AWS Social Responsibility & Impact (SRI)

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AWS Social Responsibility & Impact (SRI):
An introduction to who we are

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What is Social Responsibility & Impact (SRI)

We partner with innovative, mission-driven organizations around the world, applying **AWS technology, solutions, and expertise** to drive positive social impact where it is most needed.

What is Social Responsibility & Impact (SRI)

"AWS made a decision that saved the Ukrainian government and the Ukrainian economy.

You can calculate that this would cost millions of dollars, but let me be honest with you – this is priceless.

Registers, databases: this is critical information infrastructure.

This is core for the operation of the economy, of the tax system, of banks, and of government overall.

This war proves that digital infrastructure is the most resilient one

– you cannot destroy it easily with bombs."

– Mykhailo Fedorov,
Deputy Prime Minister of Ukraine

Mykhailo Fedorov · 3rd+   **+ Follow**   ···
Minister of Digital Transformation of Ukraine – Ministry ...
1h · 🌐

One more Peace Prize by the President Volodymyr Zelenskyy comes to **Amazon Web Services (AWS)**. The company literally saved our digital infrastructure — state registries and critical databases migrated to AWS cloud environment. Ready to cooperate on gov tech solutions and reform judicial sphere radically.

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Focus Areas
AWS Social Responsibility & Impact (SRI)

Current Focus Areas

- Disaster Preparedness & Response
- Global Public Health
- Sustainability
- Rights and Equity
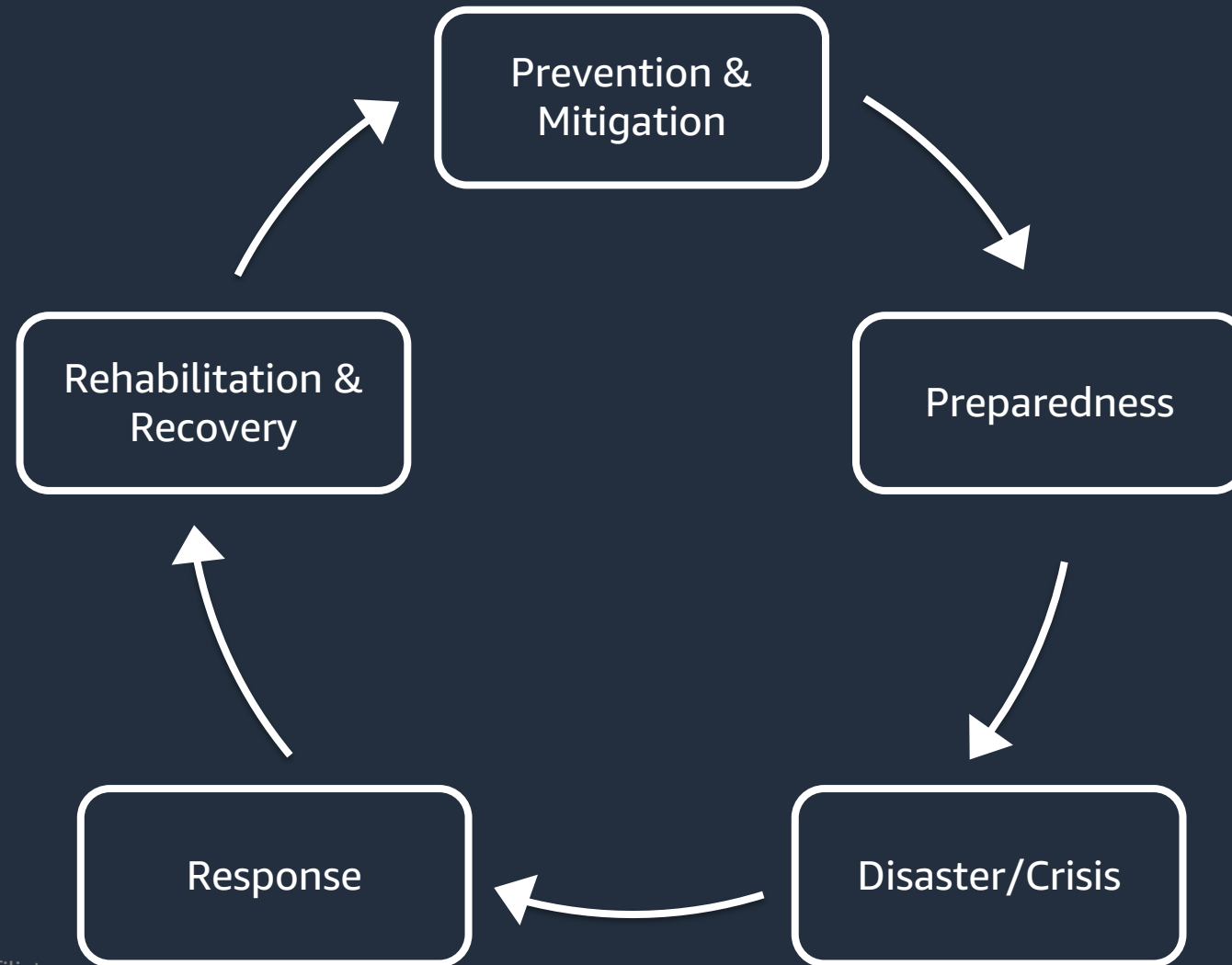- Open Data

Upcoming Focus Areas

- Tech Education

Disaster Preparedness and Response
Develop innovative proofs-of-concept, reference architectures, and best practices using AWS services that enable customers and partners to solve for disaster-related preparedness or response efforts.

Sustainability
Support sustainability decision makers, researchers and innovators in using AWS tech and scalable infrastructure for sustainability-related projects

Rights & Equity
Use the vast suite of AWS resources to combat human trafficking, reduce recidivism, and support minority-owned businesses.

Our Focus Areas Intersect to Drive Outcomes

Open Data
Support customers who actively work with data shared on AWS to accomplish their mission needs, identify trends and predictions around humanitarian needs.

Global Public Health
Increase equitable access to quality health services for the most under-served populations, resulting in improved health outcomes, globally.

How We Work

- o Solution Development

- o AWS Promotional Credits

- o Events and Panels

- o Cash Donations

- o Volunteering

Cash donations
We partner with other Amazon teams and outside investors to accumulate cash donations to distribute to our customers.

Promotional Credits
Credits accelerate innovation, drive mission achievement, and impact global communities by allowing customers to explore cloud services at no cost for a limited time.

Solution Development
AWS cloud technology is mobilized to create innovative tech solutions that help our customers maximize their impact.

Volunteering
AWS employee volunteers are matched with skill-based opportunities that provide community partners with invaluable professional services to operate effectively.

Events and Panels
We convene subject matter experts from AWS, non-profits, research organizations, and corporate partners to raise awareness about challenges and opportunities in the social impact space.

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AWS Social Responsibility & Impact (SRI):
Disaster Preparedness and Response

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Supporting customers across the disaster lifecycle

Our program offerings

1. **Large/mid/small-scale migrations and disaster workloads supported by AWS Disaster Credits (Focus of this presentation)**
    - Disaster Response Credits
    - New uses of technology for disaster preparedness/response

2. **Solution incubation and prototyping**
    - Develop technical Proofs of Concept (POCs) using AWS technology and commodity hardware   Examples: situational awareness, live drone footage streaming, Snowball Edge

3. **Strategic Partnerships and Collaborations**

4. **AWS Partner Network**
    - Our Partners are certified with a Public Safety & Disaster Response (PSDR) competency

5. **Disaster Response Datasets** via the AWS Open Data Program

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1. AWS Disaster Credits: Supporting migrations and disaster workloads by reducing financial barriers and enabling access to AWS technology

AWS's Disaster Preparedness & Response (DPR) team supports organizations and communities throughout the natural disaster lifecycle by removing barriers to tech:

- AWS Disaster Credits support cloud usage by allowing customers to explore cloud services at reduced to zero cost for a limited time

- AWS Disaster Credits are available for Public Sector customers who are (1) Mitigating the impacts of a natural or humanitarian crisis for affected populations (2) Responding operationally to a natural or humanitarian crisis, or (3) Whose business continuity is critical to a community's resilience

- Credits must be used for humanitarian efforts. Not for billing relief, general migrations, or military/defense activities

AWS Disaster Response Webpage
Contact aws-drp@amazon.com

Case study 1: New Zealand Cyclone Gabrielle

Context and background

- In Jan 2023, in what was described as a 1-in-200-year event, the North Island of New Zealand experienced catastrophic floods caused by heavy rainfall - with Auckland being the most affected. Entire summer's worth of rain fell within one day

- Considered to be the worst floods in Auckland's history. Over 8,000 homes in need of damage assessment, property damage of at least NZ$1.3 billio

- In Feb 2023, Cyclone Gabrielle impacted the North Island of New Zealand and parts of Vanuatu and Australia. Costliest tropical cyclone on record in the Southern Hemisphere, with total damages of at least NZ$13.5 billion

Case study 1: New Zealand Cyclone Gabrielle

How we supported

- SRI supported **Telnet services** in Feb 2023 to enable the Earthquake Commission (EQC) call centre on Amazon Connect (Due to surge in calls from those affected), taking calls for people affected by Cyclone Gabrielle

- This includes 300+ agents hired (temp and perm) to support EQC and all other ongoing Disaster campaigns during inbound and outbound calls.

- Able to scale up with ease when using Amazon Connect and tripling their usage, while onboarding new agents in a matter of minutes

- In addition to Connect, Amazon Workspaces is deployed to allow most of their workforce to WFH due to bad weather and continue to support this campaign

- All this resulted in increase in cloud cost which AWS SRI helped offset AWS credits

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Case study 1: New Zealand Cyclone Gabrielle

Additional next steps

- Further tech partnership with Telnet through migration of their last legacy footprint and the modernization of their MSSQL databases to PostgreSQL with Babelfish
- Further innovation of Amazon Connect by implementing Contact Lens to improve their customer experience with conversational analytics and machine learning.

Telnet CEO John Chetwynd stated that "It would have been impossible for us to even think of supporting the number of calls our agents are doing if we would still be using our legacy contact center solution"

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Case study 2: Sri Lanka Fuel crisis – Context

- Amidst Sri Lanka's ongoing humanitarian crisis and country-wide fuel shortage in 2022, AWS SRI supported the country's national Fuel Rationing System

- QR-based system running on AWS controls sudden spikes in monthly fuel demand and curbs the black market. It tracks weekly quotas to citizens using the QR code.

- System essential to Sri Lanka's critically impacted economy, to streamline the delivery, monitor various types of usage and predict accurate consumption of future demand

- Reduces the wait time to obtain fuel, eliminate fuel hoarding and prevent unnecessary confrontations at the pumping venue

- Joint AWS success story where AWS worked together with national government (Ministry of Fuel), our customer (Dialog Axiata), partner (MIT ESP) to get this system live

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Case study 2: Sri Lanka Fuel crisis – Outcome

Stats:

- Fuel rationing system went live on 16th July 2022, 5.3 million users registered within 14 days of launch
- Ability to register personal identification information of nearly 7.5 million users owning motor vehicles
- Nearly 200,000 QR transactions per day from 900 fuel sheds across the country

Project key Milestone and Achievements:

- Within first day of go-live app registered nearly 2 million users
- As of August 2022, the system has been adopted by 93% of fuel stations across the country and has contributed to national savings, reducing fuel imports from $500M to $230M
- Wait time for a person obtain fuel at a shed reduced to roughly 2 hours from 3 days

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Case study 2: Sri Lanka Fuel crisis – How the national fuel rationing system comes together
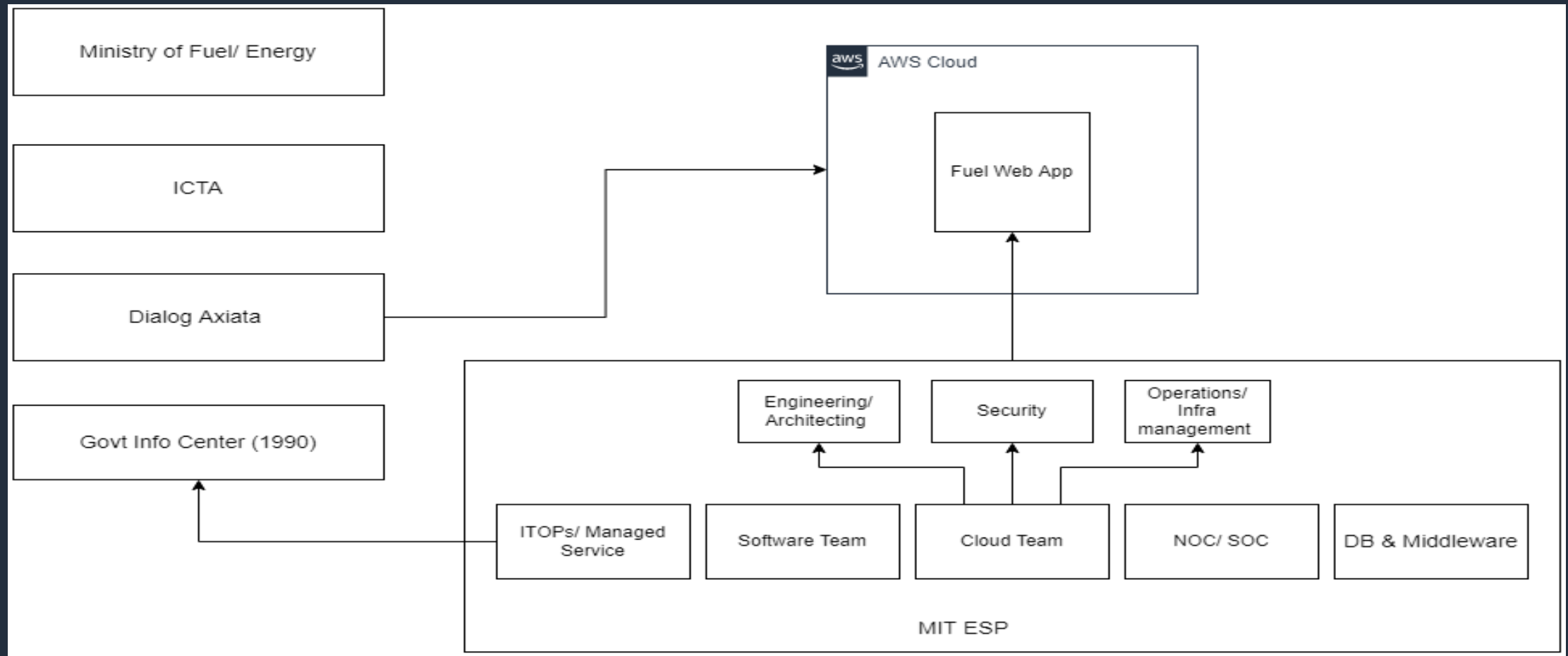
Case study 3: South Korea floods

- Class 5 typhoon Hinnamnor hit Seoul's Gyeongnam area in September 2022; 60 schools shut down affecting 200,000 students who could no longer attend class in-person

- Previously, the education system had already migrated to AWS in 2021 during COVID–delivering full capacity to hundreds of thousands of students to attend remote classes on the cloud

- With the typhoon, AWS SRI supported the installation of 500 instances, successfully enabling the opening of remote classes allowing ~200,000 students to return to school remotely

- Key is future-proofing education systems, such that in the event of future disasters, schooling can continue to run uninterrupted

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Case study 4: West Java earthquake

- West Java Indonesia earthquake that has killed about 270 people (as of Dec 2022) and displaced tens of thousands

- AWS SRI partnered with AWS's InCommunities and Amazon.com's "Amazon In The Community" in an One Amazon Approach to provide a donation to local NGO Human Initiative

- Enabled the NGO to purchase
  - 283 sets of bedding kits (one family size)
  - 1000 packages of multipurpose assistance program
  - 130 temporary shelters for community
  - 7 temporary toilets
  - Psychosocial services for trauma healing

- Amazon distributed bedding and shelter kits to hundreds of families in one of the impacted village and interacted with them

- Helped 10,405 survivors rebuild their lives

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2. Solution incubation and prototyping: Addressing capability gaps in the Disaster Preparedness and Response (DPR) space

- Develop technical Proofs of Concept (POCs) using AWS technology and commodity hardware

- Collect use cases directly from customers

- Examples: Situational awareness, live drone footage streaming, Snowball Edge clustering

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The AWS Snow Device Family

AWS Snowcone

- 2.1 kg
- 2 vCPUs
- Up to 14 TB of storage
- Up to 16 GB RAM
- Integrated WiFi

AWS Snowball Edge

- 22 kg
- Up to 104 vCPUs
- Up to 210 TB of storage
- Up to 416 GB RAM
- Optional Nvidia V100 GPU

Customized for Disaster Response

Vision: Actional intel. Adaptable solutions

Increased Situational Awareness

Biometrics collection

AWS computing and storage services to run
- Logistics
- Coordination
- Civil services ops

Local, private 4G network

UAS detection/ CUAS Ops

Resilient Comms

LoRa based IoT network

Map Server

RF Survey and intel collection

Local, secure intel collection/ analysis

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Case Study 1: Snowball Edge + Help.NGO

- Hurricane Dorian struck the Bahamas in Sep 2019. AWS provided Help.NGO two AWS Snowball Edge devices to process aerial imagery of damaged areas and assess disaster impact (Previously deployed to Haiti to provide drone mapping capability)

- AWS Disaster Response team spent time on the ground with Help.NGO running image processing tasks and training staff on deploying the Snowball Edge

- This enabled Help.NGO to rapidly distribute high-resolution images of the impact on the most affected islands

- Snowball Edge devices brought the AWS cloud to the edge for Help.NGO and its partners and made mission-critical data available to humanitarian workers/decision-makers

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3. Strategic Partnerships and Collaborations

Case Study: Humanitarian/Disaster mapping program (Mapathons)

- Ongoing partnership with Help.NGO and Humanitarian OpenStreetMap Team (HOT)
- Runs on AWS and supported by AWS Disaster Response & Preparedness team (DPR)
- Volunteers helped identify key structures, creating detailed opensource geospatial data accessible by humanitarian responders globally
- **Example:** DPR responded to Super Typhoon Noru, which made landfall in the Philippines in September 2022 , by working with Help.NGO to host a Mapathon event in October

  - AWS and Amazon volunteers mapped small towns in Luzon Island, with a focus on communities in badly-hit Aurora Province
  - 32 volunteers from across AWS and Amazon registered in the Mapathon responding to Super Typhoon Noru in the Philippines, within <48 working hours of Mapathon notification.

4. Our Amazon Partner Network (APN): We can leverage on our APN where our Partners are certified with a unique Public Safety & Disaster Response (PSDR) competency

Case Study: Amazon Connect + American Red Cross

- When Hurricane Harvey struck the coast of Texas in August 2017, the scale of the damage caused a massive increase in phone calls that overwhelmed the Red Cross call center

- **VoiceFoundry,** an AWS Public Safety and Disaster Response APN competency holder, helped implement within 48 hours, while AWS and Amazon volunteers stepped in to take calls, acting as a force multiplier for existing Red Cross volunteers

- Since then, we have supported similar activations where rapid deployment of scalable contact center technology is necessary to handle unexpected spikes in volume

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5. Disaster Response Datasets via the AWS Open Data Program

What is Open Data?

Sharing open data in the cloud lets data users spend more time on data analysis rather than data acquisition.

AWS works with data providers and data users who seek to:

- Democratize access to data by making it available for analysis on AWS
- Develop new cloud-native techniques, formats, and tools that lower the cost of working with data
- Encourage the development of communities that benefit from access to shared datasets

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Open Data Sponsorship Program

The Open Data Sponsorship Program covers the cost of storage, transfer, and egress for high-value, high-impact datasets.

- Frictionless access to the data
- Freely accessible
- No paywall or registration

We help data providers share and distribute over 400 datasets comprising over 100 PB of data with AWS resources

- 80 climate datasets
- 97 geospatial datasets
- 113 life sciences datasets
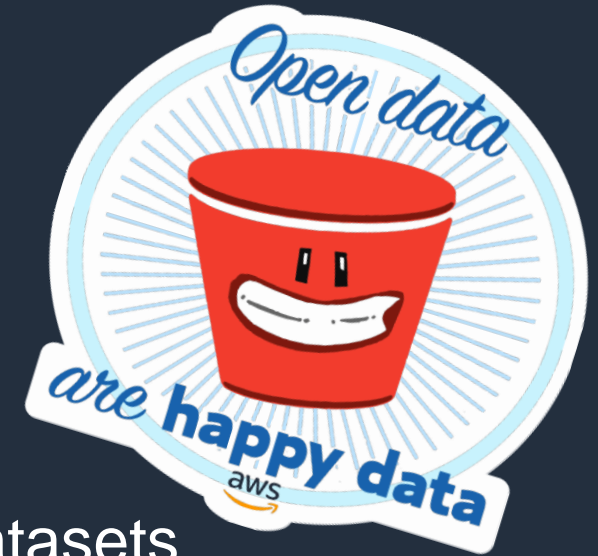
AWS Open Data Sponsorship Program

aws.amazon.com/opendata/open-data-sponsorship-program
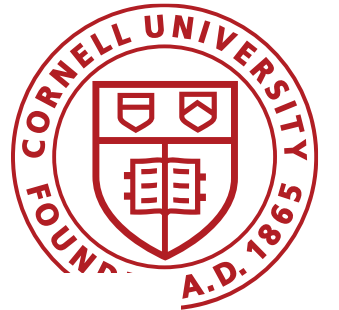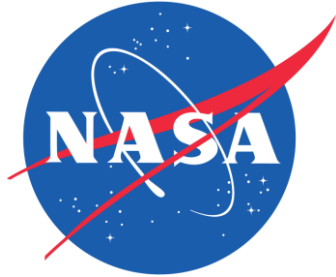
Examples of regional data providers in our Open Data Program

Earth Observatory of Singapore have provided radar expertise for disasters in the region.

- Natural Event monitoring
- Disaster Response
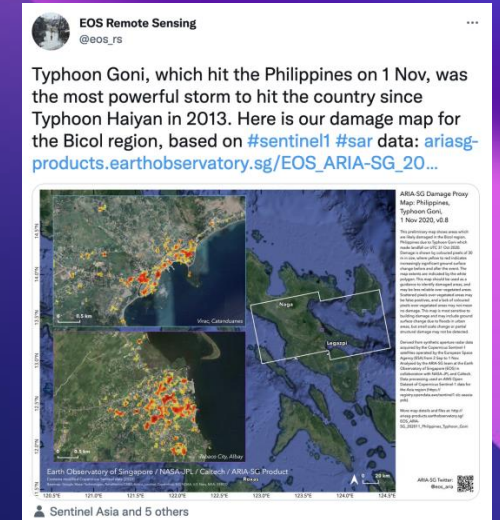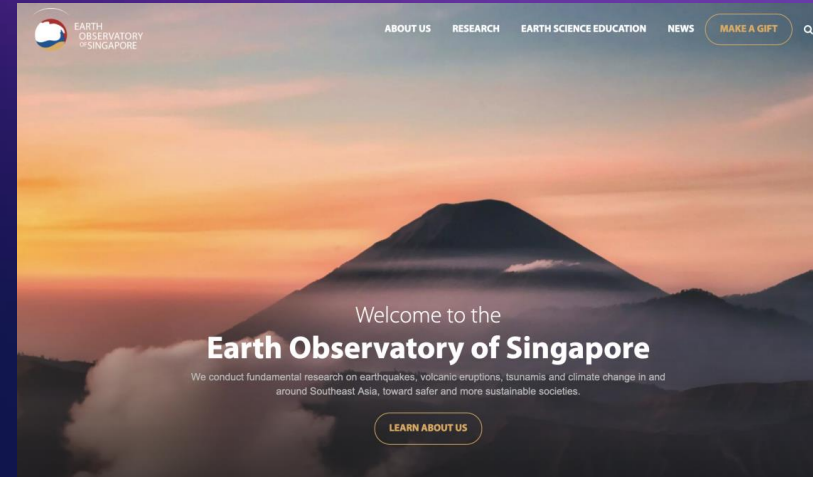
JAXA have shared Satellite imagery for large scale events like the Syria & Turkey Earthquake.

- Damage Assessment Maps
- Risk assessment and resiliency
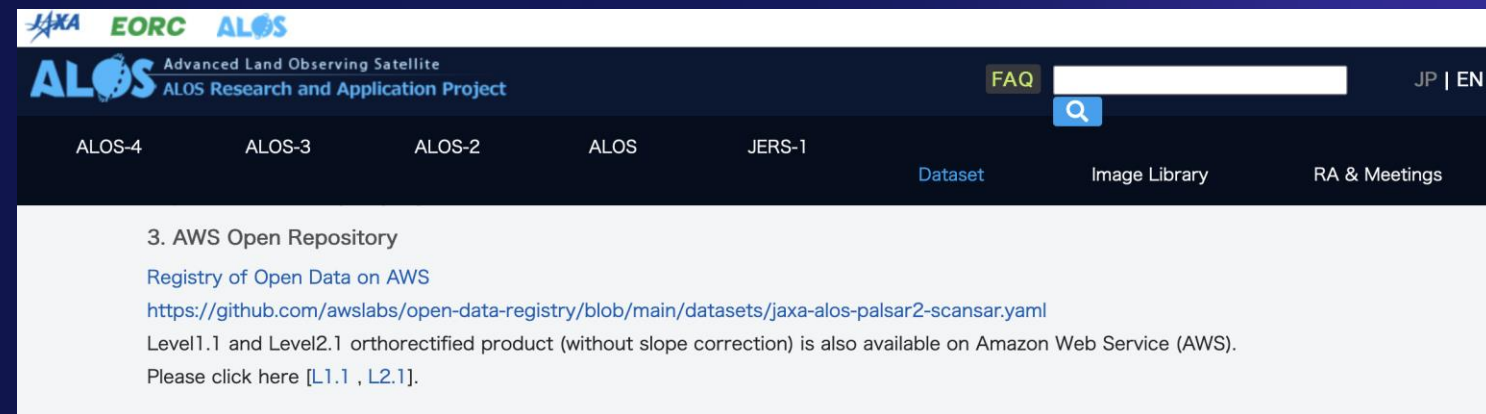
Early Detection and Monitoring

Grillo built a Low-Cost Earthquake Early Warning System on AWS using a network of IoT sensors.
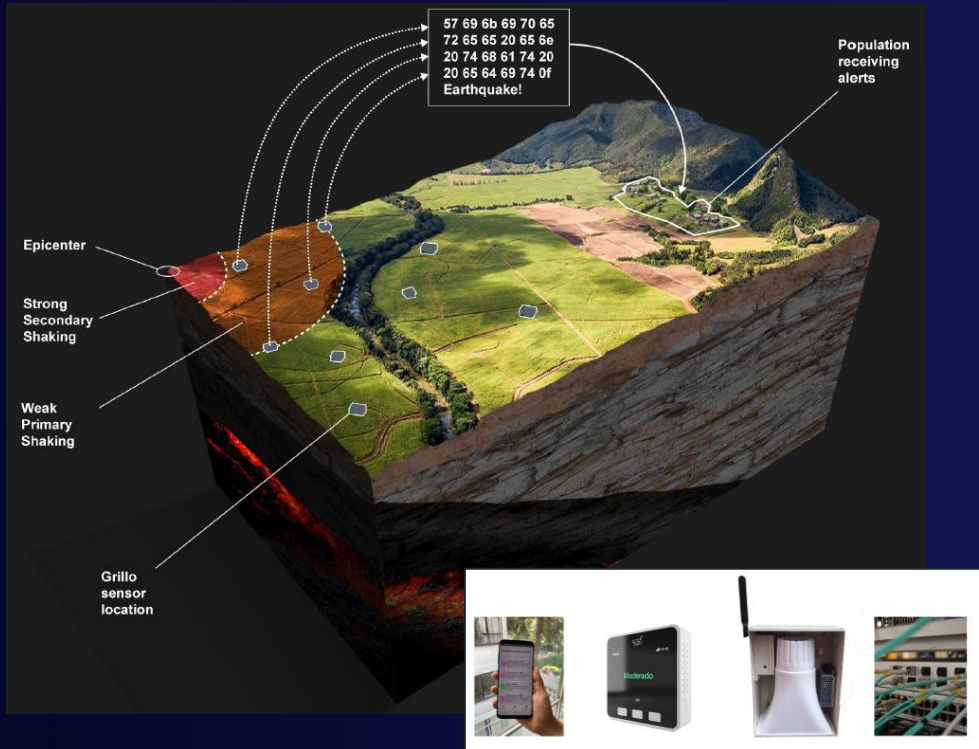
SCEDC provide 20 years of seismic data as an open dataset. Users can access large catalog holdings directly without having to download data directly.

Maxar Open Data

The Maxar Open Data Program provides pre and post event high-resolution satellite imagery in support of emergency planning, risk assessment, monitoring of staging areas and emergency response, damage assessment, and recovery. These images are available on the Registry of Open Data on AWS.
https://registry.opendata.aws/maxar-open-data/
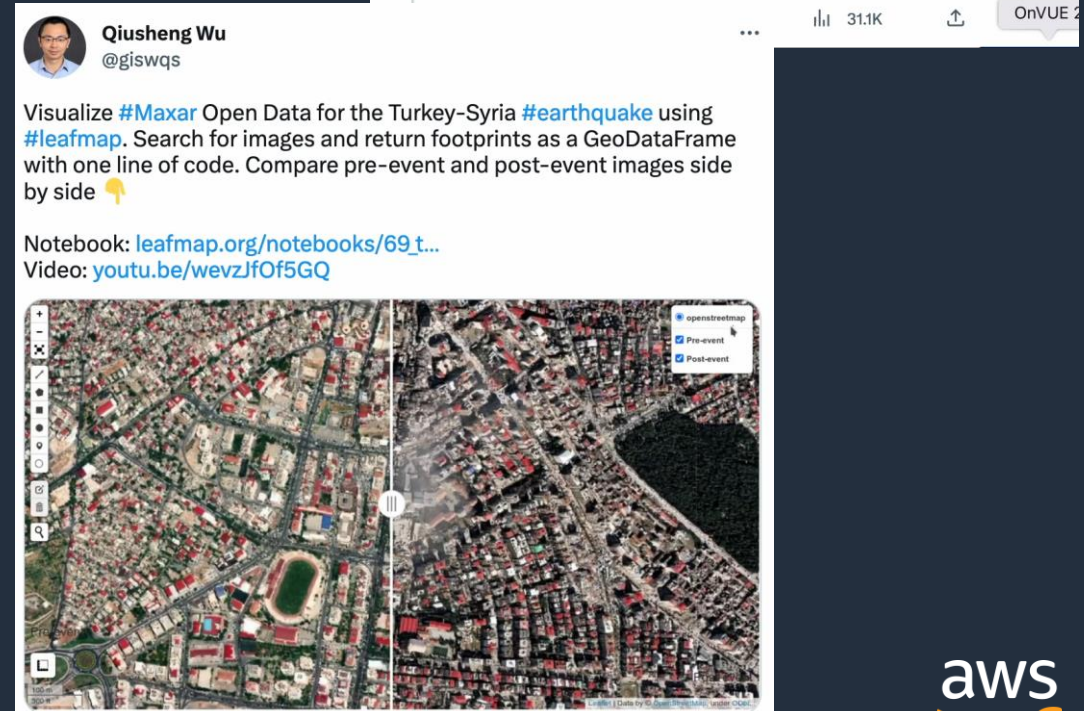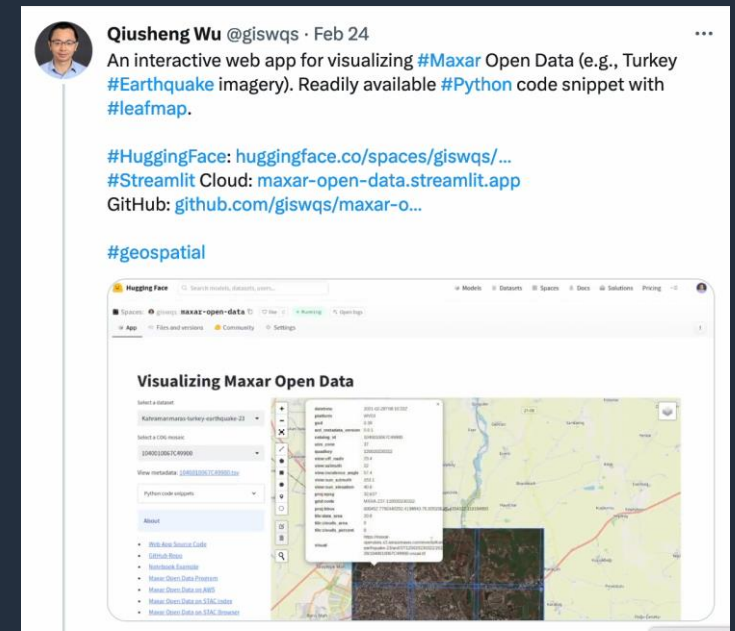
Case studies: Disasters and Open Data at a use-case level

1. GNS Science Te Pū Ao Joins the AWS Open Data Sponsorship Program to Better Prepare for Natural Disasters (Aug 2022)
https://www.aboutamazon.com.au/news/aws/gns-science-te-pu-ao-joins-the-aws-open-data-sponsorship-program-to-better-prepare-for-natural-disasters

2. Bushfire mitigation through Machine Learning with AusNet and AWS (2021):
https://aws.amazon.com/blogs/machine-learning/bushfire-mitigation-through-machine-learning-with-ausnet-and-aws/

3. Fireball International Shortens Wildfire Detection to 3 Minutes Using AWS Bushfire (2021) : https://aws.amazon.com/solutions/case-studies/fireball-international-case-study/

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AWS Social Responsibility & Impact (SRI): Global Public Health

The AWS Health Equity Initiative (HEI)

- Apply [here](#)
- 3-year, $40M commitment to help customers develop solutions to advance health equity for underserved and underrepresented communities
- Underserved or underrepresented communities can include but are not limited to race, ethnicity, gender, disability, neurodiversity, or geography
- AWS Promotional Credits and technical Expertise through the AWS Professional Services team (ProServe)
- *Note: this is not a cash program*

Program Categories

Increase Access to Health Services

Reduce Disparities by Addressing Social Determinants of Health

Leverage Data to Promote Equitable and Inclusive Systems of Care

Advance Equity In Diagnostics and Screening

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Program Eligibility

- Accredited research institutions, research consortia, non-profits, and private entities who are current or future AWS customers

- Global program - encourage applications from around the world

- Sign a credit agreement, which includes submitting progress reports and public referenceability

- Amazon Partner Network (APN)

- Maximum request per application is $250,000 in AWS Credit - exceptions reviewed on a case-by-case basis

- Private sector applicants must match 25% towards total request

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Program Review Criteria

- Align with one of the four program categories

- How the project will advance health equity for underserved or underrepresented communities

- Extent to which applicant is engaged with the community to be supported

- Stage/maturity of the proposed project

- Clear impact metrics and impact

- Use of AWS services and support within the project scope

- Project timeline within 12 months of start date

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Health Equity Program Participants

- **Overview:** WelTel is the leading evidence-based digital health solution that uses a text-first approach to provide effective and equitable relationship-based care.

- **The Challenge:** Māori, including youth & other marginalized communities, lack equitable access to health services & employment opportunities, have worse outcomes due to social determinants of health, while the Māori continue to experience systemic racism in many traditional settings. Youth suicide in NZ is higher than in any developed country.

- **The Solution:** The goal is to engage young people in meaningful wellbeing dialogue with open 2-way SMS to detect early warning signs to provide timely & appropriate interventions to avoid acute episodes. WelTel new architecture to allow WelTel's platform to use one shortcode for multiple deployments; reduced service costs will improve access for Māori & other marginalized communities. Additional cloud architecture optimizations will enhance the scalability of the WelTel application for rapid deployment and enrollment to meet the onboarding needs for New Zealand.

- **Community Involvement:** Engagement is through WelTel partner, Skills Consulting Group (SCG), a leading provider of wellbeing, education, & training services in New Zealand, Australia, and the Pacific region. WelTel will implement a culturally-safe digital mental health & wellbeing platform to improve outcomes and equitable access to services.

Health Equity Program Participants

- **Overview:** Raxa is an expert-curated and AI-driven, single-window integrated platform for every health need of users and healthcare providers. It is available as iOS and android apps for smartphones and through web browsers.

- **The Challenge:** India has the largest population in the world without access to good healthcare. This is contributed to by a perennial shortage in India of formally trained healthcare personnel, a gap that has been filled by informally trained healthcare providers, especially in rural areas where the gap is largest.

- **The Solution:** Raxa has created and evaluated a persistent, mobile, disaggregated and scalable learning and decision support system (DSS) for formal and informally trained healthcare providers. In a pilot of 10,000 rural, underserved patients whose care was delivered over on Raxa's digital system over the past 2 years, they were able to deliver decision support and training through their app-based platform (using e.g. AWS ECS, EC2, RDS, ElasticSearch, VPC, etc) in a scalable fashion to all those (providers and, in the future, patients) with a cheap mobile phone.

- **Community Involvement**: The Government of India has made a big commitment to it and is working hard on it through the National Health Authority (NHA). Raxa is part of a Bill and Melinda Gates Foundation-funded accelerator to work with the NHA and its systems are certified and connected to the NHA's National Health Stack.

Important Dates

- Application deadlines in 2022, 2023 and 2024 are March 31, June 30, and November 15 of each year

- All applications will receive an application status notification approximately 60 business days after each application deadline

- Apply [here](#)

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AWS Social Responsibility & Impact (SRI): Sustainability and Open Data

Case study 3: New Zealand Cyclone Gabrielle

Context and background

- In Jan 2023, in what was described as a 1-in-200-year event, the North Island of New Zealand experienced catastrophic floods caused by heavy rainfall - with Auckland being the most affected. Entire summer's worth of rain fell within one day

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Additional next steps

- Further tech partnership with Telnet through migration of their last legacy footprint and the modernization of their MSSQL databases to PostgreSQL with Babelfish

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Telnet CEO John Chetwynd stated that "It would have been impossible for us to even think of supporting the number of calls our agents are doing if we would still be using our legacy contact center solution"

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Our program offerings

1. **AWS Sustainability Credits**

2. **Amazon Sustainability Data Initiative**

3. **AWS Open Data Sponsorship Program**

4. **…(Other sustainability offerings in development)**

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1. AWS Sustainability credits

AWS's Sustainability credits supports sustainability decision makers and innovators in in using AWS tech and infrastructure for their experimentation and development of sustainability-related projects. Specifically, the program seeks to support those who:

- Build cloud-hosted applications, software, or tools for sustainability related work

- Perform proof of concept or benchmark tests evaluating the efficacy of moving research workloads or open data sets to the cloud

- Train a broader community on the usage of cloud for sustainability workloads via workshops or tutorials

2. Open data platforms we offer (*Please click on links below and reach out if interested)*

Open Data Sponsorship Program

Amazon Sustainability Data Initiative

(See next slide)

Data to address a wide range of open data challenges (sustainability, disasters, healthcare etc.)

Image from Landsat 8 satellite, courtesy of the U.S. Geological Survey

Deep-dive into the Amazon Sustainability Data Initiative (ASDI)

1. **Amazon Sustainability Data Initiative (ASDI**) is a global authoritative source for open-sourced sustainability data. Provides publicly available, free access to climate data that can be expensive for researchers to access/analyze

2. ASDI hosts petabytes of data including weather observations, ocean temps, climate projection, satellite imagery. Allows analysis of massive amounts of data in minutes, regardless of location or computing power

3. ASDI works with global data providers (e.g., NOAA, NASA) to identify key climate datasets and host them on AWS S3. Data providers retain complete control and ownership of their data hosted on AWS

4. ASDI reduces the **cost**, **time**, and **technical barriers** of analyzing datasets to generate sustainability insights

5. This data, together with AWS analytical tools, is enabling cutting-edge scientific work, helping governments and scientists advance their work on sustainability-related research

ASDI: Making access to data faster, cheaper, and easier

esri · NOAA · MAXAR · NASA · NREL National Renewable Energy Laboratory · Met Office · Finnish Meteorological Institute

Climate data projections	Air quality	Sea surface temperature
Weather forecasts	Water	Environmental indicators
Historical weather records	Energy	
Satellite imagery	Ocean forecasts	

https://registry.opendata.aws/sentinel1-slc-seasia-pds/

https://twitter.com/eos_rs/status/1324930298606309378/

Case example: Sustainability and Open Data at a **organization-level** (with an NPO) to fight climate change

- Digital Earth Africa (DEA) is a nonprofit working with African nations to provide leaders with information on planning for climate changes due to flooding and erosion

- Through the Amazon Sustainability Data Initiative (ASDI), DEA is using satellite imagery hosted on AWS to create a platform that monitors environmental conditions in Africa

- In Tanzania, govt officials are using DEA to monitor how coastal erosion, rising sea levels and deforestation are contributing to the degradation of mangrove trees

- The Data hosted on AWS , which local officials previously had no way to access, has helped leaders understand the need to restore their mangroves and led to an effort to plant 1,000 mangrove seeds per week

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Case example: Sustainability and Open Data at a national-level in the Philippines

- SRI APJ was invited and hosted by Philippines's Environment Minister in Manila on 16th January 2023 in a closed-door sharing on GSI's Sustainability/Disaster Response/Open Data offerings

- Ministry keen to develop more Sustainability Open Data use-cases relating to Oceans, Socioeconomic, Infrastructure, Ecosystems and Biodiversity

Case example: Sustainability and Open Data at a use-case level

A. Species and Forest Preservation

▪ **Saving the whales using bioacoustics data:** Project Ceti, an Imagine Grant awardee that seeks to understand the language of sperm whales. They work with a population of whales off the coast of Dominica, using bioacoustic data

▪ https://aws.amazon.com/blogs/publicsector/announcing-winners-of-2021-2022-aws-imagine-grant/

▪ **Saving the koalas in Australia using genomic data:** https://www.aboutamazon.com/news/aws/the-450-koalas-that-could-help-save-their-species

▪ **Sharks:** https://aws.amazon.com/blogs/publicsector/assessing-oceans-health-monitoring-shark-populations/).

▪ **Transforming animal conservation with open data and more on AWS (22 Apr 2022):** https://aws.amazon.com/blogs/publicsector/transforming-animal-conservation-open-data-more-aws/

▪ **Predicting global biodiversity patterns in Costa Rica with ecosystem modeling on AWS:** https://aws.amazon.com/blogs/publicsector/predicting-global-biodiversity-patterns-in-costa-rica-with-ecosystem-modeling-on-aws/

▪ **American Forests use the cloud to advance Tree Equity across the United States (15 Dec 2021):** https://aws.amazon.com/blogs/publicsector/american-forests-uses-the-cloud-to-advance-tree-equity-across-the-united-states/

▪ **How African leaders use open data to fight deforestation and illegal mining (1 Dec 2021):** https://aws.amazon.com/blogs/publicsector/how-african-leaders-use-open-data-to-fight-deforestation-and-illegal-mining/

▪ GBIF (Global Biodiversity Information Facility (GBIF) Species Occurrences)

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Case example: Sustainability and Open Data at a use-case level

B. River and Ocean monitoring (e.g. temperature and water levels)

- **Migration patterns:** With ocean soundings data (https://registry.opendata.aws/pacific-sound/), researchers can track migration patterns, as well as impact of fishing and commercial tanker travel lanes (as whales for example are often caught in path of large commercial ships and it's possible to use the data data to influence shipping lanes to avoid the migration paths)

- **Coral reefs:** With ocean temp and salinity data, such as from MUR SST (https://registry.opendata.aws/mur/), it is possible to track impact of temp and other factors on coral reefs (ie coral bleaching) as well as impact to ocean species populations (such as with OCEARCH https://www.youtube.com/watch?v=2gVYxu1Q4dU)
- **How the cloud is helping us better understand and manage the oceans (8 Jun 2021):**
https://aws.amazon.com/blogs/publicsector/how-cloud-helping-us-better-understand-manage-oceans/
https://aws.amazon.com/blogs/publicsector/how-cloud-helping-us-better-understand-manage-oceans/

C. Accounting of natural resources

- Managing the world's natural resources with earth observation (2 Jun 2022):
https://aws.amazon.com/blogs/publicsector/managing-worlds-natural-resources-earth-observation/
- AWS hosts a new open dataset to help businesses identify climate finance risks and investments:
https://aws.amazon.com/blogs/publicsector/aws-hosts-new-open-dataset-help-businesses-identify-climate-finance-risks-investments/

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Additional areas of consideration
1. Thought leadership
2. Partnerships

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1. Thought leadership

AWS SRI can participate in your ecosystem's thought leadership opportunities.

- **These include webinars, seminars, panels, speaking events etc.**
- **This can increase awareness of our joint offerings and capabilities, increase visibility of work we are doing, and develop connections with key ecosystem stakeholders.**

See thought leadership examples AWS SRI took part in in the following slides

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Example 1: Japan disaster conference with 12 prefectures/cities

- On 15th March 2023, SRI APJ engaged with emergency management officials from 12 prefectures/cities in Fukuoka (i.e. 1/4 of all of Japan)

- This created awareness of AWS disaster solutions and capabilities among the 12 prefectures. Participants learnt about AWS past work in the local Kumamoto earthquake and globally in Ukraine , and about our offerings in this space (Connect, Snowball Edge etc.)

- Potential opportunity to address the hyper-local needs of participants. This includes prefecture-specific disaster solutions like a common operating picture where all agencies in a prefecture can feed and monitor data together or water hazard monitoring systems

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Example 2 : USAID Pacific Islands panel

Thought leadership: SRI participation in USAID panel covering role of tech in disaster response in Sep 2022. The panel raised awareness of the role of technology in disaster response with policymakers from Pacific Islands and multilateral officials, together with fellow panelists from UN, NetHope, and Government of Tonga. 218 people from the public sector (Pacific Island policymakers) and private sector (development stakeholders) attended the panel.

Theme:

- Innovative connectivity solutions that build a resilient ICT ecosystem and mitigate against a range of threats, from conflict to natural disasters
  - Solutions to highlight include satellites and cloud storage; other potential ideas include AI-based next generation flood forecasting
  - ICT infrastructure to highlight include underseas cables, terrestrial mobile infrastructure, satellite earth stations, and logistics infrastructure for required for e-commerce

Target audiences:

- *Primary*: ICT policymakers and regulators with influence over the digital development of their respective IndoPacific nations.
- *Secondary*: Private sector stakeholders operating in the Indo-Pacific and diplomatic and development officials from the USG and other like-minded nations.

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Example 2 : USAID Pacific Islands panel

Moderator

- John Garrity, COP, USAID Better Access and Connectivity (BEACON)

Panelists:

- Matthew Johannessen, Senior Manager, AWS's Social Responsibility & Impact Team and Global Disaster Response Lead

- Joel Myrhe, Senior Disaster Management Specialist, Pacific Disaster Center

- Ria Sen, Global Preparedness Officer, UN Technology Division, Emergency Telecommunications Cluster

- Stephanie Siy, Deputy Director, Field & Impact Programs, NetHope

- Seluvaia Kauvaka, Government of Tonga Ministry of Education and Training Project Management Unit

Potential Opening / Closing Remarks Speakers:

- Ambassador Erica J. Barks-Ruggles, U.S. Representative to the 2022 Conferences of the International Telecommunication Union and Inter-American Telecommunications Commission

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2. Strategic Partnerships and Collaborations

AWS SRI is always on the lookout for strategic partners and partnerships.

Three things to take note on how we can support each other:

- We have strong partnerships, as outlined in the 2 partner examples on the following slides
- We can offer partners like these to you and your ecosystem
- We are on the look-out for relevant partners

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Example 1: Partnerships with NGOs and our Humanitarian mapping program (Mapathons)

- Ongoing partnership with Help.NGO and Humanitarian OpenStreetMap Team (HOT)
- Runs on AWS and supported by AWS Disaster Response
- Volunteers helped identify key structures, creating detailed opensource geospatial data accessible by humanitarian responders globally
- **Case study:** DPR responded to Super Typhoon Noru, which made landfall in the Philippines in September 2022 , by working with Help.NGO to host a Mapathon event in October

  - AWS and Amazon volunteers mapped small towns in Luzon Island, with a focus on communities in badly-hit Aurora Province
  - 32 volunteers from across AWS and Amazon registered in the Mapathon responding to Super Typhoon Noru in the Philippines, within <48 working hours of Mapathon notification.

HELP.NGO

Humanitarian OpenStreetMap Team

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Example 2: Pacific Disaster Centre and its suite of disaster products

Who is PDC: Pacific Disaster Centre (https://www.pdc.org/about/) provides multi-hazard early warning, hazard monitoring, and risk intelligence to support rapid disaster response & recovery. Their DisasterAWARE platform includes high resolution all-hazards impact models, advanced analytical reports, and augmented information through AI. See https://www.pdc.org/un-sasakawa-award-2022/ for details on a recent recognition (the Sasakawa award from UNDRR)

What is our relationship with PDC: PDC uses our standard suite of tools (EC2 , CloudWatch) and have built their platform (e.g. PDC all-hazards model, DisasterAlert , DisasterAware) on AWS. PDC will be upgrading their all-hazards model from version 3.0 to 3.1 on AWS

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Example 2: Pacific Disaster Centre and its suite of disaster products

Benefits AWS provided to PDC

- Scalability: As PDC deploy new apps, and gain new users, they are able to quickly add computational resources – AWS described as "backbone of how PDC is able to scale"
- Security benefits and framework of AWS, access mgt system , AIM service
- Redundancy ,uptime of the cloud, providing critical life saving info at all times , to all partners around the globe – from smallest (Fiji DR org) to biggest orgs (UN office of DR coordination affairs, US military apparatus)
- Utilizing a managed streaming - cutting edge of info gap filling for AI and disasters
- CloudWatch: Simple notification svc on monitoring , to ensure maximum uptime

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Example 2: Pacific Disaster Centre and its suite of disaster products

Our partnership with Pacific Disaster Centre (PDC) covers:

- PDC applications (DisasterAware etc.) are used by tens of thousands of disaster management practitioners in more than 70 countries, and by the 2 million public users who have downloaded the DisasterAlert app

- Multilaterals: Working with ASEAN, UN, AHA

- Country-level : US, Haiti, Philippines, Indonesia etc

- Organization-level: NASA, FEMA , US military

- Developing worlds' first flood early warning system

- Supporting RIMPAC

- Data enablement through PDC partners, APIs

- UN award: PDC selected for UN award for ability to scale , at national, regional level ; and also for focusing on most vulnerable – not just a single community but ensuring the DRP solutions provided to every corner of earth

All of the above runs on AWS!

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Thank you

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