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Validate AI

Investigating Public Sector Innovation Labs as-an-approach toward Data and AI-centric innovations in European National Governments.

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Abstract

The need of a successful transition of public administrations towards the digital government ideal model increasingly compels public administrations worldwide to address challenges that stand far beyond the dimensions of organizational and technological innovation (Leoni et al., 2023). Earlier e-government studies emphasized the importance of intra-governmental integration of public information systems and of specific ICT-centered solutions (Charalabidis et al., 2019). Today, a more contemporary sensibility seems to reinforce the need to look outside governmental boundaries in the digital transformation of the public sector (Ravšelj et al., 2022).

In fact, whilst boasting of positive potential to transform the paradigm of public, digital transformation exhibits the markings of a socio-technical problem, i.e., a problem that speaks to all public issues of high impact that are void of potential for incisive problem identification and solving (Rittel & Webber, 1973).

Data-centric public services and AI-based solutions in the public sector are, therefore, increasingly addressed as socio-technical challenges that require broad-level considerations on data ethics, algorithmic legibility, social acceptance of technology, and coordination across public bodies. It is expected that new forms of collaboration between government and other societal actors will emerge based on organizational and semantic interoperability, thus suggesting the need to experiment with new forms of governance based on co-designed and participated processes with the ecosystem of stakeholders and beneficiaries (citizens).

However, the public sector is still characterized by a functional 'silos' model, with a fragmentation of competencies and mandates (in Italy, for example, the National Statistical Agency counted more than 12,800 public bodies in a 2017 census). Several analyses carried out by international observatories indicate that the adoption of digital and data-driven solutions can improve the productivity and resilience of the public sector, as well as the perceived quality of its services (Ubaldi et al., 2019) when accompanied by horizontal organizational integration based on new institutional formulas, coordination mechanisms and policy tools that support a whole-of-government approach to digital governance (Dener et al., 2021).

Europe is encouraging this perspective with a series of dedicated strategies, which foster collaborative governance among public actors, inclusive towards other social partners, especially towards citizens, the ultimate beneficiaries of the digital transformation in PA (e.g., Data Governance Act). In this sense, it is also worth mentioning The European Digital Rights and Principles and the EU 2030 Policy Programme, whose vision of digital transformation is functional to a transition to a climate-neutral, circular, and resilient economy, to be achieved by "[...] pursue digital policies that empower people and businesses to seize a human centred, sustainable and more prosperous digital future." (EC, 2021, p.1).

In response to these challenges, public sector innovation labs (PSI Labs) or policy labs have been introduced in many countries, whose purpose is to research and test innovative practices and approaches for the transformation of the public system (McGann et al., 2021). In recent years, this phenomenon has become increasingly widespread internationally with different models of action, often as organizational units (teams) within the public sector function with a specific mandate to experiment with new forms of innovation related to governance and services. There are now several concrete examples of PSI Labs in various national states, implemented both within national ministries and agencies (e.g., the Laboratorio de Gobierno in Chile or LabX in Portugal) and in public and territorial agencies (e.g., the 27eme Région in France). In this sense, rather than identifying an absolute typology, PSI Labs seems to obey organizational constraints and opportunities peculiar and contextual to the ecosystems of subjects and practices in which they are introduced (Lindquist & Buttazzoni, 2021). Their establishment should, therefore be understood starting from a precise relation with a given institutional/public context.

On these premises, this paper proposes a study of PSI Labs as-an-approach; in other words, PSI Labs as an action of governmental bodies toward public sector digital transformation. While several mapping and listing of PSI Labs exist, little research that concentrates on how PSI labs can be used to address the complexities of digital transitions while affecting policymaking (Carstens, 2023; Kim et al., 2022; Sandoval-Almazan & Millán-Vargas, 2023) To investigate this background, we ask the following: (RQ1) What are the main typologies of projects undertaken by PSI labs dealing with digital transformation at the central government level? (RQ2) What are the main characteristics of PSI lab as-an-approach to data/AI-centric innovations in the public sector? (RQ3) How are public bodies influencing policymaking through digital government initiatives by adopting PSI lab as-an-approach?

To answer these questions, we developed a qualitative analysis of desk research data regarding the project portfolio of 6 PSI Labs working within, or in close relation with, the central government (i.e., public agencies or in-line departments) across 6 different European countries (Germany, Portugal, Norway, United Kingdom, France, Scotland).

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