

The Interplay of Ocean Science Research with Public Policy and Management Decision Making: Seeking Solutions

Kristin M. Poduska,¹ Sandra Toze,² Isabelle Caron,³ Philippe Mongeon,²
Ian G. Stewart,⁴ Rémi Toupin,² & Bertrum H. MacDonald²

¹Department of Physics and Physical Oceanography, Memorial University; ²School of Information Management, Dalhousie University;
³School of Public Administration, Dalhousie University; ⁴History of Science and Technology, University of King's College

Complexity of Decision Processes

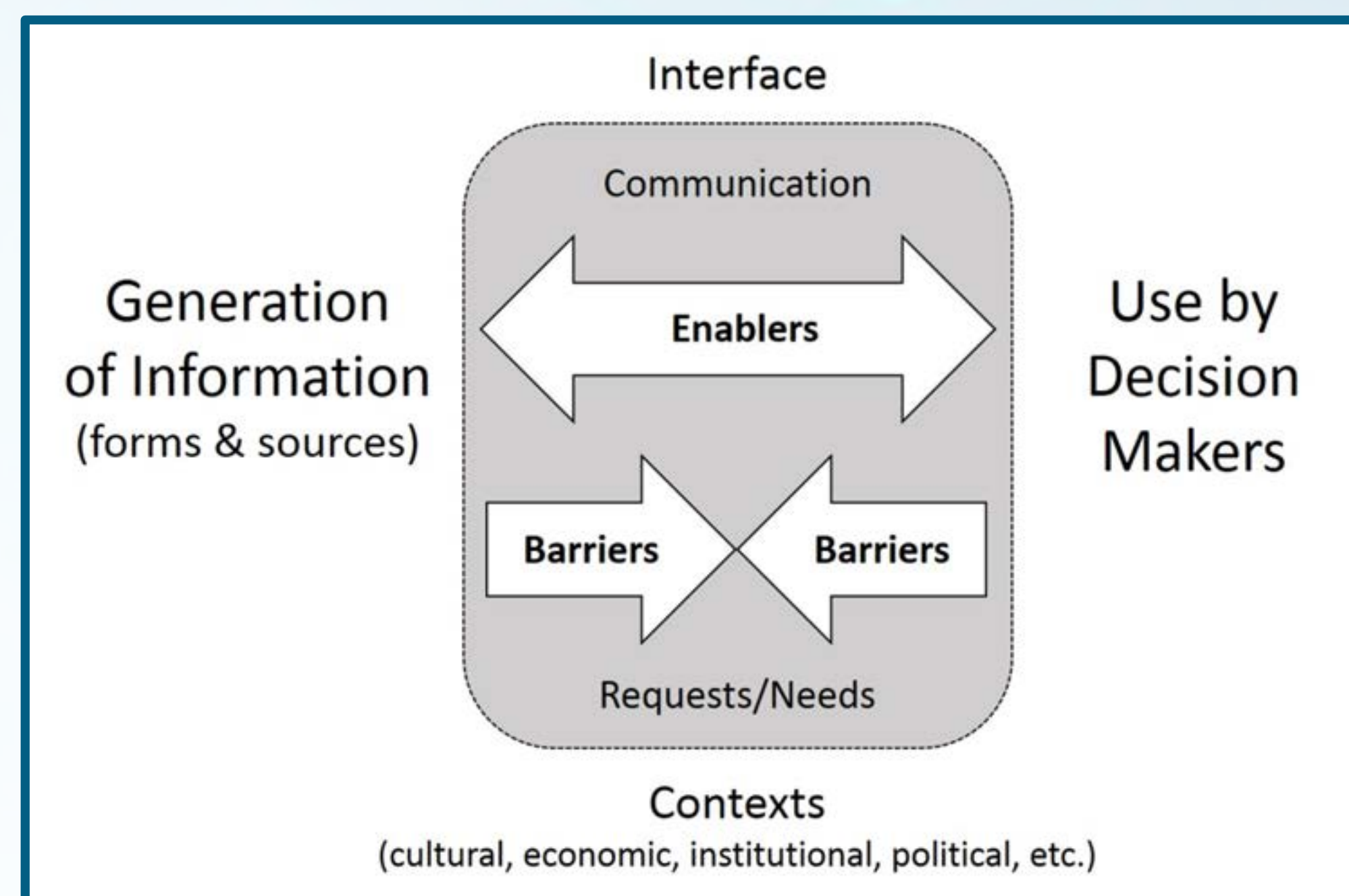
The United Nations Decade of Ocean Science for Sustainable Development aims to foster “transformative ocean science solutions” to achieve healthy and resilient oceans. This goal requires research, and, more importantly, its uptake into policy and practice. However, effective knowledge mobilization is remarkably complex. Much remains to be learned about how it occurs and can be improved.

What We Have Learned

Our research (www.eiui.ca) identified enablers and barriers to awareness, communication, and use of research information.

Enablers

- ❖ Synthesis reports and policy summaries for decision-makers and managers.
- ❖ Networks (individuals and organizations) that facilitate transfer of relevant information to managers and decision makers.
- ❖ Individuals and organization, e.g., ENGOS, acting as bridgers and information brokers to translate information into the language of various stakeholders and decision makers.
- ❖ Moving research publications into open access digital formats for greater availability.

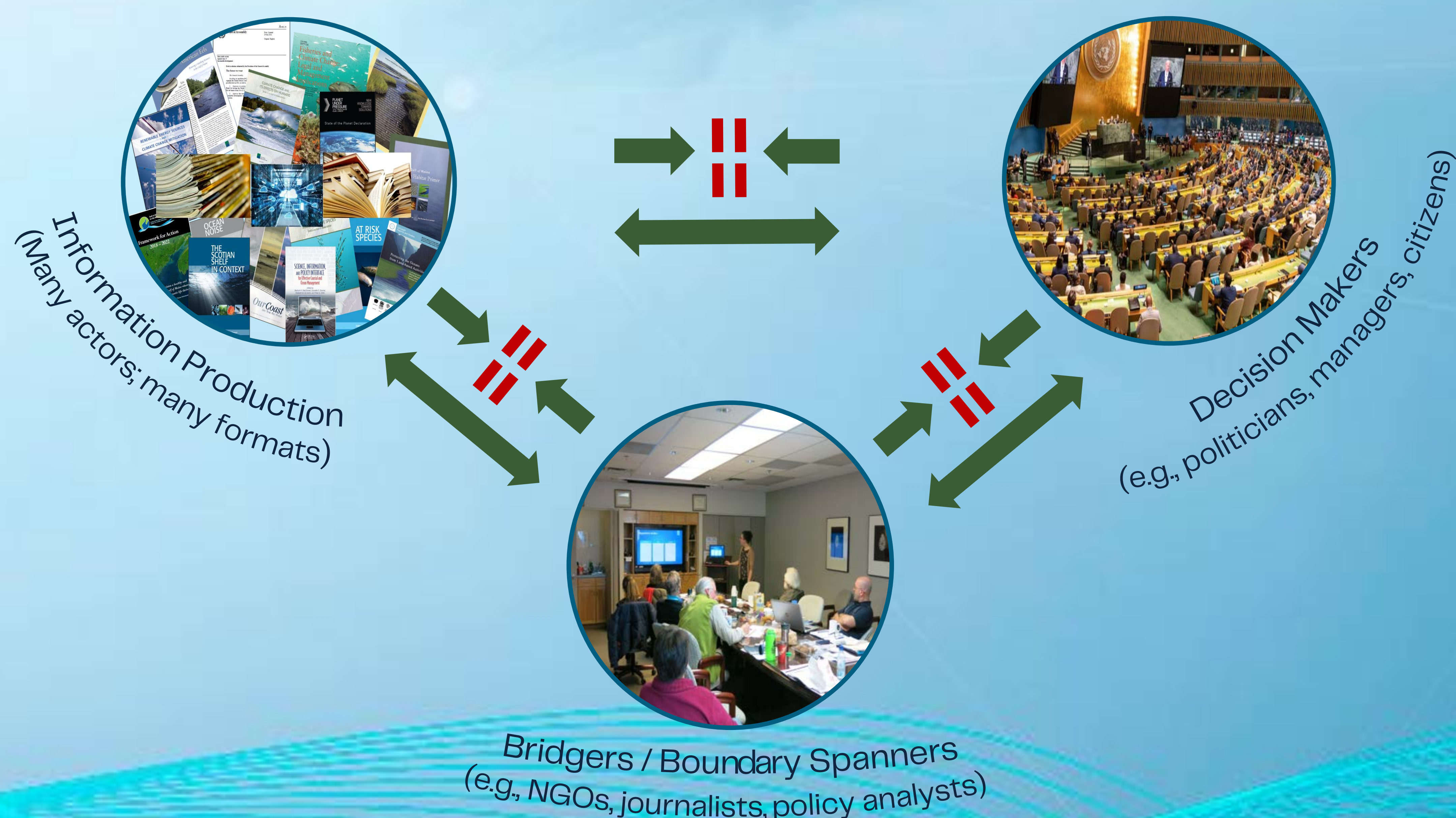


Barriers

- ❖ Decision-making processes operating in silos within government, and between government and stakeholders, blocking or preventing timely information transfer.
- ❖ Many information dissemination channels all requiring resources.
- ❖ Rapid dissemination of misinformation, contributing to distrust of information and its sources.
- ❖ Inadequate skills and resources to track and improve information production and distribution processes.

Questions Guiding Ongoing Research

1. How do decision-makers select evidence for policy development and implementations?
2. How should evidence be communicated to foster uptake in decisions?
3. What enables or limits the use of evidence?
4. What roles do formal and informal information pathways play?
5. What knowledge is being produced, disseminated, and used, by whom?
6. What perspectives are over or under-represented in the knowledge produced and mobilized?



Next Steps in the Research

We will work with ocean science researchers (natural, physical, and social scientists), who produce information, and with decision makers (at various levels of governance), who are the potential users of the information. This collaboration, using multiple research methods, aims to foster co-production of knowledge and thereby strengthen relevance, reliability, legitimacy, and actionability of the findings. The results will contribute to realizing the objectives of the Ocean Decade as governments and citizens respond to changing ocean conditions with the intent to achieve healthy and resilient oceans.