Primary industries face many serious challenges,
and the surrounding environment remains extremely harsh.

Farms are disappearing due to aging, labor shortages,
and rising production costs.
But the number of cattle is increasing,
making careful husbandry difficult
and raising questions about the sustainability of safe domestic beef.
But even as farmers face such issues,
beef exports are expected to increase,
and there is an urgent need to meet
international standards for animal welfare.

This is based on the idea of caring for animals
both physically and mentally,
to ensure their happiness and quality of life.
Animal welfare standards are becoming globalized,
but Japan has somewhat fallen behind,
making it a key factor in boosting the international competitiveness
of the country's livestock industry.

NTT TechnoCross has been striving to
digitally transform the livestock industry for the past 10 years,
using AI and cattle behavioral analysis.
This began with
a dedicated tag sensor for cattle developed jointly
with Desamis to visualizes their behavior data; U-motion®.
The aim is to revolutionize livestock farm management
by connecting cattle around the world
to the internet via IoT to analyze data on their behavior.
NTT TechnoCross has shared this field-first vision
with us since our founding,
working together in developing U-motion®.

Through repeated visits to farms, we realized that
there was a life-threatening condition for cattle known as dysstasia.

It's a serious condition where cattle can't stand up.
Then gas compresses the diaphragm,
causing respiratory distress.
It ultimately leads to death.

This results in a significant economic loss,
and it also deals a big emotional blow
to farmers who carefully raise their cattle.
It often happens just before shipment,
so their weight can exceed a ton.
Even if a farmer notices the condition,
lifting the cow is extremely labor-intensive.
This is a really critical issue for livestock farmers.
The cows can't help themselves, so they have to be closely monitored
every night.

During visits,
they found a clue to the solution in what a farmer said:
"If a cow seems in danger of developing the condition, you wake it up."
Then they were actually shown a cow lying down being called to get up.
We realized it was tacit knowledge that only farmers know.
We combined this knowledge with our technology
and conducted a pilot experiment.
We were able to get them to stand up without human assistance.
I remember being really happy about monitoring and saving cows remotely.

This led to the development and launch of a new service within a year.
Video analysis AI monitors the cow’s posture
and automatically calls to it.
It led to the launch of Japan's first product to prevent dysstasia; BUJIDAS.
Recumbency incidents dropped to zero.
The camera can provide voice prompts,
and I receive notifications on my phone, so I can make decisions remotely.
I was skeptical at first, but BUJIDAS now gives me complete peace of mind.

We're a technology company,

but I think there are many things you can only learn on-site.
Tacit knowledge acquired in the field
is turned into explicit knowledge through technology.
I want to continue supporting farmers
as an engineer who visits farms more than anyone else.
Japan's livestock industry stands at a crossroads for sustainability.
Our services based on on-site knowledge ensure animal welfare,
and it will secure a future for the industry.

NTT TechnoCross,
together with the NTT Group and other stakeholders,
will continue creating new value,
contributing to the growth of the livestock industry
through cattle-friendly animal welfare.