Case Study: Vodacom x WWF South Africa

Title: Extraordinary is protecting whales and building sustainable oceans — with real-time data

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The Challenge

South Africa's coastal communities, particularly in Saldanha Bay, face challenges from overfishing, pollution, and climate change. While rope-grown mussel farming offers a sustainable alternative, it poses a risk of entangling endangered marine mammals, especially whales.

The Partnership

To address this, **Vodacom South Africa** partnered with **WWF South Africa** to develop and pilot a **technology-led early warning system** that helps protect marine life — while supporting sustainable aquaculture.

The Solution

Vodacom implemented an **AI-based detection system** using **cameras and hydrophones** to monitor marine activity in the **Saldanha Bay Aquaculture Development Zone (SBADZ)**. This smart system:

- Detects whales in real-time - Alerts mussel farmers to entanglement risks - Initiates emergency response protocols - Gathers data on marine animal movements - Aims to prevent ship strikes on dolphins, seals, and other marine animals

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The Broader Impact

- **Supports climate resilience**: Each great whale can sequester up to **33 tons of CO₂**, contributing to carbon capture and ocean health.
- **Safeguards endangered species**: 6 out of 13 great whale species are endangered or vulnerable.
- **Enhances sustainable seafood practices**: Helps keep rope-grown mussels on the **WWF-SASSI green list**.
- **Expands ocean education**: Vodacom has integrated ocean literacy into its **education ecosystem** by supporting both an Early Childhood Development Centre and a Secondary School in the Saldanha Bay region.

Building on a Strong Foundation

This project builds on Vodacom and WWF's ongoing digital collaboration, including:

- The **WWF-SASSI Fish ID digital platform**, which helps consumers and seafood businesses make sustainable choices.
- Ongoing efforts to drive **ocean stewardship** and educate **the next generation** on marine conservation.

Voices of Impact

"This project shows how we can use technology for good — protecting marine life, empowering communities, and building a better future together."
– **Sitho Mdlalose**, CEO, Vodacom South Africa

"We welcome all efforts to keep rope-grown mussels on our green list. This pilot has great potential to scale across other coastal areas."
– **Pavitray Pillay**, WWF-SASSI Manager, WWF South Africa

What's Next

Once proven in Saldanha Bay, the solution can be **scaled to other Aquaculture Development Zones** around the South African coastline — bringing together **tech, conservation, and community upliftment**.