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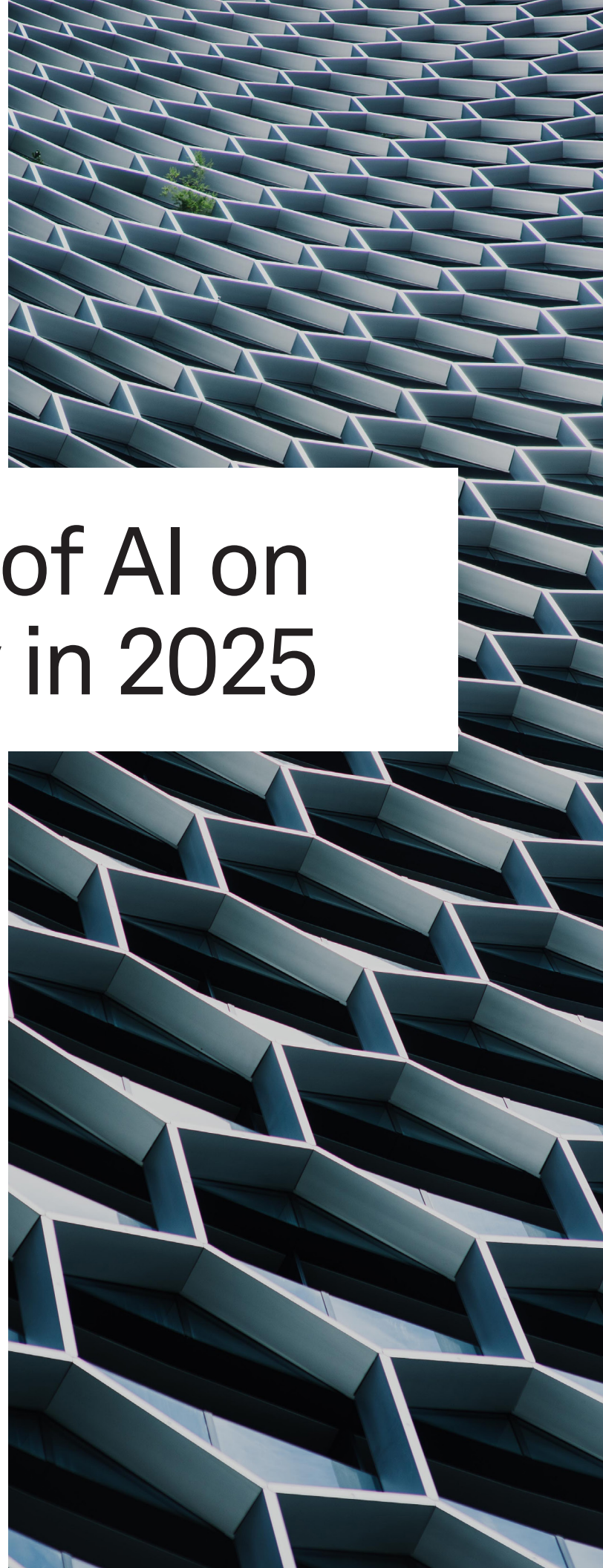

The impacts of AI on observability in 2025

January 31, 2025

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AI in conjunction with observability is increasingly expected to assist IT in tasks including data summarization, deep data analysis and visualizations, and making recommendations. However, the hype around AI can make it challenging for buyers to discern genuine capabilities.

Introduction

Artificial intelligence, in conjunction with observability, is increasingly expected to assist IT in tasks ranging from data summarization, deep data analysis and visualizations, and making recommendations, but the hype around AI can make it challenging for buyers to discern genuine capabilities. AI for automating workflows and the potential of agentic AI, which can perform tasks with minimal supervision, are promising developments for IT operations. However, AI's rapid evolution means that feature velocity and real-world applications are more critical than static feature comparisons.

THE TAKE

AI used with observability platforms and data offers significant potential for improving operational efficiency, such as faster problem resolution and automation of workflows, but enterprises must navigate the challenge of distinguishing genuine AI capabilities from marketing claims. Vendors with established customer relationships have an advantage in selling AI solutions, because these customers are more likely to understand and appreciate the benefits and limitations of AI. Additionally, the evolving nature of AI suggests that the focus should be on the speed of feature development and practical applications, rather than mere feature comparison. Agentic AI is a promising advancement, with the potential to offer a more approachable means of process automation for IT operations.

Context

Artificial intelligence is being used more and more in professional and personal workspaces. Increasingly, enterprise IT expects AI to be available to assist them in their work, from simple summarization of text to AI agents that can carry out tasks. The challenge is the hype around AI, and the fact that almost any feature that appears sufficiently opaque can be named AI. When buyers are looking for advanced features, discriminating between AI offerings will be difficult, and may slow the purchase cycle.

A better focus is on outcomes, which can be driven by AI, machine learning, analysis or predefined automated workflows. The goal is to show how customers can achieve faster time to resolution and reduce outages, so they can work on value-added capabilities for their company. It is no surprise, then, that operational issues are top goals for enterprises (see figure below).

These are the kinds of activities that are well suited for observability in general, and are improved by applying AI to make interacting with the data easier and more intuitive. Automating responses that leverage knowledge of system state and analysis of past events relies on institutional knowledge without the overhead. Pattern recognition and root cause analysis are time consuming at best, and may not yield optimal results. Due to the deeper analysis AI can perform, precursors to problems can be more readily identified and acted upon, potentially before an outage occurs.

Operational goals are the most sought after AI capabilities

Q. Which of the following AI capabilities are the most beneficial to your organization's use of observability tools or platforms? Please select all that apply.

Base: Respondents whose organizations are using, planning, or considering observability tools and platforms with AI capabilities (n=349).

Source: 451 Research's Voice of the Enterprise: Cloud Native, Observability 2024.

Although enterprise IT is being bombarded with AI everything, they are also becoming savvy users of AI, and that will translate into more sophisticated demands. For example, some early implementations of an AI-powered chat interface were one-shot questions with no memory or context of what was asked before. Using natural language to craft a query that got to what the user wanted was a long and arduous process. Recent implementations from vendors such as Dynatrace Inc., Logic Monitor and New Relic have conversational chats. These are more similiar to the AI chatbots that IT staff are accustomed to and will readily recognize during a demo or trial period.

More difficult to demonstrate is how AI can be used to provide deep analysis for root cause analysis and recommendations for resolution, because those tasks are highly contextual and situation-specific. While demos can hint at the possible, it takes live trials to show how the product performs. In many cases, this also means managing the customer's expectations, which may be far beyond the product's capabilities.

Customers need to know that AI is a rapidly evolving field, and feature comparisons are less important than feature velocity and time in the field. This is where vendors like Cisco Systems Inc.'s Splunk and Hewlett Packard Enterprise Co.'s OpsRamp will have some catching up to do — competitors like BigPanda, Dynatrace, Datadog Inc. and New Relic have been fielding products for over a year, while startups like Flip Ai and Kloudfuse launched with AI in mind.

Vendors will likely have more success selling AI to existing customers, which will have a lower barrier to entry, understand the shortcomings of the current product in their workflows, and be more able to see the benefits of AI. This gives incumbents in enterprises an advantage over competitors trying to gain attention with AI messaging. Although it is an important part of the story, AI messaging is not the most important, unless it is clear the customer is not pleased with the direction their current vendor is going.

A better emphasis is on how enterprises can go from seeing a problem to resolving it, which has always been a gap for monitoring, and now observability, vendors. The immediate benefit of observability is enabling IT to quickly discover problems and identify corrective actions to reduce the impact of an outage. Whether that velocity comes from a very well-designed user interface and workflow, or science fiction like AI analysis, does not matter as much as whether IT can respond quicky.

Enterprise IT is certainly looking to AI paired with observability platforms to automate actions, whether they are created by the AI or predefined by IT. Automating actions will be a long haul before it is entirely reliable — enterprise IT will want a human in the loop until they gain confidence in the automated actions. What IT professionals will first be looking for is the ability to pair up known failures with known good responses.

Next, IT will look for AI to generate the correct set of actions to remediate an issue. Vendors that can use AI to mine trouble tickets, chat logs and other forms of institutional knowledge will be able to identify actions that are context-specific and align with the company's standard practices. Vendors like BigPanda, Dynatrace, New Relic and ServiceNow Inc. are automating workflows, which helps companies streamline operations.

The current interest in agentic AI, or AI agents that can carry out a subset of tasks with little to no supervision, looks like a promising next step for IT operations automation. In a way, agentic AI may make process automation more approachable to IT admins because task or domain-specific agents can be created for a subset of well-known processes. Using agentic AI, enterprise IT can focus on automating similar processes without trying to automate everything. Collections of agents are flexible and malleable for future use.

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