



■ Business Impact

“The flexibility of our new solution is first-class. Thanks to SAS, we can react quickly to changes and incorporate new risk inquiries.”

Michael Kathrein
Project Manager and Risk Analyst
Allianz IDC

■ Challenges

- **Executive-level understanding of risk.** Executives often aren't fully aware of what major risks the company is facing and how those risks are being managed.
- **Data availability and quality.** Inability to create an enterprise risk data warehouse due to disparate business units and multiple legacy systems makes it hard to get access to timely, reliable risk data.
- **Incomplete view of risk.** Many firms lack the ability to aggregate multiple risks – credit, operational, market, underwriting – at a firmwide level.
- **Inability to perform stress testing.** Insurers often don't have sufficient stochastic or scenario-based capabilities to evaluate risk at multiple levels.
- **Resource limitations.** Lack of risk expertise and a limited risk culture hamper risk management efforts within organizations.

How can we integrate risk management throughout the enterprise?

YOUR GOAL: Reduce risk, optimize capital, maximize investment performance and increase competitive advantage

The financial crisis, an economic downturn and a soft global market are making it difficult for many insurers to continue in business, let alone remain profitable. Rating agencies, regulators, investors and other stakeholders are demanding greater governance, improved transparency and better financial performance.

While the whole concept of insurance revolves around risk management, most insurance companies continue to operate as disparate units, which fosters a degree of uncertainty when it comes to understanding their business risk throughout the organization.

In such a volatile environment, it is more crucial than ever that insurers review their risk management procedures in order to improve shareholder confidence and prevent regulators from downgrading their portfolios.

OUR APPROACH

To survive and emerge stronger from the current financial crisis, it is essential that insurance companies implement a risk management strategy throughout their organizations. We approach the problem by delivering software and services that help you:

- **Ensure accurate information, regardless of application or format** by accessing and managing disparate data and automatically applying embedded data quality techniques.
- **Reduce the impact of risks** by applying advanced analytics that allow insurers to anticipate enterprise risks and initiate risk control measures to minimize losses.
- **Protect solvency of the company from sudden and dramatic changes in market circumstances** by stress testing the balance sheet using the powerful analytic capabilities of SAS' unrivaled risk analytics engine.
- **Reduce implementation time and expenses** with a single, integrated solution – from data management to enterprise risk analysis to reporting.
- **Improve business decisions** by allowing risk managers, senior managers and analysts to access and communicate information they need, when they need it, in the format and level of detail they require.

Only SAS enables you to perform enterprise risk management with an open, flexible and extensible means of measuring and managing the risks that affect your business in a way that best matches your needs.



THE SAS® DIFFERENCE: Superior data integration, a sophisticated risk engine and flexible reporting

Only SAS provides a single system that integrates superior data management, powerful analytics and self-service reporting within a transparent framework that lets you manage the whole process easily and can be customized to meet your requirements. With SAS you get:

- **Superior data integration capabilities** that let you acquire and consolidate historical data from internal and external sources for risk analysis and reporting.
- **A sophisticated risk engine** that lets you perform valuation, stress and scenario-based testing to aggregate and evaluate risk across multiple levels – at the business unit, line of business, company or group level.
- **Flexible reporting capabilities** that include standard reports and an easy-to-use Web-based reporting environment to easily communicate critical risk information to the right people within your organization.
- **A data repository and insurance-specific data model** that serves as a single source of information for an enterprise risk data warehouse.

SAS also gives you the flexibility to implement the solution using a phased approach, starting where your needs are greatest and adding on over time as your needs change.

CASE STUDY: Allianz IDS

■ Situation

In the face of increasing globalization and its own expansion strategy, the company was looking for a flexible, scalable risk management solution that would enable them to manage changes in the capital market that would affect the asset management function of the company and its external customers. The ideal solution would let the company identify capital market changes more quickly, allowing for fast and efficient implementation of specific risk requirements as needed – and would also enable smooth and easy expansion in response to growth.

■ Solution

SAS delivered a solution that enabled the company to:

- Load current market, position and dimensional data into a central SAS data warehouse for investment management.
- Automatically calculate Value-at-Risk (VaR) on a regular basis.
- Analyze unusual market events and carry out any type of scenario analysis on an ad hoc basis.

■ Results

- Up-to-date asset management simulations.
- Ability to formulate ad hoc scenarios quickly and easily.
- Easier examination of global investment portfolios.

■ The Vision

Data integrity

What if your data was automatically cleansed as part of the data integration process so you could be confident in its integrity throughout your organization?

Enterprise risk

What if you could integrate and report across all your risk types – credit, market, operational and underwriting risk – using one enterprise solution?

Risk evaluation

What if you could evaluate your risk exposure by performing scenario-based analysis and stress testing to optimize capital allocation, minimize losses and maximize your investment performance?

Transparency and auditability

What if you could reduce the time you spend with regulators and auditors by providing them with a complete audit trail that traces risk measures from final reports back to the core system, with the ability to drill down interactively for more detail?

Interactive reporting

What if your standard regulatory reports were produced automatically from a scheduled process and your risk analysts could generate further reports, make changes and rerun reports as needed for faster response to requests without undue burden on IT?

SAS FACTS

- More than 1,000 insurance companies worldwide are SAS customers.
- SAS has more than three decades of experience working with insurance companies across the globe.
- SAS customers make up 92 of the top 100 companies in the 2009 FORTUNE Global 500®.

Learn more about SAS software and services for insurance at:
www.sas.com/industry/insurance



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TO KNOW.

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