ISTANBUL IN NUMBERS

Turkey's Largest Metropolis
Biggest metropolis in Turkey with a population of over 16 million. Larger than 23 countries in Europe

Strategic Location
Locates at a strategic location connecting Europe and Asia

Bigger Than Economy of 130 Countries
Istanbul provides Turkey's 56% of foreign trade volume, 27% of national income and 43% of exports

Young Population
There are 4.7M young population in Istanbul between the age of 0-25

Internet Usage
There are about 60 million internet users in Turkey. The percentage of internet access in Istanbul is 96% and there are about 14 million internet users
ISTANBUL METROPOLITAN MUNICIPALITY IN NUMBERS

- The budget for 2020 is 25.8 Billion TL
- 30 municipal enterprises, 2 subsidiary public utility corporations
- 82,500 Personnel
- 5,461 km² Service Area
- Investment share among all public institutions is 26%
DIGITALIZATION ROADMAP – SMART CITY

SMART CITY DIRECTORATE IS ESTABLISHED

2016
June
World Cities Congress Istanbul'16

Phase 1
Literature Search

2017
May
Analysis of Current Situation

World Cities Congress Istanbul'17

Phase 2

Phase 3
Vision/Strategy

April
World Cities Congress Istanbul'18

Phase 4
Architectural Design

2018
2019

Phase 5
May
SMART CITY MASTER PLAN COMPLETED

Roadmap

World Cities Congress Istanbul'19

Sustainability Activities of the Smart City Master Plan

October

World Cities Congress Istanbul'18

2020

Enrichment of IMM Big Data/Open Data Platforms

May

Projects

Data Lab

Earthquake Hackathon

IMM Open Data Portal

Zemin Istanbul

Establishment of the IMM Big Data Platform

- Smart City Index Study
- Smart City Maturity Model
- Smart City Legislation Works
- Smart City Dictionary
- Smart City Web Page
LITERATURE REVIEW
PHASE 1

1) Review of Guide Documents
2) Examination of Good Practices Examples

- All area information in the context of smart city subject was gathered within literature review phase.
- 10 major smart cities in the world, which have good practice examples, were examined and reports of these cities were created within the scope of the «Istanbul smart City Project»
Current situation was analyzed by looking at the current status of Istanbul, the competencies of the stakeholders, the technology infrastructure and the ongoing projects.

- Stakeholder Analysis
- Stakeholder Management Panel
- Contacting Stakeholders
- Stakeholder Surveys
- Stakeholder Meetings

Smart City Focus Areas
- Smart City Sub-Focus Areas
- Smart City Maturity Assessment
- Istanbul Smart City Workshops
SMART ISTANBUL
FUNCTIONAL & FOCUS AREAS

- 8 Functional Area
- 28 Focus Area
- 3 Promoters

PROMOTERS
- Information and Communication Technologies
- Organization and Human Resources
- Finance
At the phase of determining the vision and strategy, it was aimed to establish the strategies of the city, together with the stakeholders, that will enable Istanbul to reach its vision and future goals, and to determine the projects that will raise our city in every field.

- IMM Executive Survey
- Vision Workshop,
- Mars Group Workshop,
- Creation of Istanbul Smart City Manifesto

- Social Media Analysis
- Citizen Survey Study
- Legal Personality Survey Study
- Strategic Goals
- Targets
- Initiatives
- Projects
- Project Selection (101 Projects)

- Creating a master plan (101 projects to be realized in the short, medium and long term 2029)

- Strategies have been created to ensure that Istanbul Smart City is depicted in a 10-year time frame until 2029, thereby enabling stakeholders to serve a common and clear goal and goal.
ARCHITECTURAL DESIGN

PHASE 4

• Istanbul Smart City Architecture was designed based on the 3D (Discover-Define-Design)
• After the 3D Design phase is over, the process will be adapted with the fourth and fifth "D" fiction as "Develop" and "Deploy".
• The conceptual design of the applications that will be implemented in the context of a smart city for functional areas in smart city architecture has been revealed.
• Afterwards, a technical architecture was constructed in accordance with the conceptual design that would enable these applications to communicate with each other and work integratedly.
Road Map Phase (after the Vision & Strategy and Architectural Design phases) is the phase where the projects to be implemented in the short, medium and long term are determined, prioritized and planned.

**STEPS**

- Creating a Strategic Road Map,
- Prioritization of Projects
- Time Plan
- Impact Analysis
- Impact Map
- Detailed Change Impact Analysis
- Public Relations Plan,
- Smart City Governance Structure
“IMM’S OPEN DATA PORTAL”

ISTANBUL METROPOLITAN MUNICIPOLTY

“OPEN DATA PORTAL” is LAUNCHED!

Open Data of Istanbul is made available to citizens in smart city functional areas.

https://data.ibb.gov.tr
Between 18.01.2020 - 09.06.2020

Number of Unique Users connected: ~213K
Total Reach: ~11M
Total Data Transfer: ~695 GB
Average Daily Request (Access): ~212K

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>DATA SET NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERGENCY MANAGEMENT</td>
<td>4</td>
</tr>
<tr>
<td>MOBILITY</td>
<td>55</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>25</td>
</tr>
<tr>
<td>ENERGY</td>
<td>10</td>
</tr>
<tr>
<td>LIVING</td>
<td>16</td>
</tr>
<tr>
<td>SECURITY</td>
<td>6</td>
</tr>
<tr>
<td>ECONOMY</td>
<td>3</td>
</tr>
<tr>
<td>PEOPLE</td>
<td>12</td>
</tr>
<tr>
<td>GOVERNANCE</td>
<td>10</td>
</tr>
</tbody>
</table>

ISTANBUL METROPOLITAN MUNICIPALITY
IMM OPEN DATA PORTAL

A total of 122 citizen requests were received between 18.01.2020 - 09.04.2020

<table>
<thead>
<tr>
<th>CATEGORIES</th>
<th>REQUESTS DATA SET NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIT</td>
<td>7</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>19</td>
</tr>
<tr>
<td>ECONOMY</td>
<td>2</td>
</tr>
<tr>
<td>ENERGY</td>
<td>7</td>
</tr>
<tr>
<td>SECURITY</td>
<td>8</td>
</tr>
<tr>
<td>PEOPLE</td>
<td>14</td>
</tr>
<tr>
<td>MOBILITY</td>
<td>46</td>
</tr>
<tr>
<td>LIVING</td>
<td>12</td>
</tr>
<tr>
<td>GOVERNANCE</td>
<td>7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>122</td>
</tr>
</tbody>
</table>

**PLANNED EVENTS**

- Data Science for the Public Good
- Meet-Ups with Trade Association
- Integration with Tech Istanbul Innovation Platform
- Data Visualization Competition
- Deep Learning Turkey

ISTANBUL METROPOLITAN MUNICIPALITY
IMM OPEN DATA PORTAL
2020 TARGETS

# of Datasets: ~ 250

1. Deployment of Sample Projects on GitHub
2. Publishing Projects Developed with IMM Open Data on the Portal
3. Empowering Open Data Portal Content Management Team
4. Organizing Open Data Meetups @Zemin İstanbul
5. Deployment of Open Data Portal Forum
6. Frequently Asked Questions on the Portal
7. Open Data Portal E-Newsletter
8. Enhancement of GIS Data Infrastructure of the Portal
9. Open Data Dictionary

ISTANBUL METROPOLITAN MUNICIPALITY
IMM OPEN DATA DEVELOPMENTS BY CITIZENS

verikaynagi.com

https://datastudio.google.com/reporting/3dvwFjgZ-4v20zS4tJ076OM2yAhBv0/page/5Xus

verikaynagi.com

https://twitter.com/QlikViewTurkiye/status/121989566103179264

verikaynagi.com
SAMPLE PROJECTS DEVELOPED USING IMM OPEN DATA

“IMM Spatial Open Data API with IETT data”
https://medium.com/

“Instant bus locations in Istanbul”
https://verikaynagi.com/

http://macarreis.appspot.com/

“İETT vehicle locations”
data.ibb.gov.tr

İSTANBUL METROPOLITAN MUNICIPALITY
“İBB Wi-Fi” is a free internet service provided by İstanbul Metropolitan Municipality.

The purpose of this service is to establish internet access points in the areas where the citizens are most dense and to expand the wireless communication network in İstanbul.
CONSTRUCTION SERVICES

3D urban models are digital models where the details of the city such as vegetation, building, infrastructure, landscape and city furniture are displayed in coordinated form.

The 3D City Model Project is being developed in order to make analyzes such as road and transportation analysis, to make the promotion of historical and touristic places more effective, to use lidar data more effectively within IMM and to present it to both IMM and end users.
VIDEO ANALYTICS

- A signal processing system that digitally analyzes video images to detect and identify threats, suspicious events or real-time behavior.

- Video analytics solutions will be implemented based on pre-defined scenarious to take advantage of computer vision technologies.

ADVANTAGES

- Central Management of Cameras
- Notification by E-Mail or SMS
- Creation of Alarms When Threat Situations Occur
- Low Error Rate
- Reduction in OPEX/Cost Savings

USE CASES

1. Person and Object Tracking
2. Person and Vehicle Counting
3. Detection of Empty Parking Lots
4. Suspicious Behaviour/Object Detection
5. Wrong Way Passes
6. Motion Detection
7. Detection of Vehicle Violations
8. Occlusion of Video Images
9. Traffic Prediction
“Zemin Istanbul” is a center that provides business opportunities for creative entrepreneurs and small businesses and prepares our children for the future using technology.

By bringing together technology manufacturers, users and investors; it is aimed to develop innovative products for the needs of Istanbulites.

Zemin Istanbul has an Acceleration, Experience, Training and Activity Center covering transportation, energy, environment and social innovation areas.
AGILE SOLUTION
“Askıda Fatura”
(Bill on the Hook) campaign

Aiming to provide support for people financially burdened by the coronavirus pandemic, the campaign was launched by Istanbul Mayor Ekrem İmamoğlu on Monday 4 May.

Through [http://askidafatura.ibb.gov.tr](http://askidafatura.ibb.gov.tr) the campaign anonymously matches people with outstanding utility bills with those willing to cover the cost of these bills out of an act of solidarity.
Turkey’s first private Severe Weather Conditions Detection and Warning System was established in cooperation with Disaster Coordination Center (AKOM) in Istanbul.
“İSTANBUL SENİN” MOBILE APPLICATION

1. Unique & secure digital identity (SSO)
2. Digital on-boarding services for other IMM applications
3. Virtual payment & transportation access with IstanbulKart
4. Self service support via Person to Service chat (chat bot)
5. Login to 3rd party applications and websites
6. Ensuring public participation in management through survey and gamification (People’s Assembly)
7. Offline application services

The Istanbul Senin application shall function as a central mobile portal, for the residents of Istanbul to access all the products and services the city has to offer.

ISTANBUL METROPOLITAN MUNICIPALITY
THANK YOU