



+

sahaj
software

CITIZENS OF THE
GREAT BARRIER REEF

We acknowledge the diverse Aboriginal and Torres Strait Islander groups that span the length of the Great Barrier Reef as the traditional custodians of the Land and Sea Country on which we live and work. We pay respects to the Elders past, present, and emerging, for their continued efforts to manage and protect the Reef for future generations.

Great Barrier Reef Marine Park

QUEENSLAND, AUSTRALIA



AUSTRALIA

AREA

344,400km²

LENGTH

2,300 km long



U.S.A.

70 million
football fields

Roughly the
same area as ...



ITALY



JAPAN



GERMANY



MALAYSIA

3000



coral reefs

600



continental islands

1625



types of fish

133



varieties of
sharks and rays

600



types of soft
and hard corals



Australian Government
Great Barrier Reef
Marine Park Authority



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GREAT BARRIER REEF



Why a Census?

- The Great Barrier Reef & reef environments around the world are changing faster and at bigger spatial scales than ever before, challenging traditional monitoring resources.
- Comprising over **3,000 individual reefs** across 2,300 kilometers, only 5% of the Reef is regularly surveyed with as much as **40% never surveyed** at all.
- As the impacts of climate change accelerate, there is an urgent need to fill these critical data gaps

Key Objectives:

1. Conduct large-scale **reconnaissance** of the reef state
2. Develop an innovative, scalable new operating system to collect reef information that **complements** existing long-term monitoring efforts
3. **Ground-truth** habitat maps & scientific models
4. Provide **marine logistics** for other programs and develop infrastructure support scale up of conservation efforts whilst utilising local community
5. Develop a means of rapid accurate analysis of GRC data
6. **Provide rapid understanding of large spatial areas - critical for impact assessments**



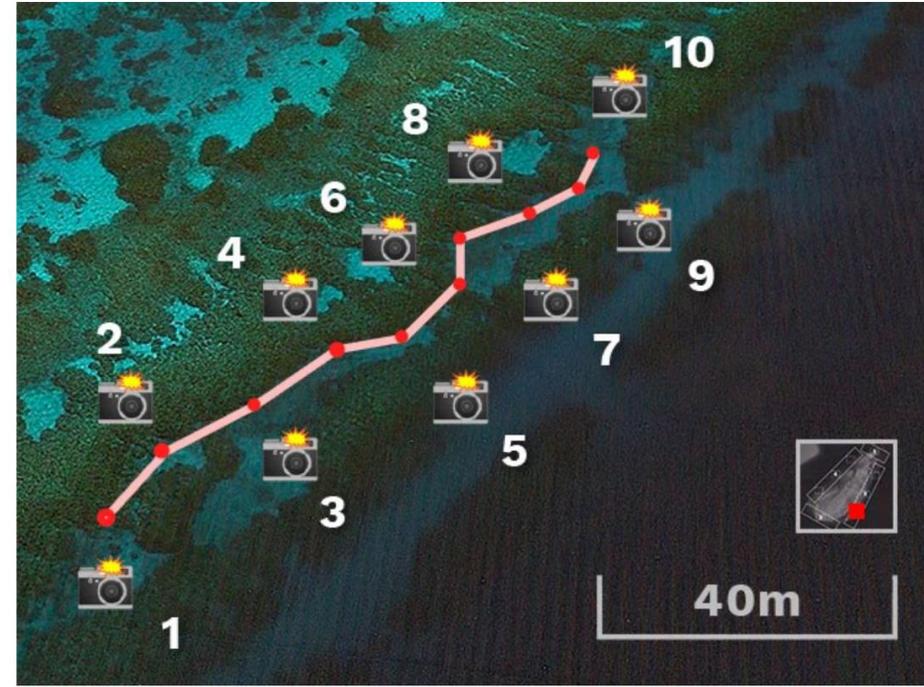
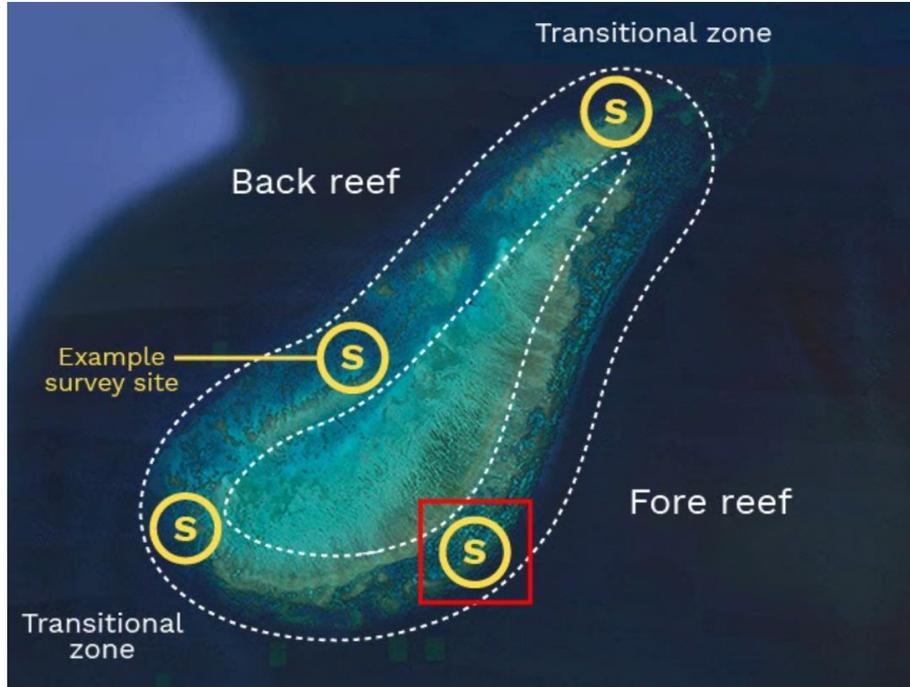


THE GREAT REEF CENSUS

From Citizens of The Great Barrier Reef



Reconnaissance Methodology



Census - technology solution challenges



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GREAT BARRIER REEF

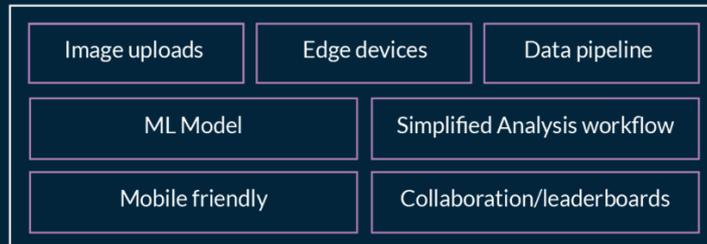
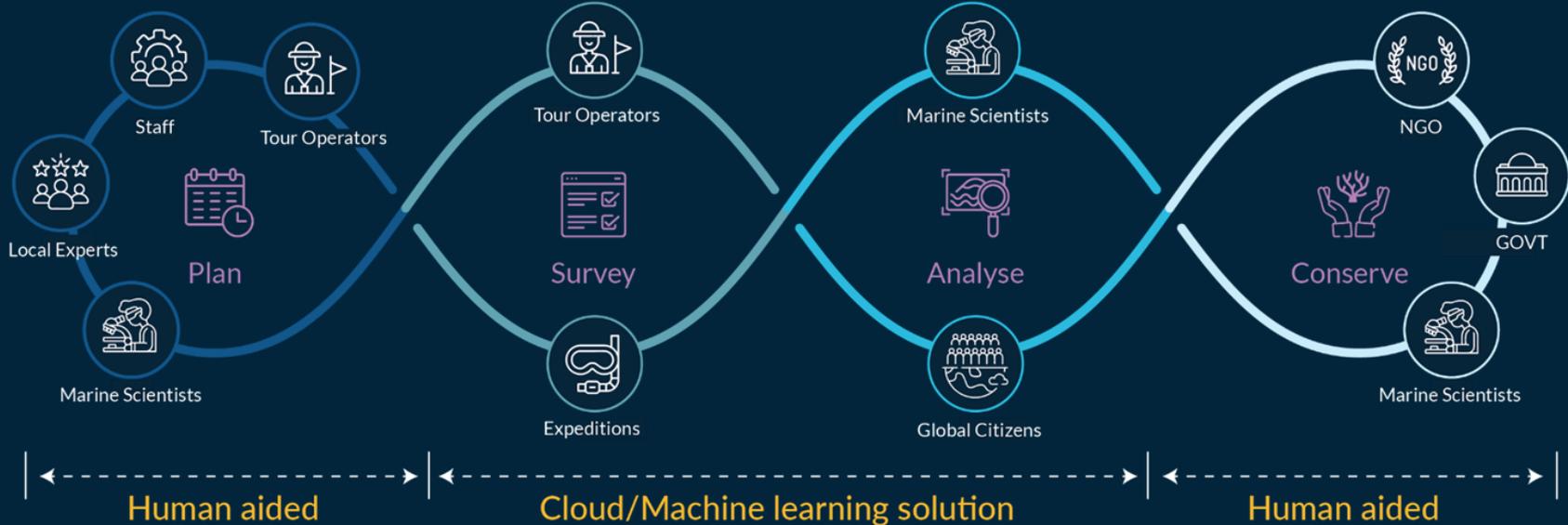


- Expensive/Time heavy expert analysis, successful but not scalable
- Upload/Survey was cumbersome
- Citizen analysis was not successful, less than 1% images useful

A reimagined purpose-built technology platform



CITIZENS OF THE
GREAT BARRIER REEF





THE GREAT REEF CENSUS

From **Citizens** of The Great Barrier Reef



The Great Reef Census is one of the world's largest marine citizen science initiatives.



510 unique reefs surveyed

this is 15% of reefs across the Great Barrier Reef. Previously only 5% of the Great Barrier Reef was regularly surveyed



75,000+ images collected

by snorkellers, divers and volunteers



100+ vessels & operators

taking us to these reefs, including dive boats, tourism vessels, sailing boats, superyachts, island operations and tugboats



Great Reef Census data is:



Helping direct Crown of Thorns control vessels (COTs are responsible for 50% of coral loss on GBR)



Identifying key source reefs, which help nearby reefs recover their coral

greatreefcensus.org



KULBUL

459727

SWIFT

Don't Waste

Yirganyulji Rangers

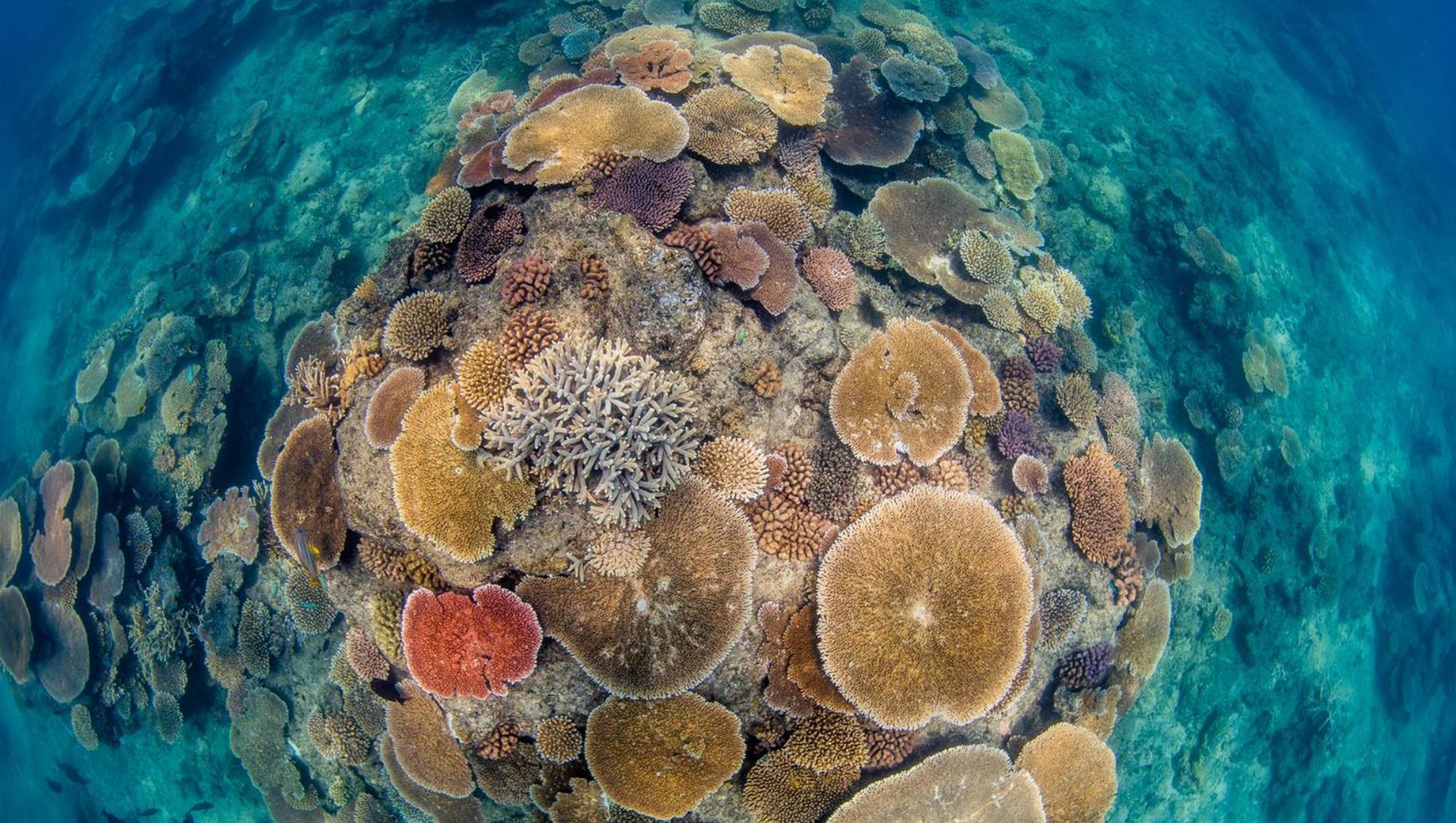
YAMAHA



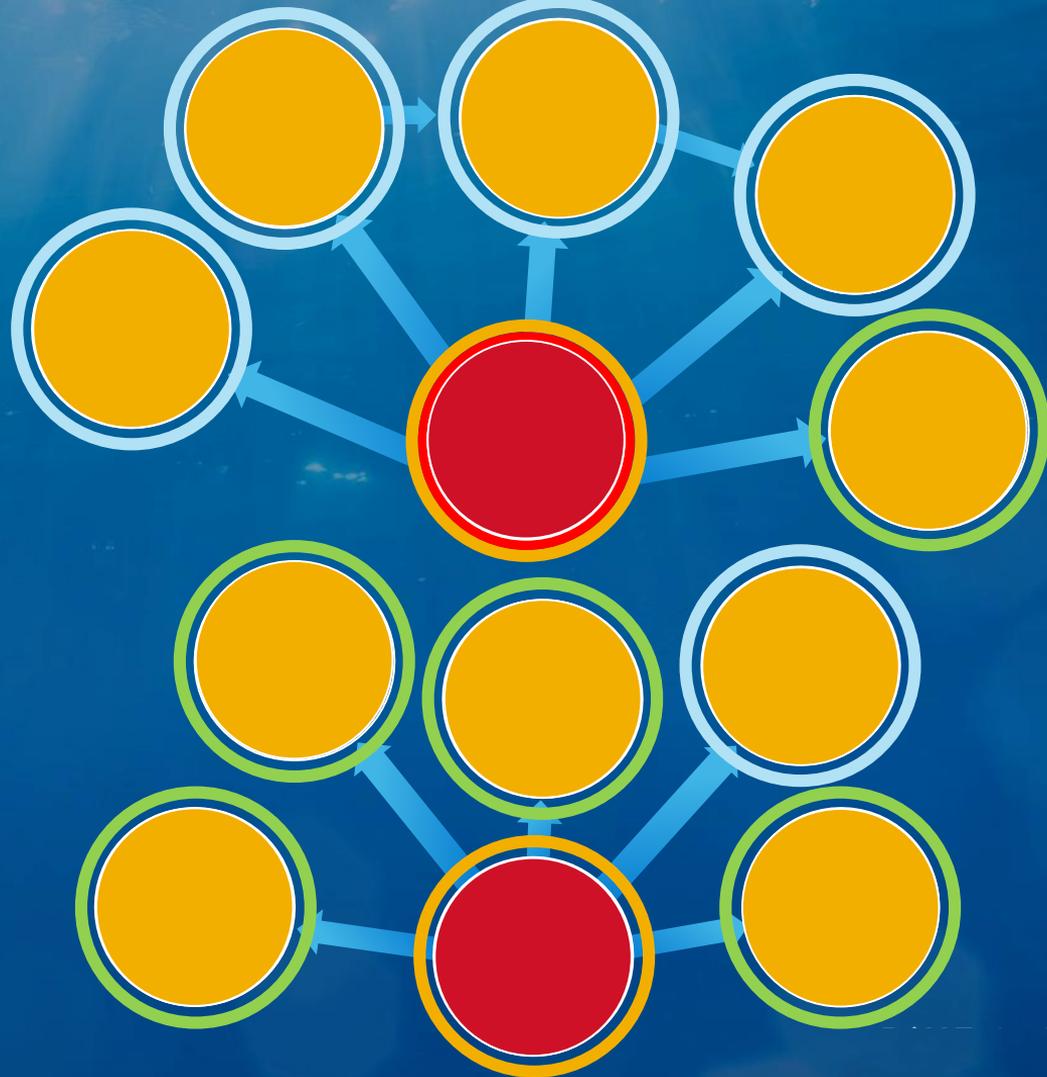
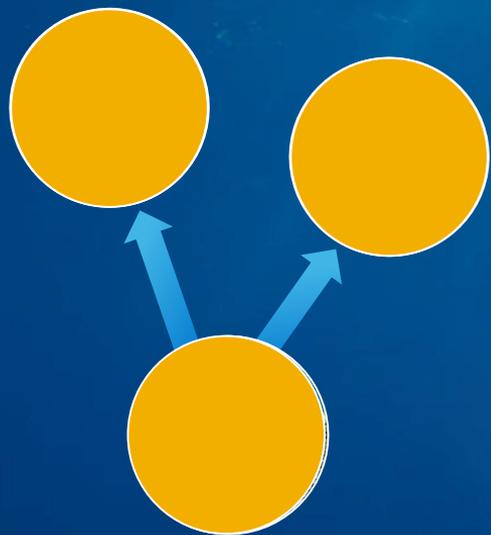








The Connected Reef



Scalability

The Deep Learning analysis model allows citizen scientists to quickly and accurately analyse survey images..

Great Reef Census Survey Image



AI Analysis



Expert Scientist Analysis



Great Reef Census Survey Image



AI Analysis



Expert Scientist Analysis



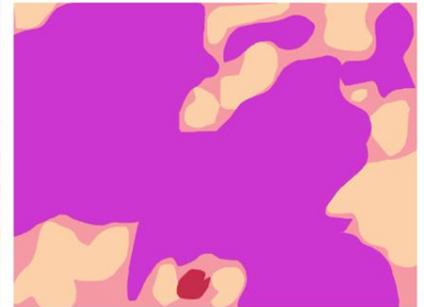
Great Reef Census Survey Image



AI Analysis



Expert Scientist Analysis





CITIZENS OF THE
GREAT BARRIER REEF

THE GREAT REEF CENSUS

About ▾

Committee

Map

Partner

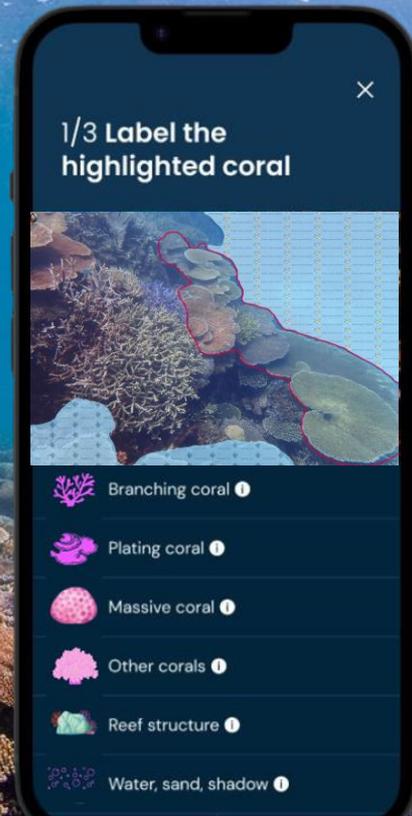
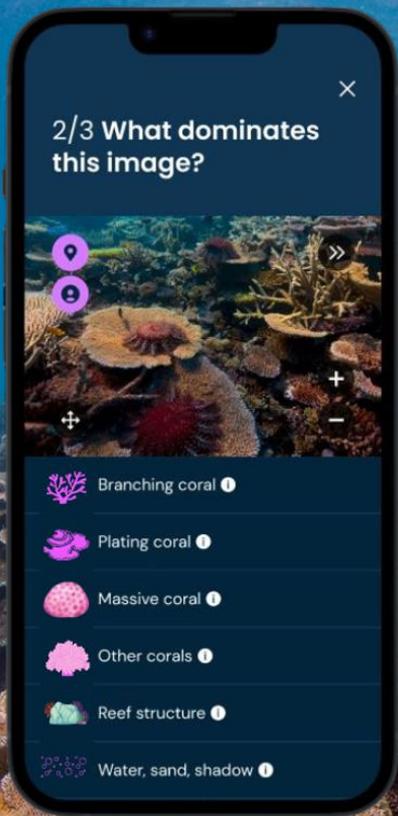
Analyse a photo

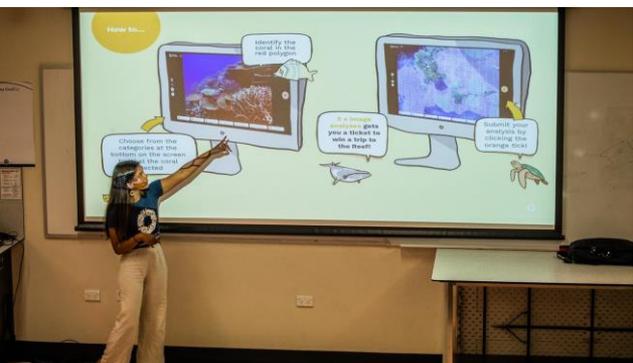
1/3 Label the highlighted coral

-  Branching coral
-  Plating coral
-  Massive coral
-  Other corals
-  Reef structure
-  Water, sand, shadow
- Bad image
- I don't know

 Previous







Education & Analysis

“This seriously was such a fantastic project and has been a major confidence boost for Charlie. He doesn’t enjoy school, and flies under the radar at school so to be acknowledged for the time he spent on this has been so wonderful.

I was totally baffled to see him analysing images on a Friday night when he avoids school homework like the plague. The ocean and sea life is his happy place, thank you for all your encouragement and offering such a great project for the kids to be involved in.”

Kate Hard, Mother of Charlie, the student who analysed 926 survey images



Mars and the Great Reef Census

Furthering our commitment to reef conservation globally, Mars is proud to continue partnering with Citizens of the Great Barrier Reef for the Great Reef Census analysis campaign. Join other Mars employees by donating your screen time to help analyse images from the Great Reef Census, providing vital data to scientists and reef managers of what's happening on reefs along the Great Barrier Reef to help better target protections.

[Get Started](#)

MARS

22
locations

7,433
analysed

5,277
minutes

79
people

Top 50 Volunteers

1.		Mel	Yackandandah, Victoria, Australia	2,332 Images
2.		Mitch	Melbourne, Victoria, Australia	1,759 Images
3.		Medhat	Melbourne, Victoria, Australia	1,257 Images
4.		John	Ballarat Central, Victoria, Australia	682 Images
5.		Emma	Azquith, New South Wales, Australia	153 Images
6.		Emma	Swansea, New South Wales, Australia	128 Images



Great Reef Census with Disney VolunteARS

Be part of a global Disney VolunteARS opportunity by donating your focus for the Great Barrier Reef. Track your progress among other Disney VolunteARS across the world and see our collective impact for the Great Reef Census. Click "Get Started" below to Sign In and get started on your analysis journey!

[Get Started](#)



81
locations

18k
analysed

12.8k
minutes

391
people

Top 50 Volunteers

1.		Celeste	Melbourne, Australia	1,361 Images
2.		Amy	Melbourne, Australia	650 Images
3.		Lauren	Kissimmee, Florida, United States	600 Images
4.		Aaron	Los Angeles, California, United States	422 Images
5.		Benjamin	Sydney, New South Wales, Australia	397 Images
6.		Sarah	Orlando, Florida, United States	359 Images



Great Reef Census with Dell Technologies

Be part of Dell Technologies partnership with Citizens of the Great Barrier Reef by donating your focus to the Great Reef Census. Using deep-learning developed by Dell, this groundbreaking image analysis platform helps citizen scientists analyse images from the Census, combining the human eye with AI technology.

Track your progress among other Dell virtual volunteers across the world and see our collective impact for the Great Reef Census. Click "Get Started" below to Sign In and get started on your analysis journey!

[Get Started](#)

205
locations

15.3k
analysed

10.9k
minutes

1,083
people

Top 50 Volunteers

1.		Elana		992 Images
2.		Kavie	Cyberjaya, Selangor, Malaysia	618 Images
3.		Sandhya	Bengaluru, India	340 Images
4.		Matze	Stuttgart, Germany	325 Images
5.		Monisha	Bangalore, Karnataka, India	185 Images
6.		Tomohisa	東京都, 日本	180 Images



Great Reef Census with PADI

From helping capture images across the Great Barrier Reef for three years, the diving community's support for the Great Reef Census is now coming out of the water and across a global scale. As a member of the dive community (whether you're in Cairns, Dahab, Bali, Bonaire or anywhere in the world) we're calling on you to turn your passion into purpose by getting involved in this year's Great Reef Census analysis campaign.

[Get Started](#)



49
locations

2,294
analysed

1,628
minutes

102
people

Top 50 Volunteers

1.		Soledad	Buenos Aires, Argentina	190 Images
2.		Pavel	Osaka Bay, Bulgaria	189 Images
3.		Maya		118 Images
4.		Rob	Sarasota, Florida, United States	115 Images
5.		Becky	England, United Kingdom	108 Images
6.		Alyssa		87 Images



THE
GREAT
REEF
CENSUS

FROM CITIZENS OF THE GREAT BARRIER REEF

115,500
analyses completed





+

sahaj
software

CITIZENS OF THE
GREAT BARRIER REEF

Every Citizen a Conservationist