

Samsung Life Insurance

Advanced insurance fraud detection



Objective

In South Korea, people are increasingly subscribing to a variety of insurance programs. Not surprisingly, the incidence of insurance fraud has also increased. According to the Korean Financial Supervisory Service, the number of insurance fraud cases in 2006 was 46.4 percent higher than 2005, and the overall trend for financial fraud crimes, such as insurance fraud, lost card fraud and tax evasion, was becoming more diversified and complex. Samsung Life Insurance, with the equivalent of \$69 billion in reference assets and \$23 billion in sales, and more than 10 million policyholders, needed a new automated insurance fraud detection system (IFDS) to address this growing problem. The company's old system was largely a manual process in which the accident processing managers sorted out insurance fraud suspects at their discretion, which increased the probability of human error.

Solution

Samsung Life Insurance has introduced a new IFDS based on ILOG JRules, the market-leading business rule management system (BRMS). The system takes knowledge gained from insurance fraud management work and applies it automatically using ILOG JRules to prevent false claims from going through. It automates more than 60 percent of the work, while the last system only did about 40 percent, and it has shortened the inspection time for processing 10,000 claims from two weeks to just one day.

ILOG Product: ILOG JRules

■ **Industry:** Insurance

■ **Application:**
Insurance Fraud
Detection System

■ **Geographic coverage:**
South Korea

■ **Benefits:**

- ▶ Speed-to-market gains of over 50%
- ▶ Reduced fraud costs by millions annually
- ▶ Increased productivity by 60%



Changing the rules of business™

Automated fraud detection

ILOG's BRMS helps Samsung Life Insurance scientifically and systematically search and analyze based on 800 different factors, including tracking the history of insurance fraud detections, the number of insurance accident cases and the number of insurance agreements. Fraudulent claims are separated for further inspection by field workers.

New insurance fraud detection methods are entered into the central rule repository as rules and ultimately allow the officers in charge to apply the new rules through the general examination process. With the systematic and fast examination process, Samsung Life Insurance expects to be able to improve the utilization of its insurance fraud experts. Further, business user, instead of IT personnel, can now change and add rules themselves in a single day, according to changing inspection requirements, compared to more than two weeks using a manual hard-coding process before.

Benefits

The IFDS applies policies expressed in rules using ILOG JRules to filter out likely cases of fraud. It helps Samsung:

- Separate real claims from false ones more quickly
- Process real claims in a timely manner
- Implement new filtering rules in a day
- Capture conditions for detecting fraud in detail
- Follow up cases with new rules based on findings from investigations into false claims
- Automate more than 60 percent of its claims processing, instead of just 40 percent

Project

The BRMS part of the IFDS was designed and developed in six months by KSTEC, ILOG's distributor in South Korea. Written in Java™, the system runs on HP-UX-based PCs, and uses ILOG JRules in conjunction with the SAS Statistics Data Mining system, HandySoft BPM Suite and TiMax WAS. Samsung Life plans to expand the inspection process to cover compound factors such as family, company and other groups.

“Utilizing BRMS, we've shortened the inspection processing time for 10,000 cases from two weeks to one day, and field workers can now apply new rules in real time. The more I learn about the many features of ILOG BRMS, the more impressed I am with this advanced technology.”

- XYZ

Senior Manager
Claims Inspection Section
Samsung Life Insurance



About Samsung Life Insurance

Founded 49 years ago, Samsung Life has been a frontrunner of South Korea's insurance industry throughout its history. The company offers products and services to customers in the areas of insurance, loans and investment, including pension and savings plans. Samsung Life is South Korea's largest insurer and a member of the Million Dollar Round Table, an association of insurance planners. The company has also been ranked the 18th largest insurer in the world by Fortune magazine.

ABOUT ILOG

ILOG delivers software and services that empower customers to make better decisions faster and manage change and complexity. Over 2,500 corporations and more than 465 leading software vendors rely on ILOG's market-leading business rule management system (BRMS), supply chain planning and scheduling applications and optimization and visualization software components, to achieve dramatic returns on investment, create market-defining products and services, and sharpen their competitive edge. ILOG was founded in 1987 and employs more than 800 people worldwide. For more information, please visit www.ilog.com.

ILOG Worldwide Information Center – Tel: 1-800-FOR-ILOG (US only) or +1 775 881 2800 (International) • URL: <http://www.ilog.com>

Australia – ILOG Australia Pty. Ltd. – Sydney – Tel. +61 2 82 48 28 00 – E-mail: info-au@ilog.com
China – ILOG (S) Pte. Ltd. – Beijing Representative Office – Tel. +86 10 8518 1080 – E-mail: info@ilog.com.sg
France – ILOG S.A. – Gentilly – Tel: +33 (0)1 49 08 35 00 – E-mail: info@ilog.fr
Germany – ILOG Deutschland GmbH – Bad Homburg v.d.H. – Tel: +49 6172 40 60 – 0 – E-mail: info@ilog.de
Japan – ILOG Co., Ltd – Tokyo – Tel: +81 3 5211 5770 – E-mail: info@ilog.co.jp
Singapore – ILOG (S) Pte. Ltd. – Singapore – Tel: +65 67 73 06 26 – E-mail: info@ilog.com.sg
Spain – ILOG S.A. – Madrid – Tel: +34 91 710 2480 – E-mail: info@ilog.es
UK – ILOG Ltd. – Bracknell – Tel: +44 (0) 1344 66 16 00 – E-mail: info@ilog.co.uk
USA – ILOG, Inc. – Sunnyvale, CA – Tel: +1 408-991-7000 – E-mail: info@ilog.com
 Representatives and distributors in other countries

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