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CR PULSE

# Thoughtworks Jolts Enterprise AppDev Into the AI Era

With the Launch of AI/works™, Developers and  
Enterprises Can Reach Previously Unseen Levels of  
Code Velocity



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*Produced exclusively for Constellation Research clients*

## INTRODUCTION

The generative artificial intelligence (GenAI) boom changes every aspect of digital value chains, enabling companies to insert AI into any corner of enterprise automation. GenAI's strong text-generation abilities have been revolutionary when it comes to programming languages, which are more structured than human languages. From understanding existing code to finding and fixing defects, creating and executing text scripts, documenting code, analyzing and writing requirement documents and specifications—and more—GenAI has been leveraged to revolutionize developer velocity. The “fabled” key performance indicator (KPI) that enterprises have been after, developer velocity (how enterprises can make developers more productive), is now within reach.

What is clear is that platforms are needed to provide developers with the frameworks for executing these new levels of productivity. And CxOs want these platforms to come from trusted partners that have a reliable platform, take care of security, and provide a roadmap for further enhancements. GenAI usage for developers cannot be left to experimentation and developers' individually picking their toolsets.

As a consequence, AI developer platforms emerged in 2025, providing the tooling that enables higher developer velocity, which will come from different dimensions. The key ones to watch are the following:

- Understanding what has been built. In short, this is a phenomenal challenge, for many reasons, including bad documentation, developer departure, low motivation to review other developers' code, and so forth.
- Knowing what has to be built. With code's needing to be built faster, the key enabler is spec-driven development. Specs can be widely understood in an enterprise, and spec conformity (when the software does what the spec asks for) is the ultimate prize of software development.
- Building at high velocity. Developers must be able to leverage GenAI as fast and well as possible to deliver the finished working automation, which is accepted by an enterprise's business according to spec.

The good news is that GenAI helps with all three key aspects, being able to understand code and old specs, create specs, uplift specs, generate code, test code, and deliver code.

## TRENDS

Customer checks from the BT150<sup>1</sup> and AI150<sup>2</sup> alumni show the following eight next-generation database trends for 2026 and beyond:



**Experimentation is over; execution is in.** The time when CxOs could leave their developers to experiment with GenAI is over; it is now all about delivering results via AI, enabling the enterprise to reap benefits from agentic AI, and more. Simply put, enterprises can no longer wait. It is not only that boards and CEOs are getting anxious but also that the maturity of the tools makes further delays inadvisable.



**AI-native platforms rule.** At the forefront of the integrated development environments (IDEs) being used are AI-native platforms, not the traditional IDEs with “bolted-on” AI capabilities. These AI-native platforms lack the understanding of enterprise demands as well as coverage of the entire software development lifecycle (SDLC), and that opens the door for providers that have a substantial developer base in the enterprise—the IT services industry.



**Vibe coding and its evolution will become standard.** The power of directing GenAI to build code—originally called vibe coding—has matured and is by now so great that it is unlikely that any enterprise developers will write more than a few lines of code in sequence. Human-in-the loop validation is the new best practice, and it requires editing, not writing, of code.



**Multiagent orchestration looms and will go mainstream later in 2026.** Establishing the ideal human-to-agent ratio in software development is still in the experimentation phase. What is clear by now is that it is more than 1, so a multiagent user experience (UX) is required in the IDE. The question is how many agents can be supervised effectively by one human.



**Quality checking of GenAI code remains a challenge; solutions will emerge.** With GenAI helping to code, more code will run in the enterprise, which creates a technical debt that will be substantial in under a few years. It is unlikely that developers will want to check AI-generated code any more than they want to check their colleagues' code. The good news is that GenAI will help itself via tools to provide the necessary quality checks emerging later in 2026.



**Autonomous agents handle end-to-end tasks.** As scary as it sounded in early 2025, agents are handling autonomous tasks in the SDLC as of early 2026, often bridging multiple phases of the SDLC. Initially encountered with deep mistrust, the promise of automation and the building of trust while monitoring will make autonomous agents a key part of an enterprise's software development ecosystem.



**Repository intelligence and lifecycle awareness are imminent.** Impact analysis of software has been more heuristic than deterministic in the past. Understanding the impact of new code on old code and their coexistence has been largely trial and error. Now tools have emerged that can assess the impact of new code on existing code via repository analysis as well as understanding where new code will be running and what that code will be interacting with.



**The IT services industry will play a role in AI IDEs.** Because enterprises do not have enough developers, they are looking for system integrators to help them achieve their GenAI product development goals. The expectation is that in 2026 an IT services developer can use an existing platform that multiplies the individual's capacity by a factor of 5 to 10. Consequentially, all IT services vendors have scrambled to build and operate their AI IDEs.



**Governance and security still matter, but code comes first.** Of course, enterprises cannot have ungoverned code run their enterprise, but all too often, the governance questions are motivated by resistance to change. It is important to build, learn, and then govern instead of governing first and waiting for code to be built.

## Threshold Criteria

The threshold criteria for the Constellation ShortList™ for AI-powered developer platforms<sup>3</sup> are as follows:

- ✓ The ability to generate working code
- ✓ More than five AI/machine language (ML)-powered code productivity capabilities built into the IDE
- ✓ A roadmap of how AI/ML will further improve the developer experience
- ✓ Capabilities adjacent to coding—either “left” to requirements or “right” to quality assurance (QA), documentation, training, and so forth
- ✓ Autonomous capabilities available/coming in 2026 and beyond
- ✓ Support for a variety of large language models (LLMs) for code generation
- ✓ Tangible results and examples of how these features increase developer velocity
- ✓ Support for popular programming languages
- ✓ Easy uptake of and education on new features

## VENDOR UPDATE

Constellation follows Thoughtworks as a vendor as well as its customers, prospects, and partners regularly. Recently Thoughtworks launched its AI IDE, AI/works™. Constellation attended launch events in the U.S. and India, has spoken to numerous customers and prospects as well as partners, and sees the following as critical updates from the last 12 months at Thoughtworks:

- **Keeps investing in software-development thought leadership.** Thoughtworks plays a significant role in the provision of key empiric research for software development—e.g., the vendor’s 2025 and 2026 [Looking Glass](#)<sup>4</sup> reports, which provide alerts on AI trends, as well as its [State of digital and AI readiness](#)<sup>5</sup> report. Equally important was the 25-year anniversary of the “Agile Manifesto” at the company’s Future of Software Retreat.
- **Receives broad recognition from industry analysts.** Over the last 12 months, Thoughtworks has been recognized by (in alphabetical order) Constellation Research, Forrester, Gartner, and IDC, validating the vendor’s thought leadership and viability.
- **Rebuilt its leadership team.** Over the last 12 months, Thoughtworks has brought in new leadership across strategy, service lines, regional leadership, AI operations, AI platforms, and operations as well as HR.
- **Is actively working with partners.** Thoughtworks was recognized by Databricks as the 2025 Communications, Media and Entertainment (CME) [Partner of the Year in Latin America](#),<sup>6</sup> announced a [strategic partnership with Groq](#), has achieved [AWS Agentic AI Specialization](#),<sup>7</sup> and has won the [2025 AWS Partner Award](#).<sup>8</sup>
- **Wins business and numerous blue-chip enterprises.** Here is a list of select wins mentioned in press releases: Crown Commercial Service, Redbridge DTA, GXS Bank, carsales, Simon & Schuster, Favor Delivery, U.S. Department of Veterans Affairs (VA), British Airways Holidays, and Energy UK.

# OFFERING ANALYSIS

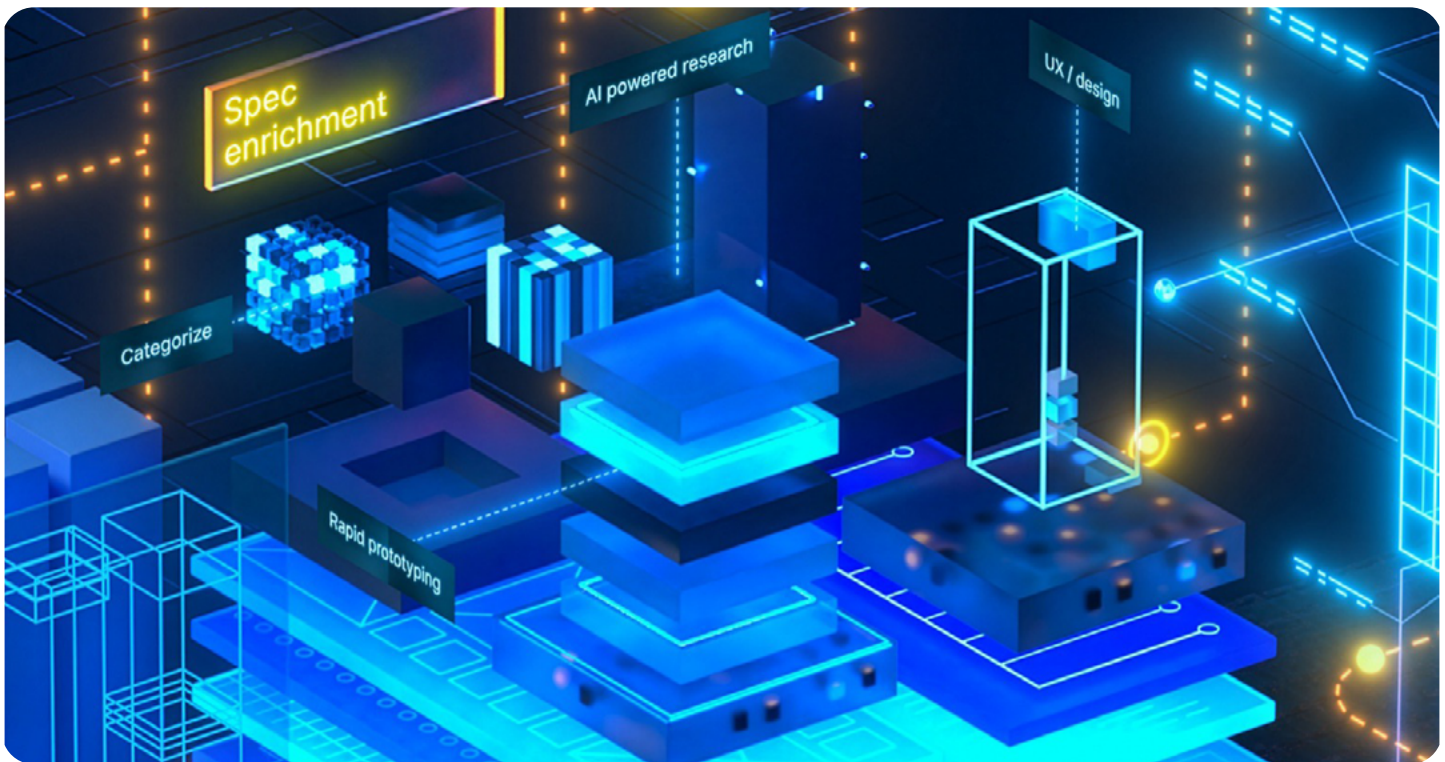
Constellation sees the following as key highlights for Thoughtworks AI/works:

## Highlights

AI-powered developer platforms are just emerging; they did not exist two years ago. Consequently, the market will push to build out the right automation for developers to achieve higher developer velocity. Thoughtworks has put forward a strong contender with its recently launched AI/works platform (see Figure 1).

- **Deep software development DNA, great reputation, and brand awareness are the foundation of AI/works.** The heritage of Thoughtworks is rooted in software development. Building software in a strategic way to help Thoughtworks customers gain strategic advantage forms enterprise DNA in the right way to build an extraordinary AI-powered developer platform. In combination with the ThoughtWorks stewardship of the [Manifesto for Agile Software Development](#) and the overall Agile methodology, this technical pedigree differentiates ThoughtWorks from the other IT services vendors.
- **Leading code-to-spec capabilities set the baseline for successful digital transformation projects.** With decades of experience in modernizing and supporting customer legacy technology, ThoughtWorks has tools for parsing and understanding existing code bases. Being able to digest them, make sense of them, and elevate them to spec level is one of the strongest capabilities of the AI/works platform.
- **Spec-driven development is the cornerstone of AI/works.** By opting to make AI/works spec-driven, Thoughtworks has given the platform the basic characteristics that CxOs want and need for the automation assets in their enterprise. Specs matter, because humans can read, understand, and update them as needed, compared with code that is understood only by developers. But AI/works does not stop at the generated spec from the code ingestion; it enriches the spec with best practices and vertical spec content that ThoughtWorks has acquired over the decades, forming a massive value-add for CxOs and a hard differentiator against competitor platforms.
- **Very good spec-to-code capabilities deliver developer velocity.** The crown jewel of any AI-powered developer platform is the ability to generate code, and AI/works does very well in this respect, again building on past experience and automation assets that ThoughtWorks has built and battle-tested with its clients in past engagements. In practice, this means that AI/works creates high-quality and spec-conforming code.
- **Offers the rightsized governance CxOs care for.** CxOs cannot let developers just build, especially in the AI era. It is key that the right amount of governance and oversight are in place. Having used modules of AI/works in the past, Thoughtworks already has the important compliance and cost monitoring in place.
- **Available where you need it—in any cloud, on-premises, and hosted.** Enterprises will make different decisions about how they want to operate their AI-powered developer platforms—in the cloud or on-premises—and some will, for example, want Thoughtworks to host AI/works for them. Thoughtworks supports all the aforementioned deployment options for its customers, because AI/works is container-based and thus can be deployed and maintained easily.

**Figure 1. The Spec Enrichment Process in the AI/works Platform**



Source: Thoughtworks

## Opportunities for Improvement

AI/works is not the typical V1 of a platform product, which warrants considerable caution in regard to quality and operability, because it was built with proven modules and components from prior years, especially in the critical code-to-spec and spec-to-code areas. As CxOs get comfortable with AI-powered developer platforms, the demand for a software as a service (SaaS)-based offering of AI/works might emerge later in 2026.

Note: Full strengths, weaknesses, opportunities, and threats (SWOT) analyses for this category are available as an advisory call for research-unlimited clients.

## BUYING CONSIDERATIONS

According to Constellation's reference checks, customers and prospects choose Thoughtworks AI/works for the following reasons:

- Seek higher developer velocity for their transformation projects as well as their agentic/AI-powered application needs
- Are existing Thoughtworks customers eager to achieve higher developer velocity
- Trust Thoughtworks in this transformation due to its custom development/Agile DNA

- Are disillusioned by the lack of spec-centricity in alternative offerings and, on the flip side, strongly believe in spec-centric software development
- Have substantial code-renovation/modernization projects that likely can be addressed only with an AI-powered developer platform

## RECOMMENDATIONS

Constellation's executive network of CxOs from the AI150 and BT150 lists recommends the following best practices:



**Select AI/works if agile and custom-coding DNA matters.** Corporate DNA matters and influences products and offerings. CxOs that care for Agile and custom-coding DNA are in exceptionally good hands with Thoughtworks, which brings its core offering to the AI era with AI/works.



**Prioritize AI/works when spec-centricity is critical.** If spec-centricity matters for an enterprise (and it should!), AI/works is the right platform for CxOs.



**Consider AI/works when looking for a platform built on proven components.** Because Thoughtworks leveraged its proven code generators and parsers for AI/works, there is little concern regarding the quality and reliability of these critical components for an AI-powered developer platform.



**Take a stance on commercial prudence.** Regardless of the vendor and the offering, enterprises must make sure they pay for value. This is valid with Thoughtworks as well, and CxOs must pay attention to whether the implementation delivers an attractive total cost of ownership (TCO).

## ENDNOTES

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- <sup>1</sup> Now in its ninth year, Constellation Research's Business Transformation 150 (BT150) is an elite global list that recognizes top executives leading large-scale digital transformation and innovative business change within their organizations. Thoughtworks CEO Mike Sutcliff was a member of the BT150 during the 2019–2020 cycle. Constellation Research Business Transformation 150™, Constellation Research, 2024. <https://www.constellationr.com/communities/business-transformation-150>
- <sup>2</sup> Constellation Research's Artificial Intelligence 150 (AI150) is an elite global list that recognizes the top 150 executives leading AI transformation efforts across various industries. The list identifies "pioneers, practitioners, and policy shapers" who are using generative AI, machine learning, and automation to solve business challenges and redefine enterprise operations. For more information, see AI100 2024 Constellation Research, 2024. <https://www.constellationr.com/communities/artificial-intelligence-150>
- <sup>3</sup> For more of the requirements, see: Holger Mueller, Constellation ShortList™ AI-Powered Developer Platforms, Constellation Research, February 2, 2026. <https://www.constellationr.com/research/constellation-shortlist-ai-powered-developer-platforms>
- <sup>4</sup> You can find the report here: Thoughtworks, 2025, <https://www.thoughtworks.com/insights/looking-glass>)
- <sup>5</sup> For the full report, see: Thoughtworks, May 2025, [https://www.thoughtworks.com/content/dam/thoughtworks/documents/report/tw\\_report\\_ai\\_readiness.pdf](https://www.thoughtworks.com/content/dam/thoughtworks/documents/report/tw_report_ai_readiness.pdf)
- <sup>6</sup> For the press release, see <https://www.thoughtworks.com/en-us/about-us/news/2025/thoughtworks-award-databricks-latam-cme-partner-year>
- <sup>7</sup> For the press release, see <https://www.thoughtworks.com/en-us/about-us/news/2025/aws-agentic-ai-specialization>
- <sup>8</sup> For the press release, see <https://www.thoughtworks.com/en-us/about-us/news/2025/thoughtworks-2025-aws-partner-award>

## ANALYST BIO

# Holger Mueller

## Vice President and Principal Analyst

Holger Mueller is a vice president and principal analyst at Constellation Research. He provides guidance for the fundamental enablers of the cloud, IaaS, and PaaS, with forays up the tech stack into big data, analytics, and SaaS. Mueller provides strategy and counsel to key clients, including chief information officers, chief technology officers, chief product officers, investment analysts, venture capitalists, sell-side firms, and technology buyers.

Prior to joining Constellation Research, Mueller was VP of products for NorthgateArinso, a KKR company. He led the transformation of products to the cloud and laid the foundation for new business-process-as-a-service (BPaaS) capabilities. Previously he was the chief application architect with SAP and was also VP of products for FICO. Before that he worked for Oracle in various management functions—on both the application development (CRM, Fusion) and business development sides. Mueller started his career with Kiefer & Veitinger, which he helped grow from a startup to Europe's largest CRM vendor from 1995 onward. Mueller has a Diplom-Kaufmann degree from the University of Mannheim, with a focus on information science, marketing, international management, and chemical technology. A native European, Mueller speaks six languages.

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## Organizational Highlights

- Institute of Industry Analyst Relations (IIAR) New Analyst Firm of the Year in 2011 and #1 Independent Analyst Firm for 2014 and 2015
- Experienced research team with an average of 25 years of practitioner, management, and industry experience
- Organizers of the Constellation Connected Enterprise—an innovation summit and best practices knowledge-sharing retreat for business leaders
- Founders of Constellation Executive Network, a membership organization for digital leaders seeking to learn from market leaders and fast followers

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