



RESENSE®
SENSE. FORECAST. PLAN.

AUTOMATION OF INGREDIENT ORDERING FOR DOMINO'S. DELICIOUSLY.



DOMINO'S INDIA

Jubilant FoodWorks Ltd (JFL) holds the master franchise for Domino's in India, Sri Lanka, Bangladesh, Bhutan and Nepal. It also happens to be India's largest food services company with 1,625 restaurants, across 349 Indian cities, where millions of pizzas are sold every month.



THE PROBLEM STATEMENT

Store Managers and Planners at Domino's were manually indenting required ingredients to the warehouses, which required them to spend 8-10 hours/week of their productive time to calculate indents.

Due to the poor accuracy of indents, regular wastage and stock-outs were leading to a loss in sales and poor customer experience.

An imbalance in ingredient inventory also led to undue wastage of perishable items.

• These issues would get worse during special events like festivals, big sporting events, holidays, etc where GDMs' inaccurate indents were even further off the mark.

HOW DID WE ADDRESS THE PROBLEM?

RESENSE - our AI/ML-based demand forecasting platform was deployed across all 1,675 stores enabling automatic calculation and indentation of ingredients at required replenishment cycles.

This has created end-to-end visibility of inventory of all ingredients at the store level, monitoring stockouts, inter-store transfers, and wastage.

Store managers (GDMs) can now focus more on the quality of customer experience through an additional 8-10 hours/per week.

Stock availability has improved significantly leading to improved sales for the same period.

Unplanned activities like inter-store transfers too have reduced remarkably.

THE BUSINESS VALUE RESENSE ADDED:

Daily forecast accuracy for Domino's has improved by 38%

Stockouts have decreased by 36%
Inter-store stock transfers have been reduced by 39%

ROI of RESENSE was realized after only 6 months post-deployment

NEXT STEPS:



- Soon we will roll out RESENSE to other brands including Dunkin Donuts, Hong's Kitchen, Popeyes, Ekdum, and Cheff Boss.
- JFL is now exploring using RESENSE to start optimizing their workforce planning across stores and delivery teams to enhance the customer experience to a whole different level.



DOMINO'S EXPERIENCE OF RESENSE

Domino's stores across India are located in malls, highways, and high streets. We offer menu items to our customers and these items are cooked freshly. On the other hand, most of the ingredients have a very short shelf life as per our quality standards.

We need to plan the number of ingredients to be stocked almost every day to ensure maximum availability and minimum wastage. Because our mission is to deliver best-in-class customer experience as well as deliver required cost standards to meet our profitability targets.

This planning activity was being done manually at every outlet by every Guest Delight Manager of ours. The food service business is highly sensitive to a range of demand variables such as holidays, festivals, local and national events, sports, etc. Manual planning activity wasn't yielding very accurate results leading to frequent stock-outs, substantial wastage, and regular inter-store transfers resulting in increased operational costs and compromised customer experience.



In our supply chain digital transformation journey, we took up the project of automating the daily indenting of ingredients from stores to warehouses. The goal was to deploy cutting-edge digital technology to forecast the daily requirements of ingredients and use the insights to work out the optimum requirement of each ingredient to ensure maximum output as well as minimum wastage.



SINCE THERE ARE VARIOUS MOVING DEMAND DRIVERS IN OUR BUSINESS, IT WAS IMPORTANT TO USE TECHNOLOGY THAT CAN UNDERSTAND TRENDS AND BUILD PREDICTION MODELS TO COVER THOSE ASPECTS.



We decided to go ahead and roll out RESENSE across our stores' supply chain network. This was to be deployed on our cloud through data pipelines created across all data sources such as our SAP, POS, etc. RESENSE deployed its intelligent forecasting engine along with its inventory planning module for automating the indenting from stores to the warehouse based on the current replenishment cycle of each store. The key functions performed by RESENSE are:

- Daily forecast of ingredients required at each store location
- Daily forecast of usable inventory based on the shelf life of each ingredient
- Calculating the safety stock requirements based on demand drivers
- Calculating the indent quantity of each ingredient as per the replenishment schedule.
- Push the indent into the system for business approvals and execution.
- Create inventory visibility at each store to flag availability, stockouts, wastages, and inter-store transfers.

RESENSE RUNS A LIBRARY OF ML ALGORITHMS ON EACH STORE/SKU COMBINATION TO PREDICT THE DAILY DEMAND. PREDICTION MODELS LEARN FROM THEIR SHORTCOMINGS EVERYDAY BASIS ACTUAL CONSUMPTION LEADS TO IMPROVEMENT IN PERFORMANCE THROUGH ML.

RESENSE HAS ALSO BROUGHT IN A SET OF DASHBOARDS FOR ALL STAKEHOLDERS ACROSS THE ORGANIZATION TO MONITOR THEIR KEY KPIS AND REQUIRED ACTIONS AT APPROPRIATE MOMENTS.



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