responsibility to solve this.

Spirulina is a very effective stunting. It's a microorganism, originating from Lake Chad in Africa; 100g of meat has 19g of protein, whereas 100g of spirulina has 65-70g of protein. Spirulina is also very rich of amino acid.

The creation of middle class is very important, and we're expanding this action not only in Africa, but also in 57 Islamic nations and in Pacific Ocean's islands countries."

Intervenant (The Special Adviser to the International Crisis Group)

"There is a strong case to be made that since the 60s innovation has gone into financialization, into surveillance. Therefore, the best universities are going into finance, into activities that make questionable social good, but that are highly rewarding. In the 60s we had the idea that innovation would have empowered the ordinary people, but if look, for example, to air travel today, it's much different than it was in the 60s; the actual innovations that affect people is gone into technology, which is sort of commercialized. I urge you not to take for granted this propaganda that all is great in the world of innovation and that much of the slowdown is because of that short-term vision."

Andrea Cuomo, STMicroelectronic Executive Vice President Advanced Systems Technology and Special Projects

"We have built a panel solar factory in Southern Italy, and we decided to do something on the side and to look into water and how to apply technology to solve some problem. We set up an NGO, I think that is somehow difficult to work in a capitalistic environment without adopting the rules of capitalism (whether we like it or not) but the idea was to build a simple machine using our panels, we put together a pump, a filter and a battery to supply the power; we're able to deliver at cost cause it's a no-profit organization and to provide a device that can deliver 140L of clean, drinking water per day for 1 dollar. This potable machine can supply clean, drinking water for 50 people per day. Machine is simple: we tried it in some countries in Africa and in one country in Europe and one in South America and it showed that the machine did what she is supposed to do. The feedback was that the all thing was working, of course there's improvement and now we are going through the second generation to see how this works.

Starting from the idea of one solar panel, one battery to create power, you can charge mobile phones, you can build a small refrigerator, you can build units that can supply lights and electricity.

The idea is to do this in parallel organization so that everyone can spend some of his time and his energy sharing something with the rest of the world.

Our mission might be seen as an example of giving back your luck and your work to mankind, because this is an activity that may help bridging divides.

When we go to the bank and we want to bring money and have money back, fast and a lot, if we don't start from there we won't reduce... Today interest rates are 0, basically, now we go to the bank and we're unsatisfied if we don't get 7-8% and where do you get that money for? That's the question. So even if it's a high risking initiative, if we don't start from the cultural values of people and we don't bring values in this world, then all the things follow; so, we have to get people with an industrial blackout into a know-how to get things done involving important sharing projects, and also really important is to rebuild

communities' values, not considering just the individual aspect of humankind because humankind is not just bunch of individuals. If we don't go back to our history I think it will be quite difficult for mankind to survive in the medium-term, because in the end our culture is largely coming from intellectual work done 300 years ago, both in the West and in the East system. We are really losing this dimension of what it means to live together and what it means to value all the people around us. Another element, which is important too, is that non-profit doesn't mean free: they are different and, for what I see from outside, the non-profits world should be organize with the same rules, determination and scheduling of the normal corporate world."

Makoto Goda, CEO, Nippon Biodiesel Fuel Co., Ltd.

"We are working in the North of Mozambique, we work with energy, food security and finance. We cover almost 300 villages, we purchase, through our electronic money service, products from the farmers.
We also try to bring the horse tilling and the horse logging, as tractors are very expensive and break easily.
We provide e-voucher to FAO
[video presentation]
The AgriNET platform connects farmer groups with agrimarkets.
Iiino is a platform to create videos. We aggregate small creators, so that they can make money from their productions on YouTube; but the problem of money transfer remains, in fact it might be very expensive to transfer money from the US to Mozambico, so we try to use tokens and blockchain."

Thomas Deely, Program Director, Applied Analytics, School of Professional Studies Columbia University

"Everyone in this room has a supercomputer, a smartphone. It resulted in more wealth created in middle-class in 25 years in China, and it is also affecting India, and I think it provides opportunities for Africa as well.
In the western world, and particularly in the US, there is financial engineering, every company has three stakeholders, i.e. customers, employees and investors, there is overemphasis on investors, a disappearing middle class and, we could say, a poverty crisis.
But if we look to the rest world we have reason to be optimistic, to grow from a lower base, particularly in Africa.
Will [Galvin] and I worked on an interesting project around data, analytics and investment. The data revolution is interesting because it's going to affect every company in every industry and us as individuals. Data allows to manufacture better outcomes in healthcare, better outcomes in financial services, particularly for people that haven't had a credit history, and that's truer in Africa than anywhere else."

Will Galvin, Executive Vice President Self Help Africa

"Self Help Africa is a non-profit organization. If you work with the poor, you help the poor to have more money, and in generating a profit leading culture is sometimes the best that you can do.
The non-profit sector is good at collecting data, but very poor at analyzing them. Therefore, the collaboration with Columbia University was very useful.
Three years ago, we worked on a project that failed. If you want to shift poverty you have to concentrate on smallholder farmers. In Africa "the man with the van" is the king, namely he helps the farmers who don't have the means to reach the market selling their products, in exchange of a rate on the sale. This

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contract isn't always very fair, therefore, instead of demonizing "the man with the man, we worked with him the large end-users, in order to create a system where no speculation would have been involved. With that system we could bring 30-35% extra to the smallholder farmers. The middle man, i.e. "the man with the van", were happy because they could reach larger volumes. The reason it didn't work was that every now and then, the man in the middle would disappear with the money.

In order to overcome this problem, we digitalized it all; we stopped giving cash to the traders, giving them liquidity on a virtual basis in form of mobile money. This feature stopped all losses in this trading system.

This allows now us to say to the end-users that we have the names and phone numbers of the farmers who have crop in the truck of the trader, and that we can communicate with them on their behalf. Now it's possible to track how much income farmers get in a year, and that helps them with the credit union. Digital is revolutionizing the way that we're doing business and data can help us reducing poverty in sub-Saharan Africa."

Babatomiwa John Adesida, Private Sector and Philantropic Consultant, UNSGDF

"At the United Nations Sustainable Development Goals Fund (UN SGDF) we strongly believe that ICTs can have a great impact on people particularly the poorest of the poor, i.e. families with 12-15 members, they only have one small device that doesn't have all the facilities of a smartphone. Connectivity is also a game changer in the world, but not everyone has access to it. 29% of the youth worldwide aren't online; in Africa 60% of the population isn't online, whereas in Europe it's only 4%. Furthermore, there is also a strong gender gap, women have less access to the internet than men.

Going back to Africa, research shows that 15 million of children aren't enrolled at school, at 4 million of them will never go to school, just because they don't have access to them. We have to leverage on technology to drive some form of basic education.

Another problem is that children in crisis area have to move from place to place, therefore it's almost impossible to educate them. That's why, at UN SGDF, we're working on a project in Tanzania, where we provide tablets to those children and teacher. Another problem is that there is no infrastructure to support them, as power is a big issue.

Therefore, our goal at UN SGDF, is how to create access to facilities to the poorest of the poor. It's not just about a smartphone, because most of those people are hungry and they can sell the phone in order to get food. We have to change the mindset, so that they don't see a mobile phone as luxury."

Eugene W. Grant, Mayor of Seat Pleasant City

"In the last decade, technological innovation has been defined as the ability to move quickly and often; for example, new generations computer chip work faster and with more power than those of the older generations, but they work the same way as the older ones.

At Smart City Pleasant, we believe that smart cities and smart villages are the future of innovation, because they can potentially solve fundamental human problems, including helping to bridge social justice and inequality.

Our Municipality was established in 1931 and we became a smart city in 2017; located in the state of Maryland, bordering the D.C. and about 40 miles outside of Baltimore. We have a population of less than 5000. We are desiring to create VIP cities around the US, because our people and our businessmen are very important to us, therefore we want to provide them the best quality services. Our smart city has an influence on our residents and on our partners, such as IBM, who is helping us achieving our mission.

According to the World Bank, worldwide everyday 180.000 people are moving into cities; 3.5 billion people live in urban areas and by 2030 that number will grow up to 60% of the world total population.

Cities in the US generate 80% of the GDP of the country. This rapid growth puts the strain on small cities and villages, due to declining budget, aging infrastructure and increasingly complex operations. We need to put smart to work, to generate revenues, because 75% of all venture capital dollars go only to three states in the US, i.e. New York, Massachusetts and California. Of that 75%, only 25% goes to women, and less than 3% to Afro-Americans. Our desire is to create value, and creating this digital transformation is what we called Connect Government Solution (CGS); it allows us to provide fast and efficient quality service delivery.

We build upon our existing capabilities; rooting from there we reengineer our processes, modernizing our legacy investments and infrastructure, using cloud computers and providing Wi-Fi in our municipality. Internet of Thing allows us to respond quickly to emergencies, reducing crime and anticipating problems.

The achieved results this far are:

Decreased service request response time (98% reduction)

Watson Chatbot allows us to re-deploy resources to focus on strategic projects

With the CGS, we identified 3.5M dollars in additional tax revenue over the last three years

Through our Shared Services Model, the sale of the CGS will yield an increase in revenue of 1.25M $ per year, which will be reinvested to sustaining the CGS, to attracting investments and deploying new Internet of Things offerings."

Tatsuro Mine, Mayor of Karatsu

"The Niji-no-Matsubara Pine Forest, which is 226ha wide was planted 400 years on the sand dunes bordering the sea, in order to protect the farmers of the area from both the sand and salt blown in from the sea; this made the area very productive and it's still protecting the farmers. The forest is the only forest to be designated a special area of beauty in Japan.

In the beginning pine cones and needles were the main sources of energy in the City of Karatsu; today, gas and electricity are used. This has now created a challenge, as no one uses the pine cones and needles anymore and they form a ground covering, that prevents the tree roots from nutrients. We were in fear of losing Niji no Matsubara.

Solutions to preserve the forest were the pesticide delivery, the cut of decaying trees and the use of medicine to healthy trees; in the future, drones will detect the problems. In 2008 two organizations were created to help keep the forest clean; one is made up by 300 volunteers, the other of businesses and clubs adopting specified areas of the forest. All together they are about 7000 volunteers.

Pine needles are now sorted and delivered to farmers to use in place of peat and top soil cover. Pine cones and branches are being pulped and reformed into pellets.

Niji no Matsubara needs ICTs to help finding volunteers and promoting alternative uses of pines. Social media are a great way to connect volunteers. Drones can update real time data in order to give quick responses and keep interested international schools connected."

Intervenant

"I went to Myanmar as an anthropologist, so I wanted to learn from their culture and their societies. As an anthropologist a I saw more than just poor villages; they have a very rich culture and Myanmar villages aren't starving either.

There are many things that they are doing right. There is a very strong Buddhist culture and one of the things they value is giving back to their own community, so they donate. Therefore, I think that the kind

of values that you [George Hara] presented would be very welcomed in Burmese society. Furthermore, I think that Myanmar is at a very important point, as they are transitioning to democracy and we have to make sure that this continues, so we have to nurture the middle class and lift the poor up to the middle class."

Intervenant

"I am a representative of Suzuki Education Group. We run some universities in Japan and some other schools, as we are one of the largest education groups in Japan.
For ten years we've been helping African people to access to our universities, especially in the medical and economic field; the reason for this is that we believe that Africa has rich nations, traditions and cultures but they aren't really focusing on what they have. For example, we have a student coming from Benin, who's studying herbal medicine at our university, as he believes that Africa has rich medical plants that can help people in Africa in a cheap way. Many Africa countries face the problem of very expensive medicines, so he believes that he can be helpful by using traditional herbal medicine. His aim is to create an herbal medicine research institution in Benin, to provide medicines instead of the expensive ones, matching the constitution of the local people."

Mr. Namura, Astrophysicist, Berkeley University

"Initially we were talking about disparity between rich and poor, which I see today in the US, and may apply to Japan as well.
Two things are quite important and I don't know how to solve them. The government declined support for higher education and that's quite serious, especially in public schools. Therefore, what was previously decided by the governments is now being decided by the rich people.
As university persons, we are desperately trying to hire some minorities, but we don't even have candidates, so the problem is at a lower educational stage in poor areas. We have to solve the problem of fixed classes and rich and poor regions. So, I think it's really important to focus on elementary schools, we've to do something there."

Intervenant

"I think it all starts from the environment. Emotionally, if we can take everybody and emotionally say "you can", they can. If people have sustainability and they have the goals, they can, they're empowered. That's where it starts.
You mentioned collective activism. If everybody gets together, they can, once again.
I think that the history of mankind has always been individualized and war-like, and I don't this is going to change much, which I think it's a shame. I love the values and the impacts that have been presented here today.
I happen to think that corporate America and corporate regions from all over the world, they are there because they create value for the people, so I do agree with what Mr. Hara said. Though every piece of the system has to be willing to do it, and I don't think they will, because money is very important and they want things, and this doesn't seem to go away at the moment.
I think that it's the government's job to check all the businesses, as businesses are risk, because they don't live if they don't innovate."

Intervenant (The Special Adviser to the International Crisis Group)

"As I listen to all these presentations, I wonder how they address one another and become one single conversation. There is a wonderful example on the application of information technology to particular problems, but the problem is whether to address the global problems of increasing inequality and, in the developed economies, a very marked disentrancement of the middle class. I want to bring the conversation back to this challenge, it is a brave thing to be talking about capitalism, but I think this is the right time to do it.

There is a failure to notice a tremendous systemic change in capitalism, which also has political effects. The question is whether we dare to bring a change to this macrostructure, as all the changes proposed today will then enter this structural reality."

Richard Musukwa, Minister of mines and minerals development, Zambia

"The mining industry in Zambia was largely parastatal under the Zambian mining corporations, that provide health facilities, education and even sports. With the privatization of the mines, we've moved to shareholder centric-capitalism and the mines are undertaking such programs anymore, which has given rise to a bit of hostility from the people.

Our desire is to see that we can have public interest capitalism in our country, which will be a win-win situation for the people and for the investors."

George Hara, Chairman of the Board, Alliance Forum Foundation

"I and Mr. Goda have been visiting Mozambique. In Mozambique mining companies maximize their profits and these profits will be sent overseas as these corporations are going to make a concession by the introduction of the AMF and the World Bank, so almost nothing is left in that country. This is a major issue that we have to face and solve. Many African, Latin American and Asian countries don't have any benefit by bringing foreign direct investments, from the point of view of the people. Form the point of view of the governments and of the UN, it is good, as GDP and export grow, and these are the only numbers the World Bank is watching at; these are the criteria we have to change in order to create a better society all over the world."

THIRD SESSION

Sarbuland Khan, Senior Chancellor of UNWTO

"I have had the pleasure to cooperate with this conference from the very beginning, as I was the ECOSOC director at the beginning and in 2000 we launched the first UN ITC task force for development. Before that, the UN wasn't tuned with the digital revolution. It was a great innovation at a time, even because CEOs of the private sector were invited for the first time ever, in order to talk with ministers and institutions about how to promote digital development in developing countries, so that those countries can grow their economies at a faster pace.

This task force has worked for five years to help developing countries and to mobilize not only the governments, but the private factor as well. I have to admit that after these five years (2001-2006) the digital revolution was really successful. For example, in Africa, the rate of penetration of mobile phones increased from 3-4% to almost 50%. It was quite a remarkable transformation, as we connected Africa. Now connectivity in Africa has moved to smartness, as we have Smart Africa.

The IWC is another application that can be used to transform education, health, environment... now we have a new generation of technologies, like the blockchain technology. A new digital era is taking place. We are very proud that the UN played a very important role in making this happen, although UN aren't usually seen as an organization that can contribute to this kind of transformation, but they did. Even if we have made a lot of progress, a lot has still to be done, therefore we have this wonderful challenge to look at what can be done."

Giulio Valeri, ICT's OCCAM Advisor

"The call of the WFSEC project is to use innovative services and technologies to support countries to develop adequate, rapid and efficient food security and safety policies. This aim is achieved starting from the small villages around which the support network has been developed. The first circle represents the districts in the villages, the second one the local institution in the country and the third one the service providers. The fields for which the platform has been created are several: e-agriculture, animals, food, water, plants, irrigation, telemedicine, human nutrition. The service users of developing countries will be able to benefit from the skills given by the service providers in order to transfer knowledge and solution as well as fastest skills development.
Internet of Things (IoT), wearable technologies and the mobile devices are the new frontiers of digital solutions and widely used by the WFSEC platform: the information are collected into greatest advanced data processing such as BigData, Artificial Intelligence, Predictive Analytics and Smart Contracts. The Infopoverty Hub connects the Service Users directly with Service Providers as research centers, universities, and laboratories. The Italian Association of the Agricultural Science Societies supports the OCCAM project with all his expertise in different fields such as agronomy and plant productions, crop protection, economics and agricultural policy and so on."

Paolo Giancane, ICT's OCCAM Advisors

"How it works the Service Request Workflow: the request starts from the End users so, for instance, a farmer, a doctor on the ground, or any person enabled by the system to the workflow system: the End user inserts request information, attaching photos, and submits the request. The District service validates the request and inserts further information (notes or attachments), provides initial feedbacks and, if the problem can be solved at the District level, then a solution is sent back to the End user; otherwise the District organization can share the information received to the National center. The information is transferred or shared across the channel and available through the workflow digital system without the use of email and whatever. It's important to highlight that at the organizational level there is total centralization of information and total control from the authority of the process. The National center analyzes the request topic, monitors the environments, can assist the information in conjunction with other potential requests, then submits the request to the Service Provider which may be a local organization, hospitals, national centers and so on. The Service Provider, finally, eventually analyzes the problem received, provides diagnosis feedback, sends an initial solution to the National center and then the District center shares results and all the information, the data, the knowledge accumulated can be connected to any intelligence service.
Key features of the Infopoverty Hub:
- Desktop and mobile smart user experience/Smart input by image, text, voice recognition and geolocation
- Profiled users with secure web access/User access auditing and data history tracking
- Web DBs to store data/metadata, media and documents/Georeferenced data entry and geo-visual data navigation

- Centralize data collection, validation and sharing/User permission and restriction on visibility editing and export/Workflow notification engine
- Integration and synchronization with external data sources/Interoperate with external operative/analytics tools and services/Scalable in functionalities and operational modules
- Integrated with Health Food Security e-Center IoT and other AI services"

GIULIO VALERI PART TWO

Talking about Magnolia, they are explaining how they identified the source of this disease and how they found a cure.

The choice of Magnolia is not accidental…
In Africa, because of a parasite, many Magnolias have become ill and no pesticide could stop the epidemic, and every time the parasites became stronger and more voracious. Several specialists in the world were then asked and one of these, after careful analysis, identified that the parasite that ate only the leaves of Magnolia, came from South America (probably present in some non-disinfestic plants from those Countries) where, however, it had an antagonist - a bee - that ate only its larvae. So, these bees were imported, reproduced in large numbers, packed in bags and thrown by airplanes in the territory where there were the Magnolias. In this way the epidemic has been stopped. This confirms that the sharing of knowledge through the current ease of communication can make it possible to quickly and effectively solve problems all over the world.
The colleague of ACRA who has followed this story in the first person, can give you more details.

Projects realized by **OCCAM**:
- Dagarà, Ethiopia
- Villa El Salvador, Perù
- San Salvador Norte, Republica Dominicana
- Sambaina, Madagascar
- Navaho Hogan e-center
- Mahobong, Lesotho
- Meis el Jabal, South Liban
- San Ramon, Honduras
- Borji Ettoull, Tunisia
- Jarapa, Ghana

H.E. Amb. Paolo Zampolli, Ambassador <u>World Artificial Intelligence Org.</u> Director

"Giving cash without transparency and accountability is a way that does not empower local economies. New technologies bring more accountability and deliver sustainability. Culture and technology will empower local communities and increase the GGP for future generation. Farmer can benefit from the use of drones and also mobile application available to sale directly to consumer rather than going through intermediaries. Surveillance drones can help security and domain for fighting illegal fishery which can usually affect African countries for about 2% of the GGP. Drone delivery with doctors are currently used in Ruanda to save life by delivering medicine supplies. AI (Artificial Intelligence) will help medicine and education, and will help to prevent epidemics, optimize resources and dramatically reduce existence of health cost and care. Microsoft with smart traps is a default front of epidemiology and developing system to prevent and predict epidemic outbreaks with the help of the AI and mosquitoes.

Smart traps collect data of over 100 million samples of mosquitoes to be analyzed in order to predict future outbreaks.

People is often scared of Artificial Intelligence, and we are concerned that we're going to lose jobs and things will be different but AI is so much important because, for instance, streets would be more safe, autonomous car would reduce the risk of accidents. Nowadays, we all have smartphones and this is called Intelligence Assistance which is not Artificial Intelligence. It's crucial the fact that we have the possibility to analyze all the data about, for instance, terrorist organizations and their propaganda. AI give access to education and to understand the issues regarding medicine: it would be a real revolution and would make a great different for example face recognition and analysis of data".

Sonia Sachs, Pediatrician and Public Health Specialist

"We have just published the Millenium Villages Project and this is our first public discussion about it. This is an idea that came out of the UN Millenium Project that is an initiative which try to reach the UN Millenium Development Goals. Actually, we manage in many remote areas of 10 countries in Africa to do this initiative of an integrated world development approach to see if this very poor communities could actually have health system and educational system, food security, infrastructure, etc. Two years ago, we took an analysis and in fact it answers the question that, yes, it is complicated, not everything went as we wanted to, but it is overwhelmingly positive. I want to focus on the health system for what ICT and the use of telephony it's been crucial and made a huge difference and it's because of that that four years ago we started a campaign called *The One Million Community Health Worker* campaign, and that's because in the African context we realize how difficult and critical is to have professionist community health workers. So, we have committed to train professionist community health workers properly paid, properly supervised and smartphone empowered so, for ten years these communities of health workers were using regular phones in the beginning and then, 5 years ago, a smartphone with an application called CommCare: that showed how transformational change is for community health workers and for the community health system have the phone because it helps as a support and driver of information and actions. Besides it collects lots of data which are very important because they inform the community manager what is the disease, in real time, and that is really important in terms of being able to adapt interventions and adapt the management because with the GPS the community can help workers managers to understand if they are doing the right things. Having a smartphone it's useful as well, to inform about emerging diseases and new diseases: there will be little outbreaks but they will not be so devastating. Ghana it's one of the State that is staking it up and they now have 20000 professionist government paid community health workers. The UN aids has decided that there should be an end to be epidemic and just control the epidemics so, two years ago, we start a new strategy called 90-90-90 which is 90% of people who are infected and that should be aware that they are infected. In addition, Ghana allowed us to scale the telemedicine program."

Intervenant

"Thanks for the honor...Seventeen years ago I just started an organization to address issues of poverty and training youth especially of those areas like Africa, and Hispanic America. The entire idea is to evolve the ends of approach on education so that the students can learn and can contribute to the work that is done. In the long terms it will help economically but also from the point of view of the resources."

GLORIA STARR KINS

"I encouraged him to come and speak because he is working with thousands of students under the poverty line and he has put in himself a tremendous amount of investment in this. He is a multitalented, brilliant, famous doctor but what he is done for his children under the poverty line, including them and many of them have become outstanding attorneys, doctors and professionals."

In this moment President Saporito awards Gloria with an Infopoverty Prize for her devoted support to the Conference and to OCCAM since 2001.

Christopher Smithers, President of Smithers Foundation

"Right now, I'm involved with many projects in South Africa (Mozambique) to do with research and training for mental health issue. This global mental health research has been created in Sub-Saharan Africa has a research hub which is called Pride SSA and is aimed at implement and disseminate sustainable and scalable evidence based practices in Sub-Saharan Africa. Pride SSA is, also, a foundation for professional development and the university of Mozambique. The hub comprises both research and capacity building components: the first one take place in Mozambique, the second one in other State too, like Zambia and Botswana. Each country will contribute to work together to the hub and that include many actors needed to develop test, implement and sustain community base services to prevent and using evidence based practices. Now we moved in Johannesburg for the first training implementation science. This project is a small example of what we can do in Africa working together in teams, with universities, foundations, and besides this can be done with very little money. This kind of work that we do can be done also for other issue as water, farming, etc."

Elena Scanferla, Managing Director ACRA

"I'm here to represent Fondazione ACRA, an Italian NGO created in 1968, and this year we celebrate our 50th anniversary.
We mainly work in rural areas and we try to bring sustainable solutions in order to eradicate poverty. We help communities to make them reach resilience and we always work in coordination with local authorities; we try to build strong relationships and partnerships with local governments, the academic sector, the private sector and the local civil society organization.
ACRA is now working in 14 developing countries, where we mostly work in the field of education, water and sanitation, energy, environment and food security.
We are developing a water program in Senegal, named "One house – one tap". The objective of this project is to bring safe drinking water and sanitation services for the communities, i.e. we reach about 6000 beneficiaries.
It's a project started in 2005, which is being developed in three phases, and we're trying to engage several donors and partners.
The main activities of this project are to bring infrastructures, namely a reservoir, a pipeline in order to get to the tap in each house. We try to implement the Water Safety Plans, promoted by the WHO.
We also develop a Behavioral Change Campaign, in order to promote good hygiene practices at home and at schools.
We implemented an app, which has been very useful for us from the beginning until the post-evaluation. The app allows us to collect data from the waterpoints on characteristics, users information, infrastructure and risk factors threatening water quality.

All these data are then being transferred to a map, in order to clearly visualize the situation and take action. When a risk is detected, the Water Safety Plans Committee will study the map and find a solution. In our opinion, digital platforms are very important as they can help identifying risks, needs and how effectively we are performing. Once we phase out a project, the idea is to leave the app and all the collected data to the local communities.

This type of platform could be useful in other sectors as well. For example, in Chad, we built cereal banks all over the region, and we used the same kind of app in order to monitor the amount of cereal which was stored. There are many ways to improve the efficiency of projects and interventions in fields like education, agriculture and sustainable water use.

Technology is very important to reach people that without it would be excluded. It's inclusive and it help us the reach rural areas, that usually not even governments manage to reach. Therefore, technologies are an important asset for NGOs and local governments to build sustainable development, to measure their impact, to be accountable and to be transparent."

Giulia Giuffrè, Board Member and Marketing Director, Irritec Group

"Irritec was born in Italy in 1974 and is now one of the leader in drip irrigation system. We reach 140 countries worldwide, thanks to our manufacturing and commercial branches as well.

The UN objective is to create a secure and sustainable food production system by 2030. Our mission is to make farmers' life easier and we aim to ensure that every waterdrop is used as efficiently as possible, minimizing the ecological footprint.

Agriculture accounts for about 70% of global water withdrawals and according to FAO, by 2050, the world population is expected to grow to 9.7 billion people. Global demand for agricultural and energy production is therefore expected to increase by 60% for food and 80% for electricity.

Drip irrigation can help saving water and increasing agriculture productivity. It allows to distribute water in smaller entities but more frequently. Thanks to drip irrigation we have up to 90% of efficiency, which can help save around 45% water if compared to surface irrigation.

This kind of irrigation can increase crop yield up to 90%, compared with surface irrigation. Furthermore, it allows us to consume less water, less energy and less fertilizers; it reduces the risk of disease, because drip irrigation keeps the foliage dry. Last but not least, it allows for utilization of saline water.

Drip irrigation market is projected to be the fastest growing irrigation market at a growing rate of 18% in the next five years.

Drip irrigation essential components are drippers, irrigation valves, polyethylene tubing, fittings and filters. Drip irrigation can also be used to apply fertilizer in liquid form through fertigation, reducing the application of excess nutrients and increasing crop yields, which minimizes nitrogen volatilization.

It is important to train the farmers and create some professionals who can become point of reference to the farmers to ensure the longevity of our product.

We think that our mission is perfectly fitted for the aims of the World Food Security e-Center and the UN SDGs."

Ivan Shumkov, CEO & Founder Build Academy

"I started Building Academy 5 years ago which is starting a platform for professional solutions in the building industry. What we do is education on one side creating upskilling people around the world who are working in this field and, in the same time, we are also market place for solutions in the industry. 90% of the world live in sub-standard conditions and they are often exposed to nature disasters and unlivable conditions. Our work in the past years has focused on a lot of collaborating with

international organizations like United Nations, World Bank, in developing solutions for smart and resilient cities: we work particularly on SdG 11 for smart and resilient sustainable cities. Our mission as building academy is to empower professionals and companies to learn, collaborate and build better. As a market place we are connecting the different constituents in the industry: there are many people in the industry who are incredibly skilled, however, they live in places that don't have access and don't give them the opportunity to intervene in these projects where it need to. On the other side, in places like China, for example, there is one architect on every 10.000 people living, in places like Italy there is one architect for every 400 people: so sometimes we have to match the link between the supply and the demand of talents, that's why we are connecting our main clients and governments with designers, engineers, investors, and so on. And because of this connection we have completely reinvented the way the procurement in the building industry works: traditionally 80% of the UN projects is going to fail because of the inefficient procurement process; 80% of many other projects is going to fail because there is a miss match between the demands and the needs. Therefore, instead of this very inefficient procurement process we have created something which is called *Crowd-solving Challenges*: we work with local communities and representatives of the clients, we work with global experts and with companies and professionals all over the world. How the process works: the clients comes to us and tell us the problem, then we study the concept design and the planning for the entire process and then we invite professionals, experts and companies to solve this problem. We align the projects with new technologies, giving to our clients a global innovative solutions, wide exposure and global outreach and building a grass-root movement. So, the solutions instead of being imposed by a top-down process, they're built from a bottom-up process with the participation of the communities."

Mikio Kimura, CEO, TORUS Inc.

"The Torus company focuses on the Real Estate Technology. The other estate of legistry, considered from a horizontal side, it is an individual view. Analyzing the Big Data raised before, it can be found a new feature with a particular individualism, like the Panama document. As a company we use artificial intelligence to analyze it in order to be an analyzer real estate. Working this way, it creates marketing concertation and we discover that asymmetry of information causes disparity of wealth: it is possible to find and extraordinary asymmetry in the real estate industry. Improvement requires digital innovation; efforts made by individual firms alone are not sufficient because it requires change as a social infrastructure.

Estonia is a quite interesting country: the capital city, Tallinn, has a technological advanced urban district and an old town which preserve the historical aspects of the city. The population is just 1.3 million, so it's a tiny country but it's a very competitive one. Everything in Estonia, excepting for marriage, divorce and house selling, can be done online, therefore, easy procedures make burocracy simpler. Time-efficient electronic solutions save money and more. Every people has an ID card which are all collected in the databases of, for instance, hospitals, medical centers and so on. Estonian are very confident about the use of a powerful security model through the ausilium of blockchains.

After getting independence from URSS in 1991 Estonia, had no sufficient money to pay for giant vendors so, instead of building an e-Government, Estonia started from scratch. Skype was a very successful tool for Estonia's growth, in fact Skype entrepreneurs have gained enormous profits and the founders of Skype were able to invest in new venture entrepreneurs, starting to be themselves the new venture entrepreneurs: the Ecosystem of entrepreneurial and investment was born in Estonia, it is like the Silicon Valley of Europe.

In addition, the government played a crucial role in Estonia's growth, infact the government keeps focusing its main force on IT and BIO, considering the collaboration of industry, government, and academia as well. Nowadays, Estonia attract foreign investments and talents, foster enterprises and earn

foreign currency through exports. Estonia has simplified tax systems too, for instance, Corporations are not subjected to taxes as long as profit is kept internal. Their tax system is so simple that it almost puts accountants out of a job. The legal system has been also so simplified that it has almost put lawyers out of business"

Rehan Chaudri, Principal Peak XV Advisor

"Over the last 9 years the bitcoin blockchain has accumulated an impressive work track of security, reliability and resilience. In doing so, bitcoin has created a new monetary system and market infrastructure, that is open-source, peer-to-peer, secure, decentralized.
There are few costs that can occur in intermediating; the cost associated with banking, the cost associated with extra-legal assets and strained capital and the cost of corruption. These three costs affect those who live in extreme poverty on a daily basis.
We came up with a solution to address these three costs, using the blockchain: transactions, time steps and trust. When a transaction is registered you can be sure that it has occurred and the record cannot be deleted. Blockchain allows us to prove that a document was published before/after a certain time, and this can reduce legal costs. Blockchain allows individuals and families to take control of their finances.
What is needed for blockchain to be effective is a little bit of infrastructure and a lot of training. Blockchain and bitcoin are certainly a technological advancement, that have the possibility to give benefits to people around the world."

Robert J. Cipriano, CEO, AllHumanity

"It's necessary to close to gap of action that exists between the UN, its agencies and all the humanitarian movements. At AllHumanity we bring together people, ideas and technology and communicate that to the world.
Today I'd like to introduce the UpliftTV, that can create contents, such as documentaries, non-profit interview programs, non-profit featured broadcast, and any humanitarian program, in order to share their action with the world and open the heart of the people. The stories I've heard today need to be told, and UpliftTV is here for that. What I am offering is an opportunity. The time is now."

Naiyer Imam, Chairman and CEO of *Advanced Medical Imaging and Teleradiology, LLC*

"I am a physician. I've a 20 years history of being in healthcare. At FirstMedicine, our vision is to create a win-win-win healthcare model, that helps improving people's life and wellbeing and also reduces its costs: it's a win for the patients, for the governments and the payors, and for FirstMedicine. An historical problem in healthcare has been that most patients present symptoms very late, either when they are very sick or when conditions become unbearable, particularly in developing nations. The reactive care model leads to significant costs, expensive procedures and much higher mortality a morbidity.
The actual solution is proactive care, which has to do more preventive medicine and more aggressive approach in identifying people before they become sick. Though, how can you develop this system on a national scale and can developing nations leapfrog legacy problems?

The main economic and social costs of Healthcare are the results of the delayed hospitalization and of the chronic and infective diseases management. Implementing a proactive approach is difficult because there is no universal system worldwide, people are reluctant to take preventive measures and healthcare is not easy to access and inconvenient. There is the need is for a community wide system that links healthcare facilities with other agencies, in order to monitor patients; a government system, that has a long view of wellbeing and control of costs, is needed; there is also the need for easier access to healthcare.

The UN Global Fund has shown that implementing a collaborative system can decrease mortality by 1/3 in malaria, tuberculosis and HIV.

We believe that the implementation of our community-wide information management system would have similar benefits to entire societies and nations.

We also believe that impactive healthcare information systems should be provided at a deep discount, similar to drugs in the pharmaceutical industry.

We have created a product, with our partner Syntranet, that allows to create connected care communities, integrates and normalizes clinical and social information, coordinates care-teams, manages health guided by advanced analytics and reports on performances and costs.

Syntranet was developed by Stanford engineers, with a 100M investment. It has been deployed in more than ten countries all over the world to share information and coordinate workflows; it has also been deployed in 11 US states to help health plans, hospitals and community organizations coordinating care and managing health."

Syntranet is a community wide healthcare information and platform system which is more modular and scalable than traditional EMR systems. Syntranet can stand alone EMR or function as the bridge for all other systems.

Just as it makes sense for the pharmaceutical industry to provide drugs at a discount for humanitarian purposes, we believe it is time that healthcare information systems are viewed the same way, assisting developing countries in leapfrogging to a preventive technological approach with lifesaving and cost cutting potential.

Norma Denise Mitchem, PhD Education and government/corporate affairs consultant, former advisor to the former Howard University President

"I want to talk about education in African countries. Today 32.6M children of primary school age 25M adolescent aren't going to school in sub-Saharan Africa, the quality of education also remains a significant issue but there is the possibility that technology can be a part of the solution.

A study carried by the French Development Agency and UNESCO showed that ICTs and education offer a large number of possible benefits, these include access to low-cost teaching resources. This means that there is a huge potential to reach those excluded from education systems.

There are 650M mobile phones users in Africa, more than Europe and the US combined. Rural areas will be soon reachable thanks to ongoing developments. Undersee cables provide connectivity to the continent. Access to wire internet remains low, with 11% of households connected, but mobile internet access is already helping the region to catch up.

This rapid expansion of mobile phones services contributed to region's economic and social development. This is particular in the area of financial inclusion, mobile banking, mobile health and farmers' productivity.

With the help of Gloria Starr Kins we'll be rewarding with 200 fully paid scholarships students from Africa to attend schools at Florida University."

Luis Galvin

"Nowadays kids can use a computer from wherever they are, provided that they are connected. I've been trying to help the community of certain areas in Mexico.
I partner there with a company called DTA that draws the ideas from the universities and help us developing some local technologies.
We need to understand that service providers look at their numbers before giving coverage and the highest challenge to overcome is the high capex in the low rural areas. So, we have to come up with solutions at a local area. We've been able to provide connectivity and all the services that come with it: education, telemedicine…
There is need for a rural broadband to be deployed. Once we have the network, it'll impact all levels; for example, we're now looking for drones to deliver medicines to unaffordable areas.
On the other hand, the ethnic group of the region manages to preserve its culture and its traditions, as they're very proud of their own heritage."

Maria Grazia Cavenaghi, OCCAM Liaison officer to the UN

"When Pierpaolo [Saporito] came to me with the idea of this conference 18 years ago, I had just opened the European Parliament Office in Milan, and I was concerned by the idea. At the time the discussion was about the digital divide, whether technologies would be profitable or not. We have come a long way from 18 years ago, by producing and delivering important technologies to humanity.
I'll briefly talk about the World Food Security e-Center, which is something Pierpaolo Saporito thought about, which was presented in 2015 at EXPO in Milan. It's considered one of the best solution that came out of that fair. We're trying to create a hub, where all the world can connect and which can gather a network of universities.
EXPO 2015 has had the theme "feed the humanity". What this e-Center is trying to do is giving the best solutions to problems of nutrition, food safety, health, agriculture, pesticides and irrigation systems. Collecting all these data in one hub that will then be able to give back the services at a low to no cost, is the whole point of the World Food Security e-Center.
This is what OCCAM has been trying to do these 18 years, bringing people together, bringing humanity-driven companies together.
Our objective is to create this hub and understand the specific needs of the users, finding solution to help bridging the existing gaps. The digital agriculture is the connection between the ICTs and the agriculture ecosystem to promote sustainable development guaranteeing safe and nutritious food at affordable prices.
Sharing knowledge and transferring technologies is the best way to fight poverty and defeat the causes conflicts, that are based on the fight for natural resources."

Conclusive round table

Chaired by Pierpaolo Saporito, with the chairman of the previous session, resumes the general discussion and analyses the projects, individuating the common purposes for a convergent action in the ambit of the Infopoverty Program. With the intervention of last speeches has been also outlined the Final Declaration of the Conference.