



The Rise of “Vibe Coding” — Risks and Opportunities for Insurance Executives



“Vibe coding” describes an emerging approach to software development in which natural language prompts, assisted by large language models (LLMs), generate and refine code at a pace far faster than traditional methods. Instead of painstakingly writing every line, developers, or even business users, guide the AI by describing desired features and behaviors in everyday language. This departure from conventional coding means that, as Andrej Karpathy has pointed out, “the hottest new programming language is English”^[1].

For insurance firms, this shift holds immediate relevance. Vibe coding dramatically reduces the overhead associated

with building new applications, upgrading legacy systems, and automating policy or claims workflows. Early data suggests large productivity gains when AI-assisted development is used, enabling leaner teams to accomplish more in less time^[2].

Just as important, **vibe coding can empower those beyond IT**, such as underwriters, claims managers, or customer service leads, **to play a more direct role in shaping technology solutions**. With the right guardrails, insurers could see faster time-to-market, streamlined operations, and better alignment between business insights and software outcomes.



Key implications for technology leaders

Insurance executives tasked with overseeing technology investments stand at a crossroads. **Vibe coding changes the fundamental calculus of build-versus-buy decisions**. Rather than adopting large, off-the-shelf platforms with extensive customization needs, many insurers can leverage AI-based coding to tailor solutions more precisely to their risk models, product lines, or regulatory requirements. This allows for the best of both worlds: high levels of customization without the full expense of traditional, in-house development cycles.

As with any powerful new capability, however, vibe coding also raises concerns around quality assurance and regulatory compliance. Because LLMs can be prone to subtle errors, experts have warned that “[v]ibe coding your way to a production codebase is clearly risky”^[3].

A robust governance framework is therefore vital. Teams must review AI-generated outputs as rigorously as human-written code, ensuring that data privacy rules and insurance regulations are respected at every stage.

A further consideration lies in the skill sets that insurance IT departments will need. AI-assisted development requires prompt engineering skills, in which staff learn how to phrase requests for the model effectively. At the same time, insurers should encourage cross-functional collaboration so that domain experts can safely explore basic software creation. **The leadership challenge is to promote this democratization of coding without compromising oversight**, especially in a market where a single miscalculation can lead to reputational harm or regulatory sanctions.



Unlocking the opportunities

Embracing vibe coding can unlock a range of opportunities across an insurer’s operations. One clear benefit is rapid product innovation, particularly in developing new coverage types or enhancing existing policy features. By removing much of the coding bottleneck, vibe coding allows more frequent experimentation with pricing engines, underwriting workflows, and digital engagement tools. Rather than waiting months to test a new feature, a small agile team can deploy and iterate in a matter of weeks.

These productivity gains also foster operational efficiency. Maintenance tasks, like refactoring old modules or creating test scripts, can be partly automated through AI.

In a sector that spends significant resources on updating legacy systems, even incremental improvements in modernization speed can pay large dividends. According to PwC, insurers that leverage emerging AI-driven tools have reported faster issue resolution and lower long-term support costs^[4].

Lastly, by making coding more accessible, vibe coding stands to accelerate customer-facing innovation. From building micro-applications tailored to specialized segments to rolling out chatbots for real-time policy service, insurers can iterate quickly and capture customer feedback throughout the process. This heightened responsiveness can enhance customer loyalty and position insurers as forward-thinking solutions providers in an increasingly crowded marketplace.



How Xceedance can help

Xceedance offers a comprehensive approach to help insurance organizations embed AI-powered software development workflows effectively and responsibly. Beginning with a technology and skills assessment, our teams identify the readiness of a company's existing infrastructure, as well as the potential for rapid wins in areas like policy administration, claims intake, or underwriting modernization. We then advise on selecting or integrating enterprise-grade AI capabilities, ensuring data privacy and intellectual property concerns are addressed before any live deployment.

Beyond choosing the right platforms, Xceedance supports insurers by crafting AI governance frameworks that align with existing risk controls, especially critical for regulated environments. This includes instilling best practices for code review, testing, and prompt engineering so that AI-generated

code meets consistent standards. We can also help set up Centers of Excellence (CoEs) that anchor continuous improvement in AI development, where IT staff and business experts collaborate under shared guidelines.

An essential dimension of our assistance is change management. Because vibe coding alters roles and responsibilities, Xceedance designs training programs tailored for developers, quality assurance teams, and "citizen developers" in business units. This structured guidance helps organizations shift to an agile, AI-driven mode of software delivery without losing the crucial aspects of compliance and user trust that underpin insurance operations. By integrating these components, Xceedance enables insurers to realize the tangible benefits of vibe coding while protecting against potential pitfalls.

References

1. Tweet: <https://x.com/karpathy/status/1617979122625712128> (retrieved 27 Mar 2025)
2. Business Insider: 'Vibe coding' lets 10 engineers do the work of a team of 50 to 100, says CEO of Silicon Valley incubator. <https://www.businessinsider.com/vibe-coding-startups-impact-leaner-garry-tan-y-combinator-2025-3> (retrieved 27 Mar 2025)
3. Ars Technica: Will the future of software development run on vibes? <https://arstechnica.com/ai/2025/03/is-vibe-coding-with-ai-gnarly-or-reckless-maybe-some-of-both/> (retrieved 27 March 2025)
4. PwC: 2024 GenAI Insurance Trends. <https://www.pwc.com/us/en/industries/financial-services/library/generative-ai-insurance-trends.html> (retrieved 27 Mar 2025)

About the Author



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Brandon Nuttall is the Chief Digital & AI Officer at Xceedance. Brandon enables Xceedance clients to incubate GenAI and other intelligent technologies into their daily operations safely and securely so that they can do more, faster.

Brandon has almost 20 years of experience in the insurance industry and a proven track record of curating ecosystems that combine the best of industry professionals and digital solutions, delivering real value to clients.

Brandon has deep expertise in digital architecture, infrastructure, and environments. He has also supported best-practice implementations of insurance technology solutions internationally. In previous roles, he has created compelling technology propositions for clients and helped C-level teams of global organizations accelerate their technology change journeys.

Learn how Xceedance can help your organization navigate complex market challenges, manage rapidly-evolving policyholder expectations, boost regulatory compliance, and kickstart enterprise transformation. Ready to find your way forward? Reach out to us at contact@xceedance.com to get started.



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