



tsia

STAR Awards

2025

2025 TSIA STAR Awards
Featured Application

Award Submission: IBM's AI-Driven Transformation of Field Services

IBM is proud to submit this application for an award recognizing our innovative integration of Artificial Intelligence (AI) into field service operations.

1. Innovation and Creativity

IBM's approach combines decades of automation expertise with cutting-edge AI to enhance service quality, workforce performance, and operational efficiency. Our global support and services workforce operates on a unified system—accessible to clients—that enables proactive support, case management, entitlement, dispatch, and client satisfaction.

At the heart of IBM's AI innovation is our AI support platform, powered by IBM watsonx. This includes Agent Assist, a tool for our Remote Technical Support (RTS) agents that analyzes incoming case descriptions, vectorizes them, and matches them with historical cases. Many of these cases are generated automatically by the system, via Call Home technology, without client interaction. This generative AI platform, built on IBM's proprietary large language model, recommends resolutions and links to relevant documentation, significantly reducing the time agents spend on research. This accelerates responses to our field service teams, who also benefit from IBM's on-demand, AI-generated case summaries—enabling them to quickly understand complex case histories and apply insights across various scenarios.

Additionally, the platform includes an IBM-built virtual assistant chatbot that provides self-service capabilities, resolving simpler issues without human intervention. This reduces the volume of basic inquiries reaching support agents. Looking ahead, IBM is piloting a voice-controlled AI agent for field engineers, offering hands-free access to work orders, instructions, and client-specific protocols—an innovation poised to transform on-site service delivery.

These tools are designed not to replace human expertise but to augment and empower IBM's workforce. By embedding AI into workflows, IBM fosters a culture of continuous innovation, where employees co-create and refine AI tools to meet evolving service demands.

2. Impact and Results

IBM's AI integration has delivered measurable improvements across field service operations. In 2024 alone, 90% of infrastructure product-related serviceable events were resolved through automation (1), thanks to systems like Call Home B2B Connect. For the remaining cases requiring human intervention, 39% of IBM hardware cases assisted by Agent Assist included recommendations, saving agents significant time (2).

On-demand case summarization is used by all teams working on a case and is projected to yield over 9,000 hours in annual operational savings with just 275,000 cases per year (3). The virtual assistant successfully resolved 82% of client questions related to IBM Infrastructure (4).

These efficiencies have led to:

- Faster incident resolution times
- Improved agent productivity
- Higher service quality and consistency
- Increased client satisfaction with IBM Support

AI has also optimized resource allocation by allowing agents to focus on high-value tasks while virtual assistants handle routine inquiries. This has resulted in cost savings, better scheduling, and enhanced technician performance aligned with client needs. IBM tracks AI's impact through metrics such as automation rates, AI assistance rates, recommendation accuracy, and agent efficiency—ensuring continuous improvement and tangible business value.

For an example of how AI has led to increased quality and workforce productivity see this video with a lead on remote technical support and field delivery team leader, the “topgun”.



[UserTestimonials Submission 1.mp4](#)

3. Customer-Centric Approach

IBM's AI strategy is deeply rooted in enhancing the customer experience. By accelerating issue resolution and improving support accuracy, AI tools enable faster, more personalized service. Our client management teams use AI-powered tools to analyze support tickets, anticipate customer needs, and provide proactive recommendations. AI-generated case summaries further personalize service delivery.

Additionally, IBM has developed IBM Support Insights, a cloud-based portal that unifies the support experience across IBM and non-IBM infrastructure systems. This “single pane of glass” allows users to view current and potential system issues, assess risk scores, and receive recommendations to reduce unplanned downtime and avoid service gaps—proactively preventing field service issues.

4. Execution and Implementation

IBM's successful AI implementation stems from a strategic, people-first approach. Building on a strong automation foundation, the company engaged employees through initiatives like the “watsonx Challenge,” which encouraged innovation and co-creation of AI solutions.

Challenges such as cultural resistance and the complexity of integrating AI into legacy systems were addressed through education, internal experimentation platforms, and a clear emphasis on AI as a tool for empowerment—not replacement.

IBM continuously measures AI's impact and refines its tools based on agent feedback and performance data. This methodical strategy ensures that AI solutions remain aligned with IBM's corporate objectives and adapt to the evolving needs of both clients and staff—fueling ongoing AI innovation.

Footnotes:

(1) Based on IBM internal assessment in 2024 systems Call Home data.

(2) IBM's analysis of all IBM hardware support cases from Feb 1 2024 to April 15 2025. Resulted in a times savings reflect a 3+ star rating from a support agent on a scale of 1 to 5. Scoring assessed by subject matter experts. Based on IBM internal data.

(3) Text similarity was used to evaluate how the support agents used the AI-generated case resolution summaries. This evaluation was performed using Jaccard similarity. The Jaccard similarity index ranges from 0 to 1. A summary was assessed to be used when it was unmodified (Jaccard score of 1) or slightly modified (Jaccard score of 0.5 to less than 1). High quality ranking is defined as 4 or 5 stars in a scale of 1 to 5. Time, scoring, and operational savings based on IBM internal assessment. A slightly modified summary does not change substantive content. Operational savings are derived by calculating the number of unmodified or slightly modified summaries and applying a two-minute time saving per instance.

(4) Based on IBM internal assessment in 2024. 82% of clients Q&A interactions about IBM Infrastructure were successfully addressed via online Virtual Assistant (chatbot) without the client requesting to talk or chat with a human agent in order to resolve that question.



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