



HEXWARE

AI-Powered Software Development for Education

Accelerating software delivery through
a governed human-AI software
development lifecycle

Case study

Client

| Client

Challenge

Solution

Benefits

Summary

A Leading Education Curriculum & Assessment Company

The client is a large education curriculum and assessment organization that develops and delivers digital learning, curriculum, and assessment solutions through large-scale digital platforms.

Serving educators and learners across multiple educational environments, the organization continuously enhances its technology ecosystem through frequent software releases and ongoing product innovation.



Challenge

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Improving Software Delivery Efficiency While Maintaining Quality

The client relied on a continuous delivery model to release enhancements across its digital learning platforms. As competitive pressures increased and AI capabilities matured, the organization sought new ways to improve productivity, accelerate release cycles, and optimize software delivery costs without compromising quality or governance.

The organization needed to:

- Improve efficiency across the software development lifecycle
- Accelerate requirements capture, development, integration, and testing
- Improve code quality before deployment
- Reduce quality assurance effort
- Explore practical applications of generative AI in software engineering
- Establish a scalable and governed approach to enterprise AI adoption



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Applying AI Across the Software Development Lifecycle

The client partnered with Hexaware to implement AI-powered software development for education through a controlled pilot program using Claude AI. The initiative focused on introducing AI-assisted capabilities across key stages of the software development lifecycle while maintaining human oversight and accountability.

Requirements

- Generated initial user story drafts using AI
- Business analysts reviewed, refined, and approved all outputs

Development

- Applied AI-assisted code analysis and refactoring recommendations
- Identified opportunities to improve code efficiency before integration

AI Software Integration

- Leveraged AI to identify code dependencies and module inter-relationships
- Reduced downstream integration issues and version conflicts
- Pre-emptive diagnosis and resolution of potential deployment risks

Testing

- Updated existing test cases to align with newly developed code
- Improved alignment between development and quality assurance activities

Governance and Responsible AI

To support responsible enterprise AI adoption, the organization established clear governance guardrails:

- AI operated only within local developer environments
- AI was not given direct access to enterprise repositories or production code
- Human teams retained full accountability for all engineering outputs
- Governance approvals were required for high complexity use cases
- AI usage was organically limited to 10–15% of the code base during the pilot phase

This approach enabled secure and controlled AI in software development lifecycle activities while preserving quality, compliance, and security standards.



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Accelerating Delivery Through Human-AI Collaboration

The initiative demonstrated how generative AI in software engineering can deliver measurable value when combined with strong governance and human expertise.

Key outcomes included:

- 20% increase in sprint velocity across requirements, development, integration, and testing
- 10% reduction in quality assurance effort
- Faster identification of code dependencies and integration risks
- Improved software quality through AI-assisted code refinement
- Increased productivity across the pilot development teams
- Established a scalable foundation for future AI transformation within the organization for education technology products



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Enabling Responsible AI Innovation Across Software Engineering

As education technology organizations seek faster and more efficient software delivery models, AI-powered software development for education offers a practical path to improving productivity while maintaining quality and governance.

By embedding AI across key stages of the software development lifecycle, the client accelerated development, improved software quality, and created a repeatable approach for broader enterprise AI adoption. The initiative demonstrates how human expertise and generative AI can work together to deliver measurable business outcomes while maintaining accountability and control.



Looking to Improve Software Delivery Efficiency?

Accelerate development cycles, improve software quality, and unlock greater engineering productivity through responsible AI adoption. Contact marketing@hexaware.com to get started.

About Hexaware

Hexaware is a global technology and business process services company. Every day, Hexawarians wake up with a singular purpose: to create smiles through great people and technology. With this purpose gaining momentum, we are well on our way to realizing our vision of being the most loved digital transformation partner in the world. We also seek to protect the planet and build a better tomorrow for our customers, employees, partners, investors, and the communities in which we operate.

With offices across the world, we empower enterprises to realize digital transformation at scale and speed by partnering with them to build, transform, run, and optimize their technology and business processes.

Learn more about Hexaware at <https://www.hexaware.com>.

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