ADVANCED GIS
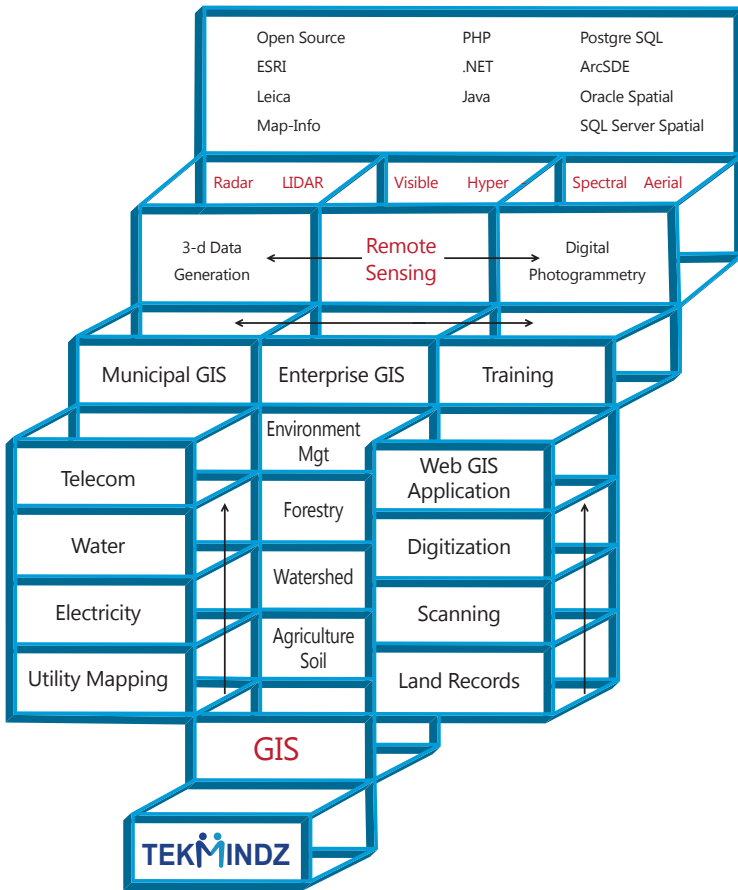# SOLUTIONS

TekMindz are developing innovative solutions that integrate geographic information with niche business applications.

TEKMINDZ ™

GIS Services Overview

At the leading edge of geospatial and information technology, TekMindz develops innovative solutions that integrate geographic information with niche business applications.

Scope of GIS Applications We Develop

The core of our competency lies in our experience of providing Spatial solutions to our clients in wide domain areas.

We integrate knowledge, technology, people, and business with geographic zones to develop innovative and potential services to local as well as global clients.

Digital Photogrammetry

We offer Ortho-rectification of high resolution satellite and aerial photographs through GCP's, DEM Creation from Stereo Photographs and Aerial Triangulation.

GIS Services Overview

With the growing demand for 3D Geo-Databases of city urban areas, TekMindz has developed expertise in generating 3 dimensional models of the cities. TekMindz is well experienced in creation of such 3D model of maps either through topographic maps, stereoscopic images and ground survey. TekMindz had been providing a range of photogrammetric mapping services that include ortho-photo editing, digital ortho-production, ortho-photo rectification and ortho-photo mapping in India and across the globe.

Remote Sensing Services

Our GIS Remote Sensing services include capturing, storing, integrating, manipulating, analyzing, and displaying data related to positions on the Earth's surface.

Data Conversion Services

Our GIS data conversion Services enable data from different sources to be merged into one common format, which allows for its easy access, analysis and utilization.

Training Services

TekMindz also provides comprehensive GIS training to its clients thus ensuring that various GIS services enabling the client to manage its own processes as required.

Land Record Management

We provide complete solution right from Scanning, Digitization and Application Development for Land record Management.
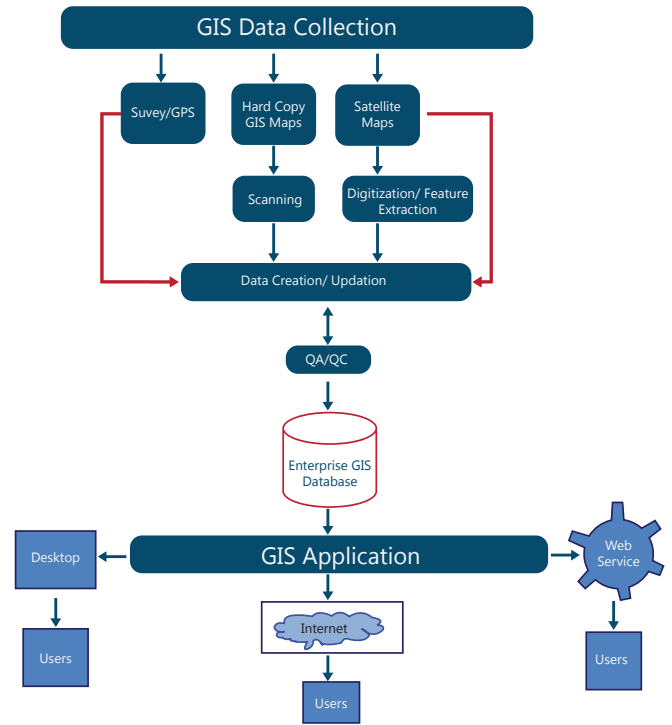
GIS for Municipalities

We provide GIS solution to municipalities for managing their assets, municipal planning, collection of taxes, Decision Support System for taking certain decisions etc.

3D Data Creation

We offer 3D model generation through stereo photographs, DEM generation from Stereo and Radar Data.

GIS Application Development Services

GIS Application Development service is another key area in which TekMindz has the expertise and can provide end-to-end enterprise level software application development services in number of GIS application areas including cadastral and Land Information System, Public Utility System, Forest Management, Eco-System Management and GIS Municipal Solution. Using the best-of-breed technologies from ESRI, MapInfo, Leica and Open Source GIS, TekMindz has been exceeding expectations by offering integrated solutions that meet the quality norms, with exceptional adherence to delivery schedules.

GIS Data Collection

- Suvey/GPS
- Hard Copy GIS Maps
- Satellite Maps
- Scanning
- Digitization/ Feature Extraction
- Data Creation/ Updation
- QA/QC
- Enterprise GIS Database

GIS Application

- Desktop — Users
- Internet — Users
- Web Service — Users

Typical Architecture of our Web based GIS Application

Success story

Our client is the Municipality Land department of an African country who were maintaining their land transaction manually. The department requires the entire process to be automated and GIS enabled and available to general public for viewing. Various reports and certificates required in various land transaction are needed to be generated by the automated system.

Business Problem:

Land department was facing challenges in maintaining the land records manually and wanted the entire operations to be automated. Other agencies that were involved in land transactions were to be added as liaison agencies within the process.

Technical Challenges :

- Complete Business Process Re-Engineering
- Building a complete database related to all land records
- Identification of the process which involved public dealing since such modules would be available for public viewing
- Identification of various reports / certificates which are required to be generated online and require judicial approval

Our Solution :

- Entire GIS enabled database for land department was build, which required extensive data entry, survey, scanning and digitization of records.
- Complete GIS Web application was developed using ESRI platform
- Various transactions involved in land department like sub-division, consolidation, transfer of land, lease are developed within the application.
- Various modules in the application where exposed as Web Services to involve other agencies involved in land transaction ODC management

Client Description :

- Client Name: Accra Municipal Corporation, Ghana
- Client Website: Not Available (Running on Intranet Portal)

Success story

Our client is the company in Australia named Cohga Pvt. Ltd. for whom we had developed the GIS portal for Land Record Management and Utility Management. The final wok is being done for one of the councils in New Zealand named Auckland Council.

Business Problem:

Auckland Council requires complete GIS portal which can manage their entire land records as well as Utilities such as underground drainage, pipelines etc. TekMindz developed the GIS portal for this project. The entire data collection as well preparation of data on GIS platform was done by Cohga Pvt Ltd.

Technical Challenges :

- Developing GIS portal
- Portal need to be dynamic and rendering of High resolution images in quick time.

Technical Challenges :

- Complete GIS Web portal was developed using ESRI platform using ArcGIS Server Platform
- Various modules in the application where exposed as Web Services to involve other agencies involved in land transaction ODC management

Client Description:

- Client Name: Auckland Council, New Zealand

Client Website :

http://maps.aucklandcouncil.govt.nz/aucklandcouncilviewer/

Success story

Requirement:

National Council for Minority Educational Institutes (Govt. of India) wants to deploy GIS based Information System depicting various Minority Educational Institute on a GIS map with Indian District Boundaries. The Information system also requires showing the status of various institutes in the form of attribute data.
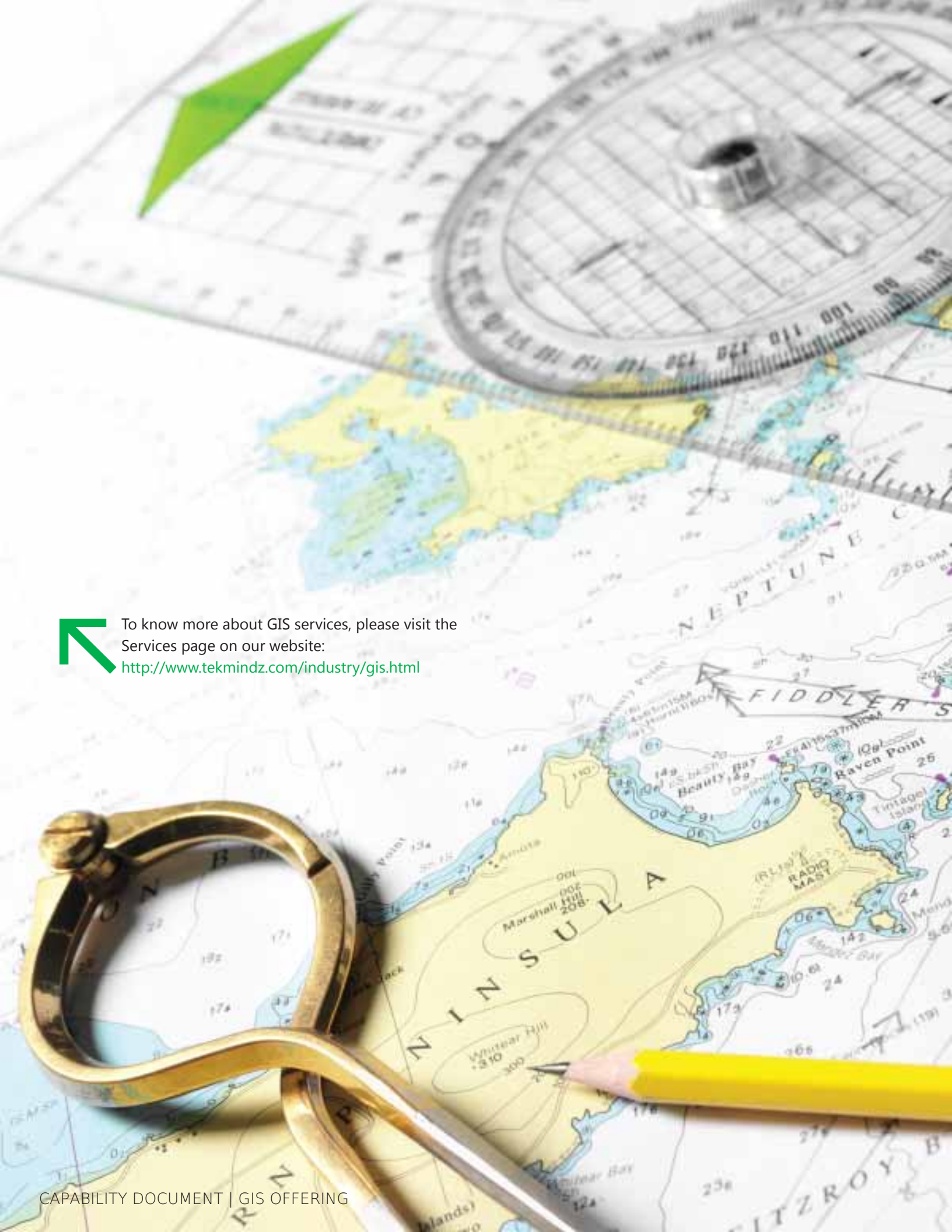
Implementation:

GIS based information system was developed based on Open GIS Architecture using various Open GIS tools like UMN Map-Server as a Map Engine, PostgreSQL along with Post-GIS as GIS Database. The solution was developed as a WEB GIS solution.

Salient features :

- Designing the business workflows of GIS Information System
- N tier architecture solution that is scalable and provides seamless integration with other applications of the client
- Developed using Open GIS Technology
- Analytical details are provided by developing dashboards that display various graphs and charts
- Query Information Tool on Web GIS Platform ODC management
- IT management consulting services

Client Description :

- Client Name: NCMEI, Government of India
- Client Website: Not Available (Running on Intranet Portal)

To know more about GIS services, please visit the
Services page on our website:
http://www.tekmindz.com/industry/gis.html

About TekMindz

TekMindz is an IT consulting & technology services company with headquarters in India, serving clients across Asia/Pacific, Middle East, North America and Africa. Bringing together technology, people and processes across diverse sectors for organizations around the world, TekMindz enables business enterprises and governments to most effectively serve their customers and citizens.

Know more about us by visiting our website at **www.tekmindz.com**

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