CASE STUDY

GREAT BARRIER REEF MARINE PARK AUTHORITY

August 2021



OVERVIEW

The Great Barrier Reef Marine Park Authority (Reef Authority) is Australia's lead management agency for the Great Barrier Reef, one of the world's most iconic natural areas.

They have provided world-leading marine park management since 1975 and are a strong, efficient and agile natural resource regulator entrusted by Australia with the responsibility of managing the natural wonder that is the Marine Park.

With over 200 staff the Reef Authority has its Head Office in Townsville with regional offices in Cairns, Mackay, Yeppoon and Brisbane.

The Great Barrier Reef is a global icon and an integral part of Australia's national identity. The Great Barrier Reef is a vast and spectacular ecosystem and one of the most complex natural systems on Earth. As the world's largest coral reef ecosystem, it is bigger in size than Italy, and spans 2300 kilometres of Australia's north-east coast. It comprises almost 3000 individual reefs, about 10 per cent of the world's coral reefs.

OBJECTIVES

- To provide clarity and visibility on the range of decision points for key teams, their frequency, the people and processes that support them and the flows of knowledge that are required to inform or report on them
- To provide recommendations on decision support tools that could be developed as part of an overall decision support system



BWC SOLUTION

The first phase of the project was delivery of a decision literacy workshop for key teams. The objective was to ensure staff understood how individual and team decision making are affected by our own biases and the general noise that surrounds decisions made under higher levels of uncertainty. It included describing the benefits of capturing team mental models of how decisions are or should be made in a decision or process map, and the provision of examples of decision support tools that may form part of an overall decision support system.

The second phase was to develop the decision maps and identify the decision points most able to be improved with decision support tools. This phase followed a simple three step process:

Collation

 Initial interviews to identify recurring decisions that may benefit from the process

Collaboration

• Team workshops to develop decision maps

Clarification

• Interviews to identify decision points that would benefit from a decision support tool and the type of tool

ACHIEVED OUTCOMES

KEY DECISION SUPPORT TOOLS

While some decision maps were more complex or the mental models of the teams were less developed, each team was clear on the benefits they derived from the process and could be derived through decision support tools. The most significant decision support tools identified which the Reef Authority could pursue development of included:

• A Geographic Management Information System (GMIS) to ensure all information available at a location was in a readily accessible system to improve speed of access.



- Multi-Criteria Decision Analysis tools where teams were weighing up competing outcomes. For example environmental vs economic.
- Group Decision Making Techniques to avoid Group Think.
- Data Models due to the amount of data available and the complexity of the decisions.

RISK ASSESSMENT

While risk assessments played their role for each team, the teams expressed their need to be clear on the organisation's appetite for risk. They appreciated that decisions posed risk, whether to the reef or to stakeholders or their reputation. They wanted, and in some cases were working on developing, very clear guidance. But the question was, when was taking a high risk warranted?

Author's Note:

As is known, developing guidance on appetite for risk is a challenge at the best of times. However, it is a necessary challenge to take on. Otherwise individuals are left to apply their own appetite for risk, and that may be very different to the one imagined by the Executive or Board.

Please, if you want to create something genuine that will enhance the culture of your teams making these recurring decisions, please take a harder path than simply saying we have a low appetite for this and a high appetite for that. It needs specifics and it needs plenty of examples.

CLIENT TESTIMONIAL



"Bryan helped us explore some of our team decision making processes. His expertise and collaborative approach ensured we have a strong foundation for developing our strategies and plans to develop our decision support systems. Personally, I found it a really interesting project to work on, as did the teams involved who are already putting into practice the valuable insights they gained."

- Dr Damian Weekers, Assistant Director Decision Support Systems - Science for Management, Great Barrier Reef Marine Park Authority



