

Predictive Analytics



Predictive Analytics: A Tool Within Everyone's Reach



**Is optimizing your operations management
a priority for you?**

**Would you like to maximize the return on
investment for each one of your decisions?**

Want to get the most out of your corporate data?

Predictive analytics can help you with planning and decision-making. Find out how to gain a competitive advantage using a solution tailored to your unique situation and needs.

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analytics?**

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What is Predictive Analytics?

The volume of data and information collected in every economic and industrial sector is growing by leaps and bounds. This availability of “big data” is driving a paradigm shift in the business world. With advances in technology, predictive analytics is now within your grasp and is used in the areas of planning and decision-making. Predictive analytics can provide a competitive advantage.

Using the data collected, predictive analytics, or predictive modelling, draws on a number of statistical techniques to analyze past and present events in order to predict future events or behaviours based on a set of assumptions.

Businesses use predictive analytics to manage risk, optimize operations, define business strategies, plan workforce requirements and forecast cost trends for employee benefit programs.

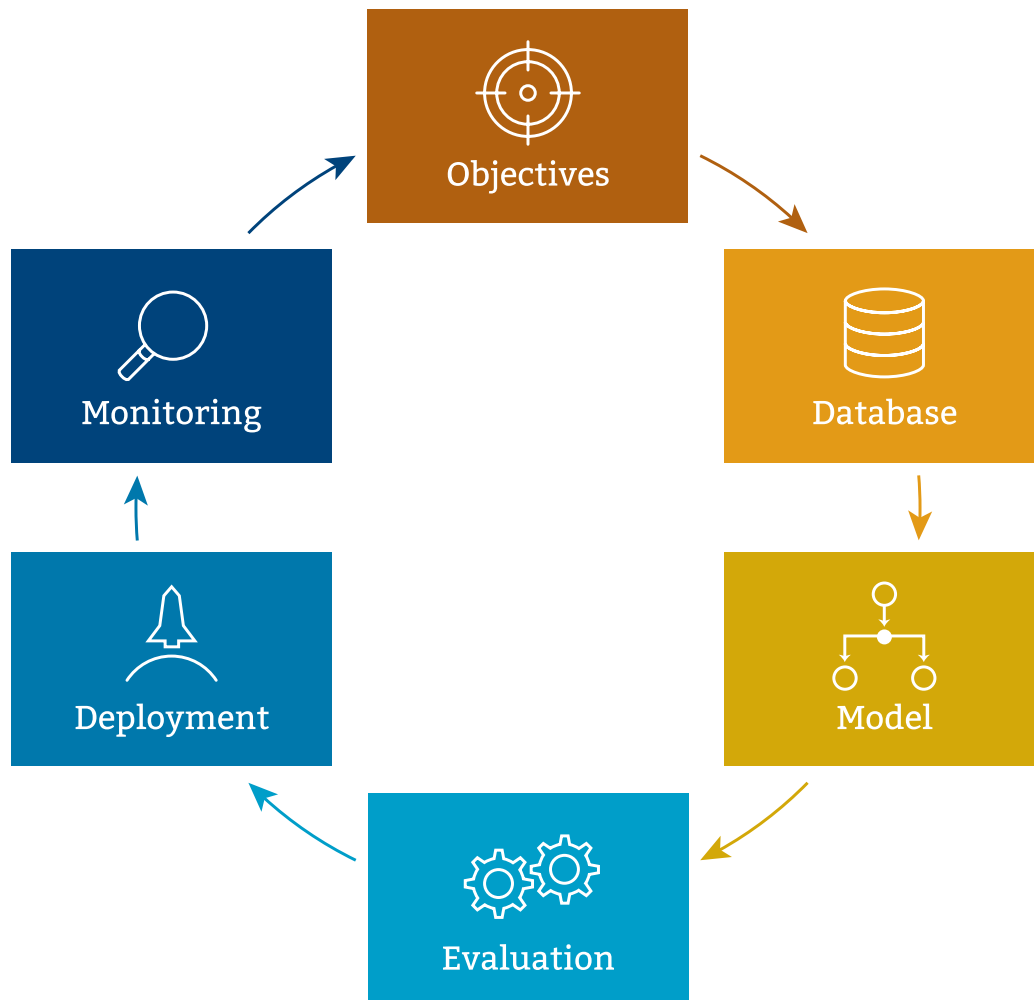
Predictive analytics is appropriate for every economic and industrial sector. The fields of application are limitless.

Predictive analytics is transforming the actuarial field and providing decision makers across all industries with access to analyses that facilitate decision-making. It is used in a wide range of contexts such as:

- **Operations management:** supply forecasting and resource management;
- **Human resources:** identifying factors that influence employee engagement;
- **Wage loss insurance:** identifying risk selection criteria;
- **Life insurance:** measuring risk factors leading to policy lapse;
- **Prescription drug insurance:** producing claim amount projections for high-cost claimants;
- **Home insurance:** implementing a risk scoring system for ratemaking purposes;
- **Liability insurance:** optimizing the adjudication process;
- **Employee benefits:** optimizing self-insurance;
- **Asset management:** optimizing asset allocation for life cycle portfolios.



Key Milestones for Predictive Analytics



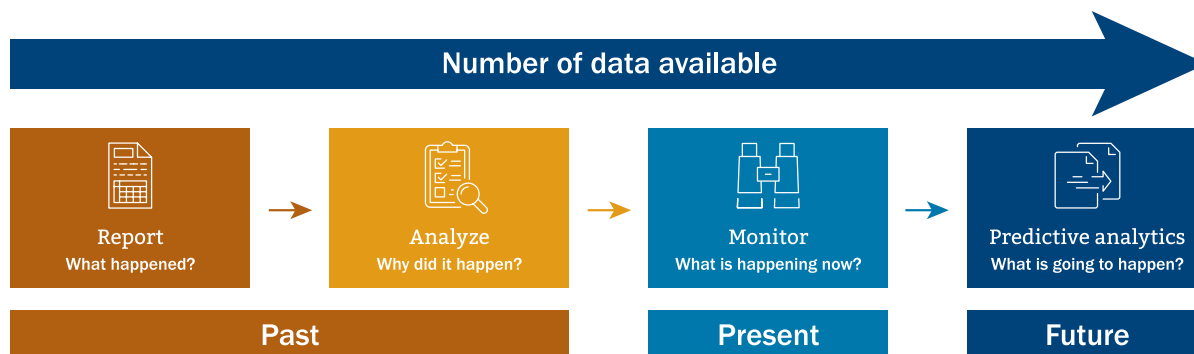
Here is a summary of the main milestones for the predictive analytics cycle:

- **Objectives**: define the purpose of the analysis, i.e., the questions the analysis will try to answer using a mathematical model;
- **Database**: review the data available and prepare the predictive modelling database;
- **Model**: build a predictive model;
- **Evaluation**: test the effectiveness and accuracy of the predictive model;
- **Deployment**: use the predictive model to answer the stated questions;
- **Monitoring**: review the model and verify its effectiveness.



Our Predictive Analytics Services

No matter what your field of activity, the experts at Optimum Actuarial Consulting can work with you in everything from needs analysis to setting up and maintaining a database to predictive analytics, and can offer you innovative solutions that are adapted to your unique situation:



• Past – Reactive Process

- › Set up a database;
- › Audit your current database and recommend an optimal structure;
- › Design and automate reports to make your decision-making more efficient.

• Present – Observation Process

- › Implement key performance indicators;
- › Create a dashboard giving a real-time snapshot of your company;
- › Provide support in the implementation of business intelligence.

• Future – Proactive Process

- › Implement a predictive analytics model to identify risk factors;
- › Review and monitor the model over time.

Why Choose Optimum Actuarial Consulting?

Tailored Solutions

We offer solutions tailored to your unique situation, solutions that you control with no commitment to third-party software.

Intellectual Capital

Our actuarial experts are backed by the expertise of the Optimum Group and its 600+ employees worldwide to fully satisfy your needs.

Professionalism and Code of Ethics

Our team consists primarily of Fellows and Associates of the Society of Actuaries and the Canadian Institute of Actuaries who uphold the codes of ethics of these organizations. Our experts also embrace the Optimum Group's values: customer focus, employee focus, integrity, expertise, risk management, rigorousness and solidity.



Optimum Actuarial Consulting

Optimum Actuarial Consulting is proud to share its data modelling expertise in the context of our predictive analytics services. By pairing the actuarial expertise of Optimum Actuarial Consulting with the intellectual capital of the Optimum Group, our team of actuaries, data scientists, mathematicians and programmers offers an innovative corporate risk management solution at the intersection of actuarial science and technology.

With our expertise in risk management, our actuaries innovate in the field of actuarial science by pushing the envelope with their predictive modelling as technology advances.

If you would like to learn more about how predictive analytics can help you reach your goals, feel free to contact us.

[Click here](#) to send us an email or call us at 514-288-1620 or toll free at 1 866-387-1301 to speak to a consultant.



Optimum Actuarial Consulting, Member of Optimum Financial Group

Since 1969, Optimum Financial Group is dedicated to the financial security of its clients. Global and privately owned, it is diversified in the sectors of life insurance, general insurance, life reinsurance, actuarial consulting, asset management, information technologies, and real estate. The Group has more than 600 employees in subsidiaries mainly across Canada, in the United States and in France. Its revenues generate more than one billion Canadian dollars, its assets exceed 5.4 billion Canadian dollars and its assets under management total 7.8 billion Canadian dollars.

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