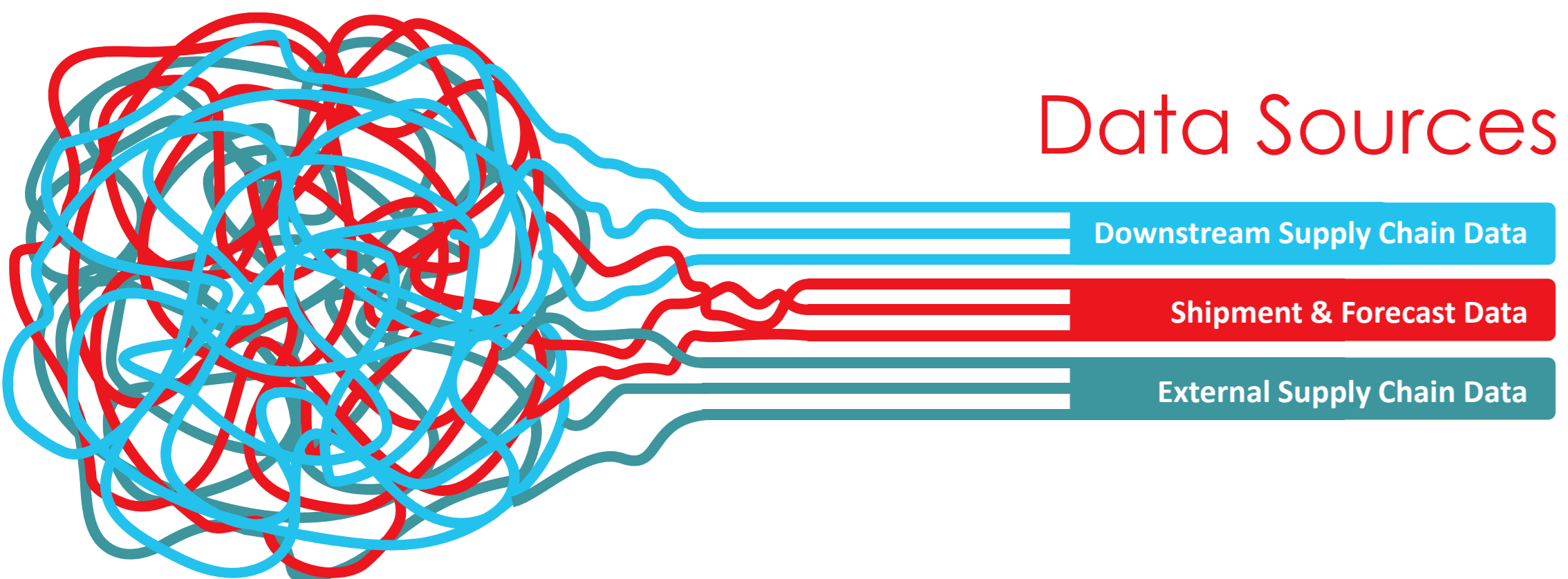


Foresight is 20/20

Improving Forecast Accuracy Through Demand Sensing

Motivation / Background

- "We must constantly strive to reduce our cost in order to maintain reasonable prices. Customers' orders must be serviced promptly and accurately." – Lines 3 and 4 of the J&J Credo
- J&J Vision is the contact lens global leader by market share but faces competition from other large companies and disruptive entrants.
- Driven to continuously improve forecast accuracy and capitalize on lower inventory costs and higher service levels.
- Demand sensing** is an approach to leverage data to continuously adjust forecasts based on shifts in key signals within the system.



Key Question

Can J&J Vision improve its forecast accuracy by using demand sensing?

Relevant Literature

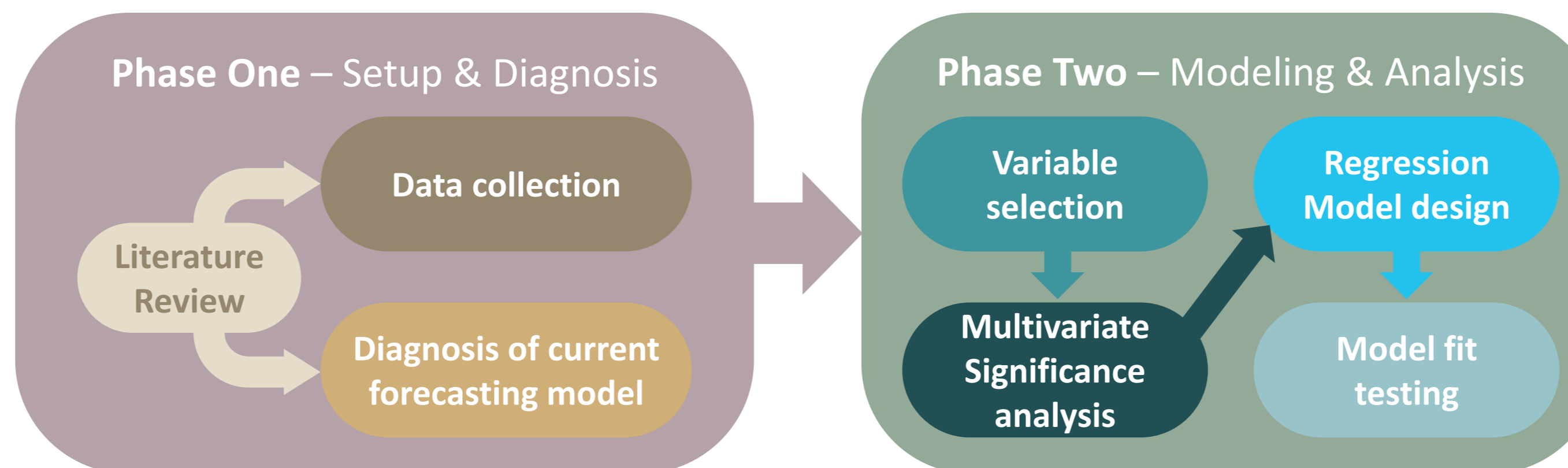
- Chase, Charles W. *Demand-Driven Forecasting: a Structured Approach to Forecasting*. John Wiley & Sons, 2013.
- Wang, Lihui, and Koh, S.C. Lenny. *Enterprise Networks and Logistics for Agile Manufacturing*. Springer, 2014.
- Dr. Lapide, Larry. "Know Your Forecastability." *Journal of Business Forecasting*, Fall 2015.



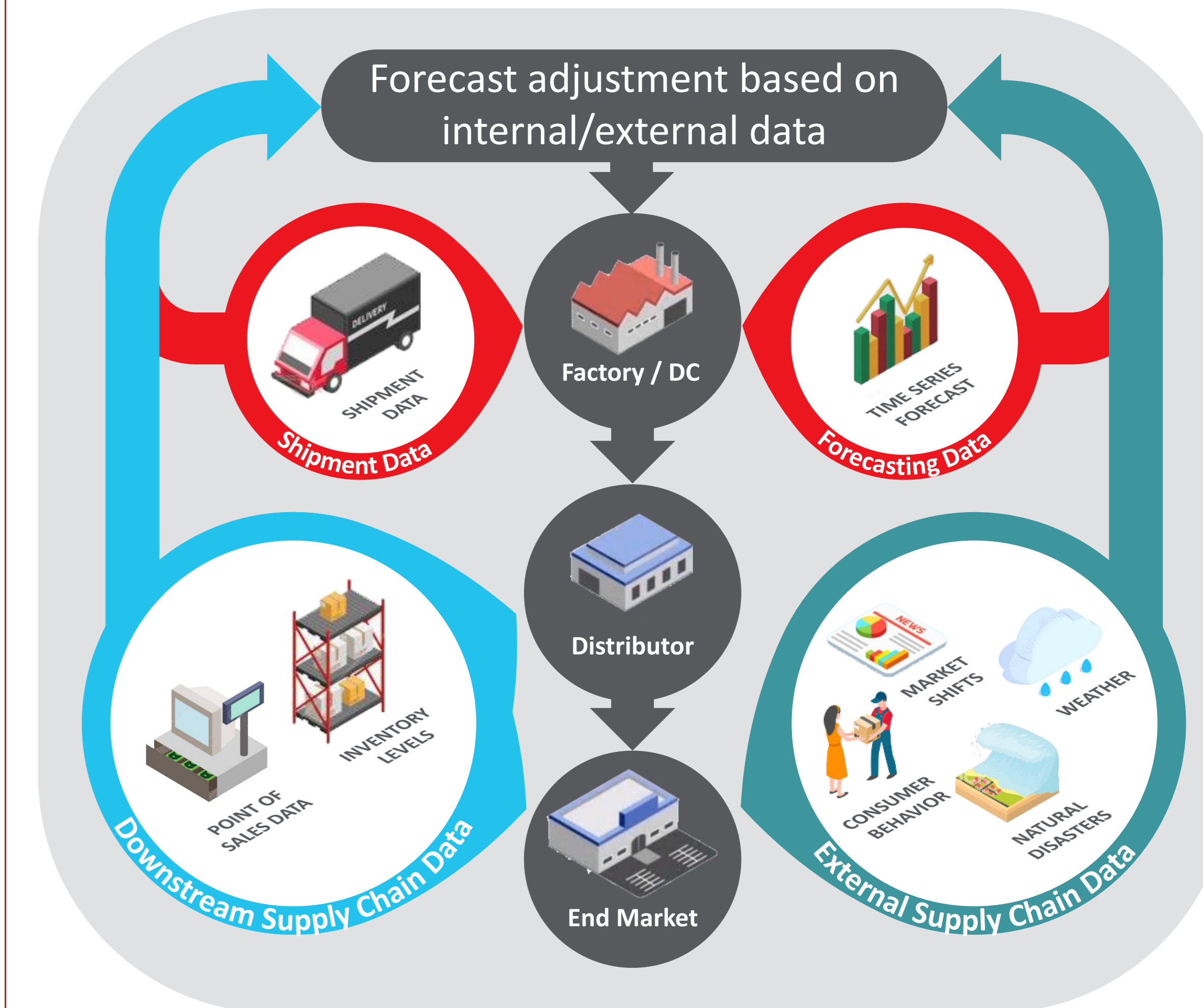
The Problem

- J&J Vision owns high-end manufacturing lines that are at near-maximum utilization with expansion requiring considerable CAPEX and time.
- J&J Vision's forecast MAPE is below 20%.
- J&J Vision wants to explore the potential of **demand sensing** as a means to improve forecast accuracy even further.
- The main objective of this project is to identify variables that explain demand variation and help to build a **demand sensing** model.

Methodology



Our Approach to Demand Sensing



Expected Contribution

- Explore J&J Vision's current forecasting process and data and evaluate alternative methods.
- Identify key variables that drive and influence demand.
- Assess the potential impact in forecast accuracy of a **demand sensing** model.



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