

propelland | Nokia Bell Labs

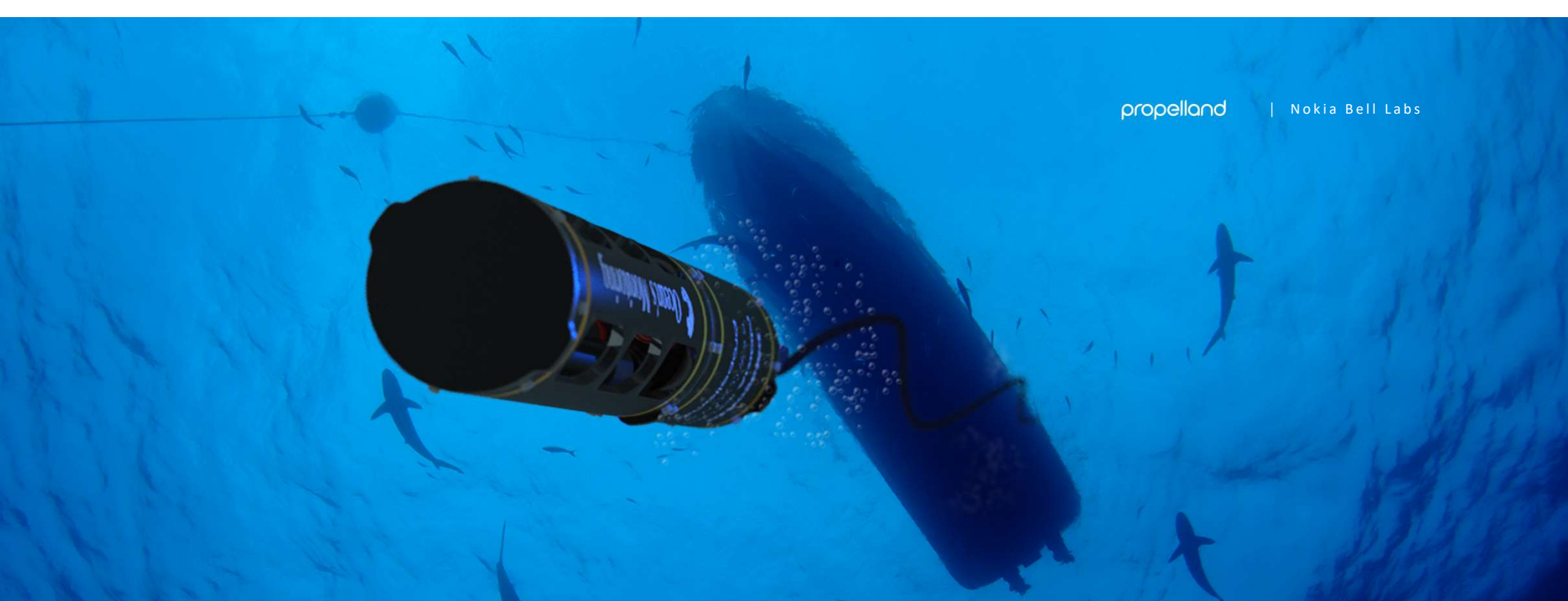
Humans2Oceans

Sensing our way to a healthier ocean



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THE CHALLENGE

With oceans encompassing 70% of our planet and serving as the source of 50% of the oxygen required by humans, the deteriorating state of oceanic health demands our immediate attention. To address this critical issue, we must enhance real-time, accurate data collection and actively engage numerous stakeholders in our mission.

Recognizing the pressing problem of ocean pollution and its rapid acceleration, Propelland has joined forces with [Nokia Bell Labs](#), an award-winning industrial research organization, to pursue innovative solutions. This collaboration aims to enable organizations to gain a comprehensive understanding and heightened awareness of the current condition of our oceans, facilitating timely action before irreversible consequences ensue. Through this partnership, we aim to empower other companies, fostering a collective endeavor dedicated to safeguarding our marine environment for the benefit of future generations.



THE SOLUTION

With over 255,000 ships navigating our oceans, curiosity drives us to pose the question: What if each ship could be transformed into a data collection point, gathering real-time information on crucial indicators such as ocean temperature, pH, dissolved oxygen, and salinity? Inspired by this concept, the research and design teams from Propelland and Nokia Bell Labs developed a prototype solution that integrates a data collection device with an environmental sensing and awareness platform for collecting and analyzing data that provides meaningful insights of ocean health. This device is adaptable for installation on any marine vessel, spanning from large research vessels to small fishing boats.

The device captures various critical ocean health data and shares this information in real-time with environmentalists and citizen scientists. By harnessing this wealth of information, these organizations can embark on well-informed initiatives aimed at safeguarding our invaluable marine ecosystem.



“Propelland has provided world-class design expertise in developing an ocean-based sensing device. Through our collaboration, we are integrating their device with our novel environmental monitoring platform, delivering an end-to-end solution that has the potential to dramatically improve the future health of our oceans.”

Thierry E. Klein

President of Nokia Bell Labs Solutions Research



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SET TRIALS AND DEVELOPMENT

Between 40 and 50 units are being developed for a 6-month pilot program with a Non-Governmental Organization in the Baltic Sea. This initiative involves the creation of physical data collection devices and a predictive data platform. To carry out this test, Propelland and Nokia Bell Labs will validate the minimum viable product (MVP), ensure the seamless integration of sensor data, develop a user-friendly interface, and validate the value proposition for end users and customers.



“Partnering with Nokia Bell Labs was crucial, as their expertise enabled us to develop a solution using their innovative environmental sensing platform.”

Hugo Giralt

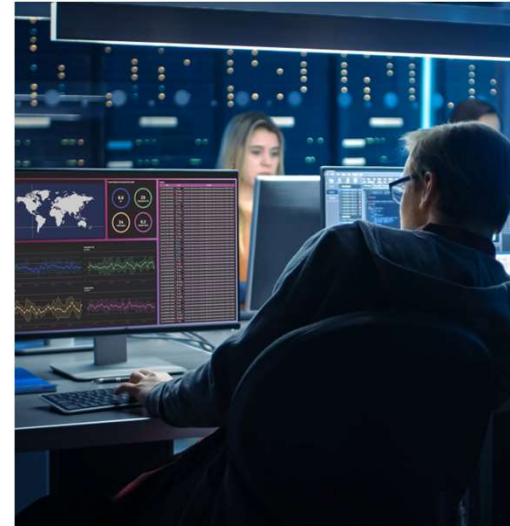
CEO of propelland

The Humans2Oceans project is dedicated to tackling one of the most formidable sustainability challenges humanity has ever encountered.

THE IMPACT

Awarded by the prestigious [Red Dot Award](#) organization in the category of Concept and Sustainability, the Humans2Oceans (H2O) initiative will benefit various stakeholders, including private businesses engaged in oceanic activities such as fishing companies, cruises, and exports, as well as citizen scientists and eco-enthusiasts seeking accessible and shareable knowledge about the ocean.

Through the provision of user-friendly tools, H2O strives to contribute to a better understanding of the oceans' condition and empower individuals and organizations to actively participate in preserving its health.





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