



THE EMERGENCE OF PRESCRIPTIVE ANALYTICS AND SEEING INTO THE FUTURE WITH PRESCRIPTIVE ANALYTICS

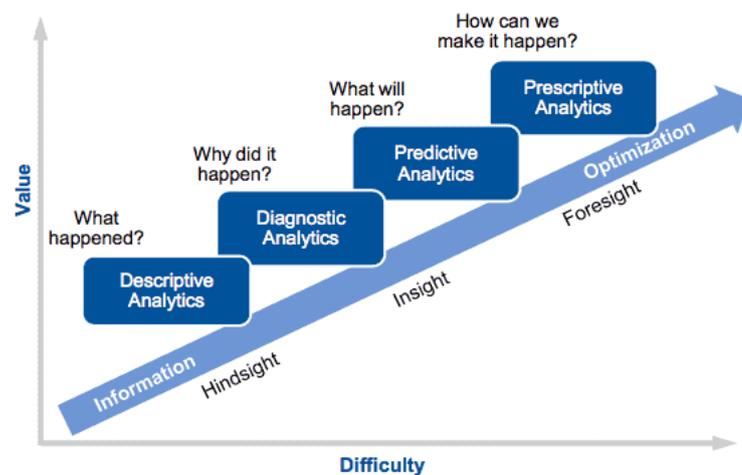
A NEW VISION FOR PERFORMANCE MANAGEMENT

INTRODUCTION

Analytics is most likely the most essential tool a business has today for gaining consumer insights. Given the tremendous data explosion of the twenty-first century, historical data and shallow insights from conventional analytics such as descriptive and diagnostic analytics will no longer suffice among decision-makers. Decision-makers now want much more than data; they require actionable insights that are clear, relevant, and allow a forward-thinking strategy. Prescriptive analytics is one approach that can help your company find data-driven strategic decisions while avoiding the constraints of traditional data analytics approaches. Prescriptive analytics, which is driven by AI and machine learning, effectively leverages unstructured data and assists decision-makers in creating what-if scenarios.

It is connected to both descriptive and predictive analytics, but it focuses on actionable insights rather than data monitoring. It collects data from a range of descriptive and predictive sources for its models, which it then applies to the decision-making process. This implies integrating present situations and weighing the repercussions of each action to see how the future will be influenced. It is the logical next step after descriptive and predictive analytics. It takes data analytics a step ahead by eliminating the uncertainty. It also saves data scientists and marketers time trying to figure out what their data means and what connections may be linked to provide their consumers with a highly customised and advantageous client experience.

BENEFITS OF PRESCRIPTIVE ANALYTICS TO BUSINESSES



Source: Gartner (March 2012)

WHAT IS PRESCRIPTIVE ANALYTICS?

Prescriptive analytics is a method to analyse information and provides real-time insights about how to enhance company operations to meet various expected outcomes. It is concerned with determining the optimal course of action in a particular circumstance based on the available information

1. Create a scalable, standardized method:
Prescriptive analytics recognises that the market is dynamic, necessitating a flexible, scalable approach to modelling. Prescriptive analytics systems, which are built on descriptive, diagnostic, and predictive analytics, take into consideration past data and forecasts to provide the knowledge that organisations want. Businesses now have a consistent procedure to assist them make decisions after running many scenarios and evaluating their findings to what happened in the market to verify the model.

2. Enhance business operations:
Forbes forecasts that prescriptive analytics will be the future of data analytics because of its capacity to go beyond projecting what will happen in a company and instead anticipate how it might happen better by making specific strategic decisions. Businesses may maximise their activities in either stable or uncertain economic situations by not only comprehending what can happen in the future but also being given with advice for how to get there.

3. Make decisions in real time:
With this flexible and precise model in place, business users at all levels of the company may execute scenarios in minutes. Users have confidence in the model because it

has been tested and validated several times, and they know that when they need answers to complicated issues swiftly, they will obtain accurate findings without losing the quality of the research.

4. With in-house competences, business can save funds:

Businesses save money and make cost-effective decisions by using self-service analytics solutions such as a simulation platform that supports prescriptive analysis. Furthermore, through a user-friendly platform, these services enable internal departments that may not be well-versed in analytics to participate in a collaborative process and learn about data and the consequences of their actions.

5. Boost your productivity:

It may go without saying, but the capacity to make better, faster, and more cost-effective decisions enabled by prescriptive analytics enriches the whole organisation. Self-service analytics are intended to be user-friendly, allowing business users to run scenarios to assist them decide what to do next. This means that IT departments and data scientists will continue to delve into the data, even if business customers will no longer require their direct assistance to execute scenarios. This approach also successfully removes data silos and communication barriers, allowing each department to increase their performance.

6. Respond to difficult problems:

Prescriptive analytics are best suited to solving complicated problems with numerous moving pieces that businesses face on a regular basis. The Concentric approach transforms the way organisations make choices by utilising prescriptive data analytics.

CHALLENGES IN PREDICTIVE ANALYTICS

Prescriptive analytics provides distinct challenges as you immerse yourself in a melting pot of machine learning and optimization approaches in order to comprehend and execute sophisticated strategies.

Below are some of the challenges faced in predictive analytics:

Complexity:

One of the primary reasons why organisations avoid utilising prescriptive analytics is its complexity. To develop predictions and construct simulated scenarios that may be used to evaluate outcomes for different actions or variables, the proper tools and specialists must be in place.

Not completely accurate:

Prescriptive analysis should be used at a much higher rate as technology develops and data-driven organisations get a better understanding of the process. Companies who currently have data mining tools for descriptive and predictive analytics are midway there.

Expertise:

Because predictive analytics solutions are generally built for data scientists with in-depth knowledge of statistical modelling, R, and Python, expertise is a hurdle. New predictive analytics solutions are developing, and they are intended for usage by virtually anybody.

Adoption:

Predictive analytics is most successful when it is incorporated inside apps that consumers currently use. Embedding machine learning and AI into your application provides you with a significant strategic edge over the competition—and provides your end users with a significant strategic benefit for their firms.

Future in Prescriptive Analytics

According to Gartner's CMO Expenditure Survey, analytics is the most strategically significant capacity in supporting marketing initiatives, accounting for an average of 16 percent of total marketing spend. Prescriptive analytics is immediately applicable and offers marketers with a roadmap for maximising the effectiveness of their efforts. Prescriptive analytics is classified into three categories: guided marketing, guided selling, and guided pricing.

Guided Marketing:

Marketers can meet and connect with consumers whenever they're in the process, build ideal customer profiles, and discover those potential when they look for the brand in real time, using advanced analytics.

Guided Selling:

Prescriptive analytics, in a similar manner, may be used to the pipeline to maximize win rates by advising which transactions to focus on, highlighting significant prospects at risk, and helping organisations to optimise time to concentrate on the contracts most crucial to the end result.

Guided Pricing:

Prescriptive analytics can bring impact on market prices and incentives based on the market, regional, corporate, and consumer information to maximise profit margins on each trade.

Prescriptive Analytics automates decision-making by extracting precise and relevant insights from data – users no longer need to filter through and evaluate enormous volumes of data. With adoption of prescriptive analytics over traditional analysis techniques can offer companies with the much-needed speed and precision in decision-making.

Prescriptive Analytics optimises the whole supply chain and production planning in real time, ensuring that completion and delivery deadlines are fulfilled. Simulations of the impacts of prospective modifications on the processes in the particular institution are critical when planning choices on investments, staff, work schedules, or new processes in hospitals, and may literally save lives.

