

Data Strategy

City Council of Madrid

#TusDatosTuCiudad



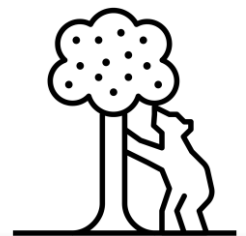
MADRID

“ Stories need data, let's build the history of Madrid together with our data ”



Mission

Taking advantage of the potential that data has, is a huge challenge for any administration that wants to generate opportunities, improve the quality and personalisation of the services it offers to its citizens and helps to make the best decisions by the government entities in the development of public policies.

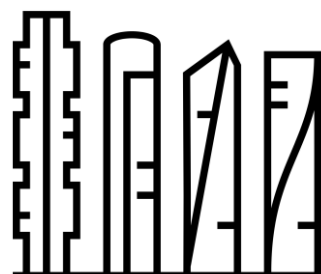


The city of Madrid adopts a new data strategy to continue being a smart and digital city

The City Council of Madrid has opted to develop a **new data strategy** that guides its **digital transformation** towards a smart city where citizens, companies and society as a whole obtain value from data. The objective of Madrid is to become a leading city, **focused on citizens, open, transparent, sustainable and egalitarian** through the development of innovative and democratic digital services that promote the **economic growth** of the city from the base of an **ethical and responsible use** of the **data**.

The main focus of the City Council of Madrid's data strategy is to get the most out of the opportunities that arise, the result of efforts to develop and innovate in new technologies that revolve around data, such as the Internet of Things (**IoT**), Data Analysis (Big Data) or **Artificial Intelligence**, as well as offering digital services and promoting initiatives based on **open data** at a level of performance and value generation that satisfies and responds to expectations and needs of citizenship.

There is enormous potential in the large amount of data that the city generates daily, and the City Council of Madrid is aware of the path that lies ahead in the design and **development of services** that take advantage of the **value** of all this **data** with the sole objective to **improve the quality of life of city dwellers**. The use of real-time traffic flow analysis systems to reduce traffic congestion, alert systems for the population with respiratory problems regarding levels of suspended pollen or air quality, or occupancy data for public parking lots are examples of digital services devised and designed for citizens, businesses and companies with the aim of **improving quality of life**, increasing citizen satisfaction and making Madrid a more **open, participatory, accessible and inclusive** city.



A city driven by data

Data and the ability to use it are the engine for **development and innovation** in the services offered in a **city tailored to its citizens.**



**Put the value of data
at the service of the city of
Madrid.**

**From Digital Madrid to
Intelligent Madrid.**

The data generated by citizens allow decision making and progress in the development of a city that adapts to what people require and need.

Optimise resources in the development of public policies and services that provide solutions that respond to real needs.

We believe in the value that data provides in the development of projects that guarantee sustainable and inclusive growth for all citizens.

City Council of Madrid, building communities more inclusive and sustainable

One of the **most relevant challenges** that large cities like Madrid must face is responding to economic segregation and **protecting** those groups **that** may experience **greater difficulties** in accessing housing, better jobs and essential services.

The City Council of Madrid will use its data for three fundamental purposes:

- **Participation:** **Stimulating** the development of open portals, citizen participation and platforms for the exchange and reuse of data that encourage **debate and voting on initiatives** as well as the analysis of aggregated and anonymised data with the aim of detecting patterns and trends that can be used to **provide responses and solutions to citizen initiatives**.
- **Investment:** The knowledge obtained from the data should serve to shape local investments, maximise the efficiency in the use of resources and **develop public policies aimed at resolving situations of inequalities and responding to the needs** of citizens.
- **Sustainability:** **Improving efficiency** in the provision of **essential services:** waste, lighting, traffic, transport and security.



+ 719 PIBA updates

Comprehensive Neighborhood Plans

+ participants

Decide Madrid

+ 505 datasets

Open Data

+ investment

Open Budgets 6

City Council of Madrid, promoter and booster of a digital society

Data is at the center of what digital transformation revolves around. In this context, people, organisations, companies and other agents that make up the universe of the city must develop **digital skills and knowledge** to be able to exploit data that, being available to all, allows them to make better decisions. Data must become the **engine of economic development and innovation in Madrid**.

The controlled opening of City Council data and the establishment of initiatives with associations, universities, companies, SMEs, NGOs and neighbourhood associations will benefit everyone.

This diversity of data and its sharing will provide new research capabilities and educational initiatives, will enable new ways of undertaking and creating products and services, and will facilitate a personalised response to citizen needs and demands. In short, **new ways of researching, producing, consuming and living that are more efficient and sustainable**.

The City Council of Madrid, driven by its own **digital transformation**, assumes the challenge of this new ecosystem by launching new digital services that **improve the quality of life in the city**.



3,334,730
inhabitants

21 districts
131 neighbourhoods
9422 streets

2892 citizenship
participation
entities

1456 education
centres

316,846
companies

8 Challenges for the City Council of Madrid

1. Definition of a Roadmap



Identify the steps to follow to carry out the change management process in a dynamic, efficient and effective way, favouring its full adoption by the organisation.

2. Quality, security, traceability, and ethical use of data



Ensure quality and traceability so that decision-making is based on consistent and updated data that reflects the reality of the city.

Guarantee security and the ethical and responsible use of data to generate trust among citizens.

3. Democratisation of Data Access



Promote access and reuse of open data under the principles of transparency, collaboration and participation, with full service to citizens.

Improve usability and ease of access to data, as well as favor its understanding.

4. Artificial Intelligence Solutions



Incorporate technological solutions that optimise the development of public policies and allow a rapid response to social demands and needs to be offered.

Lean on advanced Artificial Intelligence models to improve the services offered by the City Council and try to anticipate, with solutions, future problems.

8 Challenges for the City Council of Madrid

5. Data Training and Literacy



Promote in the City Council the adoption of an authentic data culture, through awareness and training programs, aimed at communicating the value of data and its responsible use as an element on which the City Council's activity revolves.

6. Identification of New Use Cases



Give internal visibility to the development and implementation of new data-based solutions and the improvements and benefits achieved with them, so that the success stories serve as a catalyst for the deployment of a *data driven* culture throughout the organisation.

7. Disclosure of Advances in Data Management



Share with all levels of the organisation the good practices followed, the organisational, technical and functional improvements implemented and the results that are being achieved as progress is made in the data strategy.

8. Collaboration, Coordination and Sharing



Promote collaboration and coordination between the different areas of the City Council in the implementation and application of a comprehensive data management policy.

7 Main Courses of Action

The City Council of Madrid has identified the **courses of action** that must be carried out to implement a roadmap that achieves the objectives identified in its **data strategy**.

These lines of action revolve around four key pillars:

- The **people** who are part of the City Council together with the **organisational structure** and the **roles responsible** for deploying governance capacities around the data.
- **Data** as a raw material and **main asset** of the organisation so that the City Council can meet its strategic objectives.
- The **processes** in charge of managing data and exploiting it to **transform it** into a valuable asset and **return it** to society **in the form of services** and solutions adapted to the needs of citizens.
- **Technology**, understood as a means and not as an end, in the form of a set of **enabling tools** that automate processes and **facilitate** the use and sharing of data to **generate value**.



Data Office creation



Data Governance Model



City Council Data Map



Data Training and Literacy



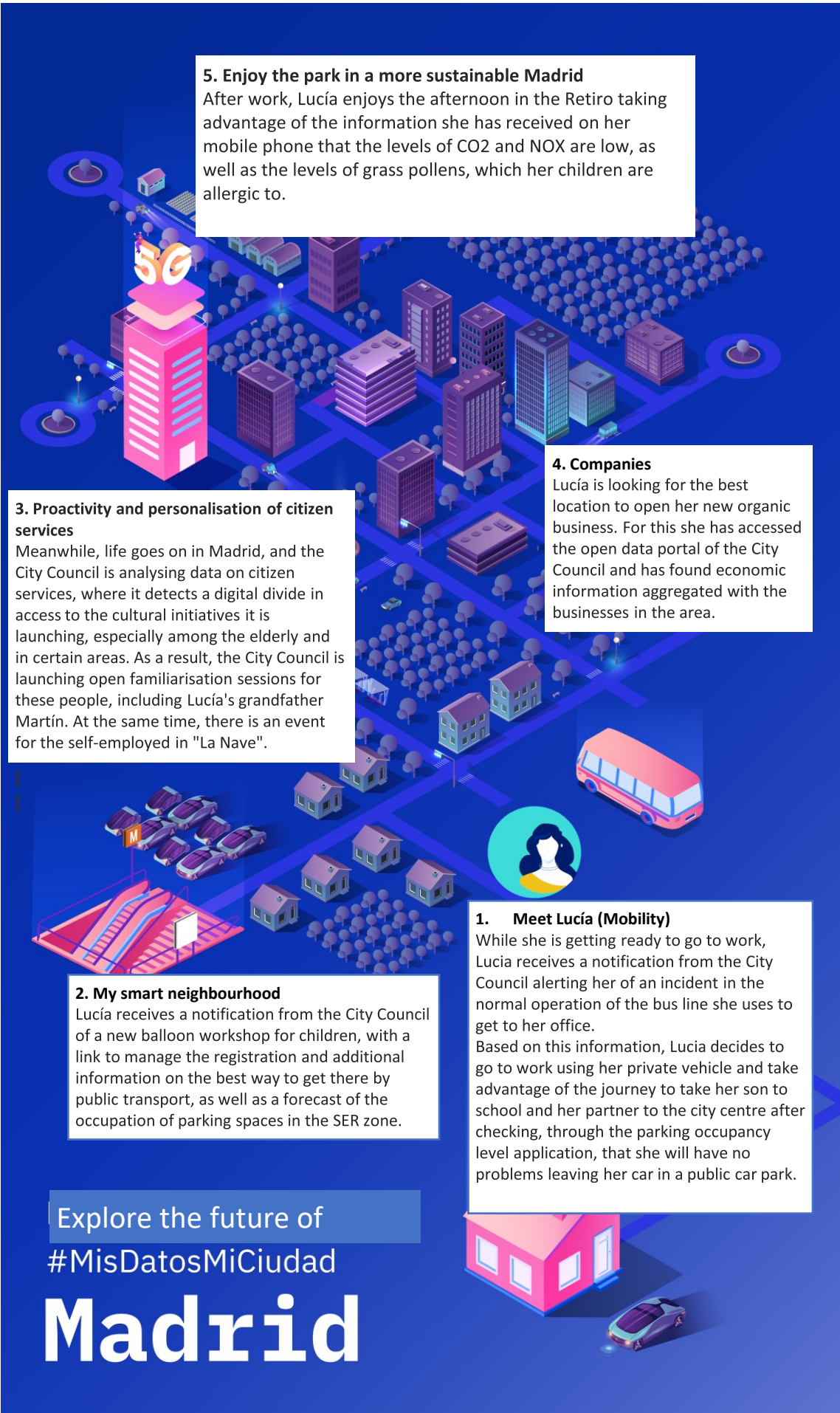
Municipal Data Lake



Analytics platform as a service for all



Implementation and monitoring of indicators



5. Enjoy the park in a more sustainable Madrid
After work, Lucía enjoys the afternoon in the Retiro taking advantage of the information she has received on her mobile phone that the levels of CO2 and NOX are low, as well as the levels of grass pollens, which her children are allergic to.

3. Proactivity and personalisation of citizen services
Meanwhile, life goes on in Madrid, and the City Council is analysing data on citizen services, where it detects a digital divide in access to the cultural initiatives it is launching, especially among the elderly and in certain areas. As a result, the City Council is launching open familiarisation sessions for these people, including Lucía's grandfather Martín. At the same time, there is an event for the self-employed in "La Nave".

4. Companies
Lucía is looking for the best location to open her new organic business. For this she has accessed the open data portal of the City Council and has found economic information aggregated with the businesses in the area.

2. My smart neighbourhood
Lucía receives a notification from the City Council of a new balloon workshop for children, with a link to manage the registration and additional information on the best way to get there by public transport, as well as a forecast of the occupation of parking spaces in the SER zone.



1. Meet Lucía (Mobility)
While she is getting ready to go to work, Lucía receives a notification from the City Council alerting her of an incident in the normal operation of the bus line she uses to get to her office. Based on this information, Lucía decides to go to work using her private vehicle and take advantage of the journey to take her son to school and her partner to the city centre after checking, through the parking occupancy level application, that she will have no problems leaving her car in a public car park.

Explore the future of

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Madrid



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