# Food demand forecasting

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A project report on Genpact machine learning hackathon project 'Food demand forecasting'.

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### 1 Abstract

Accurate demand forecasting is critical for meal delivery companies to optimize procurement and staffing decisions. This project aims to predict the demand for meals across multiple fulfillment centers for the next 10 weeks using historical order data, meal characteristics, and center-specific attributes.

### 2 Problem Definition

- 2.1 Overview
- 2.2 Problem statement
- 3 Introduction
- 4 Literature Survey
- 4.1 Key Areas of Study
- 4.2 Key Findings and Gaps
- 4.3 Relevance to Current Study
- 5 Methodology
- 5.1 Data Collection
- 5.1.1 Data Overview

Column 1	Column 2
Data 1	Data 2
Data 4	Data 5
Data 6	Data 7

Column 1	Column 2
Data 1	Data 2
Data 4	Data 5
Data 6	Data 7

Column 1	Column 2
Data 1	Data 2
Data 4	Data 5
Data 6	Data 7

#### Non-null Counts:

Missing Values: There are no missing values, as all 29,999 rows are complete.

#### 5.2 Data Transformation

#### 5.2.1 Data Synchronization:

Efforts have been made to synchronize the state and district names throughout the dataset, ensuring a uniform format.

#### 5.2.2 Column Removal

#### 5.2.3 Column Rename

To enhance clarity and improve readability, several columns were renamed to more intuitive and consistent names.

- 5.2.4
- 5.2.5
- 5.2.6
- 5.2.7

### 5.3 Model Development

Insert Model Development details here.

## 6 Results and Discussion

Insert Results here.

## 7 Conclusion

Insert Conclusion here.

## 8 References

Insert References here.