

Digital for Resilience Challenge

Challenge Handbook

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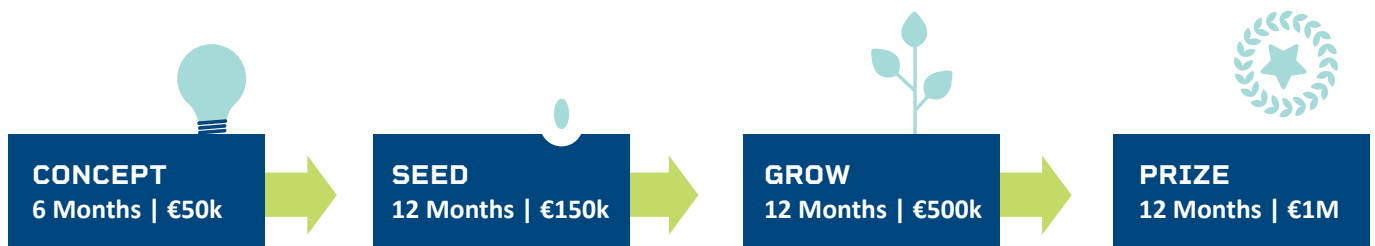
The Digital for Resilience Challenge focuses on supporting research teams to focus on the challenge of enhancing Ireland's capabilities in crisis prediction & response.

Why Apply?

The Digital for Resilience Challenge gives academic research teams a unique opportunity to contribute to the gain of deeper insights and better understanding of the origins and potential impacts of future environmental, social or economic scenarios, in order to better prepare for future shock events. Following successful review of applications, teams will receive funding of up to €200k and training to accelerate development of their idea. A number of teams will then be selected as finalists and receive up to €500k to further develop their idea before an overall winner is selected for the €1M Prize Award.

Who Can Apply?

Postdoctoral, early career or established researchers may lead teams in the Digital for Resilience Challenge. Teams will consist of a minimum of two academic researchers with complementary skillsets. At the application or during the first phase of the award, teams must also include a third member who will bring specific knowledge or experience of the societal challenge the team will address.



How To Apply?

Complete a short 6-page form that asks you to describe your team, the specific challenge or problem you will address, the solution you propose and how it will create impact. Register and upload your application to SFI's grant management system before the deadline.

Teams should note that they will also be required to upload their CVs and other supporting documentation described in the call document.

What Are We Looking For?

The Digital for Resilience Challenge focuses on supporting research teams to address the challenge of enhancing Ireland's capabilities in crisis prediction & response. The challenge provides researchers with the opportunity to explore development of new digitally enabled methods, models, and tools to gain deeper insights and better understanding of the origins of, and potential impacts associated with, future environmental, social, or economic scenarios, in order to better prepare for future shock events. The Digital for Resilience Challenge will build national capacity in crisis prediction & response, and, by demonstration of impact potential, support efforts to manage key national risk areas and inform national risk management strategies and policy on how our society and economy can be more resilient. This challenge is also aligned to national strategies (incl. Our Public Service 2020 and Civil Service Renewal 2030 Strategy) where the development of foresight capabilities has been identified.

Find out more about the varied and diverse teams we have funded under other challenges on the SFI website:

www.sfi.ie/challenges



Key Dates



November 7th, 2022 – Call opens for applications



February 10th, 2023 (13:00 Dublin Local Time) – Application Deadline



April 2023 – Successful teams notified

Areas of Interest

Applications are encouraged to focus on the challenge of enhancing Ireland's capability in crisis prediction and response. Specifically, how digital technologies (e.g., multi-scale or agent-based modelling and simulation, AI and machine learning, digital twins) can be used to anticipate, monitor, and manage shock societal, economic, and environmental events (e.g., pandemics, supply/demand disruptions, flooding).

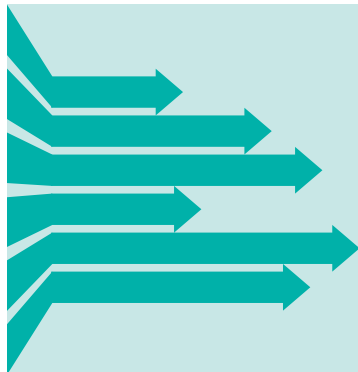
Given the need for solutions to create value, researchers are encouraged to collaborate across disciplines to gain a deeper understanding of issues and develop more complete value propositions (e.g., environmental, social or economic). Under the Digital for Resilience Challenge, consideration should also be given to the principles of equity, inclusion, and diversity, and how these can be reflected in research and form part of measures and recommendations on future resilience.

The complexity and ubiquity of digital technologies calls for digital products, processes and services to be ethical. Solutions developed as part of the challenge should ensure trust, privacy and security are considered and incorporated at all stages from design to deployment.

Digital Responsibility

Leveraging data and digital technologies has transformative impact potential to address some of the most pressing societal challenges such as climate change, biodiversity loss, and sustainability. However, the ubiquity and power of digital technologies requires that creators and users act responsibly to ensure they are utilised in an ethical way that reflects values such as safety, fairness and inclusion, transparency, and privacy. In this context, digital responsibility requires that ethics issues be considered, monitored and managed across the full life cycle of a digital asset or system.

Applications submitted to the Digital for Resilience Challenge should consider the ethical issues associated with digital assets or systems proposed and ensure that appropriate measures are in place to identify, monitor and manage risks across the full life cycle of the digital asset or system.



Challenge research is an approach to research funding that provides participants with an opportunity to accelerate progress toward delivering tangible impact from research. In addition to funding, researchers participating in the National Challenge Fund will be provided with significant training and mentoring to support them in this process.

Further Information

For all information on the Digital for Resilience Challenge, please visit the website: sfi.ie/funding/funding-calls/digital-for-resilience/. Applicants are advised that they should consult the call document for all details and eligibility criteria for the call in advance of preparing an application. For any further queries, please contact the SFI Challenge Team at challenges@sfi.ie