

UN General Assembly Side Event: *A Big Data Revolution for Humanitarian Response*

Summary

- Dutch Minister of Foreign Trade and Development Cooperation Mrs. Lilianne Ploumen urges the humanitarian community to join the data revolution.
- Humanitarian organizations emphasize the opportunities that Big Data offers in making humanitarian aid more effective and targeted, but also underline the considerable challenges that hinder scaling up the use of new sources of digital Big Data in humanitarian contexts.
- Effective use of Big Data for humanitarian community requires willingness from 1) businesses to share data, 2) governments to stimulate and regulate responsible data use, and 3) humanitarian organizations to invest in capacity-building and awareness raising of how to use real-time Big Data for decision-making.
- Discussions on Big Data should not focus solely on privacy concerns, but also on opportunities. *“We need to make sure that Big Data is not Big Brother watching you; it can be Big Sister looking after you”*, suggests WFP.

List of Speakers

- Ms. Annie Maxwell, President of the Skoll Global Threats Fund (moderator)
- H.E. Lilianne Ploumen, Minister for Foreign Trade and Development Cooperation of the Government of the Netherlands
- Mr. Robert Kirkpatrick, Director General of UN Global Pulse
- Mr. Amir Abdulla, Deputy Executive Director of the World Food Programme (WFP)
- Dr. Gilberto M. Llanto, President of the Philippine Institute of Development
- Ms. Gwi-Yeop Son, Director of Corporate Programmes UN OCHA
- Mr. Chris Moody, Vice President of Data Strategy of Twitter
- Mr. Alfredo Timermans del Olmo, CEO of Telefónica Internacional USA

Event report

On September 28th 2015, during the UNGA week in New York, the Netherlands and the UN Secretary-General's Global Pulse Initiative, with Philippines as a co-chair, organized a side event on the opportunities offered by Big Data to make humanitarian aid more effective. Looking toward the World Humanitarian Summit (WHS) to be held in 2016, the humanitarian community has become increasingly interested in innovations that can be integrated into field operations. Big Data and real-time analytics offers a myriad of opportunities, from enhancing early warning systems, to contributing to the process of conducting needs assessments to better target humanitarian aid.

Moderator Ms. Annie Maxwell, President of the Skoll Global Threats Fund, reminded attendees that in the Tsunami of 2004, there was no Twitter, Facebook, smart phones or Google earth. Over the past decade, the digital transformation of society has brought us to the point that many disaster-affected communities themselves are prolific producers of big data (through cell phones, social media, and financial transactions) – before, during and after the onset of an emergency.

Minister Ploumen opened the session by sharing her own experiences in Indonesia and elsewhere, highlighting the crucial role technology and data can play in disaster preparedness and response. The Minister described the Netherlands – a top-10 humanitarian donor – as a 'market leader' within the humanitarian sector, which comes with the responsibility of contributing to the effective and responsible management of the humanitarian sector. Minister Ploumen called on the humanitarian community to make the most of the opportunities the data revolution offers, as well as to confront head-on the challenges that come with it. The humanitarian sector should learn how to deal with privacy concerns, invest in internal expertise in the area of data, and cooperate more closely with the private sector.

Mr. Robert Kirkpatrick, head of UN Global Pulse, demonstrated how Big Data can make a difference in humanitarian aid using concrete case studies. Big data can help in identifying and confining the outbreak of a disease, for example. Real-time data analysis of social media and radio programs could enable aid organizations to identify the outbreak and spread of diseases much earlier, by monitoring when specific key-words are frequently reported in certain areas.

Mr. Amir Abdulla, Deputy Executive Director of WFP, explained the opportunities of Big Data for his organization. Humanitarian agencies face huge challenges in identifying those in need and the type of aid that is required. WFP employees traditionally are sent into the field with questionnaires to carry out a needs assessment in-person. This process is costly, time-consuming, and increasingly risky in conflict situations. Data derived from mobile phone usage can now make a real difference. For

example, a pilot project has shown that a strong correlation exists between the amounts of money spent on phone credit and food. A sudden drop in spending on mobile phone credit in a certain could be an indication of a rise in food prices or falling incomes. “Every mobile phone company is unknowingly running a real-time food security monitor,” Mr. Abdulla noted.

Dr. Gilberto M. Llanto, President of the Philippine Institute of Development, explained that the government uses Twitter as a mechanism for collecting information from the ground, and for disseminating information to the public about emergencies. Misuse of Twitter in these contexts is prohibited by law. This is one example of how governments can stimulate responsible data use through legislation.

UN OCHA, represented Ms. Gwi-Yeop Son, Director of Corporate Programmes on behalf of the Under-Secretary-General and Emergency Relief Coordinator, emphasized how essential yet difficult it is to optimize the use of available digital data: worldwide only 0.5% of the data produced is being analyzed, while an estimated 25% of the data can be of use to someone. She posed the question: how can the humanitarian sector identify and analyze data in an effective way and make a difference in humanitarian response, and in ways that minimize risk?

The private sector can contribute to answering this question. Panelists from Twitter and Telefónica Internacional explained that Big Data infrastructure is expensive, as it requires costly manpower and computing power. In particular, Chris Moody, Vice President of Data Strategy of Twitter noted that extracting value out of such large volumes of data also requires significant investment in time and analytical expertise. The private sector has considerable experience when it comes to evaluating whether these costs are justifiable based on the expected efficiency gains; with this knowledge they can support the humanitarian sector. CEO of Telefónica Internacional USA, Mr. Alfredo Timermans del Olmo, underscored that they are ready and willing to find ways to share data with humanitarian sector, but there are organizational as well as regulatory challenges which would have to be overcome.

In the subsequent discussion, representatives from the European Commission's Humanitarian Aid and Civil Protection department (ECHO), USAID, the Government of Sweden, African Risk Capacity (a specialized agency of the African Union), and from civil society, deliberated the opportunities and challenges of Big Data. While Big Data provides many opportunities for early warning, early identification of an upcoming disaster is only valuable when organizations are equipped to act upon the insights derived from this data. Several attendees highlighted that the momentum of the WHS should be seized to prioritize the use of Big Data within the humanitarian sector.