



An eminent American large healthcare organization built an **AI model that can determine the optimal min and max inventory levels** for each supply cabinet by predicting the inventory utilization of each supply cabinet.



The Background

The client involved Tiger Analytics to :

- Help reduce the current stockout rate of 0.5% by reducing slow moving items from the supply cabinets and creating space for the fast-moving items.
- Build an AI model that can determine the optimal min and max inventory levels for each supply cabinet by predicting the inventory utilization of each supply cabinet.

The AI forecast model would be delivered via Tableau or a raw Excel file output for the MVP. The person in charge of the supply cabinets would ask the nurses to validate the recommendations.

Key Challenges

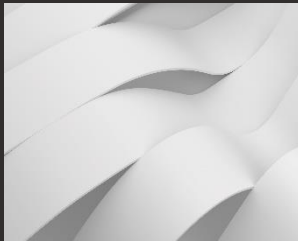
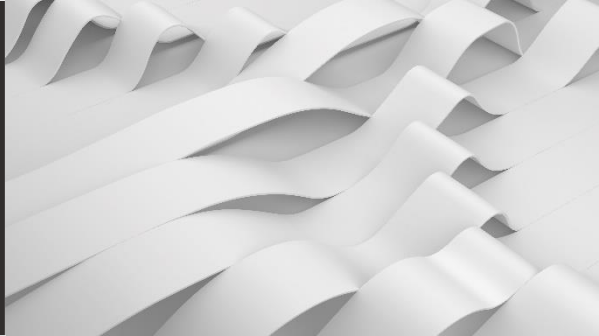


Presence of more than 900 cabinets

(~450 cart IDs) and ~450 nursing stations in the system

Model complexity grew

with availability of multiple items such as bandages, gloves and syringes.

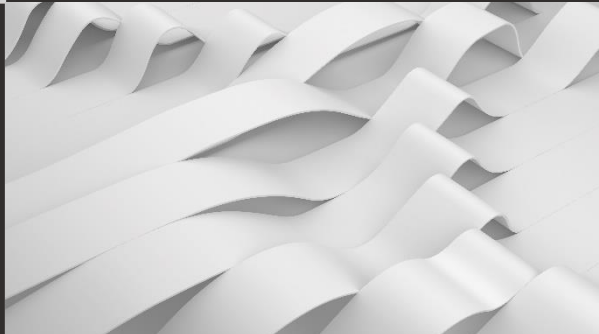


Non-availability of information

from nearby stations to replenish the out-of-stocks.

Data was as old as 2017.

Multiple gaps identified in Pharmacy Order information



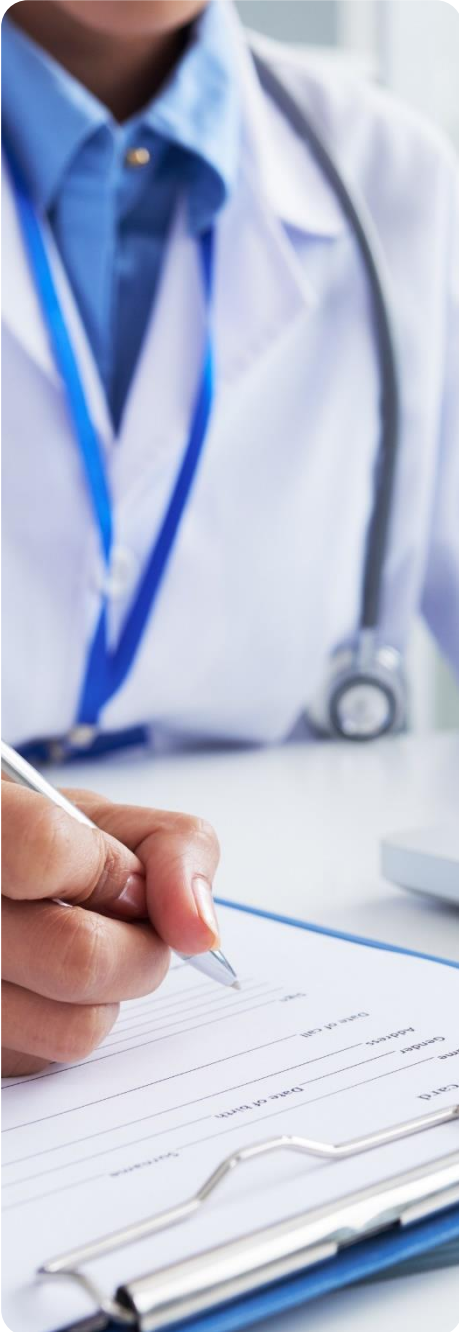
Our Solution



Pharmacy order data from Hive tables was aggregated from all locations by hour, day, month wise.

EDA was done for top 6 locations which accounted for 95% of order volume across the client's system.





Value Delivered

Identified 34K item X cart whose weeks of supply is high and can reduce their storage space

Created an AI model to determine the order point and order up to quantities for auto replenishment.

About Us

Tiger Analytics is a global leader in AI and analytics, helping Fortune 1000 companies solve their toughest challenges. We offer full-stack AI and analytics services & solutions to help businesses achieve real outcomes and value at scale. We are on a mission to push the boundaries of what AI and analytics can do to help enterprises navigate uncertainty and move forward decisively. Our purpose is to *provide certainty to shape a better tomorrow.*

Being a recipient of multiple industry awards and recognitions, we have 4000+ technologists and consultants, working from multiple cities in 5 continents.

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