



# The insurance data and AI revolution

How you can adapt to new challenges, from quote to claim



# Imagine insurance transformed

Insurers today are facing a sea of disruption. Interest rate hikes, extreme price sensitivity, persistent fraud, a drive toward sustainable practices, climate change and higher catastrophe risk, the rise of InsurTech, evolving regulations and the all-important customer demands for seamless brand experiences are all making waves in a vast sea of competition.

Although it may be tempting to batten down the hatches and take a business-as-usual approach, now's the time to take bold steps that lead to future success. According to Gartner in its *CIO Agenda 2023*, 64% of CIOs are set to increase business intelligence and analytics investments to transform their businesses.

Insurers must rethink approaches to marketplace and operational efficiency, combat threats to underwriting profitability, and know and serve their customers better. Accomplishing all of this requires seamless process integration that helps make daily operations more efficient. Plus, it makes insurers better prepared for large-scale transformations that reshape their organizations into agile and resilient businesses capable of weathering disruptions and seizing opportunities.

This e-book examines how insurers are using data and AI to build a single, comprehensive decisioning solution to balance customer experience, fraud and risk. As organizations undergo digital transformation, making analytically driven decisions is key to their success.

Having a technical foundation that links all facets of the business helps insurers address:

- Customer experience innovation.
- Risk management.
- Fraud and financial crimes detection.
- Dynamic pricing and product innovation.
- Evolving regulations.

With data and AI, insurers make their transformation dreams a reality – backed by insights that lead to material differences in efficiency, risk exposure, compliance, customer experience and revenues. This transformation serves as the cornerstone for a resilient organization that's prepared for challenges today and in the future.



# 64%

**of CIOs are set to increase BI and analytics investments in order to transform their businesses**

*Gartner CIO Agenda 2023*





# Imagine CX that directly drives revenue

What do the insured really want? To be seen as individuals and organizations, not a set of siloed policies. And while they are interacting with an organization – whether researching, buying, renewing or moving through the claims process – they want a seamless experience.

## CX redefined

According to the [Experience 2030](#) research study conducted by Futurum Research in partnership with SAS, brands are re-evaluating the essence of customer experience and the digital technologies they will need to deploy to deliver rewarding experiences that are personalized, trusted and drive loyalty.

Insurers that are unable to [deliver satisfying CX](#) risk losing customers, revenues, shareholder value – and a viable market position.

When considering customer experience, what are the keys to giving policyholders what they want?

- Omnichannel experiences.
- Enriched customer-centric data.
- Real-time decisioning.

What will insurers gain? Improved acquisition, retention and growth via up-/cross-sell. According to Gartner in *CIO Agenda 2023*, competitors are investing in innovation that will fill the customer experience gaps that have been around for a very long time.

AI also plays a major role in delivering the rewarding experiences that customers have come to expect from insurers. The CMO Council's [Cracking Tomorrow's CX Code](#) report states that “there’s no question that the future of CX runs through AI.”

**“Improving the customer experience (CX) ranked higher in the survey this year than more strategic focuses, such as growing revenue or new products/services development to support transformation.”**

**Kimberly Harris-Ferrante**, Vice President and Distinguished Analyst, **Gartner**

Gartner press release: Survey Finds Insurers' Focus Will Shift From Growing Revenue to Improving Customer Experience & Operational Efficiency in 2023



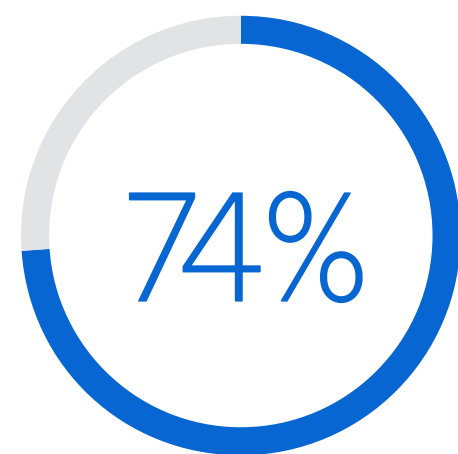
The value of analytics

Using comprehensive, integrated marketing analytics, insurers can guide every customer interaction with analytical insight. With a clear understanding of how marketing activities link to revenue and profits, answers can be shared across the business.

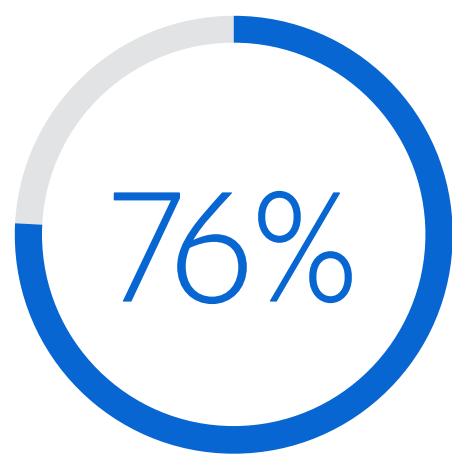
- **Know and serve customers better.** AI and machine learning (ML) help anticipate and proactively address customers’ unspoken needs at the right moment and get to market quickly.
- **Increase customer lifetime value.** Event-based marketing enables the delivery of perfectly timed, relevant and personalized communications.
- **Gain a single view of the customer.** Bring all relevant, permissible customer data together, regardless of source.

Customer management insights influence pricing strategies, enabling personalized rate adjustments for specific customer segments. Additionally, customer behavior analysis aids in identifying potentially fraudulent activities, contributing to more accurate quotes and risk assessment.

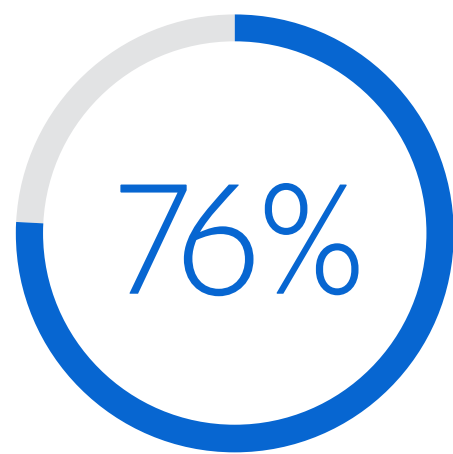
How will brands use technology to deliver satisfying CX?



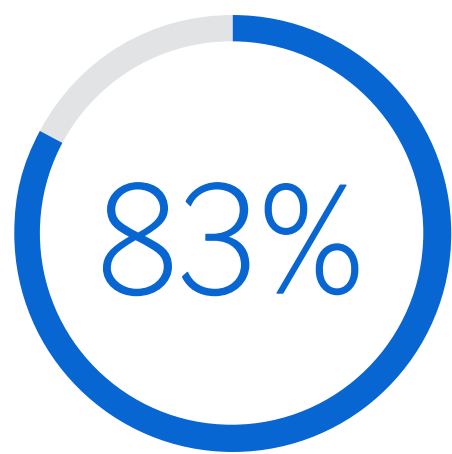
Expect wearables, smartphones and AI assistants to be the primary consumer engagement vehicle.



Believe consumers will embrace the new digital (or digital-infused) model.



Say they must offer smarter, more personal, and more interactive products.



Are rethinking what it means to deliver superior customer experiences moving forward.

Experience 2030 survey results



SBI Insurance

400% improvement in time to market for all campaigns



# Imagine saying farewell to financial crime losses



The detection of fraud and financial crimes continues to challenge insurers throughout the customer life cycle from application to claim – and it's especially prevalent in times of economic hardship.

Detection continues to evolve as those with malicious intent increasingly use AI to develop novel attack vectors. But should insurers accept fraud as a cost of doing business? And should consumers shoulder its cost? Absolutely not.

Aside from their responsibilities toward shareholder value and law enforcement, insurers must detect and reduce the impact of fraud and other financial crimes to protect:

- Brand reputation.
- The financial security of the business.
- Consumers from increased premiums and physical harm (e.g., organized crime groups staging motor vehicle crashes into unwitting victims).
- Customer experience.
- Compliance.

## The value of analytics

With analytics, insurers can [transform anti-fraud and financial crime activities](#) into proactive and real-time detection capabilities that will not compromise the experience of honest customers.

Using a hybrid analytics approach with multi-layered detection methods, insurers can:

- **Find more fraud** at the individual claim, transaction, entity or network level.
- **Expedite detection and investigation processes** as machine learning and explainable AI triage alerts.
- **Enable anti-fraud teams** to be more efficient in investigating provable fraud.
- **Systematically facilitate repeatable and reliable investigations** with case and intelligence management.

Network link analysis lets insurers identify new and emerging fraud threats that uncover previously unknown relationships among seemingly unrelated entities. As a result, organized fraud rings are quickly discovered – instead of taking months or years to make crucial connections.

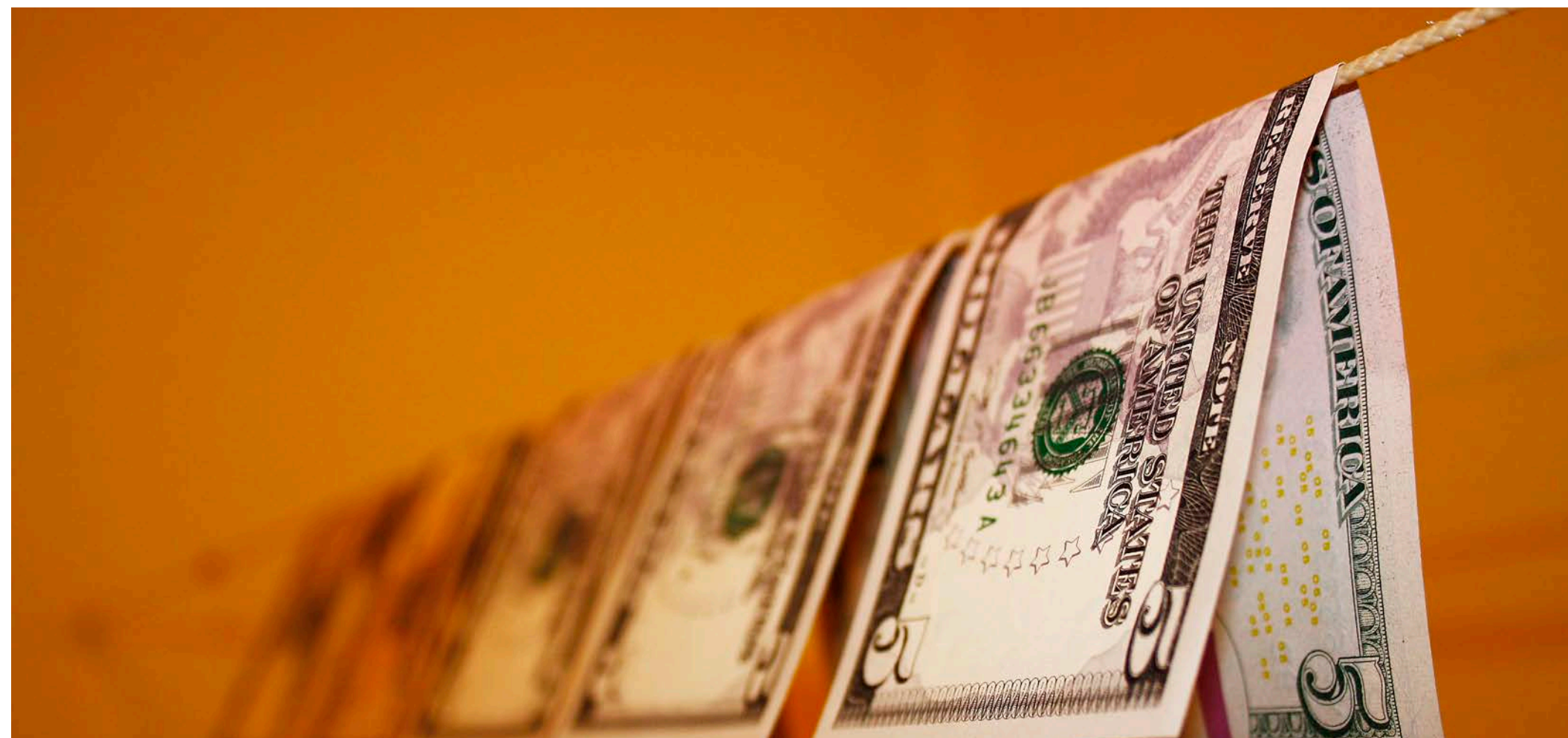
Integrating data from fraud management and customer management helps insurers identify suspicious behaviors, patterns and anomalies. Fraud detection and customer-centric strategies are supported, which also enhances overall risk management.



## Fraud facts

- Insurance fraud costs US consumers \$308.6 billion per year.
- Between 10% and 20% of insurance claims are fraudulent.

*Coalition Against Insurance Fraud statistics*



### Ayalon Insurance

Taking a risk-based approach to combat money laundering



### North Carolina Department of Insurance

Recovering millions of dollars in fraudulent insurance claims via advanced analytics

“Just seven months after implementing the Insurance Crimes Investigation System, we recovered \$6.9 million for the consumers of North Carolina. That result shows the success of the program and how operationally sound it has made our field case investigations and agents and operations as a whole.”

**Chet Effler**, Division Chief for the Criminal Investigation Division, **NC Department of Insurance**



# Imagine a comprehensive pricing and compliance approach

As of Jan. 1, 2023, insurers are in the era of IFRS 17 (International Financial Reporting Standards) and LDTI (Long Duration Targeted Improvements). In 2022, new pricing regulations took effect while summer 2023 ushered in Consumer Duty regulations.

These regulations represent a new, challenging territory and insurers affected by the new regulatory framework ICS 2.0 need to have their solutions in production by 2025.

How can firms connect the dots between the data and processes so that IT, actuaries, accountants and audit partners are working together – with a singular set of information – to address evolving regulations? It can't easily happen if their traditional manual and siloed ways of working persist.

[Changes to regulatory reporting requirements](#) and the introduction of new standards for capital calculation and ESG reporting also require new, more agile ways of working. World-class data management, secure analytics tools, stakeholder collaboration, support for planning processes and the ability to model and maintain multiple scenarios, innovative AI and ML techniques, plus what-if scenarios are absolute essentials.

There's also an urgent need to ensure risk models are continually optimized, validated and managed in order to avoid degradation and achieve compliance.

With such a lively and ever-changing regulatory environment, how can insurers adequately stress test their businesses, reduce the time and cost of compliance – and feel confident they're [satisfying regulatory requirements](#)?

## The value of analytics

Advanced analytics helps insurers gain a competitive advantage using sophisticated pricing that they can get to market quickly. They'll remain compliant while getting ahead of regulatory reporting and decisioning goals with data that's consistent, transparent and traceable.

Specifically, insurers can:

- **Create a modern data and AI-powered risk foundation** that's used enterprisewide and ensures risk models and the decisions they drive remain transparent and governed.
- **Optimize risk decisioning and scenario analysis** by bringing together actuarial, finance and risk functions. Insurers can use a common platform integrating risk and finance that supports Solvency II, ICS 2.0, IFRS 17, LDTI and stress testing alongside other regulatory requirements for model governance.
- **Evaluate and incorporate new areas of risk** into models and risk functions, such as climate-related catastrophe risk and ESG.

Insights from IFRS 17/LDTI, combined with data from insurance rate pricing and fraud management, allow for more accurate assessments of risks, claims and potentially fraudulent activities. This informs both pricing decisions and valuation calculations, ensuring consistency between financial projections and customer premiums.

# Imagine pricing that's always on point

Whether insuring consumers or businesses, lives, health or property, one thing is certain: A lot can happen to customers in the lifespan of an annual policy. And a great deal can happen to firms too.

With so much customer data available to further understand behaviors and predict needs and future risk profiles, insurers are now able to truly personalize products – and pricing.

By bringing together rich behavioral information about consumers with real-time contextual information about markets, the economy and other risk factors (e.g., the environment and connected IoT devices), insurers can deliver preventative product innovation that results in more [personalized, dynamic pricing](#) – and deploy it faster. And they can do so in ways that marry customers' expectations with the financial goals of the firm.

However, while the desire for dynamic pricing has long been there, few insurers have been able to deliver because of fragmented legacy systems.

## The value of analytics

With advanced analytics, insurers can increase profitability by accelerating and improving the pricing process.

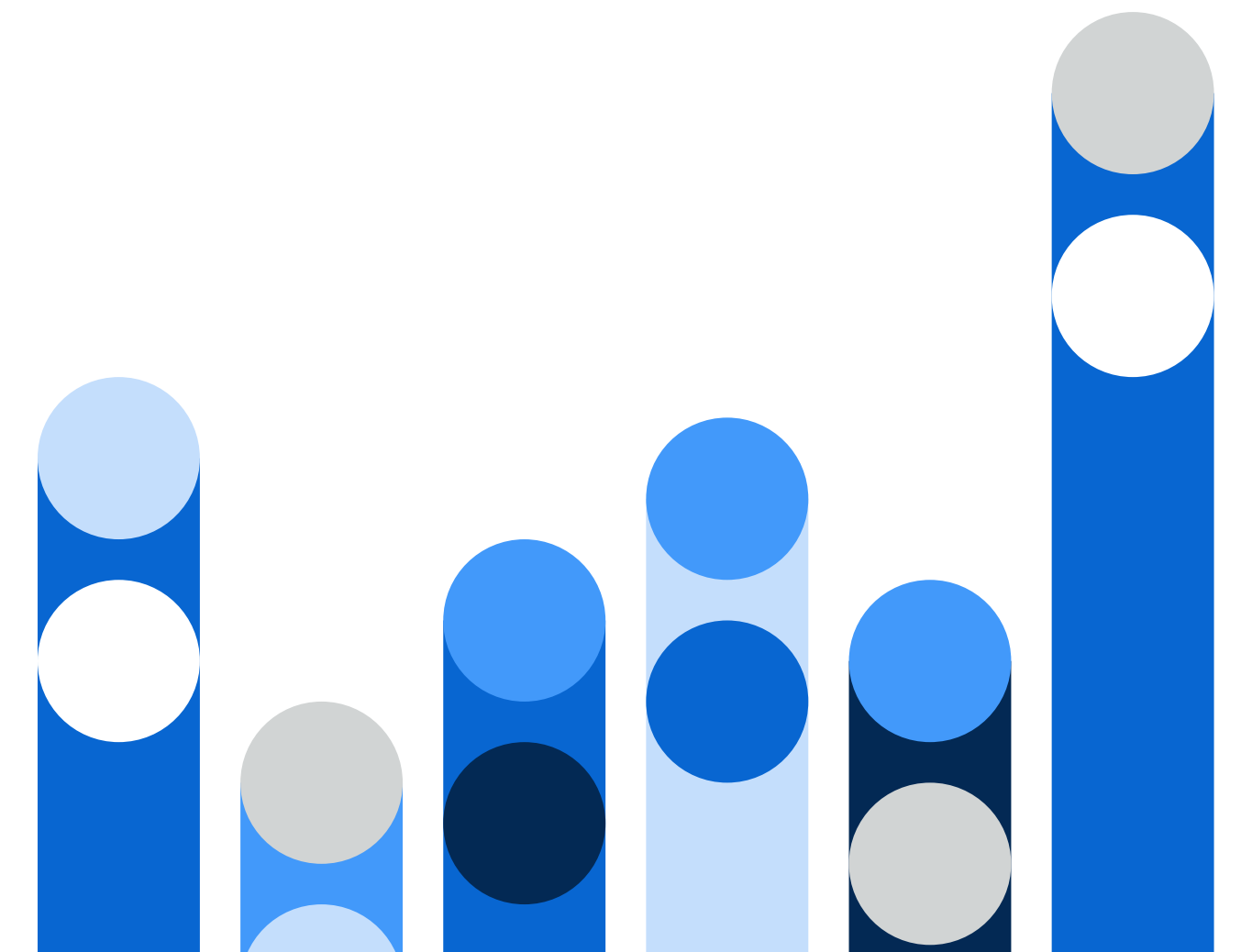
With so much more information available to consumers about insurance products, premiums and new pricing regulations, it's more important than ever that insurers deploy models faster, improve their pricing process and adapt to market movements.

Insurers need a guided and governed actuarial process – from data preparation and modeling to automatic deployment and firmwide integrated reporting.

This actuarial process should let insurers:

- **Create finely tuned pricing and premium models.** Embedded actuarial business expertise increases speed to market and competitive advantage.
- **Deploy sophisticated machine-learning techniques** and decision-making assistance throughout the pricing process.
- **Quickly and easily modify and create new variables.** Rate-making capabilities support various actuarial techniques, such as frequency/severity distributions and modification of premium model coefficients.

**By bringing together rich behavioral information about consumers with real-time contextual information about markets, the economy and other risk factors, insurers can deliver preventative product innovation that results in more personalized, dynamic pricing – and deploy it faster.**







# Why insurers turn to SAS

SAS understands the challenges that insurers face today due to nearly 50 years of experience working with insurance companies worldwide. We empower insurance companies to enhance intelligence and efficiency through AI and deep industry expertise.

The interactions between insurance contract valuation, insurance rate pricing, insurance fraud management and an insurance company's customer management are interconnected. A single analytical platform integrates data from IFRS 17/LDTI calculations, insurance rate pricing models, fraud management systems and customer management databases.

This integration provides a holistic view of policyholders' financial data, risk profiles, behaviors and interactions. SAS helps insurers optimize these interactions with a single analytical platform that delivers benefits such as:

- **Data consistency and accuracy.** Ensures consistent and accurate data across IFRS 17/LDTI calculations, rate pricing, fraud management and customer management.
- **Efficient data processing.** Streamlines data collection, processing and analysis, which reduces duplication of efforts and improves operational efficiency.
- **Holistic customer insights.** Provides a comprehensive view of policyholders, enabling a better understanding of customer behaviors, preferences, financial status and potentially fraudulent activities.

- **Real-time analysis.** Supports real-time data analysis and prompt reactions to changing market conditions, customer behaviors, fraud patterns and regulatory requirements.
- **Improved decision making.** Integrates insurance contract valuation, insurance rate pricing, fraud management and customer management data that considers both financial and risk-related factors.
- **Strategic alignment.** Fosters alignment between financial goals (IFRS 17/LDTI), pricing strategies, risk management (fraud detection) and customer management objectives.
- **Enhanced customer engagement.** Informs personalized engagement strategies that improve customer satisfaction and loyalty.
- **Regulatory compliance.** Supports accurate and compliant financial and regulatory reporting, ensures adherence to IFRS 17/LDTI requirements and helps prevent fraudulent activities.

[Learn more](#) about how to become a resilient, digitally transformed insurer.





To contact your local SAS office, please visit: [sas.com/offices](https://sas.com/offices)