

# Business analytics for insurance

*Four ways insurers are winning with analytics*



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## Overview

These are challenging times for the insurance industry. Strong competition, savvy consumers and new channels for customer interactions are driving insurers to seek more cost-effective ways to conduct business. At the same time, regulators are forcing greater transparency on insurers and the cost of compliance can be a difficult pill to swallow amid the urgent need to reduce operating costs. And when you consider the internal pressures of low investment returns and increased risk on assets, it's clear that insurers who wish to thrive in this environment must gain a specific set of capabilities that will allow them to:

- Build a customer-centric business model
- Find profitable ways to sustain growth
- Develop new, competitively priced products
- Increase claims efficiency and effectiveness
- Improve capital management and investment decisions
- Improve risk management and regulatory reporting

The common thread in this marketplace narrative is how to utilize large quantities of information or what is now called "big data." For those that are able to harness it, big data represents a huge opportunity. Insurance providers already have access to massive volumes of information about their customers and the organization. However, much of this information and the insight into business outcomes it contains are unused or not leveraged to its full advantage.

Insurers can access “big data” on the estimated 1 billion cars and small trucks on the road globally, the statistical tendencies of consumers to shop for and purchase auto and home insurance online, global weather data that affects claims, and expansive fraud detection and prevention metrics—to name just a few obvious sources. To be competitive, insurers must be able to extract the business insights embedded within all this information.

As many organizations now realize, the key to unlocking the value within all that data is business analytics. According to research from The Economist and IBM, organizations that adopt analytics achieve significant benefits compared those do not, including:

- 1.6 times greater revenue growth
- 2 times greater EBITDA growth
- 2.5 times stock price appreciation<sup>1</sup>

In this white paper, you will learn the practical applications of business analytics for insurers and the four key areas where it helps insurers win: creating a customer-focused enterprise, smarter claims, optimizing enterprise risk management and optimizing multichannel interactions.

## Business analytics defined

With business analytics, you can optimize performance and use predictive insights and trusted information to make informed decisions. By bringing together all relevant information in an organization, executives can answer fundamental questions such as *What is happening? Why is it happening? What is likely to happen in the future? Which actions will drive success?*

IBM Business Analytics software helps your organization rise to the challenge with better business insight, planning and performance. It does this by unlocking data captured in operational and financial systems and transforming it into useful, relevant insights that you can act upon. It helps you understand what’s behind critical issues, trends and opportunities and provides an accurate, forward-looking view of the business. Everyone across the organization can use this information to make strategically aligned decisions that drive better business outcomes.

The core components of business analytics for banking include:

- **Business intelligence.** Easily find, analyze and share the information you need to improve decision-making with query, reporting, analysis, scorecards and dashboards.
- **Performance management.** Guide management strategy in the most profitable directions with timely, reliable insights, scenario modeling and transparent and timely reporting.
- **Predictive analytics.** Discover patterns and relationships in data to predict behaviors and optimize decision-making.
- **Analytical decision management.** Use predictive analytics, rules, scoring and optimization techniques to empower workers and systems on the front lines to optimize customer interactions and improve business outcomes.
- **Risk management.** Make risk-aware decisions and meet regulatory requirements with smarter risk management programs and methodologies.

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### **Analytics in Action: Selective Insurance**

Selective Insurance Company of America (“Selective”) is one of seven property and casualty insurance companies held by Selective Insurance Group, Inc. which is rated “A+” (Superior) by A.M. Best.

Selective had a tremendous amount of data pouring in from different transaction systems such as policy, claims and finance. The challenge was to transform this data

into answers to critical business questions. Selective implemented IBM reports, scorecards and dashboards to aggregate critical information from diverse systems, including underwriting, claims, billing, agency production and safety management.

Today Selective uses IBM Business Analytics to:

- Make faster, informed decisions that drive completion of corporate objectives.
- Manage risk selection and find the right balance between risk and price.
- Gain deeper insight into share of wallet, customer mix, quality of business, exposures, new business acquisition and lines of business.
- Identify low performing areas and create action plans to improve performance.

“With IBM Cognos Business Intelligence delivered directly to their desktops, Selective executives and managers are now more empowered to make quick, accurate decisions that are critical to helping the company outperform the competition,” says Senior Vice President of Field UW and Information Strategy Brenda Hall. “Our analytics capabilities, our ability to deliver real-time underwriting information to the underwriters’ desk, and our sound agency relationships collectively ensure that we are continuously improving our performance and driving optimal results in the long term.”

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### **The four ways to win**

Increasingly insurance companies are turning to business analytics to address the new complexities they face. While the implementations are as individual as the companies themselves, four common areas are of particular focus:

- Creating a customer-focused enterprise
- Smarter claims
- Optimizing enterprise risk management
- Optimizing multichannel interactions

### **Creating a customer-focused enterprise**

Because the cost of attracting and underwriting new customers is many times more than the cost of keeping current customers, customer retention and growth is a high priority for most insurance companies. But creating a customer-focused enterprise can be difficult. With high customer churn levels across many insurance products and geographies, it is critical to identify at-risk customers as early as possible. And traditional quarterly satisfaction reports provide few actionable insights.

With IBM Business Analytics solutions, insurers can provide the early warning that agents, call center representatives and other employees need to keep their best customers longer while also improving their lifetime value. Analytics can help analyze all customer data sources to uncover complex purchasing behaviors, identify events that predict policyholder needs, and increase marketing effectiveness

by isolating the best targets and best offers for individual customers. These analytic insights also help insurers capitalize on opportunities at each customer interaction point whether it is through agents, call centers, by email or online. Specific capabilities of the IBM Business Analytics Customer Retention and Growth solution include:

- Discover policy lapse patterns and profiles of customer who leave for a deeper understanding of why they left.
- Predict future customer value to determine the ideal customers for retention efforts, and at what cost using what methods.
- Predict what offer or service would prevent a customer from switching insurers, and what price will cover your risk of insuring that customer for another term.
- Alert agents and other customer facing employees to opportunities as they occur by integrating predictive insights into customer interaction systems and processes.
- Monitor customer behavior for events that indicate potential needs—and provide the right cross-sell or up-sell offer in real time.
- Automatically choose the best delivery channel for each offer and customer to increase acceptance.

### Retaining at-risk customers

As shown in Figure 1, here is one scenario of how the IBM Customer Retention and Growth solution can help an insurance organization identify and retain at-risk insurance customers.

1. IBM Cognos Business Intelligence dashboards and alerts are used to monitor historic trends and look for issues. The chief marketing officer discovers that renewals for auto insurance policies are down for the last two months. He decides that a retention campaign must be initiated.
2. The CMO easily performs ad-hoc and guided analysis into the data to identify the issue and asks a business analyst to undertake additional modeling. Using IBM SPSS Modeler, the analyst will combine the historic data with related customer demographic data to build a predictive model to identify which customers due for renewal are likely to change insurance companies.
3. Once the customers are flagged in the systems, regional managers can run targeted campaigns to target at-risk, high-value customers with special incentives to renew their auto policies. Using IBM SPSS Decision Manager, call-center operators can identify when a customer is relevant for this offer and link the details with the campaign.
4. The impact of the analysis and action will then become apparent in the resulting dashboards, helping the chief marketing offer to build increasingly stronger and more effective retention strategies over time.

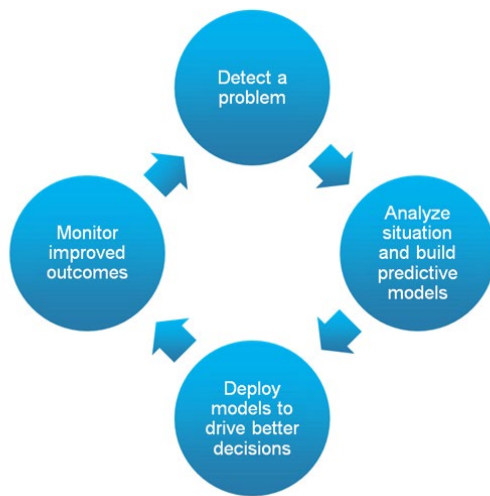


Figure 1: IBM Business Analytics solutions provide the ability to identify at-risk customers and then deploy front line decisions and actions to retain them.

### Smarter claims

Filing a claim is perhaps the single most important “moment of truth” in the relationship between insurers and the insured. It lays the foundation for customer satisfaction, profitability and positive word-of-mouth for attracting new customers. The speed, accuracy and effectiveness of claims processing is also paramount for controlling costs, managing risk and meeting portfolio underwriting expectations. As the single largest expense for insurers, claims management is fundamental to success in the insurance industry.

Many insurers still rely on intuition and subjective “gut-level” decisions for processing claims. Others use static, pre-defined business rules that automate how claims are processed. However, both of these approaches are limited when you consider the complex web of ever-changing conditions, variables and consequences represented in the processing of each individual claim.

IBM Business Analytics helps insurers overcome these challenges and transform the way they process claims. By combining business intelligence and predictive analytics technologies, IBM Business Analytics offers a powerful resource for determining how to treat an individual claim at every stage of the claims lifecycle. The optimization of claims management with IBM Business Analytics can increase customer satisfaction, control claims-related costs including fraud, and improve the utilization of claims resources for a competitive advantage.

### IBM Predictive Analytics and Reporting for Claims (PARC) solution

IBM has assembled a powerful claims analytics solution that combines state-of-the-art IBM SPSS predictive analytics and IBM Cognos business intelligence and performance management technologies. The solution is a template for integrating IBM Business Analytics software to accelerate and improve the key stages of the insurance claims life cycle and supporting workflow.

PARC can help insurers achieve highly effective claims management through better fraud detection, improved subrogation and claims right-tracking capabilities, providing new value across the insurance claims processes. Through the capabilities of predictive analytics and business intelligence,

insurers can use PARC to significantly improve claims processing and reap the benefits of superior operational effectiveness, cost containment and increased customer satisfaction. PARC provides insurers with the capability to:

- Provide claims operations reports, scorecards and analyses for executives and claims staff.
- Mine historical data to predict likelihood of fraud or discover patterns or anomalies.
- Score claims based on complexity and fraud potential, to help automate processing and direct potential fraud to investigation unit quickly.
- Reduce fraud losses by pinpointing suspicious claims quickly to avoid unnecessary payments and improve customer satisfaction by automating processing of simple claims.

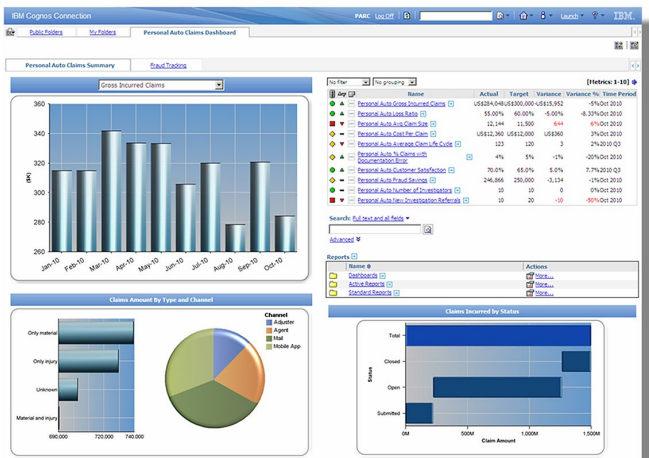


Figure 2: IBM PARC provides templates and best practices for using IBM Business Analytics to optimize and automate claims processing.

### Analytics in Action: Santam Insurance

Founded in 1918, Santam has grown to become South Africa's largest short-term insurance company. With more than 650,000 policy holders and assets under management of 17 billion South African Rand (US \$2.4 billion), the company enjoys a market share of more than 22 percent. It offers customers a wide range of services in personal, commercial, agricultural and specialist insurance and risk management.

Santam wanted to find a way to improve its service to customers by settling claims faster and keeping premiums low. To achieve this, the company needed to maximize operational efficiency and find smarter ways to combat fraud. Using IBM Business Analytics, the company implemented a claims solution that captures data from incoming claims, assesses each claim against identified risk factors and segments claims to five risk categories — separating likely fraudulent claims and higher-risk cases from low-risk claims.

With the new system, the company not only saves millions previously lost to insurance fraud, but also drastically reduces processing time for low-risk claims, leading to resolution in less than an hour for some customers.

*"In the first month of using the IBM Business Analytics solution, we were able to identify patterns that enabled us to foil a major motor insurance fraud syndicate. Within the first four months, we had saved R17 million on fraudulent claims, and R32 million in total repudiations — so the solution delivered a full return on investment almost instantly!"*

– Anesh Govender, Head of Finance, Reporting and Salvage, Santam Insurance

## Optimizing enterprise risk management

According to a recent IBM study of nearly 500 executives, an overwhelming 77 percent feel as though their risk exposure has increased year-to-year. And not a single respondent said risk is decreasing.<sup>2</sup> Driven by both external and internal forces, insurers are under great pressure to adopt more sophisticated and effective strategies for managing risk across the enterprise, to ultimately improve performance and sustain competitive advantage. These forces include increased oversight from ever expanding global, regional and national regulations such as Solvency II and RMORSA. There are also increasing internal demands to improve profitability by aligning risk, capital and performance management objectives, and to connect front-line decisions with the overall risk appetite of the organization.

Yet, at the same time, there is a lack of trusted, integrated and consumable risk information available across insurance organizations. For many, the ability to provide relevant, consistent risk data for a number of distinct stakeholder groups such as senior executives, analysts and regulators, seems out of reach. In order to meet these challenges, insurers require more accurate risk assessments to support forecasting, planning, financial reporting and decision making at both the strategic and transaction levels. To achieve this, they need an integrated view of their risk across divisions, geographies and risk classes.

IBM Risk Analytics helps insurers gain a comprehensive, integrated approach to risk management that improves decision-making capabilities throughout the organization, so that they can:

- Make risk-aware decisions.
- Optimize capital across the enterprise.
- Reduce the cost of compliance with regulations such as Solvency II and RMORSA.
- Accelerate and streamline risk processes.
- Dynamically evolve as risk practices and regulations change.
- Align strategy to risk appetite.

As shown in Figure 1, IBM Risk Analytics provides advanced analytic capabilities for transforming risk data into risk insights. Insurers can then apply these insights and take the most effective actions across these essential risk management arenas:

- **Financial Risk.** Understand and act on financial uncertainty and exposure across the business including: market risk; credit risk and collateral; ALM and liquidity risk; capital management and actuarial risk.
- **Operational Risk.** Manage operational risk to improve visibility into risk exposures across the enterprise, reduce unexpected losses and improve business performance.
- **Regulatory Compliance.** Manage against evolving regulatory change and provide senior management with confidence that regulatory compliance is achieved, risks are mitigated and corporate policies are enforced.
- **IT Governance and Risk.** Sustain compliance across multiple IT best practice frameworks and understand the impact of IT risk, threats and vulnerabilities to the business processes they support.

## Reporting for Solvency II and RMORSA

IBM Business Analytics offers pre-configured, scalable, quickly implemented solutions to help insurers to comply with the reporting requirements of Solvency II and RMORSA. These solutions provide comprehensive reporting capabilities to cover both qualitative and quantitative information covering the areas of business and performance, system of governance, risk profile, regulatory balance sheet, capital management and information on the internal model if applicable.

The Solvency II and RMORSA risk reporting solutions from IBM helps insurance organizations:

- Increase cost savings and ROI by automating reporting processes.
- Support qualitative reporting requirements for transparency into internal controls, processes, and supervision.
- Streamline external reporting processes with a central repository and reusable reporting objects.
- Deliver internal report packs to increase enterprise-wide risk awareness.
- Align with wider risk and financial performance management initiatives.

## Optimizing multichannel interactions

With increasing economic pressures and intense competition for customers, insurance executives must quickly improve the sales performance across their organization and improve profitability. But the multi-tiered sales structure of insurance organizations, combined with multiple channels for reaching customers, makes it difficult to gain a consolidated view of key sales performance metrics. How can insurers identify their top sales performers—or those that need help with their performance? How do they help agents capture emerging opportunities and avoid retention risks? How can they quickly provide sales reporting metrics for management? Or drive the right behavior from agents that will optimize profitability?

With IBM sales performance management solutions, insurers gain a clear view of sales performance throughout the organization so they can create an integrated, multi-channel enterprise. They provide the full range of analytic capabilities including sales performance management, channel management, incentive compensation, management quota planning and territory planning. With the ability to drill down and analyze sales information, executives can build, model and administer variable pay programs that drive desired sales behaviors. Frequent sales coverage changes across territories are easily managed. And insurers have the ability to more effectively plan and distribute quota targets efficiently across all levels of the sales organization.

With IBM sales performance management solutions, insurers can:

- Improve sales performance through better control of agents.
- Reduce risk of incentive compensation regulatory breaches.
- Improve efficiencies.
- Increase agility to introduce new incentive plans.

### **Why choose IBM Business Analytics for Insurance?**

IBM Business Analytics for Insurance solutions are built on the expertise and innovation of IBM's leading analytics platform. They provide insurers across the globe with the ability to gain valuable insights from data and act quickly to improve profitability, increase revenue and drive growth. IBM Business Analytics for Insurance solutions offer:

#### **Superior capabilities**

- Analytic capabilities that are dually specialized to the task and interconnected to allow shared insights across the organization.
- Analytics capabilities that scale from small and midsize businesses to enterprises.

#### **Flexibility**

- Analytic capabilities for all decisions, all people, all data, when and where you need them.
- Multiple delivery options, including appliances, hardware, cloud and mobile.

#### **Innovation**

- Nearly 600 analytics patents a year and first in overall patent ranking for the past 20 years.<sup>3</sup>
- Next-generation analytics systems that are able to reason and learn.

#### **Proven**

- Recognized technology leader with a significant number of analytics innovation use cases.
- More than 20,000 analytics engagements and 9,000 dedicated analytics consultants around the globe.

### **Conclusion**

Faced with intense competition, high customer churn rates, new regulatory compliance requirement and financial pressures, insurance organizations require the ability to transform massive amounts of information into actionable business insights. IBM Business Analytics solutions are helping insurers around the world face these challenges in order to create a customer-focused enterprise, improve claims management, optimize risk management and gain better control over multichannel sales performance.

## About IBM Business Analytics

IBM Business Analytics software delivers data-driven insights that help organizations work smarter and outperform their peers. This comprehensive portfolio includes solutions for business intelligence, predictive analytics and decision management, performance management, and risk management.

Business Analytics solutions enable companies to identify and visualize trends and patterns in areas, such as customer analytics, that can have a profound effect on business performance. They can compare scenarios, anticipate potential threats and opportunities, better plan, budget and forecast resources, balance risks against expected returns and work to meet regulatory requirements. By making analytics widely available, organizations can align tactical and strategic decision-making to achieve business goals. For further information please visit [ibm.com/business-analytics](https://ibm.com/business-analytics)

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- 1 "Outperforming in a data-rich, hyper-connected world," The Economist Intelligence Unit and the IBM Institute of Business Value, 2012. [http://www.ibm.com/smarterplanet/global/files/se\\_sv\\_se\\_intelligence\\_Outperforming\\_in\\_a\\_data-rich\\_hyper-connected\\_world.pdf](http://www.ibm.com/smarterplanet/global/files/se_sv_se_intelligence_Outperforming_in_a_data-rich_hyper-connected_world.pdf)
- 2 "Combating risk with predictive intelligence," IBM Institute for Business Value, 2012. [http://www.ibm.com/common/ssi/cgi-bin/ssialias?subtype=XB&infotype=PM&appname=GBSE\\_GB\\_TI\\_USEN&htmlfid=GBE03500USEN&attachment=GBE03500USEN.PDF](http://www.ibm.com/common/ssi/cgi-bin/ssialias?subtype=XB&infotype=PM&appname=GBSE_GB_TI_USEN&htmlfid=GBE03500USEN&attachment=GBE03500USEN.PDF)
- 3 IFI CLAIMS® 2012 Top 50 US Patent Assignees. [http://ificlaims.com/index.php?page=misc\\_top\\_50\\_2012](http://ificlaims.com/index.php?page=misc_top_50_2012)



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