

# "Project Natick", An underwater datacenter which is reliable, practical and sustainable

## Organization

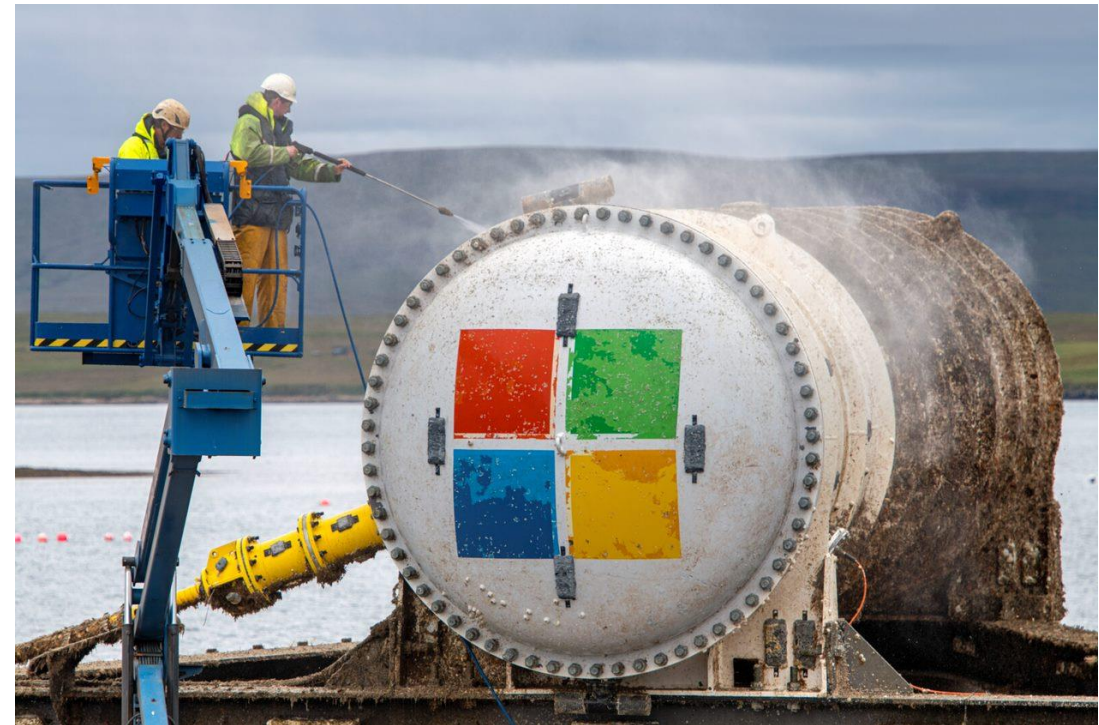
Microsoft

## Period

2018~2020

## Overview

- In 2018, a data center was set up on the seabed at a depth of 35 meters, and tested for two years, demonstrating that it consumes less energy, generates less waste, consumes less fresh water, and experiences fewer failures.
- It was also shown to be less prone to failure and more reliable than onshore.



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## Barriers on developing the innovation

- Underwater data centers are large pressure vessels and need to be integrated according to strict requirements for power, volume, weight, thermal balance, and cooling.
- The Microsoft team did not have the relevant knowledge or technology.

## Success factors to overcome the above barriers

- They began to be aware that an underwater data center is exactly like a submarine.
- That's why Microsoft chose to work with Naval Group, a 400-year old France-based company with global expertise in engineering, manufacturing and maintaining military-grade ships and submarines as well as marine energy technologies.

## Future action plan

- The proven reliability of underwater datacenters has prompted discussions with a Microsoft team in Azure that's looking to serve customers who need to deploy and operate tactical and critical datacenters anywhere in the world.

