

Measuring the socio-economic impact of innovation interventions: lessons in Serendipity for FAIR

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Large research infrastructures like FAIR find themselves balancing the needs of many stakeholders striving for excellence in areas beyond the basic research mandate. One instance of this is the need to measure their impact, especially impact brought about through their innovation, transfer and valorisation activities. This is exacerbated by EU orthodoxy that states that large research infrastructures in Europe are underperforming in terms of innovation. Our socio-economic study, the Comparative Analysis of Socio-Economic Impact (CASEIA), developed an analytical framework and methodology for better understanding the socio-economic impact of valorisation/innovation interventions applied to large research infrastructures like FAIR, but tailored for small university projects.

Our case study analysis aimed to better understand how innovation projects at FAIR perform with and without intervention, leading to socio-economic impacts such as strengthened innovation ecosystems, commercial applications of innovation, skills development, and broader social goods. Our analysis of socio-economic impact leads to conclusions and recommendations in three broad areas. The first area is that of routes to impact, including the roles of research infrastructures and businesses, open innovation, and impacts that fall beyond innovation. The second area is that of technological Serendipity, and the efforts of valorisation interventions to systematise mechanisms that may support it, without addressing the specific needs of large research infrastructures. Finally, we reflect on CASEIA as a pilot study, and consider its potential contribution to research at the science/technology interface, and make methodological recommendations for future valorisation interventions aimed at large research infrastructures.