

Data Analytics

for Credit Unions



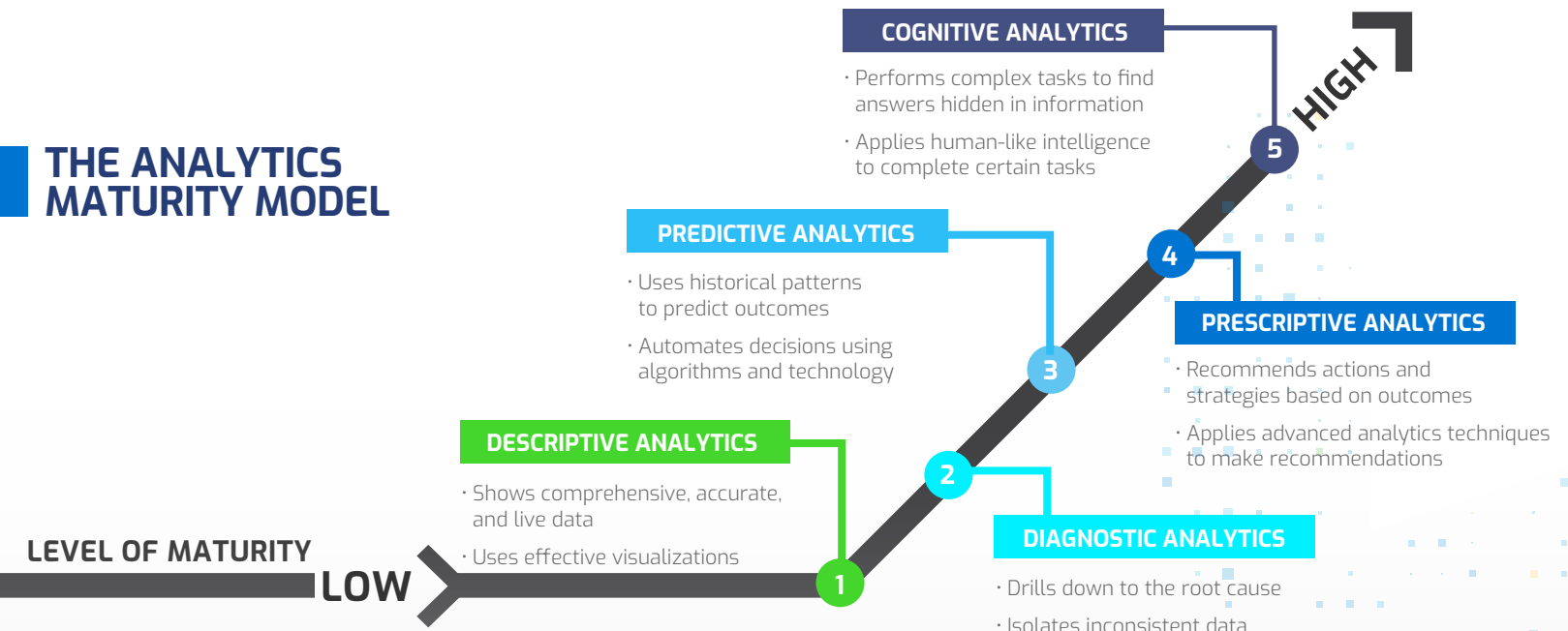
What is Data Analytics?

Analytics is a discipline that is focused on helping organizations make better business decisions; it takes data that has already been prepared and puts it into action immediately. The objective of analytics is to apply business knowledge and generate insights, which can then lead to more effective decision-making.

There are five different analytics categories. While related, each of the categories uses data to generate different insights. Technology often plays a major role in the delivery of these insights.

- 1 Descriptive analytics.** *Descriptive analytics tells you what happened previously.* This type of analytics is used to perform historical analysis and to provide insights into an organization's past performance. These insights should be comprehensive, accurate, and data-based descriptions that reflect actual events.
- 2 Diagnostic analytics.** *Diagnostic analytics tells you why something happened previously.* To understand why events happened the way they did, credit unions must isolate certain information and identify the root cause. Understanding root causes will help you optimize performance and take preventative actions, which can lead to greater success.
- 3 Predictive analytics.** *Predictive analytics tells you what may happen in the future.* When analyzing business data, algorithms can be used to identify historical trends and anticipate future trends. When algorithms are automated, so too is the decision-making process. This saves time and frees up resources elsewhere in the organization.
- 4 Prescriptive analytics.** *Prescriptive analytics helps you know what to do in the future.* This type of analytics advises you on possible outcomes. Based on the data and scenarios analyzed, prescriptive analytics recommends specific actions and strategies. These recommendations are generally made via advanced analytical techniques.
- 5 Cognitive analytics.** *Cognitive analytics helps you achieve future outcomes.* Cognitive analytics allows you to perform complex tasks and find answers hidden in a large volume of information. A unique aspect of cognitive analytics is the ability to apply human-like intelligence to specific tasks (e.g., understanding not just the words in a text but also the full context). Tools and techniques include natural language, artificial intelligence, machine learning, and deep learning.

THE ANALYTICS MATURITY MODEL



Why Data Analytics Matters

Credit unions now compete in a data-driven world, and they are fortunate to have some of the most valuable data available. Because analytics is often at the center of successful data initiatives, credit unions are now executing strategy in new ways – gaining insights while eliminating guesswork. The science of analytics is thriving in the member finance industry.

Sometimes, credit unions go big on analytics without first investing proper time and attention on the data itself. Many successful analytics projects combine software with data management improvements or consulting services to produce clean data and powerful analytics.

Practically speaking, credit unions can use analytics to improve key performance indicators (KPIs) in a variety of programs and business domains, including:

- Member loan origination
- Mortgage loan origination
- Commercial loan origination
- Mortgage loan servicing
- General ledger (GL)
- Payments
- Digital banking
- Credit risk/collections

Analytics platforms can also be used to gain a better understanding of trends and opportunities relating to members, branches, operations, dealers, and more. Virtually any combination of business functions and domains can be utilized to create a unique analytics user story.

With the enactment of recent data protection and privacy regulations, analytics platforms play an important role in an organization's overall data management strategy by allowing users to build customized reports and dashboards that address compliance and regulatory needs. Perhaps most importantly, analytics platforms allow users to quickly and conveniently access important data.



Analytics in Action

As you build your analytics plan, consider how you will visualize and interact with your data. Visualization is the science of transforming data into illustrated representations, like dynamic charts, graphs, and infographics. These visualizations help bring data to life, making it easier for information to be understood and shared. Data visualizations also help credit unions understand member behavior, address risks, make data more memorable to stakeholders, improve insights, and make faster and better business decisions.

Insights from analytics can also help your organization during uncertain economic times. Active use of analytics helps your organization stay competitive and better serve members. For these reasons, many credit unions have recently implemented an analytics solution or are in the process of evaluating when and how to introduce one.

As you evaluate, select, and implement an analytics solution, consider the following steps:

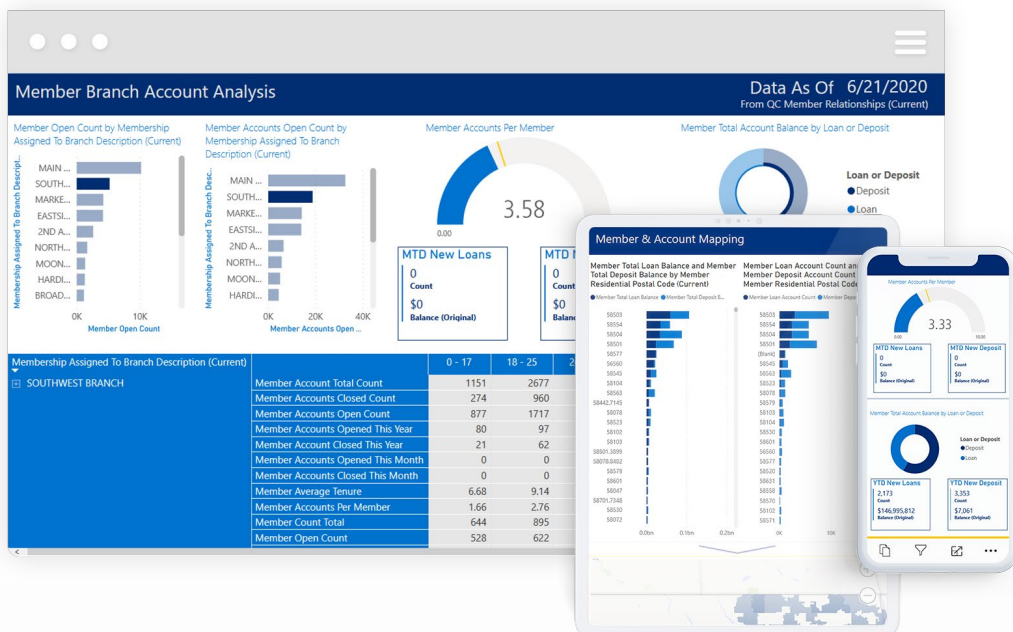
1 Ensure your data is complete.

Accurate analytics cannot be performed when critical data is missing or needs to be extrapolated. Similarly, if there are inconsistencies or errors with the data, the analytics produced will likely be incorrect. Addressing these prior to having data analysts or data scientists tackle the project is essential.

When data is missing, data scientists end up less focused on generating insights and more focused on investigating data problems. This can lead to frustration, opportunity costs, and project delays. Resolving missing or incomplete data issues allows you to maximize the value of a data scientist.

2 Properly manage your data.

Starting the analytics process with useful data is imperative, as analytics will be unable to fix mismanaged or substandard data. To prevent poor data, first adopt proper data management procedures. You will need to make the appropriate investments in the people and processes as you build a strong infrastructure. Thereafter, you can generate insights and make business decisions.



Above: Executive reporting visualization from the Rise Analytics Data Warehouse platform.

3 Invest in the right business intelligence (BI) tools.

Analytics is a sophisticated science; it takes the right talent and tools to be successful. Credit union leaders who utilize analytics need to be able to interpret the facts and apply business knowledge as they move their organization forward. This is accomplished with business intelligence tools and visualizations.

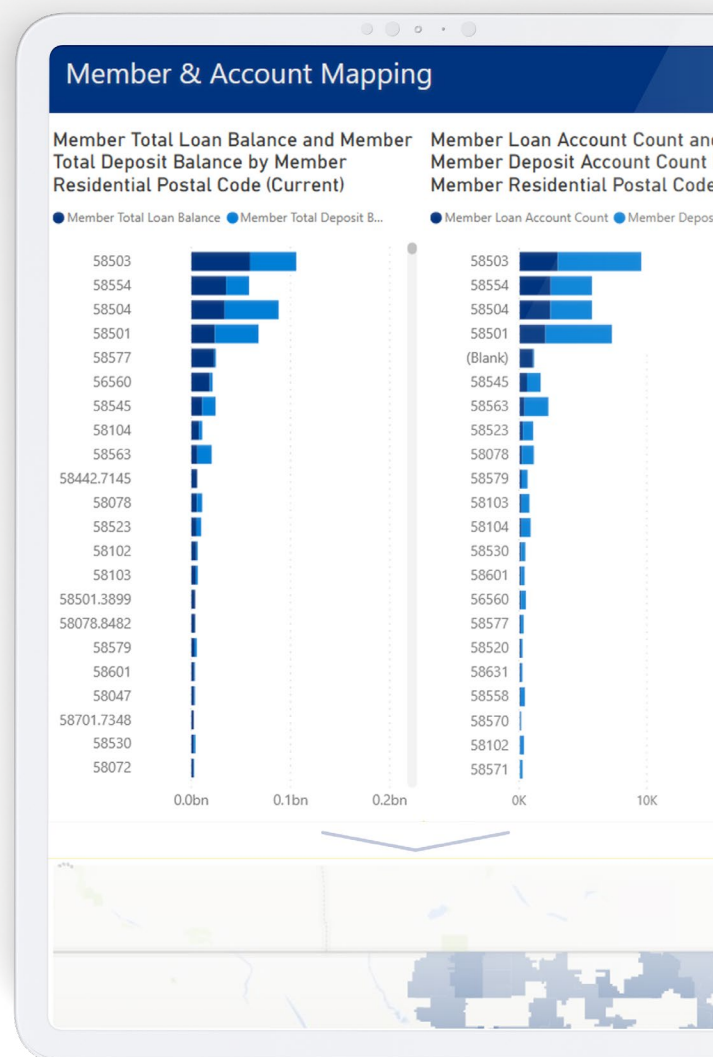
Data project leaders should evaluate BI tools based on business objectives, vendor reputation, quality and quantity of vendor staff, return on investment, total cost of ownership, and features (e.g., core and ancillary connectors, normalization abilities, and scalability).

4 Generate insights from analytics.

Developing analytics is just an initial step; organizations must also apply business knowledge to the analytics to gain insights. Having the talent to create these insights helps you maximize the effectiveness of decisions. Data scientists, for example, can play this role. These professionals have a special expertise that combines technical and business knowledge. Depending on your goals and budget, data analysts using an analytics platform, or project consultants, may help you achieve similar outcomes.

5 Use your data to plan the future.

Your credit union's data can tell a story of the past, and that has value. However, it's more valuable to have it tell a story of the future. Too often, organizations become more focused on generating insights about the past than they do about using predictive analytics to inform the future. Use analytics to focus on future risks and opportunities.



Above: Executive reporting visualization from the Rise Analytics Data Warehouse platform.

Elevated Data Solutions

Rise Analytics is a PCI-certified provider of data solutions, offering patented technology that helps credit unions extract, integrate, and visualize financial data. Rise Analytics experts also provide managed services that address card portfolio growth, new account acquisition, credit line increases, and more. Powerful platforms for the whole credit union.

LEARN
MORE