InfoCepts

Developing an Interactive Map Solution for a Leading Airport Management Group to Enable Efficient Lease and Sales Management

Summary

Our client is a leading airport management group that operates the retail spaces of one of the world's largest and busiest airports. They faced challenges in their rental, lease and sales management process. We developed a MicroStrategy based interactive map solution that enables their stakeholders to make decisions efficiently.

Industry
Airlines

Users
Tenancy Management Team and Marketing Team

Technologies
MicroStrategy, Netezza, JavaScript, ASP.Net and JAVA

Team Size
2 InfoCeptians

→ The Challenge

Our client is a leading airport management group that handles passenger traffic at one of the world's largest and busiest airports. It places them in an advantageous position to monetize passenger traffic. A significant portion of their revenues depends on their ability to manage the airport's commercial spaces effectively. Our client's tenants are hundreds of multinational retailers that operate their stores from these spaces.

They sought our expertise to eliminate inefficiencies from their rental, lease and sales management process. Their management team struggled to keep up with renewal dates of tenants. Failure to initiate timely tenancy agreement renewals frequently had led to lower than expected profit margins. The process required considerable manual efforts to analyze data and generate store KPIs that are critical for our client to –

- Make lease renewal decisions involving rent appreciation
- Offer promotional guidance and support to tenants affected by low sales
- Cater to rental requirements of potential tenants from their waiting list
- Plan initiatives to strengthen tenant relationships and ensure long-term profitability

They required a solution that could address the following challenges –

- Inaccuracies arising from their dependence on Excel for data analysis
- Excessive delays to generate store sales and rental insights across all airport terminals and levels
- The absence of hierarchical data security
- The absence of a centralized system for storing and retrieving sales data

→ The Solution

We addressed our client's challenges with a MicroStrategy solution that features an interactive map interface. The interface provides a more efficient means than Excel based reports for analyzing store sales and tracking renewal dates. It enables our client's decision makers to effortlessly access store sales and rental insights with point, click, and hover actions. The interface features a grid that displays detailed insights to strengthen decision-making.

Our client provided spatial data of all stores at the airport to us. We stored the data in a JSON file to create store shapes on the map. The shapes were critical for generating a dynamic floor map using HTML and Java script code that integrates with MicroStrategy Dossier.

Other key elements we developed for the solution are as follows –

- A centralized system that collates data from distinct operational data sources
- A custom widget made with HTML and JavaScript that secures data with API encryption
- A custom code that identifies store locations on the map and assigns color thresholds as per their rental margins
- Interactive features like zoom-in, zoom-out, movement in all directions and map rotation
- User restrictions to ensure data security at all levels

→ The Results

Our solution has received commendable feedback from our client for its interactive and seamless map interface. Their decision makers appreciate our solution's ability to predict sales and rental margin trends effortlessly. Following are the solution's key benefits -

- Time to insights has reduced from an average of four hours to no more than 15 seconds
- Maintenance costs and efforts have reduced by more than 50%
- Real-time insights and alerts enable key stakeholders to take decisive actions for avoiding revenue loss
- Accurate prediction of sales and rental margin trends leads to better retail space management initiatives