

Accelerating IBM i Development and Modernization with IBM Bob

Jack Henry, a leading financial technology provider, is using IBM Bob to accelerate IBM i development and modernization for its SilverLake System core banking platform. By leveraging AI-powered RPG analysis, documentation, secure coding recommendations, and code generation capabilities, Jack Henry is improving developer productivity, reducing modernization effort, strengthening code quality, and unlocking insights from decades of accumulated system knowledge.

Outcomes

- Accelerated RPG development workflows and improved developer productivity by up to 25%.
- Improved code quality, security, and modernization efficiency with AI-powered analysis and automation.
- Enhanced system understanding and future modernization readiness through automated documentation and code insights.

Solution components

[IBM® Power®](#)

[IBM i](#)

[IBM Bob](#)



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Business Challenge

As its application portfolio grew in size and complexity, Jack Henry began to encounter the natural challenges that come with maintaining and evolving a large RPG codebase. Many applications had been enhanced over decades, with customer-specific variations and documentation that did not always keep pace with ongoing change. As a result, developers often invested significant time in reviewing existing logic, comparing program versions, and validating that updates aligned with secure coding expectations. In parallel, the organization was looking for ways to streamline these activities and accelerate delivery timelines while continuing to rely on its trusted IBM i environment.

Transformation

To help address these challenges, Jack Henry participated in the preview program for IBM Bob, an AI-powered development partner designed to enhance productivity and modernization for IBM i environments. From the outset, the team identified nearly 20 potential use cases for Bob, ranging from code generation and reverse engineering to documentation and improving secure coding analysis. Early in the evaluation, they had tested alternative AI tools but quickly observed that IBM Bob differentiated itself through its deep understanding of RPG and its broader capabilities beyond simple code assistance. This combination of depth and versatility gave the team confidence that Bob could deliver meaningful value across multiple stages of the development lifecycle.

Results

Using IBM Bob, Jack Henry developers are now able to analyze and understand complex RPG programs more quickly, generate technical documentation automatically, and identify differences across program versions with greater accuracy. The solution also provides recommendations for secure coding practices, an area where the team saw significant differentiation compared to other tools. These capabilities are helping developers not only maintain existing applications more effectively but also improve the overall quality and security of their codebase. One of the most impactful benefits has been the acceleration of development workflows. In one instance, a developer used IBM Bob to generate a new RPG program in just a few hours, a task that would have previously taken up to a week. As adoption expands, Jack Henry anticipates achieving at least a 25% improvement in developer productivity initially, with even greater gains depending on the use case.