

MEDHOST Accelerates IBM i Modernization with AI-Powered Development Using IBM Bob

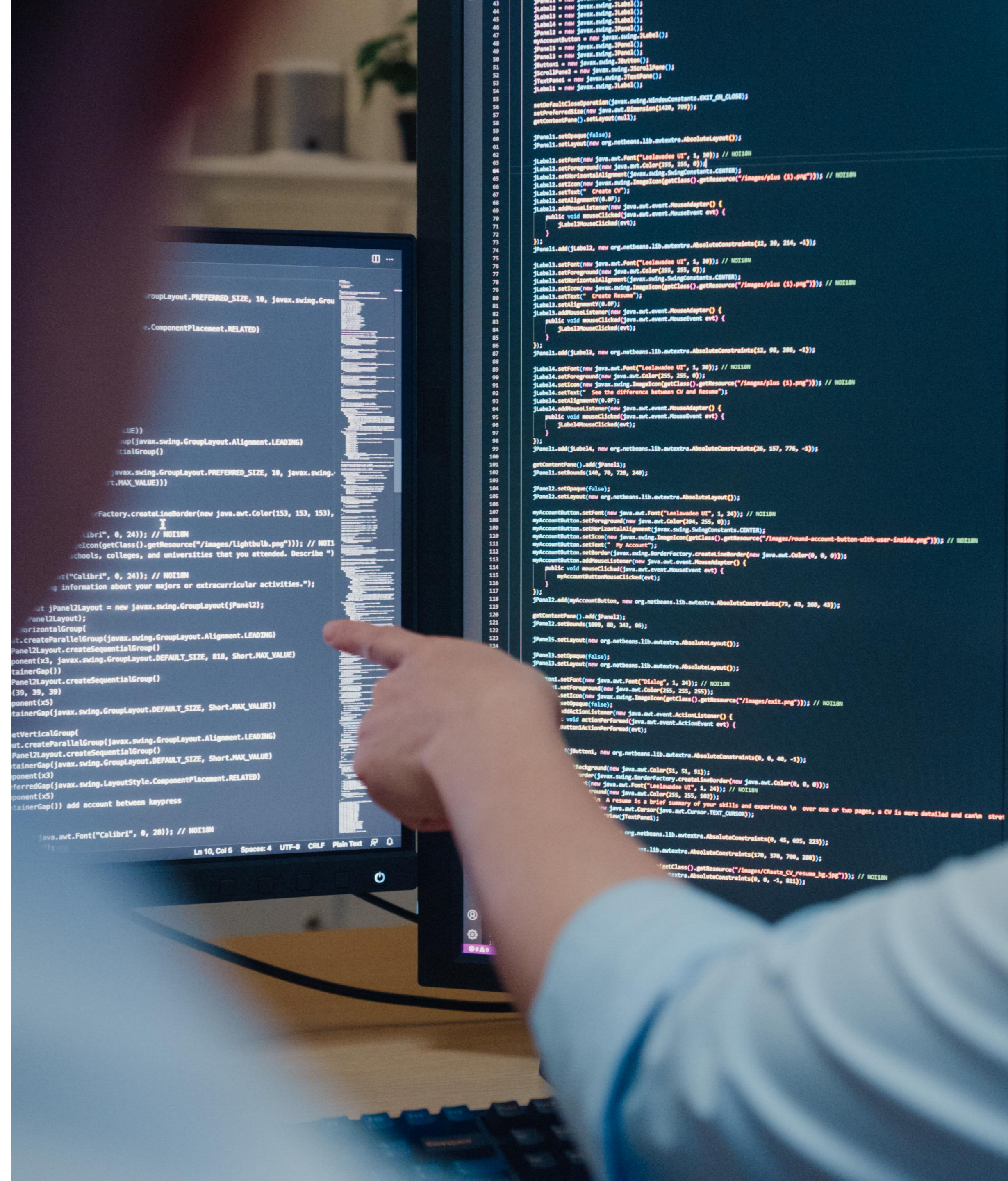
MEDHOST is modernizing its IBM i application development by leveraging IBM Bob, an AI-powered partner that enhances code understanding, accelerates development, and improves productivity. By enabling faster analysis of complex RPG applications and, through beta use cases, estimating up to a 50% reduction in effort compared to manual coding, the organization is increasing throughput and efficiency while minimizing risk in mission-critical systems. This approach allows MEDHOST to preserve reliability and stability while delivering increased value and ensuring quality remains at the forefront.

Outcomes

- Improved developer productivity and modernization speed
- Reduced risk through better code understanding and impact analysis
- Enhanced onboarding and long-term sustainability of IBM i applications

Solution components

- [IBM Power](#)
- [IBM i](#)
- [IBM Bob](#)



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Business Challenge

MEDHOST operates in a highly demanding healthcare environment where applications must support continuous mission-critical operations for hospitals across the United States. Its IBM i environment contains decades of valuable RPG-based business logic spanning multiple generations, delivering strong value and stability but, like any long-evolving system, also presenting challenges related to ongoing enhancements. Delivering new functionality in areas requiring modifications to existing RPG business logic demanded significant time, while limited familiarity with older RPG syntax reduced the available developer talent pool. Understanding program dependencies and performing impact analysis across a large codebase required significant effort, creating risk when making changes. At the same time, MEDHOST needed to maintain strict standards for quality, security, and compliance, making it essential to modernize without disrupting stable systems.

Transformation

To address these challenges, MEDHOST participated in the preview program for IBM Bob, an AI-powered development partner designed for IBM i environments. The organization quickly realized value from the ability of IBM Bob to analyze and explain complex RPG programs, supporting developers in understanding program behavior, dependencies, and data flow. By combining AI-driven insights with cross-reference data, teams were able to perform impact analysis with greater confidence and reduce the risk of missed dependencies. IBM Bob accelerated development efforts by enabling conversion to free-form RPG, transforming data access to SQL-based approaches, and assisting with code refactoring, in some cases reducing manual coding effort by up to 50%. Additionally, the solution helped improve onboarding and knowledge transfer by generating clear documentation and explanations, helping newer developers quickly build expertise.

Results

MEDHOST is already realizing significant benefits across its development organization. The team has observed increased throughput and valuable improvement suggestions through the adoption of IBM Bob. Developers can now understand code faster and perform impact analysis more efficiently, supporting improved outcomes in complex changes. Development acceleration is being realized while maintaining quality, enabled by adopting these technologies without the need to re-platform. At the same time, IBM Bob has enhanced onboarding and knowledge transfer, enabling faster ramp-up for new developers and supporting continued innovation. By augmenting developers with AI, MEDHOST is strengthening its ability to modernize while maintaining the reliability and trust required for healthcare systems.