

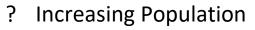
SPATIAL DATA PRODUCTION AND SHARING APPROACH FOR NSDI:

TURKEY'S CASE STUDIES

OUR WORLD AND WE...

The World, The One Planet We Know That Life Is ...

Problems...



? Descending Resources

? Climate Change

? Distorted Urbanization

? Natural disasters

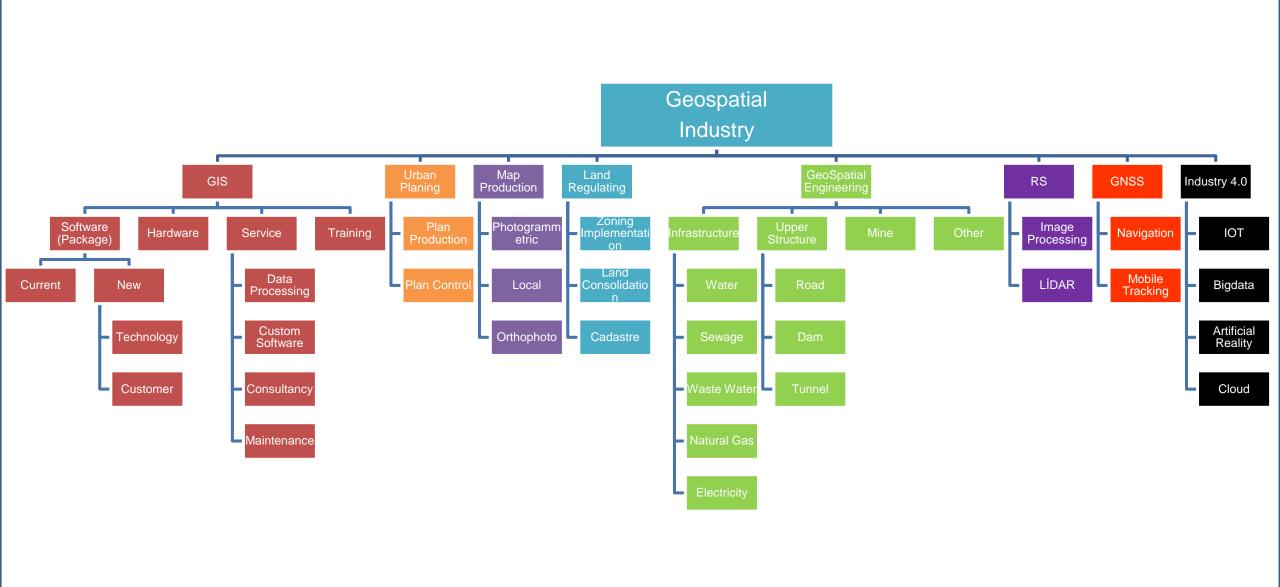
? Environmental pollution

Solutions...

- ✓ Accurate Planning
- ✓ Active and Dynamic Tracking
- ✓ Selecting the Right Location
- ✓ Accurate Analysis
- ✓ Decision Support

Geospatial Industry helps us for understanding and managing our world well ...





NSDI IS ...

TECHNOLOGY

POLICIES

PEOPLE

WEB PORTAL GIS DATA SERVERS

CLEARINGHOUS

FRAMEWORK

METADATA

SPATIAL DATA

PARTNERSHIPS

STANDART

ORGANIZATIONS



Hydrography

Elevation

Cadastral

Digital Orthoimagery

Governmental Units

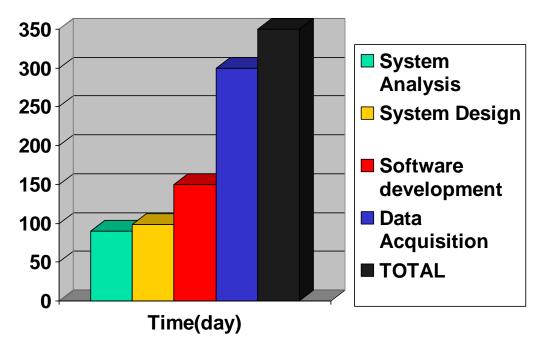
Transportation

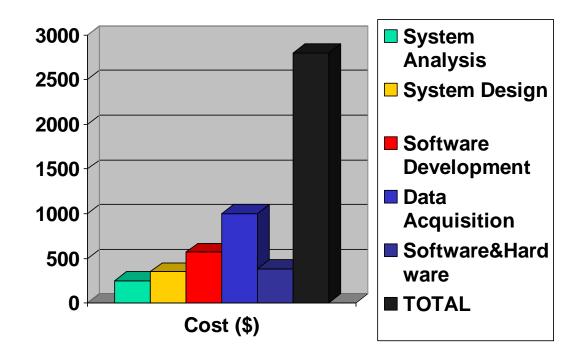
Geodetic Control

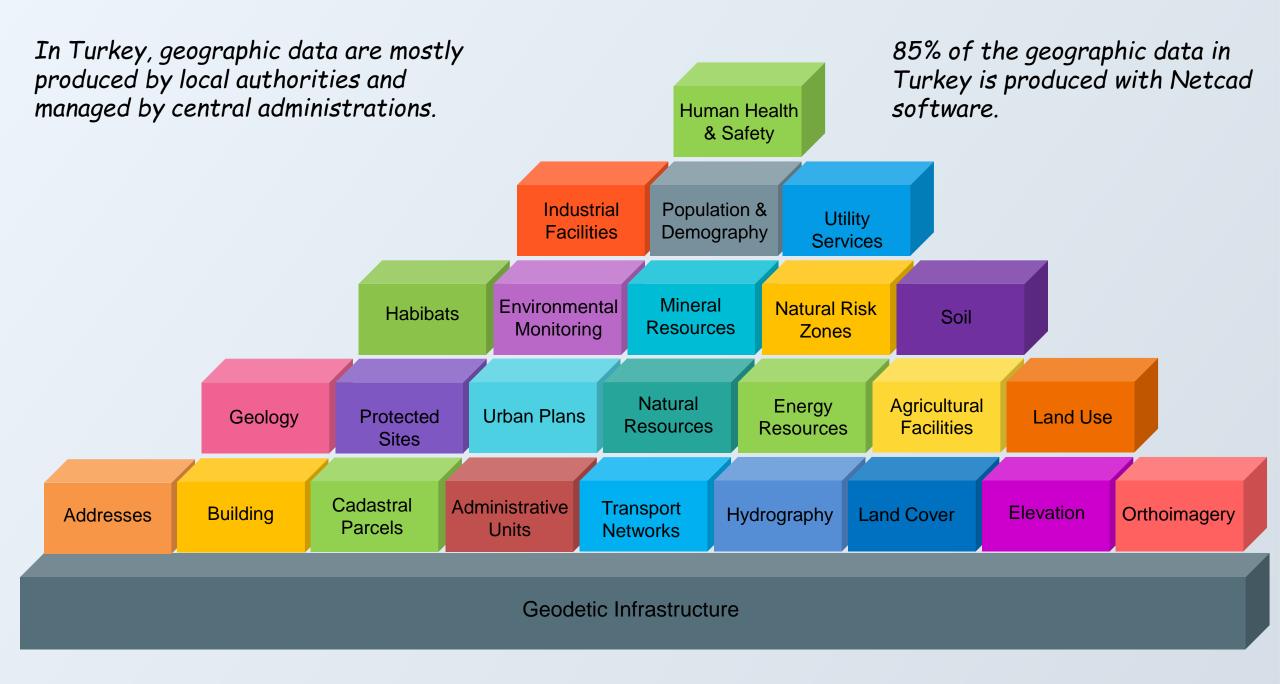


ANALYSING GIS PROJECTS

- ✓ Data service in GIS projects is the most time consuming and costly business.
- ✓ But the most important part of the success of the project is the software component.







BRIEFLY NETCAD

- Netcad is a software company that develops geographical information systems and spatial based engineering applications.
- ☐ The best known and the most common one in its sector in Turkey.

- Marketshare: %85
- ☐ Products: +30
- ☐ Users: **+100.000**
- ☐ Staff: **+140**
- Location:
 - Ankara Headquarters
 - Marmara Region Office





BRIEFLY NETCAD

- **□950** Public Sector
- ■800 Municipalities
- **□4500** Private Sector Firms
- ■84 Universities 474 Departments



- **5.000** Netcad Campus Certificate Each Year
- ■Netcad Portal Members: + 50.000



RURAL TO URBAN AREA TRANSFORMATION

MAP-IMAGE

- Base Map
- Land Model
- Aerial Photo
- Orthophoto
- Satellite Image

SPATIAL PLANING

- Landscaping Model
- Master Development Plan
- Implementary Development Plan

LAND REGULATING

- Zoning Allocation
- Parceling
- Numbering Address
- Expropriation
- Consolidation

INFRASTRUCTURE

- Water
- Sewage
- Rain Water
- Electricity
- Natural Gas



UPPER STRUCTURE

- Road
- Park-Gardens
- Gallery/Tunnel
- Dam



MANAGEMENT OF GEOGRAPHIC DATA

NATURAL RESOURCE

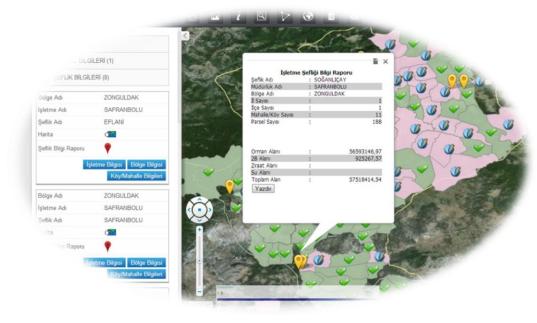
- Geology
- Forest
- Water
- Mine



- Agriculture
- Road
- Bridge
- Building
- Energy Line



- Water
- Electricity
- Natural Gas
- Telephone

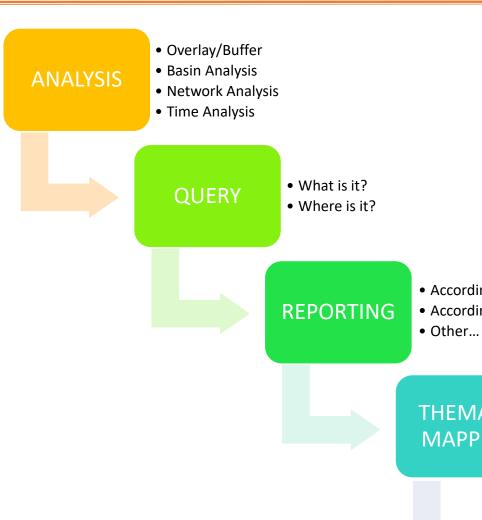


FACILITY MANAGEMENT

- Factory
- Harbour
- Large Nuclear Facility



PROCESSING OF GEOGRAPHIC DATA...





THEMATIC MAPPING

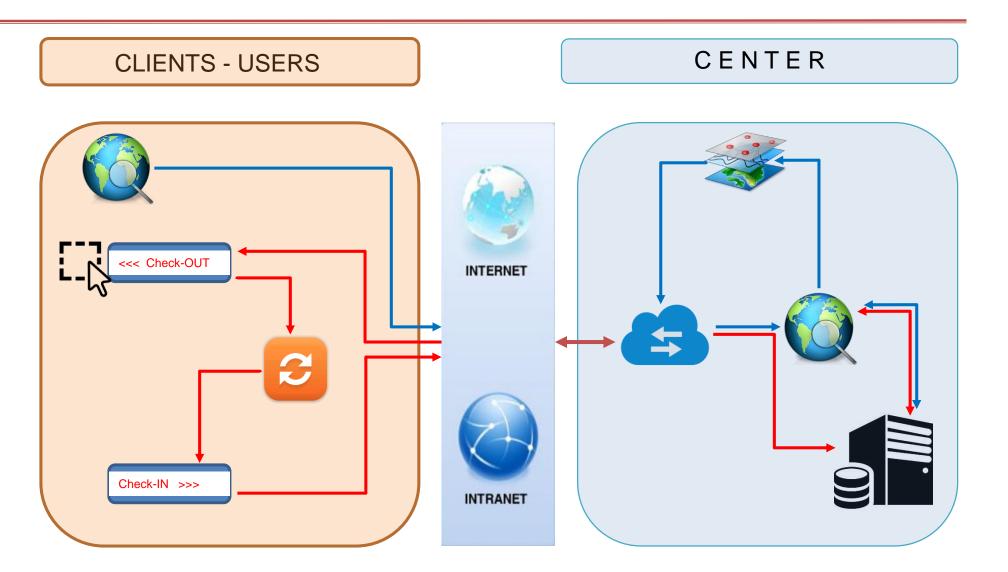
• Map Display of the Query Results

DECISION SUPPORT

GEOSPATIAL DATA FROM LOCAL TO CENTRAL

IDENTITY Geographic Data Occur With Projects SHARING By Local Authorities... Map/ Zoning/ (INSTITUTIONAL / PERSONAL ID) Agriculture TELECOM ELE TRICITY NATURA GAS REAL ESTATE ROAD ENVIRONMENT FOREST Local PROVINCIAL MUNICIPALITY DIRECTORATE Government AGRICULTURE CADASTRE **REAL ESTATE** SPATIAL EDUCATION REGISTRATION **ADDRESS** INDUSTRY-NOTICE AND CADASTER COMMERCE INFORMATION SIGNBOARD PARKS AND GARDENS **MANAGEMENT** SYSTEM SYSTEM **Central Authorities Manages** The Geographical Data in National Level...

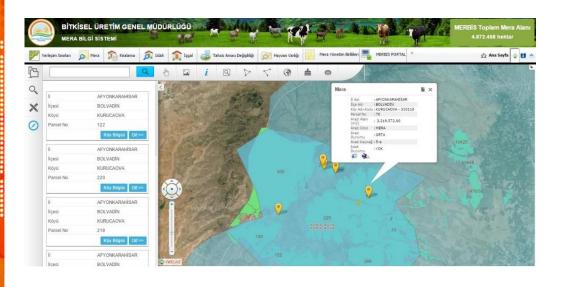
DISTRIBUTED DATA MANAGEMENT SYSTEM





PASTURE INFORMATION SYSTEM





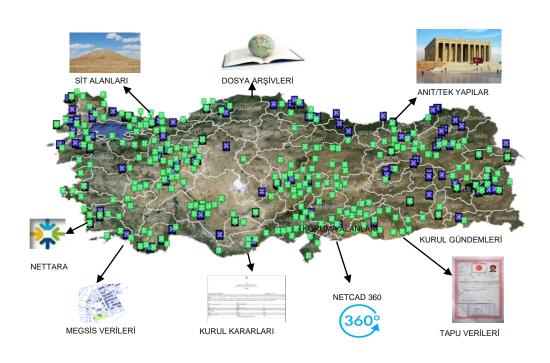
Data sets managed by NETCAD software

- ✓ Turkey Pasture Asset
- ✓ Income and Expense Tracking
- ✓ Allocation
- Occupation
- ✓ Migrant Information
- ✓ Livestock Asset





REGISTERED CULTURAL PROPERTY NATIONAL INVENTORY SYSTEM



Data sets managed by NETCAD software

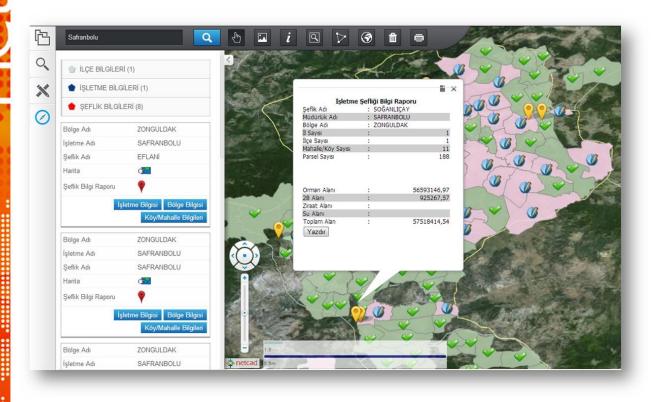
- ✓ Registered Cultural Property of Turkey
- ✓ Monuments and Unique Structures
- ✓ Protected Areas

General Directorate o Cultural Heritage

All (36) Commissions 250 Netcad Users



FOREST CADASTRE INFORMATION SYSTEM



Data sets managed by **NETCAD** software

- ✓ Turkey Forest Cadastre
- ✓ Business Programs
- ✓ Land use and land cover in forest areas

General Directorate of Forestry

All (81) Provinces 370 Netcad Users





THANK YOU FOR YOUR INTEREST