WHITE PAPER

The Underwriter of the Future:

Balancing Art and Science to Drive Underwriting Excellence in Commercial Insurance

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By Nathalia Bellizia, Lucy Pilko, Paul Nelson, and Laura Piwinski

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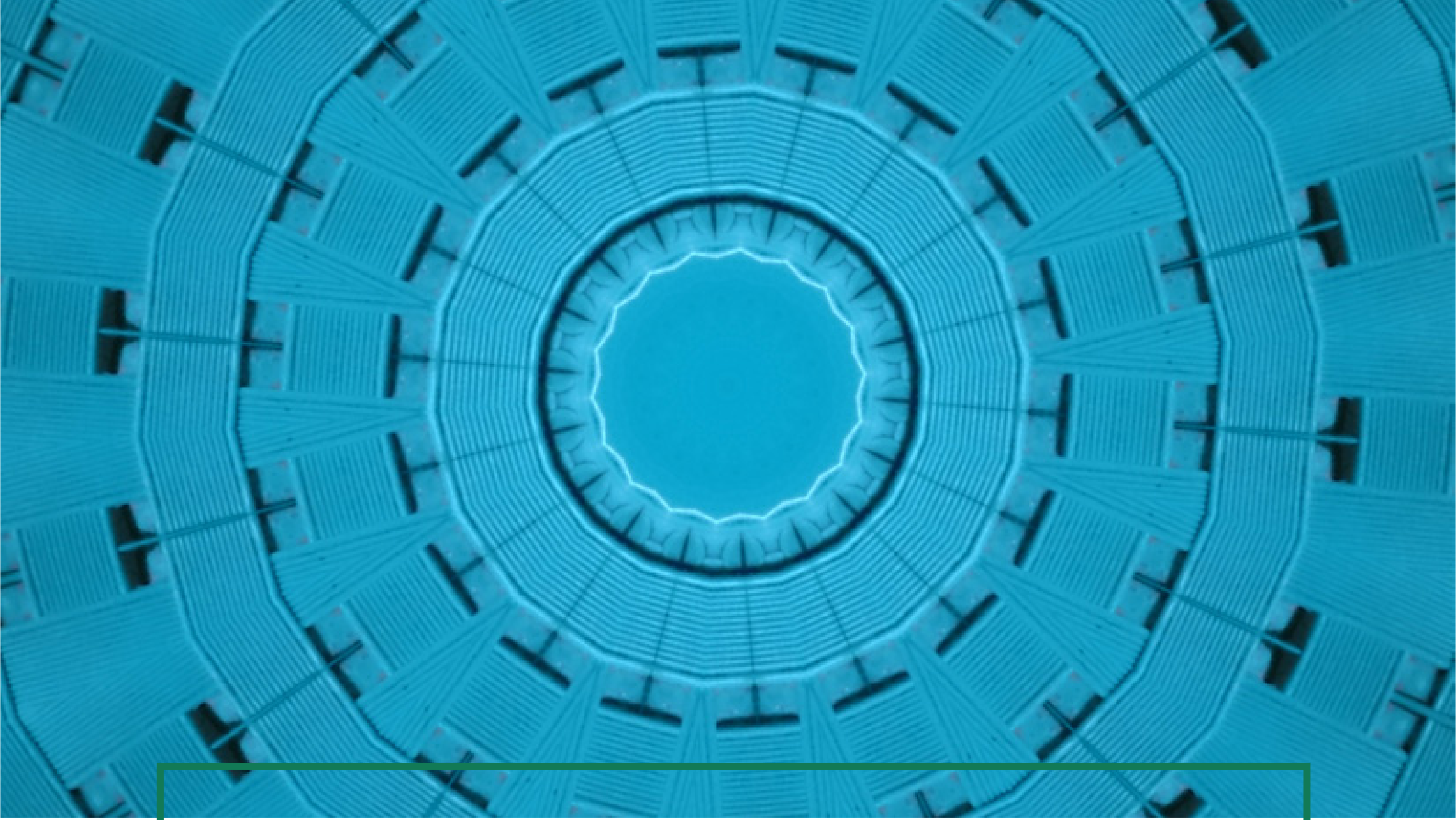


We are excited to launch the P&C Underwriting Excellence Series, featuring BCG perspectives on topic areas impacting Property & Casualty (P&C) insurers' ability to accurately and efficiently select, price, and tailor risk. Underwriting excellence is at the core of sustained value creation; it has never been more important given accelerated uncertainty in the economy, environment, and politics. This series seeks to offer guidance on business, financial, technology, and organizational strategies for today and the years to come.

Introduction

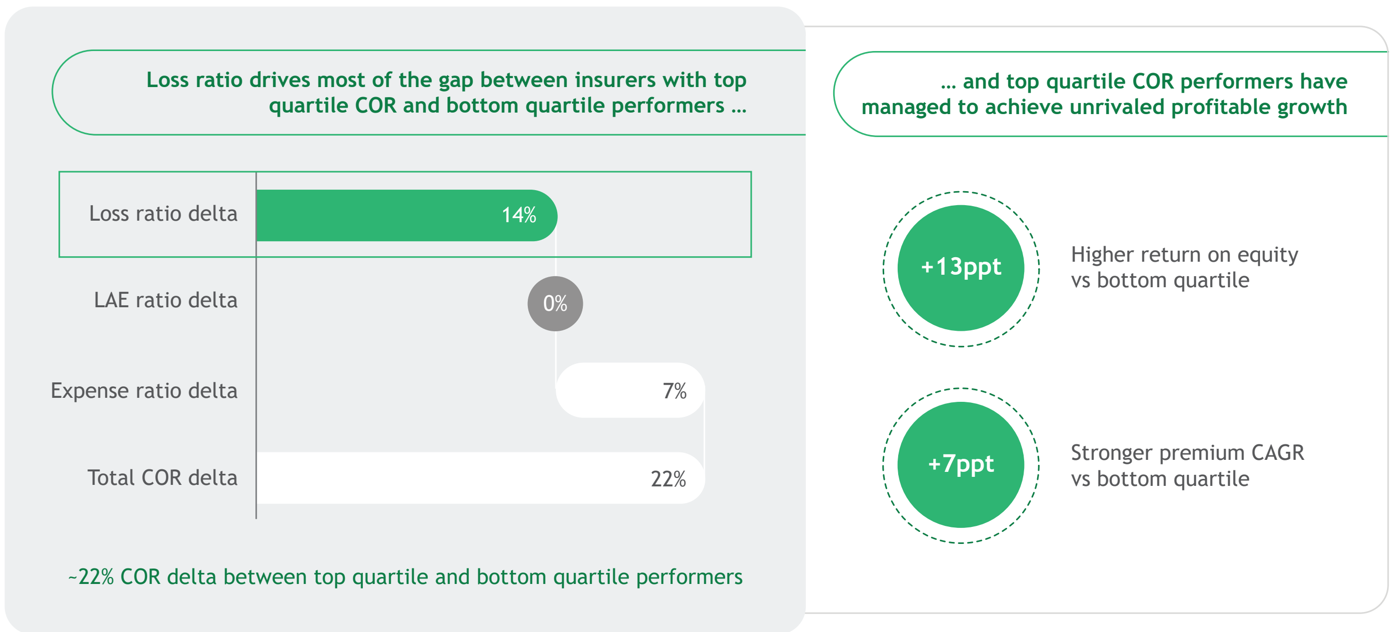
From climate change to disruptive technology, the underwriters' challenge of navigating risk is more complex than ever before. As technology and data transform the "scientific" components of underwriting, underwriters are being asked to bring forth the "art" involved in their jobs: critical thinking, leadership and communication, specialized expertise, and business development skills. Commercial insurers will have to focus on attracting and retaining top talent if they want to successfully modernize their underwriting organizations and differentiate themselves from the competition.

The Stakes of Commercial Underwriting

Stakes have never been higher for commercial underwriters; the industry is facing unprecedented volatility, uncertainty, complexity, and ambiguity. This is a changing world: Disruptive technology with its new class of insurable assets, increased frequency of extreme weather events, growth of third-party litigation and nuclear verdicts, and economic inflation fueled by supply chain disruptions are just a few examples.

Underwriting Excellence—a commercial insurer's ability to select, price, and tailor risk—has a direct impact on insurers' ability to grow profitably. As shown in Exhibit 1, commercial insurers who perform in the top quartile of combined ratio (mostly loss ratio driven) perform approximately 13 and 7 percentage points above the bottom quartile on Return on Equity and Premium CAGR, respectively.

Exhibit 1 - Underwriting excellence generates unrivaled profitable growth



Note: Sample includes largest 50 P&C carriers in the US by '21 net written premium within commercial lines (excl. State Compensation Insurance Fund); Calculations are based on '17-'21 historical average; Values for each quartile group represent the average of individual metrics (i.e., combined ratio, ROE, CAGR), weighted by '17 commercial net written premium; Results are based on statutory financial data | Source: S&P Capital IQ; BCG analysis

However, there is no one-size-fits-all solution to achieve underwriting excellence, particularly in Commercial P&C. Unlike personal lines, where underwriting mostly relies on "science" and less on the "art" of human judgment, commercial lines are more complicated. First, commercial exposures are more heterogenous than those for personal lines. Second, while in personal lines it is all about risk selection and pricing, in commercial lines, the tailoring of the risk plays a critical role in achieving target loss ratios. Third, commercial lines' business is intermediated by brokers working on behalf of clients to address their insurance needs. Finally, commercial underwriters have a lot more flexibility to adjust technical pricing based on market conditions and specifics of their client situations.

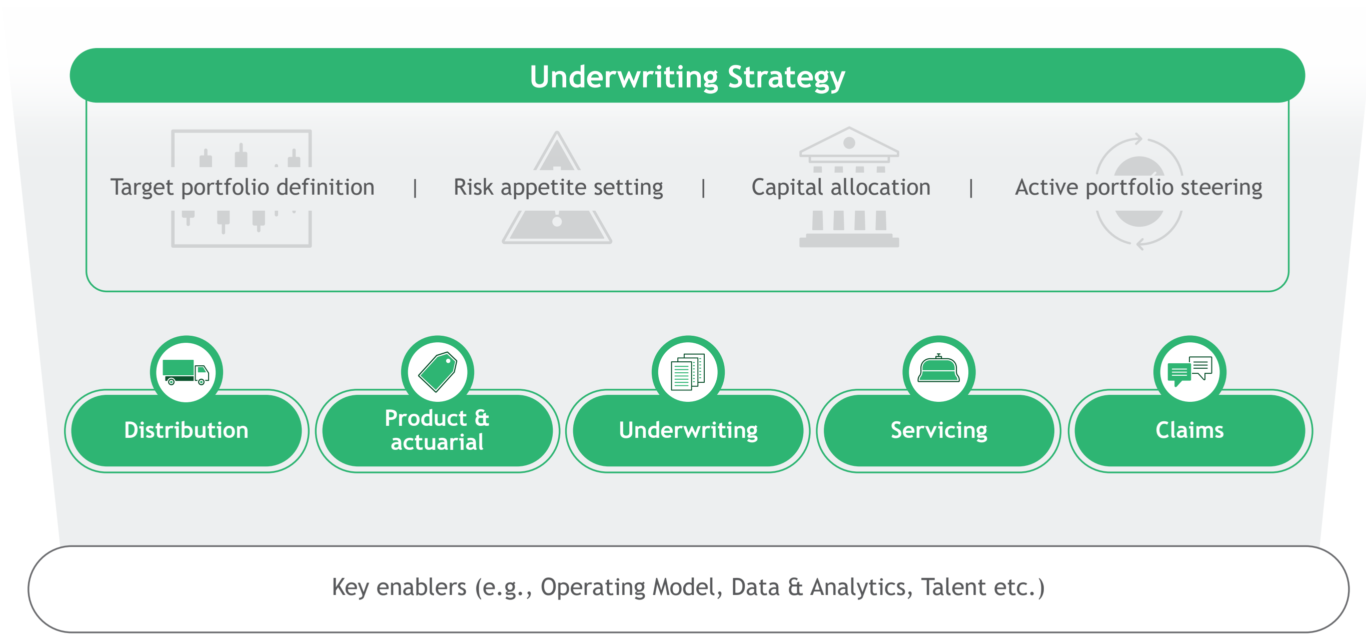
Therefore, for commercial insurers, combining expert judgment and other human skills with the power of data and technology is key. In commercial lines, keeping up with the "science" (e.g., integrating new data sources, investing in tech systems) is table stakes, whereas keeping up with the "art" (e.g., attracting and retaining top specialized talent) is often the differentiator. This article focuses on how commercial insurers can build a differentiated advantage.

Defining "Underwriting Excellence"

We define commercial underwriting as the selection, pricing, and tailoring of insurance coverage for risks. High-performing underwriters have a superior understanding of risk exposures by peril, location, industry vertical, customer size, etc. Thus, they can charge appropriately for the amount of risk they are taking—but not so much that they cannot win the business and grow or too little such that they harm the loss ratio.

Delivering superior underwriting results requires a clearly defined underwriting strategy and a broad range of capabilities for successful execution (see Exhibit 2).

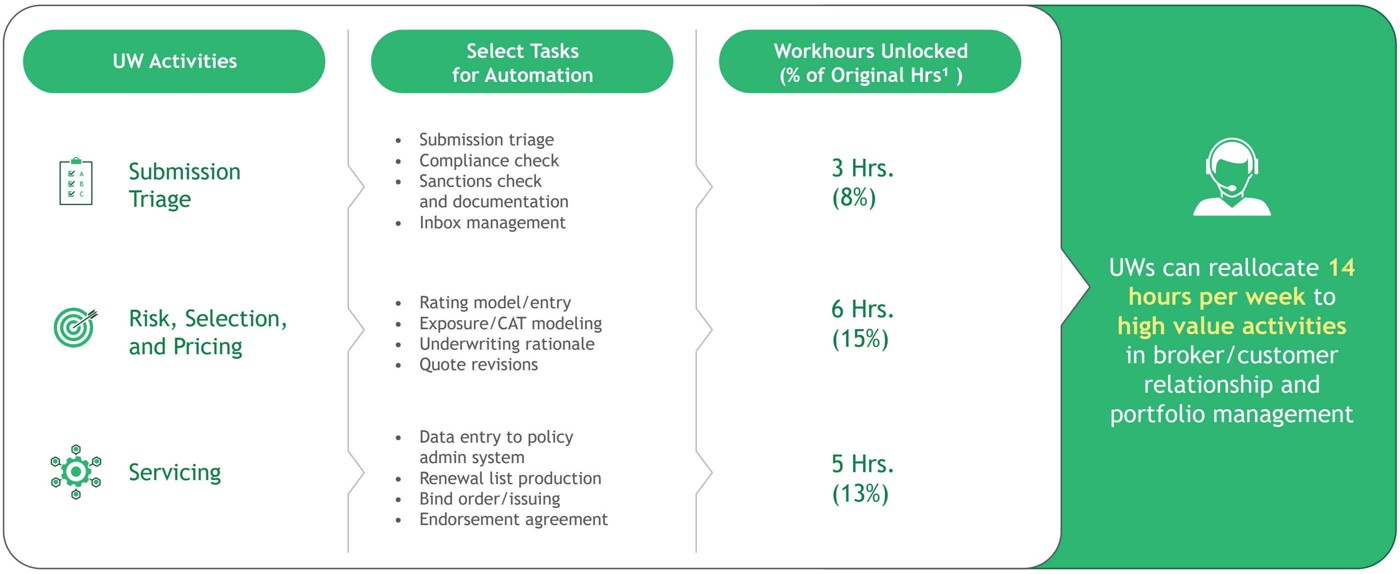
Exhibit 2 - Underwriting Value Chain



Trends in the changing role of the underwriter

Artificial intelligence (AI), big-data, and tech-enabled workbenches are changing the way underwriters work. Our experience shows that underwriters traditionally spend ~14 hours per week or ~35% of working hours on responsibilities that could be automated or delegated (see Exhibit 3). These innovations allow underwriters to focus on value-added activities, such as building relationships with clients and brokers, building new domain expertise, and so on.

Exhibit 3 - Role of underwriting is changing



1. Assuming 40hr workweek, Note: Based on prior case experience, assumes weighted average across various levels of UW positions
Source: BCG analysis

BCG scraped hundreds of thousands of recent job postings for actuaries and underwriters across the 50 largest US Commercial Insurers. Contrasting 2022's job postings to 2018's, we found a higher demand for the following five clusters of skills:

Leadership and teaming

As underwriting serves a more central role to the profitability of commercial insurers, there are growing expectations for underwriters to have leadership and teaming skills: ~17% more jobs desired skills such as communication, entrepreneurship, and people management skills. Furthermore, when we compare 2022 with 2018, we find that the number of distinct skills desired from underwriters increased by ~25%. This reflects a need for underwriters to occupy a more expansive role within their organizations.

Critical thinking

Speed in execution and punctuality in meeting timelines are no longer enough for underwriters. There were ~4% fewer jobs that expect underwriters to have "productivity and time management" skills (e.g., Microsoft Office, administrative support). In contrast, the percentage of job posts asking for "Analysis" skills—from research methodology to business intelligence—has nearly doubled.

Specialized expertise on emerging/changing risks

In 2022, there were ~20% more job posts that specified a desire for underwriters with knowledge about ESG (Environmental, Social, and Governance) and cybersecurity than in 2018. These trends are driving a high degree of uncertainty and ambiguity in commercial risk-management.

Data and technology

Although it is not necessary for underwriters to be data science or computer science majors, they do need to have enough technical expertise to effectively engage with dedicated data science and IT teams. For actuaries, our research indicates that, between 2018 and 2022, there was a ~26% increase in the number of job posts that asked for skills in "digital capabilities," such as SQL database and programming, statistical software, and mathematical modeling.

Business development and sales

Account executives and underwriters are increasingly expected to jointly establish a market presence, build a pipeline, and help communicate an insurer's value proposition. Between 2018 and 2022, the percentage of jobs that required business and sales development skills nearly doubled.

Exhibit 4 - Trends in Desired Skills and Capabilities Amongst UW and Actuaries

	Skill	Rationale	Metrics	Change	2018	2022
Strategic & Interpersonal	Leadership and teaming	Expectations for underwriters to facilitate communication and lead teaming across different business units and functions	% of UW jobs requesting "Leadership and Teaming"	+17%	17%	20%
Strategic & Interpersonal	Critical thinking	Job posts asking for "Analysis" skills — from research methodology to business intelligence — from underwriters has nearly doubled	% of UW jobs requesting "Critical Thinking"	+52%	4%	7%
Strategic & Interpersonal	Business development and sales	Account executives and underwriters are increasingly expected to jointly establish a market presence and pipeline; requiring a more customer-centric view	% of Actuarial jobs requesting "Business Development and Sales"	+120%	5%	10%
Technical	Data & Tech	Going for technical and data science expertise at the level to lead conversations with dedicated data science and IT teams	% of Actuarial jobs requesting "Data and Technology Capabilities"	+26%	19%	24%
Technical	Specialized expertise on emerging/ changing risks	Emerging risks in cybersecurity and ESG are driving a high degree of uncertainty and ambiguity in commercial risk-management	% of UW jobs requesting "Specialized Expertise"	+19%	19%	24%

Note: UW and Pricing Actuary job postings, comparing ~210k in 2022, vs. 84k in 2018; scraping over 1.8k individual skills
Source: BurningGlass job postings and BCG analysis

Four Core Behaviors of the Underwriter of the Future

Based on the findings from employment data, as well as our experiences with clients over the past decade, we have defined four core behaviors that we believe the underwriters of the future must display.

1 Act as owners to actively build and cultivate a strong pipeline

The underwriters of the future adopt an "owner" rather than "employee" perspective in building/managing their portfolios, segmenting brokers according to depth of relationship and quality of business. They actively build a distribution pipeline through managing and coordinating with leading brokerage channels and internal distribution teams. They communicate appetite clearly to brokers and collaborate with them to ensure high quotes and win rates on risks. Over the long term, they are adept at managing relationships, engaging in ongoing dialogue with brokers over service and client coverage needs.

2 Take a strategic and holistic approach to risk assessment

The underwriters of the future take a "quarterback-like" view and strategically align resources, striving to understand the full needs of their customer (e.g., property, liability, etc.) and coordinating with other business units to provide clients with optimized solutions. They proactively leverage resources within the organization to focus only on high-value activities.

Within their teams, underwriters define key performance indicators (KPIs) and actively monitor performance against goals. Prioritizing the development of their team members, they give key people "stretch" opportunities, identify talent pipelines, and encourage everyone to share learnings from past experiences. They recognize strengths and weaknesses within a team and assign people on projects in complementary ways to drive success.

3 Embrace data and technology to drive critical thinking

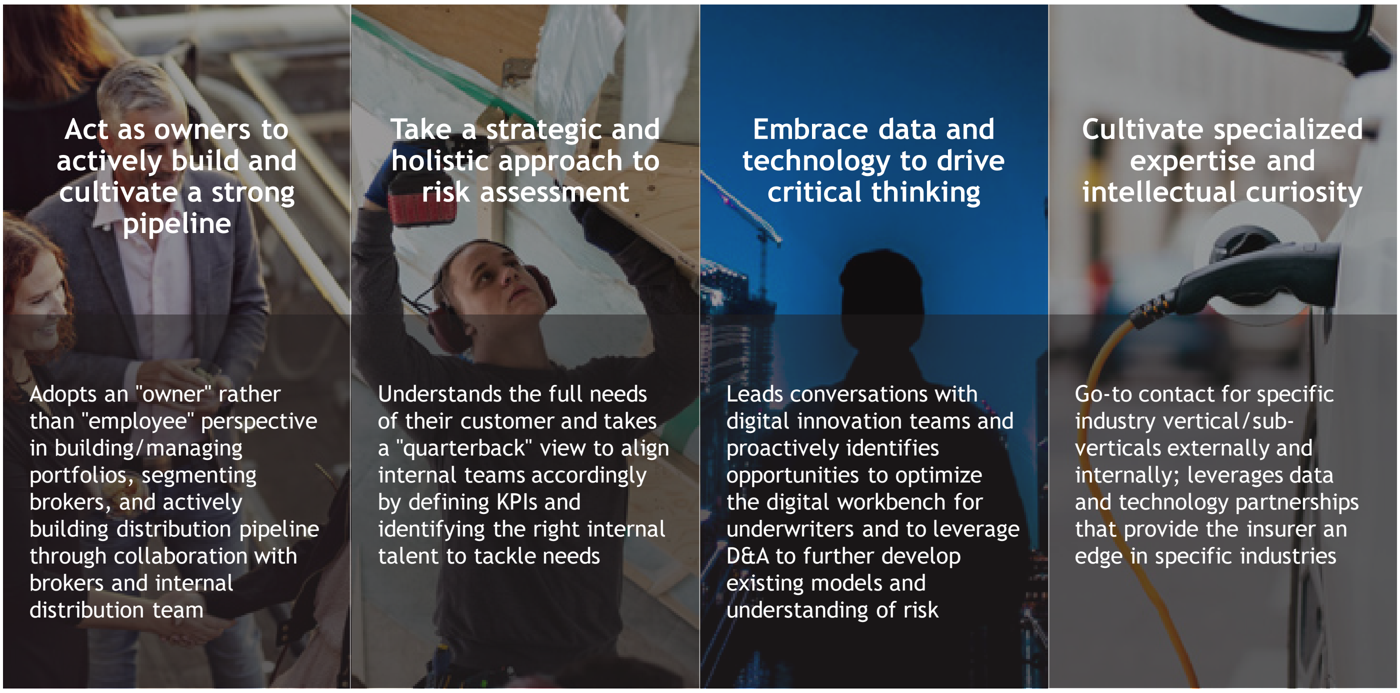
The underwriters of the future lead conversations with digital innovation teams to tailor the digital workbench toward their day-to-day underwriting needs. They design and implement feedback channels to technology teams on existing technology, and proactively identify automation opportunities.

These underwriters optimize digital & analytics (D&A) solutions to push their critical thinking further, leveraging their fundamental understanding of client risk profiles and aggregations of tail risk. They develop and consistently update catalogues of data for potential risk assessments, and work with internal and external analytics experts to identify and continuously develop models and new applications for modeling.

4 Cultivate specialized expertise and intellectual curiosity

The underwriters of the future track notable market trends and shifts within their verticals or sub-verticals, utilizing market-facing dialogue to consistently build knowledge and access to tools, third-party data, and partnership opportunities within their industry. For high-touch clients, they go the extra mile to investigate potential risk events and loss probabilities in depth. Brokers turn to them to solicit their expertise and insight on specific types of risk. These underwriters act as internal guides for junior underwriters and as public thought partners on common themes and trends within their areas of expertise.

Exhibit 5 - Four core behaviors for the underwriter of the future



While it will be a rare candidate who possesses all four of these core behaviors (see Exhibit 5), it is important that insurers ensure that, at the very least, all four are present in their underwriting teams.

Attracting and retaining the underwriters of the future

Re-imagining core behaviors within underwriting teams is only the first challenge the industry needs to address. With an aging underwriting workforce and the war for talent fiercely ramping up, most commercial insurers find themselves unable to attract and retain the best people. A holistic talent management process is therefore necessary, particularly given the challenging labor market in which demand outweighs the supply of competent underwriters.

To successfully navigate through this generational shift and employ a skillset that is in high demand, commercial insurers need to take a more deliberate and comprehensive approach to talent management. They must:

Build an E2E talent management strategy

Insurers will need to build a comprehensive talent management strategy. This starts with (i) anticipating how many jobs are needed to achieve business goals, (ii) assessing what skillset is required to perform these jobs, (iii) assessing what skills are currently present (or lacking) within the organization, (iv) identifying existing resources that can be upskilled to fulfill these new roles, (v) and deciding where and how to recruit externally. This E2E (end-to-end) strategy will allow for informed decision-making regarding when and where an insurer should buy, rent, or grow talent.

Invest in interconnected technology to enable the underwriting organization

To enable modern underwriters, insurers must increase their investments in interconnected technology. Technology implementation in underwriting is stymied by legacy technology, siloes that limit the cross-pollination of work and ideas, and a dearth of D&A strategy. AI spending in insurance lags significantly behind compared with other markets (e.g., energy, automotive, healthcare). An underwriting organization that seeks to technologically modernize must establish a comprehensive, holistic, and interconnected data and digital platform, not just invest in underwriting-specific technology.

The balance between the “art” and “science” will continue to evolve

Commercial insurers will have to embrace the best of both “art” and “science” to shape the underwriter of the future. This will require a cultural change within their underwriting teams, enabled by top-down change management that is structured around three key imperatives:

Overcoming cultural resistance to AI and technology. AI will not take over the job of an underwriter, but the underwriter that leverages AI to do the job better will. Securing buy-in from underwriters is going to be key, particularly in light of recent generative AI developments.

Building cross-functional teams to break organizations’ silos; and promoting agile and iterative ways of working that also promotes experimentation.

Consistently reinforcing, from the top, the importance of balancing “science” with “art” throughout the underwriting organization. Cultivating a culture of underwriting that balances technical pricing with business intelligence and market knowledge is key to driving underwriting excellence.

In light of automation-driven changes to underwriters’ jobs, as well as increasing volatility in environmental, technological, and economic landscapes, commercial insurers need to take a critical look in the mirror to assess whether they have the talent and technology the underwriting of the future requires. Is your organization ready for these changes?

About the Authors

Nathalia (Nathi) Bellizia is a Managing Director and Partner and is the global leader for Corporate Finance & Strategy in Insurance at Boston Consulting Group.
Bellizia.Nathalia@bcg.com

Lucy Pilko is a Managing Director and Senior Partner and is the regional practice area lead for the Insurance practice in the North America region at Boston Consulting Group
Pilko.Lucy@bcg.com

Paul Nelson is a Managing Director and Partner at Boston Consulting Group.
Nelson.Paul@bcg.com

Laura Piwinski is a Project Leader at Boston Consulting Group.
Piwinski.Laura@bcg.com

For Further Contact

If you would like to discuss this report, please contact the authors.

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