

Vendor Analysis: SAS Credit Risk Management Solutions, 2025



Report context

This Vendor Analysis is based on the Chartis quadrant report **Credit Risk Management Solutions, 2025: Quadrant Update** (published in June 2025). This section summarizes the key theses in that report; subsequent sections take a detailed look at SAS's quadrant positioning and scoring, and Chartis' underlying opinion and analysis.

Key thesis

The credit risk management ecosystem continues to undergo substantial structural and technological change. Geopolitical instability has become one of the top risks for credit risk management: no longer a static risk, geopolitical volatility is deeply embedded in credit risk frameworks, affecting everything from borrower defaults to capital adequacy. Consequently, financial institutions need to fundamentally adapt their frameworks to stay resilient. Adapted frameworks, real-time data integration and stress-based governance are now essential components of resilient credit risk management.

Chartis characterizes modern credit risk frameworks according to three critical shifts:

- **From static modeling to dynamic simulation.** New computation models (e.g., scenario-aware, time-series simulators) are replacing static probability of default (PD), loss given default (LGD) and exposure at default (EAD) estimates.
- **From siloed to integrated risk management architectures.** Credit, collateral, market, environmental, social and governance (ESG) and fraud data are converging across banking, trading and wealth domains.
- **From rules-based models to behavioral models that leverage artificial intelligence (AI) and machine learning (ML).** Graph-based hierarchies, borrower behavioral models and preemptive alerts are now embedded within credit lifecycles.

Chartis has identified the following changes across credit risk and portfolio management:

- **A growing need for modular and composable credit risk platforms** that leverage low-code/no-code, application programming interface (API)-first design frameworks.
- **Increased adoption of graphics processing unit (GPU)-accelerated simulation engines** for real-time economic scenario generation and potential future exposure (PFE), credit value adjustment (CVA) and expected future exposure (EFE) calculations.
- **The use of data mesh and semantic layers** for entity-level lineage and multisource data aggregation.
- **Increased implementation of open-source languages** such as Python and Julia for the rapid development of ML-based stress, credit portfolio and behavioral models.

Demand-side takeaways

For end users, including risk managers, credit officers and portfolio managers, the latest trends in credit risk and portfolio management mean a shift toward proactive, data-driven decision-making. Firms are expected to monitor exposures in real time, respond swiftly to early warning signals (EWSs), integrate ESG and climate risk into credit assessments and align credit strategies with capital and return objectives. This requires users to adopt more scalable, integrated platforms that enable faster analysis, cross-functional collaboration and scenario-based planning, and that help them manage risk dynamically to optimize performance across the credit lifecycle.

Market themes

Chartis expects the following key factors to shape the expansion of credit risk and credit portfolio management:

- **Integrated credit lifecycle and risk-compliance frameworks.** On the back of demand for real-time credit intelligence and unified data to comply with such regulatory requirements as Basel IV, IFRS 9/ CECL, BCBS 239¹ and stress testing, there has been an increase in market demand for end-to-end credit lifecycle platforms that combine origination, limit management, covenant monitoring, risk analytics and regulatory reporting capabilities.
- **Alternative finance.** As non-bank credit and private debt markets have expanded, demand for bespoke risk frameworks and credit risk tools for private credit, collateralized loan obligation (CLO) managers and alternative lenders have increased.
- **Embedded finance and associated counterparty risk.** The shift to embedded finance and trade platforms has resulted in a growing need for tools to conduct real-time monitoring of buyer/supplier risk, receivables and exposures to monitor the associated counterparty risk.
- **Emerging markets and small and midsize enterprise (SME) lending.** Emerging lending segments (including SMEs, microfinance and P2P lending) across various geographies require innovative and sophisticated credit risk frameworks to help firms understand the underlying credit risk.
- **Real-time portfolio risk monitoring.** Providing breakdown by segment, geography and product, this capability also includes scenario modeling, breach alerts and dynamic dashboards that integrate exposures, credit events, news and EWS alerts.
- **ML models.** As regulators' scrutiny of ML models increases, there is notable market demand for tools to carry out model validation, monitoring, governance and explainability.
- **Cloud-native credit risk platforms.** Financial institutions are continuing to shift from legacy to cloud-native solutions to achieve the benefits of scalability, agility and compliance.
- **AI-driven credit risk analytics.** On the back of regulatory drivers and the need for EWSs and stress testing frameworks, there is growing demand for predictive risk analytics and AI/ML-based credit scoring models. These can enable firms to leverage AI integration in credit decisioning and portfolio monitoring workflows.
- **Integration of alternative and ESG data.** Investors' demand for ESG-integrated credit risk is resulting in a need for credit models that integrate climate, ESG, supply chain and alt-data sources.
- **Managed services model.** Shortages of skilled resources and compliance cost pressures, combined with the need to adapt quickly to changing risk rules, are leading to rapid expansion of the market for managed services to enable firms – particularly Tier 2/3 banks – to outsource or co-manage their credit risk operations.

¹ International Financial Reporting Standard 9/Current Expected Credit Losses; Basel Committee on Banking Supervision 239.

Supply-side takeaways

For software and services vendors, the convergence of credit risk management and portfolio management, including real-time analytics, integrated risk-return optimization, ESG and climate overlays and EWSs, demands that they offer more than modular risk tools. Vendors must provide cloud-native, data-driven and interoperable platforms that support dynamic credit decisioning, portfolio steering and regulatory compliance across both the banking and trading books. To stay competitive, vendors need to embed AI/ML, deliver prebuilt stress testing and ESG analytics, and offer flexible deployment models, including managed services and API-first architectures, to support evolving client needs across banks, asset managers and non-bank lenders.

The credit risk management market is relatively mature, yet vendors are still finding ways to improve their technology stack and integrate new and emerging technologies into their solutions. Our evaluation focused on:

- **New technologies.** New technologies like AI and ML that allow for more accurate, timely and efficient management of credit risk.
- **Data.** Use of real-time data and non-traditional data, and the increased volume of data, all of which require more advanced systems.

The landscape includes a broad spectrum of vendors, many of which are category leaders in their respective niches. Providing an end-to-end solution that covers the entire credit risk management scope, or that provides capabilities to guide end users through the entire credit lending lifecycle, is the main differentiator. Even without this end-to-end coverage, many vendors in this space are still able to differentiate themselves with notable strengths in specific areas, providing expertise, advanced analytics or adaptable architecture.

Category leaders tend to exhibit strength across the broadest set of capabilities in the segment, showing innovation and clear execution of core strategies.

Quadrant context

Introducing the Chartis RiskTech Quadrant®

This section of the report contains:

- The Chartis RiskTech Quadrants® for credit risk management solutions, 2025.
- An examination of SAS's positioning and its scores as part of Chartis' analysis.
- A consideration of how the quadrant reflects the broader vendor landscape.

Summary information

What does the Chartis quadrant show?

Chartis' RiskTech Quadrant® uses a comprehensive methodology that involves in-depth independent research and a clear scoring system to explain which technology solutions meet an organization's needs. The RiskTech Quadrant® does not simply describe one technology option as the best solution; rather, it has a sophisticated ranking methodology to explain which solutions are best for specific buyers, depending on their implementation strategies.

The RiskTech Quadrant® is a proprietary methodology developed for the risk technology marketplace and considers vendors' product, technology and organizational capabilities. Section 4 of this report sets out the generic methodology and criteria used for the RiskTech Quadrant®.

How are the quadrants used by technology buyers?

Chartis' RiskTech Quadrants® provide a view of the vendor landscape in a specific area of risk, financial and/or regulatory technology. Chartis monitors the market to identify the strengths and weaknesses of different solutions and tracks the post-sale performance of companies selling and implementing these systems. Users and buyers can consult the quadrants as part of their wider research when considering the most appropriate solution for their needs.

Note, however, that Chartis does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Chartis' publications consist of the opinions of its research analysts and should not be construed as statements of fact.

How are quadrants used by technology vendors?

Technology vendors can use Chartis' quadrants to achieve the following goals:

- Gain an independent analysis and view of the provider landscape in a specific area of risk, financial and/or regulatory technology.
- Assess their capabilities and market positioning against their competitors and other players in the space.
- Enhance their positioning with actual and potential clients and develop their go-to-market strategies.

In addition, Chartis' Vendor Analysis reports, like this one, offer detailed insight into specific vendors and their capabilities, with further analysis of their quadrant positioning and scoring.

Chartis Research RiskTech Quadrants® for credit risk management solutions, 2025

Figures 1 to 7 illustrate Chartis' view of the vendor landscape for credit risk management solutions, highlighting SAS's position.

Figure 1: RiskTech Quadrant® for traded credit solutions, 2025



Source: Chartis Research

Figure 2: RiskTech Quadrant® for market-linked credit solutions, 2025



Source: Chartis Research

Figure 3: RiskTech Quadrant® for credit curves, 2025



Source: Chartis Research

Figure 4: RiskTech Quadrant® for retail credit solutions, 2025



Source: Chartis Research

Figure 5: RiskTech Quadrant® for wholesale credit solutions, 2025



Source: Chartis Research

Figure 6: RiskTech Quadrant® for alternative credit solutions, 2025



Source: Chartis Research

Figure 7: RiskTech Quadrant® for credit portfolio management solutions, 2025



Source: Chartis Research

Quadrant dynamics

General quadrant takeaways

Chartis' quadrants serve as a tool to understand the relative position of solutions and providers in a particular market segment, presenting a comparison that aligns market potential with completeness of offering. Distinction among the four areas of the quadrant rests on the scope of the offering/solution as well as the vendor's business strategy, specifically its effectiveness with its target buyers.

- **Category leaders** achieve this distinction because they exhibit strength across the broadest set of capabilities in the segment, showing a clear execution of core strategy and innovation.
- **Best-of-breed solutions** provide class-leading capabilities in specific areas or functions and are often deployed to address a particular need or use case.
- **Point solutions** may not have as many capabilities as 'category leaders' or 'best-of-breed' solutions, but their functionality may be a perfect fit for institutions seeking domain-specific capabilities. And given their deep focus on a relatively narrow area, point solution providers are often more able and willing to innovate quickly compared to vendors that offer a broader technology scope.
- **Enterprise solutions** are established platforms with demonstrated integration and scalability.

The types of products that Chartis has included in each quadrant are as follows:

Traded credit

Products include credit risk workflows for such credit instruments as commercial mortgage-backed securities (CMBSs), convertible bonds, corporate bonds and CLOs. These instruments are bought and sold in the capital markets, where credit risk is priced and transferred among investors. Unlike traditional lending, which sits on a bank's balance sheet, traded credit markets allow credit exposures to be securitized, rated and traded. This market sits at the intersection of credit risk, market risk and liquidity risk.

Market-linked credit

Products include credit risk workflows to manage credit risk exposures influenced by or priced through market mechanisms, rather than held on the balance sheet. This intersects credit risk with market risk, especially for derivatives, structured products and securitized assets. Typical computations included for market-linked credit products include credit calculations such as credit valuation adjustments (CVAs), potential future exposures (PFEs), and expected future exposures (EFEs).

Credit curves

Products include credit risk workflows to manage risk exposure via credit curves, thereby monitoring several factors: issuer credit quality over time, market perception of risk, relative value of bonds or loans and credit migration and downgrade risk.

Retail credit

Products include credit risk workflows for identifying, assessing, mitigating and monitoring credit risk across consumer lending portfolios such as mortgages, credit cards, personal loans and auto loans. The process balances credit growth with risk mitigation frameworks, using data-driven decisioning and regulatory compliance as critical pillars.

Wholesale credit

Products include credit risk workflows for identifying, assessing, mitigating and monitoring credit risk across wholesale lending portfolios, such as commercial lending, syndicated lending, SME lending and project financing. Includes the management of credit risk for large and complex borrowers that are typically financial institutions, sovereigns and institutional counterparties. Unlike retail credit risk management, wholesale credit risk management involves customized exposures, greater reliance on financial analysis, covenants monitoring and relationship management. The process balances credit growth with risk mitigation frameworks, using data-driven decisioning and regulatory compliance as critical pillars.

Alternative credit

Products include credit risk workflows for identifying, assessing, mitigating and monitoring credit risk across the alternative credit space, including real estate, private credit and non-bank loans. It includes the use of non-traditional data, advanced analytics and alternative lending models to assess, monitor and manage credit risk, especially for borrowers with limited or no formal credit histories. This model is gaining significance as the number of FinTech lenders in emerging markets increases.

Credit portfolio monitoring (CPM)

Products include credit portfolio monitoring and management workflows that have some, or all, of the following capabilities: sourcing and consolidating data for portfolio and credit analysis, credit monitoring and EWS frameworks, defining portfolio strategy, performing portfolio sensitivity analyses, analyzing credit capital and losses, and providing portfolio views.

Vendor positioning in context – completeness of offering

SAS's category leader status in Chartis' credit risk management solutions report, and its high scores in all the quadrants in which it appeared, is underpinned by the breadth and depth of its offerings. Its comprehensive solutions cover the full credit risk lifecycle, reaching nearly every corner of the market.

SAS's agile, efficient and compliance-driven platform employs advanced analytics, AI and a cloud-based architecture to keep pace with the evolving global risk landscape. The SAS suite is engineered to address the challenges faced by banks, insurance companies and other financial institutions, and is used mostly by risk managers, compliance officers, financial analysts and IT professionals. Its main capabilities lie in:

- Real-time decisioning, to ensure that institutions can respond quickly to changing market conditions.
- Stress testing that enables institutions to identify potential vulnerabilities.
- Model governance, helping to maintain the integrity and reliability of models.
- AI governance, to support organizations' AI readiness and respond to regulatory changes.

The key features of SAS's suite break down into seven distinct areas: advanced analytics, AI and ML capabilities, cloud native architecture, regulatory compliance, integrated decision-making, integrated reporting capabilities and out-of-the-box content (such as data structures, models, workflows and business rules). These features, taken together and applied across the credit risk management space, ensure corner-to-corner coverage of key areas.

SAS has an especially strong data management platform, which serves both the trading and banking books. This out-of-the box platform supports most standard data sources in the market and, by employing SAS's built-in Event Stream Processing technology, can stream data in real-time. The SAS Viya platform also provides a risk data model with pre-configured data flows that can be modified if desired, alongside data scientists who help clients onboard existing data and develop risk models (either statistical or ML-based) to fit their specific needs.

SAS's high completeness of offering scores also reflect another of its key capabilities: stress testing. Its full suite of Enterprise Stress Testing solutions allows institutions to manage and govern data, implement and execute models, and establish a controlled workflow for executing regulatory and internal stress tests. SAS's stress testing capabilities also include advanced analytics to support simulation, as well as economic, statistical and optimization analytics – all of which are especially pertinent to credit risk management. Moreover, SAS's framework enables banks to create scenarios based on key factors including lines of business, geography, exact product mix, positions and economic and political conditions.

Table 1 on page 14 lists the vendor's scores against the completeness of offering criteria.

Vendor positioning in context – market potential

SAS maintains its category leader placing in credit risk management across the banking and trading books, as well as in CPM. Its ratings are supported by consistently strong scores for all of Chartis' market potential criteria: customer satisfaction, market penetration, financials, growth strategy and business model.

SAS has a well-established global presence and a diverse client base. Its solution is used by financial institutions of all sizes, and by their risk managers, compliance officers, financial analysts and IT professionals. In addition, the company's established footprint and strong financials bolster its ratings across customer satisfaction and market penetration. By leveraging this strength for its growth model, the company can also invest in newer technologies and expand adoption of its solutions across North America, Europe, the Middle East and Africa (EMEA) and Asia-Pacific.

Table 1: Completeness of offering – SAS (credit risk management solutions, 2025)

	Traded credit	Market-linked credit	Credit curves	Retail credit	Wholesale credit	Alternative credit	CPM
Platform capabilities	High	High	High	High	High	Medium	High
Product capabilities	High	Medium	High	High	High	Low	High
Workflow management and integration	High	Medium	Medium	High	High	Low	High
Stress testing and scenario management	High	Medium	Medium	High	High	Low	High
Analytical and reporting capabilities	High	High	High	High	High	Medium	High

Source: Chartis Research

Indeed, SAS is already implementing and integrating its growth plan, focusing on two areas: consolidated onboarding and an emphasis on data. For onboarding, SAS has adopted the unique approach of combining credit risk with compliance monitoring, a move designed to improve banks' onboarding experience by improving efficiency and minimizing errors. And by shifting some of its strategic focus to data, SAS is not only capitalizing on a rapidly developing market but also helping to minimize credit risk, by ensuring that improved data and data management yield more accurate and timely decisions and adjustments.

Table 2 lists the vendor's scores against the market potential criteria.

Table 2: Market potential – SAS (credit risk management solutions, 2025)

	Traded credit	Market-linked credit	Credit curves	Retail credit	Wholesale credit	Alternative credit	CPM
Customer satisfaction	High	High	High	High	High	High	High
Market penetration	Medium	Medium	Medium	High	High	High	High
Financials	Medium	High	High	High	High	High	High
Growth strategy	Medium	Medium	Medium	High	High	High	High
Business model	Medium	High	High	High	High	High	High

Source: Chartis Research

Vendor context

Overview of relevant solutions/capabilities

SAS is a leader in business analytics and software services, helping consumers improve their performance and deliver value by making better decisions faster. SAS takes a unified approach to credit risk management and focuses on providing financial institutions with efficiency and agility backed by domain expertise and strong analytics.

Table 3 provides an overview of the vendor and its solutions.

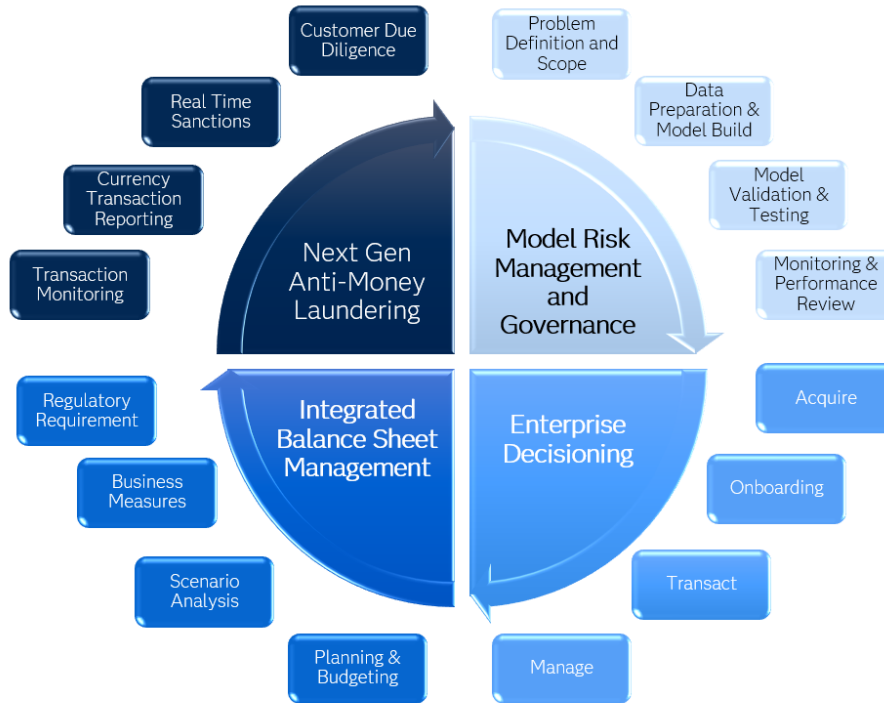
Table 3: SAS – company overview

Company	SAS
Headquarters	Cary, NC
Other offices	SAS has offices in 56 countries around the world.
Description	<p>SAS is a leading data and AI provider and one of the largest privately held software companies in the world. Used by 91 of the top 100 companies in the global Fortune 500, SAS seeks to be a trusted provider of AI solutions in the market.</p> <p>SAS offers a comprehensive risk technology platform built on strategic pillars: Enterprise Decisioning, Integrated Balance Sheet Management (IBSM), Model Risk Management (MRM) and Governance, Risk Modeling and Decisioning, and Next Generation Anti-Money Laundering (AML).</p> <p>Its solutions aim to provide agility, efficiency and compliance for financial institutions, leveraging advanced analytics, AI and a cloud-native architecture to address firms' evolving global risk needs.</p>
Solution	SAS's key capabilities in this area include real-time decisioning, stress testing and model governance.

Source: SAS

SAS was founded in 1976 and continues to be led by cofounder and CEO Jim Goodnight. The company's focus is on analytics, data science and ML, but over time it has developed specializations across multiple industries. One such area is its risk technology platform, which is designed to provide agility, efficiency and compliance for financial institutions. Leveraging a cloud-native infrastructure, advanced analytics and AI, the solution addresses an ever-evolving global risk market and helps institutions meet their regulatory requirements. This comprehensive and integrated risk management platform is designed to enable users to manage risk more effectively and enhance overall operational efficiency, with subject-matter experts in the areas of risk, fraud and compliance that support product development and customers' understanding of the solution. To make this kind of coverage possible, SAS's platform covers Enterprise Decisioning, Integrated Balance Sheet Management (IBSM), Model Risk Management (MRM) and Governance, Next Generation AML and everything that would be covered under those umbrellas (see Figure 8 on page 16).

Figure 8: SAS's coverage



Source: SAS

SAS's model risk management and governance solution is integrated across risk, fraud and compliance; the key features that SAS prioritizes include:

- Guided workflows for end-to-end coverage of the model lifecycle, from data preparation and model development to validation and monitoring.
- Model development, including diverse ML techniques and integration with other languages such as R and Python.
- Streamlined model deployment without recoding, reducing the time required and the risk of recoding.
- Out-of-the-box content for developing and validating traditional and advanced risk models.
- Integrated model risk management and AI governance.

SAS views its enterprise decisioning platform as a holistic AI decisioning platform that includes:

- A shared architecture across risk, fraud and compliance (RFC) and across portfolios with common user interfaces.
- A simplified and flexible UI, offering easy integration with models and simulation capabilities.
- Advanced execution performance for real-time and batch processing.
- An integrated business analytics platform with data management, model development, case management, business workflow, model governance and the reporting suite.
- AI agents and co-pilots that support the analytical decision lifecycle.

SAS approaches its balance sheet management holistically, with the following capabilities:

- A unified platform of risk, finance and treasury to ensure clear and traceable data.
- Unified out-of-the-box coverage for both the banking and trading books.
- Cloud-native sandbox simulations.
- Streamlined development and automated deployment.
- Balance sheet modeling and projection across a wide range of conditions (driven by customer behavior models).
- Regulatory content to enable customers to meet their regulatory requirements in areas including regulatory capital, IFRS 9, interest rate risk in the banking book (IRRBB), liquidity and stress testing.
- An optimized risk engine that allows high usability and flexibility, with a low-code approach and scalable performance.
- AI/ML models for deposits, prepayments and credit loss that enable rapid scenario creation and stress testing.

SAS approaches its AML Compliance strategy holistically, with the following capabilities:

- Unified AML and customer due diligence (CDD) framework across the compliance lifecycle.
- Real-time watchlist screening and sanctions detection.
- Advanced financial crime analytics and responsible AI for explainable risk-based decisions.
- Fully integrated coverage of transaction monitoring, currency transaction report (CTR), sanctions and due diligence.
- Packaged models and a flexible rules engine for rapid deployment and adaptation.
- Consortium fraud models designed for emerging markets.
- Cloud-native deployment options to enable scalability and faster adoption of innovation.

Methodology

Overview

Chartis is a research and advisory firm that provides technology and business advice to the global financial services industry. Chartis provides independent market intelligence regarding market dynamics, regulatory trends, technological trends, best practices, competitive landscapes, market sizes, expenditure priorities, and mergers and acquisitions. Chartis' RiskTech Quadrant® reports are written by experienced analysts with hands-on experience of selecting, developing and implementing financial technology solutions for a variety of international companies in a range of industries, including banking, insurance and capital markets. The findings and analyses in our quadrant reports reflect our analysts' opinions, along with research into market trends, participants, expenditure patterns and best practices.

Chartis seeks to include RiskTech and FinTech vendors that have a significant presence in the target market. The significance may be due to market penetration (e.g., a large client base) or innovative solutions. Chartis uses detailed vendor evaluation forms and briefing sessions to collect information about each vendor. If a vendor chooses not to respond to a request for information, Chartis may still include the vendor in the report. Should this happen, Chartis will base its opinion on direct data collected from technology buyers and users, and from publicly available sources.

Chartis' research clients include leading financial services firms and Fortune 500 companies, leading consulting firms and financial technology vendors. The vendors evaluated in our quadrant reports can be Chartis clients or firms with whom Chartis has no relationship.

Chartis evaluates all vendors using consistent and objective criteria, regardless of whether they are Chartis clients. Chartis does not give preference to its own clients and does not request compensation for inclusion in a quadrant report, nor can vendors influence Chartis' opinion.

Briefing process

We conduct face-to-face and/or web-based briefings with each vendor. During these sessions, Chartis experts ask in-depth, challenging questions to establish the real strengths and weaknesses of each vendor. Vendors provide Chartis with:

- A business update – an overview of solution sales and client satisfaction.
- A product update – an overview of relevant solutions and R&D roadmaps.
- A product demonstration – key differentiators of their solutions relative to those of their competitors.

In addition to briefings, Chartis uses other third-party sources of data, such as conferences, academic and regulatory studies, and publicly available information.

Evaluation criteria

We develop specific evaluation criteria for each piece of quadrant research from a broad range of overarching criteria, outlined below. By using domain-specific criteria relevant to each individual risk, we can ensure transparency in our methodology and allow readers to fully appreciate the rationale for our analysis. The specific criteria used for the Credit Risk Management Solutions, 2025 report are shown in Table 4 on page 19.

Table 4. Evaluation criteria – credit risk management solutions, 2025

Completeness of offering	Market potential
Platform capability	Customer satisfaction
Product capabilities	Market penetration
Workflow management and integration	Growth strategy
Stress testing and scenario management	Financials
Analytical and reporting capabilities	Business model

Source: Chartis Research

Completeness of offering

Depth of functionality. The level of sophistication and number of detailed features in the software product (e.g., advanced risk models, detailed and flexible workflow, domain-specific content). Aspects assessed include innovative functionality, practical relevance of features, user-friendliness, flexibility and embedded intellectual property. High scores are given to firms that achieve an appropriate balance between sophistication and user-friendliness. In addition, functionality linking risk to performance is given a positive score.

Breadth of functionality. The spectrum of requirements covered as part of an enterprise risk management system. This can vary for each subject area, but special attention is given to functionality covering regulatory requirements, multiple risk classes, multiple asset classes, multiple business lines and multiple user types (e.g., risk analyst, business manager, CRO, CFO, compliance officer). Functionality within risk management systems and integration between front-office (customer-facing) and middle/back office (compliance, supervisory and governance) risk management systems are also considered.

Data management and technology infrastructure. The ability of risk management systems to interact with other systems and handle large volumes of data is considered very important. Data quality is often cited as a critical success factor and ease of data access, data integration, data storage and data movement capabilities are all important factors. Particular attention is given to the use of modern data management technologies, architecture and delivery methods relevant to risk management (e.g., in-memory databases, complex event processing, component-based architecture, cloud technology and software as a service). Performance, scalability, security and data governance are also important factors.

Risk analytics. The computational power of the core system, the ability to analyze large amounts of complex data in a timely manner (where relevant in real time) and the ability to improve analytical performance are all important factors. Particular attention is given to the difference between 'risk' analytics and standard 'business' analytics. Risk analysis requires such capabilities as non-linear calculations, predictive modeling, simulations, scenario analysis, etc.

Reporting and presentation layer. The ability to present information in a timely manner, the quality and flexibility of reporting tools, and ease of use, are important for all risk management systems. Particular attention is given to the ability to do ad hoc 'on the fly' queries (e.g., 'what if' analysis), as well as the range of 'out-of-the-box' risk reports and dashboards.

Market potential

Business model. Includes implementation and support and innovation (product, business model and organizational). Important factors include size and quality of implementation team, approach to software implementation, and post-sales support and training. Particular attention is given to 'rapid' implementation methodologies and 'packaged' service offerings. Also evaluated are new ideas, functionality and technologies to solve specific risk management problems. Speed to market, positioning and translation into incremental revenues are also important success factors in launching new products.

Market penetration. Volume (i.e., number of customers) and value (i.e., average deal size) are considered important. Rates of growth related to sector growth rates are also evaluated. It also covers brand awareness, reputation and the ability to leverage current market position to expand horizontally (with new offerings) or vertically (into new sectors).

Financials. Revenue growth, profitability, sustainability and financial backing (e.g., the ratio of license to consulting revenues) are considered key to the scalability of the business model for risk technology vendors.

Customer satisfaction. Feedback from customers is evaluated, regarding after-sales support and service (e.g., training and ease of implementation), value for money (e.g., price to functionality ratio) and product updates (e.g., speed and process for keeping up-to-date with regulatory changes).

Growth strategy. Recent performance is evaluated, including financial performance, new product releases, quantity and quality of contract wins, and market expansion moves. Also considered are the size and quality of the sales force, sales distribution channels, global presence, focus on risk management, messaging and positioning. Finally, business insight and understanding, new thinking, formulation and execution of best practices, and intellectual rigor are considered important.

Quadrant construction process

Chartis constructs its quadrants after assigning scores to vendors for each component of the completeness of offering and market potential criteria. By aggregating these values, we produce total scores for each vendor on both axes, which we use to place the vendor on the quadrant.

Definition of quadrant boxes

Chartis' quadrant reports do not simply describe one technology option as the best solution in a particular area. Our ranking methodology highlights which solutions are best for specific buyers, depending on the technology they need and the implementation strategy they plan to adopt. Vendors that appear in each quadrant have characteristics and strengths that make them especially suited to that category and, by extension, to users' needs.

Point solution

Point solution providers focus on a small number of component technology capabilities, meeting a critical need in the risk technology market by solving specific risk management problems with domain-specific software applications and technologies.

They are often strong engines for innovation, as their deep focus on a relatively narrow area generates thought leadership and intellectual capital.

By growing their enterprise functionality and utilizing integrated data management, analytics and business intelligence (BI) capabilities, vendors in the point solutions category can expand their completeness of offering, market potential and market share.

Best of breed

Best-of-breed providers have best-in-class point solutions and the ability to capture significant market share in their chosen markets.

They are often distinguished by a growing client base, superior sales and marketing execution, and a clear strategy for sustainable, profitable growth. High performers also have a demonstrable track record of R&D investment, together with specific product or 'go-to-market' capabilities needed to deliver a competitive advantage.

Because of their focused functionality, best-of-breed solutions will often be packaged together as part of a comprehensive enterprise risk technology architecture, co-existing with other solutions.

Enterprise solutions

Enterprise solution providers typically offer risk management technology platforms combining functionally rich risk applications with comprehensive data management, analytics and BI.

A key differentiator in this category is the openness and flexibility of the technological architecture and a 'toolkit' approach to risk analytics and reporting, which attracts larger clients.

Enterprise solutions are typically supported with comprehensive infrastructure and service capabilities and best-in-class technology delivery. They also combine risk management content, data and software to provide an integrated 'one stop shop' for buyers.

Category leaders

Category leaders combine depth and breadth of functionality, technology and content with the required organizational characteristics to capture significant share in their market.

They demonstrate a clear strategy for sustainable, profitable growth, matched with best-in-class solutions and the range and diversity of offerings, sector coverage and financial strength to absorb demand volatility in specific industry sectors or geographic regions.

They typically benefit from strong brand awareness, global reach and strong alliance strategies with leading consulting firms and systems integrators.