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Insights & inspiration for social innovation

- 20 Ways to Use ICT in Disaster Relief and Resilience Programs
- 26 Let's Upgrade Development
- 30 Mobile Can Be the Most Transformative Technology of Our Time
- 32 8 Digital Life Skills All Children Need, and a Plan for Teaching Them



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#### FILIPINO FARMERS TO Benefit from climate Smart technology

A project called "Improving Productivity in Agriculture through Climate-Smart Technology" or ImPACT Philippines has been introduced to help smallholder farmers in Benguet to manage their use of farming inputs. During the launch of the project in Quezon City, Philippines, Chairperson for the Senate Committee in Food and Agriculture Senator Cynthia A. Villar stressed the urgency to adopt measures that will address the effects of climate change in agricultural production.

From identifying risks and measures, which can help people prepare for emergencies, to sustaining the effectiveness of aid delivery and disaster response operations, Information and Communication Technology (ICT) has established its importance in humanitarian response and disaster resilience.

У f /AsianNGO









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#### SRI LANKA IS MARKETING Skilled careers to A New generation of Workers

The problem is so acute that some companies have begun to import labor in small numbers, while paradoxically, the number of Sri Lankans seeking foreign employment, often in the same sectors in which labor is needed at home, are high among the 25-34 age group. And although vocational training providers, both public and private, are moving away from supplydriven approaches, market demand is proving no match for a reluctant workforce.



#### BUILDING & REBUILDING Sustainable homes

Innovations are born out of the constant need for the next best thing—may it be to improve processes, increase profits, or simply to push the boundaries of the status quo. Innovation has long been a buzzword in many industries, and the housing sector is not exempt from this human tendency to set our sights on wanting to be at the cutting edge of progress.

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# **Editor's Note**

It is imperative that the development sector evolves with the changing world. The most important innovations today are those that interface an idea with technological advancements that aim to push humanity to its full potential. While the current landscape can be intimidating, navigating through it with a clear purpose can help further the causes of organizations and corporations. Thus, in this issue, we focus on how the digital sphere is reaching out to mankind-especially the vulnerable and the excluded—as we all try to march toward the greater good.

In, "Ways to Use ICT in Disaster Relief and Resilience Programs," author Alina O'Keeffe of the Aid and International Development Forum discusses how technology has immensely served well disasterprone areas and victims of calamities. Shaleen Rakesh and Sachal Aneja of VSO talks about reducing inequality and helping the most vulnerable with the use of simple technological gadgets in the article, "Let's Upgrade Development." The organizing team of the ICT4D Conference shifts the spotlight to mobile phones as a powerful tool in, "Mobile Can Be the Most Transformative Technology of Our Time." In, "8 Digital Life Skills All Children Need, and a Plan for Teaching Them," Dr. Yuhyun Park, founder of Digital Intelligence<sup>™</sup> (DQ), informs readers of the importance of DQ, "the sum of social, emotional, and cognitive abilities essential to digital life."

And as we are on the topic of evolution, we, too, are undergoing an evolution of sorts, by giving you a modified iMPACT magazine. A few tweaks are in place, such as new sections and a little visual realignment. The Sector is our features section, which encompasses relevant themes in the development sector-in addition to the current issue's theme. The In the Field section aims to incite positive change through stories of innovative projects, of lasting and new partnerships, and through aspirations of leaders and constituents. These additions are proof that we accept the challenge of having to constantly reinvent, to stay current, insightful, and inspiring.

We are all drivers in this fast-paced arena, but the goal is to be on the same path to social good. And when different sectors work together, the possibilities are as infinite as the burgeoning digital space.

### PREMIUM PARTNERS







- The iMPACT Editorial Team

Publisher & CEO Sreenivas Narayanan

Managing Editor Vanessa Abellon

**Editorial Associate** Ian Jamotillo

Director of Business Development Aru David

**Business Development Manager** Max Bengtsson

Senior Business Development Associate Hugo Delaune

> **Creative Director** Kelvin Tee

Senior Multimedia Designer Nicole de Leon

> Multimedia Artists Joseph Lontoc Policarpio Velasco Ramon Camposano Venus Reverente

Guest Art Director for the Issue Dino de Ocampo

> Web Administrator Chris Daria

For Subscriptions subscribe@asianngo.org

For Contributions contribute@asianngo.org

For Partnerships partner@asianngo.org

For Sponsorships & Advertising advertise@asianngo.org

> For General Inquiry info@asianngo.org

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# Contributors



Alina O'Keeffe is the marketing manager for the Aid and International Development Forum, having previously established a charity for refugee children in Eastern Ukraine, United for Ukraine Children's Foundation. Alina is also a published author. Writer, "Ways to Use ICT in Disaster Relief and Resilience



director at VSO India. He has over twenty years of experience with national and international development organisations. Shaleen has a degree in Mechanical Engineering and completed his MBA from S.P Jain Institute of Management and Research in Mumbai. "Let's Upgrade Writer, Development"



Programs'

Michele Soh is an associate director for communications in Asia-Pacific for Habitat for Humanity International. As a communications professional in the Asia-Pacific region, Michele has over 15 years of experience managing successful multicountry campaigns. She has developed brand-positioning and regional corporate social responsibility (CSR) projects focused on community, environment, conservation and youth initiatives.







country director of World University Service of Canada (WUSC) in Sri Lanka. WUSC is a Canadian nonprofit committed to creating a more equitable and sustainable world. With a particular focus on youth and women, WUSC provides education, employment and empowerment opportunities to lift individuals and communities out of poverty. (emcintosh@wusc.ca) Writer, "Sri Lanka is Marketing Skilled Careers to a New Generation of Workers"

Kurt McClung has been a writer and creative consultant in interactive media for over twenty years. He has written, adapted, or developed 70 intellectual properties for thirty entertainment studios and publishers. Writer, "Bridging the Digital Gap One Mind at a Time"



Pacific corporate engagement manager at VSO India. Sachal leads on the corporate engagement strategy for VSO Asia-Pacific, managing in the Knowledge Exchange (corporate volunteering) and CSR programme partnerships.

Writer, "Let's Upgrade Development'



**Loek Peeters** is the co-founder and CEO of HumanSurge. Writer/Interviewee, "Providing Development Aid Workers During Emergencies"

#### The Organizing Team of the ICT4D Conference

Writer, "Mobile can be the most transformative technology of our time"

Dr. Nader Imani is the CEO and the head of business field education at Festo Didactic Inc., U.S.A. Writer, "From the Industry, For the Industry"

Tris Lumley is the Director of Innovation & Development, NPC (@ trisml). Writer, "Leaping Forward in Technology for Social Good"

Jenny Davis-Peccoud, Paul Stone & Clare Tovey Writers, "Achieving Breakthrough Results in Sustainability"

Lauren Turner Writer, "Tips for Profiting from CSR Activities"

James Sutherland Writer, "The ChildSafe Movement and Responsible Tourism: Our Shared Responsibility"



Dr. Yuhyun Park is a World Economic Forum Global Young Leader, an Ashoka Fellow, an Eisenhower Fellow, and a recipient of numerous honors, including two awards from UNESCO. She has a doctorate in Biostatistics from Harvard University. She is the founder of DQ Institute<sup>™</sup>, a think tank committed to improve digital education, culture, and innovation through cross-sector collaboration and big data research.

Writer, "8 Digital Life Skills All Children Need, and a Plan for Teaching Them"



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# **Events**

#### 9th Asia Sustainable Palm Oil Summit

Kuala Lumpur, Malaysia (July 31-August 2)

With the theme "Sustainable Challenges Moving Forward and Improving Palm Oil Traceability," the 9th Asia Sustainable Oil Palm Summit will focus on the role of smart technologies in plantations to meet sustainable targets.

#### EdTech Asia Summit 2017 Ho Chi Minh, Vietnam (July 29-30)

In the heart of the ASEAN community, Ho Chi Minh City is fast becoming a leading business hub for entrepreneurship and leadership, and will provide the perfect environment for cutting-edge discussion and engagement focused around the future of education.

#### CIO Leaders Summit Manila, Philippines (July 12)

Covering areas like Cloud Computing, Data Privacy, Public Finance and ICT procurement, ICT education and a code of ICT Laws, CIO Leaders Summit, organized by the Media Corp. International, will be held in Manila, capital city of Philippines.

#### Green Infrastructure and Poverty **4**Reduction in the Pacific Island Countries

Port Moresby, Papua New Guinea (July 26-27)

ADBI-funded government officials from 10 Pacific island countries and officials from ministries of finance are expected to gather at the "Green Infrastructure and Poverty Reduction in the Pacific Island Countries" in Papua New Guinea to tackle innovative ways to reduce poverty and foster sustainable growth by developing cost effective green infrastructure projects.

#### Singapore MICE Forum Singapore (July 27-28)

At a macro level, the Asian market continues to hold great promise given her rising affluence, reasonable GDP growth, and regional collaborations. With all these factors at play, how has our industry leveraged on opportunities in "our backyard"?

#### 62nd International Conference on ICT for Sustainable Development Hiroshima, Japan (August 1-2)

Tackling the relationship of technology and sustainable development in the continuous globalization of our world, the 2nd International Conference on ICT for Sustainable Development will be held in Hiroshima, Japan, with theme "Resilience."

#### Stop Slavery Summit Hong Kong (August 29)

Corporations, non-profit organizations, and leaders gather to raise awareness toward slavery, and to tackle how technology, data, and regulation play a role in eliminating the crime.

#### Asia-Pacific Housing Forum • Hong Kong (September 4-7)

Organized by global non-profit housing organization Habitat for Humanity, the event will gather major stakeholders to discuss about poverty housing issues and to encourage affordable housing as the key for economic growth.

#### **Global Disaster Relief and** Development Summit Washington DC, U.S.A (September 6-7)

Organized by Millersville University School of Social Work Learning Institute, with the theme "Children's **Rights: Building Resilience, Protecting** from Harm, and Fostering Well-Being among Our World's Children," the summit will tackle national issues regarding children's safety and development.

### **10**<sup>IBTM China</sup> China (August 23-24)

The IBTM china attracts buyers, event planners, and all those involved in the decision making process for meetings, events, conferences, incentives, as well as those involved in booking and buying business travel/group travel.

#### Angel Investing Course Singapore (August 4)

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This Angel Investing Course was created with the aim to initiate new angel investors, to equip you with the skills to evaluate a start up, and to build a community of likeminded angel investors looking to support the regional startups and potentially secure greater returns as a community.

#### 12<sup>8th</sup> Annual International Conference On ICT: **Big Data, Cloud and Security** Singapore (August 21-22)

The Annual International Conference on ICT: Big Data, Cloud and Security serves as a platform for industry professionals, academics, researchers, scientists, consultants, and policy makers to interact and discuss various issues in big data, cloud computing, and IT security.

them.



With the theme "water and wastereduce and reuse," the Stockholm World Water Week will tackle the world's water issues, with focus on Asia, and includes current and emerging issues and challenges in the region's water sector, along with efforts of governments and

development agencies to address

#### **14 2017 Asian Evaluation Week** Hangzhou, People's Republic of China (September 4-8)

Co-sponsored by the People's Republic of China, Ministry of Finance Asia-Pacific Finance and Development Institute, and ADB's Independent Evaluation Department, the 2017 Asian Evaluation Week with the theme, "Evaluation for Policymaking,"

is a forum dedicated to promoting partnerships and advancing the evaluation work in Asia and other regions, such as Africa and Latin America.

#### **15** 4th Urbanization and Poverty Reduction Research Conference Washington DC, USA (September 8)

Hosted by World Bank, George Washington University, and the International Growth Centre (IGC), the 4th Urbanization and poverty reduction research conference will bring together academics and development practitioners to deliberate the challenges of sustainable urbanization in developing countries.

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# News



Amidst the ongoing conflicts in Syria, Yemen, and Nigeria-as well as the destruction brought by natural disasters throughout the globe-the United Nations (UN) Office for the Coordination of Humanitarian Affairs launched its highest humanitarian fund yet, with a total of \$22.2 billion allotted for 2017.

"The scale of humanitarian crises today is greater than at any time since the United Nations was founded," UN humanitarian chief Stephen O'Brien said. The fund, which is their largest appeal since the establishment of the yearly call in 1991, will be allocated into different resources and will greatly benefit more than 92.8 million of the most vulnerable people in 33 countries.

The amount of fund assigned for humanitarian aid saw a significant rise over the past 10 years, up to 400 percent increase. Natural phenomena, like droughts brought by El Niño, are putting communities at the danger zone, which led to the sudden increase of UN humanitarian fund over the past years.

"Funding in support of the plans will translate into life-saving food assistance to people on the brink of starvation in the Lake Chad Basin and South Sudan; it will provide protection for the most vulnerable people in Syria, Irag and Yemen," O'Brien said.

According to OCHA, 13.5 million people in Syria alone will require aid in 2017, while 8.5 million people suffering from famine in Nigeria are expected to benefit the aid. Despite of this, the organization revealed that some donor countries have failed to keep up with the demands of humanitarian aid, adding to the bigger problem of assistance in war-stricken and impoverished countries.

"The lives of millions of women, girls, boys, and men are in our hands. By responding generously and delivering fully on this appeal, we will prove to them that we will not let them down." The UN chief stated.

### **ASIA-PACIFIC DEVELOPMENT TO** TAKE A TOLL AFTER AUSTRALIA **CUTS ITS AID**

Australia's new budget reports could put select Asia-Pacific countries and their development sectors in jeopardy with its aid and assistance program predicted to fall for the next four years.

Australia's Official Development Assistance announced that it will halt its aid budget by 2018-2019 and 2020-2021 to secure an estimated 303.3 million Australian dollars that will be allotted for "other policy

priorities" in line with the Consumer Price Index. Department of Foreign Affairs and Trade (DFAT) confirmed that Australia's development assistance will indeed reach the lowest level in recorded history by 2021.

"There is an understanding that the aid budget is frozen until the federal government budget returns to surplus, which isn't a good forecast for people who rely on Australia's international assistance," Annmaree O'Keeffe of Lowy

### WORLD BANK GROUP LAUNCHES THE **DEVELOPMENT FINANCE FORUM FOR** THE PRIVATE SECTOR

The two-day Development Finance Forum (DFF) launched by World Bank Group was held last May 29 in Bintumani Conference Hall, Sierra Leone, with focus on inviting private investments on leastdeveloped countries.

In an effort to raise support toward least-developed countries, especially in West Africa, the Development

Finance Forum will give way for stakeholders to explore business and investment opportunities for marketbuilding alliance. In line with the project, the World Bank Group has put a budget of US\$2.5 billion for private sector investment in Sierra Leone, the first beneficiary of DFF.

"Under IDA 18, US\$2.5 billion will be available for supporting the private sector in countries like Sierra Leone. This is a good opportunity for the private sector to tap into funding from the World Bank Group to be able to develop industry and

Institute for International Policy Sydney said.

The cut in Australia's aid could impact the development sectors of some Asia Pacific countries—a mirroring of the country's assistance decline in Myanmar brought by their transitioning economy. Australia's ODA was met with backlash; with Greens Senator Scott Ludlam stating, "What an absolute disgrace that is. Why should we believe a single thing this government says about what may or may not happen in 2021?"

With its recent attempts into producing more sustainable jobs and strengthening

WHO. respond.

investment in the country," World Bank Country Manager Parminda Brar said.

Over 100 companies from different regions attended the forum with primary emphasis toward the

sectors of agriculture, energy, mining, and infrastructure, all of which require a lot of funding according to Brar. During the forum,

#### WORLD BANK GROUP

the country manager stressed the selection of Sierra Leone as one of DFF beneficiaries, highlighting the plethora of natural resources in the country and the native culture of entrepreneurship that is perfect for business and private investors.

The launch of the Development Finance Forum is World Bank's first step towards reaching least-developed countries and proving support in terms of investment. Resident Representative of IFC, Frank Ajilor says that DFF will cross into other West African cities such as Abidjan in Ivory Coast and Accra in Ghana. - IJ

its own economic growth, Australia's infrastructure spending pose a major threat to future assistance budget and organizations, such as UNICEF and

Several agencies and organizations have released their statement about Australia's budget cuts. Nigel Spence, CEO of ChildFund Australia, said that they are still figuring out on how to

"It's part of the core mission of NGOs to keep going, work with what you have and do as much as you can," he said. - IJ

#### SUSTAINABLE DEVELOPMENT TO OPEN MORE JOBS IN ASIA BY 2030

Asian cities can benefit from livability and livelihood improvements through sustainable and green development by 2030, according to a report by the **Business & Sustainable Development** Commission (BSDC).

At the Ecosperity conference organised by Temasek Holdings last June 5, investments in sustainable cities, such as high-carbon infrastructures could open 230 million jobs in Asia and produce \$6.91 trillion (US\$ 5 trillion) worth of market opportunities. Five trillion US dollars could be found in China, 1.1 trillion US dollars in emerging Asia particularly including India, and the remaining 0.7 trillion US dollars in developed Asia, including Japan and South Korea.

Amidst the outrage brought by Trump's decision to withdraw the US from the Paris climate agreement, the world's second biggest carbon emitter from the Paris accords on climate change, businesses will still continue exploring green developments, such as low-carbon growth, as predicted by BSDC.

Asian cities could benefit from lowcarbon transport investments, waste reduction in use of physical resources, and efficient building constructions. Enhanced agricultural systems through renewable energy and wider healthcare access are also expected by 2030 if countries will pursue sustainable development.

"Many of these opportunities will be in Asia. Last year, China was the top issuer of climate bonds, amounting to 246 billion US dollars, or 36 percent of the world's issuances. All these developments point to the fact that there is no better time to do well, and to do good," Temasek chairman Lim Boon Heng said. - IJ

# Numbers&Quotes



pespite being stereotyped as apathetic and egotistic, an insight report from World Economic Forum's (WEF) annual Global Shapers survey states that today's generation aged 18-35 show some care about global issues.

According to the report, which surveyed more than 26,000 millennials from 181 countries, 70% of millennials see bountiful opportunities for them and their peers, while 50% believe they can contribute to decision making in their home country.

Respondents were also asked about the most critical issues affecting the world today—with climate change being the most concerning, followed by global conflict and wars, and religious conflicts. Here are the results:

#### CLIMATE CHANGE AND ENVIRONMENTAL DESTRUCTION (45.2%)

 $\rightarrow$  Latin America/Caribbean – (51.8%)

 $\rightarrow$  South Asia – (49.3%)

#### 2 GLOBAL CONFLICT AND WARS (38.5%)

- → Eurasia (54.3%)
- $\rightarrow$  Middle East/North Africa (50.3%)

#### B RELIGIOUS CONFLICTS (33.8%)

- → Middle East/North Africa (45.1%)
- $\rightarrow$  South Asia (44.1%)
- → Eurasia (41.8%)
- → Europe (38.8%)

#### **4 POVERTY (31.1%)**

- → Latin America/Caribbean (40.4%)
- $\rightarrow$  North America (33.9%)
- → Sub-Saharan Africa (33.6%)

#### **GOVERNMENT TRANSPARENCY AND** CORRUPTION (21.7%)

- $\rightarrow$  Sub-Saharan Africa (32%)
- → Latin America/Caribbean (27%)
- → Middle East/North Africa (23.2%)

#### **G** CRIME (SAFETY AND SECURITY) (18.1%)

- → Sub-Saharan Africa (24.6%)
- → Middle East/North Africa (23.4%)
- → Latin America/Caribbean (12.8%)

#### LACK OF EDUCATION (16.5%)

- $\rightarrow$  North American (21.8%)
- → Europe (19.7%)
- → Eurasia (19.7%)
- → Sub-Saharan Africa (7%)

#### **(B)** POLITICAL INSTABILITY (15.5%)

- → East Asia/the Pacific (19%)
- → Eurasia (18.9%)

#### FOOD AND WATER SECURITY (15.1%)

- $\rightarrow$  North America (27.3%)
- → Europe (21.5%)
- $\rightarrow$  Latin America/The Caribbean (11%)
- $\rightarrow$  Sub-Saharan Africa (11%)

#### **(14.2%) UNEMPLOYMENT**

→ Sub-Saharan Africa (22%)
→ Eurasians (8.3%)

Source: WEF Shaper's Survey, Business Insider

#### MILLENNIAL DONORS

Charities now welcome a new face as their frontrunners, with the generation of millennials (1982-2000) becoming more engaged in philanthropy. Blackbaud's 2013 NEXGEN report says **60 percent** of Millennials gave to charity at that time, whereas **84 percent** have given to charity in 2014, according to the 2015 Millennial Impact Report.

## YOU CARRY ON BECAUSE YOU'RE SAVING SOMEBODY ELSE'S LIFE.'

British surgeon **DAVID NOTT** on his twodecade experience in giving medical aid to war zones and battlefields.

# 'It's very important to get the communication right.'

St. Louis Federal Reserve President **JAMES BULLARD** on market communication, with regard to the continuous drop of US inflation.

#### TECHNOLOGY IS JUST A TOOL. IN TERMS OF GETTING THE KIDS WORKING TOGETHER AND MOTIVATING THEM, THE TEACHER IS THE MOST IMPORTANT.

#### BILL GATES

# *"We are witnessing the starving and the crippling of an entire generation. We must act now to save lives."*

UN Secretary-General ANTÓNIO GUTERRES on the worsening famine in Yemen.



### Welcome to a Low Carbon World.

The agreements reached during the recent COP21 in Paris have united over 190 countries to act against climate change by taking concerted efforts to lower carbon emissions. The Philippines, under certain conditions, has committed to reduce its carbon emissions by 70% no later than the year 2030.

At First Gen, we've always cared about providing cleaner alternatives to coal. That's why we've dared to invest in power plants that run on natural gas, geothermal, and other low carbon technologies. By investing in clean, low carbon power, First Gen is helping the country meet it's COP21 commitment.



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ce of Parties to the United Nations taken in the mangroup groves located in First Gen's Batangas Foo7

# FILIPINO FARMERS TO BENEFIT FROM CLIMATE SMART TECHNOLOGY

he Philippines has been tagged as the 13th most climate-vulnerable out of 186 countries. To help local farmers deal with the effects of climate change, technology will play a key role in promoting resilience in the agriculture sector.

A project called, "Improving Productivity in Agriculture through Climate-Smart Technology," or ImPACT Philippines has been introduced to help smallholder famers in Benguet manage their use of farming inputs. During the launch of the project in Quezon City, Philippines, Senator Cynthia A. Villar, Chairperson for the Senate Committee in Food and Agriculture, stressed the urgency to adopt measures that will address the effects of climate change in agricultural production.

#### Below is the full speech of Senator Villar:

Thank you very much to Asia Society for Social Improvement & Sustainable Transformation (ASSIST) for inviting me to be part of the launch of "Improving Productivity in Agriculture through Climate-Smart Technology in the Philippines," or the ImPACT Philippines Project, in partnership with Pessl Instrument GmbH. I am glad to be here with all of you to witness this milestone.

First of all, I support your goal in launching this project, experts, typhoons like Haiyan that pack winds of at least 300 which is to introduce climate-smart agriculture to smallholder farmers, to increase productivity and to improve food security. It is one of the pillars of my legislative priority as the chairperson of the Senate Committee on Agriculture and Food since 2013 or for four years now.

Farmers and Fisherfolk remain among the poorest in the Philippines, an agricultural country. Twenty seven percent of our population are living below the poverty line, and 40 percent of these are farmers and fisherfolk. Poverty incidence among farmers, at 36.7 percent, is higher than the average for the whole country, which stands at 27.9 percent (based on latest available figures from NSCB).

Thus, if we really wanted to make a significant mark in poverty reduction, helping small farmholders is the best way to start, since about two-thirds of the country's population is involved, directly or indirectly, in the agriculture sector. Increasing food production and farm productivity are crucial but it cannot move them permanently out of poverty. We must also teach small farmers capacity-building strategies and new approaches or technologies including climate-smart farming or agriculture.

As we all know, the Philippines is an archipelago, and as such, is one of the countries most vulnerable to climate change. We top most of the lists for that. Furthermore, according to the

# Commentary

Asian Development Bank (ADB), the Philippines, and other countries in Southeast Asia, would each need to spend US\$5 billion a year by 2020 on climate change adaptation measures.

Problems due to climate change are realities that we Filipinos have been facing, particularly in recent years when extreme weather conditions such as super typhoons, massive flooding, El Niño and La Niña phenomena, among others, have caused death and destruction in our country. According to climate kilometers per hour (kph) will likely be "the norm" in the Philippines.

As an agricultural country, the Philippines posts tremendous losses from the onslaught of environmental disasters. For example, damage to agriculture caused by super typhoon Yolanda, which hit the country in November 2013, reached over PHP90 billion (about US\$2 billion). The losses were such because the typhoon struck between two planting seasons. It damaged about 600,000 hectares of agricultural lands, with an estimated 1.1 million metric tons of crops lost. In fact, it was only in August last year when our farmers have started harvesting crops from what they replanted after Haiyan in November 2013.

That is the same scenario that I reported in Rotterdam in Netherlands, when I was invited to speak at the Second International Conference on Climate Change in 2014. However hard we try not to paint a bleak picture of future eventualities, there is no avoiding the glaring realities that face us. But of course, we are not without options. That is why we have forums such as this, to find ways and means to make us more resilient

to climate change-most, especially Filipino farmers and fisherfolk or agriculture, the most affected sector. It is good that your project, Impact Philippines, will help bring climate-smart agriculture to smallholder farmers, one of the most vulnerable



Senator Cynthia A. Villar (center) is presented with a certificate of appreciation. With her in the photo are the following: (L-R) Mr. Peter Mikal, Charge d'Affaires of the Embassy of the Republic of Austria; Mr. Alfredo Aton, Deputy Director of Agricultural Training Institute; Mr. Sreenivas Narayanan, Managing Director and Founder of ASSIST; Mr. Joseph Arnel Go, Project Director for IMPACT Philippines; Mr. Vishnu Nair, Pessl Instruments' Regional Director for the Asia-Pacific; and Mr. Halmond Parker Ong, VP for Business Development of Calata Corporation, Pessl Instruments' distributor.

sectors. They would truly benefit from it. I commend ASSIST and Pessl Instruments, as well as their partners-many of whom I have worked with previously, particularly ATI and Calata Corporation—for this timely intervention in the agriculture sector.

Climate change is not anymore merely an environmental concern. Its effects are all-encompassing. It directly affects the economy, people's livelihood, etc. A World Bank report estimated that natural calamities cut 0.8 percentage point from the country's economic growth rate each year, on the average.

As cited earlier, agriculture is the most affected by climate change. Among other effects, it directly compromises our country's food security. We definitely need to develop adaptive measures and strategies. Climate-resilient crop varieties, as crucial to introduce.

The Philippines has a National Climate Change Action Plan (NCCAP), which prioritizes food security, water sufficiency, ecological and environmental stability, human security, climate-smart industries and services; sustainable energy; and knowledge and capacity development as the strategic direction from 2011 to 2028.

Our people's primary source of sustenance and livelihood is from agriculture. It is imperative to protect our farmers and fisherfolk from crop failures and losses due to climate change, especially smallholder farmers. I always remind people about the huge importance of small farmers and family farms. Time will come when we would rely on small farmholders to feed all of us, rather than have it done by corporations. Which is why family-involved farms should never stop producing, otherwise the day would come when we would go without.

The world population is ever growing, even here in our country, which drives the pressure to produce more food. According the United Nations Food and Agriculture Organization (UN FAO), by 2050, when the world population would've reached 9 billion people, we need to produce 70% more food, to sustain the needs well as pioneering procedures, and advanced technologies are of all. So, we have to rethink our priorities and really focus on agriculture.

> Part of which is continuing our collective efforts to provide our countrymen, especially farmers and fisherfolk, and other agricultural workers and businesses as well, with a shield to protect against the impact of climate change. We must live up to our reputation as a climate-resilient people, and we need to 6 have a food-secure future.

# Leaping Forward in Technology for Social Good

#### BY TRIS LUMLEY

On June of 2017, I chaired a session, called "Leaping Forward in Technology for Social Good," at the AVPN Conference in Bangkok, the largest gathering of philanthropists and social investors in Asia. I talked about the huge synergies between the technology sector and social sector, and the potential roles technology can play in delivering social impact. The panellists who joined me represented diverse perspectives across both sectors, from venture capitalists to giving and volunteering intermediaries, and tech companies already investing in the social sector. They are thought leaders in their respective fields, and they discussed the opportunities and challenges that can be tackled, at least in part, through technology.

> here was much for AVPN delegates to learn from the work of these organisations on technology for social good, while, at the same time, there is still a huge chasm to close between the use of technology in the private sector and the social sector. Taking words from the great William Gibson: the future's already here, it's just not very evenly distributed.

> East Ventures, the Singapore-based early-stage venture capital firm, has 80 portfolio companies in Southeast Asia. It has also announced its fifth fund worth US\$27.5 million for investing in early-stage Southeast Asian startups in order to overcome problems with supply chains, and bridge the gap between previously isolated consumers and service providers. For example, East Ventures is aware that only 20% of Indonesian consumers have bank accounts, so it is determined to give the other 80% access to financial services. As a result, in 2014, East Ventures has provided seed funding to Kudo, an innovative online-to-offline technology startup that targets traditionally hard-to-reach middle class consumers by appointing 400,000 'agents' across the Indonesian archipelago. East Ventures has already become critical in using technology to improve supply chains in Indonesia.

Likewise, Givo recognises the importance of technology to bridge the chasm between the charities and donors,

going beyond the realm of traditional philanthropy. Givo is predominantly a service provider-a news and social media mobile application that creates a personalized newsfeed of causes, and provides the public with a more holistic giving experience. As an online platform, Givo has partnered with World Wildlife Fund's Earth Hour in March 2017, which had successfully achieved high levels of social engagement. The Givo team hopes to inspire givers to become more proactive when donating, and to stay better informed with their favorite causes over time.

Pass It Forward's technology is also redefining the way donors and NGOs interact. Unlike conventional crowdfunding websites, Pass It Forward is addressing the growing demands of companies that are struggling to implement their CSR and employee engagement strategies. The organisation has created a corporate platform, where a company can engage with their nonprofits and beneficiaries around the world with a click of a button, getting real-time updates from the nonprofit & beneficiaries they are supporting, tracking employee engagement and giving, and managing in-kind donations.

Google.org works to connect nonprofit innovators with a blend of support that includes funding, tools, and volunteers from Google. In Google.org's own words, "These innovators are the believers-turned-doers who have made the biggest impact on the communities they represent, and whose work has the potential to produce meaningful change that can scale. Though each nonprofit's project poses a fresh challenge, we ask the same question every time: How can we bring the best of Google to power their work and accelerate their progress?"

As the panellists at the AVPN session demonstrated, there's already a great deal of exciting work going on to bring the benefits of technology to underserved communities, through the social sector and private sector. But while I'm excited about these approaches, we still need to grapple with ways to support the whole NGO sector to embrace the opportunity.

The real opportunity-and the real disruption-will come when NGOs embrace the use of technology to augment or change how they deliver their products and services. And that opportunity is immense. Look at the big challenges that NGOs face: how to scale their work with limited budget, to meet an increasing proportion of need and demand that exists; how to understand more about those who use their services to improve delivery and increase impact; how to increase visibility in those areas that might need their help; and how to empower people through their work, rather than create a relationship of dependency.

	POOLED FUND	
Philanthropists & Foundations	Businesses & Government	Social Investors
	SECTOR FOCUS	
Network of social organisations	Colloborative governance	Open source
	USER-CENTRED	
User journey mapping	Tech landscape mapping	Priorities to tech to transform
INV	EST, ADAPT, INNOVATE	
Invest in promising solutions	Adapt existing solutions	Innovate in gaps

NGOs exist in a constant struggle to raise enough capital to deliver the work they need to do. Just keeping the lights on is a major challenge, let alone having the resources to invest in developing or transforming the organisation. That means they struggle to attract and retain the talent and skills they need to embrace technology. And it's even harder to launch and maintain technology products: the business model doesn't fit well with the ongoing investment that's needed to refine and improve digital solutions, and keep up with the latest developments.

Where NGOs are developing technology solutions, most of the time what they're doing is building their own applications in isolation. That's understandable, but it misses the true opportunity. What we see in the tech sector is an ecosystem of products, services, and platforms. Apple, Google, Facebook, Amazon, and eBay are all platforms on which other organisations' and people's products and services can reach huge numbers of customers. From a customer perspective, that means easy access to an immense range of products and services. That also means trust in the platforms that are allowing this access.

Where are the "tech for good" platforms? Who's building them? With what business models?

There is, of course, a growing and thriving tech for good startup scene, and we're starting to see the emergence of tech for good incubators and accelerators, following the for-profit sector's cue. Startups are absolutely essential for innovation, and I expect to see a great deal more activity in this space in the coming years. But startups in the tech for good space face huge barriers to scaling their work: we don't have the luxury of venture capital to fuel investment and growth. And even if tech for good startups do start to attract more investment, the markets they operate in are challenging themselvesthat's one reason why they're not full of profitable companies already.

So if we're excited about technology truly transforming the social sector, we need to think about the sector, about building the ecosystem, and about bridging the divide between the private and social sectors not just implementing technology in individual nonprofits. And that's going to take joined up thinking.

My own work at NPC—a Londonbased think tank and innovation hub focuses on new approaches that can help drive digital transformation across the social sector. We're developing tech funds that will take a deep dive into the opportunities for tech to transform in specialist areas. The first approach focuses on young women's employment in Africa, where we'll invest in the most promising areas, working collaboratively across the NGO sector to drive implementation and reach. We're exploring the opportunity to do this in Asia, too. And since the skills and solutions we need already exist in the private sector, we want to invest in joint ventures, through which tech companies can develop into social good markets. Then along with our partners, we can bring the knowledge of social issues and practitioner expertise to serve young women well.

These funds will be built on user-centred design: the people who are supposed to benefit from the initiatives need to be at the heart of identifying and prioritising where we invest in technology to meet our social goals. Their user experience needs to be at the center so they can make technology that works, and so they make technology that users love.

I'm incredibly excited to be developing philanthropy and investment tech funds. I'm excited to explore the vibrant, emerging space between tech companies, VC funds, NGOs, and philanthropy. When we bring those elements together in really smart ways, that's when the techfor-good magic happens.



he debate on how to provide authentic experiences that preserve the physical and cultural environments of tourist destinations has been a cornerstone at many recent gatherings of the travel industry. The environmental and ecological footprint of tourism is now a major consideration, with tour groups often offering "Responsible Tourism" packages to negate any negative impacts that a large influx of tourists into an area may cause.

But what of the social footprint—not only of the travelers, but of the businesses that bring the travelers to their destinations and serve them there? What impact are they having upon individuals, particularly upon one very vulnerable group: the children?

# The ChildSafe<br/>Movement and<br/>Responsible Tourism:OUR SHARED<br/>RESPONSIBILITY

The rapid growth of tourism throughout Asia brings with it many associated benefits: economic growth is boosted; new businesses spring up; new job opportunities emerge; and communities seize opportunities to share traditional skills and culture to satisfy the needs of the incoming tourists and visitors.

**BY JAMES SUTHERLAND** 

Wherever you travel in Asia, you will encounter children—you will see many. However, their smiles mask the reality of their all-too-often difficult or dangerous situation. These are the children who clamor around your tour bus or ferry as you disembark, who sell flowers in restaurants late at night. These are the shoeshine boys and girls, booksellers along the riverside, child vendors outside temples, and children handing out flyers for the orphanage in which they live. "Buy my book, I will go to school."

"Please give me money, I'm hungry."

#### "Come and see the dances at our orphanage tonight."

They are vulnerable and they melt hearts. You, of course, want to help. You want to buy from them, give them money, take their photograph to show everyone back home-all of these things which, although well-meaning, condemn them to lifestyles, which keep them on the streets, out late, or at risk from exploitation, including sexual exploitation. As long as you give your support the wrong way, they will be there, day after day, begging or selling until they grow older, without education, skills, and, sometimes, managing a debilitating drug habit. This is the reality.

#### How can we help break the cycles of poverty and marginalization experienced by these children at risk?

Since 1994, when it launched in Phnom Penh, Cambodia, nonprofit organization Friends-International has been working to get marginalized children and youth away from at-risk situations and back into education and training for employment. In 2005, driven by their shared individual responsibility to protect children, Friends-International created a unique child-protection project, called the "ChildSafe Movement."

"ChildSafe Movement" trains key people within communities to be agents of child protection. The agents, who must be aware of the range of risks and abuses children could face, may include taxi drivers, street vendors, community chiefs, and all people, who already have inside knowledge of their community. "ChildSafe Movement" then looked beyond communities, to those coming in from the outsidein particular, travelers, who have developed resources-to give advice on responsible tourism. The travelers cover issues tourists may encounter, including children begging, child labor, sex tourism, and informal settlers. They can

"CHILDSAFE MOVEMENT" TRAINS KEY PEOPLE WITHIN COMMUNITIES TO BE AGENTS OF CHILD PROTECTION. THE AGENTS, WHO MUST BE AWARE OF THE RANGE OF RISKS AND ABUSES CHILDREN COULD FACE, MAY INCLUDE TAXI DRIVERS, STREET VENDORS, COMMUNITY CHIEFS, AND ALL PEOPLE, WHO ALREADY HAVE INSIDE KNOWLEDGE OF THEIR COMMUNITY

also give advice regarding orphanage visits: what not to do or what a traveler can do to reduce potential harm to children during their visit. The travelers may also engage in direct actions, such as reporting abuse to a 24/7 hotline, giving information on how to support social initiatives and helping children out of danger.

International campaigns have grown. "Children Are Not Tourist Attractions" and "Don't Create More Orphans" raise awareness of orphanages that are run as businesses to exploit children for financial gain. These campaigns also urge visitors, volunteers, and donors to redirect their good intentions toward keeping families together.

As the "ChildSafe Movement" has grown into a truly global movement, so too has the community of trained agents. Businesses can become ChildSafe supporters or certified businesses, if they have strongly defined child protective ethos. The travel industry has broadened its engagement with the "ChildSafe Movement," with a growing number of players in the industry seeking certification. This has run in tandem with rapidly increasing international recognition from the industry-with recent awards from the World Tourism Market, UNWTO, and Wild Asia.

It is only by reflecting the tagline of the "ChildSafe Movement:" "Together, protecting children," that we will achieve responsible tourism throughout Asia and the world. We can take individual responsibility as ChildSafe citizens by following the tips given by travelers. But we must also engage all stakeholders to truly create protective environments, where children can thrive-and visiting travelers can play an active part in that process. Collaboration among business sectors, civil societies, local authorities, and the government is absolutely essential. Already, ChildSafe is forming such partnerships across the world, creating a global movement, where we all play a significant part in protecting our children, thus, enabling a better future for all. 0

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- grooming.
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#### What is your child's DQ?

• DQ Education empowers 8-12 year old children to navigate the digital world with discernment, enabling them to mitigate negative risks such as cyber-bullying, technology addiction, fake news and online

• DQ Reports provide an evidence based assessment of your child's digital life. Free Basic and Premium

• DQWorld.net is tested, proven and FREE, for all children and schools. Children self-learn 8 core Digital



#### **#DQEveryChild**



# **Cover Stories**

# WAYS TO USE ICT IN **DISASTER RELIEF AND RESILIENCE** PROGRAMS **IMPROVING DISASTER RESPONSE WITH TECHNOLOGY**

From identifying risks and measures, which can help people prepare for emergencies, to sustaining the effectiveness of aid delivery and disaster response operations, Information and Communication Technology (ICT) has established its importance in humanitarian response and disaster resilience.

**BY ALINA O'KEEFFE** 

#### COVER STORY

nature of disaster response and recovery demands resilience and innovation. This has sparked numerous new technologies and solutions to emerge, with an aim to accelerate relief efforts during disasters and improve early warning systems and recovery operations. Advances in Informaton and Communication Technology (ICT) range from the sophistication of hardware and infrastructure—robotics, Unmanned Aerial Vehicles (UAV), and satellite networks with no-fringe global coverageto cutting-edge-computing artificial intelligence and mobile applications. These advances provide real-time updates about evolving crisis situations to all parties involved.

Empowering humanitarian workers with new technologies is of paramount importance in all areas of early disaster prediction and mitigation—from prompt dissemination of disaster information to response and recovery (or from disaster prevention and coordination to building resilience).

#### **Prevention & early warning systems**

The impact of disasters can be reduced through accurate and targeted warnings, information response systems, advanced operation plans, and effective coordination. However, it takes time and precision for any early-warning system to earn credibility and trust.

To help reduce the number of deaths attributed to landslides, El Salvador's government and scientists at the Hydrologic Research Center (HRC) in San Diego developed a novel software system for predicting landslides and likely flash floods. Integrating global soilmoisture assessments and satellite data on rainfall forecast, a digital map of 8,000 known historic landslide sites was created to yield risk estimates every six hours.

Another example is a project of Liquid Robotics, an oceans data services provider. To advance remote sensing, they have developed an autonomous marine

robot, called Wave Glider, which collects and transmits real time seismic data from under the sea to a satellite, with the aim of countering the emerging threat of a tsunami. The bot can survey volcanos by translating the pattern and motion of waves, storing wave and solar energy to power itself. The subsea technology was piloted in Japan's Ogasawara Island in May of 2017. If successful, a team of tsunami-detecting bots will be deployed across other parts of Japan, home to 10% of the world's active volcanoes.

In Germany, as well, scientists are working on creating an early warning system in the form of commercial underwater cable systems, which are used for submarine telecommunications. The Science Monitoring and Reliable Telecommunications (SMART) are networking cables that can sense their environment and quickly detect and characterise potential tsunamis and earthquakes.

Lastly, multinational conglomerate General Electric-together with the Nicaraguan government-is working on installing 80 wireless sensors inside Masaya, one of the country's active volcanoes. The sensors can gather realtime data to better predict the volcano's eruption via an open-source database called Predix.

#### **Coordination of aid delivery & rescue** operations

Fast assessment of and communication within the hardest-hit areas-in order to prioritise communities with the greatest needs for first respondersis challenging. With the increasing popularity of social networking services, such as Twitter and Facebook, and the

THE IMPACT OF DISASTERS CAN BE REDUCED THROUGH ACCURATE AND TARGETED WARNINGS; INFORMATION RESPONSE SYSTEMS; ADVANCED OPERATION PLANS; AND EFFECTIVE COORDINATION. HOWEVER, IT TAKES TIME AND PRECISION FOR ANY EARLY-WARNING SYSTEM TO EARN CREDIBILITY AND TRUST.



spread of mobile phones, ICT allows affected populations to play an important role in leading their own recovery.

It is critical to locate areas that are most in need of assistance as fast as possible. Big data analytics and social media mining have been proven useful in crisis mapping and finding actionable data in the overwhelming amount of information following a disaster. The success of social media in disaster response and recovery depends on the usage of the affected population. Assessing access to technologies and media outlets is

important when analysing the needs of the most vulnerable environments.

Monitoring both social and mainstream media becomes easier with the use of artificial intelligence, complementing people-driven efforts. As such, MicroMappers, developed by Qatar Computing Research Institute (QCRI) in partnership with United Nations and Standby Task Force, uses machine learning in combination with human computing/ crowdsourcing in order to discover vital information that could be potentially lifesaving in a disaster setting.

Crowd-sourcing has seen a rise, thanks to organisations like the Humanitarian OpenStreetMap Team (HOT), tasked by OCHA (United Nations Office for the Coordination of Humanitarian Affairs) in the aftermath of Typhoon Haiyan in the Philippines, in 2013. The HOT relied on volunteers to update maps with damaged buildings, blocked roads, and locations of key infrastructure, like hospitals. Most recently, Médecins Sans Frontières took this to another level by launching a mobile application called, Map Swipe, which allows anyone to search satellite imagery and draw detailed maps of affected local communities using his or her smartphone.

UAV technology also plays an essential role in humanitarian response, allowing aid agencies to survey wide areas of damage from the air, and collect data needed for 3D mapping of devastated cities. A number of drone attachments are being developed to advance search and rescue efforts, and enable scanning of disaster zones for breathing and heartbeats. The Aeryon SkyRanger, for example, contains thermal cameras, which help identify people trapped or injured in a disaster zone. There are a few other examples: MIT Media Lab's Camera Culture group is using microwave cameras, which inspect debris for signs of life. In Nepal, NASA's radar detector, Finding Individuals for Disaster and Emergency Response (FINDER), was used to locate survivors from under collapsed buildings.

However, privacy and regulation should be taken into account when deciding to incorporate drones into the humanitarian aid and relief programmes. Further evidence is needed to know whether the benefits can outweigh the risks.

In the Republic of Korea, a robot called DRC-Hubo was developed to assist humans in responding to natural and man-made disasters. A winner of the Defense Advanced Research Projects



#### ONE OF THE MILESTONES IN A.I. APPLICATION TO DISASTER RELIEFA HAS BEEN NASA'S VOLCANO SENSOR WEB, WHICH WAS ALERTED BY DETECTION FROM ANOTHER SATELLITE TO IMAGE THE ERUPTION OF ETHIOPIA'S ERTA ALE VOLCANO.

Agency (DARPA) Robotics Challenge, the robot stood out as the most robust, and was able to enter areas too dangerous for humans. It would be incredible to see such robot paired with a next-generation heartbeatdetecting technology.

Another promising product is a distributed digital ledger of transactions, or Blockchain, as it is widely known. It is now being tested by the Start Fund to improve the efficiency of disaster response, and see resources reach emergencies even quicker. Addressing issues of accountability and transparency of aid spending, as well as the time it takes to get money to relief agencies working on the ground during a crisis, the Start Fund is able to disburse cash within 72 hours of the alert, thanks to blockchain technology, which streamlines administrative process of exchanging contracts and other paperwork needed to trigger a payment.

#### **Resilience & DRR**

ICT helps organizations move from only relief and recovery to risk and vulnerability management before a disaster. A combination of crowdsourced data with the big data produced by government agencies can give useful information to address disaster response.

For example, artificial intelligence (A.I.) is helping researchers study natural disasters around the globe. One of the milestones in A.I. application to disaster relief has been NASA's Volcano Sensor Web, which was alerted by detection from another satellite to image the eruption of Ethiopia's Erta Ale volcano.

To democratise climate resilience and help people respond more quickly to natural disasters, Bessie Schwarz co-founded Cloud to Street. Cloud to Street uses satellite records of historic floods, preceding rainfalls, and landscape characteristics in order to evaluate flood vulnerability of a region. By combining mobile phone data with social vulnerability modelling, Cloud to Street helps disaster responders to locate areas that were previously left out of flood maps. It also assesses the social vulnerability of the communities and individuals in the given region in order to prioritise emergency aid to those who need it the most. Offering an insight into real-time information instead of assumptions or historical archives, big data has challenged the fundamentals of decision-making for governments, NGOs, and businesses alike. Yet the ability to use predictive analytics has not been fully utilized.

Another example is the smallest satellite in the world, built by Capella Space. The satellite provides hourly imagery of any location in the planet, regardless of weather patterns or time of day. The organisation aims to use its massive data archive to model the world and potentially predict events.

As for the health sector, using environmental satellite data in combination with public health information can help predict and monitor disease outbreaks and excessive heat. To shed light on the matter, NASA is hosting a webinar on utilising remote sensing for health applications in June

Lastly, the Federal Emergency Management Agency has developed a virtual reality (VR) program, called Immersed, in order to advance

aid agencies, and solution providers can help people use ICT more effectively in disaster relief and resilience programs. Innovation in technology for disaster relief can help create localised, dynamic, and globally interconnected humanitarian response that is grounded in ethics; attuned to the needs of the most vulnerable; and founded upon strong collaborations between key stakeholders.

2017.

#### IN PARTNERSHIP WITH OGILVY AND BRIGHTLINE INTERACTIVE, THE FIRST LARGE-SCALE VR PLATFORM OFFERS AN IMMERSIVE EXPERIENCE INTO A FLOOD SITUATION.

education of local officials and community leaders on flood response. In partnership with Ogilvy and Brightline Interactive, the first large-scale VR platform offers an immersive experience into a flood situation. The program shows a 360-degree video of what can happen if flood hits and how local communities can prepare for three flood situations: a flooded home, or a washed-out road, or a siutaion where one needs to be rescued from the roof of a flooded building. The aim of Immersed is to demonstrate how flood-mitigation steps can avert each situation, and to urge local councils to improve disaster preparedness programs, including the installation of drainage systems or porous pavements in floodrisk areas.

#### Conclusion

With the rise of humanitarian emergencies around the world, and of the number of people affected by emergencies, the humanitarian community relies on technology and innovations to respond to humanitarian disasters better and faster. The success of these ICT programs and products depends on recognising that the use of ICT must become a core competency for humanitarian action. Cooperation among national and local governments, aid agencies, and solution providers can help people use ICT more effectively in disaster relief and resilience programs.



A Still from Immersed (via Ogilvy) http://www.prweek.com/article/1430514/ fema-taps-vr-bring-flooding-risks-life



# **LET'S UPGRADE** DEVELOPMENT **DIGITAL INCLUSION IN INDIA**

Technology is rapidly changing the world and all forms of human interaction. It cuts across geographies, genders, generations and sectors.

BY SHALEEN RAKESH & SACHAL ANEJA

Information and Communication Technology for Development (ICT4D) presents breakthrough opportunities to drive sustainable impact. The rapid penetration of mobile technology has, in particular, achieved significant results in improving the lives of disadvantaged people across the globe. More than 90 percent of people in emerging economies have access to mobile networks. In 2014, nearly 80 percent of adults in emerging economies had mobile subscriptions, compared with 55 percent who had financial accounts. It is projected that over 90 percent of adults will have mobile phones by 2020.

#### COVER STORY

igital inclusion, an emerging term, is still trying to find its complete meaning to address the ever increasing digital divide. The simple definition of digital inclusion is to connect people and bring together knowledge, access, and application of technologies, to address the needs of citizens, especially the marginalized communities It combines the strengths of high speed internet access, information technologies, and digital literacy to ensure inclusion and equality for everyone.



Globally, the number of mobile phone users will surpass 5 billion by the middle of this year, as per a recent study by the association of mobile operators. With the rising populations in Asia, and especially India, the number of mobile phone owners is expected to mushroom to 5.7 billion, or three quarters of the world's population, by 2020. However, it is also important to note that a lot of countries are not fully utilizing the power of technology. India, for example, is ranked 48 out of 57 countries on the ease of internet entrepreneurship.

Though India is a growing digital economy, it lags behind other countries on the e-government development index. According to the United Nations' (UN) measure of e-government development, India ranks in the lower range of countries worldwide. India's internet impact is restrained by hurdles and gaps in the Internet ecosystem. Restricted availability of digital infrastructure; exceedingly high costs of access and usage; lack of awareness; and low digital literacy are some of the key challenges India needs to address.

Many development organisations are using Information Technology for community outreach, programme management, information gathering, and providing the poor and marginalised communities access to services.

However, technology in itself isn't good or bad when it comes to development sector practice. What is important to consider is the kind of technology that is being used, and how it is engaging with members of the communities. For example, a development worker trying to provide crop-related information to farmers living in rural areas may decide it is more appropriate to use text messages or radio broadcasts instead of developing an app.

Today, the world has come together to see how technology can be harnessed to exponentially scale up the reach and impact of innovative solutions to solve development challenges. We have powerful examples of how multimedia, the web, and mobile technology are improving educational outcomes, increasing access to health services, and increasing access to rights and services for some of India's most marginalised communities.

There have pioneering examples, from organizations like Voluntary Service Overseas (VSO) and their corporate partners' technological models, that will shape the future of development in India. People-first is VSO's way of development. It means development with the people, and not for the people, brings lasting change. The technologies that are being used are collaborative and help build evidence and stakeholder accountability.



A text message can be an empowering tool It's crucial that technology is customised with the end user in mind, to make sure it appeals to the target audience for whom it is designed. VSO's Samadhan project in Odisha state of India is using technology to strengthen the people living in

poverty, by helping them hold government officials and service providers accountable. By sending a simple SMS using any mobile phone, end users are able to get access to their rights and entitlements in the following areas: health care, education, and livelihood.

By using the SMS Story approach, VSO in India also uses mobile phones to increase educational outcomes of poor children in government

poor children in government schools. The programme reaches remote villages in Rajasthan and Jharkhand to significantly improve learning and English speaking abilities of children.

#### Technology can help engage volunteers

VSO in India is working with the Vodafone Foundations' World of Difference programme, which aims to increase employee engagement in development programmes. The Word of Difference mobile application, or

app, is a smart way to engage and motivate the volunteers. The app creates a gaming environment for the volunteers, which nudges them to do their best while on assignment; records how their work is making an impact on communities; and allows them to be recognised along the way.

#### Minimum viable product approach

The focus of VSO is on the minimum viable product approach: to co-design technology-based development solutions that minimise risks and

BY USING THE SMS STORY APPROACH, VSO IN INDIA USES MOBILE PHONES TO INCREASE EDUCATIONAL OUTCOMES OF POOR CHILDREN IN GOVERNMENT SCHOOLS. THE PROGRAMME REACHES REMOTE VILLAGES IN RAJASTHAN AND JHARKHAND TO SIGNIFICANTLY IMPROVE LEARNING AND ENGLISH SPEAKING ABILITIES OF CHILDREN. expenses, and maximises marginal value to the communities. It is based again on VSO's peoplefirst approach, which provides sufficient capability to the poor and marginalised people, and allows them to be engaged in future improvements for the solution. This means the organisation does not



over-invest and create complex systems. In fact, it maximises the impact of the interventions.

We must bridge the gaps, not widen them However, it's also critical that the use of technology reduces inequality, rather than increase it. People need to be extremely conscious of who may be inadvertently excluded. It is often the most vulnerable who are also the least likely to have access to such



tools, and relying on these tools to deliver services risks leaving the disadvantaged farther and farther behind.

There is a great scope for development sector organisations to use technology effectively for greater impact and economies of scale. There are also opportunities for collaboration between NGOs and private sectors in the technology space. Indeed, the 2030 development agenda relies on collaboration and innovation of this kind.

#### Partnership with the private sector

Sustainable Development Goal 17 fosters partnerships between the development organisations and the private sector. This could be a true game changer for the development space, if done with effective and appropriate solutions-building systems. High potential employees of companies, such as IBM, Accenture, and Randstad, help achieve VSO's mission of a world without poverty. Private sector collaborations provide NGOs with technical expertise and capacity building support. As a result, small yet innovative programmes are scaled across geographies; interventions get smarter with process reengineering; and VSO builds 21st century leaders and intrapreneurs within corporations.

Equitable knowledge and access to digital technology and resources that steer development is what ICT4D is all about. Bridging the gap between technology haves and have-nots and building partnerships are set to make a measurable difference in the lives of millions of people.

#### COVER STORY

# MOBILE **CAN BE THE MOST TRANSFORMATIVE TECHNOLOGY OF OUR TIME**

The power of mobile devices is still to be fully realised when it comes to creating solutions for development challenges. Mobiles can end isolation, amplify the voices of the disadvantaged, and connect the poor to information and advice to improve their livelihoods. But there are still challenges, which organisations across India are working on to solve through innovative use of technology and partnerships.

BY THE ORGANIZING TEAM OF THE ICT4D CONFERENCE

lobally, all the trends point to increased ownership and J utility of mobile devices. As mobile broadband costs decrease, and as smartphone costs approach those of today's lower-cost 'feature' phones, mobile-first strategies increase. Mobile experience—already taking strides forward with new smartphone and tablet products being launched annually by well-known manufacturers-will be greatly enhanced by seamless sharing of information across an owners' gadgets; by evolving human-computer interfaces, which open new avenues of languageagnostic communication for all levels of literacy; and by the advent of virtual reality and cognitive computing.

Mobile devices may seem to be assets that are accessible only to those with the purchasing power in the developed world. However, the reality is that the most exciting potential of mobile is in the developing world. In India, more than one billion mobile phones are in use today (Government of India Telecommunications Regulatory Authority figures, 2016), and by 2019, it is projected that there will be close to 180 million smartphones (Smartphone Penetration in India, Assocham-KPMG,

August 2016) in use. Access to mobile devices has outpaced that of other technologies over the past decade. And now, the penetration of smartphones into rural areas is also on the rise: between 2011 and 2015 alone, penetration increased from 22 percent to 38 percent (Mobile Phone Penetration in India, Counterpoint Research, 2015). Similarly, while coverage of second generation mobile networks has grown at unprecedented rates, now, governments and technology and telecommunications providers are partnering to increase affordable Internet access. There are some great and wellknown examples of this already underway in India, including Internet Saathi.

While the challenges of handset affordability and affordable access to the Internet still must be met over the next several years, particularly in Indian society, three additional barriers must be overcome to leverage the full potential of mobile technology to solve development challenges: scarcity of locally-relevant content, lack of digital literacy, and cultural barriers that create gender gaps in technology access.

People need content, in their own language, relevant to their locality and the issues they are facing, if smart devices and Internet access are to provide them with compelling benefits. And they need opportunities to increase their digital skills. This is where developers and content providers need to work with the civil society organizations, such as NGOs and governmental agencies, that serve these communities to provide digital services that deliver value.

Even with the advances in low-cost digital services that improve livelihoods in low-resource settings, these interventions are not always reaching the people who are most in need. In low and middle-income countries, 200 million fewer women than men own a mobile phone (Bridging the Gender Gap, GSMA, 2015 http://www.gsma.com/ mobilefordevelopment/programmes/ connected-women). Due to sociocultural practices, women in rural India are often not empowered with a decisionmaking role in the home, or indeed do not have their own income, to enable them to access technology, like mobile phones. Again, governmental agencies, civil society organizations, and private sector companies can work together to influence these norms through education and incentives.



For example, NGOs and their technology partners are now working with local governments across India to scale up simple mobile technology that empowers community health workers, known as accredited social health activists (ASHAs), with tools that help improve their services for pregnant women. Crucially, these tech interventions recognise the unique situation of many rural and urban women from lower socio-economic communities and their lack of access to this technology. By empowering ASHAs with information, these interventions directly benefit both the ASHAs and mothers in the community.

In Uttar Pradesh, a state in northern India, this programme improved community health workers' medical knowledge, enabling them to better advise patients, and resulted in the doubling of number of home visits to expectant mothers over a two-year period. It also improved expectant mothers' knowledge of pregnancy danger signs by 43%, and increased their attendance at antenatal checkups to three or more by 58%.

Another programme launched last year in Bangalore, the mHealth app, enables government health professionals to better monitor and boost the health and nutritional status of underprivileged women, thereby reducing possible health risks to the mother and baby during

pregnancy. Mothers receive counselling messages with multimedia features through the app—operated by healthcare workers—as well as other vital healthcare information, including immunisation for children under the age of two.

These are only a few examples of digital services that are providing value to those living in low-resource settings. Use of the Cloud has enabled affordable low-cost services to be developed and proliferated in time frames that can be measured in days rather than years. The potential of such services to impact development challenges is best realised when we come together across sectors to share our insights, best practices, and latest innovations in the mission to achieve the Sustainable Development Goals. Governments can work to incentivize mobile penetration and to advance policies that promote equitable access to and use of mobile services. Technology providers can continue to develop innovations that increase the usefulness and affordability of their services, while at the same time reducing their negative impacts on the environment. And in turn, development organisations can work to embed ICT solutions into their programming, to focus efforts on developing digital skills—particularly among the women in communities-and educate people on the transformative effect that mobile technology can have on family life and prosperity once women A have that access.

#### Organizing team of the ICT4D Conference About the **2017 ICT4D Conference**

The 2017 ICT4D Conference was held in Hyderabad, India, on May15-18, 2017. It was focused on the ways in which technology solutions are allowing us to harness the power of data in accelerating the achievement of the United Nations' Sustainable Development Goals.

The annual ICT4D Conference event, founded by Catholic Relief Services, is now organized by a consortium of NGOs and Private Sector Companies. This year's organizing team includes: Catholic Relief Services. Mercy Corps, World Vision International, NetHope, the Anudip Foundation, Dalberg, the Digital Impact Alliance (DIAL), the Environmental Systems Research Institute (Esri), iMerit Technology Services, and the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT). The team is supported by Google, the Government of Telangana, Oxfam, RTI International, Digital Globe, Microsoft, aWhere, CGIAR, Cyient, Dalberg, DuPont, Global Development Analytics, Inc, and GPC Group.

#### COVER STORY

# **DIGITAL LIFE SKILLS ALL CHILDREN NEED, AND A PLAN FOR TEACHING THEM**

A generation ago, IT and digital media were niche skills. Today, they are a core competency necessary to succeed in most careers.

#### BY DR. YUHYUN PARK

hat's why digital skills are an essential part of a comprehensive education framework. Without a national digital education programme, command of and access to technology will be distributed unevenly, exacerbating inequality and hindering socio-economic mobility.

#### What's your DQ?

The challenge for educators is to move beyond thinking of IT as a tool, or "IT-enabled education platforms". Instead, they need to think about how to nurture students' ability and confidence to excel both online and offline in a world where digital media is ubiquitous.

Like IQ or EQ – which we use to measure someone's general and emotional intelligence – an individual's facility and command of digital media is a competence that can be measured. We call it DQ: digital intelligence. And the good news is that DQ is an intelligence that is highly adaptive.

#### DQ can broadly be broken down into three levels: Level 1: Digital citizenship

The ability to use digital technology and media in safe, responsible and effective ways

#### Level 2: Digital creativity

The ability to become a part of the digital ecosystem by co-creating new content and turning ideas into reality by using digital tools

#### Level 3: Digital entrepreneurship

The ability to use digital media and technologies to solve global challenges or to create new opportunities

#### Why are we neglecting digital citizenship?

Of the three, digital creativity is the least neglected, as more and more schools attempt to provide children with some exposure to media literacy, coding and even robotics, all of which are seen as directly related to future employability and job creation. Likewise, there are major education initiatives-from America's code. org to Africa's lamTheCode.org-that promote access to coding education.

Digital entrepreneurship has also been actively encouraged, particularly in tertiary education. Many top adopted universities have and developed new courses or initiatives such as technopreneurship and entrepreneurship hackathons to encourage a culture of innovation. We're even starting to see global movements that nurture social entrepreneurship among children through mentoring programmes-such as the Mara Foundation-and school programmes, like with the Ashoka Changemaker School.

But digital citizenship has often been overlooked by educators and leaders. This is in spite of the fact it is fundamental to a person's ability to use technology and live in the digital world, a need which arises from a very young age. A child should start learning digital citizenship as early as possible, ideally when one starts actively using games, social media or any digital device.

#### The digital skills our children should learn

Educators tend to think children will pick up these skills by themselves or that these skills should be nurtured at home. However, due to the digital generation gap, with generation Z being the first to truly grow up in the era of smartphones and social media, neither parents nor teachers know how to adequately equip children with these skills.

Young children are all too often exposed to cyber risks such as technology addiction, cyberbullying and grooming. They can also absorb toxic behavioural norms that affect their ability to interact with others. And while most children encounter such challenges, the problematic exposure is amplified for vulnerable children, including those with special needs, minorities and the economically disadvantaged. They tend to not only be more frequently exposed to risk, but also face more severe outcomes.

So what skills should we be teaching our children as part of their digital citizenship? In the research we've done on this matter, we've identified eight in particular.

**Digital citizen identity:** the ability to build and manage a healthy identity online and offline with integrity

Screen time management: the ability to manage **L** one's screen time, multitasking, and one's engagement in online games and social media with self-control



**Cyberbullying management:** the ability to detect Situations of cyberbullying and handle them wisely

Cybersecurity management: the ability to protect • one's data by creating strong passwords and to manage various cyber attacks

**Privacy management:** the ability to handle with Odiscretion all personal information shared online to protect one's and others' privacy

Critical thinking: the ability to distinguish between Utrue and false information, good and harmful content, and trustworthy and questionable contacts online

**7** Digital footprints: The ability to understand the I nature of digital footprints and their real-life consequences and to manage them responsibly

**Digital empathy:** The ability to show empathy towards one's own and others' needs and feelings online

#### What a quality digital education looks like

A quality digital citizenship education must include opportunities for assessment and feedback. The assessment tools should be comprehensive as well as adaptive in order to evaluate not only hard but also soft DQ skills. Ultimately, such assessments should serve as a means of providing feedback that gives children a better understanding of their own strengths and weaknesses, so that they may find their own paths to success.

Ultimately, national leaders need to understand the importance of digital citizenship as the foundation of digital intelligence. National education leaders should make it a priority to implement digital citizenship programmes as part of an overall DQ education framework.

> Most importantly, individuals should initiate digital citizenship education in their own sphere of influence: parents in their homes, teachers in their classes, and leaders in their communities.

> There is no need to wait. In fact, there is no time to wait. Children are already immersed in the digital world and are influencing what that world will look like tomorrow. It is up to us to ensure that they are equipped with the skills and support to make it a place where they can thrive.

# The Sector

GOVERNMENT | CORPORATE SOCIAL RESPONSIBILITY | NONPROFIT

# SRI LANKA IS MARKETING SKILLED CAREERS TO A NEW GENERATION OF WORKERS

In recent years, reports of critical labor shortages in Sri Lankan industries have created ripples among various market actors, catalyzing a flurry of research, reforms, policies and programs. The island nation's post-war growth, averaging 6.4 percent between 2010 and 2015 (World Bank), has been driven by services, and fueled by high performing sectors, such as hospitality and tourism, construction, light engineering, and ICT. The productivity of each of these sectors has been saddled with a vexing problem: finding people who have the right skill set, in the quantities needed. The problem is so acute that some companies have begun to import labor in small numbers, while paradoxically, the number of Sri Lankans seeking foreign employment, often in the same sectors in which labor is needed at home, are high among the 25-34 age group. And although vocational training providers, both public and private, are moving away from supply-driven approaches, market demand is proving no match for a reluctant workforce.

BY ESTHER McINTOSH

When the perceive description of the perceive personnel be convinced to change their attitudes and behaviors—especially given that they perceive technical and vocational education and training as boring, tedious, and undesirable?

Social marketing is an innovative approach, and part of a bold communications effort being mainstreamed in Sri Lanka, to reposition skilled trades in order to sell previously undesired careers to a new generation of young men and women. A significant segment of industry demand is for entry-level skilled personnel and, in principle, this should be easily addressed given the prevalence of youth unemployment. Among youth ages 20 to 24, the unemployment rate is 21.2 percent, and for 20 to 29 year olds the rate is 14.4 percent, which is more than twice the national average. The end of the three-decade civil war means that young people are eager for opportunities to rebuild their lives, but in some parts of the country, their awareness of new "non-traditional" employment sectors, like tourism, is low.



GOVERNMENT



The situation among women is especially troubling as their participation remains among the lowest in South Asia (World Bank, 2014). In key sectors like tourism, women in Sri Lanka account for less than ten percent of the labor force. Their reasons for opting out are rooted in long-held, socio-cultural perceptions that are ingrained in young people and their influencers. The majority of whom, 69 percent based on a 2015 study by the World University Service of Canada, prefer jobs in the public sector. The study found that while women had higher levels of educational achievement, 66 percent of out-of-school female youth were not working, a higher proportion than their male youth counterparts (47 percent). Working female youth also had lower expectations with respect to future salary, a clear incentive to stay away, and to encourage others to do the same. The risk is that young and marginalized youth could be excluded from the market, and inter alia, even replaced by imported labor.

THE GOVERNMENT HAS PRIORITIZED SOCIAL MARKETING AND CAREER GUIDANCE. AND WITH INITIAL GRANT FUNDING FROM THE GOVERNMENT OF CANADA, IT IS EMBARKING ON A SOCIAL MARKETING CAMPAIGN THAT USES MASS MEDIA: TELEVISION, RADIO, PRINT MEDIA, AND SOCIAL MEDIA.

Social marketing is an approach used to develop activities aimed at changing or reinforcing people's behavior for the benefit of individuals and society as a whole. Its successful use in areas such as health and education holds promise for the Technical and Vocational Education and Training (TVET) sector. The government has prioritized social marketing and career guidance. And with initial grant funding from The Government of Canada, it is embarking on a social marketing campaign that uses mass media: television, radio, print media, and social media. The four-stage campaign is expected to reach at least 8.4 million people over a twelve-month period.

Although a social marketing campaign does not market a traditional product in the same way that a commercial campaign would, the current campaign has benefitted from the same rigor as a corporate research and development department. A national level perception study was commissioned to understand the situation, and a social marketing strategy was developed to respond effectively. An expert communications firm was identified, and the content of the commercials, slogans, and advertisements have been subjected to focus group testing to ensure impact. The campaign will create hype and interest, address myths, and educate and inform a wide audience, in order to promote careers in high-performing sectors. The campaign will also encourage community level behavioral change activities through youth camps, sports meets,

street dramas, and debates that complement the media strategies.

Marketing is by no means a silver bullet to a longstanding and formidable challenge. The shortage of labor is only one factor that contributes to Sri Lanka's muchexamined skills gap—defined as the difference between what is required

for the job and the actual skills that employees have. The other factors include a mismatch between what is taught and what is needed, inadequate compensation, poor working conditions, and weak soft skills. There is a necessity for modernization and wider reforms at the policy level, within both the government and the private sector. The campaign will hopefully serve as a catalyst for change among various actors in the face of greater demand by Sri Lanka's new generation of workers. GLOBA & DEVE

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# ACHIEVIN JGH **SUSTAINABILITY**

Many CEOs want to make a difference. Convinced that companies should play a positive role in environmental stewardship and social development, they declare sustainability a top priority, launch a transformation program, hire a chief sustainability officer, and commit millions of dollars and hundreds of hours of management time to the effort. Then momentum fades.

BY JENNY DAVIS-PECCOUD, PAUL STONE & CLARE TOVEY

is a frustrating setback-and a common one. Bain research on corporate transformation programs shows only 12 percent achieve or exceed their aims. For sustainability, that figure is just 2 percent (see Figure 1). Why? Sustainability transformations add another dimension of challenge.

#### **Organizational resistance**

Often, enthusiastic leadership teams overlook the difficulties frontline employees confront when implementing new approaches. If employees feel forced to choose between sustainability targets and business targets, for example, most choose business targets. As a result, corner-office passion remains stuck at the top.

# **FIGURE 1:** CHANGE IS HARD; SUSTAINABILITY CHANGE IS EVEN HARDER

ALL CHANGE Efforts	SUSTAINABIL Programs
<b>12</b> %	2%
50%	81%
38%	16%
	ALL CHANGE EFFORTS 50% 38%

#### Sources: Bain Sustainability and Change survey; Bain risk history survey

Sustainability leaders overcome organizational resistance by changing attitudes and behaviors. They rethink processes and incentives and confront the prevailing mindset that sees sustainability as bad for business. Armed with a new way of thinking, employees bring about change, rather than resist it.

Organizational change takes time and management commitment, but companies that succeed say it is worth the investment. To better understand the obstacles to sustainability efforts and how leading companies overcome them, Bain conducted a survey of more than 300 companies engaged in such transformations. Our findings include four guidelines to beat the odds and deliver impressive sustainability gains.

The first and most critical one is making clear public commitments with quantitative targets. Public targets send a ringing message throughout the ranks that helps overcome resistance to change. Second, CEOs show the way, not just with words, but by rolling up their sleeves and becoming deeply involved in the transformation. Third, leadership teams make the business case for change throughout the organization. Finally, leaders use process and incentive changes to reshape behaviors and ensure line managers incorporate sustainability into daily decision making.

Sound obvious? In fact, many companies overlook some or all of these steps and fail to lay the foundation for success.

#### Making a public commitment

Bold public targets create a shared sense of mission throughout the organization and help companies stay the course during difficult phases. Many executives hesitate to make their goals public, fearing reprisal from nongovernmental organizations and others if they fall short. Sustainability leaders manage that downside risk by engaging proactively with stakeholders. They affirm that the benefits of creating a sense of commitment significantly outweigh the risks.

Public sustainability commitments are most effective when they are strategic and selective. In 2014, Coca-Cola's chief sustainability officer, Bea Perez, streamlined the company's numerous publicly announced targets to 12 goals that extend across the value chain, including a franchise system of more than 200 independent bottling companies and suppliers.

To manage the transition, Coca-Cola launched an open dialogue with stakeholders for input on a new sustainability framework, and implemented changes based on the feedback. Stakeholders supported the company's focus on select targets that align with the business. In 2015, Coca-Cola met its goal five years ahead of schedule to replenish or balance the amount of water the company and its bottling partners use globally back to nature and to communities.

#### CEO & executive-level actions

CEOs create the vital lift-off energy for sustainability efforts and regenerate momentum throughout the journey. Our research shows senior leadership support is the most important factor contributing to success, and that visible actions-not words—make the difference (see Figure 2).

A CEO may be the only one able to push through tough choices that break with longstanding practices such as changing suppliers or customer conditions.

Broader executive-level actions also can play a critical role supporting change. In 2008, for instance, leading biotechnology company Novozymes created an executive sustainability board, including vice presidents of each business function, as a catalyst for change. Giving each member direct responsibility for results helped ensure that efforts to meet sustainability targets also created value for the business.

#### Changing mindsets

Despite a CEO's enthusiasm, many employees believe sustainable products or processes are bad for business, assuming they increase cost and undermine a company's performance. In our survey, 62 percent





#### CORPORATE SOCIAL RESPONSIBILITY



of respondents cited public reputation as the primary business rationale for sustainability programs-nice to have, but not essential to the business.

Those attitudes are a big risk factor for leadership teams intent on achieving breakthrough targets. When managers and employees regard sustainability efforts as nonessential or nonurgent, they fall to the bottom of the priority list. Our research showed lack of investment resources and competing priorities are the most common barriers to change (see Figure 2).

Sustainability leaders overcome negative attitudes by helping employees understand the business case that links sustainable products and processes with success. And there is no shortage of global companies using these strategies to improve their performance. By doubling the fuel efficiency of its vehicle fleet, for example, Walmart saved nearly US\$1 billion while significantly reducing greenhouse gas emissions.

The most effective approach is to start with a quick win-win for business and sustainability. Walmart began its sustainability journey by reducing packaging for toy trucks—an easy triple-win that saved trees, money and fuel.

#### Hardwiring change

Setting sustainability objectives has become part of the annual reporting exercise. But few companies hardwire sustainability into their organizations' processes, accountability systems and incentives.

Our survey revealed only 24 percent of employees are held accountable for sustainability in a meaningful way. By contrast, 72 percent of sustainability leaders scored highly on embedding sustainability into core processes vs. 32 percent of companies that are just starting on the journey.

Companies that achieve ambitious sustainability goals embed sustainable behaviors and processes throughout the business and make line managers responsible for delivering results. For example, some companies change their capital-approvals process to include sustainability factors, or increase time horizons in business case assessments, allowing more initiatives to qualify for investment.

Successful companies also embed sustainability priorities in their incentive structures alongside financial key performance indicators. Food retailer Delhaize Group, for example, achieved results by linking remuneration to sustainability in all areas of the business.

#### FIGURE 2: SUSTAINABILITY'S BARRIERS AND **SUCCESS FACTORS**

THE LARGEST BARRIERS TO CHANGE ARE Lack of resources and competing Priorities	LEADERSHIP SUPPORT IS THE Greatest factor in success
"Can you provide a concrete example of a barrier or other obstacle that threatened to derail your company's sustainability program?"	"What has been the single greatest factor contributing to the succwss of your company's sustainability program to date?"
<b>25%</b> Lack of investment or resources	<b>27%</b> Senior leadership support
<b>15%</b> Competing priorities	<b>11%</b> Employee engagement and interest
<b>11%</b> Culture change challenges	<b>8%</b> Clear goals and metrics
<b>10%</b> Organized obstacles (e.g., structure, decision making)	<b>5%</b> Effective internal communication
<b>6%</b> Lack of compelling case for change	<b>5%</b> Intoduction of environmentally friendly policies/processes
Source: Bain Sustainability and Change survey	/ (^-301)

#### How can you accelerate results?

The upside opportunities for companies that embrace sustainability are growing, but few companies get the return on their investment that they desire. The resulting disappointment is real, but it is not inevitable. Answering a few key questions can help reenergize your efforts.

- What stretch commitments can you make in a few key areas?
- Where can the CEO help remove barriers to change?
- What is the best win-win test case to highlight the business benefits of sustainability?
- · Which simple process changes would deliver the greatest sustainability gains?

Changing deep-seated beliefs across the organization will take time, but answering these questions will help advance you down the path toward achieving results.

This article has been condensed and edited for style and clarity. Source: Bain & Company, Achieving Breakthrough Results in Sustainability (2016). www.bain.com



If your firm is struggling to justify its sustainable activities, you had better keep at least one aspect in good standing: YOUR BEHAVIOR.

#### BY LAUREN TURNER

vorporate social responsibility (CSR) activities help Product social performance refers to how well a firms meet their responsibilities to stakeholders, firm's product-related activities, such as marketing, ✓ including employees, customers and society. CSR development and product characteristics, reflect its can be broken down into two components: product social commitment to society. performance and environmental social performance. Environmental social performance refers to how well a

#### Why differentiate between Product & **Environmental Performance?**



#### CORPORATE SOCIAL RESPONSIBILITY

# **PROFITING FROM CSR ACTIVITIES**

# ENVIRONMENTAL SOCIAL PERFORMANCE

including reducing harmful emissions, recycling and regulatory conformance. Past research has shown mixed results regarding the financial impact of CSR performance on a firm's bottom line. For this reason, researchers Satish Jayachandran and Kartik

company meets its environmental obligations to society,

Kalaignanam from the University of South Carolina, and Meike Eilert from the University of Nebraska wanted to examine the individual impact of the two components of CSR, to determine the nature of each component's relationship with financial performance.

Researchers evaluated 518 companies according to KLD criteria. KLD criteria include indicators of strong and weak social performance in the product and environment categories. Performance in these areas was compared to a company's Tobin Q value (a ratio of market value to book value) as a measure of financial success.

In improving financial performance, product social performance is more important than environmental social performance. What is more, in both CSR streams, bad behavior is punished more strongly than good behavior is rewarded.





**GOOD PERFORMANCE** 

Good product performance pays, but good environmental performance does not.

POOR PERFORMANCE

This likely happens because:

**PRODUCT SOCIAL PERFORMANCE** 

**ENVIRONMENTAL SOCIAL PERFORMANCE** 

**Product performance more directly impacts** stakeholders. A firm's ability to create and sell

products that meet consumer needs, while avoiding

ethical issues, directly affects stakeholders and

profits. While environmental performance may be of

consumer interest, it does little to satisfy operational or

Environmental performance is difficult to

**— measure.** It is much easier for stakeholders to

evaluate a product than to determine the success of

a firm's environmental activities. Data reporting and

collection on environmental impacts, such as ecological

#### foot printing or carbon offsets, are not an exact science. Stakeholders may view such data as unreliable.

#### Stakeholders punish all bad behavior

When firms misbehave, it generates negative attention. As a result, stakeholders have been known to punish firms for bad behavior more so than they reward for good behavior. This is called 'negativity bias' and it has also been seen in previous research.

Results from this study suggest that poor behavior in either CSR stream negatively affects financial performance. However, poor product performance was associated with greater financial loss than poor environmental performance.

#### **Profiting from CSR**

**Invest** in socially responsible products. Managers should allocate resources toward innovation and product development in concert with more traditional CSR activities, like greening supply chains or donating to charity. Being known for a socially responsible product can lead to market leadership and a halo for your CSR more broadly. For example, Toyota markets socially responsible vehicles and is regularly rated as being environmentally responsible.

🗖 Do not ignore environmental **L**performance. Although positive

actions may not produce financial return, lapses in environmentally-focused CSR activities can prove costly.

**T**ie environmental performance to other **O**stakeholder interests. Be sure to communicate your environmental successes widely. In doing so, tie environmental activities to other outcomes valued by stakeholders. For example, link new supply chain efficiencies to competitive advantages or increased market access, in addition to the more abstract environmental outcomes.

Source: Network for Business Sustainability

# Sustainability Forum 2017 October 5

#### The Forum

The Sustainability Forum is back for the 6th year, with specialised workshops and plenary sessions that will take place in October 5, 2017, in Athens, Greece.

Prominent speakers from all around the world will take part in this unique interactive event, revealing fresh insights on sustainability issues, based on the needs of the business community and providing hands-on experience, practical knowledge, best practices, knowledge sharing and professional skills.

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- Corporate affairs managers

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- How technology enables sustainability
- Redefining energy with innovation and sustainability.
- Experiences in the Green Bond market does it add value?
- Sustainability Strategy from A to Z.
- Leadership in Sustainability.
- Credit Risk & Sustainability.
- Establishing and improving External Advisory Councils for competitive sustainability.
- Sustainability Indices Elements of success. GRI Standards and Non-financial Reporting

transactional needs.

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# **BUILDING & REBUILDING SUSTAINABLE HOMES**

Innovations are born out of the constant need for the next best thing-may it be to improve processes, increase profits, or simply to push the boundaries of the status quo. Innovation has long been a buzzword in many industries, and the housing sector is not exempt from this human tendency to set our sights on wanting to be at the cutting edge of progress.

BY MICHELE SOH

hile we tend to place the need to innovate as human, finding meaning as to why innovation happens does not come as naturally. We can only hope that the meaning and motivation for innovation goes beyond increasing the coffers of business-that it is to be used socially to benefit a greater number of people for the common good.

On a global scale, how can the discourse on innovation meet sustainability? When it comes to an individual's need for shelter, we often talk and learn about exciting ideas and initiatives, where new technology

can exponentially reduce construction time and cost throughout the production process. Cloud computing, for example, can make household services run more efficiently for families, helping decrease utility costs. It is important to reconcile resilient housing with broader integration and with the sustainability goals of our governments. A crucial element to this sustainability aspect is making sure homeowners can operate and expand their livelihoods and enterprises, while also achieving shelter security.

An exciting future is one where daily activities

blend seamlessly with technology. When there are rapid changes taking place in the areas of e-commerce and the burgeoning internet economy, it is easy to feel optimistic about seeing the same innovation applied to social causes, such as poverty alleviation, disaster response, education, and housing. Organizations around the world are working to find and adapt to new technologies that can be urgently used by those who need it the most.

Global housing organization Habitat for Humanity is well on its way to implementing innovative and sustainable

technologies in its projects around the world. In the Asia-Pacific region, where millions of people still live under thatched roofs and sleeping on mud floors, the organization works with communities it supports to find locally-sourced and appropriate housing technologies, in partnership with governments, local suppliers, and other cause-oriented organizations.

Combining innovation with existing techniques is what made a difference for hundreds of people supported by Habitat for Humanity in countries such as Cambodia, Vietnam, and the Philippines. The use of

AN EXCITING FUTURE IS ONE WHERE DAILY ACTIVITIES **BLEND SEAMLESSLY WITH** TECHNOLOGY. WHEN THERE ARE RAPID CHANGES TAKING PLACE IN THE AREAS OF E-COMMERCE AND THE **BURGEONING INTERNET** ECONOMY, IT IS EASY TO FEEL **OPTIMISTIC ABOUT SEEING** THE SAME INNOVATION APPLIED TO SOCIAL CAUSES, SUCH AS POVERTY ALLEVIATION, DISASTER **RESPONSE, EDUCATION, AND** HOUSING.

soil bricks is a common practice in these locations, and in the last few decades, have been replacing cement and fired bricks. Soil bricks are locally-sourced, have less impact on the environment, and can be mass produced at a lower cost. Working in partnership with local communities and research institutions, Habitat further developed 'earth technologies' so that local soil can be incorporated in the production of bricks and construction plaster.

In Sri Lanka, the introduction of these earth blocks is gaining traction. Habitat secured a partnership with World Vision and funding

from the European Union to introduce environmentally-friendly compressed earth blocks. These earth blocks are weatherresistant and affordable for low-income families. The project is expected to construct 2,500 houses made from soil bricks in the next two years. Similar technologies are also being introduced in Bangladesh and Fiji, as more organizations look for sustainable materials that can be used in to build shelter.

"When implementing earth block technologies, we not only introduce an improved the local material to but also environment.





build capacity within the communities so they can understand the benefits of using sustainable components and learn how to use them.

These steps go hand-in-hand to ensure the longevity of our projects," explains Nurlan Moldosherip, housing solutions and construction technologies manager for Habitat for Humanity Asia-Pacific. People are beginning to understand that they can transform locally-available resources into viable housing material, which in turn reduces housing expenses and creates new livelihoods in support of local economies. It also has positive cultural implications as the practice encourages the revival of traditional construction techniques.

These simple, yet innovative ideas have shown to be so promising, that changes are being made in local legislation. To foster the development of sustainable construction materials, the government of Vietnam has set guidelines in place to cease all production of fired bricks by 2020. Organizations from both the public and private sectors are looking for opportunities in green materials, to be in line with international regulations, but also as a way to help them achieve the sustainable and environmental metrics outlined by the Sustainable Development Goals.

#### Web-based Project Management Systems

Moving from on-the-ground technologies, another promising innovation that is now being used is web-based project management systems for tracking the progress of development projects in real time. Mapping technology-geographic information systems-enables information on



the locations of damaged homes and earthquake-affected individuals to be stored, sorted, analyzed, and presented in different formats, which can be extremely valuable for organizations coordinating the response to natural disasters. When applied to this setting, these

technologies represent an important advancement in the way that the speed and quality of projects are measured, and also provide valuable data to organizations on the field and to communities they work with.



Habitat for Humanity has built a mobile application to tap into a Geographic Information System (GIS) database that tracks construction progress in its Nepal Earthquake Assistance Program. The GISdatabase initiative for monitoring and evaluation allows data, images, and maps to be uploaded and shared with all stakeholders in the rebuilding projectscomplete with details, such as construction progress of individual households.

The idea of an "innovation" does not always come in a shiny, futuristic package. Sometimes it comes in a product as humble as an earthen block that opens up new possibilities for community members, who once believed they had limited options to live better lives. Sometimes, innovation comes in the form of efficient processes or increased

The Asia-Pacific Housing Forum will take place on September 4-7, 2017, in Hong Kong. It will feature a session on "Technology for affordable housing," which will showcase best practices in technology and innovation solutions, and will tackle housing issues in the Asia-Pacific region. For more information, visit aphousingforum.org.

capacity to utilize what is available to improve one's quality of life.

Innovations for social good often lack support from the private sector, and are usually small-scale and isolated. Sector organizations frequently cite

WHEN IMPLEMENTING EARTH BLOCK TECHNOLOGIES, WE NOT ONLY INTRODUCE AN IMPROVED MATERIAL TO THE LOCAL ENVIRONMENT, BUT ALSO BUILD CAPACITY WITHIN THE COMMUNITIES SO THEY CAN UNDERSTAND THE BENEFITS OF USING SUSTAINABLE COMPONENTS AND LEARN HOW TO USE THEM.

- NURLAN MOLDOSHERIP, housing solutions and construction technologies manager for Habitat for Humanity Asia-Pacific.

the important role governments play in accelerating ideas and projects that can improve the lives of people. A multisectoral approach is crucial so that innovation can reach meaningful scale. Working together, all parties can make a difference in the lives of people today and of the generations to come.

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As part of the Festo Group, Festo Didactic develops technical education and consulting solutions within the context of the industry. With our direct access to the most recent technologies in automation, research and test environments, and a broad variety of opportunities to evaluate new solutions in real industrial environments, we are in an ideal position to bring new product and service developments to a level that will set international standards in qualification.

BY DR. NADER IMANI

#### **Qualification for Industry 4.0**

The enormous rise in the quantity of data and in the complexity of plant networks and company divisions is changing our production processes, and is requiring new qualifications solutions. For the operation and ongoing optimization of facilities; to maximize adaptability; and to develop flexible, intelligent components; one needs to communicate both a general understanding of digital, fully automated production technologies and in-depth knowledge of the structure and programming of digital facility networks. The Festo Group takes a holistic approach. All solutions are modular in structure: the practical training in the use of new technologies is conducted using the cyberphysical research and learning platform, "CP Factory." The platform replicates the workstations of a real production facility and makes it possible to learn how to program facilities, set up networks, and optimize many other aspects, such as energy-efficiency and data management. In addition, the "CP Factory" can also be used to develop and test flexible software solutions prior to their implementation in practice in the production facility.

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# In the Field

Industry 4.0 Learning Factory

The "CP Factory" is part of a holistic learning factory solution - a modular learning environment that can be used to qualify personnel in the operation of a particular production process, or in a particular field of work, such as production technology. Different qualification modules can be added to the "CP Factory." process-oriented training in the fields of mechatronics, logistics, and process optimization, as

well as organizational and skills training in aspects, such as interdisciplinary collaboration, learning capacity, and adaptability. In so-called "One-Point Lessons," skilled workers and management staff are trained at frequent intervals by internal or external experts in practical aspects of current requirements: for example, in the fields of energy management, process optimization, IT management, or in the training of skilled staff themselves. Staff training in learning factories increasingly requires a highlyflexible, work-integrated approach that relates to production needs and can be easily adapted to changing conditions. The subjects and skills taught need to be intuitive to learn, and easy to share to facilitate networked learning.

The concept of "Connected Learning" provides an optimal basis. The concept's primary tool, Tec2Screen® connects digital learning material from all fields with the hardware components of the learning factory. In addition, users can cooperate and share information and get new information related to the aspects of Internet of Things (IoT) and Industry  $\rightarrow$ 

4.0 by joining the Cyber Physical community, www.CP.Community.festo.com. The CP Factory is a growing family of building blocks for production facilities designed for training and research. Different production layouts and concepts can be built, e.g. assembly lines, Computer Numerical Control (CNC) production, Flexible Manufacturing Systems (FMS), quality assurance, robotics, lean production, and more. Powerful but easy to understand Software Modules like Manufacturing Execution System (MES) and Energy Monitoring Tools, as well as Cloud Solutions, are part of the system. Mobile Robotics as the enabler for agile, flexible, and changeable production plays an essential role in the factory of the future. The mobile and autonomous robot system ROBOTINO is designed to perform a variety of production-oriented logistic tasks.

Latest communication standards like OPC-UA and http(s) based on TCP/IP makes the system prepared for the Internet of Things (IoT) and Industry 4.0. Third Party Products like SAP-ME easily can be interconnected due to the standardized interfaces and well-structured software utilized in the CP Factory. Production orientated IT security issues can be demonstrated and explored impressively in the environment of the CP Factory. To support this essential research and training topics, Festo works together with CISCO on training solutions.

#### Learning for Applications in Industry is Becoming More Mobile, More Networked, and Occurs in More **Frequent Cycles**

Technology trends in ever shorter cycles are leading to greater complexity in increasingly networked industrial environments. Teachers and trainers need to plan and layout their learning environments flexibly, and trainees and students want to put together their own learning programs. They want to choose where they want to learn, without being dependent on educators, and need to prepare on their own, in advance, for their lessons. At the same time, they want to share their experiences (Source: United States-German Economic Yearbook 2015)

in an ever more valuable global network, and also want to profit from working in teams and exchanging experiences. The concept of "Connected Learning" provides students with knowledge in a modular and networked form, and helps establish an intuitive connection to technologies that is easy to communicate and to share. Consisting of a combination of base unit and iPad, Tec2Screen®

makes it possible to call up modular learning material from the fields of mechatronics, robotics, industrial communications and plant controlling, and can be directly connected to different learning environments and offers an effective training environment for the following:

- Automation technologies and mechatronics. Drive technologies, controlling, material and information flow, SPS programming and other variable functions.
- Electronics and electrical engineering. General knowledge, measuring, analysis, identifying energy-saving potential
- Fluid technologies
- · Pressure and flow rates, detection of end positions, sensor technologies, optimization

#### Green Industry Offers New Paths for Economy and Education

Through their innovation and broad value chains, industries are the backbone of economic growth and prosperity. As industries increasingly face raw material and energy shortages, a fundamental shift towards a more "green" industry and greater energy efficiency is inevitable to ensure sustainable growth. On the one hand, the "greening" of existing industries will lead in the long term to an improvement in their environmental "performance" regardless of industry, size or location. On the other, new, "green" industries will arise in response to newly developed technologies and services. These environmentallyoriented industries will give rise to and serve completely new markets: environmental technologies and environmental services. Both trends will require well-trained employees and specialists who can design professional facilities in accordance with the guidelines of the green industry concept.

Festo Didactic is the world-leading equipment and solution provider for technical education. As a global partner for educational institutions, governments, state organizations, and companies around the world, we design and implement learning centers and laboratories, and educational equipment and programs that train people to perform in highly dynamic and complex environments. Our goal is to maximize learning success in educational institutions and industrial companies around the globe. Our holistic approach to qualification means that all educational environments designed by Festo Didactic connect technical, organizational, and skills training programs with advanced technical equipment and overall planning, operative, and consulting services.

SEDPI Books



# Wealth Building Training



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#### **Community Support Group**

At SEDPI, we believe that it is not easy to navigate financial opportunities and challenges alone. This is why we created community support groups. The groups are mostly online communities where information are shared and healthy discussions transpire. SEDPI initiates meetings and gatherings to the support groups to provide updates and guidance.

#### Why choose (L)Earning Wealth SEDPI's **Financial Empowerment Program?**

(L)Earning Wealth is a program designed to help participants reach financial empowerment and comprising a set of FUN modules built on real-life examples from financially stable trainers.

#### The first step towards financial freedom!

To Filipinos seeking financial freedom, (L)Earning Wealth is the brand of choice for financial literacy training programs that offers proven methods of training that change financial habits, taught by financially stable trainers who use real-life examples.

#### SEDPI is the Philippine's premier capacity builder in the fields of social entrepreneurship. microfinance and financial literacy.

Established in 2004, SEDPI trained more than 30,000 stakeholders from 3,000 development organizations. Through the Ateneo-SEDPI Microfinance Capacity Building Services it is able to reach participants in 27 countries worldwide. Capacity building services offered include training, research and consulting. These provide stakeholders - practitioners, policy makers, denote and networks, with practical and readily makers, donors and networks - with practical and readily applicable tools that lead to better institutional and operationa

the Year Award in 2012 and received Special Recognition from Price Waterhouse Coopers in 2015.



### (L)Earning Wealth: Successful Strategies in Money Management

The book is a personal finance guidebook that leads the reader through what many consider to be unfmiliar territory—money. It contains expert advice, practical tips, and proven methods that can help the reader develop the skills needed to better navigate the world of finance. Savings, budgeting, loans, insurance, and investments are all clearly explained, with tables and simple worksheets that can be used right away.

More than just another how-to book, this book delves into the Filipino psyche, discussing common attitudes and behaviors that can prevent us from managing money effectively. Real-life examples and the author's own experiences illustrate that the road may be rocky, but financial success is possible. Informative, insightful, and inspirational, this book will help the reader on the journey towards financial freedom.

# **LEARNING WEALTH** Successful Strategies in Money Management

SEDPI trainings have been consistently evaluated as excellent since its inception in 2004. On average, it mounts more than 110 training events per year. Financial literacy training courses are designed to help participants improve financial habits and reach financial freedom.

Information made practical, relevant and effective. That's the goal of SEDPI Books as a publisher. Most publications on personal finance are either too technical or too personal. SEDPI Books strives to strike the balance such that readers are not intimidated but are motivated and inspired through well researched publications.

#### Track Record

Conducted financial literacy trainings to Filipino migrants in 15 countries worldwide: Austria, Belgium, Denmark, France, Germany, Hong Kong, Italy, Luxembourg, Netherlands, Norway, Singapore, Spain, Switzerland, United Arab Emirates, USA

#### What Clients Say About Us

SEDPI trainings have been consistently evaluated in as excellent since its inception in 2004. On average, it mounts more than 110 training events per year.

Financial literacy training courses are designed to help participants improve financial habits and reach financial empowerment. These employ adult learning techniques and structured learning experiences. Financially stable trainers deliver the modules based on real-life examples. The main objective of the courses is to teach wealth building and financial management strategies to people financial management strategies to people from different backgrounds. The trainings provide practical and readily applicable tools that participants may use in order to improve their financial well-being.

#### **About the Book:**

### **SEDPI**

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IN THE FIELD

### **Providing Development Aid Workers During Emergencies**

### Is **HumanSurge** a social enterprise?

#### Yes, HumanSurge is a social enterprise.

#### BY LOEK PEETERS

umanSurge seeks to improve humanitarian relief operations for the benefit of disasteraffected populations. This is achieved through more efficient and effective mobilization of professional human resources-whether local, national or international-thus, enabling a faster deployment of, and response by, gualified aid workers.

Indeed, the humanitarian sector is defined by the government, nongovernmental organizations (NGOs), and not-for-profit actors. It is also dependent on institutional donors, philanthropists, and generous contributions by the general public. However, a recent United Nations (UN) study revealed a 15-billion-dollar annual funding gap. Hence, we sought to launch this initiative by taking a business approach, offering valuable service-for an affordable fee-that will reduce organizational costs. As the platform grows and becomes more widely used, economies of scale can be realized.

HumanSurge has been set up independently in order to stay neutral, and provide services to the whole humanitarian ecosystem without bias. We monitor and report on the number of professionals contacted by NGOs for possible deployments. We also report on the individual responses. We then document those who have been deployed, and aim to see how they have been able to support the operations and positively impact the relief services given to the affected population.

We also aligned ourselves with the humanitarian-to-humanitarian network, a diverse group of small, lean, and agile humanitarian entrepreneurs, who are engineering new solutions and services that enable the humanitarian sector to perform better (h2hworks.org).

What motivated you to start HumanSurge? I have worked for over a decade in the humanitarian sector and have seen and experienced the challenge to scale up operations in emergency situations. National responders are always first in the scene. And in case of large-scale emergencies, where the response capacity overwhelms a region or country, the international community also reacts. The actors mandated to respond have built their respective global surge capacities over the last decadewith notable strengths in the 'first wave' response, enabling quick assessments. They have also set up initial operations, deployed pre-stocked relief items, and provided emergency funding appeals, to name a few. Yet as the full scope of a disaster becomes apparent only in the days or weeks after it hits, many of those actors struggle to mobilize the required additional professional aid workers.

The lack of manpower adds stress to aid workers, who are already exposed to challenging and volatile environments. In the emergency phase, aid workers tend to work day and night, seven days a week, thinking that they would be in this situation only for a limited period of time. Yet, it is not unusual to find extended deployment periods, due to unavailability of replacement.

As a recruitment platform, what problems in humanitarian response does HumanSurge aim to address? When looking at the ability to rapidly scale operations in response to a humanitarian emergency, otherwise known as 'surge capacity,' the localization and deployment of gualified human resources is a key component. The challenge to locate available aid workers is largely the result of an existing disconnect: organizations do not know which aid worker is available right now, and professionals don't have a venue to indicate such availability to the sector at large. Nearly half a million aid workers respond to humanitarian emergencies around the world, yet many work on short-term contracts or project-based agreements.

Having an incomplete team also poses the risk of not meeting the needs of the disaster-affected populationand the requirements of the donor.

Organizations have built their surge capacity through stand-by teams and internal or external rosters. A roster is typically a list of persons who are willing to be deployed during an emergency. However, a maintaining a roster is time-consuming and costly. Moreover, these efforts are typically done in silos, repeated from organization to organization. There is also a continuous influx of young humanitarians seeking entry into the sector, while members of the 'older' generation move into HQ positions, or settle down.

HumanSurge is in essence a global emergency roster for active humanitarian responders, updated online by the aid worker, and shared across the humanitarian ecosystem. Specific features enable recruiters to quickly search sector-specific profile characteristics, narrowing in on potential candidates within seconds, while tapping into a pool of human resources much larger than their organizational roster.

How is HumanSurge innovating humanitarian response? HumanSurge has taken modern information technologies and techniques, and adapted and tailored them to fit the humanitarian sector. In connecting humanitarians and organizations to an online platform, HumanSurge addresses an existing gap in surge resource mobilization. On one hand, a shared global roster is more efficient and effective than replicating such efforts across multiple actors. On the other hand, aid workers can signal their availability with ease, as opposed to contacting former employers.

HumanSurge has also placed the perspective of the aid worker centerstage, rather than that of the recruiter or hiring organization. Aid workers typically work on short-term assignments, and therefore, often lack job security. By registering their profile, they can get contacted for vacancies they did not

HUMANSURGE IS IN ESSENCE A GLOBAL EMERGENCY ROSTER FOR ACTIVE HUMANITARIAN RESPONDERS. UPDATED ONLINE BY THE AID WORKER. AND SHARED ACROSS THE HUMANITARIAN ECOSYSTEM.

see announced. Moreover, aid workers have preferences in regard to any deployment. The platform provides them with a tool to indicate preferences, such as contractual arrangements, nogo countries, or the maximum period they are available to be deployed.

HumanSurge is Importantly, competency-based. The search engine

Final recruitment, contract signing, and deployment takes place between the organization and the candidate, without involvement of HumanSurge. This facilitates the quick recruitment, as each organization can use their own tools and follow internal processes. The downside for us is that we do not have full visibility on all successful deployments, which would be better

filters sector-specific characteristics, and notably lacks a profile photo.

Finally, HumanSurge is actively working toward automated profile validation. Currently, this is primarily shaped through collaborations with RedR-UK, the NOHA network on Humanitarian Action, and the Institute of Studies on Conflicts and Humanitarian Action (IECAH), among others. Several other collaborations are expected to be formalized starting in 2017, while complementary ways to automate

profile validation are being explored.

What impact have you seen so far? How many people have been deployed through HumanSurge? HumanSurge is still in early-stages of development. Launched in March 2016, the sector has been quick to respond and is responding positively to the concept. In the first year, more than 5,000 professionals started the registration process, and over 3,500 aid workers completed a basic profile and confirmed their email (a requisite to have ones profile appear in the search results). Also many major INGOs subscribed to HumanSurge, and started to search for gualified and available candidates, who match their requirements. More than 25 INGOs started using HumanSurge.

To date, 225 humanitarians have been contacted for a particular deployment, with a 90% response rate.

from a business perspective. This approach was chosen as we value social impact most-more deployments mean faster results. Nonetheless, we follow up on individual cases, and we have documented several success cases of humanitarian professionals contacted through HumanSurge. (Check out blog.humansurge.org)

Separately, we also presented HumanSurge to several startup competitions and received multiple recognitions. Notably, HumanSurge was awarded the Startup Europe Award 2016 Spain, in the category 'Social', which will take us to the European finals. We received a grant to attend a 3-week accelerator program in Silicon Valley. We were also invited onstage at Y-Combinator startup school in Palo Alto, and are currently enrolled in a 6-month accelerator program for startups, supported by the European Union. Most recently, HumanSurge was selected by Telefónica to enter their Open Future\_ CrowdWorking space in Madrid, which has become our office. We aim to learn from these programs. and to translate these learnings to the humanitarian sector and social entrepreneurship.

Any other message for the development sector? The humanitarian and development sector is bound to make significant efficiency and effectiveness gains through sharing and collaboration. HumanSurge made this part of its vision: "There are solutions to the world's challenges, when people respond together." While many will agree that no single actor can address the diverse and complex challenges before us, there are also inherent disincentives to collaboration, obstructing such efforts. Current lean startup and innovation models have already brought disruptive solutions to many sectors, and there is a lot to be learned from these methodologies. The current wave of technological innovation and sharing economy can bring similar change to the humanitarian 0 and development sector.

# BRIDGING THE DIGITAL GAP AT A TIME BY KURT McCLUNG

HE FIELD

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thousands of educational websites now provide online classes for little or no cost, millions of households and communities throughout the world remain desperately distanced from the miracles of the Information Age. A dozen years ago, the NGO Passerelles numériques (PN), dedicated to the singular goal of eradicating poverty, came to the pragmatic conclusion that bridging the gapfrom the half of humanity floating up into the digital clouds and the other half struggling to maintain their footing on the ground-could not be solved by the Internet alone. Cloud sourcing, social networking, and intuitive search engines are of no use without dependable communication infrastructure, and, more importantly, the minds to build and leverage them. PN decided to go old school-literally. They founded a computer technology school in Cambodia, sponsoring and delivering two-year associate degrees, building those bridges one mind at a time.

Building and Funding a Technology school in a developing country sounds like a simple enough project, but when the planet is taking ten steps forward at the speed of gigabytes per second, it is hard to take a step back to the age of traditional brick and mortar classrooms. PN leverages all the modern day educational technologies in their approach. But in South East Asia, where the economies are booming and everyone wants immediate digital visibility, it is a hard sale. The first minds that had to be convinced were those already on the other side of the gap: sponsors, employing partners, and teachers.

Maud Lhuillier, PN Asia director, said, "It is always a challenge to convince people that the 1800 students we've

Sopheakmonkol Sok, co-founder & CEO at Codingate, said, "PNC has done a remarkable job in training qualified young technical students. We have been happy to employ three generations of PNC students, who have great attitudes and good fundamental computer skills (programming and network administration). We have been impressed with their commitment and

trained over the past decade have had as much impact in these countries as 18 million hits on a modern-day educational website. It's difficult to measure a two-year education on the same grounds as a twenty-minute video. No matter how good the video might be, they haven't studied the backgrounds of each and every student. Our education program is tailor fit. What has always worked in our favor is that our students actually get jobs in companies in need of trained staff. Companies that have followed them throughout their training and are glad to have them."

What has sustained the association for the last twelve years, and permitted them to expand the initiatives into Vietnam and the Philippines is that



#### OUR EDUCATION PROGRAM IS TAILOR FIT. WHAT HAS ALWAYS WORKED IN OUR FAVOR IS THAT OUR STUDENTS ACTUALLY GET JOBS IN COMPANIES IN NEED OF TRAINED STAFF.

the impact is tangible. Lives and communities have been changed for the better, and the companies who have participated in the program are not only satisfied, but proud to be associated with a solution that delivers motivated and trained employees in growing instrumental local businesses.

teamwork. They join Codingate as Team leaders, front-end developers, Web programmers, graphic designers and IT systems administrators."

One of the secrets of PN's success has not only been the quality of their training, but their intensive student recruiting process. They target communities who are the isolated in their countries who they estimate would not have access to a higher education without their intervention. Their program not only interviews candidates to estimate their affinity to the program, but also their families and support groups to assure that the student's absence will be encouraged by their entourage. The success rate of the program is exceptional - 90%!  $\rightarrow$ 

IN THE FIELD



PN LEVERAGES ALL THE MODERN DAY EDUCATIONAL TECHNOLOGIES IN THEIR APPROACH, BUT IN SOUTH EAST ASIA, WHERE THE ECONOMIES ARE BOOMING AND EVERYONE WANTS IMMEDIATE DIGITAL VISIBILITY. IT IS A HARD SALE.

Charity Mahinay, PNP Student, Class 2017, said, а "PN is a dream come true! Having this opportunity to study IT with PN is very interesting. I came to PN without any hesitation, with my desire to build a better future. I am full of persistence and perseverance to study IT. The preparation for the professional life was tough. But PN didn't fail to support and remind us to trust ourselves."

PN is currently developing other methodologies for measuring the impact of their program, as it has become essential for educational initiatives to demonstrate their effectiveness with numbers and statistics. The organization would like to expand, and the numbers game does not frighten them. The testimonies of their students and partner companies, as well as those of their teachers have provided a tremendous body of proof that their schools are making

a difference. They have incorporated volunteer guest teacher programs with corporate sponsors, such as Econocom and Accenture. It is not only the minds of the students that have been connected to the rapidly moving world, but anyone who has been in touch with the program.

Dong Nguyen Tran, a PNV Educator, said, "The fact that most students at Passerelles numériques come from troubled and less-fortunate families does not make our job as educators easy; but it does make our job essential. We encourage the students to try their best. Once they succeed, so have we."

Passerelles numériques is a living case study that illustrates great changes in society are still possible. Yet no matter how broad a program's scope is, lasting impact needs to take A place one mind at a time.



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# **KT** launches **Creating Shared Value Initiative** "Giga Island" in **Bangladesh**

KT announced on April 27, 2017, that the company had established 'GiGA Island' on the Moheshkhali Island in Bangladesh.

BY KT

"GiGA Island" is a corporate CSV KT'S (Creating Shared Value) initiative that aims to enhance the quality of life and provide better access in terms of education, culture, and healthcare for people who live in remote areas-such as highlands and islands-by providing high-speed Internet and Information and Communication Technology (ICT) solutions. KT first launched the "GiGA Island" in 2014 and currently operates five locations in Korea. Bangladesh marks the first global launch of KT's "GiGA Island."

The opening ceremony was held in an extraordinary fashion, simultaneously connecting the Moheshkhali Island with Seoul, the capital of South Korea, and Dhaka, the capital of Bangladesh, through a three-way video conferencing system operating on high-speed Internet network.

Hwang Chang-Gyu, the chief executive officer of KT, delivered his congratulatory speech via video conferencing, which occurred inside KT's Gwanghwamun building

in Seoul. Zunaid Ahmed Palak, the Bangladesh State Minister of ICT, joined the ceremony from Dhaka. At the same time, Sheikh Hasina, the Prime Minister of Bangladesh, celebrated the launch of the "GiGA Island" on the Moheshkhali Island, together with the residents. He also conducted interviews with the residents in person.

"Today's launch is one more step towards the Digital Bangladesh Vision 2021. With the launching of Digital Island, better communication of the island has been ensured with the rest of the world. So, the people of this island will never remain neglected," said Sheikh Hasina.

Moheshkhali is a small island located in the southeastern part of Bay of Bengal, with a total population of 250,000. Due to geographical limitations and a poor telecommunications environment, the residents of the island had limited access to public services, including education, medical services, and information.

The "GiGA Island" in Bangladesh is powered by multilateral partnerships of the following sectors: the Bangladesh government, international organizations, public institutions, and non-governmental organizations (NGOs). The Bangladesh Ministry of ICT, International Organization for Migration (IOM), and

KT signed a trilateral memorandum of understanding (MOU) at the Mobile World Congress 2016 in Spain. Also, the State Minister of ICT, Zunaid Ahmed, had already visited the 'GiGA Island' in Korea in May 2016.

KT connected the Moheshkhali Island to the inland areas by installing the "GiGA Microwave," using copper-based Wires" to "GiGA circulate network traffic within the island. This enabled more than 30

percent of the residents in Moheshkhali to communicate with the world through high-speed Internet.

KT also enabled a remote education platform for elementary school students by providing a video conference solution, which will extend to 12 different education institutions on the island. This platform, called the KBOX, provides a full HD screen, with at least 3 mbps, and supports the simultaneous connection of up to seven different locations. Notably, this platform does not require many resources for maintenance or operation. The teachers in Moheshkhali Island can now provide various educational content through the network-in addition to textbooks.

In April, the initiative started teaching English to about 2,000 students across three primary schools, with the help of e-learning services provided by three teachers from the Jangoo Foundation in Dhaka. The intitiative allows teachers and students to interact with each other in real time, via digital equipment-including cameras, projectors, and a computer-placed in a specially designated classroom. The e-learning program will extend to another ten primary schools and two madrasas by the end of July, covering a total of about 9,000 students in the process.

KT will also provide digital healthcare

MOHESHKHALI IS A SMALL ISLAND LOCATED IN THE SOUTHEASTERN PART OF BAY OF BENGAL, WITH A TOTAL POPULATION OF 250,000. DUE TO GEOGRAPHICAL LIMITATIONS AND A POOR **TELECOMMUNICATIONS** ENVIRONMENT, THE **RESIDENTS OF THE ISLAND** HAD LIMITED ACCESS TO PUBLIC SERVICES, INCLUDING EDUCATION. MEDICAL SERVICES, AND INFORMATION.

services at five different hospitals in Moheshkhali Island with its network. The services include a mobile instrument ultrasonic called the Ultrasound, and a mobile urine diagnosis instrument, called Yodoc. The two services will collect residents' medical data and enable them to see a doctor through video conferencing. This information will be shared between hospitals in Dhaka and Cox's Bazar, and community health centers in Moheshkhali Island, in order to establish a remote medical diagnosis system.

IN THE FIELD



The initiative is first targeting Maternal Neonatal Child Health needs, given the community's chronic female-doctor-staff shortage. The distribution of portable, handheld ultrasonic devices would allow specialist doctors in big metropoles, such as Dhaka and Chittagong, to diagnose patients and complicated pregnancies in real time. This will help reduce the maternal mortality rate of 18 deaths every 10,000 people, every year-above the national average of 17 deaths every 10,000 people-by alerting doctors to potential complications beforehand.

The project also aims to promote e-commerce by helping farmers connect directly with consumers. Beetle leaf farmer Mohammed Gafun Alam, 40, believes he can increase his profit by 67 percent, or an extra 100,000 taka a year, by selling directly to retail customers via an e-commerce portal. He says he's excited about starting training classes that will be provided by the Bangladesh government and its partners.

"If I can sell to Dhaka or another Upzila, I can earn more," said Mr. Alam, who currently only sells his product at a local market twice a week. "KT has achieved many of its Sustainable Development Goals based on technology and solution by operating five different 'GiGA Islands' in Korea for the last two years," said Yoon Jong-Jin, executive vice president of public relations office in KT. "Based on our experience, we

put our utmost efforts to provide the best IT solutions for education and medical treatments in Moheshkhali. We will continue to cooperate with the government of Bangladesh to better support the island in the future."

A newly renovated community IT space will ensure that locals can gain access to IT training classes, fostering equitable adoption of the new technology, as well as creating a space for online surfing and exploration.

Lastly, the project also hopes to create new job opportunities for the local community by teaching interested residents how to care for the 19-kilometer fiber-optic cable and related technological equipment that KT provided. Classes will be conducted at a learning center. Through these initiatives and many more, the project aims to reduce the social and economic gap between urban and island areas, to prevent forced migration to the cities and abroad, as well as to improve overall quality of life in the targeted population. 6

#### **GLOSSARY**

Giga Microwave: a wireless network technology that can provide giga-internet service to remote areas without the fiberoptic connection

GiGA Wire: a solution that provides giga-level internet speed of 600Mbps through an existing landline, specialized for areas where it is difficult to construct optical cable.







The AsianNGO Academy, through its seminar series, aims to build the capacity of nonprofit organizations in Asia and expand their impact, ultimately enhancing their ability to aid underserved populations across the globe. The seminar series will implement high-value, low-cost trainings designed for key actors in the nonprofit community.

#### **TRAINING PACKAGE**

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