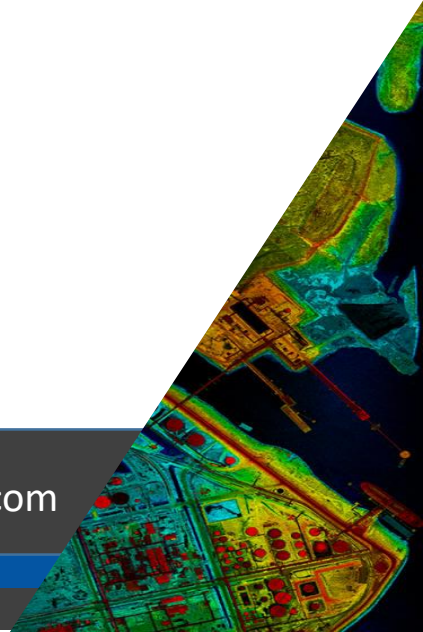




A Geospatial Services & Engineering Consultancy Company

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About Matrix Geo



- **Geospatial Service & Engineering Constancy Company**

- Matrix Geo India - Established in 2008
- Profitable enterprise with zero liability
- ISO 9001-2008 Certified Company
- Legal Status – Private Limited Company
- Owners – Amit Sharma & Rahul Jain
- Located in [New Delhi](#), INDIA (Capital City)

- **Global Delivery, Processes and People Readiness**

- 120+ Associates (Geospatial Experts, Civil Engineers, Geologist, Geophysicist, Environment Expert, Hydrology Expert, Surveyors, Drone Pilots)
- Dedicated delivery Units in INDIA (New Delhi)

- **Business Model**

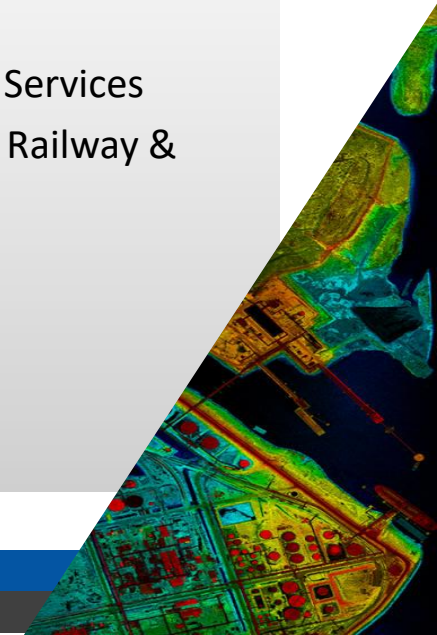
- **International** - Outsourcing, Off-shoring & Global Delivery for leading companies worldwide
- **Domestic** - Modern Tech. Survey, GIS Services & Engineering Consultancy

- **Practices and Business units**

- Drone Based Services
- Photogrammetry products and services
- LiDAR Acquisition & Processing
- RS - GIS products and Consultancy Services
- Engineering Consultancy for Road, Railway & Water

- **Customers**

- 25+ Active Customers



Service / Sectors / Clients

Support @

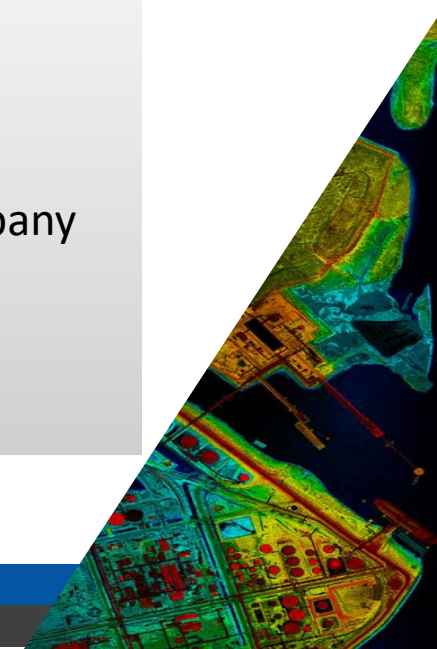
- **During Planning**
 - Prefeasibility
 - Feasibility
 - Detailed Project Report
 - Pre Tender
- **During Construction**
 - Progress Monitoring
 - Quality Monitoring
 - Safety Monitoring
- **Existing Projects**
 - Asset Mapping
 - Monitoring
 - Inspection
 - GIS based Management

Sectors

- Road & Highways
- Railways / Metro
- Irrigation
- Urban
- Water Distribution
- Mining
- Oil & GAS
- Power
- Archaeology
- Agriculture

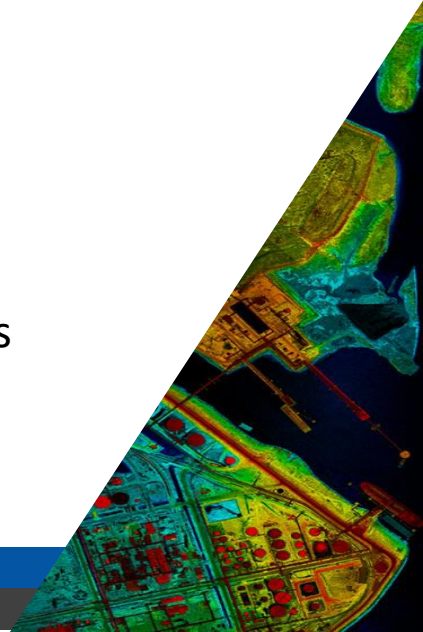
Clients

- World Bank, USA
- World Bank, India
- Central Government
- State Governments
- Public Sector Units
- Giant Corporates
- Construction Companies
- Consultancy Company



Capacity

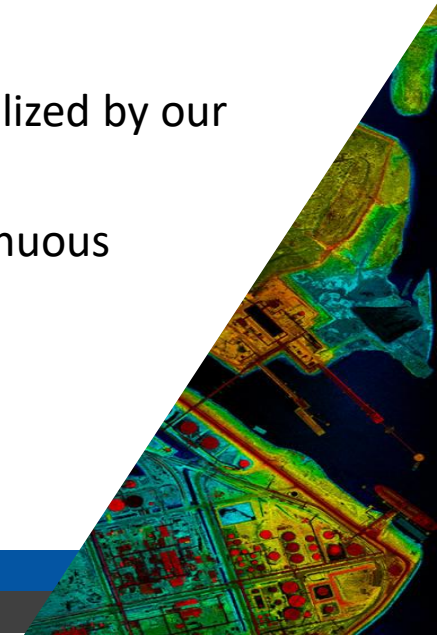
- **120+** Skilled Staff
 - Geospatial Experts, Engineers, Geologist, Geophysist, Environment Expert, Hydrology, Surveyors, Drone Pilots
- **15+** Drones (Fix Wing / Multirotor) for Low Altitude Aerial Survey
- **Sensors** - RGB Visual, Thermal, Multispectral, LiDAR Sensors for Drones
- **1 No.** fully functioned Mobile LIDAR Scanner of Engineering Survey Grade
- Dual frequency DGPS for Ground Control Survey
- Eco-Sounder & Ground Penetrating Rader for Under Water & Under Ground Survey
- Access to manned Aircraft for Aerial Survey with our Local aviation partner
- Access to satellite imageries provider to purchase latest dataset of any part of the world
- Insider - GeoVideo based mapping solution for Road/Rail/Water/Transmission/Pipeline etc.
- 55+ Workstation of Photogrammetry, LiDAR, GIS & Remote sensing for execution of Large Projects
- 3 Shifts, 24 Hours working, 6 Days helps in providing large capacity & support our global clients
- Technology - ESRI, Bentley, Autodesk, BAE Systems, Cardinal Systems



Key Differentiator



- **Own 21+ years of experience** working with Geospatial Technologies
- **Global Work experience** : Worked with client all over the world USA – EUROPE – AFRICA – ASIA and know-how of latest technology development & best practices
- **Technology Implementation**: We understand each project, associated challenges and decides the most appropriate technology to meet the objective of the project
- **Work Conditions**: Extensive experience working in very high altitude Himalayas , plains, forest, dense cities & remote rural area. In India we have executed projects from J&K to Kerala & Gujrat to North East
- **Full Life Cycle Support**: Satellite imagery for planning, aerial /Lidar survey for design, field survey for construction, GIS services for implementation, and consultancy for project-wide maintenance
- **Performance Guaranteed**: Our team ensures the service are provided in agreed schedule and utilized by our clients in best possible manner
- **Access to Latest Practices**: Our commitment to innovation, latest technology adoption and continuous improvement help us to provide latest practices to our clients
- **Best Value for money** –



Technology We work with

Geospatial Service

- Drone / UAV Aerial Surveys
- LiDAR Surveys
- Satellite Based Surveys
- DGPS / RTK Survey
- Conventional Survey (ETS / Auto Level)
- Remote Sensing Geology/Land use Studies
- GIS Services & Analysis
- Drainage \ Flood Studies
- Engineering Analysis



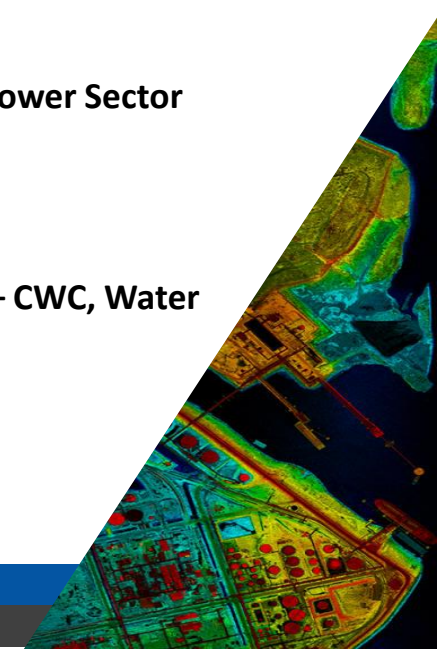
Technology

- Photogrammetry
- GIS
- Remote Sensing
- LIDAR
- GNSS / DGPS
- RADAR
- Traditional Survey
- GPR
- Eco Sounder



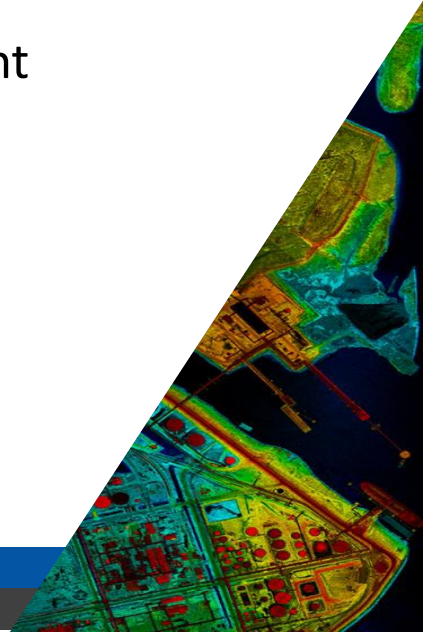
Drone Based Survey Initiatives

- Drone Based Aerial Project Progress Monitoring Concept Introduced First Time in Indian Railway
- Drone Aerial Survey **Introduced** for **Yard Development (ESP), Station Development Projects, Doubling Project, DRP/FLS Green Field New Line Alignment, Railway Electrification Design** Development in Indian Railway
- Drone Aerial Survey **Introduced** for **Bridge Inspection** in Indian Railway – **Critical Asset Inspection**
- DGPS Integrated Drone Based Survey **Introduced** for **planning / Design** in High Altitude & Inaccessible Areas – **Chardham Rail Project**
- Drone Based Survey **Introduced** for **planning / Design + BIM** (Building Information Modelling) – **Metro Rail Project**
- Drone Based Aerial Survey for **DPR Project for Road Widening, Green Field Project, Expressway** – **NHAI – Road Sector**
- Drone based Aerial GeoVideo Documentation for **Land Acquisition support in Road Widening projects** – **Road Sector**
- Drone Aerial Survey for Mine Exploration, Mine Planning, Mine Management & Volumetric Analysis - **Mining**
- Drone Aerial Survey for **Inspection of Critical Assets** such as Chimney, Belts, Structures & Coal Stock **Volumetric Analysis** – **Power Sector**
- Drone Aerial Survey for **Pipeline ROW Mapping and Aerial Inspection** projects – **GAIL – Utility Sector**
- Drone for Power Distribution **ROW Management, Inspection, Monitoring** - **TATA Power, NDPL– Utility Sector**
- Drone Based Survey for **DAM Planning, Submergence Area Analysis, Command Area Study and Irrigation Network Design** – **CWC, Water**
- Drone Based **Flood Monitoring** and helping is quick decision making – **Delhi Flood 2019 - Disaster**



Project Experience – Drone

- **100000 + Ha** Area Surveyed Using Drones for Engineering Grade Accuracy
- **5000+ Km** Drone Based Aerial Project Progress Monitoring
- **2000+ Km** Drone Based Aerial Survey for Railways & Metro
- **2000+ Km** Drone Based Aerial Survey for Road & Highways Projects
- **15+** Large Critical Asset Inspection Projects – Railway Bridges, NTPC, Power Transmission Network
- **20+** Projects for bulk Water Planning & Distribution – CWC / WAPCOS
- **6+** Large Mine Site Surveyed for Exploration Planning, Mine Planning, Mine Management
- **2** Projects for Drone >> 5D BIM Successful Executed
- **200+** Projects Successfully Delivered



Project Experience

- **Satellite Based Survey -**

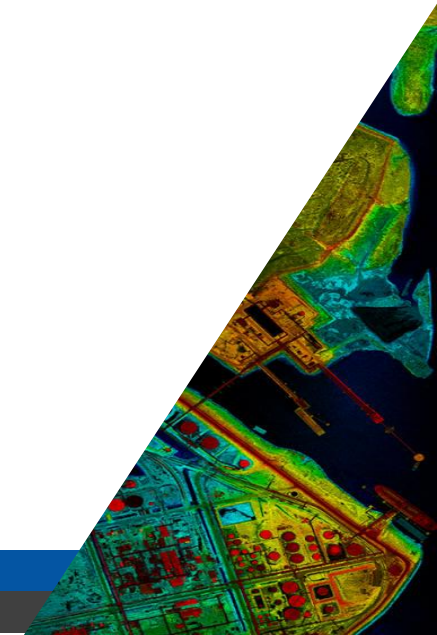
- 100000+ SqKM Photogrammetry Survey for conducting various studies across different sectors
 - 25000 Sqkm For Alignment Design in DFCCIL, 2500 SqKm Mumbai-Ahmedabad Bullet Train Project, 12000 Sqkm for DEL-CHD-AMT HSRC for Systra (France)/ RITES, 12000 SqKM for Mumbai-Chennai HSRC, 12500 SqKM for Delhi-Mumbai HSRC, 7500 SqKM for Road development project in Very High Altitude Area in Himalayas
- Worked for DFCCIL, HSRC, RITES, SYSTRA, Tractable, CPWD, WAPCOS, MP Irrigation etc.
- 10000+ Sqkm Photogrammetry survey for various International Projects

- **LiDAR**

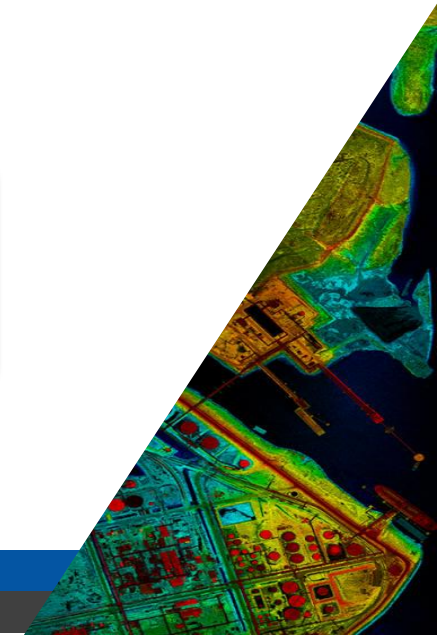
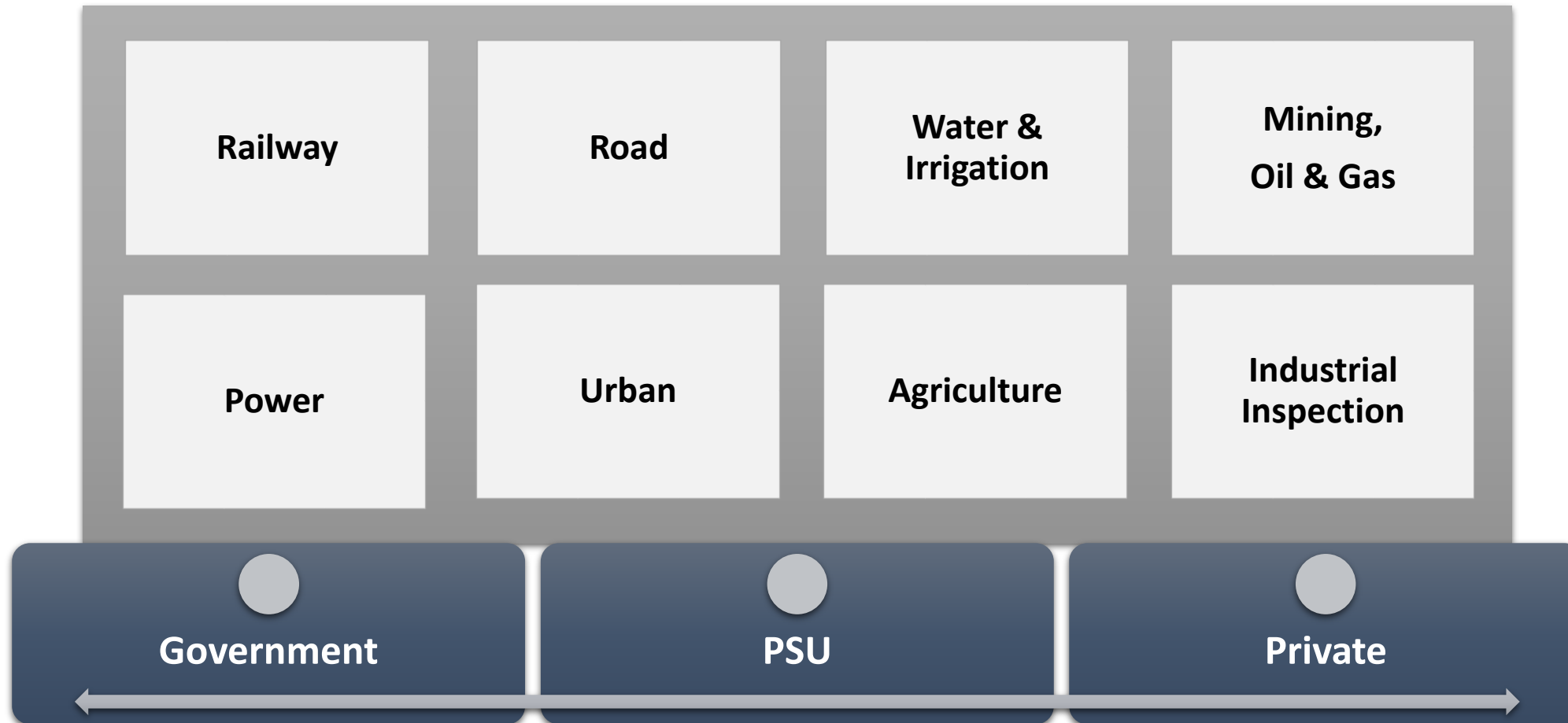
- 10000+ SqKm Aerial Lidar Survey Project execution for leading International clients
- 1000+ KM LiDAR Survey using Mobile Laser Scanner for NHAI

- **GIS**

- GIS data development project for 6 Indian States for World Bank USA
- Bihar State Road GIS Thematic project for World Bank & Road Construction Department, Bihar
- GIS mapping of Large Irrigation network including user information in MP
- 8+ Flood Mapping analysis projects in MP, Rajasthan, Karnataka, Uttrakhand etc.
- School Planning Project in Uttar Pradesh State to implement SSA, MSA



Sectors on Focus





MAKING **GEOSPATIAL TECHNOLOGY** WORK FOR **PEOPLE**



Quick Contact

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