Methodological Framework for developing Open Source Software Tools at Istat

Marcello D'Orazio 1

Abstract

The Italian National Institute of Statistics (Istat) is modernizing its statistical production processes also by adopting cost-effective statistical software tools that implement sound methodologies. To this purpose we are complementing proprietary software with open source tools such as R and Python.

The adoption of open source statistical tools in official statistics is not straightforward and requires efforts at the technical, organisational and cultural levels. For this reason, we set up a clear strategy whose first step consisted in the preparation of a methodological governance released in 2024. It mainly deals with statistical-methodological aspects and provides a set of guidelines and recommended practices to Istat researchers for the development of new tools or the adoption (and possible adaptation) of existing tools and their endorsement, dissemination and maintenance over time.

Keywords: Statistical software tools, Methodological governance, R environment.

Research Manager, Directorate for Methodology and Statistical Process Design, Department for Development of Methods and Technologies for the Production and Dissemination of Statistical Information, Italian National Institute of Statistics – Istat, e-mail: marcello.dorazio@istat.it