

# Open Innovation Playbook for Risk



## Open Innovation Playbook for Risk

FY20 Open Innovation  
Playbook for Risk  
Proposal

### Playbook Components

- [Earthquake Case Study](#)
- [Climate Change Case Study](#)
- [Catalog and Toolkit](#)
- [Guidance and Policies](#)
- [Playbook Platform](#)

### Overview of Open Innovation Playbook for Risk

USGS has a long history of risk projects that engage the public to enhance science, a method often referred to as "citizen science." There is a broad spectrum of public engagement and community-based research (e.g., citizen science, crowdsourcing, and prize competitions). "Open Innovation" (OI) has recently become an umbrella term to reference these participatory methods. Such methods are ways to meaningfully engage communities at risk and transform users of risk products into vital contributors. However, the lack of bureau-wide guidance, resources, and policy on OI has led to ad hoc efforts giving rise to concerns and misconceptions about data quality and validity that need to be addressed and dispelled. A comprehensive strategy is needed to provide practical and consistent guidance to direct USGS scientists, managers, and leadership on how to use and evaluate OI methods effectively while meeting USGS science needs. A USGS Open Innovation Strategy is currently being developed that will result in USGS-specific Guidance and Policy as well as a Toolkit and Catalog of USGS OI activities.

Supplementary to the USGS Open Innovation Strategy, this Risk project focuses on surveying past and potential OI risk projects by engaging USGS representatives from various mission areas, regions, and science support offices. Ethnographic research methods and user-centered design techniques will be employed to co-design and co-produce an OI Playbook for Risk. The goal is to build institutional capacity for using OI methods through bureau-wide engagement that will ultimately increase awareness and effective use of OI methods for future USGS risk research and applications. The project outcomes are: (1) A catalog of past and potential USGS open innovation projects related to risk; (2) Two case studies of OI projects related to earthquakes and climate change that will also be summarized through graphical and video products; and (3) a USGS Open Innovation Playbook for Risk that packages together the catalog, case studies, and multimedia products, which will be targeted towards the Risk Community of Practice and inform future Risk RFPs. Content and key insights from the Playbook will directly inform and be integrated into the broader USGS guidance and policy on open innovation.

If you are interested in providing feedback on this Open Innovation Playbook for Risk and participate in a virtual workshop to inform the design of the playbook, please [Provide a Comment Below](#) (sign in with AD username/password) or [Send an Email](#) with subject line "Playbook for Risk" to:

[SophiaLiu@usgs.gov](mailto:SophiaLiu@usgs.gov) and [OpenInnovation@usgs.gov](mailto:OpenInnovation@usgs.gov)

## Open Innovation Techniques

### CROWDSOURCING



**Crowdsourcing** is an open call to quickly obtain services, ideas, or content from a large group of people often through simple and repeatable micro tasks.



**Citizen Science** is a practice where people collaborate with professional scientists by providing voluntary contributions to any part of the scientific research process to enhance science.

### COMPETITIONS



**Competitions** are challenges that typically use monetary and non-monetary prize incentives to spur a broad range of innovative ideas or solutions to a well-defined problem.

## Open Innovation Playbook for Risk



### Case Studies

- Earthquake
- Climate Change
- Flood



### Catalog

- Past & Potential Projects
- Tools & Platforms
- Other Related Resources

### Guidance and Policies

- Terms & Definitions
- Typical Use Cases
- Implementation Process
- Evaluation Metrics
- Relevant Policies

### Playbook Platform

- Develop a Hub Site
- Feedback from Risk CoP
- Easy to configure & update