

## Client Information

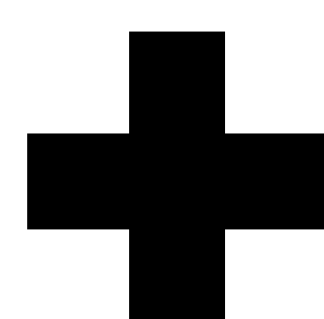
- PepsiCo was founded in 1965
- PepsiCo's lineup has 500+ unique brands including:
  - 
  - 
  - 
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- PepsiCo consistently exceeds over 11 figures in revenue each year
- The client, Tony Orr, Senior Manager of PES (Pepsi Equipment Service) Parts, acts as an "Amazon" for over 300+ PepsiCo technicians across the U.S. and Canada



**PEPSICO**

## Problem Statement

Large Network with High Inventory Cost

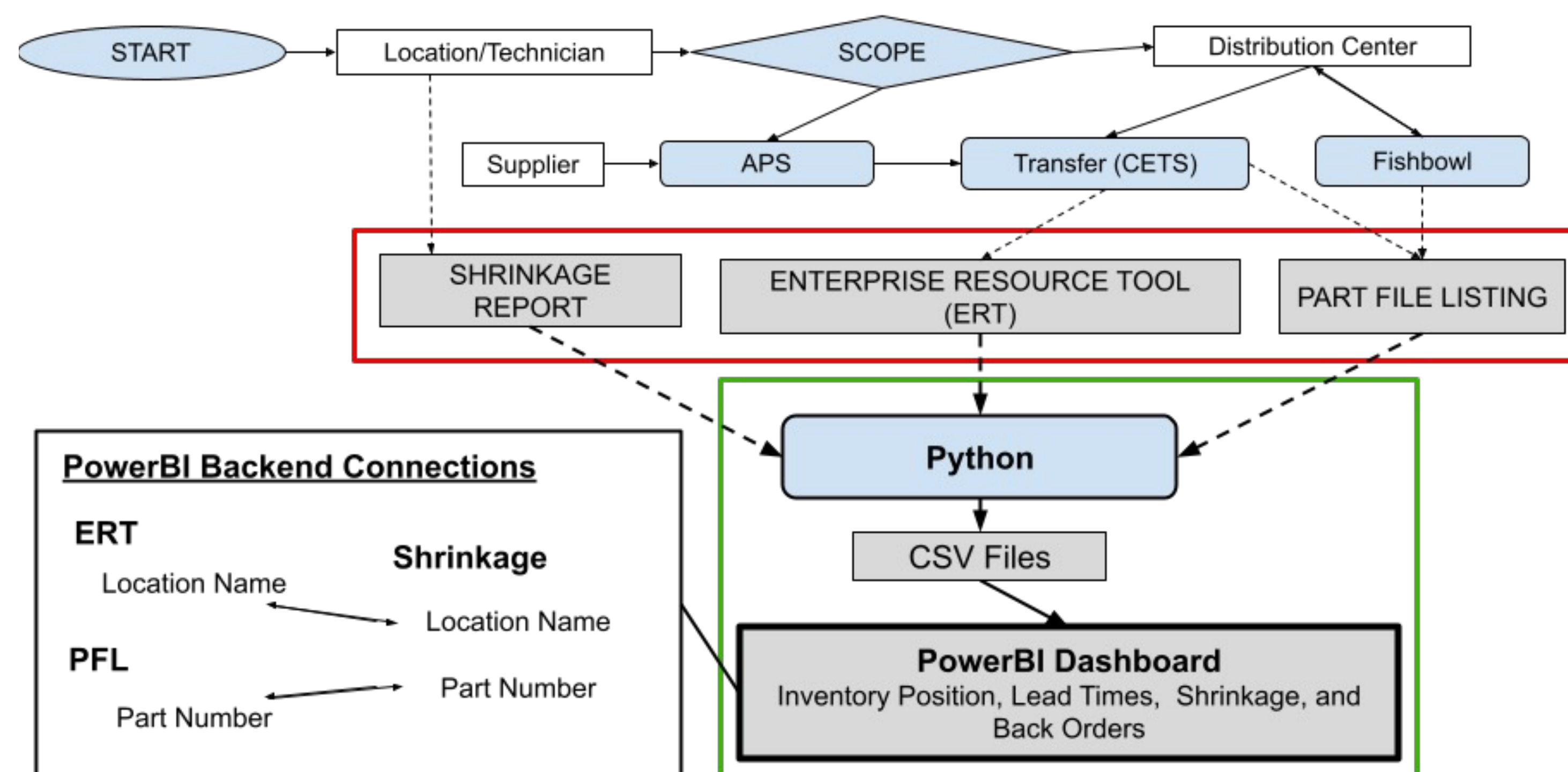


Lack of Visual Reporting & Decentralized Data



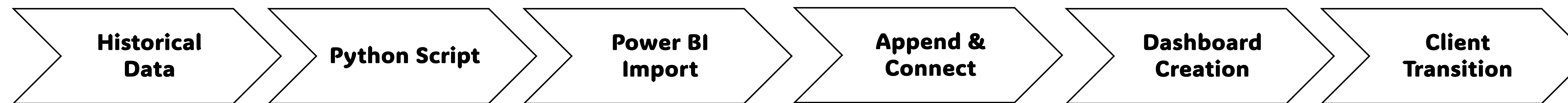
Overspend and Supply Chain Exposure Risk

## System Model



- Large amount of decentralized supply chain data collected daily with different software and stored as .csv (Red box)
- Python scripts compile all historical data from .csv files and are imported into Power BI and connected on the backend (Green box)
  - New data can be imported via Power BI

## Methodology



- 2018-2023
- Daily Enterprise Resource Tool, Part File Listing and Shrinkage Reports

- Cleans and concatenate all the historical data from ERT and PFL
- Simpler analytics

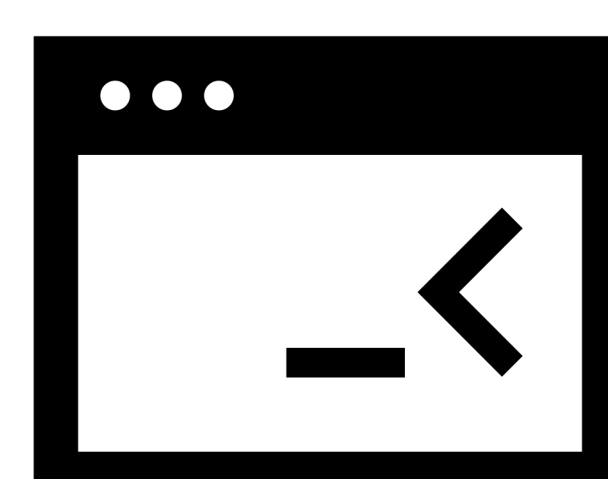
- Compiled historical files uploaded
- Corrected errors with file size and path

- Combined each years ERT file
- Created new metrics in file
- Connected file in backend

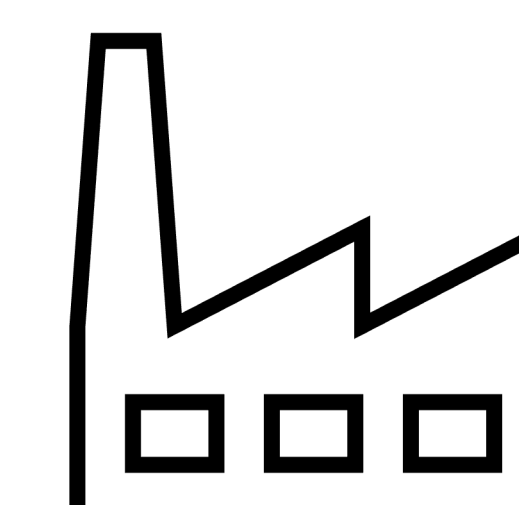
- 2 ERT pages for Lead Time and Back Orders
- 3 Shrinkage pages
- 1 PFL page for Inventory Position

- Hard drive with dashboard, .csv files, python script, and standard operating procedure

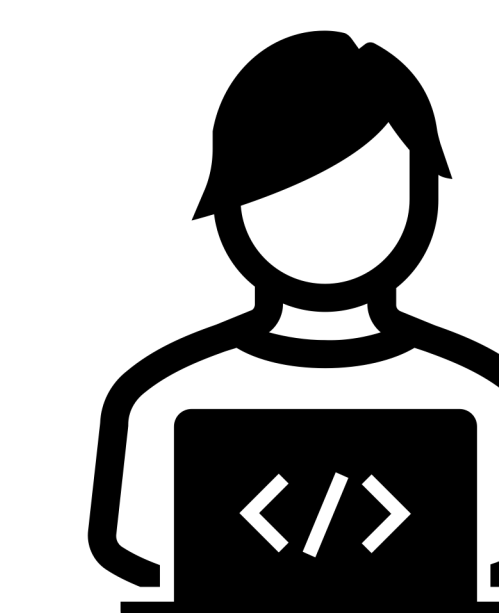
## Applied Knowledge



- IE 332
- Databases
- Algorithms



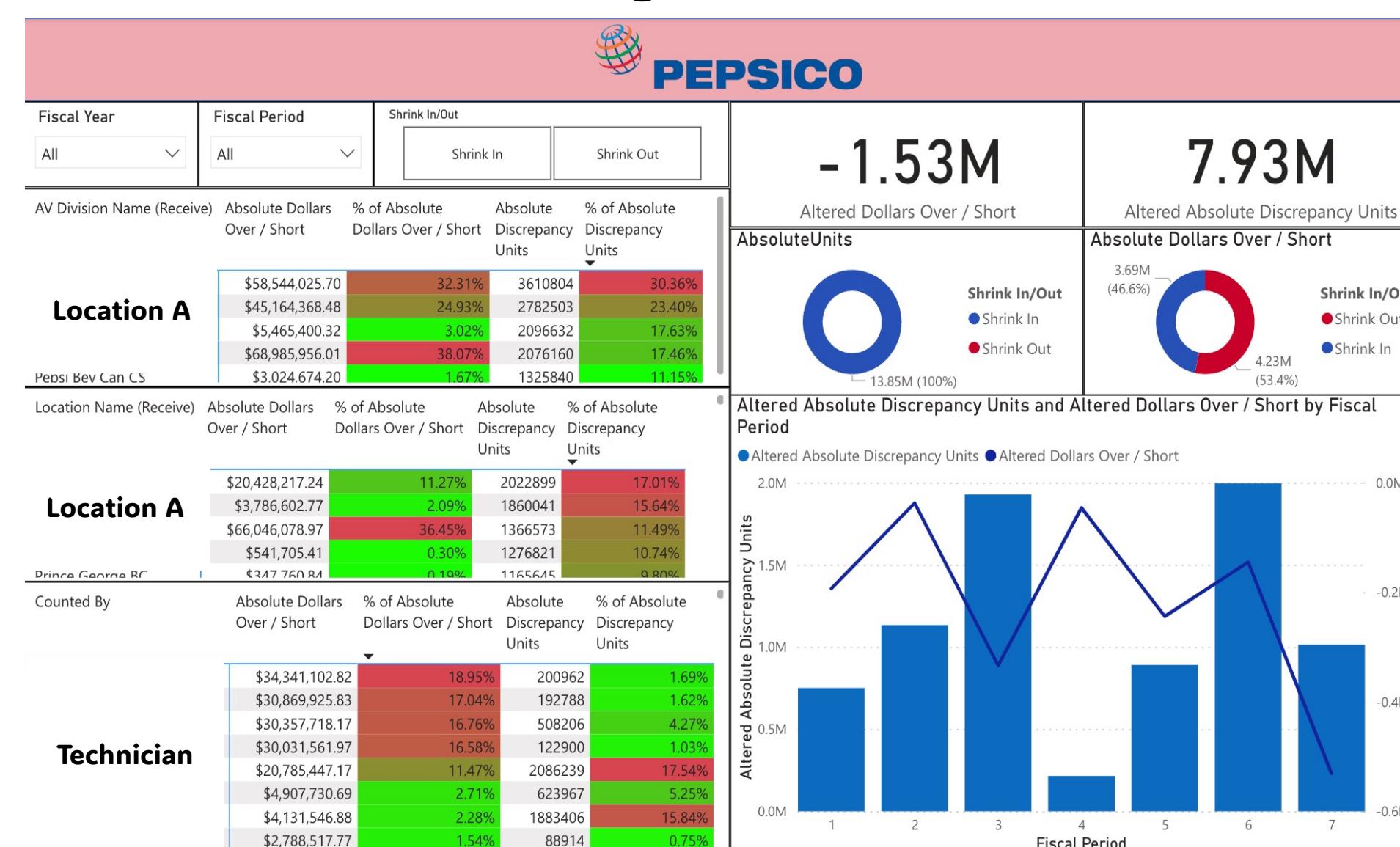
- IE 383
- Supply chain analytics
- Lead time



- IE 486
- Usability Testing
- Interface Design

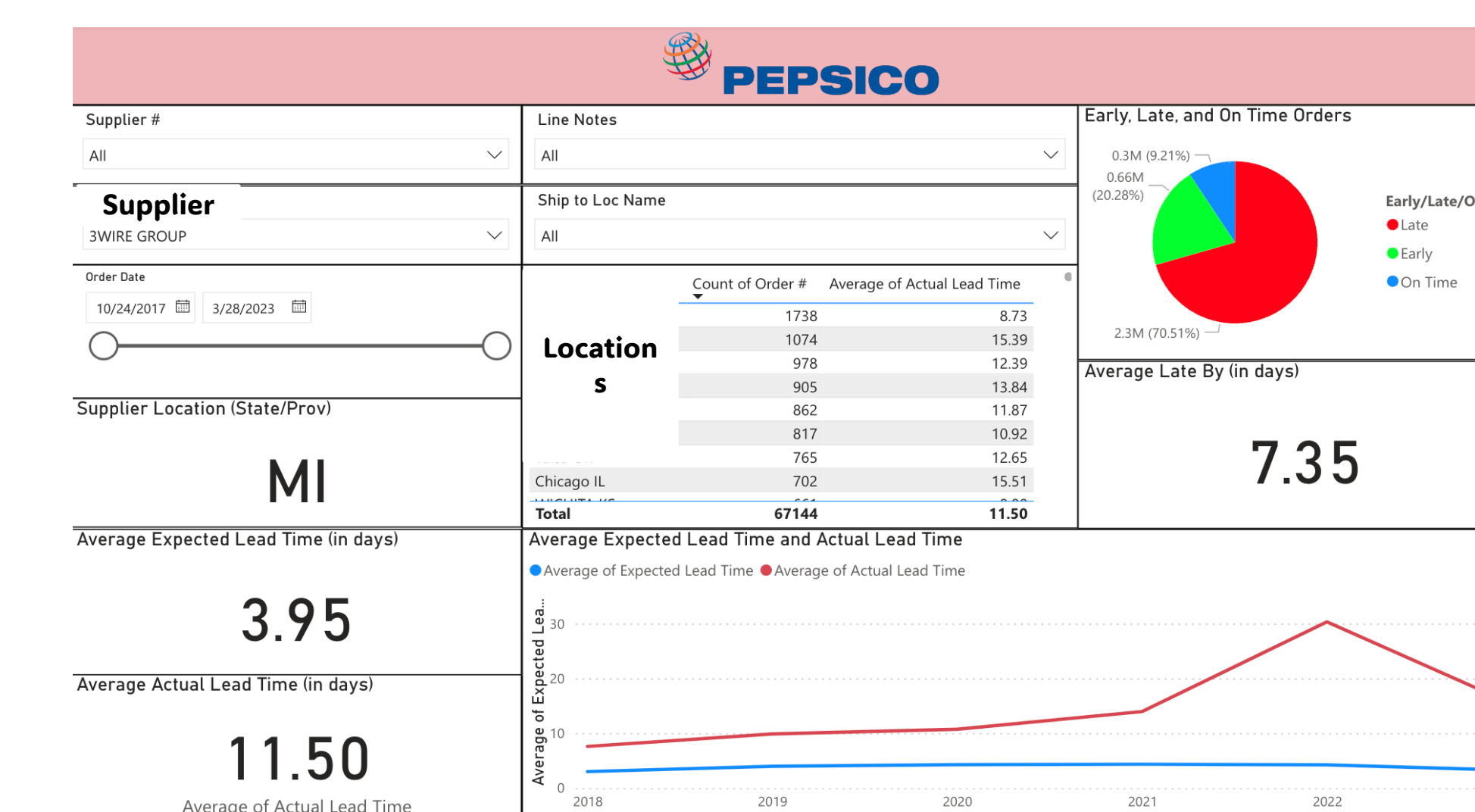
## Results

### Shrinkage Dashboard



- Utilizes drill down by person, division, and location
- Scorecard of shrinkage, over/under, and trends on additional pages.

### Lead Time Dashboard



- Filters: suppliers, part number, location, and date
- Displays supplier location, expected and actual lead time, and late order information



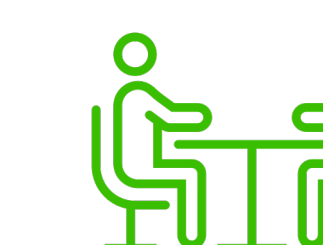
Enhanced organization



Cost Savings



Time Saving



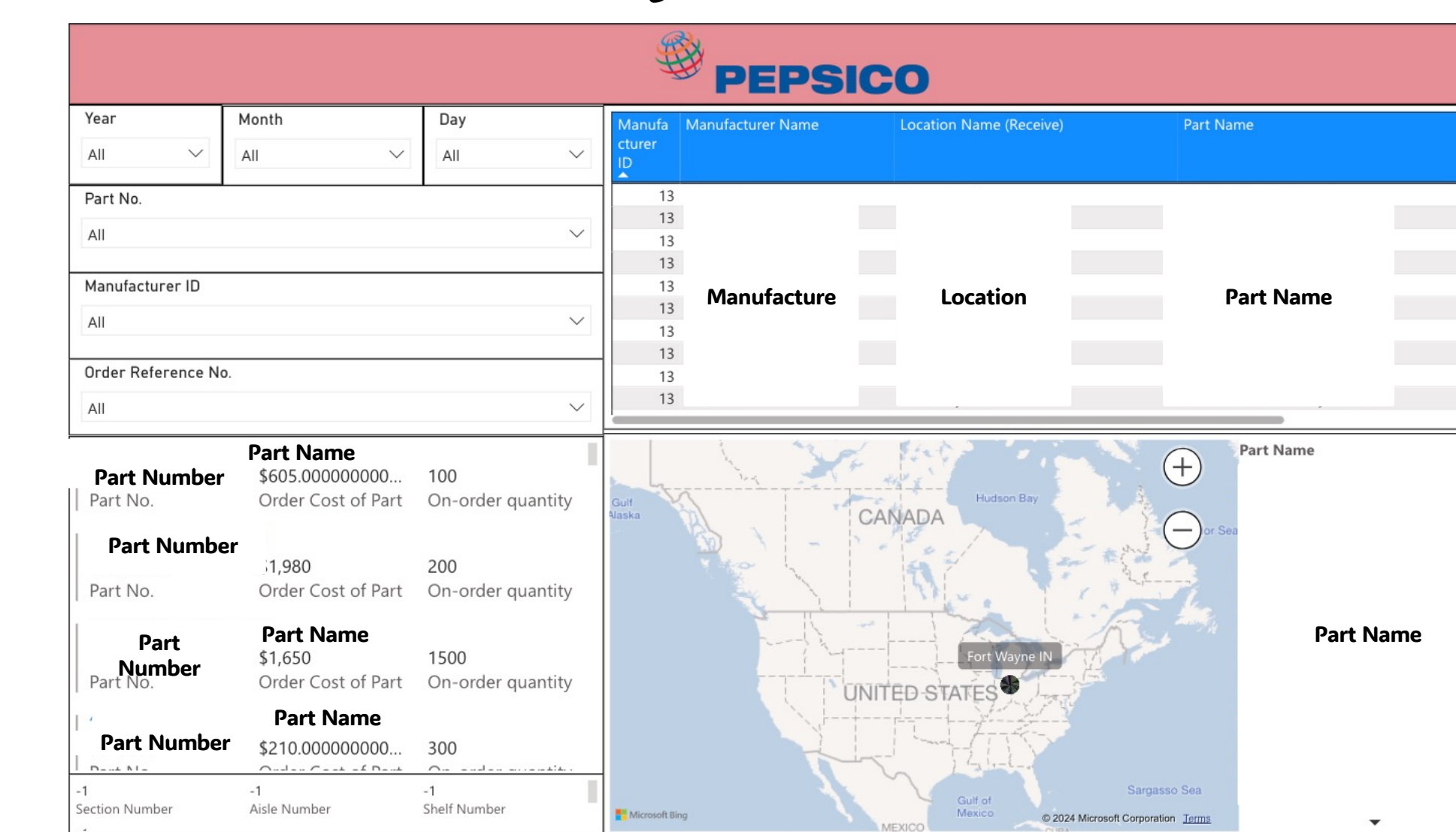
Supplier Evaluations

### Back-Order Dashboard



- Filters: supplier, requester, and date
- Provides back-order quantity, total amount, and part information.

### Inventory Position Dashboard



- Filters: date, part number, manufacturer, order number
- Displays part information and location status