



www.avenuesinc.com
email: info@avenuesinc.com

What Is Operational Risk

The Basel Committee of the Bank of International Settlements defines operational risk as the risk of monetary loss resulting from inadequate or failed internal processes, people and systems or from external events, that is not already covered by other regulatory capital charges (e.g. credit risk, market risk, interest rate risk).

The Basel Committee has regulated that, by 2006, all global banks be in a position to start measuring operational risk. This presents a significant challenge to the global financial services industry.

“An internal assessment of events based on the Basel definitions of operational risk led to the startling discovery that this risk costs us hundreds of millions of euros each year. It can no longer be ignored”

Managing Director Risk - Leading European Bank

Overview

Avenues International Inc. through its subsidiary “OpRisk Data, LLC” provides a full spectrum of operational risk management services. Our experience in risk, finance and operations functions at large global financial institutions has provided us with unparalleled insight into the practical and theoretical aspects of operational risk data collection, management and measurement.

Our industry experience is unparalleled. Our principals have worked with Stock Exchanges, Back-office Infrastructure Providers (clearing companies and trust banks), Global Banks and Brokerages, and Asset Managers – as auditors, accountants, consultants and line managers. Our principals also have experience in architecting, modeling and building large-scale data warehouses, marts and libraries for the Financial Services, Telecom, Healthcare and Retail industries.

Our Offerings

Our solutions fall into three categories:

Software Products

- *External loss Database*: a relational database and OLAP tool. Currently in excess of 4,000 events where each event is in excess of one million US dollars. Each loss is categorized in accordance with the Event and Effect classification standards, prescribed by the Basel Committee.
- *Internal Loss Database*: An internal loss collection tool that can be easily integrated with existing infrastructure, modeling tools, and external or consortia databases.
- *Modeling Tool*: A state of the art modeling tool, featuring:
 - A three parameter curve fitting routine based on a mixture distribution (for fat tailed severity distributions)
 - Three VaR calculation tools, with a built in mechanism to account for insurance/risk transfers:
 - Monte Carlo Simulation
 - Panjer's Algorithm
 - Fast Fourier Transformation

Consulting

We support organizations at all stages in the life cycle of operational risk management.

Our experience includes:

Data Capture and Management

- *Designing an Organizational Framework for Operational Risk*: organizational structure, staffing, delineation of roles and responsibilities, resource requirements.
- *Definition and Categorization of Data*: appropriate standards to apply, reasoning behind the three most common categorization methods – event, cause and effect.
- *Identification of Indicator Data*: A comprehensive assessment of relevant indicator data to collect and appropriate statistical analysis required.
- *Training*: workshops to train staff in identifying, collecting, categorizing and reporting relevant data. Checklist of “rules of thumb” to assist staff in categorization.
- *Self-assessment scorecard*: issues and approaches based on tested audit principles.
- *Reporting*: integration of operational risk indicators with Management Information Systems.

Modeling and Capital Allocation

- *Analysis*: Use of the latest breakthroughs from Phd's that are dedicated to advancing operational risk measurement.

- *Data Cleansing*: Use of a bottom-up measurement methodology, addressing data cleansing issues such as scale, inflation, mixing of internal and external data, insurance.
- *Curve Fitting*: A methodology that includes advanced MLE and MDE distribution-fitting techniques designed to work with a number of parametric families for frequency and for severity. These techniques allow for fitting of data drawn from distributions subject to different truncation levels.
- *VaR Calculators*: Use of advanced Value at Risk calculators with the ability to calculate aggregate loss distributions using different numerical methods including Monte Carlo simulation, Panjer's recursive method and Fast Fourier transforms.
- *Capital Charge*: VaR calculation and operational risk economic capital allocation.

Technology Implementation

- *External Loss Database*: implementation of our product as a software solution or ASP model.
- *Internal operational risk data-warehouse*: customization and integration of our product to ensure all operational loss data is identified and captured.
- *Modeling Tool*: customization and integration of our ASP solution.
- *Development of a customized solution*: implementation of a client defined solution utilizing existing data management infrastructure.

Outsourcing

- *Identification of Opportunities*: cost and benefit analysis of operational risk mitigation potential from outsourcing processes to whole businesses.
- *Assistance with Outsourcing*: on the scene resources with country specific knowledge and experience dedicated to ensuring your success.
- *Outsourcing of the Operational Risk Function*: infrastructure to become the Operational Risk Department for your company with significant cost savings.