



## Predictive Analytics & Big Data

### What It Is

Predictive Analytics (PA) is an important leading-edge technology that is being adopted by Fortune 500 corporations and coveted by many other entities in industry and academia. As the name suggests, it seeks to predict the outcome of certain events. The applications of PA are quite wide-ranging. Predictive Analytics provides actionable solutions to many business problems. It's an extension of web analytics and data mining.

Another term used in the industry for Predictive Analytics is 'Big Data'. The roots of 'Big Data' come from 'Decision Support System' that became popular in 1980s. As the name suggests, Big Data uses corporate data to predicts outcomes which aid the decision making process.



Predictive Analytics has been used successfully in many industries, including Health Care, Banking & Finance, Public Utilities, Telecommunications, Media, Retail, Insurance, and Travel. Amongst the major users of PA techniques are UPS, United Health Care, Macys, Bank of America, Citi Group, LinkedIn, Netflix, Amazon, Best Buy, and Proctor & Gamble.

### How It Works

PA is based on techniques such as Decision Trees, Naïve Bayesian statistics, Linear and Logical regression, Neural Networks and TreeNet. For unsupervised learning, it also uses correlation and clustering.

### Why It Matters

A well-known Predictive Analytics success story is the role it played in predicting the performance of the individual baseball players who propelled the Boston Red Sox to three World Series titles. The Hollywood movie, *Moneyball*, which is based on a true story, was built on a similar theme. Amongst the more obvious uses:

- Predicting fraud in credit card usage.
- Determining whether a professional athlete's compensation should be based on predictions of future performance.
- Predicting election outcomes.

### Available From A+ Web Services

We at A+ Web Services have extensive experience in managing and successfully executing Predictive Analytics and Data Mining projects. We utilize R package for this purpose. It's a special scripting language for statistical data manipulation and analysis.

The founder of A+ Web Services, Dr. Ash Pahwa, is on the Advisory Committee of UC Irvine's Predictive Analytics program. He also teaches Predictive Analytics and R Programming courses at UC Irvine and UCLA.



### Advisory Committee

- Dean Abbott, President, Abbott Analytics
- John Elder, Ph.D., Chief Scientist, Elder Research
- Ian Harris, Ph.D., Associate Professor, Department of Computer Science, Donald Bren School of Information and Computer Sciences, University of California, Irvine
- Gary Miner, Ph.D., Senior Consultant/Statistician, Statsoft
- Bob Nisbet, Ph.D., Consulting Data Scientist
- **Ash Pahwa, Ph.D., CEO, A+ Web Services**
- Eric Siegel, Ph.D., Chair, Predictive Analytics World
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- Jim Sterne, President, Target Marketing; Chairman, Digital Analytics Association, Founder, eMetrics Marketing Optimization Summit
- James Taylor, CEO, Decision Management Solutions

### Contact Us For A Free Consultation

If you have a business problem that can be solved using Predictive Analytics tools, please discuss your project with us. We'll explore how we can harness this remarkable technology to address your digital marketing challenges.