

The Future of Product Delivery: AI Accelerates IT Modernization

ITGuidepath® introduces an innovative product delivery model that harnesses the power of AI for critical IT projects.

Digital modernization and innovation initiatives have the potential to radically transform an organization's business operations and improve performance, but they can also become risky and costly—sometimes delivering less value than originally planned.

Lengthy modernization efforts frequently incur cost overruns and schedule slippages while contributing little to mission-related outcomes. Many agree that the root cause of these challenges can often be found in antiquated IT delivery strategies. These strategies require scope, scheduling, funding, and architecture precision at the outset of the initiative—at a time in the lifecycle when the least is known about end-user and mission needs and requirements that, when satisfied, make products fit for purpose.

Uncertainty requires management agility. When uncertainty is high, a learning system based on iteration and feedback is required to balance feature, resource, and schedule decisions. Agile methodologies provide such a system by using progressive elaboration, iteration, product demonstration, adaptation, customer feedback, and continuous improvement to accelerate the incremental delivery of high-quality, working products and business value.

Teams that adopt Agile techniques work to continually deliver and deploy value, apply rigorous and automated quality assurance, minimize work in process, and leverage user-centered design and customer feedback to reduce risk and continuously improve product fit. But even as Agile methods have gained recognition as a best practice for modern digital solutions and product development, adopters are realizing that these methods can be streamlined and made more effective by harnessing the power and promise of generative AI (GenAI).



At Guidehouse we are using GenAI to increase the effectiveness of engaged product owners, strengthen the product owner's ability to articulate the voice of the customer, and improve the team's ability to elaborate, experiment, build, and test features that satisfy customer needs.

By integrating GenAI into standardized implementation processes, defined within ITGuidepath®—our proven modernization methodology—we are accelerating our ability to work collaboratively with customers to build, demonstrate, pivot, and deploy products that are valuable, high-quality, and fit for purpose.

How AI Accelerates Product Delivery

Standardized product management frameworks like Agile can cut time to market in half¹ — but additional efficiencies are often possible in the planning and execution of these Agile-enabled large-scale transformations.

Within ITGuidepath, Guidehouse created a templated product delivery framework to help streamline modernization initiatives and enable modernization success. Designed by a team of experts from multiple industries and technology areas, ITGuidepath is used by digital practitioners across Guidehouse to predictably deliver mission-critical digital modernizations that delight customers across the markets we serve.

Our success using ITGuidepath to deliver digital modernizations over the last five years demonstrates the value of institutionalized, standardized delivery practices, tools, and methods. Building upon this success, we are now harnessing the power of large language models (LLMs) and engineered prompts to enable the next generation of product delivery by creating an enhanced version of the ITGuidepath framework.

The AI-enhanced ITGuidepath delivery model uses engineered prompt templates to standardize and streamline product owner planning and consultation and improve developer productivity. Using a library of engineered prompts that are specifically tuned for Agile use cases, we help product managers and product owners quickly generate, disaggregate, and elaborate product backlog items while also helping developers leverage LLMs to draft code documentation and generate and refactor code.

This AI-enhanced delivery model generates significant efficiencies and helps Guidehouse professionals deliver better outcomes, improved quality, reduced costs, higher customer satisfaction, and sustainable success for organizations executing complex technology modernization projects.

The New AI-Enabled ITGuidepath

Guidehouse's enhanced ITGuidepath framework will include AI-enabled tools and capabilities that automate the initial development of the most critical deliverables to help reduce digital product delivery cycle times, control costs, improve product quality, and enable greater innovation.

The new framework will be rolled out in two phases. In the first phase, ITGuidepath is being enhanced to include multiple assets focused on streamlining product owner and product manager work efforts and improving productivity when working on tasks like epics, feature disaggregation, and user story elaboration. In the second phase, ITGuidepath is being updated to improve developer productivity by simplifying tasks like code refactoring, generating legacy code equivalents in target technology stacks, and defining test cases.

In subsequent enhancements, ITGuidepath will be enhanced to identify valuable features through the examination of customer-sentiment data and better inspect observability and telemetry data to analyze system usage, monitor resource utilization, and optimize service configurations.

AI-Enabled ITGuidepath Benefits

The new AI-enabled ITGuidepath will support our team's efforts to rapidly deliver business value in the form of working software that benefits our clients and addresses their unmet needs and challenges. The new and improved ITGuidepath will enable our teams to:



Improve planning: Specialized engineered prompt templates jump-start the identification, disaggregation, and elaboration of product backlog items.



Accelerate product delivery: Reduced manual work frees product owners and developers to add value to generated deliverables and other higher-value work.



Reduce team delivery burden: Automating the first drafts of important documentation and software artifacts reduces Agile delivery burdens and cycle times.



Reduce risks and costs: Standardizing processes and tooling reduces the risk of cost and schedule overruns that can impact delivery deadlines, performance, and quality.



Increase quality: AI-assisted code reviews, refactoring, and code generation jump-starts software delivery and validates software quality.

The Guidehouse Difference

We developed ITGuidepath's new AI-enabled tool kit by leveraging our internal expertise and experience executing public and commercial sector modernization initiatives across industries to ensure that it meets the needs of diverse clients.

ITGuidepath templates can be used for modernization initiatives of any kind, from large, multiyear modernization programs to targeted, quick-turnaround projects with more limited scope. Adaptable to any industry, ITGuidepath enhancements enable efficiency, reduce risk, and improve any project's success.

Guidehouse is excited to build on the success of ITGuidepath with this innovative, AI-enabled project delivery framework that will help accelerate and improve the performance of our clients' critical IT transformation projects.

Contact Guidehouse to learn how our experts can help your organization experience the benefits of accelerated product delivery through our AI-enabled ITGuidepath framework.

¹ "The Impact of Agile Quantified." Broadcom Software. March 16, 2023. (<https://docs.broadcom.com/doc/the-impact-of-agile-quantified>).

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About Guidehouse

Guidehouse is a global consultancy providing advisory, digital, and managed services to the commercial and public sectors. Guidehouse is purpose-built to serve the national security, financial services, healthcare, energy, and infrastructure industries. Disrupting legacy consulting delivery models with its agility, capabilities, and scale, the firm delivers technology-enabled and focused solutions that position clients for innovation, resilience, and growth. With high-quality standards and a relentless pursuit of client success, Guidehouse's more than 17,000 employees collaborate with leaders to outwit complexity and achieve transformational changes that meaningfully shape the future. [guidehouse.com](https://www.guidehouse.com)

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