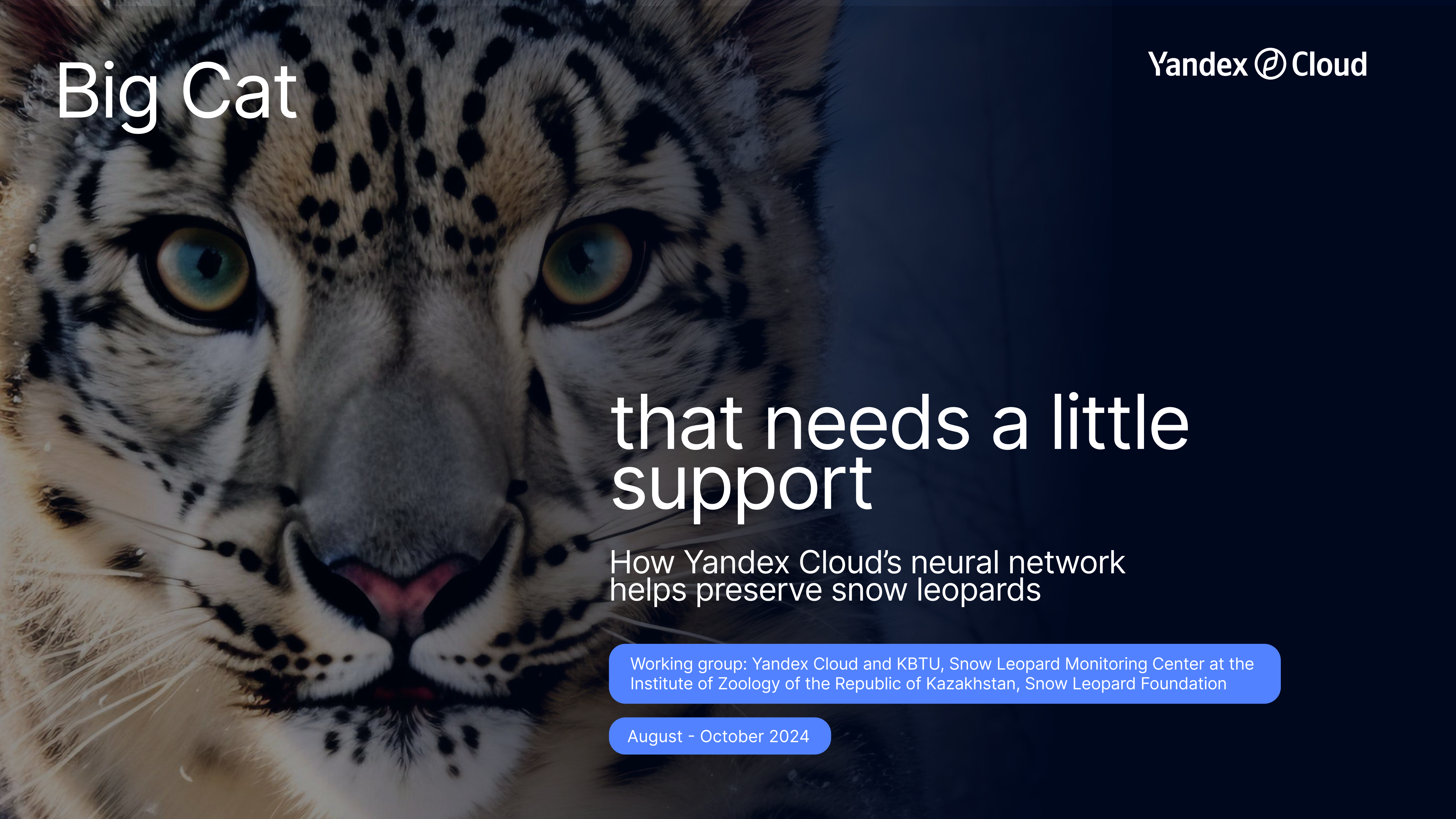




Big Cat

Yandex @ Cloud

that needs a little support

How Yandex Cloud's neural network helps preserve snow leopards

Working group: Yandex Cloud and KBTU, Snow Leopard Monitoring Center at the Institute of Zoology of the Republic of Kazakhstan, Snow Leopard Foundation

August - October 2024

Challenges



1

The snow leopard is listed in the Red Book as an endangered species

190

individuals

Approximate population
in Kazakhstan

2

Threats: poaching, climate change,
human activity

It is becoming increasingly difficult for snow leopards to find peaceful places in the mountains: new roads, ski resorts, and industrial facilities are pushing them out of their natural habitats

3

Labor-intensive traditional monitoring
methods based on camera traps, which
can generate up to 40,000 images from
a single camera

Reviewing such a volume of photos manually can take weeks

Target audiences of the project

Yandex @ Cloud

Government

Governmental and non-governmental organizations in the field of ecology



Scientific Community

Ecologists and wildlife conservation specialists, students of technical disciplines



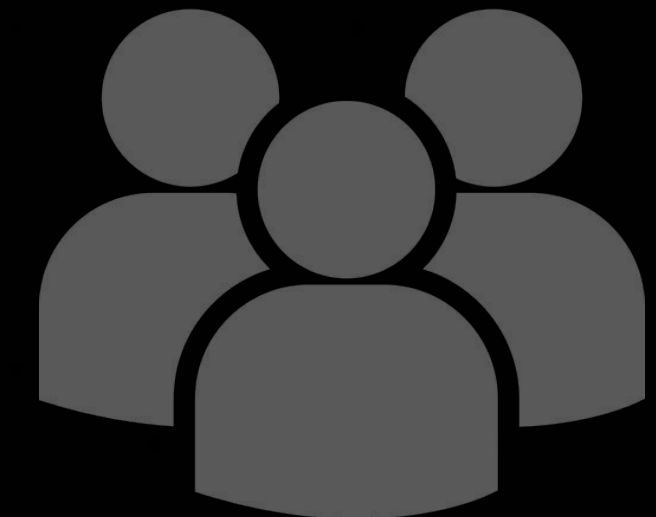
Business

Companies involved in solving socially significant issues or engaged in greening initiatives



General public

Those interested in nature conservation



Goals and Objectives

Project Goals ▾

- Create an innovative tool for monitoring the snow leopard population
- Invite collaboration on projects aimed at solving other socially significant issues

Project Objectives ▾

- Develop and train a neural network to process data from camera traps
- Train the neural network to identify snow leopards in photos, distinguish them from other animals, and recognize individual leopards

PR Support Goals ▾

- Draw public attention to the issues and methods of preserving rare species
- Promote the idea that technology can help solve complex, socially important problems

PR Support Objectives ▾

- Organize a comprehensive PR campaign for the project, covering all target audiences

Communication Strategy

Yandex @ Cloud

- Informing and engaging the target audience through **classic PR tools**
- Engaging the audience through **creative formats**
- **Spreading knowledge** about the project through the Yandex Cloud ecosystem and partners

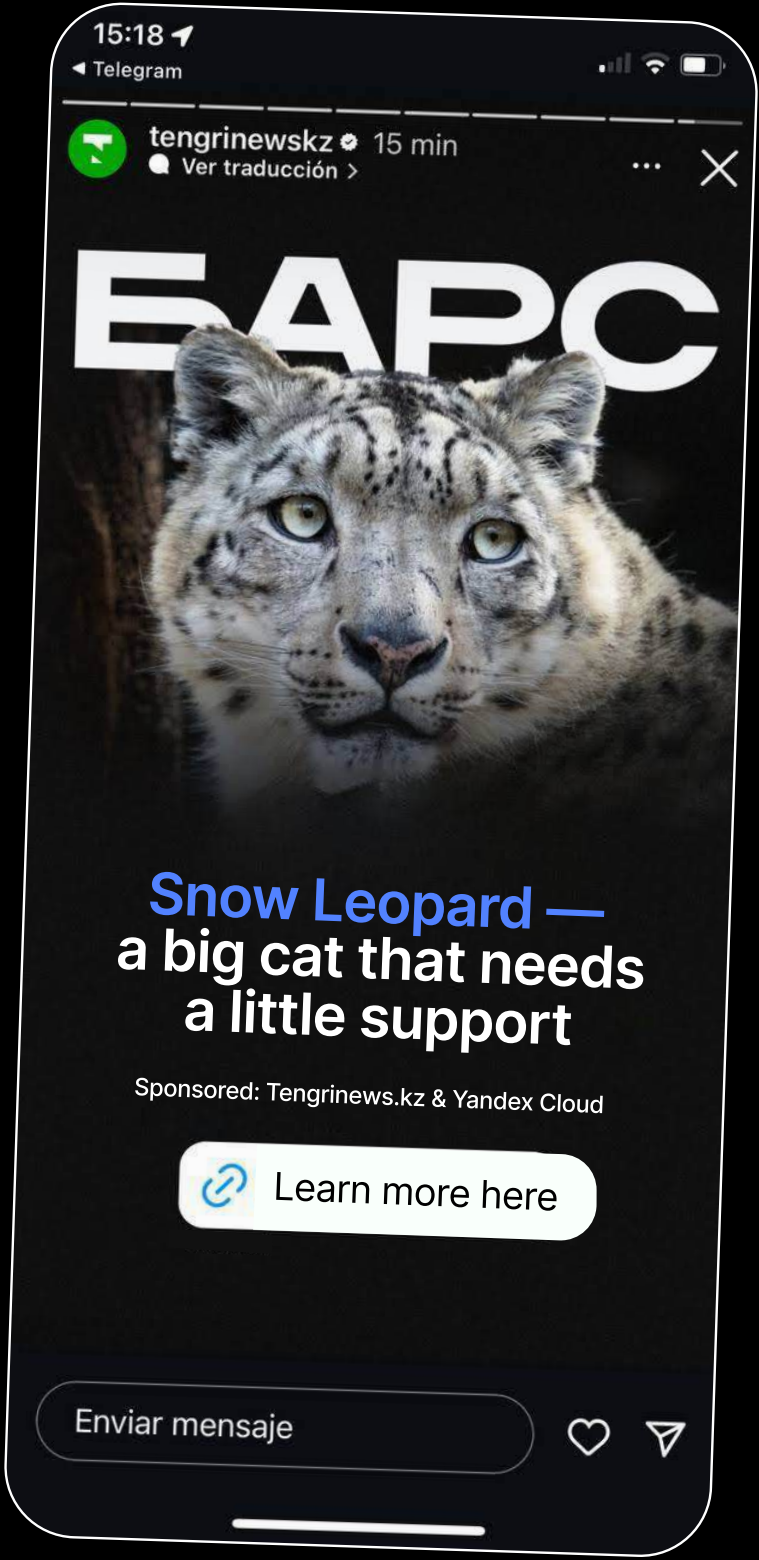
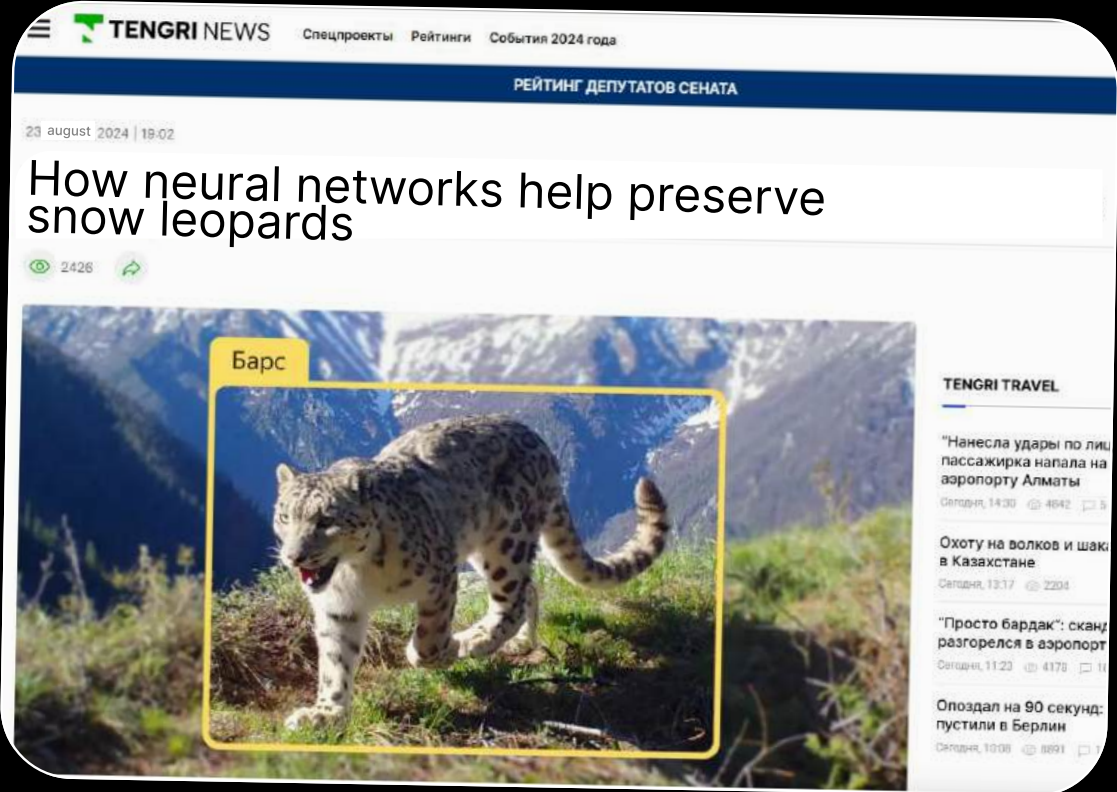
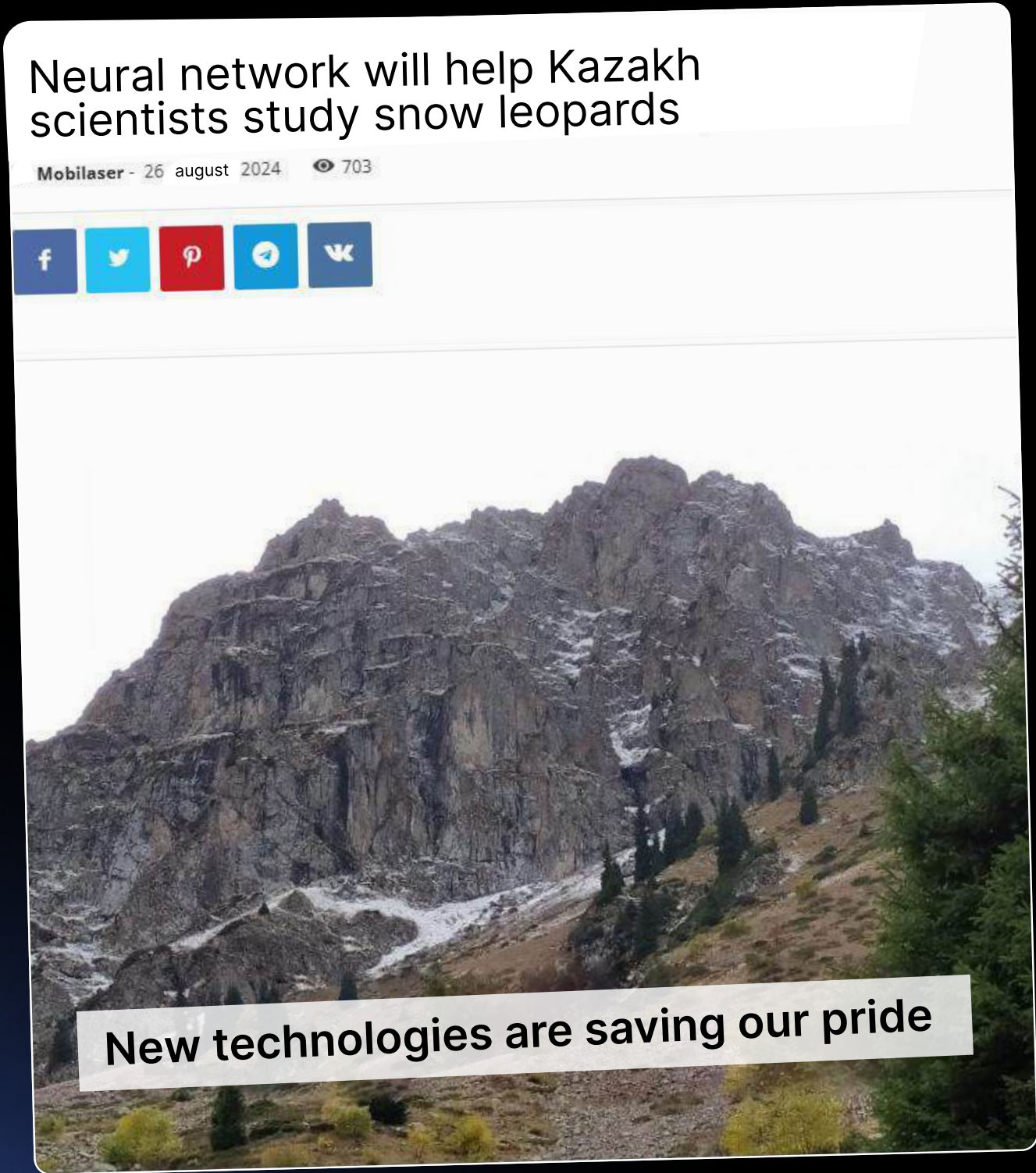
Tactics, Creative Solutions

CLASSIC PR ↘

- Media support for the project in **mass media and social networks**
- **Presentations** at Yandex Scale Kazakhstan

CREATIVE ACTIVITIES ↘

- Collaboration with well-known actor and influencer **Askar Ilyasov**
- Special project on the **Tengrinews platform**
- Interactive stands at the **IQ BBQ science & music festival in Almaty**

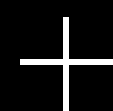




Practical Actions

Project Launch

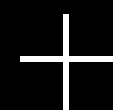
Yandex Cloud experts became mentors for third-year students of the School of Information Technology and Engineering at KBTU. Together, they developed a method for processing data from camera traps



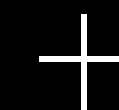
The Institute of Zoology of the Republic of Kazakhstan and the Snow Leopard Foundation joined the project. Through joint efforts, the team created and trained a neural network using thousands of snow leopard images

PR Support for the Project

The PR and marketing team of Yandex Cloud developed a media plan that included communication channels and formats tailored to the project's target audiences, themes, and goals



All necessary materials were collected, and content was prepared for distribution across all selected channels in line with the media plan



Agreements were reached with all channels and offline venues, and PR activities were organized

Project Results

Yandex @ Cloud

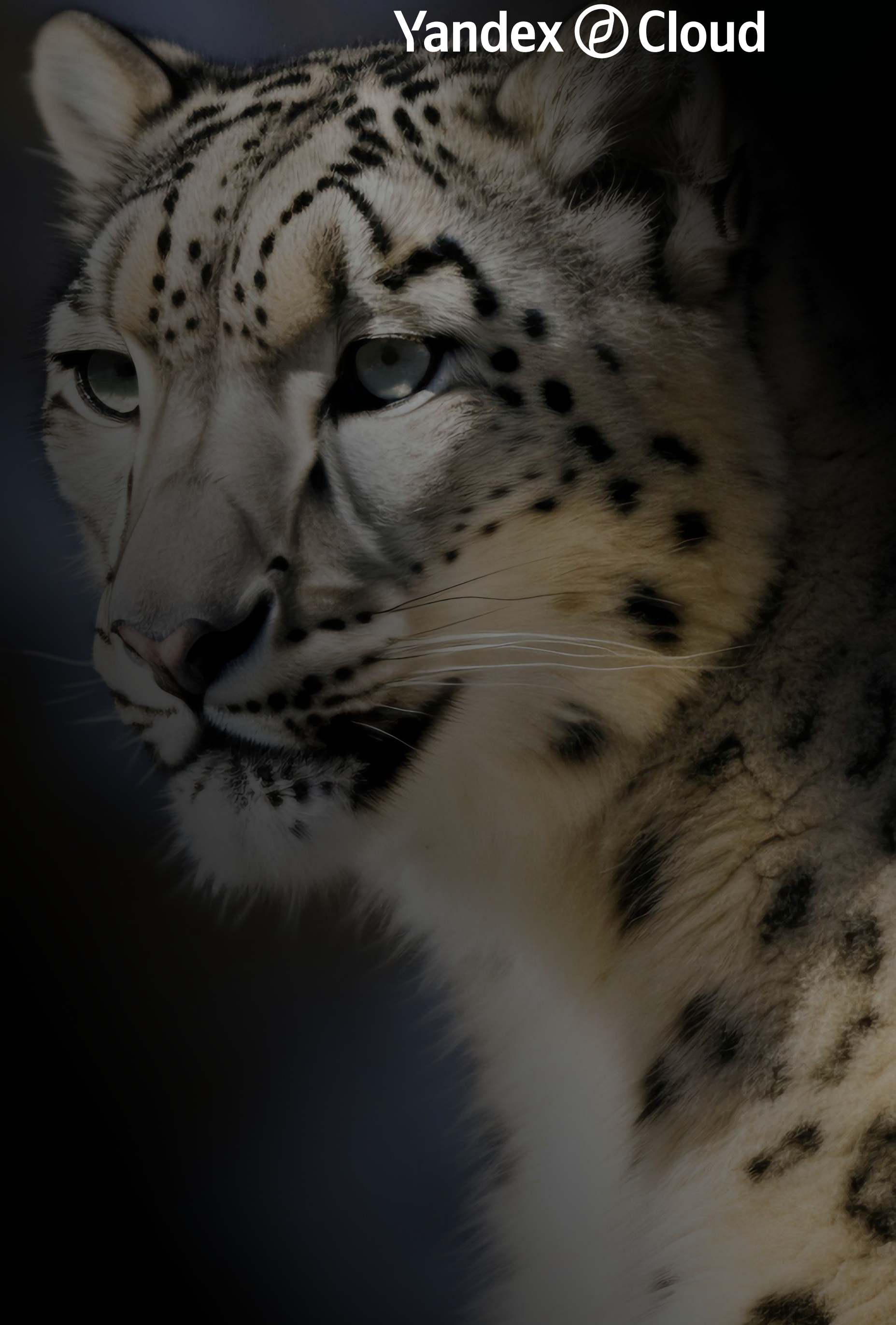
- An innovative tool was created for monitoring the snow leopard population.

The developed technology can also be used to study other animals, soil, air, and water

Before Manual processing of massive datasets from camera traps, which took weeks

Now A neural network was introduced that, in just 1 hour, can review up to 8 million photos. It not only identifies snow leopards among other animals but also recognizes individual leopards — by fur pattern, body size, leg length, and other parameters

- Within the project, a population of 20 previously unrecorded snow leopards was discovered in the Altyn-Emel National Park



Project PR Support Results

Yandex @ Cloud

- A comprehensive PR campaign was organized to reach out to all target audiences

- 65 publications in major media outlets and social networks in Kazakhstan, reaching **over 61 million people**
- Collaboration with Askar Ilyasov (**52,000 people reached**)
- Offline coverage: **6,000 guests at the IQ BBQ Festival, 400 guests at Yandex Scale**

61.9 million people
total PR reach

- **25+ partnership requests** received from organizations

Project budget

4.5 million rubles

across all channels

