DISRUPTIVE TECHNOLOGIES & DISASTER MANAGEMENT

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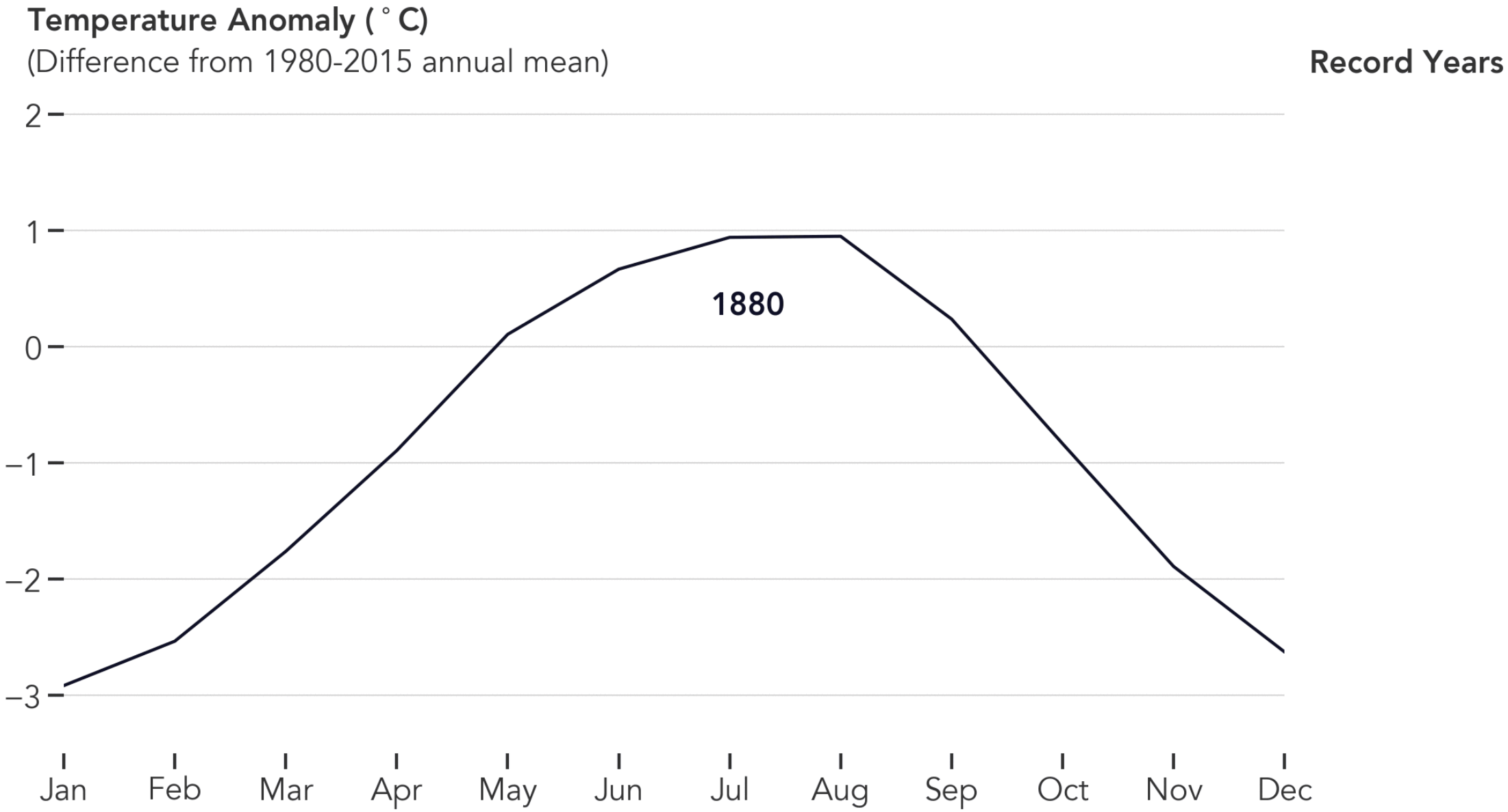
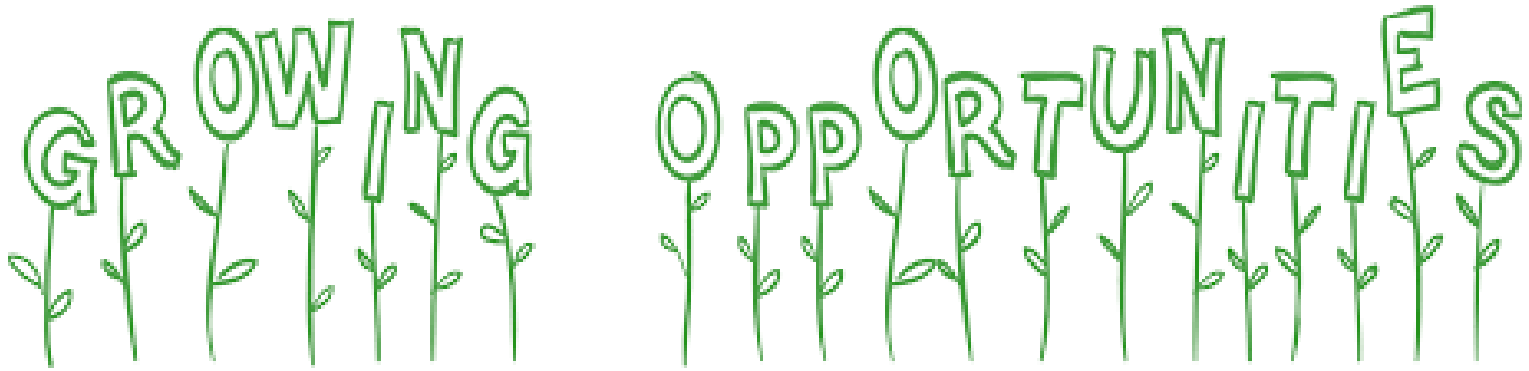
2017 WAS THE SECOND HOTTEST YEAR ON RECORD



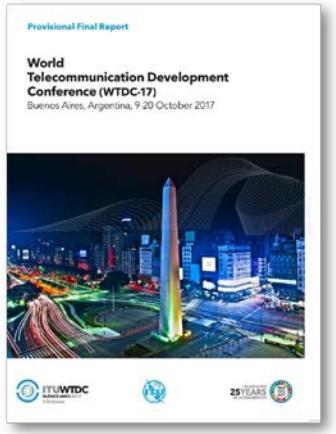
Source: NASA Earth Observatory

EMERGENCY TELECOMMUNICATIONS MATTER … MORE THAN EVER

- Disasters have devastating effects on peoples' lives
- Climate change makes things worse
- ICTs offer growing opportunities to predict, to track, to warn and to save lives



SAVING LIVES



- Use ICTs to increase disaster resilience and reduce its impact
- Raise awareness in the use of ICT for disaster response and mitigation
- Promote the implementation of early warning systems
- Support countries in the preparation of national disaster response in the areas of regulation, policy and to develop national emergency telecommunication plans
- Carry out research and **identify new technologies,** trends, best practices

DISASTER PREPAREDNESS: EARLY WARNING SYSTEMS

Saving lives
Zambia 2017

GUIDELINES ON NATIONAL EMERGENCY TELECOMMUNICATION PLANS

- Better coordination for disaster management
- Processed/procedures to identify national needs
- Framework for national consultation and cooperation
- Multi-stakeholder roles and responsibilities
- Implementation of policy/legislation requirements

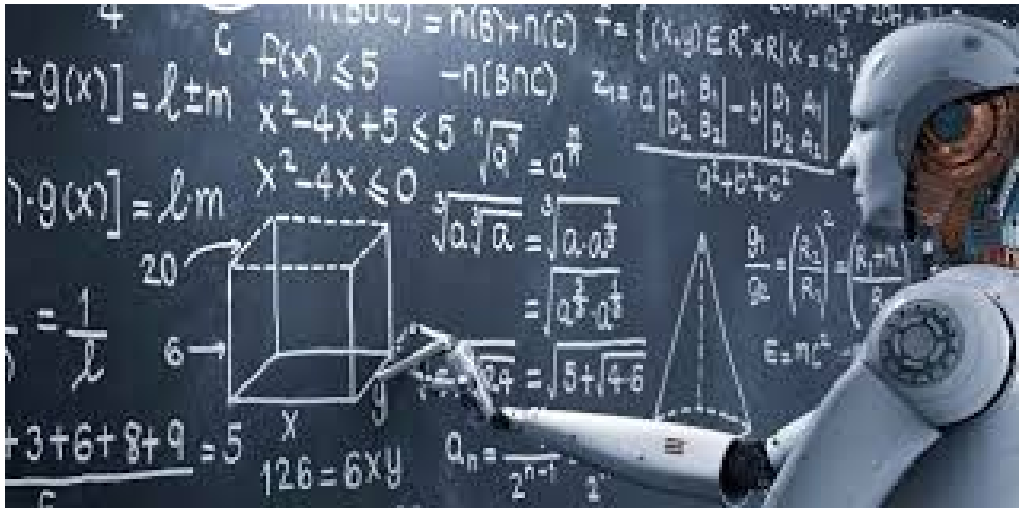
REPORT ON DISRUPTIVE TECHNOLOGIES FOR DISASTER MANAGEMENT

- ICT development/trends: 5G, AI, IoT, big data, robotics, drone technology
- Case studies: Opportunities & benefits
- Challenges, relevance and sustainability
- Recommendations

ARTIFICIAL INTELLIGENCE

A machine trying to replicate what a human can do

e.g. image/speech recognition, text to speech, natural language processing, self-driving cars, robotics



A machine doing something “intelligent” that is typically difficult for normal human capabilities

e.g., identifying patterns in huge data sets and making predictions (data mining, search, big data analytics, etc.)

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AI Helps Cities Predict Natural Disasters

New tools aim to forecast storm and earthquake damage, improving emergency response

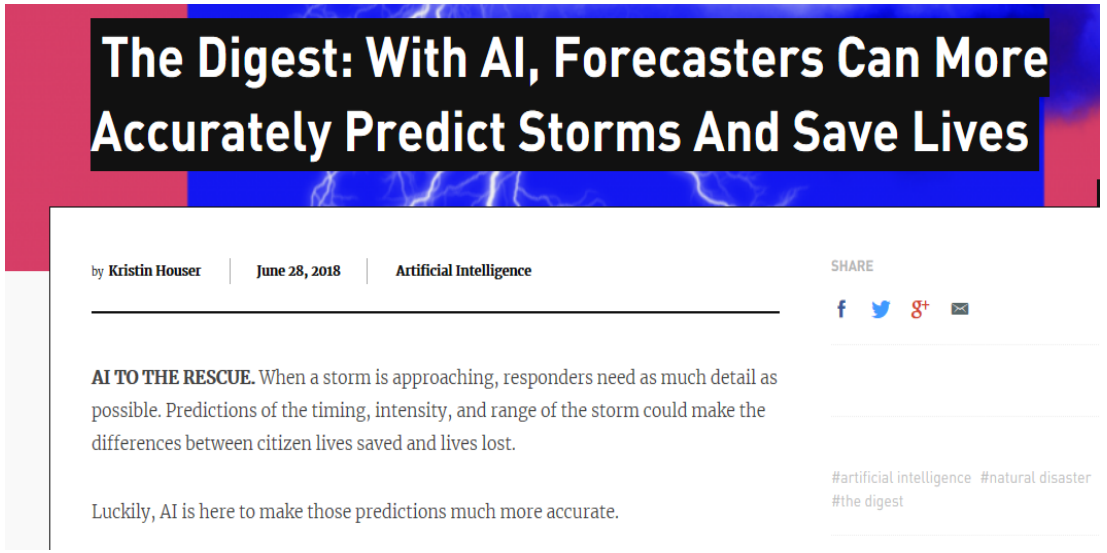
By Aili McConnon
June 26, 2018 10:05 p.m. ET

In April 2018, a major storm hit Ontario, bringing torrential rain, an inch of ice and wind gusts up to 60 miles an hour. More than half a million people lost power.

Within four days, Hydro One—Ontario's largest distribution utility—restored power to its customers' homes and businesses. By contrast, after a major storm in 2016, it took six days to restore power.

Give...

- AI
- Financial big data
- Twitter



The Digest: With AI, Forecasters Can More Accurately Predict Storms And Save Lives

by **Kristin Houser** | **June 28, 2018** | **Artificial Intelligence**

SHARE

AI TO THE RESCUE. When a storm is approaching, responders need as much detail as possible. Predictions of the timing, intensity, and range of the storm could make the differences between citizen lives saved and lives lost.

Luckily, AI is here to make those predictions much more accurate.

#artificial intelligence #natural disaster #the digest

Stellenbosch University

EMBASSY OF SWEDEN
Kampala

UNITED NATIONS
DEVELOPMENT GROUP

United Nations
UGANDA

PULSE
LAB KAMPALA

Using machine learning to analyse radio content in Uganda

Pilots

Radio and community radio in particular are critically important medium for vulnerable groups in Uganda. In the 2014 Uganda Population and Housing Census, most households reported radio as their main source of information.

Pulse Lab Kampala and partners have conducted case studies which provide evidence of the fact that public radio discussion includes reports of local incidents and first-hand experiences reported by citizens that are not gathered with other quantitative or qualitative assessment methods and are not formally recorded anywhere else. The pilots show how the exploration of the unconstrained public radio discussion can inform programmes to achieve the SDGs. And they also prove that the radio application developed by Pulse Lab Kampala and partners can be used to capture and analyse in a systematic way these discussions.

DRONES: MAPBOX OF CYCLONE PAM DAMAGE

Note: Red structures are heavily damaged, blue structures moderately damaged, and yellow structures undamaged.
Source: Matt Irwin, “Mapping Cyclone Pam’s destruction with drones.”

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