<epam> NEORIS

PUBLIC SECTOR

Innovation in the Publication and Reuse of Open Data

Context

Every year, the volume of data generated by businesses and society as a whole is growing worldwide. According to the "European Data Market Study 2024-2026," revenue for companies in the sector in the EU-27 is estimated to exceed €115 billion during 2025, an 11.6% increase compared to 2024. Demand for specialized professionals is also expected to exceed 10 million by 2030, with an average annual growth rate of 3.5% between 2025 and 2030. If the trend continues, the value of the data economy could reach €815 billion in 2030, representing 5.6% of European GDP.

In this context, the reuse of open data has become a key factor in boosting competitiveness, productivity and innovation. Since 2009, **the Aporta Initiative, promoted by the Ministry for Digital Transformation and Public Service**, has become a fundamental pillar of the Spanish government's data policy for the release of public information, promoting the development of advanced data-based services. **Through the website www.red.es, this initiative manages the National Catalog of Open Data (https://datos.gob.es), which provides access to more than 90,000 data sets published by public administrations for reuse.**

To effectively coordinate the actions of various administrations, the private sector and the academic field, Red.es faces the challenge of **coordinating this project and keeping the datos.gob.es platform up to date**, allowing it to function as a reference meeting point for all agents of the open data ecosystem in Spain.

The Challenge

Through the Aporta Initiative, Red.es has as its mission to **actively contribute to the national strategy** to coordinate and promote the release of data from the public sector, as well as to **promote the development of advanced services** based on the information. To achieve this, the initiative has the following objectives, among others:

Create a meeting point where data demanders and suppliers can access high-quality public open data.

Promote the continuous enrichment of datos.gob.es and the development of the reuse market at the national level.

Raise awareness about the value of open data through promotional and awareness-raising actions.

Boost the development of the reuse market at the national level.

Our Proposal

In May of 2024, EPAM NEORIS committed to joining with Red.es to promote the Aporta Initiative, offering **specialized technical support** which covers the entire management and publication cycle of open data:

Prospective: support in strategic formulation and planning for the publication of open data.

Publication: management of automatic consolidation processes and interoperability among data portals.

Monitoring: track the use of published resources to adjust and optimize the process.

Preparation: preparation of technical documentation, advice on defining and adjusting metadata and data directories along with the application of open licenses.

Communication: active dissemination of available data resources and promotion of reuse by generating innovative use cases.

In addition, we advise the different profiles that reuse this data, helping them interpret complex sets and transform them into solutions, services or content with impact for:

Public organizations that want to better understand what they do, strengthen ties with reusers and facilitate access to their data.

Reusers seeking useful information, ideas or visibility for their own services.

Anyone interested in learning and staying up-to-date on open data.
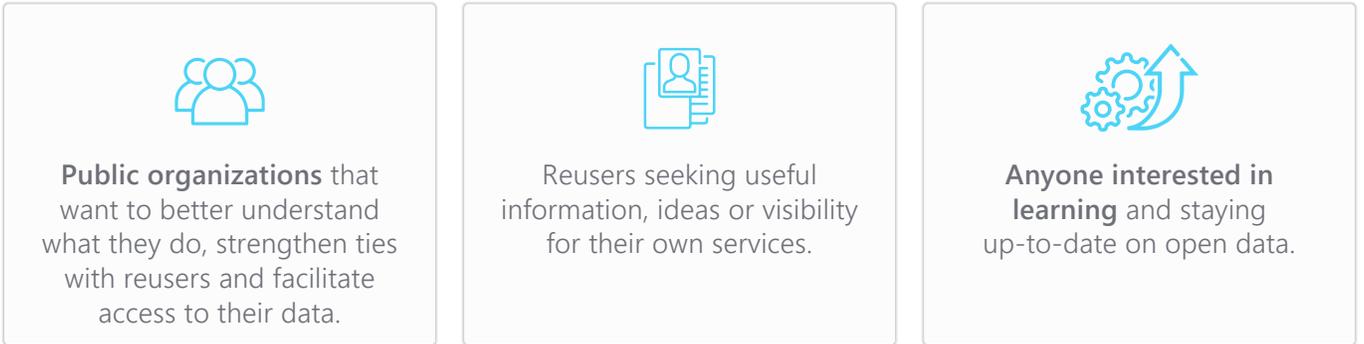
The Solution

An essential part of the project is to promote the use of the extensive catalog of data available at datos.gob.es. To this end, various practical exercises are periodically conducted to learn how to extract the data's maximum potential. As one of these exercises, **we developed an agent that allows us to interact with the data from the datos.gob.es catalogue using natural language through a Chatbot.** This tool achieves a key objective of the collaboration between Red.es and EPAM NEORIS: to teach users how to reuse open data in a simple and intuitive way.

This exercise allows for:

Learning to build web applications based on the Streamlit Python front-end framework.	Interaction with the datos.gob.es portal via the REST API.	Integration of Artificial Intelligence into web applications.

The entire process is documented in an open notebook that the user can consult, modify and reuse. The results are also published on the datos.gob.es portal as part of a series of practical reuse examples.

In addition to this application, our **team of open data specialists**—with expertise in semantic technology and data quality—ensure consistent, reusable and high-value output. Datasets are semantically described using **RDF technology (Resource Description Framework)**. This allows information from the general portal to be replicated to others, ensuring interoperability among data portals throughout Europe.

Our technical support for **public organizations** is ongoing:

- We answer their questions through a support channel.

- We contribute to the creation of publication guides tailored to the public's needs. In addition, we hold technical advisory meetings to resolve questions about how to prepare, document and upload data to the catalog.

- We advise on the management and updating of their open resources.

In addition, we help the **people who reuse data**—even those without advanced technical knowledge—through:

- Step-by-step guides and examples of how the data is utilized so that reusers can apply this knowledge on their own.

- Our contribution to the creation of available resources, in the Github repository, to carry out the use of data efficiently.

In short, we contribute to ensuring that the Aporta Initiative continues to be a useful and reliable tool within the national open data ecosystem.

The Results

Since the creation of the Aporta Initiative, **Red.es has promoted the development and distribution of open data in Spain**, reaching the following milestones:

More than 90,000 published datasets	160,000 monthly visits to datos.gob.es	More than 560 documented use cases	More than 300 registered open data initiatives nationwide	More than 35,000 followers on social media

Our joint work with this public business entity, within the framework of this initiative, also strengthens the country's international positioning. Based on the data-related activity, studies are developed and we participate in international rankings such as the Open Data Maturity, prepared by the European Data Portal, where Spain is among the leading countries, ranking sixth in the 2024 edition.

Currently, EPAM NEORIS continues to work closely with Red.es to ensure that the data published on datos.gob.es is up-to-date, meets quality standards and is easily reusable.

Testimonials

"This success story demonstrates how collaboration between the public and private sectors can transform open data reuse into a key driver of innovation and competitiveness. At EPAM NEORIS, we are proud to have supported Red.es in developing datos.gob.es into an accessible, intuitive, and valuable platform for all stakeholders in the open data ecosystem in Spain. Thanks to our technology and specialized advice, more than 90,000 datasets are now available to drive practical solutions, contributing to a more digital and sustainable future."

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