

Actionable Strategies

Data Analytics for Real Estate

Client Profile



The client is a global real estate services company that operates a portfolio of properties and development projects. It is fully-integrated, developing and managing premier assets focused on the tenant experience.

The company has \$202B in assets and 19,000 employees managing over 600 properties. 30 more projects, comprising 40M square feet, are under development. The portfolio contains 450M square feet of commercial properties, over 17,000 apartments and 170 retail destinations.

Services include:

- Business & Capital Planning
- Property Management

- Leasing
- Marketing
- ♦ Development
- ♦ Design & Construction
- Arts & Events

Business Objective

Executive leadership did not have a clear picture of the company across global regions. The



CIO engaged Actionable Strategies for our expertise in real estate, program management, data warehousing and data analytics. The objective was to drive a program to deliver a data warehouse and initial business intelligence functionality.

Stated Constraints

The CIO had a firm grasp of the constraints that would be faced.



- Business re-prioritization and evolving international initiatives required agility
- Close coordination with a maturing PMO was required including guidance in best practices
- Deliverables and interim work products were being scrutinized by senior executives requiring polished and succinct reports that summarized the detail provided by the project teams
- Managing the implementation vendor was a high visibility item due to past issues experienced by the client
- Internal capacity was already overcommitted requiring Actionable Strategies managers to "roll up their sleeves" with data and business intelligence work
- This was the first end-to-end initiative for the IT
 Director responsible for the program

Data Governance

Data Governance was essential to immediate and future success. The implementation vendor was responsible for creating a data dictionary and logical data design. A reasonable target of one year was negotiated. However, the numerous legacy systems with known data quality issues necessitated creating a separate data governance project.

Composite Data

Data analytics was viewed as a strategic program with enduring value. The long term model included data beyond the operational realm. This included a number of domains outside of the scope of the initial data warehouse.

This required planning for an extended data model, ingestion of data and ongoing data quality management managed by defined data governance. Additional data sources included:

 Corporate data required for more strategic reporting

Solution Approach

Managing the program required that we identify work streams not part of technical implementation. While the client considered some of the additional effort, there were a number of critical sub-projects that were critical to success.

Project Management Services and Governance Support

- Project management support in compliance with PMO standards, as negotiated
- Best practices around project governance including PMI guidelines
- Monitoring, control and reporting
- Incremental work to close any identified gaps

Data Warehouse

- Best practices around implementation methodology
- Data governance model and setup
- Master data management guidance
- Problem identification and remediation

Application Decommissioning

- Functional assessment of application portfolio
- Architectural implications
- Migration plan for applications
- Application development and integration consulting

- Occupants' demographic and other master data overlays
- External financial data about tenants and their parent organizations
- Lease information not previously captured in structured data models
- Metrics related to tenants, leases, properties and geographies

Data Quality Management

While individual departments understood that there was dirty data in their



reporting, an overall plan needed to be enacted to ensure that strategic reporting would be accurate on a consistent basis. Data quality management was initiated as a longer term initiative. After initial data cleansing, an ongoing operational effort was defined to ensure that strategic reporting remained effective.

Future State

Business Intelligence was expected to play a much larger role at the client. It was anticipated that BI would be used across all of the operating companies once the data and tools were available. In addition, front-line users and individual contributors were expected to use BI once the needs of executives were met. These future needs necessitated a longer term view of data models and tool selection. For example, multi-currency reporting and slowly changing dimensions had to be considered.

Business Results

Actionable Strategies successfully drove the program forward and managed the individual



projects and vendors. The client was able to use their major deliverable of a "Comprehensive Enterprise BI Platform" to address immediate needs:

- Identify portfolio risks
- Meet publicly stated guidance
- Provide single source of enterprise information for analytical distribution

One stated objective was to "Improve Operational Efficiency through system integration and best practices". These goals were realized through processes and a solid technology foundation.

- ♦ Enterprise level data governance
- Standard business definitions for data
- Resilient architecture

The client was positioned to rapidly broaden the use of BI which it continued to do successfully. In addition, retirement of inefficient legacy applications was readily supported. Applications were replaced with more suitable solutions using modern technology. Integration of data was simple due to the enterprise data modeling that was performed.

The successful program yielded ongoing benefits which accelerated as adoption grew upon the stable foundation that included proactive data quality management.