From Complexity to Clarity, A Strategic WFM Success Story: 83% Forecast Accuracy and 15% Cost Reduction for a Global Retail Leader

About the Client

A leading global retailer with a diverse presence across hypermarkets, online commerce, and grocery delivery sought to optimize its customer service operations and ensure cost-effective, high-performance service delivery.

Challenge

Despite advanced systems and data availability, the client faced:

- **Low Forecast Accuracy**

  The client relied on just one month of historical data and top-down aggregation to forecast multi-channel volumes. This led to unreliable predictions, with accuracy dropping to 54%, service levels declining to 57%, and abandonment rates rising to 11%.

- **Chronic Overstaffing**

  Inaccurate weekly forecasts led to persistent overstaffing of up to 39%, inflating labor costs without improving performance. Workforce underutilization also created engagement and morale issues.

- **Service Inconsistency**

  Lack of visibility into demand fluctuations across individual channels especially during promotions or peak retail periods meant the client couldn't respond dynamically, leading to inconsistent customer experiences.

Executive Summary

The client was grappling with poor forecast accuracy, chronic overstaffing, and declining service quality across its customer service channels. These inefficiencies impacted both operational costs and customer satisfaction. Lumina Datamatics delivered a data-driven WFM solution that enhanced forecast precision, incorporated external demand drivers, and realigned staffing in real time. The result: improved service levels, reduced abandonment rates, and a 15% cut in WFM operational costs transforming workforce planning into a strategic asset.

Objective

To address inefficiencies in its customer service operations, the client aimed to implement a more granular and statistically sound forecasting process tailored to each service channel. The focus was on improving weekly forecast accuracy, optimizing headcount to prevent overstaffing during peak retail periods, and ensuring resources were better aligned with actual demand patterns. The client also intended to enhance service levels, reduce abandonment rates, and build a flexible WFM model that could scale with the demands of a multi-channel retail environment influenced by frequent promotions, seasonal events, and shifting customer behaviors.

Solution

Lumina Datamatics implemented a data-driven WFM solution focused on precise forecasting, agile staffing, and real-world demand alignment.

- **Multi-Model Forecasting Evaluation and Benchmarking**

  Several forecasting techniques, including Simple and Weighted Moving Averages, Exponential and Double Exponential Smoothing, and Auto ARIMA were tested on actual client data. Models were benchmarked using Mean Absolute Percentage Error (MAPE) and week-over-week forecast accuracy. This rigorous evaluation identified the most accurate, channel-sensitive model, reducing forecasting errors by over 30%.

- **Transition to Bottom-Up Forecasting**

  We shifted the client from a top-down volume aggregation model to a bottom-up, channel-specific forecasting framework. Instead of relying on consolidated data, we used day-level historical data for each channel, which captured intra-channel and intra-week variability more effectively. This improved demand sensitivity and forecasting precision, ensuring that each service channel's unique patterns were accounted for.

- **Integration of External Demand Drivers**

  To enhance forecast quality, external demand drivers such as holidays, product launches, and promotional events were incorporated into the model using linear regression. Time-series decomposition isolated trend, seasonality, and residual components, while variance decomposition assessed each driver's contribution to overall variability. Variance Inflation Factor (VIF) analysis was applied to remove multicollinearity, ensuring predictor independence and model robustness. These integrations enabled the client to anticipate demand spikes with greater confidence.

- **Dynamic Staffing Based on Forecast Delta**

  Weekly variances between projected and actual volumes were monitored in real-time to fine-tune resource allocation. By adjusting staffing plans dynamically based on forecast deltas, the client could proactively address peak demand periods without overstaffing. This alignment led to a 31% improvement in Service Levels and a 6% drop in abandonment rates, while preserving cost efficiency.

Results

The WFM transformation delivered substantial improvements across operational KPIs, directly impacting service quality, cost efficiency, and workforce utilization.

- **Forecast Accuracy Improved from 54% to 83%**

  By implementing a bottom-up forecasting model and integrating external demand drivers, the client's ability to predict customer demand became significantly more precise. This helped eliminate reactive staffing decisions, bringing predictability and control to operations.

- **Overstaffing Reduced by ~28%, Optimizing Headcount Utilization**

  Weekly staffing was previously misaligned with actual volume, resulting in excessive resources being scheduled. With accurate, channel-specific forecasting in place, the client was able to right-size teams in advance, reducing unnecessary labor costs and improving overall productivity.

- **Service Level Increased from 57% to 88%**

  Better forecasting and real-time staffing adjustments meant that customer queries were handled within acceptable timeframes. The jump in service level reflects improved response times and greater consistency in service delivery across channels.

- **Abandonment Rate Dropped from 11% to 5%**

  With fewer customers waiting due to under-resourcing, the client saw a significant drop in call/chat abandonment rates. This directly improved customer satisfaction and retention, especially during peak load periods.
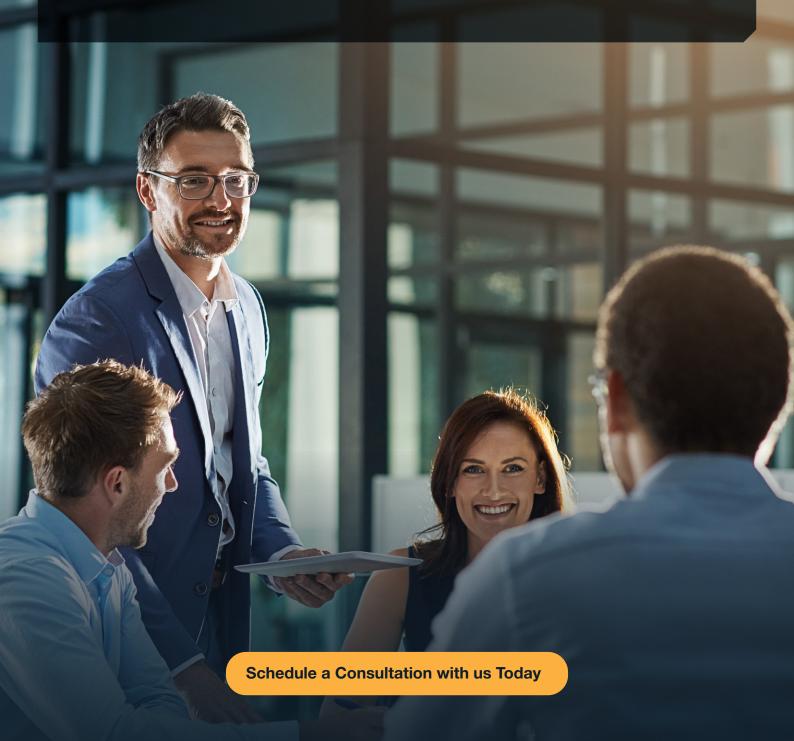
- **WFM Operational Costs Reduced by 15%**

  By minimizing overstaffing, improving agent utilization, and avoiding emergency staffing or overtime, the client saw a noticeable reduction in WFM-related operational costs—delivering long-term cost savings and improved ROI on workforce investments.

The Lumina Datamatics Advantage

At Lumina Datamatics, we view Workforce Management (WFM) as a strategic catalyst for scalable and cost-efficient growth. Our solution goes beyond basic scheduling—it combines advanced forecasting, demand analytics, and dynamic staffing to align the workforce precisely with real-time needs. Enhancing forecast granularity and operational visibility, we help reduce overstaffing, boost service levels, and elevate customer satisfaction. Focused on precision, adaptability, and measurable outcomes, we transform workforce operations into a competitive advantage without sacrificing quality or efficiency.

Schedule a Consultation with us Today

About Us:

Globally, 9 of the top 10 publishers and 3 of the top 5 ecommerce retailers trust Lumina Datamatics as their strategic partner in providing content, analytics, and technology solutions. Lumina Datamatics' expert solutions comprise in-house platforms, partnerships with global technology leaders, and more than 6500 professionals across Germany, India, Philippines, UK and United States. Our clients have reduced time-to-market, optimized business processes, operational efficiencies, and improved competitiveness.