CHALLENGE

In order to drive efficiencies based on their continued growth and expansion, this organization had been undergoing massive system overhaul and conversions across all of its 6+ distribution centers. A key aspect of concern for management and the internal audit team was integrity of inventory and costing. As each distribution center completed its conversion, the internal audit team was tasked to perform a check on the inventory records and produce a report of any findings that required local management to review and possible rectify.

On average, they were dealing with 1.5million records of inventory data from each distribution center that required examination – a task that would’ve taken weeks to set up and many days to execute. Complicating matters further was the need for additional data from multiple disparate systems. Data integrity was of upmost importance during system conversions, especially as it related to inventory and costs. Any significant discrepancy and errors could have had a negative impact on the company’s bottom line.

SYSTEM CONVERSION AND DATA VALIDATION

COMPANY PROFILE

One of the largest food and drug retailers in the USA with over $25B in revenue, 2,000+ stores operating in 30+ states
SOLUTION

This organization turned to Arbutus Analytics for this important project. To ensure accuracy and completeness of its inventory data after conversion of each distribution center, Arbutus developed and implemented a full suite of analytics procedures/scripts to define an average of 1.5 million inventory records, plus supplementary data needed from other disparate systems. Arbutus Analyzer was then used to prepare and analyze the massive data tables, incorporating and harnessing powerful commands such as joins, summarize and cross-tab to produce multiple outputs, one of which was an exception list (average of 10 anomalies) that would require further review and investigation by local management.

Arbutus Analyzer was also able to accommodate SQL query, which was written to pull data needed from all the different systems Lawson (financial), SSIMS (inventory, cost). Other features that were particularly effective for this project were the ability to: select and apply multiple data queries without having to use filters; automate sample selection based on custom criteria; and designing/applying scripts/procedures to automate and speed up execution of all the common commands.

RESULTS

The Internal Audit team has seen tremendous benefits since applying Arbutus Analytics to assist with their system conversions. With Arbutus, the IA team is able to continue to achieve the following:

- **Provide strong assurance to senior leadership and local leadership around the conversion success of each distribution center;**
- **Accrue significant time savings (few days to less than 30 minutes) in executing inventory data testing;**
- **Ability to efficiently and effectively attest to the strength of each data center conversion efforts and how they stack against each other;**
- **Harness significant power and speed of Arbutus Analyzer, which has no data limitation, in handling large 1.5 million data volume plus data from multiple disparate systems;**
- **Confidence in data protection from such things as human edit errors during audit test – read-only analytic software;**
- **Retain full audit trail that is visible within the analytic scripts/procedures, plus Command Log, making them available for anyone to query and trace;**
- **Stand up an analytics solution that is fully automated, scalable, and repeatable across all distribution centers;**
- **Produce powerful, sophisticated reporting such as trending and other types of comparative analysis**