

Fuel Your AI Strategy with Your Progress OpenEdge Data

WHITEPAPER



Introduction

Artificial Intelligence (AI) has reshaped what is possible with today's business applications and enterprise data. Because of its amplified impact, more and more organizations are incorporating AI capabilities into their mission-critical applications.

Leveraging data to fuel AI strategies has become critical for businesses aiming to maintain a competitive edge. Information can be more understandable, processes quicker and more productive and data more accessible to read and share. Having these insights empowers organizations to make more informed decisions and craft highly tailored strategies.





Did You Know?

You can use [Progress® OpenEdge®](#) data to build and strengthen your AI strategy, unlock value and transform developer productivity and operations. This whitepaper aims to showcase the impact of integrating OpenEdge data into your AI strategy, as well as utilizing the full capabilities of the Progress Data Platform.

The Role of Data in AI Strategy

Data is the driving force behind any AI strategy. Relevant, accurate, high-quality and governed data is essential for generating insights and making informed decisions. Integrating your Progress OpenEdge data into an AI strategy can help businesses access reliable datasets, which are crucial for the success of AI initiatives.

AI capabilities are extensive and transformative. For example, AI-driven predictive analytics can help provide forecasts based on historical and real-time data, enabling businesses to make informed decisions. This is particularly useful in inventory management, customer behavior analysis and financial forecasting.

Additionally, implementing AI to offer personalized recommendations and suggestions can significantly improve user experience and engagement. For example, an e-commerce platform can use AI to recommend products based on a user's browsing history.

AI can also identify trends and anomalies in data, allowing businesses to detect potential issues before they become major problems. This capability is valuable in use cases such as fraud detection, quality control and maintenance prediction.

Leveraging the Data in OpenEdge with AI

The comprehensive Progress OpenEdge development platform is designed to build, deploy and manage scalable, reliable and secure business applications. The platform's ability to efficiently handle large volumes of structured data makes it an ideal candidate for general AI integration. Handling large data volumes is crucial for AI applications because it enables more accurate and insightful analysis, leading to better decision-making and improved business outcomes.

• Enhanced Data Quality and Consistency:

The OpenEdge platform provides reliable data management capabilities, helping to reinforce that data is accurate and up to date. By leveraging these features, businesses can check that their AI models are trained on high-quality data, leading to more accurate and reliable predictions.

• Predictive Capabilities:

AI models can help predict future outcomes based on historical data. When integrated with the OpenEdge platform, these capabilities can be applied to various business situations, such as forecasting demand and identifying potential risks. These insights can help weaken risks and strengthen the ability to jump on potential business opportunities.

• Operational Efficiency and Automation:

Integrating OpenEdge data with AI can strengthen operational efficiency and drive automation across various business processes. AI algorithms can analyze OpenEdge data to identify process bottlenecks, optimize resource allocation and automate routine workflows. This saves time and resources and allows developers and DBAs to focus on more strategic and critical activities for the business.

• Predictive Maintenance and Risk Management:

Predictive maintenance and risk management are critical in various industries for minimizing downtime and mitigating potential risks. By integrating Progress OpenEdge data with AI, businesses can utilize predictive analytics to identify potential equipment failures, optimize maintenance schedules and proactively address risks.

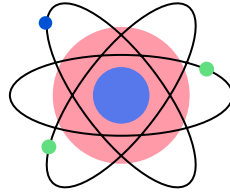
Implementation Strategies for AI Integrations

To integrate AI into Progress OpenEdge applications, we recommend the following:



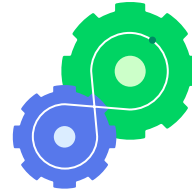
Start Small:

Begin with small, impactful AI projects to demonstrate value and gain experience. This approach allows for gradual integration and helps make a business case for the integration. As these projects succeed, they can garner more executive buy-in, leading to increased funding and support for larger AI initiatives.



Utilize Existing Data:

Leverage the vast amounts of data stored within your OpenEdge databases. AI models can analyze this data to create detailed reports, generate insightful summaries and enhance customer interactions. By utilizing existing data, you can maximize the value of your AI initiatives and drive informed decision-making. Consider implementing data governance practices to maintain data quality and integrity.



Continuous Improvement:

Regularly evaluate AI models to verify they are still accurate and relevant. Continuous updates and improvements can enhance the effectiveness of AI capabilities and prevent unknown data bias. This ongoing refinement helps maintain the quality and reliability of AI-generated content.

Unlocking Efficiency and Innovation

The widespread adoption of AI technologies has grown across various sectors, with many organizations integrating AI solutions to drive innovation, improve efficiency and enhance customer experiences.

In the finance sector, AI integration with the OpenEdge platform can enhance fraud detection, risk management and customer service. AI models can analyze transaction data to identify fraudulent activities, assess credit risk and provide personalized financial advice. This results in more secure and efficient financial operations.

In manufacturing, integrating AI with the OpenEdge platform can enhance predictive maintenance, quality control and process optimization. AI models can analyze sensor data to predict equipment failures, stopping major issues before they happen.

In logistics and transportation, AI models can optimize logistics operations by analyzing OpenEdge data to predict delivery times, optimize routes and reduce transportation costs, getting products to customers faster and more effectively.

The Progress Data Platform

The Progress Data Platform is a comprehensive, enterprise-grade solution designed to support advanced data management and AI applications. It offers a wide range of features and capabilities that make it an ideal foundation for implementing multi-model RAG solutions. These features include:

- **Unified Data Access:** The platform provides seamless access to a wide range of data sources, including relational databases, NoSQL databases, cloud storage and more, enabling comprehensive data integration. The PDP facilitates unified access to data across various sources, including the OpenEdge platform and other relational databases. This integration allows businesses to enrich and supplement OpenEdge data with additional information, creating a richer set of data from which to draw insights. This unified access is crucial for AI applications that require comprehensive datasets for training and analysis.
- **Advanced Data Processing:** The platform supports real-time data processing, allowing the AI system to retrieve and utilize the most current and relevant information.
- **Scalability:** The Progress Data Platform is designed to handle large-scale data operations, making it suitable for enterprise-level AI applications that require high performance and reliability.
- **Security and Compliance:** With robust security features and compliance with industry standards, the platform helps safeguard that data. This secure and responsible handling is critical for AI applications in regulated industries.

Governing the use of the data with the AI, identifying the correct data to provide to the AI and helping increase the accuracy and trust of the AI results can all be improved by using a semantic RAG-based architecture and approach to integrating AI with your OpenEdge data. Combining OpenEdge with the Progress Data Platform can significantly enhance your efforts by leveraging the strengths of both technologies.

Our customers are already experiencing tangible benefits from this integration. For instance, they've reported improved application performance, more efficient data management processes and enhanced overall productivity. This combination is proving to be a game-changer in delivering high-quality, reliable solutions that meet our customers' evolving needs.

Data doesn't stop with the OpenEdge platform. With the data connectivity capabilities of the Progress Data Platform, you can access all your existing data (both structured and unstructured) along with OpenEdge data for the most comprehensive strategy while feeding AI models.

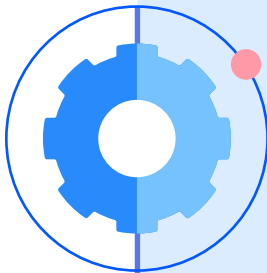
[→ Learn more about the Progress Data Platform.](#)

Integrating Generative AI and RAG with the Progress OpenEdge Platform

With the constantly changing landscape of artificial intelligence, generative AI (GenAI) is capable of producing new and unique content, ideas and solutions. However, while generative AI offers vast potential, it is not without limitations, particularly when it comes to accuracy, context-awareness and relevance of the generated outputs. To address these challenges, retrieval-augmented generation (RAG) has emerged as a powerful approach that combines the strengths of information retrieval with generative models.

RAG utilizes new and pre-existing knowledge and datasets to enhance the outputs of generative models, resulting in more accurate, contextually aware and relevant content. The integration of multi-model semantics into RAG further amplifies its capabilities by enabling the model to understand and utilize information across various modalities, such as text, images and structured data.

The Progress Data Platform serves as a robust foundation for implementing this advanced AI solution. Here's how you can integrate RAG with the Progress OpenEdge platform:



- 1. Data Preparation:** Utilize the Progress OpenEdge database to store and manage the datasets required for training and retrieval. Reinforce that your data is clean, well-labeled and relevant to your use case.
- 2. Model Training:** Train your generative model using the prepared datasets. The training process should include both generative and retrieval components so the model can generate and retrieve relevant information.
- 3. API Development:** Develop a RESTful API to serve the trained RAG model. This API will handle requests from the OpenEdge application, process the data and return the generated outputs.
- 4. Integration with OpenEdge:** Write OpenEdge procedures to interact with the RESTful API. Use the HTTP and JSON capabilities of the OpenEdge platform to send data to the API and receive the generated outputs. This integration allows your OpenEdge application to leverage the enhanced capabilities of RAG.

- 5. Application Enhancement:** Modify your OpenEdge application logic to incorporate the AI-generated content. This could involve using the generated content to provide insights, automate tasks or enhance user interactions.
- 6. Monitoring and Maintenance:** Continuously monitor the performance of the integrated AI solution. Regularly update the datasets and retrain the model to help keep it accurate and relevant.

By following these steps, you can effectively integrate generative AI and RAG into your Progress OpenEdge applications, enhancing their functionality and providing smarter solutions for your business needs.

Conclusion

Elevating your AI strategy with Progress OpenEdge data can help transform business operations and drive innovation within your mission-critical applications. By leveraging AI for predictive analytics, recommendations, pattern detection and more, businesses can achieve new levels of success and stay competitive in today's business environment.

Integrating Progress OpenEdge data with your AI strategy can unlock significant value and transform your business operations. By leveraging AI's predictive capabilities and automation, businesses can enhance their decision-making, improve operational efficiency and deliver quality customer experiences. As AI continues to evolve, combining your OpenEdge data with AI capabilities will become increasingly important for businesses looking to stay competitive and drive innovation.








[Learn more about the Progress Data Platform.](#)

About Progress

Progress (Nasdaq: PRGS) empowers organizations to achieve transformational success in the face of disruptive change. Our software enables our customers to develop, deploy and manage responsible AI-powered applications and digital experiences with agility and ease. Customers get a trusted provider in Progress, with the products, expertise and vision they need to succeed. Over 4 million developers and technologists at hundreds of thousands of enterprises depend on Progress. Learn more at www.progress.com

© 2025 Progress Software Corporation and/or its subsidiaries or affiliates.
All rights reserved. Rev 2025/02 | RITM0283656

 /progresssw
 /progresssw
 /progresssw
 /progress-software
 /progress_sw_