

SAS Inside Intelligence 2023 Conference April 06, 2023 By: <u>Kathy Lange</u>

IDC's Quick Take

SAS hosted the Inside Intelligence 2023 Conference for Industry Analysts on March 29–31 at its world headquarters in Cary, North Carolina. The three overarching conference themes were productivity, performance, and trust. This IDC Link will focus on SAS' <u>responsible innovation initiative</u> and the importance of building trust, transparency, and information privacy in machine learning (ML) and artificial intelligence (AI) life-cycle technologies and applications.

Event Highlights

SAS Inside Intelligence was an invitation-only event for a small group of industry analysts and investors. It provided on-stage presentations, software demonstrations, and plenty of opportunities for networking with executives, product managers, and technical staff.

SAS executives shared its growth strategies highlighting corporate directions, products, solutions, and cloud. Later sessions focused on go-to-market execution strategies, including marketing, sales, channels, and customer adoption. SAS highlighted three customers (National Bank of Greece, Georgia-Pacific, and The Nature Conservancy) in an on-stage panel, with an opportunity for the audience to schedule one-on-one sessions to discuss the applications and business problems in greater depth.

Each SAS presenter anchored their presentation using the SAS AI life cycle (including data management, model development, and model operations), incorporating the conference themes of productivity, performance, and trust. SAS shared its vision *to be the most trustworthy analytics partner on the planet* and its mission *to provide knowledge in the moments that matter*.

Customer stories highlighted AI's impact on cost savings, revenue generation, and saving lives. Still, SAS stated that with powerful technology comes risk and the need for guardrails to prevent unintended harm. As such, SAS discussed its views on responsible AI, which the company calls "responsible innovation," striving to infuse ethical principles in its people, processes, and products. The company laid out a Trustworthy AI market landscape covering six technology subcategories (data management, bias detection and fairness, mitigation, explanation, privacy and security, and model operations) and four activation categories (oversight, operations, compliance, and culture). SAS overlayed its trustworthy AI features onto the landscape, noting that no single vendor currently provides all the capabilities.

SAS' responsible AI demonstration provided further details on its approach to creating trust and transparency across the AI life cycle. Listed here are a few noteworthy responsible AI capabilities. First, SAS Viya automatically tags potentially sensitive or private data fields during the data management phase and provides features to anonymize, mask, or suppress it. Built-in data profiling uncovers data quality issues such as completeness, outliers, or correlated variables. Data lineage tracks the flow of data elements used in downstream models and the data pipeline transformations for generated variables.

Next, the software provides various capabilities for model interpretability, including partial dependence plots, individual conditional expectation (ICE) plots, local interpretable model-agnostic explanations (LIME), and Kernel Shapley values to help users understand the results of the model during the model development phase. Also, the software automatically generates visualizations and natural language descriptions of the data and the model results using business terminology. Further, the software includes bias detection and mitigation techniques to identify and adjust data for several different types of bias.

Finally, SAS provides a centralized repository for model governance. The software automatically generates reports with metrics that monitor the health of production models over time and detect data and concept drift in the model operations phase. Visual workflows provide transparency into decision-processing applications with integrated steps for the review and approval of models. Additional responsible AI capabilities are on SAS' road map.

IDC's Point of View

Organizations are rapidly increasing their use of AI/ML technologies to scale their digital business initiatives and drive improvements in operational efficiency, customer experience, and employee productivity. At the same time, businesses and regulators have raised concerns about the potentially discriminatory impact of automated ML models for decision making due to unintentional encoded biases (prejudice in favor of or against a person, group, or thing, usually considered unfair).

There is a growing need for greater transparency and explainability of model results to promote confidence and trust in AI/ML–based applications. IDC expects this focus to continue, with vendors adding significant trustworthy AI components to their platforms.

IDC describes trustworthy AI software as tools and technologies used throughout the AI/ML life cyle for ensuring the models' safety and security. These include capabilities for fairness to minimize bias, interpretability to understand model predictions, adversarial robustness against model tampering, lineage for auditability, and transparency about the data and modeling processes.

IDC believes SAS is committed to responsible AI in its software technology across the AI/ML life cycle. Its product road map continues to add responsible AI capabilities to SAS Viya on a regular cadence. The company has an established data ethics team and participates with external organizations to drive industrywide responsible AI practices, with an eye on global regulations and policies.

Responsible AI tools are fast becoming table stakes for AI platform vendors as businesses become proactive about mitigating potential AI/ML business risks to brand reputation, revenue loss, and regulatory backlash. Generative language and vision AI models will further fuel the need for new tools for fact-checking, content moderation, combatting discrimination, and other safeguards.

Subscriptions Covered:

Machine Learning Life-Cycle Tools and Technologies

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