Overview
Loss events are seldom random. They generally arise from failures of control and involve multiple contributing factors. With the benefit of hindsight, it is easy to see that many risk factors are chronic or recurrent, and most are common across financial institutions of various sizes and types.

What if you could reliably transform that hindsight into foresight? With a stringent system in place to track loss events and collect data about all those factors – internal and external – you could more accurately predict the probability and impact of potential future loss events.

Since operational risk is driven primarily by high-severity events, which are rare, it would take years or decades to collect enough data to build an effective and reliable predictive model. While regulators welcome the inclusion of external loss data to broaden the statistical knowledge base, most external loss databases are in their infancy and come up short. SAS® OpRisk Global Data changes all that.

Challenges
• Inadequate sample size. An institution’s own internal loss data provides the most relevant information to use for analyzing operational risk, but internal data is generally insufficient for most modeling and statistical analysis purposes.
• Shortage of suitable event/loss data. Often, there is a shortage of available or relevant event/loss data, especially for larger and unexpected loss events.
• Lack of standardization. With no standard method for scaling data from external databases into internal ones, almost all institutions use their own algorithms.
• Insufficient external databases. External databases offer the larger sample size required for meaningful modeling and statistical analysis. However, most external data pools only capture losses above a certain threshold, contain only 10 data fields and generally cannot be directly integrated into an internal loss database.

SAS® OpRisk Global Data
A comprehensive database of operational loss information

The Solution
SAS OpRisk Global Data is the world’s largest, most comprehensive and most accurate repository of information on publicly reported operational losses in excess of US$100,000. The solution documents more than 32,000 events across all industries worldwide and provides up to 50 descriptive, categorization and financial elements.

• The database draws on the resources of several leading commercial online information providers and accesses thousands of publications. SAS OpRisk Global Data provides the broadest possible statistical sample from which to model risk factors, probabilities and costs.
• A team of seasoned SAS operational risk research analysts maintains the database in accordance with strict data quality standards and reviews it periodically, to provide updates to older loss events that change over time, to ensure accuracy and completeness. Updated versions are released monthly. In addition to the monthly electronic release of new data, SAS can also provide a quarterly release on physical media.
• It supplements an organization’s internal loss history and serves as a key component for qualitative and quantitative measures, helping provide an effective and reliable estimate of operational risk exposure.
Capabilities

Logical, standard data structure
SAS OpRisk Global Data identifies and categorizes loss events in accordance with Basel II Event and Effect classification standards. Loss data is segregated into seven distinct data sets, distinguishing between final operational loss events and soft losses (preliminary losses, estimates) to facilitate more accurate modeling. Losses in financial services firms are assigned to generic business and sub-business lines — also in conformity with Basel II standards.

With this logical, yet flexible database structure, users can view the number of loss events and their average dollar loss grouped by various categories of risk exposures by company-defined organization areas — and then view the same information by regulatory generic organization areas per Basel II.

Scaled for your organization
Empirical evidence suggests that loss magnitude is to some extent a function of firm size. That is, if the same loss event occurred simultaneously at two firms of different sizes, the larger firm would experience the larger loss, all else being equal. As a result, external data must be scaled to be proportional to the size of the firm being analyzed.

SAS OpRisk Global Data provides five types of data on which scaling can be performed — revenues, assets, net income, number of employees and shareholder equity. Using a powerful scaling algorithm or methodology, you can tailor external data to your organization’s exact analysis requirements.

Part of an end-to-end solution
SAS OpRisk Global Data is one component in a complete operational risk management solution. Encompassing award-winning data integration, analytics and reporting — the SAS OpRisk Management solution includes three components designed specifically for managing operational risk:

- SAS Enterprise GRC, a web-based application for collecting, tracking and reporting risk intelligence.
- SAS OpRisk VaR, a sophisticated, yet user-friendly, analytical model for calculating value at risk (VaR).
- SAS OpRisk Global Data, a comprehensive database of external loss data, documenting more than 32,000 publicly reported operational loss events.

The SAS® Difference

- **Extensive database and statistical sample.** By integrating SAS OpRisk Global Data into your risk analysis processes, you gain the broadest possible statistical sample of relevant data on which to gauge the probability and potential cost of loss events.

- **An intelligent foundation.** With standardized data, scaled for your organization’s size, you can optimize capital allocation, develop the most effective controls, satisfy regulatory reporting requirements and assess performance in preventing or mitigating operational risk.

![Global data loss events by event risk.](image-url)