

MAP-BASED MUNICIPAL TAXATION SYSTEM FOR THE CORPORATION OF PANAJI CITY



Sector	Public sector
Department	Taxation Section
Solution	Development of a GIS map-based online house tax system
Start	August 2013
End	September 2013
Team Size	8 people

CHALLENGE

The Corporation of City of Panaji (CCP) assesses property tax based on the unit area of its properties. It collects three different kinds of taxes depending on the properties:

1. House taxes for residential buildings,
2. Trade license fees for commercial ones and
3. Signage taxes for signboards.

However, the dataset used for tax calculation was incomplete and prevented the Municipality to realize appropriate revenues from its citizens.

Transerve Technologies Pvt. Ltd. was then appointed to offer a GIS based online property tax solution.

SOLUTION

By using cutting-edge techniques, Transerve Technologies used its proprietary solution, SmartMu® to enable timely updates and completed CCP's database on properties.

The solution enabled the following:

1. Data field validation to capture missing features and
2. Door-to-door property data capture using GPS devices.

SmartMu® workflow enabled automatic digitization and creation of updated baseline maps and linked them with property tax data.

The new data integrated the property usage, ownership and taxation details along with geo-tagged photographs. Once the quality of the data was ensured and linked with the maps, Transerve Technologies supplied a web-based property tax management system. The aim of the solution was to help CCP to leverage GIS for intelligent decision making.

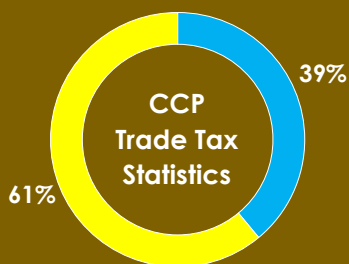
Through integrated and user-friendly software, users were directly able to exploit the system without any specific detailed technical training. With its map-based interface, the solution has offered CCP an opening to many tax-management decisions.

VALUE ADDITION

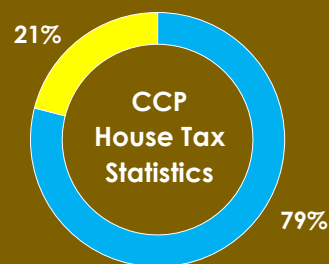
- By providing the entire geographical data of Panaji on fingertips, the GIS map-based Property Tax Module has enabled CCP to computerize easily the tax revenue department in an exhaustive manner.
- The system has the ability to calculate the property tax demand automatically. It also generates tax collection reports, property detail reports, etc.
- By working with Transerve Technologies, CCP has now an entire IT system that enables the department to manage properties and their taxation.

Thanks to its collaboration with Transerve Technologies, CCP has been able to locate properties that were not assessed or were under-assessed, increasing its revenues from tax collection in just one ward by more than Rs. 5 million.

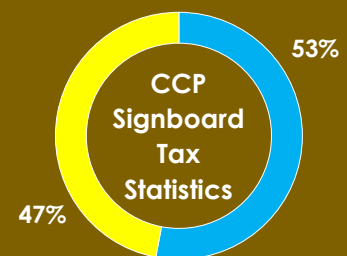
Findings from Transerve's intervention



■ Properties under Tax Net
■ Properties Not under Tax Net



■ Properties under Tax Net
■ Properties Not under Tax Net



■ Signboards under Tax Net
■ Signboards Not under Tax Net

23% of the buildings were not in CCP records

61% of businesses were not paying commercial taxes

21% of residents were not paying house taxes

47% of the signage taxes were not paid

ABOUT US:

Transerve is an award winning technology company working on geospatial technology, smart city solutions and advanced data collection technology for data democratization. Founded by a team of IITians, Transerve is an ISO 9001:2015 certified organization with a vast experience of working on city-level technology roll-outs, including the likes of World Bank aided projects. Their team brings a complete end-to-end experience on geospatial data acquisition, data processing, mobile & web based application development and complete geo-database design and development. They have worked with customers in sectors ranging from urban to ports to water resource and environmental management, etc.

Supported by: IL&FS, Omidyar Network as its investors and incubated by CIIE (IIM Ahmedabad) and CIBA (Goa), both of which are DST funded, Transerve has its presence in both Panaji (Goa) and Gurugram (NCR) now. Geographically, Transerve is executing contracts from Chandigarh to Jharkhand to Tamil Nadu in the south. It is also involved in the prestigious Statue of Unity project in Gujarat. Its municipal revenue management solution has been adopted by ULBs in Maharashtra, Goa and Uttar Pradesh. BBMP Restructuring Committee in Bengaluru has adopted its solution for urban flood risk mitigation and assessment.

CONTACT US

PANAJI OFFICE:

604-606, 6th Floor, Dempo Towers, EDC Patto Plaza,
Panaji 403001, INDIA

GURGAON OFFICE:

Rider House, Level 3, Sector 44, No 136, Near HUDA City Center Metro Station
Gurgaon-NCR 122003, INDIA

BHUBANESWAR OFFICE:

Workloop Premises, 102, Arihant Plaza, Shaheed Nagar,
Bhubaneswar 751007, INDIA