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Weathernews Inc. (WNI)*

Challenges & Opportunities in Climate Change Adaptation from Private Sector's view

**COP28 Japan Pavilion
Promoting Early Warning Systems
for Minimizing and Addressing Loss & Damage
Dubai, 10th November 2023**



“I want to protect the lives of mariners.”
“I want to help in time of crisis.”



January 1970, an explosive low-pressure system hit the port of Onahama, Japan, and lives of 15 crew on the vessel has lost.

“If there had been really useful weather information, maybe this accident could have been prevented.”

Weathernews Inc. was established with a sense of responsibility and will of company founder Hiro Ishibashi in 1986.

Since then, our “Risk Communication service” have expanded to cover all types of business and our daily lives.



We need both
*Early Warning for ALL & Early Warning **for YOU***

Public Private Engagement (PPE) in Japan

Legal Framework for Meteorological Services in Japan - Meteorological Service Act - (enact 1952)

1993: Enhancement of Public-Private Partnership

- Establishment of an authorized organization for dissemination of meteorological data to the private sector
- Establishment of “certified meteorological forecasters” system
- Authorization of Public Weather Forecast by the Private Sector

 気象庁 Japan Meteorological Agency	 weathernews <i>Always WITH you!</i>
Public Weather Service	Your Weather Platform (Info. Exchange Platform)
Weather Forecast Warning	Weather Forecast Solutions for Risks Warning Dissem. to End-users
Basic Observation	User-oriented Obs. for Specific Services



Weathernews Inc. (WNI) in Brief

Global Service Operation Network Supporting 24 x 7, from 32 offices in 21 countries

**Oklahoma
Operations Center**



**Copenhagen
Operations Center**



**Athens
Operations Sub-Center**

**Amsterdam
Operations Center**



**Yangon
Operations Center**

**Tokyo Global
Operations Center**



**Manila
Operations Center**

Established in 1986
Sales in 44 areas of global market
1,100+ employees
(including 200 Certified Forecasters,
300 Risk Communicators & 250 IT Experts)
2,500+ BtoB customers in 50 countries
2,000,000+ BtoS "Supporters"
180,000 Weather Reports / Day

SEA Planning



Shipping



Oil & Gas



Offshore &
Near Sea



Fishery



Aviation

SKY Planning

LAND Planning



Road
Management



Railway



Transportation



Logistics



Local
Government



Retailer



Event
Management



Agriculture



Telecom
Carriers



Facility
Management



Energy



Construction



River
Administration



Dam
Operation
Management



Manufacturing
Management



Your
Weather
Station



Dynamic
Climate
Change



Terrestrial
Phenomena



Air
Quality
Analysis



Insurance

LIVING Planning



Mobile



Internet



Broadcasting



Travel



Wellness



Flower



Weather
Literacy



Farm



Disaster
Reduction



Star



Photo



Space
Weather



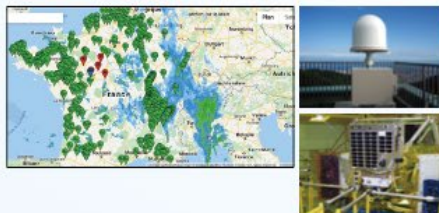
Natural
Energy

For Global Service and Development

Collect Various Data

1 Observation & Eye-Servation

- Information Infrastructure
13,000 Observation Infrastructures



- Supporter Information



Weather reports including sky photographs and sensory information.
We also use these "Eye-servations" that cannot be captured by machines in the forecasting process.

2 Observation data from worldwide official sources



3 Your Business Data



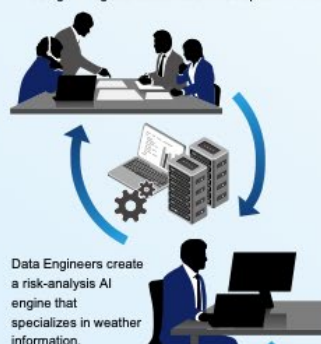
Data Accumulation

The world's largest database of meteorological, met-ocean and terrestrial phenomena



Data Analysis + Content Making

Risk Analysts who specialize in specific markets and related operations work closely with the customer to identify needs and create content using AI engines to address those specific needs.

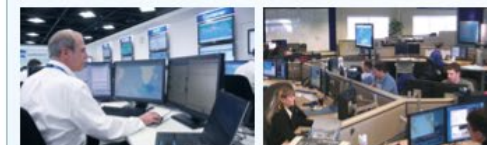


Risk Communication

(Providing countermeasure responses based on the 12V scale)

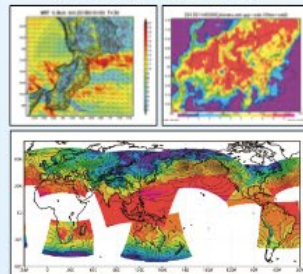
Risk Communicators provide information that will help address weather risks specific to each market.

Ex: T-Max is a platform to support fleet optimization with weather data, met-ocean data and vessel performance data.



Weather Analysis and Forecast

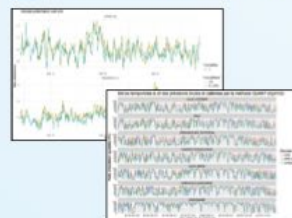
1 Analysis using original weather forecast models and AI



2 24/7 monitoring



3 Evaluation of Forecast Accuracy



Evaluation

(Service feedback and verification)

1 Quantitative Evaluation of forecasts and daily service



2 Service Review & Planning Meetings with the Customer



PPP in APAC

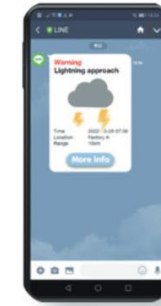


Thailand

The Bangkok Metropolitan Administration agreed to cooperate with WNI in enhancing natural disaster risk reduction and management in Bangkok.

We are working with local institutions to deploy observation sensors in the Bangkok area.

The first "Rainfall Nowcast" for Thailand is provided to local factories to notify about possible flooding and lightning.



Early Warning Alert
Notification of Flooding and
Lightning Strikes via LINE
and Email



Vietnam

In November 2022, a state-of-the-art X-band meteorological radar-EAGLE Radar-was provided to the Viet Nam Meteorological and Hydrological Administration (VNMHA), within the framework of the Voluntary Cooperation Programme (VCP) of WMO and installed in Hanoi.

In addition to realizing early disaster detection through the public-private partnership, Weathernews will provide meteorological services to address the needs for individuals and businesses against weather-related risks.



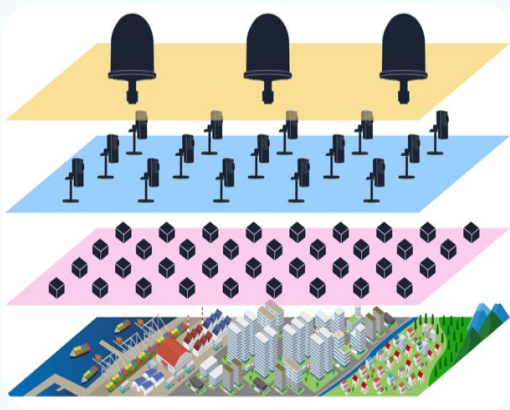
Indonesia

To help mitigate damage from natural disasters and loss, an MoU was bound with the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG).

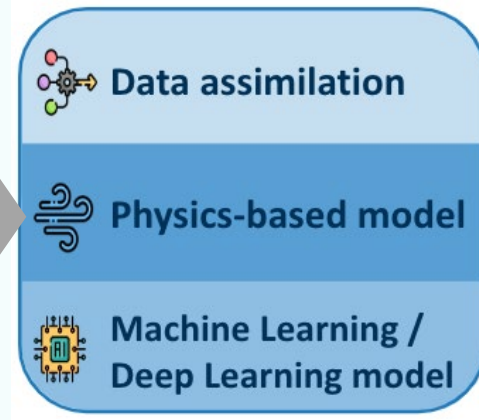
Under the MoU, BMKG and Weathernews will collaborate to automate rain cloud observation using image data based on Weathernews' proprietary AI-driven analytics technologies, as well as enhance forecasting accuracy.



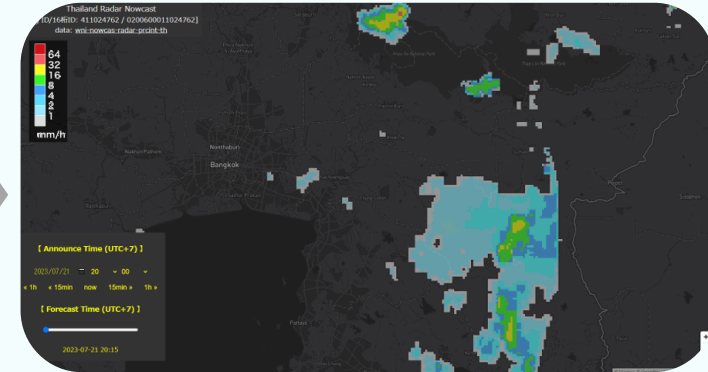
Weathernews Alerting Service



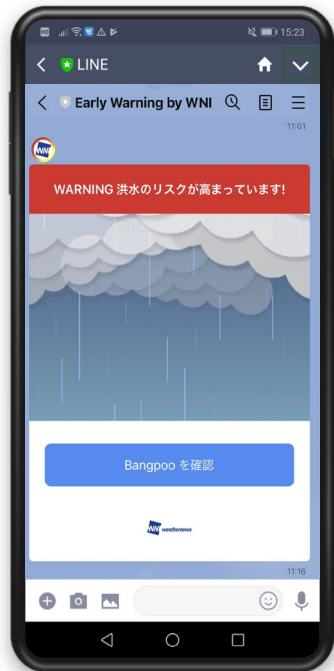
Hybrid Obs. Network



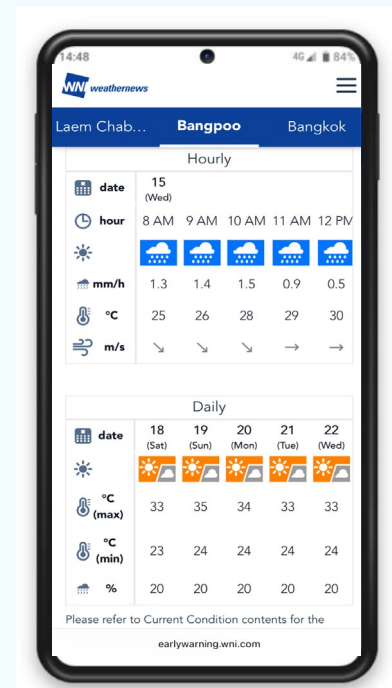
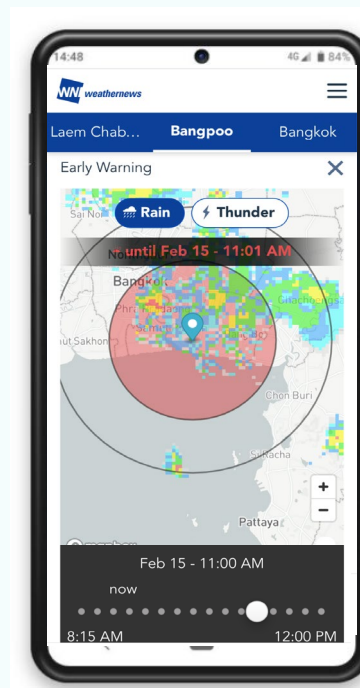
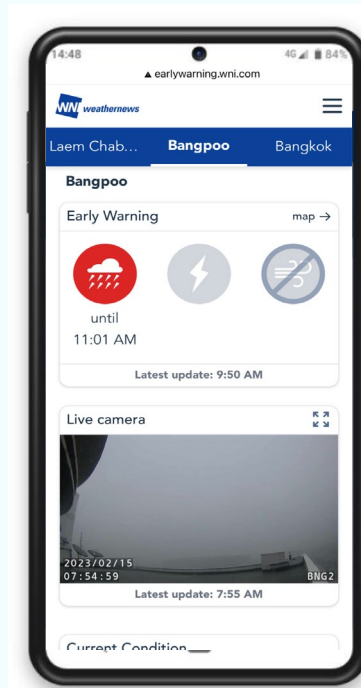
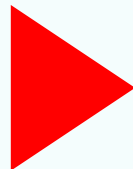
WNI Original Forecast Model



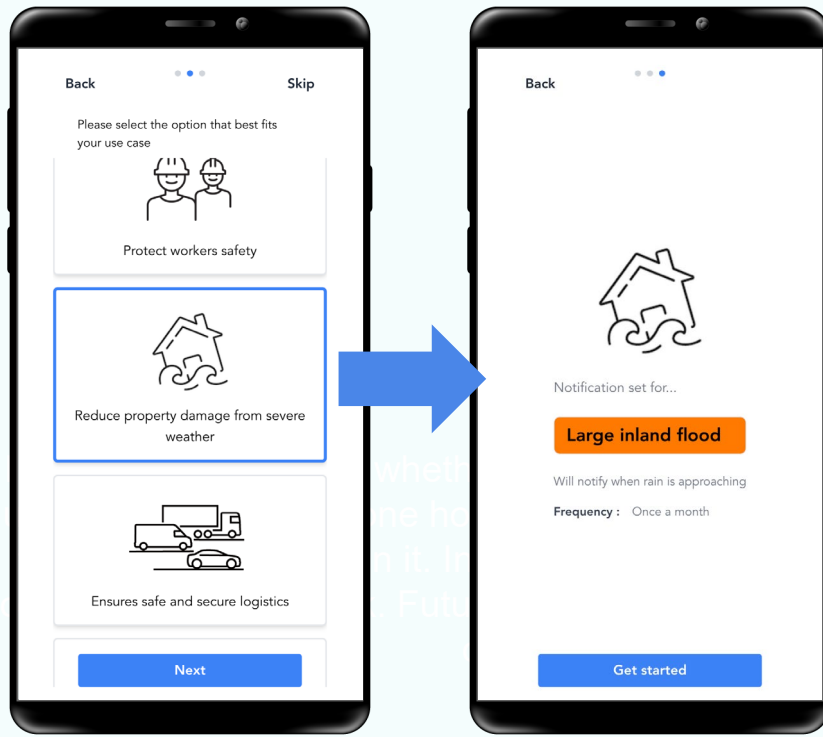
WNI Radar Nowcast



Risk Alert



Customer's Needs and Voices



Customer needs to

1. Protect the safety of workers

→ Alert the risk of heavy rain when going / leaving work

2. Reduce the damages on facilities

→ Alert the risk of flooding around the facilities

3. Ensure the products delivered

→ Alert the risk of traffic jam due to rain

4. Work effectively outdoors

→ Alert the risk of working outside



“We are concerned about whether it will rain when we work outdoors or move to other facilities. I feel the Rain Alert Service usually come exactly one hour in advance. We were skeptical at first, but managers in Thailand are using it and we now have a lot of trust in it. In particular, the rain “stop” forecast released in October 2023 was very useful in determining the timing of movement and work. “

Challenges & Opportunities: Private Sector's View

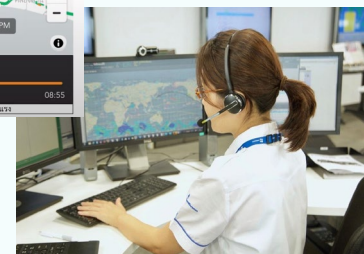
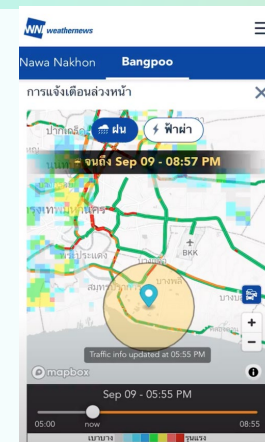
Challenges in Countries:

- ◆ No legal framework of PPE/PPP to clarify the role of private sectors
- ◆ Few communications between public and private sectors to understand and establish the mutual trust.
- ◆ Data and information not available; No (open) data policy, No system/mechanism for data distribution, or Data ownership is not belonged to NMHS



Opportunities with efficient PPE/PPP

- Disseminating timely and reliable information to end -users, as a key component of People -centered Early Warning System
- Increasing accuracy of data and information with cutting -edge technologies and credible feedback from customers and users in the society
- Maximizing the value and socioeconomic benefits of meteorological services with clearly defined roles and responsibilities of public and private sectors based on the mutual trust



Our Partners in Asia

Bangkok would like to thank Weathernews Inc. for supporting with weather radar, weather observation station & CCTV cameras, including installation of various equipment and sharing information to Bangkok. This is considered a good starting point and we sincerely hope that there will be continuity in the future.

Mr.Chadchart Sittipunt, Governor of Bangkok
Bangkok Metropolitan Administration
At the MoU Signing Ceremony in Bangkok, March 2023
English Translation



Conclusion

We are willing to minimize the loss & damage for individuals and businesses with our innovative weather/climate services.

And, we have received a lot of needs/wants and expectations from our customers facing weather risks from climate change.

Now is the time to establish an efficient framework for cooperation between the public and private sectors to achieve a resilient and sustainable society.

Thank you

[https:// global.weathernews.com /](https://global.weathernews.com/)



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