



## Analytics Maturity: From Basics to GenAI Generational Gains

**RFG Perspective:** We have taken a generational leap in analytics capabilities with generative AI (genAI) and those who use it will have a distinct business and productivity advantage over competition. It is no longer good enough to have a feel for the current environment. With genAI enterprises can know things more deeply and in real-time than ever before. Moreover, the need to use a pre-programmed query program to be able to gain access to insights is gone. We can now delve into root causes of problems in real-time and make have systems automatically make predictive analyses – and even act on them. Thus, to remain competitive companies must incorporate the latest analytics capabilities into their distribution, marketing, operations, and sales processes if they wish to maximize revenues and customer loyalty while minimizing costs and risks.

With the advent of ChatGPT, business analytics have changed forever. The application of genAI to applications, data, and operations will enable enterprises to know more of what is happening in their environments today, to predict the future state and address it using far fewer development, marketing, programming, or other operating personnel than is currently required. The shift to genAI is not just a technology shift but a fundamental business model change.

To make sense of the vast amount of data bombarding organizations, companies need systems of insight that can analyze the data. The primary purposes of these systems are to drive revenues, improve loyalty, upsell, increase productivity, ensure availability, and minimize risk. Everyone employs analytics; just some do it far better than others. Some companies still live in the 20<sup>th</sup> century and do all their analytics on spreadsheets while others have made the quantum leap from basic historical analyses to predictive analytics using advanced genAI tools. According to a 2024 IBM Institute for Business Value report, even though it is early days, more than 80 percent of respondents report already engaging with generative AI, but a scant two percent are optimizing the technology. Almost three in four (74 percent)—are still in pilot mode, and only about a quarter have gone beyond pilots to start implementation. Still, the pace of adoption is stunning. By the end of 2024, 77 percent of respondents expect to use generative AI.”

### Historical Analytics

The initial mode of analytics usage is historical analysis. This can be a review of customer buying habits, sales by account type, inventory movements, value of a customer, and other baseline information that can help determine marketing programs, inventory management, sales quotas, etc. These basic metrics business executives measure are very useful in looking at trends and planning. But they are just the baseline that all successful companies use. While there are few differentiators in this mix, companies like Amazon use the data as a competitive advantage for reordering and restocking shelves, modifying pricing in real-time by various subcategories, and moving inventory amongst distribution centers. Historical analytics can help answer the following for executives:

- What happened?
- How many, how often, where?
- What exactly is the problem?
- What actions are needed?



Less than 10 percent of all data is ever analyzed; thus, there are numerous ways executives can improve the business through more and better analytics. The biggest challenges with historical data are its accuracy, consistency, and currency. Data is of most value in real time, meaning that it becomes increasingly less accurate, actionable, and valuable as it ages and relates to today's reality. Consistency relates to the fact that an individual doing historical analysis will likely use multiple files which may not have been taken at the same time, causing inconsistencies. While there is a cost in cleaning up the data, RFG studies find there is a strong business case for doing so. Unfortunately, IT executives more often than not are unable to make the case, and therefore most analyses inherently have a level of corruption in them due to the faulty data.

## Real-Time Analytics

Real-time analytics has made tremendous advances in the last couple of years and is becoming an imperative to improving productivity and competitiveness. With an effective real-time analytics program that is integrated with all aspects of the business, organizations can increase revenues, reduce risks, improve availability, deliver new functionality, and be more responsive to customer needs. This approach enables companies to analyze real-time transactions more accurately and, with genAI, more intelligently. Amazon employs such analytics to recommend other upsell purchasing options based on one's history. Banks use this modality to determine credit risk or potential fraud and can take action while the customer is still online and before the deal closes. Police use this guidance to determine if there are any outstanding issues or tickets with cars and/or individuals that they have pulled over. Developers can use it to write the majority of the basic code, thereby reducing development time significantly. Marketing staff can build emails and social media streams and while sales can create proposals more quickly. IT operations can use the new analytics tools to rapidly determine root causes of problems and quickly fix them. Used effectively, enterprises should be able to increase revenues and productivity by 10 percent or more (depending upon the activity and the genAI solution) while shrinking their risk exposure.

## Predictive Analytics

The most advanced analytics methodology is predictive analytics. Through the use of predictive analytics, executives can stop using gut feelings and start basing decisions on projected future impacts. It can answer questions such as:

- Why does it happen?
- What if the trend continues?
- What will likely happen next?
- How can the trend be leveraged?
- What is the best outcome or set of outcomes?

For example, some companies use predictive analytics to determine the discount amount they will offer a customer when on the call. By anticipating what discount level will entice individual customers, companies can minimize a price cut, increase the probability of a sale, and yield better margins. Companies including Progressive Insurance use the information to determine which individuals they want to insure based on desired profile and which ones they want to send



to competition based upon the expected margins gleaned from past behaviors and known changes in lifestyle habits. Another use for predictive analytics is to identify in real-time potential equipment failures so that repairs can be made before an outage occurs, saving millions of dollars.

## Collaborative Analytics

With the advent of ChatGPT, a new dimension of collaborative analytics was born. In its simplest form, individuals can ask questions rather than use a search engine. If done properly, and if the information is verified, these tools have been known to give false or hallucinatory responses – the tool can greatly reduce search time and make the individual more productive. Other new collaborative tools can assist with email creation, presentation development, proposal foundational materials, code development, and other productivity tools. However, progress here is still in its infancy of this type of analytics, so it is important that users verify outputs and tailor the material to match the needed requirements.

## Summary

Analytics and business intelligence is not new but the way they are being applied today is much more advanced than just three years ago. Business executives are rapidly advancing from the historical sense-and-respond analytics approach to the interlocking of predict-and-act analytics with real-time transactional processing. Individuals are independently adopting the collaborative analytic tools with or without corporate support.

**RFG POV: CEOs rate analytics as the top factor contributing to an organization's competitiveness and IT needs to deliver the required capabilities to remain competitive. Moreover, the change in the executive mindset to incorporate fact-based, deep-dive data analytics into the decision-making process will make it more difficult for companies to survive that do not make it integral to their business planning and execution. Business and IT executives should understand and act upon what information they need for business forecasting and planning decisions as well as for the real-time and predictive information required to improve margins or revenues, improve availability, reduce risks, or increase customer loyalty through personalization.**

*Additional relevant research and consulting services are available. Interested readers should contact Client Services to arrange further discussion or interview with Mr. Cal Braunstein, CEO and Executive Director of Research.*