



IBM Planning Analytics and the future with generative AI

Plan, predict and pivot with an autonomous
planning analytics solution

What is autonomous business planning?

Autonomous business planning and analytics is a set of innovative methods that leverage advanced technologies—including foundation models and generative AI—to support business users throughout planning, budgeting and forecasting journeys. These transformative approaches not only can help automate actions but also simplify the processes so organizations can adopt data-driven strategies. It can streamline financial planning operations and enhance agility to help you adapt to market dynamics.

However, the scope of autonomous business planning and analytics can extend well beyond automation alone. This set stands out because it can also offer augmented, predictive and prescriptive insights. It also can provide data exploration and an enhanced user experience so business users can access data and insights without requiring advanced technical expertise or specialized skills.

How can generative AI impact the landscape of business planning?

Generative AI can revolutionize business planning processes in several aspects. Using large language models can provide a natural language interface, elevating planners to advanced users by helping to automate complex tasks and rapidly provide insights and guidance.

This paper explores how IBM® Planning Analytics intends to use generative AI to help streamline integrated business planning across all roles and skill levels within an organization, paving the way to provide users with an autonomous business planning solution.¹



What is IBM watsonx?

IBM watsonx™ is an enterprise-ready AI and data platform designed to multiply the impact of AI across your business. The platform comprises three powerful products.

- IBM watsonx.ai™ studio: Work with new foundation models, generative AI and machine learning.
- IBM watsonx.data™: Use this fit-for-purpose data store built on an open lakehouse architecture.
- IBM watsonx.governance™: Accelerate AI workflows that are built with principles of responsibility, transparency and explainability.

IBM Planning Analytics and the potential of generative AI

In today’s dynamic landscape, many companies grapple with the combined pressures of inflation, supply chain disruptions and a complex labor market—factors that severely strain profitability. IBM Planning Analytics can help automate integrated business planning across your organization, streamline processes and foster collaboration across your teams to respond to market disruptions quickly.

The upcoming addition of generative AI to IBM Planning Analytics has the potential to enhance the efficiency of the planning workflow to promote greater accuracy. One of the visualized features is a natural language AI assistant that can provide a conversational interface so more users can have access to information, insights and personalized recommendations for business users.

IBM Planning Analytics intends to go beyond traditional conversational interaction, leveraging AI to enable users to identify risks and opportunities and accelerate business agility proactively. These actions can help companies more quickly transform insights into actions and predictions into outcomes while maintaining a consistent planning cadence.

Planned goals include:



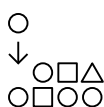
AI performing complex analyses to enhance forecast accuracy



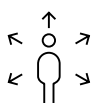
Planners able to swiftly adjust strategies in response to updates, market shifts or unexpected changes



Automated processes to free up planners to focus on high-value tasks, strategic thinking and decision-making



Widespread access to data with an intuitive, self-service experience



Personalized recommendations to enable quick decision-making

Conversational interaction to help lower barriers

For many companies, providing easy access to information and fostering the adoption of an integrated business planning solution is a significant challenge. Expanding decision-making capabilities beyond specialized roles, such as data analysts and finance experts, can lead to more holistic, company-wide efficiency while also optimizing costs.

The envisioned inclusion of a natural language AI assistant could enable business users to enjoy a self-serve experience. Users could ask questions, get answers and provide instructions to manipulate or create data explorations, widgets and other artifacts using plain language—without the need for specialized technical expertise.

For example, a sales leader may need to know the sales forecast for the next quarter or wonder how a 20% increase in the marketing budget might affect the sales forecast. In response, an AI assistant would interpret the request, apply the time series forecast available in Planning Analytics and provide forecasted data based on historical trends and patterns.

This innovation could help simplify the user experience and enhance collaboration among teams by bridging the gap between technical and non-technical users. It could also help lower reliance on extensive training or specialized knowledge, making data and insights accessible to more users across the company.

Maximize strategy with AI-driven prescriptive suggestions

Making strategic decisions is a common objective for users—whether it’s a finance manager who wants to optimize budget allocation, a marketing professional hoping to boost campaign performance or a supply chain executive striving for greater operational efficiency. Having access to insights that align with their objectives and are expressed in the language of their business function can improve this experience.

Since 2021, IBM Planning Analytics has introduced a powerful capability that enables users to access recommendations for optimal paths to achieve expected business results. It is possible through integration with IBM Decision Optimization (IBM® ILOG® CPLEX®). This family of IBM optimization software delivers prescriptive analytics capabilities to companies to help make informed decisions and deliver better business outcomes.

The use of generative AI could enhance this experience and help make accessing insights easier and more intuitive.

The envisioned addition of an AI assistant has the potential to empower users to access descriptive, diagnostic, predictive and prescriptive insights through natural language in a conversational experience.

The user could be able to ask questions about specific expenses and receive responses about which drivers impact them. The assistant might initiate analysis using the driver-based planning model to generate a list of primary factors that influence the target. At completion, the assistant could generate responses along with descriptive text that helps explain data and insights, highlight crucial aspects, and identify anomalies.

This experience can help address the unique needs and challenges faced by different users within an organization to deliver tailored prescriptive recommendations. In addition, this could empower decision-makers by providing more timely information in their preferred format without the need for time-consuming extensive data analysis or interpretation.





Elevate planning, budgeting and projections by identifying risks and anomalies

When decision-makers base their plans on unreliable projections and estimations, it can alter the overall strategic direction of the organization. Companies can misallocate resources, miss out on growth opportunities and even create financial instability.

Planning Analytics envisions using AI to simplify what-if planning and risk analysis by simulating various business scenarios based on historical data and external factors such as interest rates, currency fluctuations, inflation and even weather.

By recognizing patterns and correlations, IBM Planning Analytics will strive to provide valuable insights into the probability and severity of risks, identify anomalies and create alerts that reveal the potential causes.

Automated planning creation to boost productivity

Planners and finance professionals regularly dedicate much of their time to manual, repetitive tasks, often leaving them with too little time to analyze data and its evolution. This time-consuming approach to business planning can lead to inefficiencies and diminish the company's responsiveness to dynamic market changes.

A future AI assistant would be designed to save users from doing such work manually. For instance, when addressing a user's request to generate a quarterly plan, the AI assistant could interpret the query and autonomously produce a preliminary draft. It may use existing data, such as a semiannual budget, and make necessary adjustments to align it with the quarterly requirements. Alternatively, the planner could leverage the AI assistant to create an annual budget and recommend to the assistant that it bases the budget projection on the current year's budget while considering a 10% growth. These kinds of advancements could save time for planners while helping offer consistency and alignment across different planning periods.

About the author



Rodrigo Andrade
IBM Senior Data and
AI Offering Manager

With 15+ years of experience across various industries, Rodrigo leads the AI strategy and roadmap for IBM Business Analytics solutions, focusing on innovative and advanced solution delivery.

1. Information contained in this paper represents envisioning of potential future product direction based on the current state of generative AI technologies, and is subject to change or withdrawal without notice. The statements represent goals and objectives only.

© Copyright IBM Corporation 2023

IBM Corporation
New Orchard Road
Armonk, NY 10504

Produced in the
United States of America
November 2023

IBM, the IBM logo, CPLEX, IBM Watson, ILOG, watsonx, watsonx.ai, watsonx.data, and watsonx.governance are trademarks or registered trademarks of International Business Machines Corporation, in the United States and/or other countries. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on ibm.com/legal/copyright-trademark.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

It is the user's responsibility to evaluate and verify the operation of any other products or programs with IBM products and programs.

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT.

IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at IBM's sole discretion.

