# Revolutionizing Retail with Al-Driven Demand Forecasting

A Google Cloud Solution by Inflexion Analytics

In the dynamic retail landscape, precision is paramount for success. Accurately anticipating customer demand is essential to ensuring optimal inventory levels at the right locations. Leading retailers, including Carrefour, trust Google Cloud for automating precise demand forecasting, enhancing efficiency, and staying ahead in the fast-paced retail environment.

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# WHY ACCURATE FORECASTING MATTERS

Customers demand availability, and mismanaged inventory can cost retailers over a trillion dollars annually. According to IHL Group, a 10% to 20% improvement in demand forecasting accuracy directly translates to a 5% reduction in inventory costs and a 2% to 3% increase in revenue (Notes from the AI Frontier, McKinsey & Company).



## **CHALLENGES WITH TRADITIONAL APPROACHES**

Many retailers currently rely on outdated methods such as ERP-type applications, niche SaaS solutions, or even Excel for demand forecasting. Unfortunately, these approaches fall short in today's dynamic retail landscape for several reasons:

#### LIMITED ACCURACY

Existing solutions often lack the incorporation of relevant signals, leading to suboptimal forecasting.

#### HISTORICAL RELIANCE

Relying solely on past sales history becomes a limitation, especially during unprecedented times like the recent pandemic.



#### INABILITY TO FORECAST NEW PRODUCTS

Traditional methods struggle to accurately forecast new and short-life-cycle products.

#### NEGLECT OF LOCAL DYNAMICS

Ignoring local market conditions and overlooking real-time data puts retailers at a disadvantage.

#### SCALING CHALLENGES

Conventional solutions face scalability issues for larger retailers with diverse product catalogues.



# INFLEXION ANALYTICS APPROACH FOR GOOGLE CLOUD AI/ML

We understand the challenges retailers face in navigating an ever-changing market. By seamlessly integrating Machine Learning into the demand forecasting capabilities, powered by Google Cloud's ML/AI, we offer a transformative solution tailored to the unique challenges faced by retailers. AI/ML-based demand forecasting techniques offer several advantages over traditional methods, providing retailers with more accurate, adaptive, and insightful forecasting.





## Accuracy and Precision

AI/ML Techniques excel at analyzing vast datasets, identifying intricate patterns, and adapting to changes in real-time, resulting in more accurate and precise demand forecasts.



## Adaptability to Changing Conditions

AI/ML Techniques are adaptive and can continuously learn from new data, allowing for more responsive and resilient forecasting in the face of evolving market dynamics.



## Handling New Product Introductions

AI/ML Techniques can quickly adapt to and generate forecasts for new products by analyzing various factors beyond historical sales, such as social media trends, market sentiment, and competitor activities.



# **Real-Time Analysis**

AI/ML Techniques enable real-time analysis, allowing retailers to make timely decisions based on the latest information, leading to more agile and responsive operations.



## Localized and Granular Forecasting

AI/ML Techniques can factor in local market conditions, regional preferences, and other localized variables, offering more precise and tailored forecasting.



# **Continuous Learning**

AI/ML Techniques continuously learn from new data, improving forecasting accuracy as they encounter and analyze additional information.

Inflexion Analytics offers expertise in enhancing your demand forecasting through the utilization of cuttingedge Google Cloud Technologies. Leveraging advanced tools such as AutoML with Vertex AI and BigQuery ML, we specialize in constructing robust demand forecasting models tailored to meet the specific needs of your business.

#### Ready to start your journey?

Reach out to **contactus@inflexionanalytics.com** to explore how Demand Forecasting can help your

business

