# 3-Minute Presentation Script – HAVI Data Visualization Competition (Enhanced)

## 1. Introduction (0:00–0:20)

Hi, my name is Anthony Baptiste and for the HAVI Data Visualization Competition, I focused on solving three key supply chain challenges using real-world QSR data: Inventory Optimization, Supplier Performance, and Waste Management. I used Python to engineer key performance metrics and Power BI to visualize the insights in an interactive dashboard, styled using HAVI’s brand colors for consistency and clarity.

## 2. Inventory Optimization (0:21–1:00)

The first area I explored was inventory optimization — specifically, whether restaurants were receiving the appropriate amount of inventory compared to what was actually needed based on menu item sales.  
  
To do this, I calculated expected ingredient usage using recipe percentages and sales data, then compared that to what each restaurant actually received. The line chart shows that restaurants consistently received more than necessary, and the understocking rate was 0% — suggesting that while HAVI effectively prevents stockouts, there's a strong opportunity to reduce excess delivery and improve forecast alignment.  
  
The dashboard also includes slicers to explore performance by restaurant and product category.

## 3. Supplier Performance (1:01–1:30)

Next, I evaluated supplier performance by comparing what suppliers reported shipping to distribution centers against what the DCs recorded receiving.  
  
The bar chart highlights the top suppliers with the largest performance gaps, most of which are negative — meaning DCs recorded receiving more than was reported shipped. This could point to early deliveries, unlogged overproduction, or potential reporting mismatches.  
  
A supporting line chart shows trends in shipped versus received volume over time to help pinpoint when these mismatches occur.

## 4. Waste Management (1:31–2:10)

Finally, I looked at potential waste by identifying overages — cases where restaurants received more than they were forecasted to need. A matrix highlights which restaurant-product combinations had consistent over-deliveries, while a bar chart ranks the most overstocked product categories.  
  
This part of the dashboard provides a clear view into where excess inventory is accumulating, giving HAVI insight into where potential waste reduction strategies could be applied.  
  
A card also displays the total excess volume across all restaurants.

## 5. Conclusion (2:11–3:00)

Together, these visualizations tell a clear story: HAVI is successfully avoiding understocking, but there's a valuable opportunity to optimize delivery precision, reduce overages, and improve alignment between supply and demand.  
  
This dashboard provides HAVI with a dynamic tool to explore trends over time by supplier, product category, or restaurant — and supports data-driven decision-making for enhanced supply chain performance.  
  
Thank you for the opportunity to analyze your data. I hope these insights support your continued operational excellence.