LTIMindtree

Optimized Airline Pricing with Advanced AI

Efficient Fare Strategies Drive Revenue Growth

Client background

The client is a major aviation group operating globally with 97,000 employees and serving approximately 123 million passengers annually. They lead the market in logistics, maintenance, repair, and catering services. Faced with unstable and complex demand forecasts, the client sought to improve their revenue management through more reliable analytical models.

Challenges

- The existing revenue management system relied on a single model to forecast demand volume and price elasticity. This approach led to forecasts with too many parameters, resulting in instability and inexplicable results due to sparse data

- The client needed to build a production-ready analytical model to generate accurate price elasticity curves and Buy Down Adjusted Fares (BDAFs) across their diverse markets

- There was a need to provide robust fare strategies through the Revenue Management Cockpit

Our work

- We created a price elasticity estimator that calculates price elasticity and BDAFs, addressing the issue of inaccurate forecasts. The estimator uses a statistical model provided by the client, ensuring accurate and stable results

- These BDAFs are then used to deliver fare strategies through the Revenue Management Cockpit, providing robust fare recommendations to end users

- We also designed the application to be flexible and scalable, so it works smoothly across different markets, whether on-premises or in the cloud

Tools & Technologies

OpenR | Azure Spark & Azure | Kubernetes Service | Azure | CosmosDB Azure Data Lake | Spring RestAPI

Business benefits

- Revenue increased by **9%** across more than **1,000** routes

- Daily fare strategies were generated for over **670** markets

- The cockpit UI enabled real-time adjustments based on user influences, with responses in under one second

- The model scaled efficiently with near-zero downtime over the past year
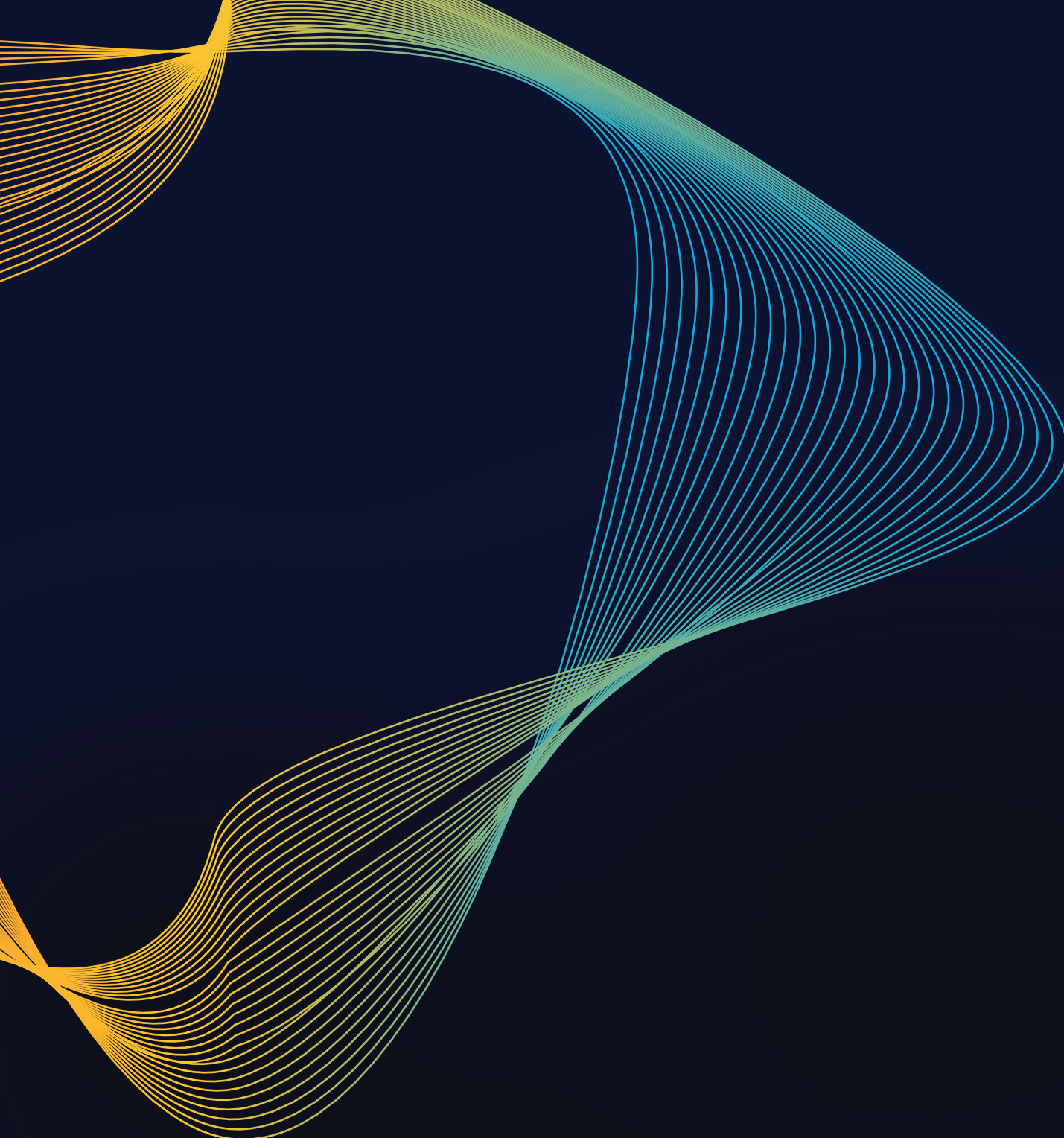
About LTIMindtree

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by 81,000+ talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — solves the most complex business challenges and delivers transformation at scale. For more information, please visit https://www.ltimindtree.com/.