Case Study:
BI Report Change Management and SOX Compliance

Boston Properties

Boston Properties (NYSE:BXP)

Boston MA

SOLUTIONS USED: **APOS INSIGHT**
                        APOS ADMINISTRATOR

BACKGROUND:

Boston Properties is a self-administered and self-managed real estate investment trust (REIT), and one of the largest owners, managers, and developers of first-class office properties in the United States, with significant presence in four markets: Boston, New York, San Francisco and Washington, DC.

Founded in 1970, the company was listed on the New York Stock Exchange (NYSE) in 1997. The Company acquires, develops and manages its properties through full-service regional offices. Its property portfolio is comprised primarily of Class A office properties and also includes one hotel, two residential properties and four retail properties. As a public company, financial reporting is a component and discipline critical to their success, and as their platform of choice, Crystal Reports is the reporting engine that drives reports out to management, shareholders and auditors.

CHALLENGE:

Management at public companies has a responsibility under Sarbanes-Oxley (SOX) to establish and maintain adequate internal controls over financial reporting (ICOFR), and to provide an assessment of the effectiveness of this internal control structure and the company's procedures for issuing financial reporting. It is the responsibility of the independent auditor to attest to the effectiveness of these controls and reporting.

Governance and compliance are key issues for all public companies, who owe it to their shareholders to manage financial and reputational risk, but these issues are equally important to private companies,

particularly for those that provide services to public companies. Public companies need to ensure that their standards for governance and compliance are upheld by any third-party companies with whom they share business processes.

For all companies, there is a balance to strike with regard to the time and resources available for risk management activities. Boston Properties is a big company in terms of their assets and revenue, but a small company in terms of their human resources. Over its history, Boston Properties has successfully implemented very tight management controls over financial systems, processes, security and application development. However, the passage of time has also brought a proliferation of reports, and ever-increasing reporting audit requirements, which needed to be addressed.

One of the internal audit requirements Boston Properties needed to address is to show evidence of all changes to an inventory of key reports. Addressed manually, this requirement would require a labor-intensive audit and re-baselining of these key reports on an annual and sometimes quarterly basis. Boston Properties has a medium-sized IT team, and the challenge of establishing and maintaining this control manually threatened to stretch their limited resources. They needed to implement more efficient report change management processes, and this need triggered a search for a solution.

Complicating this need was the continued proliferation of reports over time. With more than 1,500 reports, IT wanted to re-baseline all reports that were still being actively used and decommission those that were no longer required.

Another challenge for change management was the need to maintain interoperability with other enterprise systems, particularly their ERP system. Upgrades to the ERP system frequently require changes to report parameters. Such changes meant that all affected reports would need to be re-baselined in order to be acceptable to the independent auditors, creating a huge burden for the IT team.

SOLUTION:

David Pigott is the V.P., Application Development, at Boston Properties, is responsible for research and due diligence on IT solutions. David had been aware of APOS solutions for SAP BusinessObjects for several years and recognized that there was potential for APOS to assist with their audit and control requirements. After appropriate due diligence, they implemented the **APOS Insight** and **APOS Administrator** solutions to resolve their report proliferation and report change management issues, and to meet ever-increasing audit requirements going forward.

Report Proliferation

They began by reducing the size of the problem. They used APOS Insight to take an inventory of their reports and to determine how each report was being used, and whether it was necessary. Then they used the APOS Administrator solution to decommission approximately 500 of 1,500 report objects almost immediately, and another 400 shortly thereafter, bringing the total number of reports that they had to manage to about 600. With the size of the task thus reduced, they turned to report change management.

Report Change Management / Audit Requirements

Prior to the implementation of APOS Insight, Boston Properties would have to assign resources periodically to baseline reports, compare them against the ERP system, and sign off on their validity. However, this process only guarantees the provenance of the report at a point in time.

The APOS Insight solution provides advanced system auditing and monitoring capabilities. Insight's **History mode** allowed Boston Properties to exercise tight change management over a body of internal controls and financial reports. In History mode, as the name implies, APOS Insight records the history of changes to your Bi environment, content and security structures. Each time Insight scans your deployment, it notes all new and changed objects, identifying when your internal controls and other reports change. With History mode, APOS Insight lets you analyze detailed audit information to support change management controls and documentation, improve system governance, and achieve financial report and internal control compliance.

APOS Insight allowed Boston Properties to answer key audit questions:

- Have any financial reports changed?
- What changed? When were the changes made? By whom?
- Do the changed reports still produce the same results?
- Can you prove it?

APOS Insight thus helped them to fulfill a new requirement in 2015 from their independent auditor that had them baselining all control reports each quarter before signing off on financials. This process would have introduced a huge burden to IT. After performing their own tests, the independent audit firm was completely satisfied with the use of APOS Insight to track all changes to control reports.

Insight gives them a running history of changes, ensuring change history is up to date. They are now able to issue a weekly change report without placing a major burden on IT resources. This report plays a significant role in their quarterly controls meetings.

Report change management is itself a key control. When it comes to controls, automation is the preferred method, as it reduces the chances of human error or intervention, and creates significant time savings.

These APOS solutions also facilitated their recent ERP upgrade. Using APOS Insight to perform impact analysis and APOS Administrator to perform bulk updates to reports, they were able to bring Crystal Reports in line quickly with the ERP system, while maintaining a clear change management record for their control reports.

Note: David Pigott joined us for a webinar on BI System Change Management:

View the Boston Properties BI System Change webinar on demand...

WHY APOS?

Regarding report change management, David said:

> I can't imagine a public company that doesn't have this issue. Many organizations can only maintain such control by not allowing users to generate reports at all, but we have a tech-savvy user base, able to work with the enterprise systems, and we don't want to stand in the way of them doing their jobs. IT and SAP BusinessObjects platform management is there to facilitate and put controls around their workflows. Any company with SOX requirements or a need to track report change history should consider leveraging a tool such as APOS Insight for this purpose.

Formed in 1992, APOS Systems is a global provider of solutions which enable well managed business intelligence. APOS solutions improve the return on your BI investment through enhanced BI platform management, providing automated and simplified administration, detailed platform auditing and monitoring, robust archive, backup and restore capabilities, enhanced data connectivity, enhanced content publishing and distribution, detailed BI query awareness and controls, and targeted solutions to speed and streamline your platform migrations.

APOS solutions simplify, automate, complement and extend your BI platform management practices.

FOR MORE INFORMATION:

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