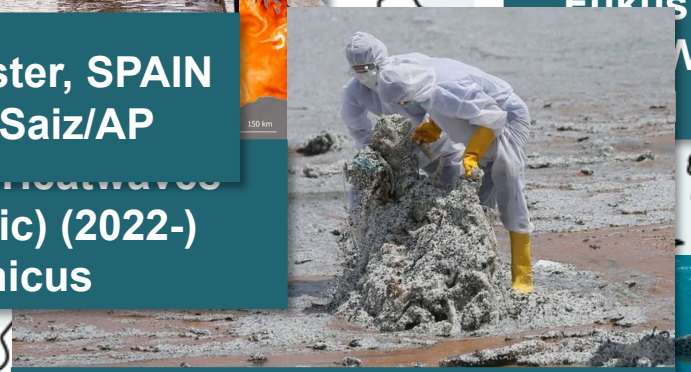
NATURAL OR HUMAN INDUCED DISASTERS

Megatsun
Fjord, GRI
@r

Valencia flood disaster, SPAIN (2024) @Alberto Saiz/AP

Deepwater Horizon oil spill, U.S. (2010) @U.S. Coast Guard

Fukushima Daiichi Nuclear
Wastewater Discharge,
(2011) @Getty Images

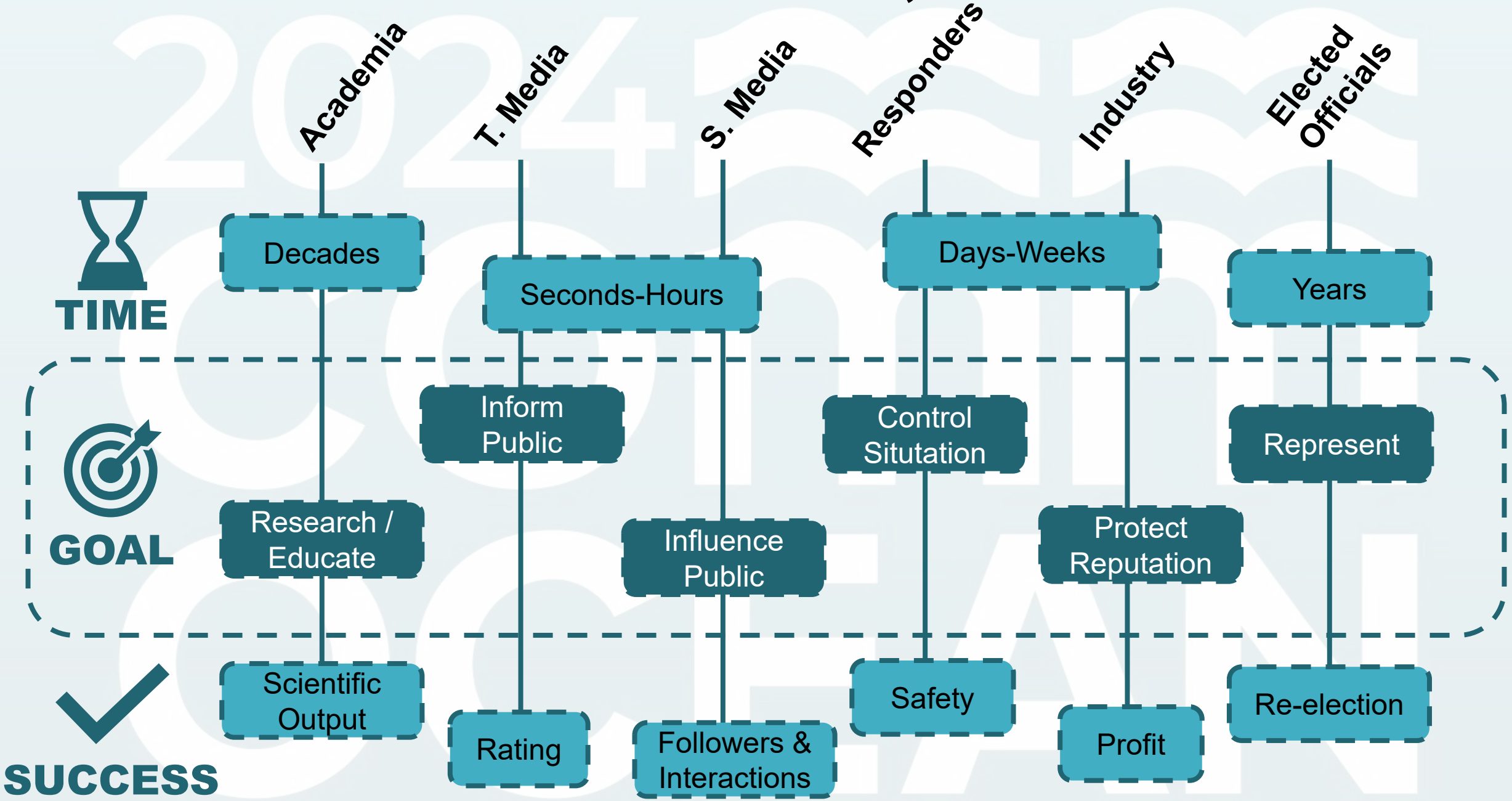


(Med. & Atlantic) (2022-)
@Copernicus

The M/V X-Press Pearl Nurdle and Oil Spill, SRI LANKA (2021) @Reuters

The Great Barrier Reef 7 Mass Bleaching E., AUSTRALIA (1998-) @Richard Vevers, OIB

EVERY ACTOR HAS DIFFERENT GOALS, NEEDS AND PRIORITIES



Adapted by Christopher Reddy, WHOI

SCIENCE COMMUNICATION IN CRISIS / DISASTER

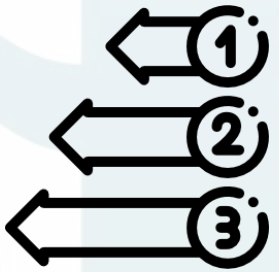
Crisis communication is characterized by urgency, directness and a heightened focus on actionable information

1. Objectives and Focus

- Emphasizes immediate understanding to aid decision-making, risk mitigation, and safety.
- Focuses on explaining cause, effect, and actionable responses to minimize harm.
- Reactive, responding to urgent events

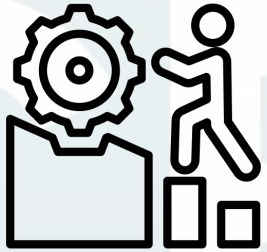
2. Needs and Priorities

- Clear and Accurate Information
- Transparency
- Empathy and Sensitivity
- Timely Communication
- Collaboration
- Real-Time Monitoring



3. Challenges

- Uncertainty and Evolving Information
- High Public Emotion and Anxiety
- Time Pressure
- Misinformation and Disinformation
- Diverse Audience Needs
- Accessibility Barriers



4. Methods & Tools

- Real-time channels like press briefings, social media, emergency alerts, and live broadcasts.
- Infographics, visual aids or maps to convey complex data visually under time constraints.
- Multilingual Communication
- Collaborative Platforms

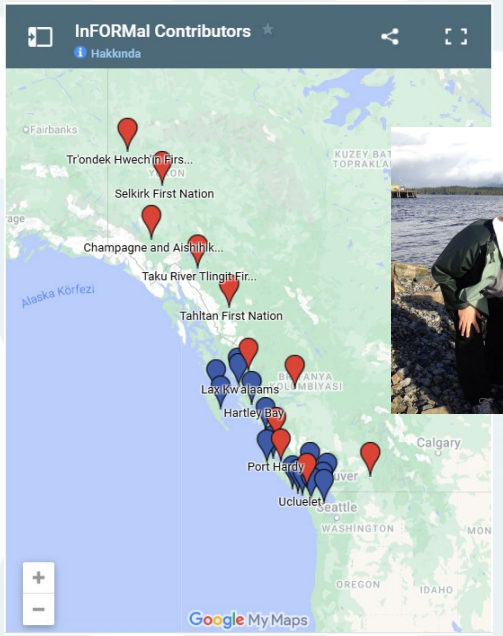
SCIENCE COMMUNICATION STRATEGIES IN CRISIS: CASE STUDY

SEA SNOT, SEA OF MARMARA

- **Governmental and Academic Engagement:** e.g. press conferences, press releases
- **Visual Tools:** e.g. Satellite images and underwater footages
- **Stakeholder Engagements:** e.g. serious games

SCIENCE COMMUNICATION STRATEGIES IN CRISIS

GOOD PRACTICES



INTERNATIONAL COLLABORATION

WHOI Scientist, U.S. - Asha de Vos, marine Biologist collaborated with Sri Lanka in assessing the chemistry of these pellets to help responders prepare for the consequences of the spill.

Factsheets @Woods Hole Oceanographic Institution

Image @ Asha de Vos

CITIZENS SCIENCE

InFORMal scientists help monitor the levels of Fukushima contamination present in coastal marine waters and biota (salmon) across the ocean

@Fukusima Inform, CANADA

?

YOUR EXPERIENCE

LEARNING FROM DISASTER TO AVOID A DISASTER: HOW TO BETTER COMMUNICATE OUR SCIENCE WITH DIFFERENT STAKEHOLDERS IN TIMES OF CRISIS

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&
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