

# HOW PREDICTIVE ANALYTICS WORKS AGAINST THE CONSUMER

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Predictive analytics is a type of data analytics that uses statistical algorithms and machine learning techniques to analyze data and make predictions about future events or trends. It involves using historical data to identify patterns and trends, which can then be used to make predictions about future outcomes.

The process of predictive analytics typically involves several steps, including data collection, data cleaning and preparation, feature engineering, model selection, and model training and evaluation. Once a model has been trained, it can be used to make predictions about new data or future events.

Predictive analytics has a wide range of applications in various fields, including finance, healthcare, marketing, and manufacturing. It can be used to forecast customer behavior, identify potential fraud, optimize pricing, and improve decision-making in a variety of other contexts.

The type of data required for predictive analytics depends on the specific problem you are trying to solve and the type of prediction you are trying to make. However,

in general, the data should be relevant, accurate, and representative of the problem domain.

Some of the common types of data used in predictive analytics include:

1. **Historical data:** This is data that has been collected over time and can be used to identify patterns and trends.
2. **Structured data:** This is data that is organized in a structured format, such as in a database or spreadsheet.
3. **Unstructured data:** This is data that is not organized in a structured format, such as text data from social media or customer feedback.
4. **Behavioral data:** This is data that captures how people or systems behave, such as clickstream data on a website or sensor data from a machine.
5. **Demographic data:** This is data that captures information about individuals, such as age, gender, income, and location.

In addition to the type of data, it's important to ensure that the data is accurate, complete, and representative of the problem domain. Data cleaning and preprocessing techniques may be required to transform and normalize the data before it can be used for predictive analytics.

Pricing analysis is one of the most common applications of predictive analytics in business.

Predictive analytics can be used to analyze historical pricing data to identify patterns and trends, and to develop models that can be used to predict the optimal price for a product or service. These models can take a variety of factors into account, such as customer demand, competitor prices, and product features, to help businesses set prices that maximize profits. By analyzing historical data and identifying patterns and trends, predictive analytics can be used to develop models that can help businesses predict how different price points will affect customer behavior, such as demand, sales, and revenue.

For example, a company might use predictive analytics to analyze sales data and identify the optimal price points for different products or product bundles. They can also

use predictive analytics to identify which customers are most likely to respond to price changes, and to develop targeted pricing strategies for different customer segments.

Correspondingly, it could be used to determine which factors influence customer behavior, such as demographics, purchase history, and product features. This information can then be used to develop pricing models that consider these factors and help businesses set prices that optimize revenue.

In addition, predictive analytics can be used to monitor pricing in real-time, and to adjust pricing strategies as needed based on changes in the market or customer behavior. This can help businesses stay competitive and maximize profits over time.