Capgemini deploys first-of-its-kind business intelligence and data warehousing solution for the Maharashtra Sales Tax Department

Maharashtra Sales Tax Department plugs revenue leakage, expands tax reporting with data warehousing solution

The Situation

Tax evaders find various means to avoid paying governments their due—under-reporting incomes or sales, overstating deductions, exemptions, or credits. This results in an adverse impact on the public services that citizens are entitled to. The Maharashtra Sales Tax Department (MSTD), in a bid to plug such revenue leakages, sought to arrest evasion, whilst expanding its taxpayer base. With 11,000 personnel, MSTD contributes a staggering two thirds of Maharashtra’s revenue through Sales Tax and Value Added Tax (VAT).

Moreover, the tax agency wanted to step up efforts to boost revenue collection. A revenue forecast model was conceptualized to set targets. However, the agency lacked appropriate tools to create accurate forecasting inputs and perform advanced analysis. Existing processes required streamlining through business process analytics to break the silos. Retrieving relevant analytics from vast chunks of data and gathering a consolidated view of its collections and operations was a bitter challenge.

To meet these challenges a robust and scalable technology foundation comprising data integration and advanced business analysis was envisaged. A business intelligence and data warehousing solution was seen by MSTD as the ideal means to create such a foundation.

MSTD has constantly been focused on reducing tax evasion and associated revenue leakages. Through our collaboration with Capgemini, MSTD has implemented a Computerized Desk Audit system which detects instances of unmatched tax credit claims with enhanced efficiency, and has also augmented overall operating efficiency. This project is the first step toward the transformation agenda set up by MSTD to infuse technology for better tax compliance and better service delivery to the dealers.”

Dr. Nitin Kareer, IAS
Commissioner of Sales Tax, Maharashtra
**The Solution**

MSTD selected Capgemini as a technology partner to overcome those business problems. Capgemini was selected for its expertise in Business Intelligence (BI) and analytics solutions for Tax and Welfare agencies and its experience with similar implementation at large agencies in the Europe. Capgemini’s Tax and Welfare team supports agencies across the world to accomplish a digital transformation that prepares them to detect and rapidly combat tax evasion and deter non-compliance. With 4,700 tax experts, Capgemini is the world’s largest global systems integrator, working with 33 leading tax and welfare administrations across Europe, North America, South America, and Asia Pacific.

Capgemini implemented an end-to-end business intelligence, data warehousing, and reporting solution from scratch, including installation of hardware, software, solution definition, and support. Capgemini experts defined comprehensive solution architecture for MSTD using SAS Enterprise Data Integration Studio, SAS Enterprise Miner, and SAS/ETS, SAS Enterprise BI Studio, powered by HP hardware. Comprising 1,000 database tables, over 600 ETL jobs, 350 reports, and 30 dashboards, the solution integrates data extraction storage data mining, data analysis, and reporting tools. It automates the process of building sophisticated predictive models and enables the detection of fraud through circular trading and predictive analysis.

Capgemini also implemented the Computerized Desk Audit (CDA) for MSTD to calculate the tax liability of dealers on the basis of 11 parameters.

**The Result**

Capgemini’s successful collaboration with MSTD resulted in a sophisticated data warehousing solution that enabled the MSTD to spot potentially fraudulent claims and expand its taxpayer base. The solution closes the gap between revenue owed and collected and detects erroneous patterns of financial reporting. Predictive analytics helps gather intelligence from different channels to incorporate the right inputs into the forecasting models. The project is unique and the first of its kind in India.

The CDA implementation performed by Capgemini helped MSTD accrue numerous benefits, including improved service delivery by actualizing Anywhere Anytime services for website compliance, enabling improved dealer satisfaction due to easily available information, and bringing government services closer to the doorsteps of citizens. Moreover, with CDA compliance, the dealers were spared the effort of appearing before an audit officer. Involving dealers in the audit process upfront via CDA provided MSTD with an opportunity to respond to their tax liabilities. In addition, the decreased cost of compliance and reduced response and resolution time helped MSTD save time and cost incurred by dealers. CDA was run on all dealers, enabling MSTD to realize Rs. 56 crores in additional tax revenue.

MSTD was able to successfully implement CDA and observe an increase in revenue collection. Due to the use of advanced technology and integration with a dealer-facing e-service, there was an observed reduction in the tedious and manual effort, thereby enhancing operating efficiency. The CDA implementation also freed up human resources from
Business Audit work for additional tax for eleven months. This resulted in further financial savings.

MSTD is now well equipped to collate data from various external agencies across Maharashtra, as well as the Indian Government, to identify tax evasion and stop revenue leakage. Additionally, robust reporting ensures MSTD has real-time access to accurate data at the right place and right time, replacing manual processes. The project has achieved such unprecedented success that it is already being recognized with prestigious awards from industry bodies.

Commenting on the successful association with Capgemini, G.V. Bilolikar, Joint commissioner of Sales Tax, Economic Intelligence Unit said: “Capgemini’s solutions have been an advantage to our operations as they have helped us apprehend revenue leakage resulting from tax evasion—a massive challenge faced by state tax and revenue collection departments around the country. The BI-DW solution implementation at MSTD enabled us to analyze the massive data and supported business decision making. The CDA implementation has been successful and has been widely adopted by the dealers. It also helped us realize value close to INR 56 crores immediately after its implementation. This success was jointly conceived by both the MSTD core team as well as the Capgemini project team with the able sponsorship of the Honorable Commissioner of Sales Tax.”

Vinay Kargaonkar, IPS, Special Inspector General of Police and Chief Vigilance Officer, Maharashtra Sales Tax Department, commenting on how the Capgemini solutions helped MSTD control tax evasion said: “The BI DW initiative has brought a revolutionary change in the way we make decisions everyday- moving away from a person to a system based decision making. The CDA implementation also proved instrumental in controlling tax evasion. The Capgemini team not only implemented the solution but also helped our officers use the system efficiently.”