publicis sapient

Legacy Modernization

Unlock the power of generative AI to accelerate legacy modernization

Offering summary

To compete in the digital era, businesses need modern technology. However, it isn't always easy or cost-effective to transition old code to new architecture and migrate away from the legacy technology stack. Publicis Sapient is helping clients to modernize significantly faster, enhancing operational efficiency and innovation for scalable, agile growth—enabled by AI with human intervention.

Unleash the opportunity

Businesses today must be more agile to innovate quickly and meet evolving customer and regulatory demands, but legacy technology is holding back many organizations. It is time to find a better and faster way to modernize to take advantage of solutions that offer the agility to launch products faster, create new applications and innovations and boost customer satisfaction.
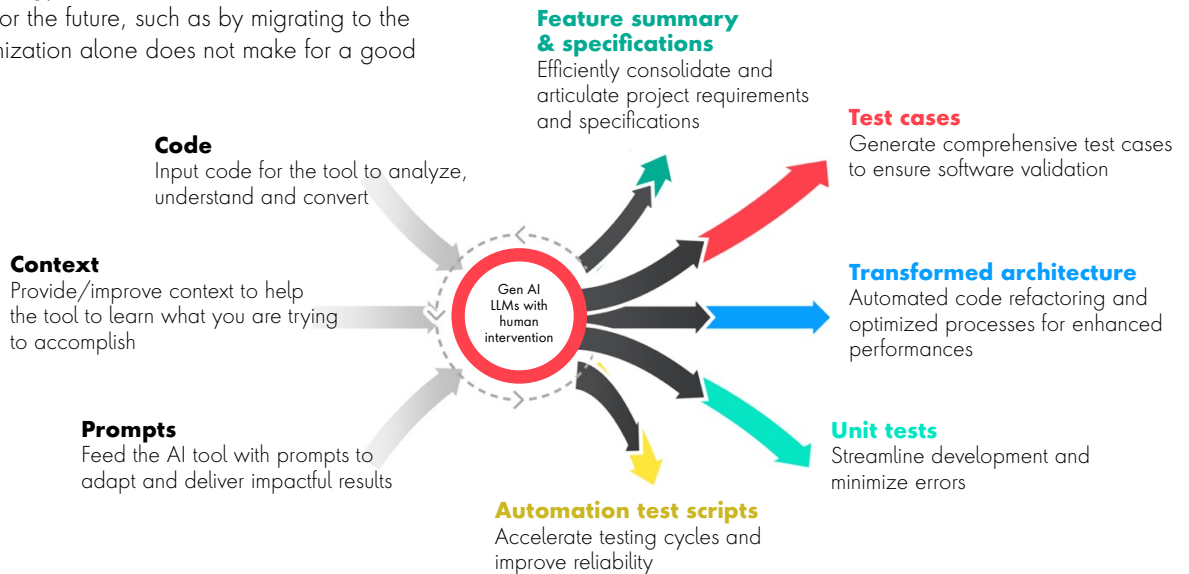
Outdated technology: Legacy technology is expensive, draining IT budgets and oftentimes keeping companies stuck in long-term contracts. Outdated technology also makes it harder to innovate and position the business for the future, such as by migrating to the cloud. Technology modernization alone does not make for a good business case.

Shortage of skills: It is rare—and nearly impossible—to find engineers who understand both legacy and modern technologies.

Slow transitions: Traditional translation tools haven't delivered on their promises, and migration journeys have been complicated, often running over budget and significantly behind schedule.

Our approach

Publicis Sapient utilizes various large language models (LLMs), contextual knowledge and pre-built prompt libraries to significantly amplify developer productivity. As a result, we can seamlessly comprehend code, generate documentation for the target state, transition old code to modern architecture and automate testing.

Code
Input code for the tool to analyze, understand and convert

Context
Provide/improve context to help the tool to learn what you are trying to accomplish

Prompts
Feed the AI tool with prompts to adapt and deliver impactful results

Gen AI LLMs with human intervention

Feature summary & specifications
Efficiently consolidate and articulate project requirements and specifications

Test cases
Generate comprehensive test cases to ensure software validation

Transformed architecture
Automated code refactoring and optimized processes for enhanced performances

Unit tests
Streamline development and minimize errors

Automation test scripts
Accelerate testing cycles and improve reliability

Measurable outcomes:

>50%
reduction in
modernization costs*

50%-70%
increase in migration speed*

50%
fewer defects, significantly
expanded coverage of
requirements and test cases*

This data is based on our analysis of over 100 end-to-end experiments using our Gen AI modernization accelerators in combination with PSChat, Bodhi, GPT, using internal organizational datasets, PS Innersource accelerators, combined industry research and metrics. Actual results will vary based on client-specific context.

How we've made an impact:

LEADING BENEFITS PROVIDER

The imperative for change:
- Accelerate the modernization of legacy mainframe applications to enable greater agility and lower costs

The transformative solution:
- Designed a process for cloud developers to use private models/LLMs to deconstruct legacy programs
- Used proof of concept results to fine-tune the operationalization and iterative development in sprints

The business impact:
- **3x faster migration and reduced effort through AI**
- **Created functional specifications to improve traceability and quality**
- **Made code easier to maintain and enhance in a modern tech stack**

What sets Publicis Sapient apart?

Publicis Sapient brings a unique combination of expertise, experience and capabilities to accelerate legacy modernization for clients using the power of AI:

- **Digital transformation and legacy modernization expertise:** We have a long-standing history of delivering successful digital business transformation and legacy modernization initiatives across multiple applications and clients

- **Generative AI leadership:** We deliver enterprise-scalable generative AI solutions for leading global brands, and we are transforming our own business through our investments in AI

- **End-to-end capabilities:** Our services span from strategy to implementation, and we have the deep technical expertise and business acumen to deliver value through practical solutions

- **Partnerships with cloud leaders:** Our partnerships in cloud strategy, build, migration and security enable legacy modernization and unlock partner funding for AI initiatives

WHY PUBLICIS SAPIENT

Publicis Sapient is a digital business transformation company. We partner with global organizations to help them create and sustain competitive advantage in a world that is increasingly digital. We operate through our expert SPEED capabilities: Strategy and Consulting, Product, Experience, Engineering and Data, which combined with our culture of curiosity and deep industry knowledge, enables us to deliver meaningful impact to our clients' businesses through reimagining the products and experiences their customers truly value. Our agile, data-driven approach equips our clients' businesses for change, making digital the core of how they think and what they do. Publicis Sapient is the digital business transformation hub of Publicis Groupe with 20,000 people and over 50 offices worldwide. For more information, visit **publicissapient.com**.

For more information, visit **publicissapient.com/solutions/sapient-ai-solutions**.

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