



DIGITAL TRANSFORMATION
STRATEGY
MADRID, DIGITAL CAPITAL

MADRID, Digital Capital

It is the digitalization strategy to consolidate Madrid as a city of reference in which to work, invest, study, visit, enjoy and live; where technology is the means to strengthen the efficiency of municipal and city services, the welfare and quality of life of people, attending to their inclusion and digital training, and the generation of opportunities for social, sustainable and economic development.



Because digital
is capital

3,4

millions registered
(2nd city in Europe)

5

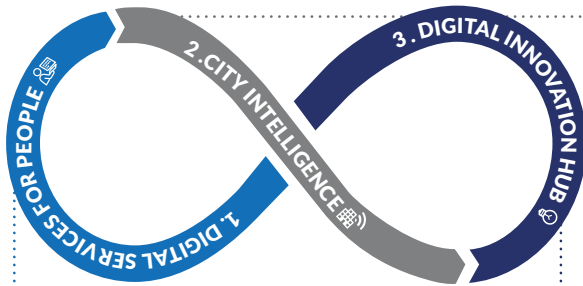
millions of people to
serve on a daily basis

320.000
companies

10,6
million
tourists

5.939
million euros
budget for 2024

Strategic axes



STRATEGIC OBJECTIVE 1



AXIS 1

The best digital administration with public employees as protagonists of change



AXIS 2

Technology to make people's lives easier



AXIS 3

Safe, cybersafe, resilient and empowered city



AXIS 4

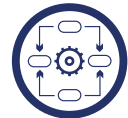
Managed based on evidence and data

STRATEGIC OBJECTIVE 3



AXIS 5

Hyperconnected and hyper-automated city: Human adaptive city



AXIS 6

A reference in the world and in Europe and in Europe, in innovation and digital investment



AREAS OF ACTION

Digital services for people

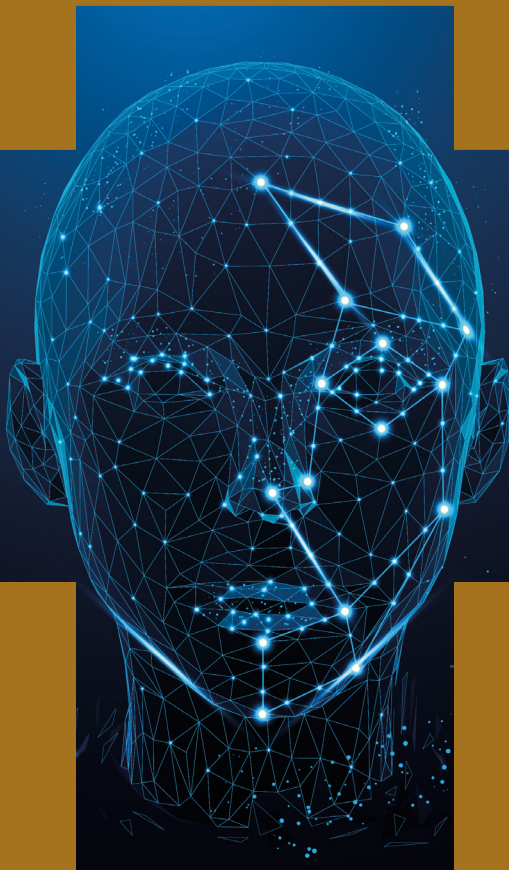
ICT infrastructures, security, cybersecurity and resilience

City intelligence, smart and sustainable Madrid

Madrid, digital innovation hub

DIGITAL SERVICES FOR PEOPLE

Madrid is committed to facilitating the daily lives of its citizens through excellence in digital services. To this end, it designs, develops and offers services that are easy, fast and convenient, ensuring that all citizens can benefit from them.



PROJECT FOR THE TRANSFORMATION OF THE HUMAN RESOURCES AND TALENT MANAGEMENT SYSTEM OF THE MADRID CITY COUNCIL

Technological and functional evolution on SAP solution for the Transformation of the Human Resources Management System of the Madrid City Council. System that covers the management of more than 28,000 employees of the municipal administration.

Collaborating company: **inetum.**

TRANSFORMATION OF THE ECONOMIC, FINANCIAL AND BUDGETARY MANAGEMENT SYSTEMS OF THE MADRID CITY COUNCIL

SAP S/4HANA solution to optimize the integration of the Madrid City Council's economic systems, enhance application mobility and implement a zero-paper system.

Collaborating companies: **inetum.** **SAP**

DIGITAL TRANSFORMATION OF SOCIAL SERVICES

Towards comprehensive people-centered delivery and improved quality of care through the incorporation of new technological capabilities.

Collaborating company: **minsoit**
An Indra company

MADRID MÓVIL: CONNECTING CITIZENS AND SERVICES

Madrid Móvil is the official application of the Madrid City Council through which citizens can obtain information and carry out multiple municipal procedures. Among other services, it provides access to all administrative procedures and to the citizen folder of the electronic headquarters.

minsait

Collaborating company:

An Indra company

MADRID LINE. PERSONALIZED ASSISTANCE

Línea Madrid is a well-established and recognized service that allows and facilitates comprehensive and targeted attention to the needs of citizens with high quality standards. In 2023, more than 7 million services were resolved in Línea Madrid through the 010 telephone number, the 27 offices and the telematic channels, and more than 24 million visits were made to the madrid.es website.

Collaborating company: 

DIGITAL TRANSFORMATION OF THE MUNICIPAL REGISTER

We digitized 100% of the municipal registry processes, facilitating a more efficient internal management and an optimized citizen experience.

Multichannel solution, integrated with internal systems and with other AAPP, automation of inter-administrative communication and unprecedented efficiency in internal processes.

Get your census certificate instantly, just with your electronic ID and any device.

Collaborating company: 

DIGITAL TRANSFORMATION IN MUNICIPAL REVENUE MANAGEMENT

Intelligent revenue management and agile and effective tax collection, improving service, increasing the efficiency of internal processes and providing strategic and valuable information for citizens and managers.

Collaborating companies:



PLATFORM FOR THE DIGITIZATION OF HUMAN RESOURCES MANAGEMENT

Supply and managed services on the logical and physical infrastructures that support the human resources management of the city council, providing new capabilities, scalability and resilience in the provision of these services.

Collaborating company:



PLATFORM FOR THE DIGITIZATION OF ECONOMIC AND FINANCIAL MANAGEMENT

Supply and managed services on the logical and physical infrastructures that support the economic and financial management of the City Council (accounting, asset management, financial planning...), providing new capabilities, scalability and resilience in the provision of these services.

Collaborating company:



CITY INTELLIGENCE

Smart and sustainable Madrid

Madrid seeks a more efficient and sustainable management through the intensive use of technology. The city adapts and responds to its environment, improving the quality of life of its citizens and optimizing resources. This approach thus enables a more lively, connected and resilient city.



DATA AS THE CITY'S ENERGY

Using advanced data to transform Madrid into a more sustainable and accessible city, improving mobility, public space management and service efficiency, all under strict data security protocols. And by enabling data spaces for the improvement of data quality, consultation, search automation and analysis of stored information through advanced big data and artificial intelligence techniques, with the aim of driving a culture of management based on data and evidence.

Collaborating company:  **accenture**

ADVANCED USES OF 5G IN THE CITY OF MADRID

The projects explore the potential of 5G to revolutionize urban services in Madrid: in industrial and recycling environments such as the Valdemingómez Technology Park, in logistics, mobility and energy environments in MercaMadrid, and in critical emergency environments in the Calle 30 tunnels.

Collaborating company:  **accenture**

INTELLIGENT AND SUSTAINABLE MANAGEMENT OF THE VALDEMINGÓMEZ

Treatment of organic matter by applying the concepts of industry 5.0, taking into account environmental sustainability, ensuring energy efficiency, minimizing noise and odor emissions and implementing an architectural solution that seeks to reduce the visual impact of the facilities and ensure environmental integration into the surroundings.

Collaborating company:  **FCC**
Medio Ambiente

SAE NEXT

New version of EMT's Operation Support System (core of the technological architecture that correlates all the geopositioned information of its fleet: ticketing, console-driver events, waiting times, detours, Open Data, etc.) that includes artificial intelligence elements to improve the automation of processes such as the improvement of real-time management, regulation actions during the development of the service of its buses, etc.

Collaborating companies:



SMART CHARGING SYSTEM

EMT, in its goal of decarbonization and digital transformation, is electrifying its fleet and developing innovative automated operations centers for electric bus charging with data analytics capabilities. Smart charging management (smartcharging) is the key to a new efficient operational management that enables the new electric fleet to be put into service with service level conditions.

Collaborating companies:



MADRID MOBILITY 360

A transportation information platform that provides a comprehensive view of Madrid's mobility in real time and integrates cutting-edge technologies to offer innovative solutions (efficiency gains, cost reduction, etc.). It also provides customizable services such as intelligent route selection or real-time traffic updates and can manage access to mobility systems as well as means of payment.

Collaborating companies:



DIGITIZATION OF THE MANUAL SWEEPING SERVICE: E-CARR

Digitized sweeping trolley with electric traction for manual sweeping operations. The integration of geolocation and sensors and the use of devices to receive and manage warnings and incidents, allows the optimization of service routes and the reduction of detection times, channeling and resolution of incidents.

Collaborating company:



DIGITIZATION OF WASTE COLLECTION: CONTAINER SENSORIZATION

Sensorization of waste containers for monitoring the degree of filling, interior temperature, emptying detection, overturning and fire alarms, geopositioning and planning of collection routes. overturning and fire alarms, geopositioning and planning of collection routes.

Collaborating companies:



ROBOTIZATION AND DIGITIZATION OF THE MANAGEMENT OF CITIZEN NOTICES FOR STREET CLEANING

Automated Programming Robot (RPA) with Artificial Intelligence (AI) and Natural Language Programming (NLP) to digitize the process of managing citizen notices on cleaning of public spaces. The robot accesses the incidents registered in the corporate notification applications and, using AI, reads them, classifies them by days and categories, and refers them to the corresponding action teams, after which they are automatically closed.

Collaborating company:



SIDERA: ADVANCED INTEGRATED MANAGEMENT SOLUTION FOR TUNNELS

Madrid uses SIDERA ITS & Tunnels to manage two of the most advanced Control Centers in the world: AZCA, with 40 tunnels, and MadridCalle30, with 48 km of tunnels. This platform, connected to tens of thousands of sensors and cameras, monitors in real time the safety and operation of the tunnels, ensuring efficient mobility and rapid response to incidents.

Collaborating companies:



BICIMAD

The pioneering public electric bicycle system in Madrid, Bicimad, after its technological transformation, has 7,500 interconnected bicycles and 611 stations in the 21 districts of Madrid, thus consolidating the bicycle as an effective alternative for sustainable mobility in the city. It is a micro-mobility system that has all the technological mechanisms for supervision, monitoring and provision of an excellent and safe service.

Collaborating companies:



SIDERA ANALYTICS: THE BIG DATA AND AI PLATFORM APPLIED TO MOBILITY PLANNING

Madrid uses SIDERA Analytics, a Big Data platform developed by SICE, which collects and analyzes data on urban mobility. With data from different sources (sensors, mobile telephony, connected vehicles, EMT, Bicimad, etc.), this technological platform based on Artificial Intelligence and Vision optimizes infrastructure planning and policies to improve road safety and mobility.

Collaborating company:



GEOPORTAL, GEOGRAPHIC TECHNOLOGY FOR A SMART MADRID

Geoportal is the Spatial Knowledge Infrastructure of Madrid. It provides a solid base of geospatial data for evidence-based management. Its technology supports process managers and offers the three-dimensional model of the physical reality, a fundamental basis for the conformation of the Digital Twin. It is committed to integrating BIM/GIS and improving its usability with generative AI.

Collaborating company:



MINT: MADRID INTELLIGENT PLATFORM

Technological platform to support urban public services that allows the management of the elements of the city of Madrid, integrating maintenance actions, citizenship incidents and municipal inspections, as well as the level of monitoring services of large municipal service contracts.

Collaborating companies:



MADRID, DIGITAL INNOVATION HUB

Madrid is working to become the preferred destination for innovation, investment and talent in the digital sector. To this end, it is developing an attractive ecosystem to invest, work, study, visit, enjoy and live, positioning the city as a benchmark in digital innovation.

COLLABORATION R+D+I MADRID UNIVERSITIES

Collaboration between university, municipal administration, industry, companies, researchers, students, entrepreneurs, social groups and users of municipal services, mainly in the fields of 5G, IoT, Cybersecurity and Data-IA. As a result, a physical and virtual space for innovation and excellence has been set up in order to establish a model that allows the deployment of an open, neutral and interoperable IoT network that drives the digital transformation of services.

Collaborating companies:



SAN BLAS DIGITAL SCHOOL OF COMPETENCES

In the San Blas Digital School of Competences we offer training in digital competences oriented to employability. We carry out training itineraries adjusted to demand based on digital transformation, innovation and the use of digital environments in the professional environment. We facilitate the acquisition of soft skills through innovative methodologies: Hackathons, Fake It, Design Thinking, LEGO SP, Gamification.

Collaborating companies:



EXTENDED REALITY APPLIED TO TRAINING

Incorporation of virtual reality in the training of the Madrid Employment Agency, aimed at people with less qualified job profiles. Through simulations of real contexts, such as hospitality and cleaning, the learning of digital and customer service skills is facilitated, closing the digital divide in collaboration with the Accenture Foundation.

Collaborating company:



SMART TAXES

The Madrid Tax Agency has implemented from its “Tax Laboratory” the concept of “Smart Taxes”, applying SAS Advanced Analytics and Artificial Intelligence Solutions, with the help of SEIDOR Gesein, for data-driven decision making, drastically reducing analysis time, optimizing services and ensuring fairer policies that benefit both the Citizen and the Administration.

Collaborating companies:



EVERYTHING IS IN MADRID

TODO ESTÁ EN MADRID is an ambitious digital project of the Madrid City Council aimed at:

- Create a great digital showcase of the city (web, app and rss) to give visibility to the establishments of the commercial, hospitality and business sector of the city.
- Accompany companies in their digitalization process.
- Provide citizens with a reference tool for online searches of companies in their area.
- Provide tourists and tour operators with a quality commercial directory for shopping tourism.

The flagship of this program is the website www.todoestaenmadrid.com and its app (iOS and Android), reinforced by social networks.

Collaborating companies:



MUNICIPAL CLUSTER NETWORK

Meeting place for the promotion of economic activity and strategic sectors with great future potential and high added value. This municipal promotion network is formed by seven clusters (such as Big Data, Cybersecurity Madrid Capital of Construction, Architecture and Engineering, eHealth) grouping more than 550 entities and whose basic purpose is to become an essential tool for public-private collaboration that constitutes a privileged place for the exchange of knowledge, technologies and good practices.

Collaborating companies:



WATCHBOT XPLOER: ROBOT INSPECTOR IN WASTE TREATMENT PLANTS

Watchbot is a proprietary robotic technology for 24/7 operation in complex real environments such as waste treatment plants and landfills to perform robotic and autonomous inspections in waste treatment plants and landfills. It is a ground robotic platform, with autonomous navigation, possibility of teleoperation, generative Artificial Intelligence and Deep Learning and based on Cloud.

Collaborating companies:



5G+ AUTONOMOUS ELECTRIC VEHICLES FOR SUSTAINABLE MOBILITY IN MERCAMADRID

As part of the initiative 'New Mobility solutions for climate neutrality in EU Cities' and within the framework of the European Mission 'Climate Neutral and Smart Cities', the objective of this project is the development and implementation of autonomous electric vehicles connected to the 5G+ network for the efficient and sustainable transport of people and goods in Mercamadrid.

Collaborating companies:



MOBILITIES
FOR EU



Co-funded by
the European Union

ZERO EMISSION, AUTONOMOUS AND CONNECTED VEHICLE (CCAM) FOR PEOPLE

Design, manufacturing, commissioning and evaluation of an autonomous commercial vehicle, level 5, for the transport of people, connected to the 5G network, with the creation of a data space with all the information of the system to be analyzed and reused by all operators.

Collaborating company:

alsa

5G+, CONNECTING THE FUTURE

5G+ technology offers high data throughput, ultra-low latency and high reliability, crucial elements to support communication between a large number of connected vehicles simultaneously, as well as ensuring secure and efficient communications between connected vehicles and the surrounding infrastructure.

Collaborating company:



Empresas

ELECTRIC AND AUTONOMOUS VEHICLE FOR WASTE TRANSPORTATION IN MERCAMADRID

Development, implementation and commissioning of an electric and autonomous vehicle for the transport of waste (boxes of pórex) in the Central Fish Market of Mercamadrid. The objective is to achieve a more efficient and sustainable collection service of recyclable materials thanks to the electrification of the current diesel vehicle and the design of an on-demand collection solution.

Collaborating company:

pre
zero

ENERGY AND MOBILITY DATA SPACE IN MERCAMADRID

Design and development of two data spaces for green energy in mobility, which respond to the DIGIT-Egovera (EC) scheme and the data spaces for intelligent infrastructures - EDINT promoted in the European space and promoted by the FEMP.

Collaborating company:

T Systems

ICT INFRASTRUCTURES, SECURITY, CYBERSECURITY AND RESILIENCE

Madrid sizes, strengthens and reinforces its technological infrastructures to guarantee the availability, scalability and flexibility of its digital services. It starts from the pillars of security and cybersecurity and ensures resilience to potential threats and disasters, to maintain the continuity of services and the confidence of citizens in the digital environment.



CYBERSECURITY CENTER

Advanced and expert services and solutions to reinforce the protection of municipal digital management in the face of the exponential growth of threats in cyberspace.

Collaborating company: **SIQ** 
An Indra company

BORDERLESS CONNECTIVITY FOR A MOBILE FUTURE A MOBILE FUTURE

Transformation of fixed telephony into mobile telephony to respond to and contribute to the transformation of the workplace and mobile work, including the possibility of exploiting the data provided by Orange to improve the management and analysis of municipal services.

Collaborating company:  **Empresas**

EASYDRO: TRANSFORMATION OF THE DIGITAL ENVIRONMENT OF MUNICIPAL STAFF

Advanced management of the municipal staff workstation, incorporating networking, collaborative environments and change management for a digitalization of performance, reinforced with a training space, making their work more agile, efficient and mobile.

Collaborating company:  **accenture**

AI APPLIED TO VIDEO ANALYTICS FOR SECURITY VIDEO ANALYSIS FOR SECURITY

SICE has installed and configured the first video surveillance systems equipped with AI systems for the Municipal Police of the Madrid City Council, which allows automated real-time or forensic processing of video images. This processing enables automated searches for incidents, perimeters or subjects with defined characteristics, among others. But always safeguarding the confidentiality of personal data.

Collaborating companies:  **SICE** 

CORE PROJECT: DIGITAL TRANSFORMATION OF THE ACTIVITY OF THE MUNICIPAL POLICE MUNICIPAL POLICE

Digitalization of the municipal function and redesign of end-to-end processes in digital key for the use and improvement of the efficiency of the security devices, contemplating the integration of multiple sources of information and the advanced treatment of data and images from an Integral Coordination and Control Center.

Collaborating companies:  **NTT DATA** 

INTEGRATED EMERGENCY MANAGEMENT. GEMMA

Command and Control System for Firefighters and SAMUR to improve coordination and integral response to emergencies, providing a real-time vision, facilitating decision-making and resource management in the field through communications and on-board systems.

Collaborating companies:  **EVIDEN**  

RPA (ROBOTIC PROCESS AUTOMATION)

Robotic Process Automation (RPA) infrastructure, for the automation of repetitive and tedious tasks in a much faster and more efficient way, reducing errors and freeing resources to devote them to higher value-added tasks.

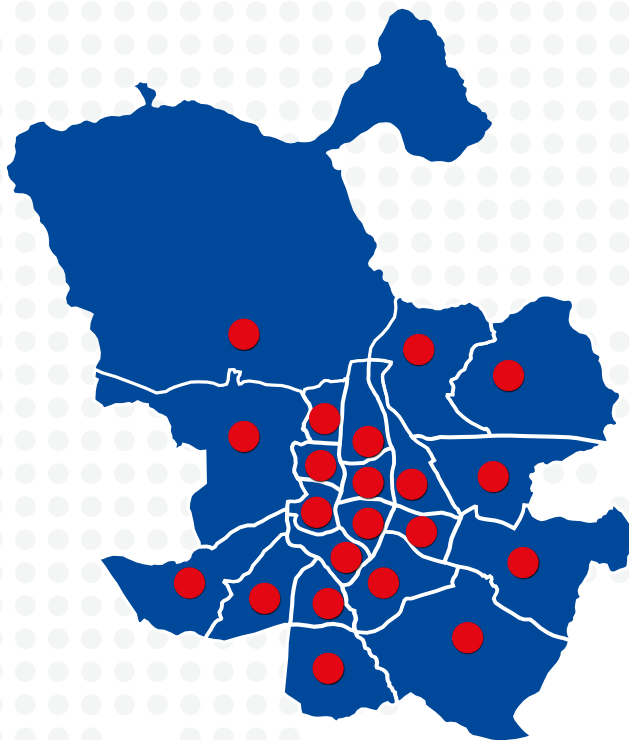
Collaborating company:  **EVIDEN**

MANAGED SERVICES AND MULTICLOUD STRATEGY

Design and deployment of technological architectures for processing and storage in high availability, security, resilience and sustainability that responds and adapts in a flexible and agile way to the needs of the organization for the provision of services.

Collaborating company:  **NTT DATA**

SOME INITIATIVES



Sentiment analysis in social networks and media of Municipal Sports Centers

STRATEGIC OBJECTIVE
Digital services for people

PROGRAM
Personalized services for people

CROSS-CUTTING PROJECT
Govtech Program

Govtech challenge: intensity of use of O'Donnell Green Wedge Park

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Data as the city's energy

CROSS-CUTTING PROJECT
Madrid Data-Driven

Ideas competition. Smart irrigation system. La Latina Green Wedge Park

STRATEGIC OBJECTIVE
Digital Innovation Hub

PROGRAM
A city council with innovative digital DNA

CROSS-CUTTING PROJECT
Govtech Program

Smart accessible spaces in senior centers

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Digital and sustainable management intelligence

CROSS-CUTTING PROJECT
Smart Urban Space - 5G Corridor

Laboratory of Internet of Things of the city of Madrid

STRATEGIC OBJECTIVE
Digital Innovation Hub

PROGRAM
Infrastructures and technological assets

CROSS-CUTTING PROJECT
Smart Urban Space - 5G Corridor

Smart Urban Space Casa Campo Puerta Grande

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Digital and sustainable management intelligence

CROSS-CUTTING PROJECT
Smart Urban Space - 5G Corridor

Smart Urban Space of Valdemingómez

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Digital and sustainable intelligence in management

CROSS-CUTTING PROJECT
Smart Urban Space-Corridor 5

Smart Urban Space of Mercamadrid

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Digital and sustainable intelligence in management

CROSS-CUTTING PROJECT
Smart Urban Space - 5G Corridor

Digital Twin Madrid Nuevo Norte

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Evidence-based planning and management

CROSS-CUTTING PROJECT
Digital twin

Simulation and Event Planning Parade of Kings

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Evidence-based planning and management

CROSS-CUTTING PROJECT
Digital twin

Digital Twin Landscape of light

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Evidence-based planning and management

CROSS-CUTTING PROJECT
Digital twin

Detailed scanning of City Elements

STRATEGIC OBJECTIVE
City intelligence

PROGRAM
Evidence-based planning and management

CROSS-CUTTING PROJECT
Digital twin

