PREDICTIVE ANALYTICS FOR DATA-DRIVEN DECISIONS

The past few months have seen several enterprises moving from conducting proofs of concept or deliberating with their investments on data analytics to finally reaching the stage of implementation and reaping results thereof. All organizations that are planning to deliver on the digital transformation agenda well understand the need to collect, nurture, and monetize data. These organizations, particularly those involved in banking and finance, are also keen on investing in predictive analytics and replacing age-old analytics methodologies to move away from best guesses to data-driven decisions.

Infosys®
Navigate your next

While some trends ebb with time, the trend of financial services firms leveraging data science and predictive analytics is gaining traction. A close look at the outcomes of a recent study by Greyhound Research, a leading global analyst firm, confirms the same. The study found that 7 in 10 company boards (of companies with revenue exceeding USD 1 billion) are keen on building additional capabilities around data analytics which they believe is a must to achieve competitive differentiation, better manage operations, improve customer satisfaction, and create new revenue models.

NEED FOR AN ANALYTICS-DRIVEN APPROACH

Our view is that organizations must first understand the need to nurture data and the possibilities it brings to the table while attempting to monetize it. In our experience of working with a global client base, here are three key possible outcomes that we believe any organization can expect with an analytics-driven approach:

- **Customer Intimacy:** Delivering delightful customer experiences driven by actionable insights that ensure revenue upside for the enterprise.

- **Operational efficiency and risk management:** Higher efficiency through automation and insights-driven operations, and prevention of risk across the business value chain through predictive insights, which help reduce costs and in turn offer monetary gain for the enterprise.

- **New revenue streams:** Enabling enterprises to convert data into strategic assets that create new revenue models.

More specifically, organizations can up the ante on the possibilities mentioned above by leveraging the capabilities of predictive analytics.

A **financial services company,** an Infosys client, providing clearing and settlement services, wanted to use predictive analytical models to be able to **forecast business volumes** for various product lines in a timely and efficient manner. This, they expected, would enable their capacity planning team to **manage their IT infrastructure** more efficiently.

BUILDING SAS-BASED STATISTICAL MODEL

Infosys has worked closely with clients on mathematical and statistical model development, model validation, assessing model performance, AI-based solutions (Text Analysis, Speech Analysis), and helped deliver outcomes in the following areas:

- Marketing and Customer Insights: Customer Churn analysis, Campaign Effectiveness, Pricing Analysis
- Risk and Compliance: Model Validation (Credit, Market Risk), Money laundering and Fraud prevention
- Planning & Optimization: Supply chain and Inventory Optimization, Capacity Planning

The Infosys team used SAS (Statistical Analysis System) to build statistical models for 24 product lines belonging to the client. The key was to take into account historical data from the last two years to predict monthly volume projections for the next two years.

We developed **linear time trend models** – forecast models for projecting average day volumes - to account for:

- **Time trend** (increase/ decrease over time) analyzed by considering historical volumes
- **Seasonal variations** that incorporate business patterns across specific months

Using this approach, the Infosys team was able to provide monthly forecasts for average and peak day volumes based on statistical models. The team also allowed for a provision to re-forecast when the actuals were outside the projected limits for three consecutive months.

The engagement was highly successful, with the client gaining the ability to **predict future volumes with more than 80% accuracy** for many products. Also, the client's capacity planning team was able to use the predictions to **schedule stress tests for servers** and be better prepared for anticipated increases in business volume, or use server capacity for other purposes in case of low volumes. The solution provided by Infosys can also help the client verify their business outlook and assist in performing critical functions like budgeting.

PREDICTIVE ANALYTICS FOR DATA-DRIVEN DECISIONS: THE FIVE KEY TAKEAWAYS

1 **Collate** a list of challenges that the business is looking to resolve before making the statistical models

2 **Organize** data with granularity to account for historical data and to ensure questions can be answered with precision

3 **Allow** for provisions to re-forecast in the event of a mismatch with the projections

4 **Update** and improve statistical model over time by exposing more data from various business functions

5 **Plan** to include advances in artificial intelligence (AI) and machine learning to make predictive analytics more relevant

BIG LEARNING:

As businesses enter an era of uncertainty and change, it is becoming increasingly difficult for organizations that are traditionally run and don't have a culture that appreciates the active collection of data and using it for decision making. We are partnering with organizations on their journey for changing both, using existing data to bring in additional efficiencies and more importantly, inculcating a culture where using data and statistical models are seen as a must-have.

WE DID THIS FOR THEM.
WE CAN DO IT FOR YOU.

To learn more about predictive analytics for financial service companies, reach out to us at askus@infosys.com

For more information, contact askus@infosys.com

Infosys®
Navigate your next

Infosys.com | NYSE: INFY

Stay Connected ⓧ ⓘⓝ ▶ ⓘⓝ SlideShare