# Sema4.ai Announces Semantic Layer Capabilities at the Gartner® Data & Analytics Summit 2026

*New offering eliminates data access bottlenecks with AI-powered Semantic Data Modeling*

**Gartner Data & Analytics Summit, Orlando, Florida. *March 9, 2026* –** Sema4.ai today announced the general availability of its Semantic Layer at the Gartner Data & Analytics Summit 2026. This is an enabling capability that transforms how AI agents understand and work with enterprise data. The innovation addresses a critical barrier facing organizations: the inability of business users to rapidly access and analyze both structured and unstructured enterprise data, without SQL expertise or lengthy data engineering dependencies.

## From data access crisis to autonomous action

Organizations today face mounting challenges in democratizing data access across their enterprises. Business analysts and process owners waste countless hours writing SQL queries, manually extracting data from documents, or waiting for data pipeline development. The result creates bottlenecks that slow decision-making and limit data accessibility. The challenge is compounded by the reality that critical business information exists in two disconnected worlds: structured databases and unstructured documents.

"The artificial boundary between structured and unstructured data has held enterprises back for decades," said Paul Codding, co-founder and SVP of Product and Customer Experience at Sema4.ai. "With our Semantic Layer, we're giving business users the power to work with all their data, including databases, documents, and spreadsheets, through simple conversation with AI agents. This is how data democratization finally becomes real."

## A comprehensive solution for complete enterprise data access

The new Semantic Layer capabilities combine AI-powered profiling with an intelligent data workspace that seamlessly connects to databases, spreadsheets, and files, enabling natural language queries across Postgres, Snowflake, Redshift, and other natural databases to deliver precise, mathematically accurate analysis. Uniquely, Sema4.ai integrates three powerful capabilities to provide complete enterprise data intelligence:

**Semantic Layer capabilities** enable organizations to build Semantic Data Models that use AI to automatically understand database structures and business context, while eliminating the SQL barrier for business users.

**DataFrames** provide agents with an intelligent data workspace for mathematically accurate analysis of millions of rows. Unlike LLM-based analysis, prone to calculation errors, DataFrames uses SQL for all mathematical operations, ensuring complete accuracy and auditability for financial reconciliation, compliance reporting, and business-critical decisions.

**Document Intelligence** transforms complex documents into agent-ready data through industry-leading multi-pass parsing with agentic OCR self-correction. AI-guided configuration empowers business users to teach the system how to understand invoices, contracts, and forms once, then automatically adapt to document variations across 100+ languages and file types.

## Seamless integration creates unified data intelligence

When agents query databases through semantic data models, results automatically become DataFrames for further analysis. When Document Intelligence extracts tables from PDFs or invoices, that data instantly becomes structured DataFrames ready for joining with database queries. Business users can now ask agents to reconcile invoice data extracted from PDFs against payment records in Snowflake, join spreadsheet uploads with Postgres operational data, or analyze document extractions alongside live database queries, all through natural conversation.

"This integration eliminates the artificial boundaries between structured and unstructured data," continued Codding. "An agent can extract invoice line items from a 100-page PDF, join that data with payment records from your ERP system, and perform mathematically precise reconciliation analysis, completing in minutes what previously took analysts days of manual work."

## Solving three critical enterprise challenges

**Eliminating data access bottlenecks:** Business users connect AI agents to their data in minutes, then query using plain English, no SQL or technical skills required. This eliminates weeks of waiting for data engineering support while maintaining enterprise security and governance standards.

**Automatic semantic understanding with multi-source intelligence:** AI automatically profiles database structures and learns document layouts through business user guidance. Agents understand what data means across sources, whether in database columns, document fields, or spreadsheet cells, providing unprecedented contextual intelligence.

**Enterprise-scale multi-source analysis with mathematical precision:** Organizations connect to multiple databases, upload documents and spreadsheets, and enable agents to join and analyze data across all sources. DataFrames processes data with SQL-powered mathematical accuracy, delivering the reliability enterprises require, while Document Intelligence handles the most complex documents with human-like understanding.

## Built on open standards with enterprise-grade capabilities

The Semantic Layer capabilities are built using Snowflake's Open Semantic Interchange (OSI) format, ensuring data models are portable, shareable, and compatible with emerging industry standards. Document Intelligence processes sensitive documents entirely within your AWS VPC, maintaining complete data sovereignty for the most confidential business information.

The solution provides natural language data quality assurance, with AI-generated validation rules that ensure extraction completeness and accuracy through business-relevant checks like "verify all line items match the invoice subtotal" or "ensure we always have a vendor name and due date."

## Real-world impact across industries

Early customers are achieving dramatic results:

- **Large manufacturers** reconcile gas invoices in 2 minutes instead of 3 hours, processing 350+ monthly invoices with 90%+ autonomous accuracy
- **Financial services teams** reduce cash matching manual review from hours to minutes, increasing accuracy from 20% to 80%+
- **Process analysts** complete complex data reconciliation across multiple sources in minutes, versus weeks of manual work

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## About the Gartner Data & Analytics Summit

Gartner analysts will provide additional analysis on data and analytics trends at the Gartner Data & Analytics Summits, taking place March 9-11 in Orlando, FL., April 28-29 in Sao Paulo, May 11-13 in London, May 19-21 in Tokyo, June 16-17 in Sydney and September 21-22 in Mumbai. Follow news and updates from the conferences on X using #GartnerDA

## About Sema4.ai

Sema4.ai provides a comprehensive enterprise AI agent platform that enables organizations to build, run, and manage AI agents at scale. Our platform empowers business users to create intelligent agents using natural language, connects agents to enterprise applications and data through pre-built actions and universal connectivity, and provides complete lifecycle management with enterprise-grade security and governance. Sema4.ai is trusted by leading enterprises to transform business operations through autonomous, intelligent agents that work 24/7 with complete transparency and control.

For more information or to get a demo, visit www.sema4.ai

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