Comune di Milano

A data driven approach to urban digitalization

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Comune di Milano

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Vision, digital plan and strategic goals

WHICH GOALS?

PRINCIPLES AND FOUNDING VALUES OF THE COUNCIL'S ACTIVITIES

- Innovation and inclusion
- Legality, transparency and efficient administration
- Committed involvement and participation
- International dimension as well as focus on suburbs development
- Security, liveability and care of the city
- Sustainability and green economy
- Policies, administration and fair resource allocation

HOW TO SUPPORT THEM?

AGID'S PLAN AS A BASE FRAMEWORK TO DEFINE HOW DIGITALIZATION SUPPORTS THE COUINCIL TO ACHIEVE THE GOALS

- Information sharing in «open data» mode
- «Mobile first» approach
- Safe, scalable and harmonized IT architectures
- Well-defined application interfaces
- Full compliance with cyber-security standards
- Adoption of enabling «Platforms»
- ...

ICT today: organization and competences

Organization

- Director
  - Secretariat
  - Special IT projects
  - Information Security and technological Innovation
  - Project Governance and PMO
  - Application systems and Infrastructure
    - Interoperability
    - Data Management and Integration
    - Digital Lead
    - Administration, tenders and contracts

6 Managers

208 Staff

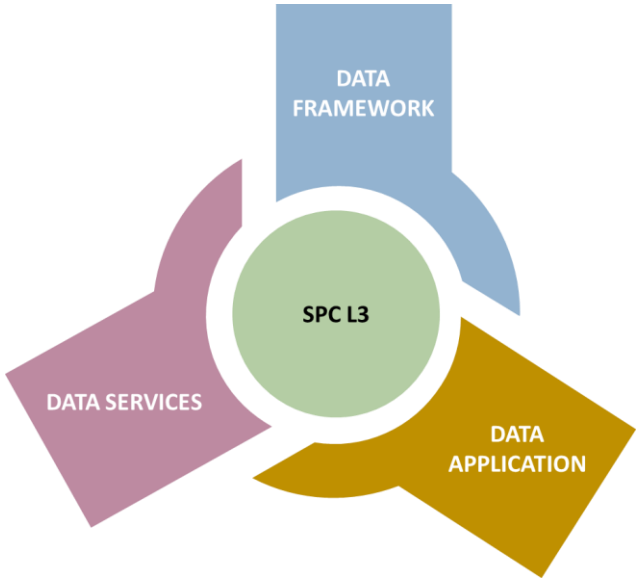
Main competences

- *Application management and maintenance*
- *Application interoperability*
- *ICT infrastructure maintenance*
- *Telecommunication services*
- *EA[1] design and control*
- *UX[2] of services to the City users*
- *Data architecture*
- *Statistics and Data analytics*
- *IOT e Big Data*
- *Information security policies*
- *Authentication systems*
- *Business continuity and Disaster Recovery*
- *Contract management*

1. Enterprise Architecture
2. User experience

DATA INTEROPERABILITY PLATFORM

Implementing application cooperation across information systems through the improvement of the legacy platform and the modernization of the data management services



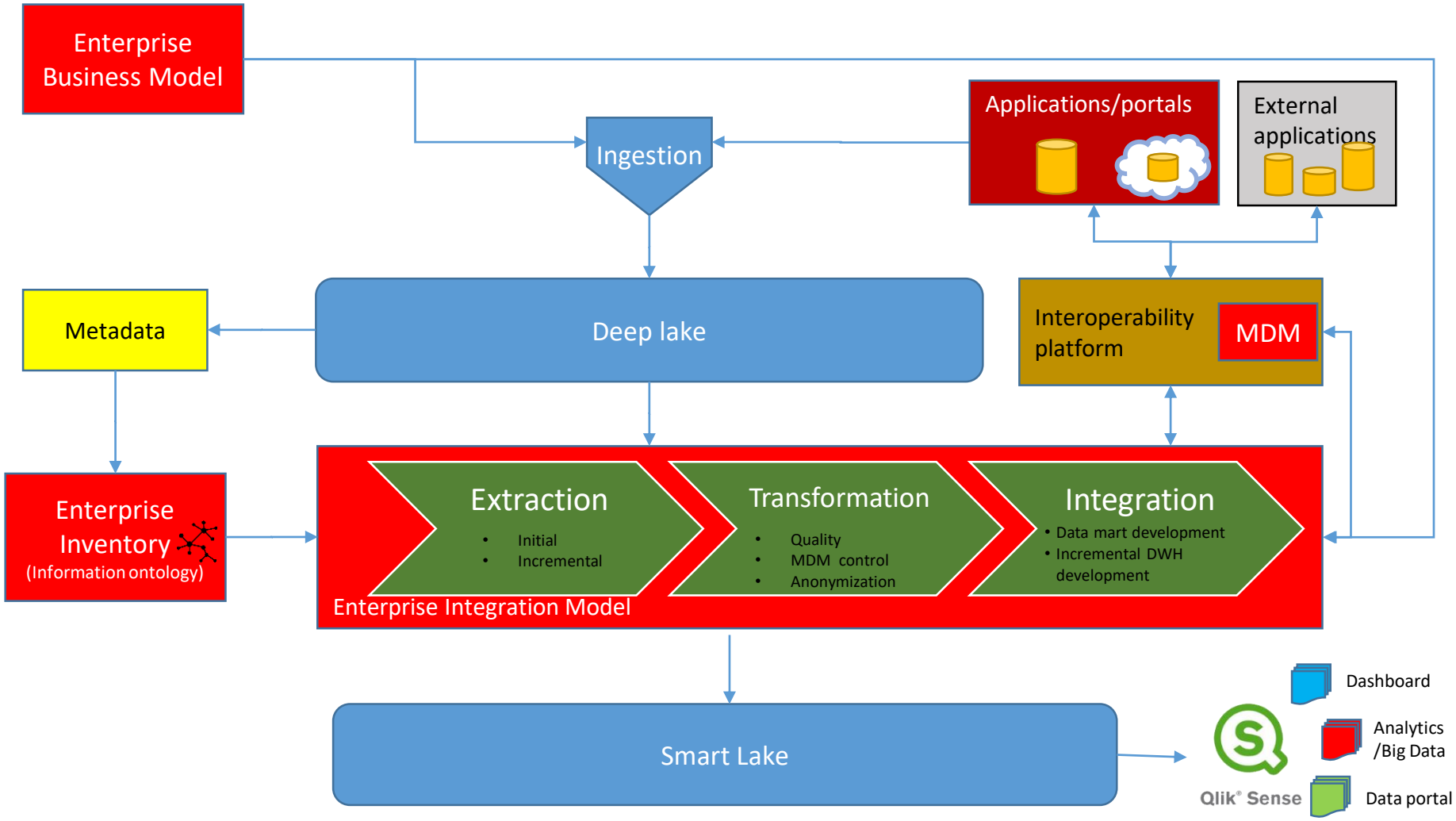
- **Data Framework**:
  - *Enterprise Information Management (EIM)*
  - *Master Data Management model*
  - *Data integration model*
  - *Data Analytics Framework (DAF)*
- **Data Services**:
  - *Specific services to provide data through WSO2*
  - *Information asset census*
  - *Adoption of a Master Data Management model*
  - *Integration process*
  - *Implementation of a Data Analytics Framework (DAF)*
- **Data Application**:
  - *Citizen Folder and Open Data*
  - *Shared Welfare system*
  - *Service model for the «020202» infoline*
  - *Dashboards and analytics*

Data Lake

- A place to store structured and unstructured data coming from internal and external sources
- Infrastructure for Big Data analysis

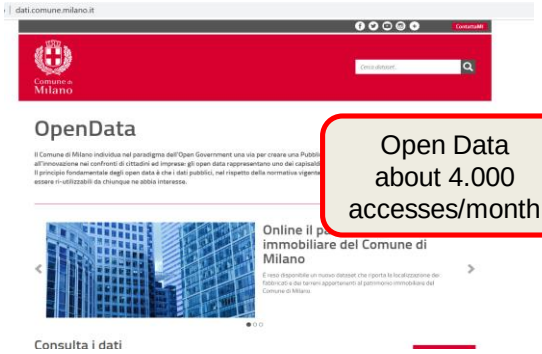
- A set of resources to access, share and correlate data, build business intelligence tools and services for the citizens
  - For example using machine learning algorithms

Data governance platform

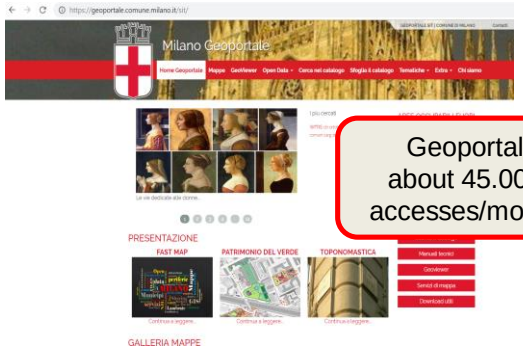


Data portal

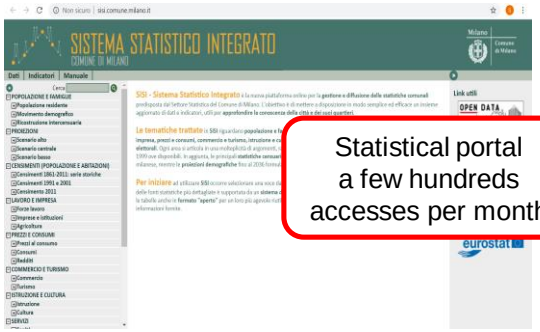
Currently three data portals: open data, geo-portal, statistics portal



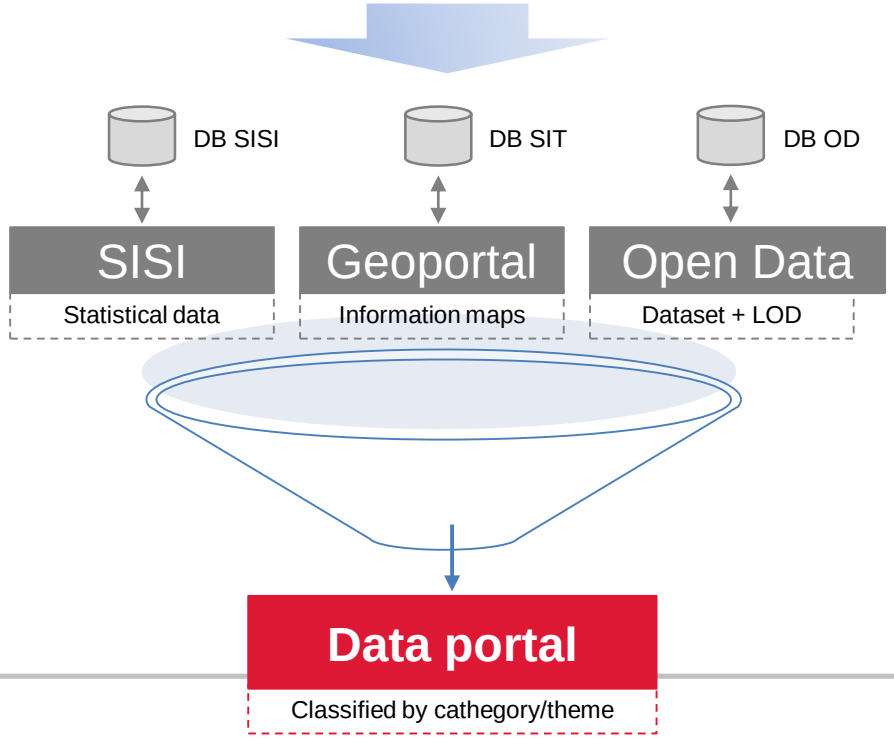
Open Data
about 4.000
accesses/month



Geoportal
about 45.000
accesses/month



Statistical portal
a few hundreds
accesses per month



Geo-intelligence

Geoportal: geoportale.comune.milano.it

The project is aimed at providing an «ID card» of the Milan area, taking data from and supporting the operational processes. **Geographic intelligence** tools are provided to both internal and external **operators, policy makers and stakeholders**.

Processes

- Service plan
- Land and subsoil use
- Real estate development
- …

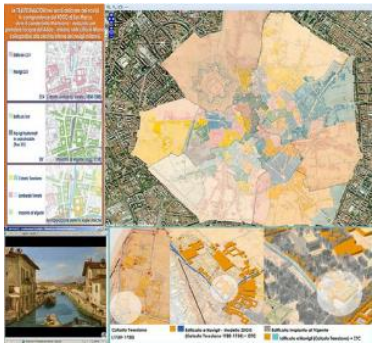
Data input

***Geo-intelligence* tools**

Data input

External DBs

- Regional geo-portal
- Ministries' DBs
- Other PAs' DBs
- Private DBs



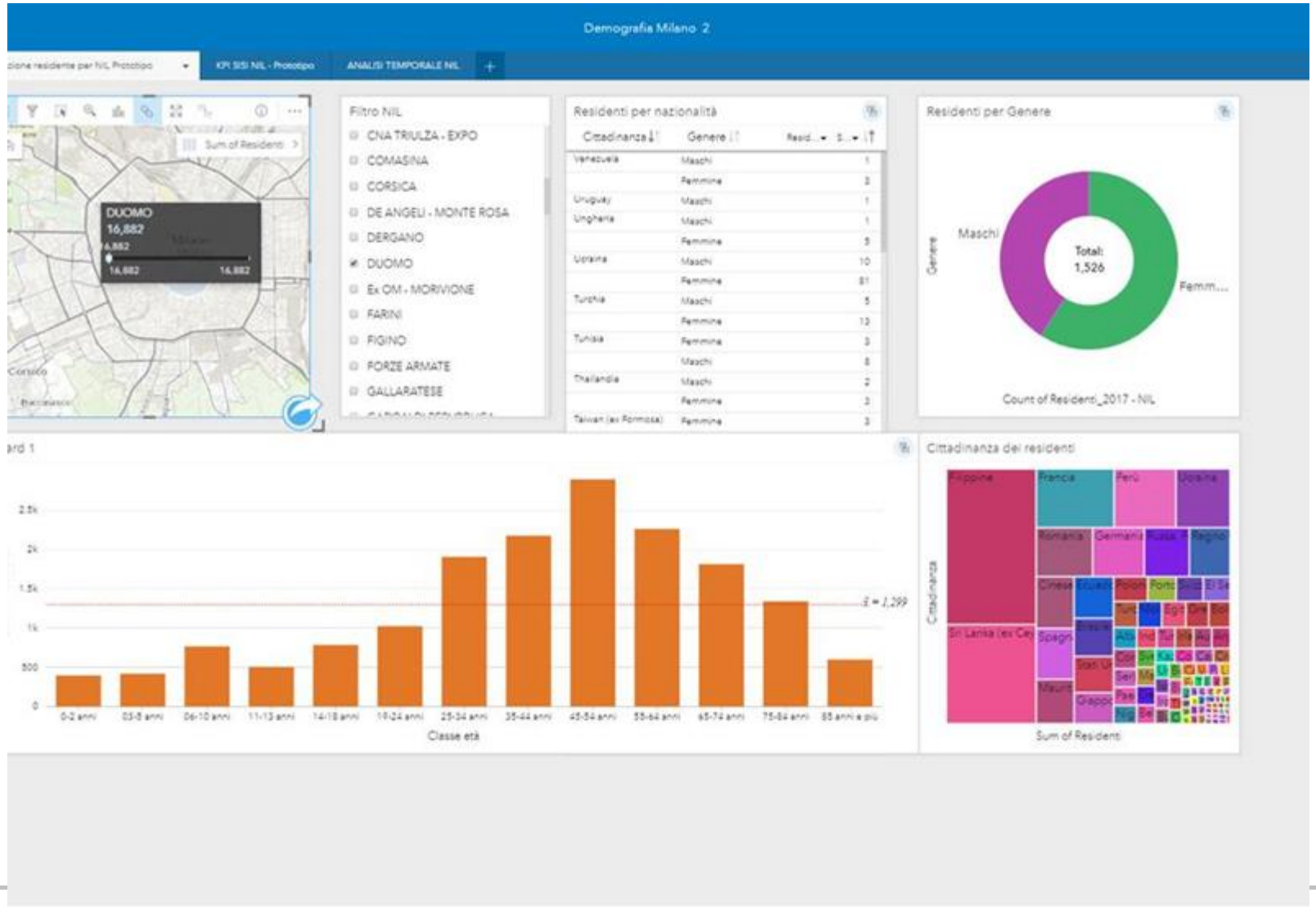
Strategic benefits

- Data driven decisions
- Multi-sector approach
- Full knowledge of the municipal areas
- Stakeholder satisfaction

Operational benefits

- Real time data access
- Administrative tasks optimization
- Process speeding
- Information sharing

A city dashboard



The Open Data portal

GO LIVE

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TECHNOLOGY

ckan

Version 2.6

dati.comune.milano.it

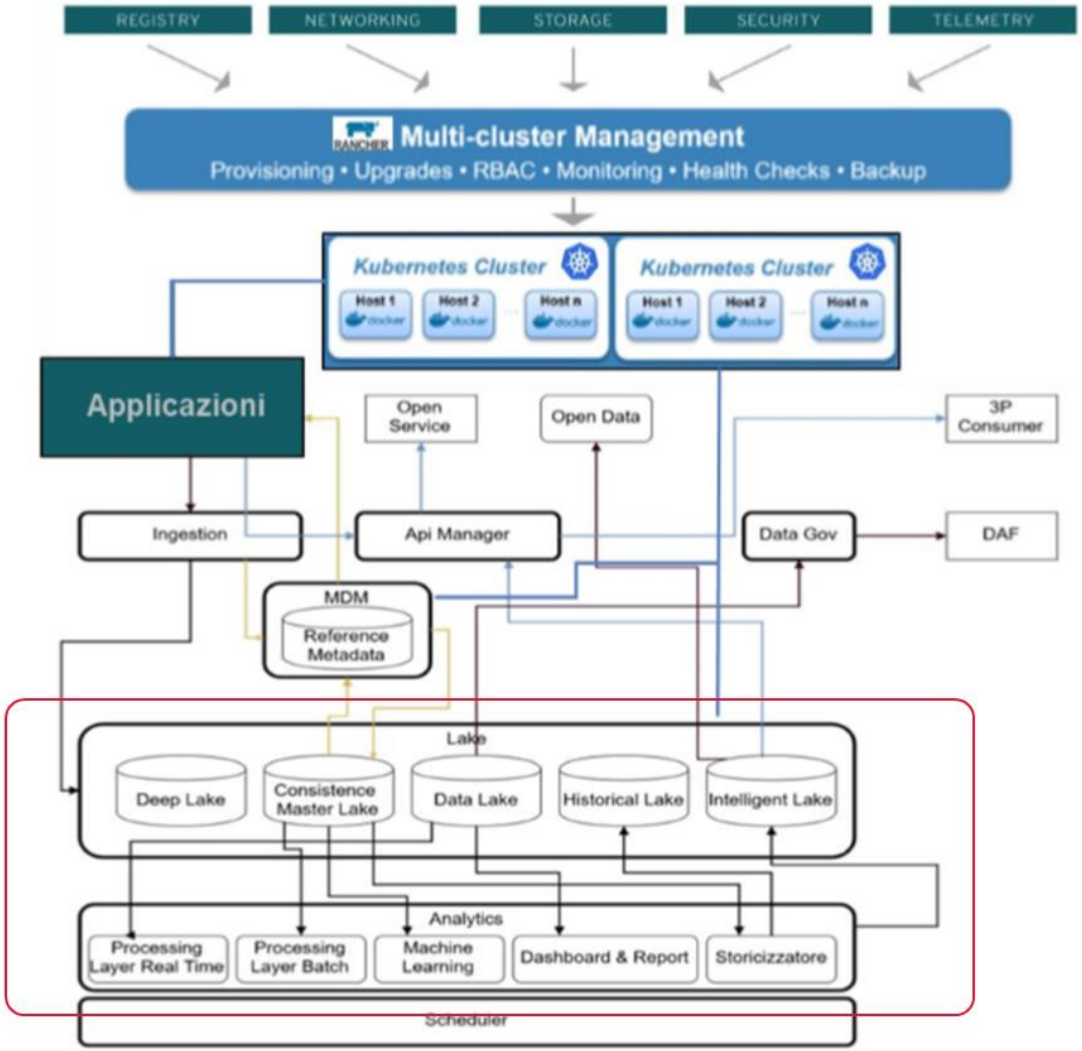
Comune di Milano's data portal

DATASETS

> 450 DATASETS

DCAT_AP-IT

National Metadata Profile

Where are the big data?

Big data architecture