

**MOODY'S**

# Digitizing risk workflows

Essential priorities for  
managing risk in an  
interconnected world

**Insurance Solutions**





**The new interconnectedness of risk is complex, costly, and amplifies the effect on business during every crisis, so insurers have more difficulty understanding, predicting, pricing, and managing risk.**

Chief risk officers, chief underwriting officers, and other key decision-makers constantly battle analytic fog and miss vital indicators, insights, and correlations of risk due to technology limitations. Homegrown, legacy, or on-premises IT systems can be expensive, hard to maintain, and slow to evolve. By approaching underwriting, portfolio management, and other key stages of the insurance value chain as independent disciplines, firms have developed organizational and technical risk silos often built on different data, modeling approaches, and standards.

Cloud-native technology presents an enormous opportunity for (re)insurers and insurance-linked securities (ILS) firms to future-proof their risk environments and build more automated, resilient, and dynamic workflows. Moving to the cloud is not a new concept, and many firms have already realized the benefits of solutions such as business productivity tools or HR systems. But risk analytics are just starting to reap the rewards of cloud-native platforms. Now is the time to tap into the power, agility, and scalability of the cloud to take your risk analytics to the next level.



# Delaying change limits opportunities

The pace of technological disruption to underwriting, exposure management, and portfolio steering has never been greater. While many companies continue to emphasize delivering better outcomes, they don't always realize that their technology often determines what's truly possible. Disjointed, legacy systems make responding to new risk paradigms difficult, exposing their business to greater losses.

Spinning up a new risk analytics solution built on a monolithic IT architecture inevitably results in drawn-out planning cycles, complex commissioning, and long workflow integration. Without an adaptable, forward-looking approach, firms may find that responding to more complex, connected, and systemic risk is virtually impossible.

On-premises systems have significant limitations when it comes to digitizing risk workflows:

1

**Data quality:** On-premises systems frequently struggle with integrating new risk insights and enriched datasets into risk workflows. Updating views of risk or changes in exposure data do not always carry over from one workflow to another, so firms cannot achieve a gold standard of real-time exposure or portfolio analytics. The result is poor decision-making based on different views of risk across underwriting, event response, and portfolio management.

2

**Risk silos:** The constraints of on-premises systems push underwriters, portfolio managers, and catastrophe modelers to build workflows tailored to unique processes, issues, and technology. When technology lacks interoperability and a common approach and standard, then collaboration between risk stakeholders is particularly challenging. Without easily shared data and analytics, firms are less agile and struggle to respond to market dynamics.

3

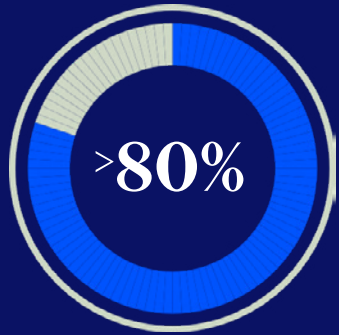
**Productivity bottlenecks:** Shortcomings in software design and IT systems can considerably influence vital business functions such as model change management, event response, and portfolio steering. Typical signs of aging, inflexible IT infrastructure include long model run-times, complex data engineering tasks, and IT workarounds that monopolize risk stakeholders' precious time and resources.

By maximizing the productivity of your underwriters, portfolio managers, and catastrophe modelers with a modern, powerful IT environment, you will not only help grow the business but also attract and retain talent.

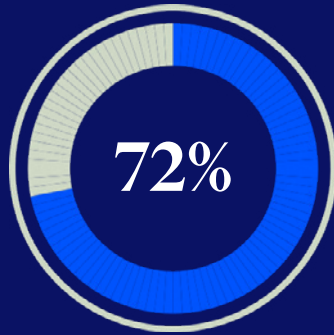


# The drive for insurtech modernization

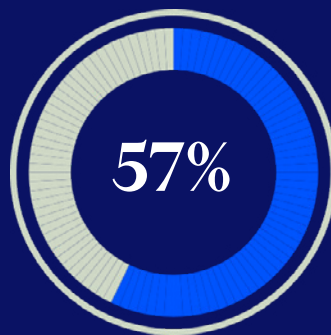
## TECHNOLOGY TRENDS AMONG INDUSTRY LEADERS



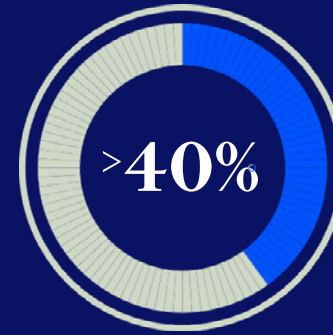
>80 percent of insurance executives say their organization's **business and technology strategies are becoming inseparable**<sup>1</sup>



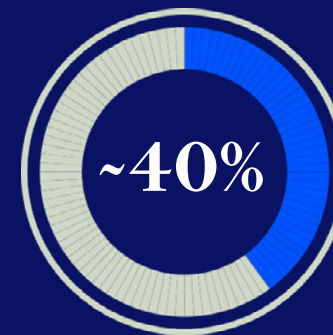
72 percent of senior insurance executives **expect to increase cloud computing and storage**<sup>2</sup>



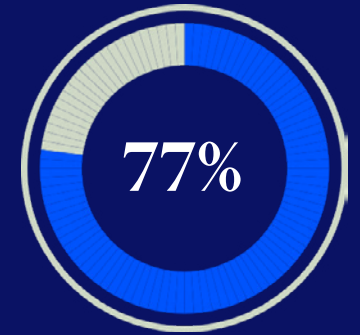
57 percent of insurance CEOs say they are **impacted by accelerating technology and digital innovation**<sup>3</sup>



>40 percent of insurance executives say **deficiency in data quality is a blocker for digital transformation objectives**<sup>4</sup>



~40% 40 percent of commercial lines underwriters time is spent on tasks **that are not core to the underwriter's role**<sup>5</sup>



77 percent of insurance executives say they are **in some stage of adopting AI as part of their value chain**<sup>6</sup>

## WHY DIGITIZE WORKFLOWS

<sup>1</sup> Thomas, J., Reilly, M., Viswanath, V., Muñoz, J., & Murphy, S. (2021). Leaders wanted: Masters of change at a moment of truth. Accenture. <https://insuranceblog.accenture.com/wp-content/uploads/2021/07/Technology-Vision-For-Insurance-2021-Accenture.pdf>

<sup>2</sup> Deloitte Center for Financial Services. (2021). 2022 insurance industry outlook: Digital and talent transformation accelerating as insurers adapt for postpandemic growth. Deloitte Insights. [https://www2.deloitte.com/content/dam/insights/articles/US164650\\_CFS-Insurance-industry-outlook/DI\\_Insurance-industry-outlook.pdf](https://www2.deloitte.com/content/dam/insights/articles/US164650_CFS-Insurance-industry-outlook/DI_Insurance-industry-outlook.pdf)

<sup>3</sup> Santenac, I., Bong, S. Y., Connolly, D. A., Dellaway, C., Fattibene, L., Hurynovich, A., Majkowski, E., Manchester, P., & Wassink, B. K. (2022). 2022 global insurance outlook: Achieving growth through people, purpose, and technology. EY. [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_gl/topics/insurance/ey-2022-global-insurance-outlook-report.pdf?download](https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/insurance/ey-2022-global-insurance-outlook-report.pdf?download)

<sup>4</sup> Duncan, S. (2021, July 14). When it comes to property and casualty insurance, digital is data. HFS. <https://www.hfsresearch.com/research/when-it-comes-to-property-and-casualty-insurance-digital-is-data/>

<sup>5</sup> Accenture & The Institutes Risk and Insurance Knowledge Group. (October 2021). 2021 P&C underwriting survey. [https://riskandinsurance.com/wp-content/uploads/2021/12/TI-Accenture\\_PC\\_Underwriter\\_Survey-vf.pdf](https://riskandinsurance.com/wp-content/uploads/2021/12/TI-Accenture_PC_Underwriter_Survey-vf.pdf)

<sup>6</sup> Conning. (2024, March 11). Insights on AI and Transformative Technology. <https://www.conning.com/about-us/news/ir-pr---ai-and-transformative-technology>

# Digitizing risk workflows with Insurance Solutions from Moody's

(Re)insurers must adapt and evolve to improve their understanding of existing and new complex risks. Technology and the right data can play an essential role in helping facilitate transformation. With the right risk platform, (re)insurers are equipped to build workflows that can realize the full value of their data, generate new risk insights, achieve higher resolutions of risk, and reduce volatility in risk assessment.

Moody's is focused on helping you build workflows based on three foundational pillars that will shape your move into the future:

## 1

**Consistent and trusted data:** Enabling access to the same risk data based on a single source of truth.

## 2

**Modular cloud-native technology:** Leveraging cloud-native services and architecture to future-proof workflows and add new risk insights in a fraction of the time.

## 3

**Unified views of risk:** Breaking down silos to bring greater clarity to your underlying risks.



# 1

## CONSISTENT AND TRUSTED DATA

Centralizing risk data and modeling is key to creating consistency and trust—and this is where a cloud platform makes all the difference. By establishing a single source of truth built on consistent data practices across all risk workflows, you ensure teams can access the necessary information for effective underwriting, exposure management, and portfolio steering. In addition, you'll equip stakeholders with analysis that has broad business impact.

To provide the business with actionable insights, you need:

### → High-quality data

- A common foundation eliminates unnecessary duplication of production data
- A catalog of data helps users easily find the right data for analysis
- Trusted sources of data inform decision-making across the organization
- Consistent exposure data characteristics across workflows maintain continuity or risk perspective

### → Secure yet agile data

- Customer data complies with local data and privacy laws across a patchwork of global regulations
- Transformation engines enable firms to analyze risk regardless of data schema
- Data maintains robust security controls when shared between internal and external stakeholders

### → Common analytical engines

- Applications share the same methodology and can accurately predict a location no matter how complete the address data
- The science underpinning applications is calibrated using a uniform approach
- A unified, cross-application financial engine translates theoretical damages into financial losses and delivers homogenous results for risk systems

# 2

## MODULAR CLOUD-NATIVE TECHNOLOGY

Cloud-native technology coupled with software as a service (SaaS) applications can future-proof your risk workflows. Its architecture is inherently designed to facilitate the addition of new capabilities without needing to procure, install, and provision new infrastructure. SaaS vendors can help firms meet evolving market demands by building and delivering highly differentiated services—such as generative AI based on large language models, casualty analytics, or insured emissions data—directly into applications. Fewer disruptions to mission-critical workflows mean faster adoption of innovative technology and accelerated time to insights.

The Moody's Intelligent Risk Platform™ unites our excellence in science, models, and data with modular, cloud-native technology for digitizing workflows. Its six-week release cadence empowers the market with new capabilities to meet the growing needs of insurers.

## DELIVERING NEW INNOVATION ON THE INTELLIGENT RISK PLATFORM

FOUNDATION	NEW CAPABILITIES
The <b>Risk Modeler</b> ™ application unifies Moody's modeling and management, so you have greater efficiency with workloads and costs.	Manages and executes over 300 third-party models hosted on Nasdaq's modeling platform as well as clients' in-house models for greater efficiency.
The <b>ExposureIQ</b> ™ application streamlines how you analyze concentrations of catastrophe risk to help identify opportunities to optimize and grow.	Integrates environmental, social, and governance (ESG) factors and analytics for net-zero underwriting into pre- and post-bind workflows.
The <b>TreatyIQ</b> ™ application delivers advanced risk, profit, and marginal impact insights directly to your underwriters for customizable pricing.	Executes fast, secure treaty and results sharing during renewal periods with Moody's Risk Data Exchange.
The <b>UnderwritelQ</b> ™ application leverages industry-leading science and modeling for your commercial and account underwriting.	Taps into Moody's deep expertise in firmographic data to unlock new lines of business to underwrite.
The <b>Intelligent Risk Platform</b> centralizes exposure and results data to unify your risk analytics.	Integrates generative AI, large language models, and bespoke analytics into workflows.

# 3.

## UNIFIED VIEWS OF RISK

A great model or a single application can only get you so far. Digitizing workflows gives you an ecosystem of consistent, correlated insights that unify the risk life cycle and facilitate collaboration across risk stakeholders. To effectively manage risk in an interconnected world, your solutions must break down silos and bring greater clarity to your underlying risks. Empower everyone—from the catastrophe analyst to the chief risk officer—with the tools and capabilities to understand correlations of risk and efficiently respond to new market opportunities.

The Moody's Intelligent Risk Platform unifies your risk life cycle with workflows built on cloud-native technology, enriched datasets, and real-time portfolio data.







# Analyze risk with new approaches for a complex, interconnected world

Risk managers understand that the gap between leaders and laggards is not determined at the moment a catastrophe strikes. Rather, the divide often begins earlier, in the months or years in advance, when firms invest in their tools and risk management capabilities. The ideal platform empowers organizations to identify and deliver new risk insights, illuminates previously unknown correlations of exposure, and ultimately, helps firms take on the right risk for more profitable business.

The insurance industry today has an imperative to continue to build and utilize more resilient and dynamic risk workflows to better price, transact, and manage interconnected risk. Using Insurance Solutions from Moody's for digitizing workflows, firms can establish a digital foundation with consistent data, modular cloud-native technology, and unified views of risk—so you can see risk differently and deliver better business outcomes.

## ABOUT INSURANCE SOLUTIONS FROM MOODY'S

Moody's shapes the world's view of risk for insurers, reinsurers, financial services organizations, and the public sector, with Moody's models underlying the nearly US\$2 trillion Property & Casualty industry. We empower organizations to evaluate and manage global risk from natural and man-made catastrophes, including hurricanes, earthquakes, floods, climate change, cyber, and pandemics.

Our unmatched science, technology, and 300+ catastrophe risk models help (re)insurers and other organizations evaluate and manage the risks of natural and man-made disasters. Leaders can address the risks of tomorrow with the Intelligent Risk Platform™, the only open cloud with collaborative applications and unified analytics that can power risk management excellence across organizations and industries.

Today's risk professionals trust Moody's to help them manage and navigate the risks of natural and man-made catastrophes.



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