



Astera Highlights Critical Gap in AI Document Processing for Mainframe Data Extraction

July 29, 2026

Thousand Oaks, California - July 29, 2026 -

Astera, a provider of AI-powered data management solutions, is drawing attention to a significant oversight in current enterprise AI adoption strategies. While organizations rush to implement large language models for document processing, mainframe reports generated by legacy systems remain a critical blind spot that poses substantial financial and compliance risks.

Mainframe reports, produced by decades-old COBOL systems running on IBM i Series, z/OS, and AS/400 platforms, continue to power core operations across banking, insurance, government, healthcare, and manufacturing sectors. These fixed-width text reports represent a unique challenge that modern AI approaches have struggled to address effectively.

The company points to fundamental limitations in how large language models handle structured mainframe output. Unlike variable documents where context and natural language processing excel, mainframe reports follow rigid formatting rules that require deterministic extraction methods. When LLMs attempt to process these documents, the probabilistic nature of their output introduces unacceptable error rates for mission-critical financial and regulatory data.

Astera ReportMiner, the company's established platform for unstructured data management, has been specifically engineered over the past decade to handle these challenging document types. The platform employs template-based extraction methods that adapt to document structure while maintaining the precision required for enterprise-scale operations.

"The enthusiasm for large language models in document processing is understandable, but applying them universally ignores the unique requirements of mainframe-generated reports," said a spokesperson from Astera. "These systems process billions of dollars in transactions daily and support regulatory compliance across industries. A probabilistic approach to data extraction for financial services simply cannot meet the accuracy thresholds these operations demand."

The distinction becomes particularly critical in regulated industries where data accuracy directly impacts compliance reporting, audit trails, and financial reconciliation. Banking institutions processing loan applications, insurance companies handling claims data, and government agencies managing citizen records all rely on mainframe reports that must be extracted with complete accuracy.

Astera's approach leverages deterministic, rule-based extraction that guarantees consistent results across millions of documents with identical formatting. This methodology eliminates the variability inherent in LLM processing while maintaining the speed and scalability modern enterprises require.

"Organizations need to recognize that not all document processing challenges are best served by generative AI," added the spokesperson. "Mainframe reports require a different approach, one that respects the structured nature of the data and the zero-tolerance for errors in financial and compliance contexts."

The platform processes various mainframe report formats, including those from legacy systems that have operated continuously for decades. By maintaining compatibility with these established formats while providing modern integration capabilities, the solution bridges the gap between legacy infrastructure and contemporary data management requirements.

Astera is an AI-powered data platform providing comprehensive data management solutions for modern businesses. The company's suite of products includes Centerprise for pipeline generation, ReportMiner for unstructured data extraction, Dataprep for data preparation and analytics, and EDIConnect for EDI transaction processing. Based in Westlake Village, California, Astera serves leading enterprises worldwide with solutions that consolidate extraction, integration, preparation, and visualization workflows into a unified platform.

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Astera

Astera is an AI-powered data management company offering no-code, drag-and-drop solutions for data integration, extraction, warehousing, and API management, all in a single unified platform.

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