

Prescriptive Analytics

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What is Prescriptive Analytics

Prescriptive analytics provide organizations with recommendations around optimal actions to achieve business objectives like customer satisfaction, profits and cost savings. Prescriptive analytics solutions use optimization technology to solve complex decisions with millions of decision variables, constraints and tradeoffs. Organizations across industries use prescriptive analytics for a range of use cases spanning strategic planning, operational and tactical activities.

Improve operations: Optimize product planning, reduce inefficiencies and drive smarter operational decision-making.

Manage resources more efficiently: Better utilize capital, personnel, equipment, vehicles and facilities.

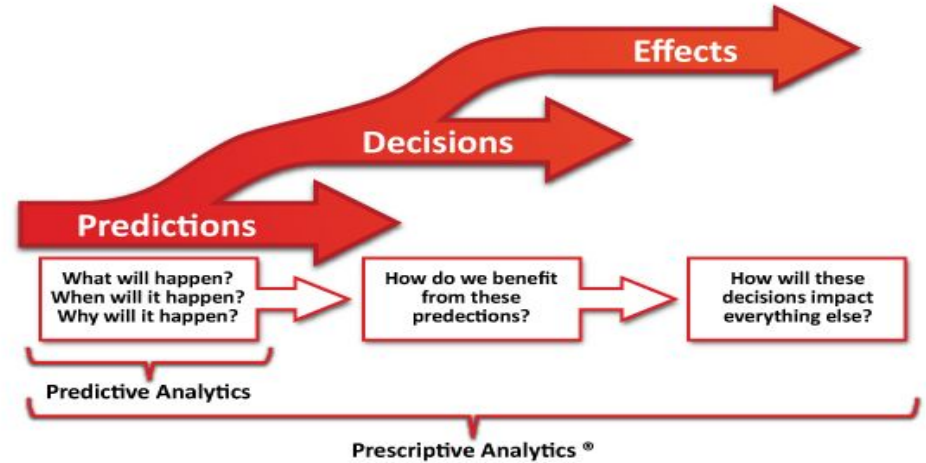
Mitigate risks: Gain insight into how decisions can have business-wide impacts and hedge against data uncertainty.

Content Source: www.ibm.com



Features of Prescriptive Analytics:

- Models the entire business
- Is 100 percent data driven
- Recommends specific business decisions
- Considers interdependencies
- Is not bound by static rules
- Provides tangible, measurable benefits
- Supports what-if scenarios
- Is free of "gut feel" and personal bias
- Accounts for all inputs, variables and outputs
- Uses calibrated and validated models that truly reflect how the business operates



Prescriptive analytics looks at the bigger picture. While predictive analytics may measure individual trends, prescriptive models usually evaluate entire businesses, or at the very least, discrete functions, divisions or plants. Examples of problems solved using prescriptive analytics include:

- Optimizing coal extraction over a number of mines to simultaneously meet customer requirements and increase overall profitability.
- Establishing an optimal manufacturing and inventory strategy for consumer goods companies.
- Determining the best operation strategy for a waste water treatment utility covering a large metropolitan area while maintaining regulatory compliance.