# New Survey Uncovers an "Aloneware" Crisis: Isolated AI Development Threatens Enterprise Stability and Adds Maintenance Costs

November 23, 2026

More than half of UK AI decision-makers and IT leaders say standalone coding assistants lead to "aloneware": software that's difficult to support, understand, and maintain

LONDON, Nov. 23, 2026 /PRNewswire/ -- Appian (Nasdaq: APPN), an AI automation leader, today released new research asking UK AI decision-makers and IT leaders about AI-assisted development. They found that enterprise investments in fast-tracked AI software development are creating an unexpected drain on corporate innovation capital, with 79% of UK enterprise leaders allocating at least 10% of their current technology innovation funds to test, deploy, maintain, update, integrate and/or repair isolated AI software builds.







In the survey of 200 UK respondents at large enterprises, Appian defines a new term: "aloneware." These are applications built or modified with AI-assisted development tools outside an approved enterprise platform environment. While these tools accelerate initial code creation, organisations face mounting friction to understand AI-generated applications and keep them functional, secure, and integrated over time.

**Upfront speed creates downstream work**

Initial build speed is failing to deliver long-term efficiency. Almost two-thirds (64%) of enterprise leaders surveyed report that while standalone AI tools accelerate development, they are spending more time across testing, system integration, troubleshooting, scaling, and/or deployment.

According to Matt Calkins, CEO of Appian, "Some people get so excited about 'free' software that they forget the risks. Enterprises can now create tech debt faster than ever before."

**Aloneware diverts strategic innovation budgets**

The operational burden of maintaining software built outside a platform is directly diverting capital away from strategic growth. Almost eight in 10 (79%) enterprise leaders surveyed report allocating at least 10% of their current technology innovation budgets to testing, deploying, maintaining, updating, integrating and/or repairing software built outside a platform environment. And 43% of those surveyed currently allocate at least 20% of the budget—a figure that 55% expect to allocate within the next two years, indicating that the financial drain is accelerating quickly.

Compounding these budget demands, 60% of UK enterprise leaders report unexpected post-launch costs or resources tied directly to security, governance, and compliance remediation.

**The support void and the need for platforms**

When isolated AI applications break, organisations face a critical support void. 60% of leaders find it challenging to access accountable technical support when problems arise with applications built outside a platform, while 61% report difficulties keeping code, architecture, dependencies, and system integrations up to date.

Against this backdrop, 59% of respondents state that a shared architectural foundation would improve their ability to control total cost of ownership and 60% say it would help them maintain software over time.

"The most important applications in enterprises need support," Calkins adds. "If you vibe-code them, there will be nobody to turn to when problems occur. Using AI to build applications on a commercial platform combines the speed of AI with the reliability of supported technology."

To access the complete research findings and executive report, visit appian.com/aloneware.

**About the research**

The research was conducted by Censuswide among 200 senior decision-makers who primarily work in AI/Engineering or IT, work at large enterprises (5,000 employees or more, or annual revenue exceeding $1 billion), and who work on at least three software systems annually. Respondents were based in the UK. Data was collected between 21 and 30 October 2026.

Censuswide is a member of the Market Research Society (MRS) and the British Polling Council (BPC), and a signatory of the Global Data Quality Pledge. The research adheres to the MRS Code of Conduct and ESOMAR principles.

**About Appian**

Appian provides AI automation for the most important business processes at the world's largest organisations.

On the Appian Platform, customers build AI-powered processes that accelerate work, reduce cost, and manage risk. Our platform is known for its unique power, reliability, and scale. We've been automating processes for more than 25 years and have proven expertise in enterprise operations. For more information, visit appian.com. [Nasdaq: APPN]

Follow Appian: LinkedIn, YouTube, Instagram, Facebook, and X.



View original content to download multimedia:https://www.prnewswire.com/news-releases/new-survey-uncovers-an-aloneware-crisis-isolated-ai-development-threatens-enterprise-stability-and-adds-maintenance-costs-302948028.html

SOURCE Appian

Cindy Cheng, Senior Director of Global Media Relations, cindy.cheng@appian.com