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UPP Statistical Demand Forecasting (FORETELL)

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Abstract:

UPP Demand Statistical Forecasting is the process of forecasting the UPP (Unit Purchase Plan) Demand Planning numbers for Consumer and Commercial LOBs (Line of Business) every month for the next 12 months using robust supervised machine learning models, considering various parameters like historical sales data, market data, financial target, product mix etc.

Earlier, there was no statistical model (data driven approach) being used to predict these UPP numbers and the accuracy of these numbers had to be improved. Hence for our project, we propose additional factors that might influence the sales in a month for example – various festivals, holidays, sales season etc., simultaneously develop a FORETELL Frontend embedded analytics tool is used to interactively simulate the forecasting ad-hoc, tracking key metrics and insights leveraging the model. This would also facilitate the user with the historical data as well as an option to dynamically select and view the monthly future forecasts. Another important functionality of this is to cater Analyst's to Senior Executives business driving process easier and much more efficient. This would also have direct dollar impact on the company's revenue.

For several cross functional projects, that I was part of, solving the problem statements, adequate code reviewing, documentation was done to gain a larger understanding and mix of technologies being used. Automating this process was performed in order to reduce a whole lot of manual effort.

[Computing methodologies] :-

R Modelling, C# Frontend, Python Automation, SQL server (SSMS), Excel, Power BI