

Abstract Details

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A framework for the management of research and innovation projects: mission impossible?

Biography

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Simon has been a research manager and administrator for over 25 years, the past eight leading the research office at Kent. Simon is an EARMA Board member, and also sits on the Annual Conference Programme, and Awards Committees. Sits on the NCURA Select Committee for Global Affairs, is a past chair of ARMA (UK), and acts as an expert for the EU funded foRMAtion project. Leads the INORMS RAAAP (Research Administration as a Profession) Task Force that is collecting longitudinal data about the profession.

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The shift from discipline-based research ("mode 1") to interdisciplinary knowledge production involving industry or service partnerships and increased social accountability ("mode 2") have led to deep changes in the organizational structure of research and innovation (R&I) ecosystems. In particular, public research-performing organizations have been re-shaping their management and organizational structures towards a more market-oriented direction, with a strong executive control approach also known as 'New managerialism'. Also, since the 1990s, R&I organizations have increasingly adopted collaborative research projects, seeking access to complementary knowledge and competencies, additional drive to innovate, and increasing funding opportunities (regional, national and supranational). In this type of environment, consortia of public, academic, and private agents that share a common research interest work across disciplinary, organizational, and national boundaries to achieve innovative results.

Under "mode 2" R&I projects, managers must integrate individual and small-team research activities that demand high levels of creativity and innovation. However, funding bodies and institutions require clear work plans, perfectly defined and assigned responsibilities, and strict schedules, deliverables and milestones. This apparent contradiction calls for flexible and adaptable project management principles. In fact, "traditional" management strategies, such as pure "waterfall" methods tend to fail. Success or failure of contemporary R&I endeavours is, therefore, strongly linked to the project management practices adopted by institutions and teams along a collaborative and "open" context under which new knowledge and technologies are nowadays

developed.

The contextual complexity, uncertainty and creative nature of R&I does definitely not mean that no structure, no planning and no management is neither necessary nor possible. But it does mean that the way we organize and manage research projects should reflect and aim to accommodate this ambiguity and complexity. By presenting, assessing and discussing the case study of ValorNatural, a project funded by the Portuguese government under the country framework programme 2014-2020 of the European Structural and Investment Funds (ESIF), the authors propose a framework for the successful management of R&I projects. To this aim, the research methodology is based on action research, participatory observation and on the own experience of the authors. This framework should be seen as a practical tool for scientific projects managers. It seeks to provide a structured, comprehensive overview of key pillars that should underpin the development and implementation of project management to R&I endeavours. We conclude that (i) R&I projects substantially differ from “traditional” projects, (ii) R&I projects are characterized by high uncertainty, high contextual complexity, and high stakeholder heterogeneity, (iii) R&I projects are conditioned by the observed strong mismatch between the flexibility requested to researchers in the pre-award phase and the rigidity demanded by the funding agencies during the post-award phase, and (iv) adequate R&I project management helps avoid common pitfalls and improve project success.

Learning Outcomes (max 50 words)

- R&I projects substantially differ from “traditional” projects.
- Key features: high uncertainty, high contextual complexity and high stakeholder heterogeneity.
- R&I projects are conditioned by a mismatch between flexibility in the pre-award phase and rigidity during the post-award phase.
- Adequate R&I project management helps avoid common pitfalls and improve success.