

Corporate Report 2024

Weathernews Inc. Integrated Report



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The landscape photographs on the cover and table of contents were provided by our supporters (users).



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Founding Aspiration

One man's ambition "I want to save sailors' lives"

The origins of Weathernews

Weathernews was founded by Hiroyoshi Ishibashi in 1986. Ishibashi chose to become involved in meteorology in 1970 when, while working for a trading company, a cargo ship he oversaw became involved in an accident at sea.



The dream lives on

January 1970. Iwaki City, Fukushima Prefecture. An explosive low-pressure system hits the local port of Onahama, causing the sinking of a cargo vessel. The lives of 15 of its crew are lost. At the time, it was not possible to predict this dangerous weather phenomenon, nor was weather information tailored to the needs of sailors available.

"This tragedy might have been prevented if truly useful weather information had been available"

The accident inspired Ishibashi to enter the world of meteorology, and he later founded Weathernews in 1986. Ishibashi's dream of protecting the lives of sailors and being of help to others in times of need still lives on with all of us at Weathernews today.

Together with our supporters

Together with the "supporters" who are our stakeholders

We use the term "supporters" to describe all of our various stakeholders. Customers, shareholders, even our employees—we all experience, think about, and are affected by weather on a daily basis. We all have an interest in the weather. So by gathering data together with input from a lot of people and finding out what it is they want to know, we can provide information and services that are better and more useful. Weathernews will continue to co-create new value together with everyone who is interested in weather.





Co-creating value based on trust

The trust we have built with our supporters is our strength. Individual supporters send us weather reports through the Weathernews app.

Each day, we receive an average of 180,000 reports on weather and conditions all across Japan from people on the ground. Feedback and requests from corporate supporters also serve as key hints for the creation of new services.

It is thanks to our supporters, who communicate with us day after day, that we are able to improve the accuracy of our weather forecasts and produce valuable services. **Our Dream**







Our dream today

We want to save sailors' lives We also want to protect the future of this planet

Our dream has grown

In recent years, climate change has resulted in the frequent occurrence of extreme weather and severe natural disasters.

As the world seeks to solve this issue shared by all humankind and make the shift to a carbon-neutral society, we have redefined the dream of Weathernews.

As we renew our dedication to our founding aspiration, we are evolving into a company that saves lives and also protects the future of this planet.

From weather to climate change

We provide weather impact forecasting and response strategies to businesses in ocean-, air-, and land-based transport; weather-sensitive retail; electric power; and even professional sports.

We have also expanded our services to include the climate domain. We have launched a service that analyzes the risks of climate change on companies and helps them develop measures to adapt to a changing environment.

Going forward, we will be combining our vast accumulation of business and weather data with AI, risk analysis, and other technologies to create new services that not only aid adaptation to climate change but also help mitigate it through the reduction of CO₂ emissions.

Overview of businesses and services

FY2024: June 1, 2023-May 31, 2024

Weathernews originally began offering weather services in the marine segment based on a passionate dream to save sailors' lives, and its markets have since expanded to include land and aviation segments as well. Today, Weathernews provides services 24 hours a day, 365 days a year to customers in approximately 50 countries and regions around the world in a variety of markets, including not only B2B (business-to-business) but also B2S (businessto-supporter, our term for business-to-consumer). Business overview and composition (main businesses)



Weathernews' main services

In the air

Weathernews supplies information that supports optimal decision-making on when and whether to operate aircraft. To airline operators, airports, aircraft, and pilots, we provide notifications for sudden weather changes and information on predictable weather phenomena which aids in selecting appropriate countermeasures.

On land

B2S

We provide weather services through a variety of media platforms. We see the final recipients of our information, individual users, not as consumers (C) but rather as supporters (S) who work together with us and in turn benefit the weather industry, hence the term "B2S" instead of "B2C."

For drones

Provision of high wind risk notifications and wind forecasts up to 150 meters above the ground for drone operators in Japan.



For transport

Support for transportation operators to help them understand the conditions of transport infrastructure based on land, sea, and air service information.

For disaster preparedness

Support for local governments in developing optimal disaster preparedness systems to protect the lives and property of residents in the event of a disaster.

Support for ensuring the safety, economic efficiency, and

For airplanes

economic efficiency, and comfort of aircraft operations, from pre-planning to in-flight.



For helicopters

Support for decision-making on when and whether to operate medical helicopters and other flights requiring emergency dispatch.

For energy production

Provision of support for electricity demand forecasting and real-time renewable energy generation forecasts.



FY2024 results Our domestic and international airline market sales increased as the number of both domestic and international flight passengers continued to recover, mainly due to strong inbound demand and domestic leisure demand.

B2B

We offer a wide range of B2B services. Our primary customers are transportation, electric power, and other companies involved in the infrastructure that is indispensable for daily life and economic activities. We also serve companies and municipalities engaged in protecting human life through disaster preparedness.



FY2024 results Through television commercials and other advertising strategies, our mobile and web forecasting services increase awareness of Weathernews' apps and brand, making them a growth driver for the entire company. Backed by steady user growth and improved advertising market conditions, these services saw increased revenue.



FY2024 results While the importance of weather information is increasing, especially for disaster-related reporting, television stations and other major customers are continuing to revise their costs due to changes in the business environment. Weathernews is promoting improvements to create a more profitable structure by streamlining service operations and building new services.

For roads and railways

Support for road safety and safe railway operations during snow, ice, rainfall, and other inclement weather.

For broadcasters

Support for the production of weather content tailored to the needs of individual regional broadcasters. In addition, the provision of disaster information bulletin systems.

For sports and events

Support for decisionmaking on whether to hold sporting and various other events, as well as the safe and smooth operation of such events.



FY2024 results In logistics-related markets such as expressways and railroads, the need for weather information will increase from the perspective of ensuring safety in logistics, including disaster preparedness for business locations in the event of extreme weather events and impacts on transportation. Revenue increased due to an increase in the number of customers in the expressway market.



FY2024 results WxTech Data and Weathernews for Business, two SaaS-type products, saw sales to Japanese electric power companies expand, resulting in increased revenue.



FY2024 results Despite ship cargo movement shifting to a weakening trend against the backdrop of geopolitical risks on major routes, revenues increased due to expanded sales and new orders for support services for environmentallyfriendly operation, as well as the positive impact of foreign exchange rate fluctuations.

By sea

With regard to the marine transportation that underpins global trade, we provide services that support safe and economical navigation for large vessels on long voyages, as well as support for efficient port operations and the maintenance of offshore wind power generation facilities.

For large vessels

Provision of services to oceangoing vessels around the world such as Optimum Ship Routing (OSR), which supports safe navigation and efficient fuel consumption.

For ports

Apps and SNS

video stream.

Distribution of weather

information via the Weathernews

app and Weathernews LiVE

Support for safe and efficient port and maritime operations and coastal navigation with detailed weather countermeasure information.

Growth Strategies Past and Future | 40 Years of Progress

Value Creation History

Milestones in Weathernews' value creation

Since its founding, Weathernews has continued to grow under a dream of protecting the lives of sailors and being of help to others in times of need. This history has manifested itself in the form of the creation of new value in various businesses.

2004-2011

Corporate Soundness

1970–1995 Market Creation

Market Creation and Growth

1970

A cargo vessel tragically sinks off the coast of Onahama

1986

Establishment of Weathernews Inc.

1992

Started providing optimal route information service for vessels

1996

Models

Started providing services for the logistics industry

1996-2003

Diverse Business

1999

Started content service for cell phones (launch of B2S business)

2000

Listed on NASDAQ Japan

2003

Transitioned from a flow-based to a stock-based business model

2004

Started supporter-participation-based content in B2S business

2009

Proprietary WITH Radar deployed all over Japan / Started providing the Optimum Ship Routing (OSR) for marine shipping

2011

After the Great East Japan Earthquake, supported reconstruction with the former Antarctic research vessel SHIRASE / Started development of TSUNAMI radar to detect tsunami formation

2018

Started broadcasting Weathernews LiVE

2012-2022

Pursuit of

Innovation

2019

Started broadcasting Weathernews app TV commercials

2021

Started providing a climate change risk analysis service

2022

Ranked no.1 in forecast accuracy as evaluated by a third-party organization

A new phase of scaling our business to also protect the future of this planet

2023 -

Scaling Business

Growth Strategies Past and Future | Medium-Term Management Plan 2023-2025

Medium-Term Management Plan 2023-2025

Aims for Stage 1 of our fifth period of growth (up to the end of FY2026 ending May 31)

A tremendous volume of data gathered from a variety of sources, highly accurate forecasts based on that data, and a community that participates in further improving and enhancing this accuracy-

During the three years of Stage 1 of our Medium-Term Management Plan, we will build a world, spanning numerous markets, in which the elements of data, forecasting, and community form a virtuous loop and grow while creating value. Thereafter, each loop will bring further development and greater integration. This optimization loop will generate value that will expand to encompass the entire market as well as society as a whole.

Focus Areas

- 1. Develop a New Customer Base Through a SaaS Model
- 2. A New AI Operation Model Starting with Data Analysis
- 3. Value through the Synergy of Connected Individuals and **Corporations**
- 4. A Global Business Structure for Continued Growth in the Future

14.7%

12.8%

(Actual)

(Target)

ROE

5. Contribute to the Global Environment through Services Aiding **CO₂ Reduction**



Medium-Term Management Plan

Growth Strategies Past and Future | Value Creation Process

Value Creation Process

Trinity loop (value creation cycle)

Various layers of weather, business, and other data are utilized in our highly precise forecasting. This spurs the growth of our community, a space for sharing the value of our forecasting, giving us more data in a selfreinforcing cycle.

Leveraging weather and multi-industry business data accumulated since our establishment

• Global observation data

• Proprietary meteorological observation data • Weather forecasting models for individual countries

•Oceanographic data and private satellites

Business data

Past-Present Correlation analyzation

↓ Weather laver

Data Sales, customer traffic, electricity consumption, etc.

Existing observation data

We provide highly accurate forecasts for a variety of industries

Electricity supply and demand forecasting
CO2 emissions forecasting
Forecasting numbers of customers
Navigation and flight risk prediction
Driving risk prediction
No.1 most accurate weather forecasts
Pollen dispersal forecasting

data

Weather

layer

Business

The value creation of trinity loop forecasting

Through the loop of data, forecasting, and community, Weathernews will create more and more new value.

Community

Contributing to both individual and corporate communities as we become a space for even greater data accumulation

• Ships and navigators around the world

- Airplanes and pilots from numerous airlines
- Convenience stores across Japan

• Weathernews app users nationwide who send us 180,000 reports a day

Onward globally

Maximizing the loop by expanding the number of individual and corporate supporters who form our community to include the entire world

Acquisition targets and value creation What we aim to be 10 years from now

In ten years, we aim to be a post-carbon solutions support company that sets the industry standard for environmental operations. Weathernews was established in Japan, a country whose expertise serves as a benchmark for disaster preparedness and mitigation worldwide. Under the sense of mission this gives us, and with a cloud of weather and environment data that can support every industry, we will create new businesses and expand them.



* Approx. 6% of Japan's required emission reductions in 2030

To Our Shareholders

I, Tomohiro Ishibashi, recently assumed the position of president of Weathernews.

When Weathernews was founded, people said you couldn't make money from the weather. Now, almost 40 years later, the weather industry is growing by leaps and bounds. No company or industry can afford to ignore the effects of climate change. Even so, currently only a small percentage of businesses make use of weather and climate data in their operations.

I am both extremely honored and excited to be taking over the reins as president at a time like this. Weathernews has a responsibility to society, and to fulfill this responsibility we will be contributing to the world at large through innovation and by fully leveraging the strengths we have cultivated over the last four decades. **Tomohiro Ishibashi** President and Representative Director Chief Executive Officer

Assumed office in June 2024. Dream 30 years from now: "To make Weathernews an indispensable company that is known throughout the world."

To Our Shareholders

Creating value together with our supporters (S)– Our unique "B2S" business model

I previously worked in business-to-business (B2B) sales for a manufacturer. Speaking directly with customers and getting feedback on the products and services we provided was something I found rewarding and challenging.

When I joined Weathernews in 2000 and became involved in our consumer-oriented services, I was confronted with the unique difficulty of the business-to-consumer (B2C) model. In B2C, the only response you get back from users is data, and you can't directly speak with them or ask questions. My team and I gave much thought to this issue, and what we arrived at was the idea of "B2S": Business-to-supporter. We came to look at the people who use our services not as consumers (C) but rather as supporters (S), partners who gather and share information with us. And over the 24 years since this realization, we have been growing our weather community together with these supporters.

The weather world has always had a "one for all, all for one" sense of mutual aid and benefit. Ship captains, for example, must keep an eye not only on the weather at their current location but also all across an expansive area

covering their charted course. The only weather they can really get a full picture of by themselves, however, is that directly above their heads. So captains help each other out by sharing information with their fellows at sea, in turn making things safer for every vessel on the water. The sky has no boundaries, national or otherwise, and this makes information about the weather extremely suitable content for sharing, not only from the sea but every location imaginable, because doing so helps everybody out. And that is what we focused on in our B2S model as well. Backed by the growing popularity and sophistication of the Internet, we have used Weathernews as a platform for everyone to share weather data.





A community of supporters growing alongside our B2S services— Our next aim is global expansion

I became convinced of the power of sharing information when we first implemented the Sakura Project in 2004. It was around that time that it had really become possible and easy to send photos via cell phone. We wondered if we could leverage the strength of our supporters outside of typhoons and other forms of inclement weather, and decided to try to track the front of the cherry trees coming into bloom. Cherry blossom season is a much-romanticized and important cultural event in Japan. But the flowers only last for a short amount of time, and information on when they are in bloom, particularly when they are at their "peak," is highly desirable yet difficult to gather. Utilizing photos and other information sent to us by our supporters, we were able to truly and accurately track the cherry blossom front, in real-time, with greater granularity and dynamism than conventional weather maps and data had ever been able to provide. In addition to just how great of an asset our supporters were, it really drove home to me that this was the new way of doing things in the age of the Internet.

With 180,000 reports sent to us every day, our circle of supporters, connected through the platform that is Weathernews, has grown significantly. Our supporters understand that this is a community worth paying for, one which makes it possible for anyone to experience the satisfaction of helping others and have fun working together to create weather data. Now we want not just individuals but also more companies and local governments to use the Weathernews app. With everyone's involvement, we will be able to create new and more powerful content. One particularly representative example of this is the increased ability to prepare for and respond to natural disasters. When a disaster strikes, we immediately set up a special website to provide support for the affected area and volunteers. In addition to weather information, such sites leverage content to help assess damage and aid recovery efforts.

I fully and wholeheartedly believe in the power of our supporters. We will continue to expand our circle of supporters and our area of business, from Japan to the world, taking the value we create and the value generated by our community to a global scale. This, too, is a part of our dream—to save sailors' lives and also to protect the future of this planet.





Leveraging big data and our forecasting capabilities, expanding business to include the domain of climate as well as weather

To protect the future of this planet, we are expanding our business domain to include climate in addition to weather. Whereas weather is something whose time scales are relatively short, the time spans for climate are measured in decades.

How will climate change affect business? This is something many want to know. The weather, climate, and business data we have accumulated rivals that of any organization. And our ability to use this big data to forecast the future is an unassailable strength for us. The value we offer is data, forecasting technology, and a community of supporters with whom we work to stimulate and grow. It is in these areas that we will continue to invest aggressively as we advance toward achieving our dream.

Expanding our business domain to encompass climate in addition to weather is an exceptional challenge, but the corporate culture that we have built is one of never fearing failure as we advance toward our goals. In terms of technology, as well, we have always been leaders in making use of the latest advances. The emergence of such technologies as cloud computing and AI has created even more fertile ground for our growth. Going forward, we will be accelerating the development of SaaS-style businesses and cultivating new client segments. The services

we have provided for many years have much in common with so-called subscription-based services, and we believe they are quite close in spirit to SaaS. Weather information is something that is used on a daily basis, and in part due to this distinctive trait of weather services, our churn rate, an important indicator for SaaS, is also extremely low. As such, we expect to see continued improvements in profitability in the future. Now that our B2S has grown as large as our B2B products, we will aim to create new value through synergistic reactions between them and deliver services that can be scaled up even further to reach the entire world.





Toward being a company where every employee can achieve their dreams— I want to be Weathernews' Chief Dreaming Officer

Above, I discussed that what we offer is data, forecasting, and a community, and we are executing our Medium-Term Management Plan* with these positioned as its three values. We are promoting our businesses with a strategy which revolves around the five elements of SaaS, AI, synergy, global expansion, and CO₂ reduction.

Even as we expand our businesses, we also place great importance on fulfilling our social mission. Since our founding, we have pursued the concept of "how wonderful" over "how much." Profit is necessary, but we value exciting work that helps people and society. This is a belief shared by all of our employees, and contributing to the reduction of CO₂ is part of this.



Our founder said, "A company can be no bigger than its president's head." I believe that in this day and age, it is not just the president's head but the heads of all of a company's employees. The dreams that each of our employees wants to achieve at Weathernews are its driving force and greatest human capital. And the sum total of these is the limit of what is possible for the company. That is why I want to be both Weathernews' president and its CDO (Chief Dreaming Officer), and in order to grow this company, I will create an environment where individuals can dream big.

*Please visit the following address to view our Medium-Term Management Plan: https://ssl4.eir-parts.net/doc/4825/ir_material9/210712/00.pdf

June 2024

WEallow

Dream Session

What Weathernews can do to contribute to the world

Climate change is resulting in increased heat waves, torrential rains, and other extreme weather events, and weather-related natural disasters are becoming more severe around the world. Having announced a new dream of saving sailors' lives and also protecting the future of this planet, what can Weathernews do? The key to our strategy is the three values of data, forecasting, and community, strengths that we have cultivated over our many years of business. We held two discussion sessions to talk about the future that we can achieve by evolving and building on the "trinity loop" that is the virtuous cycle of these three values. Members from our land, marine, and aviation operations took part in Session 1, while the leaders of our forecasting and technology departments participated in Session 2.

Session

The evolution of the "trinity loop" will add new value to the weather services we create







Takayoshi Kawahata Executive Officer in charge of Road and Railway Business Division

Land

Marine

Shingo

Fukukawa

General Manager of

Operations, Marine

Business Division

I want to deliver services that provide road comfortable, and economical air travel on a global and rail operators with safety and security, contributing to the overall market for land-based transportation.



I aim to build a platform that will cultivate a "true community" which creates a win-win relationship with marine shipping operators.



Session



Achieving highly accurate forecasts to solve the world's weather challenges



Through Weathernews' services, I am

committed to taking on the tasks of both

adapting to and mitigating climate change.

data

Team Leader,

WNI Data Store

Yuta

Seto

forecast data Daisuke Moderator Abe Executive Officer. Service Operation and Development Officer, **Risk Management Officer**

forecast Kohei Sakamoto Development Team Leader, WNI Forecast Center

Feeling a great sense of satisfaction from hearing that our weather forecasting has helped customers, I work every day to improve forecasting accuracy.



We have started full-scale work on collecting We are currently negotiating with the Kenya weather data from around the world. The Meteorological Department and other organizations thing I enjoy most right now is thinking about for data collection. I have high hopes that we can what kind of content we can create with this. build partnerships with a variety of institutions.

Mavuko Yoshikawa Development Section Leader, WNI Forecast Center

forecast

I am developing a grain harvest forecasting service and am seeking to expand it to a wider audience. This is a challenge unlike any I have faced before, and I am absolutely engrossed.

We primarily provide services for the logistics and power markets. My goal is to improve people's lives through sustainable consumption, from Japan to the rest of the world.

My goal is to build a service that enables safe,

scale and make Weathernews the information

Land

Rumiko

Takashima

Environmental Business

Team Leader.

Division

exchange platform for the world's skies.

The evolution of the "trinity loop" will add new value to the weather services we create





Mie Takamori Executive Officer. Service **Operations Officer**

Aviation



Executive Officer in charge of Road and Railway Business Division



Using weather information to balance business safety and economic performance (loop 1)

Moderator

- Takamori Let's talk about how evolving the "trinity loop" will add new value to the weather services we create. First, please share how you have created services in our land, marine, and aviation operations.
- Land
- **Kawahata** We have developed services spanning a broad range of fields, from companies involved in roads, railways, and other infrastructure, to supporting local governments with disaster preparations and facility management for buildings and condos. And what inspired these services is the same dream of protecting sailors' lives that led to the creation of Weathernews itself. After the Great Hanshin Earthquake, Weathernews really got serious about providing disaster-related services, and since then we have supported various companies in their recovery and business continuity in the face of earthquakes, typhoons, heavy snows, and other natural disasters that occur virtually every year. For example, in 2019, the Chikuma River burst its banks during Typhoon Hagibis, inundating several Shinkansen train cars. This prompted us to develop a service that supports deciding when to evacuate trains to help prevent similar incidents. This service is now being used by JR East.

Land Rumiko Takashima Team Leader. Environmental Business Division

Takamori Moderator



Shingo Fukukawa General Manager of Operations, Marine Business Division

• Weather on land directly affects people's lives, and that's why information about it can have such a big impact and why demand for it is so high. From an economic standpoint in terms of cost-effectiveness, what are the benefits?

Marine

Nowadays, it's a matter of course for JR to implement a Kawahata planned service suspension ahead of a potential natural disaster. Such measures not only have value to society in terms of preventing customers from being left stranded at a station or stuck on a train, they also preclude expensive damage to the trains themselves. For roads, our weather information allows for the application of limited resources to remove snow and close roads where it's needed most. Our customers understand the value of our information. When the Japan Meteorological Agency's information alone isn't enough to make a decision, using the high-density information Weathernews' provides enables them to avoid risks and optimize costs.

Takamori Moderator



Takashima To date, I've released a lot of logistics- and Land transportation-related content. For example, we provide information to retailers and logistics businesses involved

perspective with us.

Ms. Takashima, you've also created some different

land-based weather services. Please share your

The evolution of the "trinity loop" will add new value to the weather services we create

Land

Provides services that meet any and all customer needs on land. These include services for road, rail. logistics, and other transportation operators; as well as support for local governments, factories, and other facilities in disaster prevention operations.



in distribution by road or rail. This information looks at things like eliminating the loss and waste of products that can't be delivered due to weather conditions, and preventing opportunity loss when there is a surge in demand due to an approaching typhoon. We took a land-based weather service originally started for safety purposes and turned it into something that could also be used to save money and maximize profits.

- Moderator
- **Takamori** Our land weather services are generally B2B and target road administrators, but they have gradually been expanded to include B2S (business-to-supporter). including for the drivers who deliver our packages as well as for package recipients.
- **Takashima** That's right. Our community of supporters provides us with valuable information through the Weathernews app. This information in turn gives a heads up to our logistics operator and retailer customers, and to ordinary consumers, enabling our customers to stock the right products and consumers to make the right choices. I feel like over the past few years we've taken steps that support society as a whole in terms of weather.
- **Takamori** Having a tool that enables direct communication with Moderator supporters is definitely one of Weathernews' unique strengths. What sort of cost efficiencies does this lead to?
- Takashima By using weather forecast information, our customers can choose the optimal delivery method according to seasonal and weather conditions, thus increasing cost-effectiveness. For example, using regularly-scheduled flights to carry packages instead of charters when deemed unnecessary. During typhoons, they can take the necessary measures to protect driver

and truck safety while ensuring deliveries arrive. Our customers are satisfied because our services are more than worth what they cost.

Our marine weather operations have the longest history here at Weathernews. What are some of the challenges involved in creating services in this space?

- How to optimize the differing interests is a difficult task, I feel. Ship operators want to ensure that things make the most sense economically, which is at odds with ship captains, who want to put safety first. With our OSR Service, for instance, there were cases where captains didn't want to follow our suggestions for optimal engine speeds. Now, however, we've reached a point where both operators and captains are able to respect each other's positions and, together with Weathernews, communicate and agree on a single route plan. With the environmental perspective becoming increasingly important, as well. I think we'll see even more stakeholders in the future, so our challenge will be to find goals that everyone can agree on.
- Takamori Moderator
- Fukukawa

Moderator

Takamori

Fukukawa

(Marine)

Moderator

How do you secure cost-effectiveness while ensuring safety? We take routes that are based on the experience of captains, who emphasize safety; and other routes that are shorter and consume less fuel as determined from weather forecasts. We then simulate these routes. calculate the results, and compare and show the difference in savings to the customer.

I know that as part of the communication process, there Takamori is also information you get from ship captains, but is there a community which crosses the boundaries of individual shipping companies?



Optimum Ship Routing. A service which supports optimal route selection and engine speeds to achieve routing that ensures safety while meeting individual voyage needs such as on-time performance and economy.

The evolution of the "trinity loop" will add new value to the weather services we create

Marine

Land

Moderator

Takamori

(Aviation)

Supports all operations related to the sea-Weathernews' starting point-from coastal construction to the safe and optimal vovages of approximately 10,000 vessels sailing the world's seas.



- **Fukukawa** The marine transport industry has long had a strong culture of treating even ship location information as highly confidential, but recently, ship owners and ship management companies have started expressing a desire to share information and make effective use of it. We are still in the community-building phase, but we want to continue to be a partner that is always engaged in a give and take relationship with the community. When stakeholders with divergent interests share their information for each other's mutual benefit, what kind of content and products can we create with that information, and how much value can we produce therein?
- Moderator
- **Takamori** So, the real question going forward is whether Weathernews can serve as the platform which connects our customers.
- **Fukukawa** Ms. Takamori, you're in charge of our aviation operations; what can you share with us about that space?
- **Takamori** For aircraft, we offer the En-Route Optimization Support service, which not only improves safety by avoiding Aviation turbulence, lightning, and other flight hazards, but also takes into consideration passenger comfort when serving in-flight meals. What makes it unique is that it factors in the different phases of takeoff, cruise, and landing. Just like with autonomous ships and self-driving cars, airplanes are evolving into self-flying aircraft. The customer environment is also changing. So we need to adapt to these new circumstances while creating optimal services. **Fukukawa** What kind of cost efficiencies have you achieved?

• The cancellation of a single flight can result in a loss of Takamori tens of millions of yen. Safety is of course top priority, but in the midst of soaring fuel prices and rapidly changing global conditions, I believe that by supporting the

economical and comfortable flights of our customers, and by helping them remain their own customers' airline of choice, we have aided their cost-effectiveness.

Walking hand-in-hand with our customers to enter industries and cultivate new markets

- Takamori • Weathernews currently offers services in 45 markets, and Moderator is also cultivating new markets and developing new services. Ms. Takashima, you launched Weathernews' entry into the logistics market. Did you face any hurdles in its development?
- Takashima As Mr. Fukukawa from our marine operations touched on, there are markets in which stakeholders with different interests proactively share information with each other, and others that are more negative about this. It's difficult balancing between staying about a half step ahead of things without going too far, and changing things little by little to keep up as the times change. Further, all of our B2B markets are highly specialized. Sometimes information for one market can't be applied at all to another, and other times an overemphasis on safety can result in too much caution, so it's been trial and error as to how we present our information.

Taking B2B information and converting it into a service Takamori that fits a given market really is something only a private enterprise can do.

Takashima How are you developing new markets in the aviation field? Right now we are cultivating the drone market. To date, we have created many services that solve market issues, but the drone market is still immature and in its infancy, and customers themselves do not yet know what their



A content service that notifies flight operators and assists them in determining the best alternative route in the event of turbulence, lightning, volcanic ash, or other weather phenomena affecting flight along the planned route after takeoff.



Weathernews has outlined eight fields of business as its main business areas. For our B2B businesses (targeting corporations and local governments), include our marine, aviation, land, environmental, sports, and climate tech operations. Meanwhile, our mobile and internet, and broadcasting operations are the categories for our B2S businesses (for individuals and communities). And within these eight fields, we offer services covering 45 markets.

The evolution of the "trinity loop" will add new value to the weather services we create

Aviation

Supports more than 13,000 flights per day, from helicopters to large passenger aircraft. Provides services on a global scale that not only thoroughly pursue safety but also take into account passenger comfort and economical aircraft operation.



challenges are. The reality is that it's at a stage where there still isn't much interest in safety, making gaining understanding difficult when we try to explain how our services can help ensure safe operation. We're working together with our customers to build the market as we explore services that they will need.

Meeting industry challenges with weather + X factors (loop 2 and 3)

- **Takamori** While safety is a common thread across all markets Moderator served by Weathernews, environmental friendliness is also a rapidly growing need these days. How are you dealing with this in our marine operations?
- Fukukawa Starting several years ago, we started seeing stricter Marine regulations on greenhouse gas emissions, particularly in Europe, and environmental taxes are also now being considered. Since CO2 emissions calculations differ depending on the type of fuel, we are prioritizing dealing with this aspect and modifying our content. At the same time, severe weather events are on the rise, we have begun trying to create a more direct way to present safety by using naval engineering models to visualize ship motions and reduce physical damage to hulls and cargo.
- Moderator

Takamori In logistics, there's Japan's "2024 problem," as well as the "2030 problem" for pilots in the aviation industry, plus the issue of knowledge transfer. How to communicate the importance of safety is an issue shared by all industries. But looking at the needs of the marine transport industry, for example, would you say these include inter-system DX (digital transformation) and content that can be readily understood by young, new workers as well as veterans?

Fukukawa With the aging of sailors, especially in coastal shipping, and with the majority of sailors in ocean shipping being non-Japanese, passing on the skills of Japanese sailors is a challenge every company in this country is facing. Talking with experienced captains, what I hear is that the practice of passing on knowledge from expert to new opportunities for shipboard experience is on the decline, the range of duties expected of sailors is expanding. And what captains are saying is that we need to share with new sailors the importance of content and services

Takamori Moderator Kawahata

Land

Takamori Moderator

sailor is reaching a breaking point. Even as the number of devised to enhance safety. How about with road management?

One of the key phrases in the medium-term management plan of an expressway company I know is "knowledge transfer," and promoting DX has been raised as a means of achieving this. One of the things that is expected of us is similarly to provide daily road management information in a form that is easily understood by employees. So we are working with each company to devise ways to use this information in areas such as routine disaster prevention and dealing with things like snow and strong winds.

It is important that we not only identify the tacit knowledge of experienced employees and provide it in an easy-to-understand manner, but also that we incorporate DX and work together with our customers to develop it into something that they can use to make the right decisions. Have you seen progress in inter-industry collaboration? For example, when an airport closes down due to heavy snowfall, traffic in the surrounding area also comes to a halt. I imagine there is a greater need than ever for Weathernews to connect our land and aviation customers.



From April 2024, a new annual overtime cap comes into effect for truck drivers in Japan, raising concerns that this may result in insufficient transportation capacity and an inability to handle the volume of logistics.



Pilots hired en masse in Japan in the 1980s are now in their 50s or older and many will reach the mandatory retirement age in 2030. Expected to retire in large numbers, this has resulted in concern that it could become impossible to secure the necessary human resources to maintain operations.

The evolution of the "trinity loop" will add new value to the weather services we create



Driving Weather, a program now being provided at expressway rest stops, delivers road weather information tailored to driver's needs, supporting safety and comfort.



- **Kawahata** There are many commonalities in the needs of our customers regarding the impact of typhoons, heavy snows, and other inclement weather on transportation and communities, and both sides have expressed an interest in sharing their individual challenges. We believe that as sharing increases in their respective industries, we will also eventually see more inter-industry collaboration in the future. Talking with our customers. I feel that Weathernews has Takamori
- Moderator
- become not just a service provider but a pillar around which communities are built

Bringing success in Japan to a global stage

 Having refined the value of its services in Japan, Takamori Moderator Weathernews is now in the process of expanding them to the global market. Our marine shipping services were the first to be taken overseas; do you find any differences in the needs of different countries?

Fukukawa Marine

Every part of the oceans is connected, so at the fundamental level the needs with regard to marine weather services do not differ drastically. Comparing Europe, Asia, the U.S., and Japan, however, the things people focus on in business vary by culture. For example, in Japan, when communicating with shipowners, ship operators, ship management companies, and everyone else involved, it's from the perspective that safety is a precondition for pursuing economic efficiency. But in Europe, safety assurance is the responsibility of shipowners, while ship operators focus on the business side of things. The substance of the communication and how we reflect that in our content are different

Takamori Aviation

Kawahata Land

Takamori Moderator

The sky, like the sea, is a single connected whole, but the way people involved in flight operations think differs between Asia and Europe. Some regions require repeated communication to reach a final decision, while others only want a single piece of content that makes things easy to understand. Accordingly, we have created service formats suited to each country and region. For our land operations, are you planning to develop services based on regional characteristics in the coming global expansion? Japan excels at the strategic use of weather information, and we believe that there are ways to successfully apply and deploy this success to meet the individual needs of countries and industries. Unlike with the ocean, on land, it is a given that we need to comply with the governmental and administrative agencies of each country, so we intend to take things very seriously with regard to this. It is important that we assess the situation in each country, seek the best formats for our services through dialogue with customers in each region and market, and make the best moves in order to expand globally.

Achieving highly accurate forecasts to solve the world's weather challenges

Observation Data from Around the World Observation data from public weather services worldwide The World's Largest Database for Meteorological Marine, and Terrestrial Phenomena Weather Reports 180.000 weather and firsthand reports per day on average

Proprietary Network

Proprietary observation data obtained from 13.000 locations

Customer Data

Observation data from customers in 45 markets (Including reports from oceangoing ships and commercial aircraft)

Our forecasts leverage not only our own observations and data from weather agencies around the world but also observational data from our customers as well as weather reports submitted by our supporters.

Andre Mubunde

data

Ouinaueni

WNI Data Store



data Daisuke Moderato Abe

Executive Officer, Service Operation and Development Officer, Risk Management Officer



forecast

WNI Forecast Center

Seto

Abe

Abe

Seto

Moderator

Moderator

Center

forecast

Mayuko

Yoshikawa

Development Section

Leader, WNI Forecast

The volume of our data and the accuracy and breadth of our forecasts create value

- Let's discuss the current state of Weathernews' Abe Moderator forecasting technology and its prospects for solving the world's weather challenges. To start, Ms. Yoshikawa and Mr. Sakamoto, since you're in charge of our weather forecasting, what do you think is the value of high forecast accuracy?
- Yoshikawa While no forecast is 100% right, high accuracy can help customers make more accurate business decisions. At the same time, the closer you get to 100%, the harder it is to become more accurate, so it's a challenge to decide how far we should pursue accuracy.
- **Sakamoto** For the past 10 years, we have provided not just one forecast for businesses to use, but also a range of deviations-for example, what will happen if rainfall is high or low. These are our COMPASS and CHORUS systems. We calculate quantitative ranges, taking into account the views of our forecasting engineers, and provide our customers with forecasts of the likelihood they will be affected by weather.
- Abe Moderator
- I believe that data, analysis, and improvement are the three elements that increase forecasting accuracy; what kind of efforts are we making regarding data collection?

Since it is important to have highly accurate data and to first get a proper picture of what is going on in the moment, we collect data from all over the world with our own proprietary observation network using three methods: ground-based observation data, radar that can observe a wide area, and satellites. However, while good-guality data is collected in Japan, in emerging and developing countries, weather data collection and access are still inadequate. That's why we've implemented Project GAIA, an in-house effort to acquire local weather and climate data from around the world and enhance our body of collected data.

data

Team Leader,

WNI Data Store

Yuta

Seto

What kind of data are you collecting around the world now? Quingueni Mainly weather warnings and historical data. We are now able to get weather warnings from a total of around 100 countries. Recently, we have been focusing on South America and Africa.

Weathernews is the only one out there gathering this guantity of warning data from around the world. The UN is interested in ensuring that weather warnings are able to reach every person in the world; do you think this is feasible?

There are many countries where it is difficult to get accurate weather alerts. However, we have been approaching the meteorological agencies of various



A system which generates the most probable forecast (main scenario) and a more extreme forecast (severe scenario) of precipitation or snowfall by combining multiple weather forecast models with corrections and weighting based on AI and the expertise of forecasting engineers.



A system which calculates probabilistic forecast values (e.g., the probability of precipitation exceeding 1 mm/h. wind speed exceeding 5 m/s, etc.) based on an "ensemble forecast" of multiple forecasts made from many slightly different initial values. Statistical corrections are made using observed data to achieve highly reliable forecasts

22



Forecasts are created by incorporating observation data into a proprietary AI weather forecasting system. This system goes through repeated verification and improvement for uncompromising accuracy.

Terrestrial Phenomena Center



Continuously monitors earthquakes. tsunamis. volcanoes. and other terrestrial phenomena around the world

Global Storm Center



Monitors and forecasts typhoons. cyclones, hurricanes, and other storms across the globe

Global Ice Center



Constantly monitors and forecasts sea ice around the world, including polar regions

Air Quality Center



Monitors and forecasts air quality and causes of air pollution such as pollen and PM2.5 particles

Asian countries to collect their data for some time. We struggled at first. They would tell us there was no mechanism for doing so. Gradually, however, some of them have opened up to us, and we have been able to build cooperative relationships. We want to keep pushing forward and eventually gather weather warning data from every place where people live.

Improving forecasting accuracy with experience, knowledge, and the latest technology

- Once you have the data, the next step is analysis. How Abe Moderator are we processing the data we collect to improve forecast accuracy?
- **Sakamoto** Observation data includes noise and anomalous values, so first we perform quality checks with computers and AI. We also improve forecast accuracy by applying corrections from AI that has been trained on the relationship between physically calculated simulations based on that data and observed data from the past several years or so.
- **Yoshikawa** The use of <u>T-zero</u> to enhance initial analysis values also improves our accuracy. Since these analysis values are currently available only in Japan, one of the challenges in expanding our services in the future will be to create global analysis values. Abe
- Moderator Are analytical tools evolving as well?
- **Sakamoto** Cloud-based databases are now readily available, making it possible to calculate new weather models instantly. This in turn has led to increased calculation resolution and made it easier to do things like predict building winds with

Abe	
Moderator	

Seto

Abe

Abe

Moderator

- Al Big Tech is also engaging in weather forecasting; what are Weathernews' strengths? Yoshikawa We have forecasting engineers unlike anyone available to
 - IT companies. These engineers have the experience and knowledge that comes from forecasting the weather on a daily basis for some 40 years, and we are in the process of digitalizing that expertise and incorporating it into AI.

5-meter meshes, albeit over a limited and confined area.

- We have a wealth of data that is unmatched by any other Quingueni company. We also have in-depth expertise in infrastructure and nature. I believe these are strengths that other companies do not have.
 - We also have a database of information from companies and individual supporters that is unavailable to other firms. And it is our skilled and knowledgeable staff who have access to this database. These factors tie into the creation of a lot of types of value.
 - I agree. And looking at the global picture, a single point of weather alert data is not something you can make use of as-is. Turning that data into something usable and matching it to the needs and wants of customers is something only Weathernews can do.

The new challenge of matching data to needs and wants

- What challenges do you face in providing data that meets Moderator customer needs?
- **Yoshikawa** We are creating new content that involves grain monitoring to highlight future climate risks in agriculture. It uses AI to predict things like harvest volumes for the



Live analysis data on weather conditions across Japan, created by taking observations from the Japan Meteorological Agency and other public agencies and combining them with Weathernews' own observations, those of its customers, and weather reports from the supporters who use the Weathernews app.

Achieving highly accurate forecasts to solve the world's weather challenges

> Forecasts based on ship fuel consumption, schedules, and other business data as well as weather and oceanographic information instantly reveal risks such as excessive fuel use and arrival delays.



Abe Ai

harvest data, and we're aiming at worldwide deployment.
 And you can also predict how crop growth will change depending on how many degrees Celsius temperatures rise in the next few decades due to global warming. Mr. Sakamoto, you're taking on the challenge of Weathernews' Business Forecast; please tell us about that.

year based on satellite data, local observations, and past

- Sakamoto Business Forecast provides a quantitative representation of the impact of weather on business, helping customers take the best possible actions. In the case of marine shipping, for example, you can calculate fuel consumption, CO₂ emissions, and costs based on weather conditions and speed, contributing to fuel and CO₂ reductions. We are aiming to expand this quantification of weather impacts to other services.
- Abe In addition to supporting customers with how to use weather information, we felt it can also help streamline business operations.
- Sakamoto Definitely. We believe that by providing our forecasts for our customers' digital transformation (DX), we can instantly improve their efficiency.
- Abe We have data from around the world, analytical forecasting technology, and a full content lineup. And the fact that it's all neatly tied together is a major strength for Weathernews.

Initiatives to achieve our dream and global expansion

to

Abe	Lastly, please discuss what Weathernews needs to do
Moderator	grow and what you are doing to achieve this.
Yoshikawa	Climate forecasts cover several years to decades in
	advance, and weather forecasts look at a few days to

months to a year. I want to support our growth by moving into this in between space. Sakamoto In addition to weather forecasts, business impact forecasts are also important. I'd like to expand our Abe quantification of weather impacts to other services. Moderator What do we need to expand globally? To expand our weather data and tie this into high-quality Seto services. We will gather observation data while carefully selecting the most accurate sets. **Quingueni** • We are currently in discussions with the Kenya Meteorological Department. I believe that building communities together with countries and companies around the world will help us expand globally. Someday I'd like to see our Japanese weather services implemented in Africa. From dialogue with meteorological agencies to reports Abe Moderator from our supporters, the Weathernews community is extremely deep. And our ability to talk openly with our customers, share their dreams, and see from their

several weeks at most. There is an emerging need,

however, for forecasts that lie in between, from a few

perspective is also one of our strengths. Going forward, we will combine this with our data and forecasting technology to create solutions to the world's weather and climate challenges.



Achieving our dream with a network that spans the globe

Operating not only in Japan but around the world, Weathernews continues to create new businesses to protect the global environment for future generations and to help people further activities that contribute to society. To save sailors' lives and also to protect the future of this planet-to achieve our new dream on a global scale, we must use our offices around the world to continue to expand business.

In locations all across the globe, we have people taking on the challenge each day of creating new value. We asked some of them to talk with us about how things are going in their region, the challenges they face, and future prospects for Weathernews.



Europe

Craig West General Manager, European Sales Headquarters, WNI UK



North America **Amy Buhl**

General Manager, Marine Business Division, WNI America



Europe

Julien Vienne

IT Manager, Environmental Business Division, WNI France



Asia Lee Jin Woo

General Manager, Mobile/Internet Business Division, WNI Korea

European Sales Headquarters



Craig West

I grew up in Scotland. The sound of footprints in unspoiled fresh snow in winter is still a beautiful experience.

Europe is a touchstone for our global growth– Expanding services from the European Sales Headquarters and our global network of offices to the entire world

Through its weather forecasting-based solution services, Weathernews aims to further expand its core strengths across Europe as a key part of global expansion. We believe that our success in Europe is a touchstone for determining the success of future global expansion.

The European market is made up of businesses of all sizes, from companies that operate on a more regional or country basis to large multinational and global companies spanning many industries. The specific industry focus also varies by country. To properly understand these differences and provide services that meet their needs, we have already set up geographically located centers in Paris, Copenhagen, Greece, Netherlands, and London. And we launched the new European Sales Headquarters in 2024 to accelerate our business expansion.

From information provision to solutions— Impacting businesses on both a financial and human level by supporting weather information-derived decision making

Generally speaking for weather information the key needs are accuracy, ease of integration, and frequency of updates. However, increasingly the focus is changing from the provision of weather information to derived decision support solutions that enable clients to make proactive decisions. The monetary impact of weather information-derived decision making runs into the billions of Euros every year. And such decisions may at times also affect human lives. Our marine forecasting services are a great example where highly accurate and granular weather information is a critical component that enables safe and efficient routing and optimization of many thousands of vessels around the world.

As extreme weather events occur more frequently across the globe, the importance of weather-driven resilience solutions to aid operational efficiency and human safety will increase. And we believe that the needs and thus potential for our services will grow exponentially.

To become the most trusted provider of weather and climate solutions in Europe and secure the lives of future generations

The increasingly real current impact and future implications of both climate change and weather events provide Weathernews with the opportunity to become the provider of choice in the weather forecasting space. To achieve this, the European Sales Headquarters wants to make a difference in the weather services market and help Europe adapt to the impacts of the climate crisis and increasingly extreme weather events. We aim to become the number one trusted provider of weather and climate solutions in Europe and grow as a company that secures the lives of future generations.

North America

Focusing on radar development and climate change research as a center of collaboration with the University of Oklahoma to create new value for global expansion

WNI America has two offices in Oklahoma. One is the Oklahoma Service Center, established in 2004 with the intention of engaging in collaboration with the University of Oklahoma School of Meteorology, one of the top weather research universities in the country. Our office currently supports the Marine and Aviation businesses as part of our "3-Axis" operation strategy covering the three regions of Japan, the United States, and Europe. The other office is the Oklahoma Innovation Center, an entity dedicated toward engaging with the University of Oklahoma (OU) on research topics related to increasing the value of Weathernews' services through innovative technologies. In 2021, collaboration with the Advanced Radar Research Center resulted in the development of the EAGLE radar, a small, low-cost radar. This was added to our suite of proprietary observation infrastructure, increasing the accuracy with which we can predict sudden downpours and linear rainbands. The Oklahoma Innovation Center is also now focusing on establishing a scholarship program with OU.

We have recently started to collaborate with OU to research climate change, working with Dr. Berrien Moore, a noted climate scientist, for expansion of our ClimaTech services. Through activities such as these, we create new value and contribute to Weathernews' global expansion. General Manager, Marine Business

The OKHC Operations office

Division, WNI America

Amy Buhl

In the musical *Oklahomal*, there is a song with the lyrics, "Oklahoma, where the wind comes sweepin' down the plain..." It's really true. Sometimes the wind here is unbelievable!

> The Oklahoma Service Center is located on the University of Oklahoma research campus.

WNI France members working with the Global Center on IT development

IT Manager, Environmental Business Division, WNI France

Julien Vienne

I recently saw the aurora borealis just outside my hometown. A very rare phenomenon to see at France's latitudes, it was a beautiful panorama. A strategy and tactics meeting at the WNI France office. These meetings are held to accelerate the strategies and tactics for realizing the vision of our Medium-Term Management Plan.

Europe

Targeting the renewable energy market, developing infrastructure, and structuring databases to expand from Europe to the world

WNI France is in charge of new service development for the European energy market (renewable power, transmission and distribution, and energy traders) as well as for the retail market, including fast-moving consumer goods; and for the agriculture market. Currently, our main target is the renewable power market, and we are developing new infrastructure to prepare accurate power generation forecasts. We also work closely with the Global Center in Japan to prepare the most complete European weather database that will serve as the basis for accurate forecasts covering the entire continent.

The renewable energy sector is very competitive in Europe. The demand for weather data is accordingly high, and public regional weather models are already very accurate. To increase our presence given this context, our main effort is focused on developing new modeling tools so that our data-scientists can develop and deploy accurate models in the fastest way possible. WNI France's services currently cover the European region, but in the future, we are aiming to expand to a global level. To this end, we would like to continue to structure our database and develop a global weather API to further increase customer convenience.

Asia

Going global with the successes of Japan's advanced meteorological industry through collaboration with international companies and local government agencies

WNI Korea was established in 1994 as the first private weather company to be registered when they began being allowed in South Korea. As a base for building on the successes achieved in Japan, a country with an advanced meteorological industry, in other Asian nations, we have taken on a variety of challenges in business.

Our mission is to work with Korea's homegrown global companies and government agencies to expand Weathernews' content to Korea, Japan and, all of the countries of Asia. Toward this end, we are building a global weather database to improve the accuracy of weather forecasts and create optimal content suited to the needs of each Asian nation's individual industries and markets.

Over the past decade, we have focused on working with global smartphone and consumer electronics manufacturers. If we can make Weathernews' weather information easily obtainable via the smartphones and other devices so many people use on a daily basis, we can expect to see our business expand not only in Korea but also elsewhere in Asia and even on into the global market. We believe that collaborations such as these are one of the most effective strategies for bringing our outstanding content to a wider audience. Delivering content through smartphone weather apps and widgets

General Manager, Mobile/Internet Business Division, WNI Korea

Lee Jin Woo

Perhaps it's because the character for "woo" in my name means "rain," but it often rains on days when I am going on a trip or have some other important engagement. Seas, mountains, lakes... They all have their own unique charm in the rain. I particularly love the scent of a rainy forest.



2023-2024 News

Weathernews continues to create and provide new value on a daily basis. In this section, we present a selection of recent news stories covering our latest services, the expansion of existing services, and promising new initiatives.

July 26, 2023

Weathernews to participate in MEGURI2040 autonomous ship program's second stage

Weathernews will participate in the Joint Technological Development Program for the Demonstration of Fully Autonomous Ships under the Nippon Foundation's MEGURI2040 Fully Autonomous Ship Program as

a member of the Designing the Future of Full Autonomous Shipping Plus consortium, comprised of 51 Japanbased companies. In MEGURI2040's second stage, the program aims for full-scale commercialization of fully autonomous ships by 2025.



MEGURI2040 logo



DEFAS+ loor

2023

July

Nov.

Weathernews will utilize Soratena Pro for a new SaaS-type solution for businesses delivering app-based on-site observations and rapid weather alerts.

rainfall amount, wind direction, wind

velocity, and illuminance.



Web https://global.weathernews.com/news/17415/

November 8, 2023

July 5, 2023

with **OMRON**

Weathernews and Dataloy's unique weather integration for Smarter Voyage Management

New Soratena Pro weather IoT sensor jointly developed

Weathernews and sensor specialist OMRON have jointly developed a new weather IoT sensor, the Weathernews Soratena Pro. Compact and offering high-performance, Soratena Pro provides minute-byminute observations of air temperature, humidity, atmospheric pressure,

Weathernews and Dataloy Systems have introduced an integrated solution to refine voyage management using unique weather data. Combining Weathernews' comprehensive historical seasonal routes and sea margins with Dataloy's innovative Voyage Management

System (VMS), this integration provides streamlined critical data access, error reduction, increased efficiency, and a focus on enhancing voyage quality and profitability. A milestone in more effective voyage management.



Web https://global.weathernews.com/news/17646/

Web https://global.weathernews.com/news/17548/

December 21, 2023

Weathernews receives Minister of the Environment's Award for Climate Action

Weathernews climate tech segment has received the Japanese 2023 Minister of the Environment's Award for Climate Action. WNI offers SaaS-type products which help businesses combat climate change. These include Climate Impact, which analyzes climate

change risks for business locations; and Weathernews for Business, which detects when facilities may be affected by weather, enabling appropriate countermeasures to be taken.



Web https://global.weathernews.com/news/17689/

January 31, 2024

Weathernews participates in COP for second year in a row

Weathernews participated in the 28th Conference of the Parties (COP28) to the United Nations Framework Convention on Climate Change (UNFCCC) held in Dubai, UAE from November 30 to December 11, speaking at the Asian Development Bank Pavilion

and a side event at the Japan Pavilion. Weathernews shared its progress and achievements in supporting climate change adaptation measures in Asia.



December 23, 2023

Dec.

2024

Jan.

Feb.

SeaNavigator now supports EU ETS features, including dynamic voyage simulation

The EU ETS (Emissions Trading Scheme), coming into force on January 1, 2024, requires shipping companies to further optimize voyages to mitigate increased CO2 emissions costs. To help clients maneuver this challenging new regulatory environment,

Weathernews has updated its SeaNavigator platform to include enhanced data management, validation and monitoring, automated EU ETS voyage data record creation, and streamlined voyage records.



Web https://global.weathernews.com/news/17726/

February 16, 2024

Weathernews launches Berth Waiting Forecast, a port congestion prediction service

Global weather intelligence leader Weathernews introduces Berth Waiting Forecast, an innovative solution for the global shipping industry providing improved port congestion prediction. Powered by advanced AI and seamlessly integrating data from shipping

companies with precise weather insights, Berth Waiting Forecast empowers users to accurately predict delays at ports, marking a significant advancement in maritime operation efficiency and informed decision-making.



Web https://global.weathernews.com/news/17778/

Corporate Outline / Stock Information

Corporate outline (as of June 1, 2024)

Corporate name	Weathernews Inc.	
Founded	June 11, 1986	
Representative	Tomohiro Ishibashi, President and Representative Director	
Headquarters	dquarters Makuhari Techno Garden, Nakase 1-3 Mihama-ku, Chiba-shi, Chiba, 261-0023 JAPAN	
Number of offices and centers	30 offices in 21 countries (Service & Operation Centers : 8 centers)	
Capital stock	1,706 million yen	
Consolidated sales	22,242 million yen	
Consolidated number of employees	1,152	
Registration number	T6010401003504	
URL	https://global.weathernews.com/	

Stock information (as of February 29, 2024)

Total number of shares authorized to be issued	47,000,000 shares
Total number of shares outstanding	11,844,000 shares
Number of shareholders	13,709 (includes 11,481 shareholders of shares constituting one unit)
Stock trading unit	100 shares
Listing date	December 25, 2000
Market listing	Prime market of the Tokyo Stock Exchange
Securities code	4825
Fiscal year	From June 1 to May 31
Annual general meeting of shareholders	August
Shareholder record date	May 31
Dividend record date	November 30, May 31
Shareholder registry administrator	Mitsubishi UFJ Trust and Banking Corporation
Accounting auditor	PricewaterhouseCoopers Japan LLC

Major shareholders (Top 10) (as of February 29, 2024)

Shareholder name	Number of shares	Shareholding ratio (%)*
WNI WxBunka Foundation	1,700,000	15.39
WNI Institute Inc.	1,700,000	15.39
The Master Trust Bank of Japan, Ltd. (trust account)	735,400	6.66
Weathernews Employee Supporter Shareholding Association	458,617	4.15
The Chiba Bank, Ltd.	360,000	3.26
MUFG Bank, Ltd.	360,000	3.26
Taeko Ishibashi	353,800	3.20
Custody Bank of Japan, Ltd. (trust account)	210,100	1.90
Nippon Life Insurance Company	200,000	1.81
Sumitomo Mitsui Banking Corporation	180,000	1.63

* Shareholding ratio: Ratio of shares held to total number of shares issued (excluding treasury shares) Besides the shares described above, Weathernews Inc. holds 797,376 shares.

Distribution by shareholder (as of February 29, 2024)



Scope of reporting

Reporting period: June 1, 2023 to May 31, 2024 *Some content outside this period is also included. Reporting organization: Weathernews Inc. and consolidated subsidiaries

Inquiries IR Dept.

https://global.weathernews.com/contact/

