




Swiss Re:

Helping rebuild lives

and create more

resilient cities



 Swiss Re



IBM

The Quiet Economic Stabilizer

After the catastrophic 1861 fire in Glarus, Switzerland, insurance companies took a major hit to their capital thanks to the sheer number of unanticipated payouts from property damage, injury and loss of life in the fire's wake, revealing just how ill-equipped insurance companies were to handle large-scale catastrophic events. Seeing the need for a new kind of insurance company—one that spreads its risks internationally to help absorb the financial burden of traditional insurance companies—Helvetia General Insurance Company and the Basle Commercial Bank founded the Swiss Reinsurance Company in 1863.

Today, Swiss Re has offices in over 25 countries and was ranked 334th in Fortune Global 500 in 2013.¹ As one of the world's largest reinsurers, Swiss Re works behind the scenes to help insurance companies, governments and society as whole deal with today's risk landscape across auto, home, life and health, business and, especially, major catastrophe scenarios. On a global scale, Swiss Re helps to mitigate the risk an insurance company might take on while covering anything from the construction of a new skyscraper in New York City to a 20-mile long bridge in China. By providing this extra security blanket to its clients, insurance companies assume less risk and retain more capital to extend its coverage to more clients. Through its wealth of data and the expertise of its specialists, Swiss Re encourages construction, stability and economic expansion.

Learning from the Past, Preparing for the Future

Economic losses from catastrophes worldwide amounted to \$140 billion in 2013, with Asia taking

the highest loss.² This kind of global economic impact doesn't go unnoticed by Swiss Re. And as a company specializing in reinsurance, it knows that data is its most valuable asset; when a city is ravaged by flooding or an industrial complex is left in ruin by a tornado, Swiss Re relies on data to evaluate exactly what kind of damage happened, why it happened and how to prevent it from happening in the face of a similar natural event in the future. Using powerful analytics on its massive wealth of data, Swiss Re uses predictive modeling to educate insurers, cities and private builders on the possible risks and outcomes they face when rebuilding after a catastrophe. This kind of extensive knowledge allows both Swiss Re and its clients to make better use of both capital and resource.

“We needed a consolidated view of all claims, and our business users needed a way to run their reports in minutes or hours, instead of days. IDAA provided the high availability our global business users demand as they rely on the system to run analysis and reports 24x7.”

Reto Estermann

Head Finance IT General Ledger Systems, Swiss Re

Furthermore, the wealth of financial data that Swiss Re has gathered over the last 150 years enables informed decision-making in global investments that help to result in strong capital growth. So while powerful analytics provide insight into risk,

“The more we know about risk, the better we can manage it, the better we can help our clients manage their risk, the better we can help them avoid risk where it can be avoided economically. And, the better we can help them to design systems that can withstand the forces of nature.”

Andreas Schraft

Managing Director, Natural Hazards, Swiss Re

additional financial insight allows Swiss Re to grow its capital through wise investing that results in additional coverage, smarter coverage and more resilient cities—all pulled from the mainframe.

A Platform For Risk Mitigation

The IBM mainframe is the data and analytical foundation for Swiss Re, channeling the quick analysis and near real-time availability of data through its scalable, available and reliable platform. Deploying IBM DB2 Analytics Accelerator, Swiss Re sees actionable insight faster than with traditional methods, gaining those insights in hours instead of weeks.³

Swiss Re depends heavily on the mainframe for natural catastrophe modeling, one of the most data intensive components of the reinsurance



industry.⁴ But this kind of predictive capability can yield great benefits to cities when rebuilding after a natural disaster occurs. Typically, in the event of a hurricane or other natural disaster, a government will allocate funds—as well as reallocate already established budgets—to pay for initiatives designed to rebuild public sector buildings and infrastructures such as streets, subways, etc., putting a heavy strain on taxpayer dollars.

“The mainframe actually represents our financial backbone from start to beginning. So, everything which has to do with our finance department and our money allocation is done on systems supported by the mainframe.”

Christoph Locher
Head IT Sourcing, Swiss Re

After Hurricane Sandy raged across New York in 2012, the state estimated \$42 billion in repair costs, with a heavy concentration of those costs going toward repairs in New York City.⁵ The state knew that simply rebuilding wouldn't be enough; it would need to reinforce structures, design more resilient buildings and choose better locations with future weather patterns in mind. Working with the New York City's Mayor Office, Swiss Re used the mainframe to assess damage caused by the storm, incorporate economic factors and create powerful “what-if” scenario modeling to highlight the impact

of various possible future catastrophes. Using powerful analytics, Swiss Re provided New York with a detailed report that recommended how to rebuild, as well as projecting economic losses and how to prevent those same kinds of losses in the future.⁶



Swiss Re used analytics on the mainframe for allocating its financial strengths to risk investment gains of **\$766 million in 2013.**⁸

TRUSTED

Swiss Re is counted on for accurate underwriting and industry expertise. And to provide dependable financial insight that promotes accurate coverage and informed decision-making, it depends on data that is readily available, secure and trusted from a single source: the mainframe.

RELIABLE

With the mainframe as its financial and analytical backbone, Swiss Re has a platform that can run applications built 25 years ago,³ as well as integrate and communicate seamlessly with its existing systems.

BIG DATA & ANALYTICS

The mainframe provides Swiss Re a single source of truth. Using IBM DB2 Analytics Accelerator, the reinsurance provider can run queries and generate reports—quickly and efficiently. And the mainframe is a safe, scalable platform for Swiss Re's vital data to reside, moving data in the magnitude of 3 petabytes and housing its biggest database that contains 1.5 billion rows.⁸

Looking Forward

Swiss Re can effectively use lessons from the past to help guide and shape the future. With the mainframe as its safe, reliable and available platform, it will continue to use its industry knowledge and wealth of information to reduce claim volatility, claim severity and help promote economic growth and recovery in the event of a catastrophe—rebuilding lives and creating more resilient cities.

About Swiss Re

Since its founding in 1863, Swiss Re has since become one of the world's largest reinsurance companies with over 60 office locations across 25 countries. In 2013, it delivered a net income of \$4.4 billion and was ranked 127th in Forbes 2000 Global Leading Companies and 334th in Fortune Global 500.⁹

For over 150 years, Swiss Re has been using its extensive knowledge and expertise to become a leading player in the reinsurance industry, helping insurance providers invest capital wisely, extend coverage and promote economic growth.

Swiss Re is based out of Zurich, Switzerland.

swissre.com

Sources

1. Fortune Global 500, 2013 (Source)
2. Sigma Report, 2013, Swiss Re
3. Interview, Reto Estermann, Head Finance IT General Ledger Systems, Swiss Re
4. Interview, Andreas Schraft, Managing Director, Natural Hazards, Swiss Re
5. "Economic Impact of Hurricane Sandy: Potential Economic Activity Lost and Gained in New Jersey and New York," US Department of Commerce, September 2013
6. Interview, Megan Linkin, Natural Hazardous Expert, Swiss Re
7. Interview, Christoph Locher, Head IT Sourcing, Swiss Re
8. Swiss Re 2013 Annual Report