



Broadening the Definition of Insurance Innovation

By Pamela Davis

It is accepted wisdom: insurance companies are late to the game and must embrace innovation to become more customer-centric and stay relevant.

A KPMG survey found that 73 percent of insurance CEOs are ready to push their organizations through radical transformation in order to remain competitive. For an industry inundated with data, InsurTech and artificial intelligence (AI) are considered the driving forces of innovation. Technology can help insurers improve the insurance value chain and the time it takes to evaluate, rate and quote a policy. AI can play a significant role in delivering much-needed insights on data. In the most hopeful scenarios, technology expands access and choice, helps companies cover more loss exposure and reduces the cost for policyholders.

As InsurTech and AI dominate insurance media headlines, is the industry relying too much on technology for innovation?

The case for technology-driven innovation is clear. Expert systems, the precursors of AI, have been used by insurance companies for various lines since the 1990s. Yet the potential for AI to draw insights from big data will take years to materialize. According to a recent consulting report, “the vast majority of insurance IT spending still goes toward maintaining legacy systems.”

Given the time horizon and how little is actually being invested in InsurTech for commercial insurance, the obvious question is: are we taking too narrow a view of innovation?

Facing a Hardening Market

This is especially pertinent in the hard market we are facing. According to a Willis Towers Watson Commercial Lines Pricing Survey quoted in the Wall Street Journal, rates for P&C commercial insurance rose on average 6.7 percent in the first three quarters of 2019. This is the highest annual increase since 2003. And according to Marsh, U.S. insurance pricing in the fourth quarter of 2019 increased 10 percent, year-over-year, led by increases in property, financial, and professional lines.

This hard market may be unlike any we have managed to get through before. Commercial insurers are adjusting more than rates; they are reducing capacity, increasing exclusions and restricting the availability of umbrella insurance for some.

We are also seeing another disturbing trend: nonprofits with specialized risks are finding it more difficult, and costly, to obtain adequate coverage that addresses their distinctive exposures. Take for example animal rescue, fostering and adoption nonprofits. These organizations rescue and shelter pets, nurse them back to health and find new homes for them. These organizations care for tens of thousands of animals every year. No two dogs or cats are the same — even those of the same breed — and caring staff spend countless hours observing behavior and traits and sharing details with potential new owners.

In industries where the risks are mirrored in nearly every business, AI promises to make simple the quantification of risks and rates. Yet by focusing on the alignment of similar risks and clients under the same underwriting framework, insurers could make the mistake of overly simplifying risks and treating correlations as causation in some underwriting decisions. As Mona Sloane, adjunct professor at NYU Tandon School for Engineering, has written, “AI technologies continue to be grounded in statistical analysis ... limiting what conclusions can be drawn from an inference.”

¹ “Accelerating the transformation,” KPMG, <https://home.kpmg/xx/en/home/insights/2018/09/accelerating-the-transformation.html>

² “Underwriting 2.0—In an increasingly automated world, what does risk assessment look like?,” Contingencies, <http://contingencies.org/underwriting-2-0/>

³ “2020 Insurance Outlook,” December 3, 2019, Deloitte, <https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/insurance-industry-outlook.html>

⁴ “Fintech by the numbers,” Deloitte, <https://www2.deloitte.com/us/en/pages/financial-services/articles/the-next-phase-of-fintech-evolution.html>

⁵ “Insurers Drive Up Prices for U.S. Businesses,” February 11, 2020, Wall Street Journal, <https://webreprints.djreprints.com/4767110739922.html>





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Given the potential risk exposure for nonprofits such as animal rescue organizations, there are obvious questions about how much insurers that rely on machine learning algorithms for underwriting decisions would end up basing decisions primarily on technology. Could AI's inherent design of maximizing a single result, such as target loss ratio, restrict access to insurance or create gaps in coverages that could result in uninsured risks? One analyst has suggested that insurers could end up whittling away the basic principle of pooling by too narrowly evaluating and pricing risks.

It's already happening. Thanks to pressure from jury awards, increased lookback periods, and heightened activity around child abuse claims, some insurers are shedding their entire nonprofit books of business. Gallagher USA reports that the nonprofit insurance market is in a state of crisis. The insurance company that I lead has seen applications increase 30 percent over the last year.

As more insurers look to InsurTech for innovation, smaller customers and those market segments with unique risk profiles may be left behind. Customers, already struggling to locate coverage that fits their exposures, may find it even more difficult to fit into the underwriting box created by technology — the same box that streamlines the insurer's business operations.

As if market conditions weren't tough enough for some customers, things are getting even more difficult. Carrier decisions about who, what, and how they'll insure, coupled with broker consolidation, are conditions that are putting additional pressure on smaller customers, who are finding it more difficult to get the insurance they need. In some cases, larger brokers are putting conditions on agent

commissions — unless an account generates a certain amount of commissions, the individual agent or broker will not be compensated for that account. This is worrying when you consider that 88 percent of 501(c)(3) charitable organizations have annual budgets of less than \$500,000 annually, and many of these risks rate up to less in premium than the minimum commission these brokers require.

In an environment in which smaller entities have been underserved for decades, such changes signal that things for these customers will only get worse. As more insurers adopt InsurTech into their underwriting practices, the question remains: is the insurance industry moving in a direction that will sacrifice value and capacity for whole classes of business — and service to specialized customers — in exchange for more efficiency?

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Technology that expands access to insurance should be welcomed and promoted. However, the insurance industry should consider what alternative forms of innovation might accomplish the same goal.

Insurance Innovation

While technology may be dominating the headlines, innovation is about how we serve our customers' needs. For example, our company started in California in the late 1980s as a member-driven risk pool that offered liability coverage for nonprofits, which at the time of our company's founding was extremely difficult to find in the state. Ten years later, nonprofits outside of California were still having trouble finding coverage, so we created a risk retention group, offering a chance for nonprofits, even those the admitted market deemed "uninsurable," to transfer their risk with consistent policy terms at affordable rates.

Innovation in how we operate serves the needs of the nonprofit sector we serve. It's proof that the insurance industry doesn't have to sacrifice value for innovation. In fact, innovation through alternative risk transfer

6 "Ethics Codes Are Not Enough to Curb the Danger of Bias in AI," January 23, 2020, Brink News, <http://www.brinknews.com/ethics-codes-are-not-enough-to-curb-the-danger-of-bias-in-ai/>

7 "Analyst Warns Regulatory Battle Over AI Bias to Grow," February 14, 2020, Insurance Journal, <https://www.insurancejournal.com/news/national/2020/02/14/558440.htm>

8 "2019 Excellence in Risk Management Report," Marsh, <https://www.marsh.com/us/insights/research/excellence-in-risk-management-xvi.html>

9 "Operational RRGs and RRG Premium 1987-2019: A Risk Retention Reporter Special Report," Risk Retention Reporter

10 "Analysis of Risk Retention Groups—Third Quarter 2019," Demotech

(ART) solutions has already transformed much of what we do. According to the Marsh 2019 Excellence in Risk Management survey, 40 percent of respondents are using, have used, or expect to soon use ART solutions; another one-third say they need to learn more.

- **Risk Retention Groups (RRGs):** There are over 200 RRGs representing total gross premium of \$3.3 billion in 2018, up from \$2.7 billion in 2013. According to a Demotech analysis of third quarter 2019 results, collective RRG policyholder surplus has increased by 25.7 percent over the year earlier period. A senior analyst at the firm concluded, “RRGs have a great deal of financial stability and remain committed to maintaining adequate capital to handle losses.
- **Captives:** Self-insurance vehicles that are their own licensed insurance entity, set up to reduce costs and insure complex risks. In 2018, there were 6,454 registered captives globally. In 2018, the captive market reported a pretax profit of approximately \$1.1 billion with a reported \$6.6 billion being held or paid back to policyholders and stockholders.
- **Protected cell companies:** Working within an existing company, the risks are walled off from the rest of the company, as are the assets within that cell. Begun in 2007 as a spinoff of the captive risk transfer model, protected cell companies operate as “one legal entity within which there are a series of pools of segregated assets and liabilities.”

An additional area of innovation is in risk management education, training and consulting services that help insureds manage loss exposure. At NIA we offer our members over a dozen specialized programs including a free HR consulting service used by nearly 20 percent of eligible organizations. With their use of interns, contract professionals, and former and present clients as staff, nonprofits deal with complex personnel issues beyond what other organizations face.

In addition, nonprofits rely heavily on volunteers and board members to accomplish their missions. Smaller and even mid-sized nonprofits operate without in-house HR expertise, making the task of addressing issues with legal compliance doubly difficult. We recognize this challenge, and the potential impact on nonprofit liability, and therefore offer unlimited, free consulting on HR matters. Members receive prompt attention on a whole host of issues

allowing them to limit disruption to their operations and stay in compliance with the law.

Still another important innovation is specialized coverages. Every sector faces unique risks, and the insurance industry distinguishes itself when we can anticipate exposure and develop products that give customers peace of mind. However, when we restrict essential protection or otherwise fail to offer solutions, we lose credibility.

An example of this is insurance for improper sexual conduct (ISC) and physical assault. Three decades ago, seeing an emerging trend, we pioneered ISC as a separate coverage for nonprofits. Nonprofits are on the frontlines of this issue, caring for the most vulnerable and affected in our communities. Yet they are not immune from the pernicious actions of perpetrators. As employers, nonprofits may have to defend themselves and be able to pay for damages in cases involving staff and volunteers. The insurance industry cannot walk away from this loss exposure simply because it is a difficult risk to insure.

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We need to use insight gleaned from our data to develop innovative solutions to a clear problem.

The organizations that I lead have found ways to innovate to meet the needs of our members. Because we serve the nonprofit industry, our customers range in size from no employees to thousands of employees. While they are a common industry because of their use of volunteers and commitment to service, their missions run the gamut — shelters, community service entities, philanthropic endeavors, mental health services and more. Each customer’s business focus is specialized. An out-of-the-box insurance solution does not serve their needs.

When we decide to employ technology, we keep a singular focus — how can we use technology to help our customers

11 “Demotech Releases Third Quarter 2019 Financial Analysis of RRGs,” Captive.com, <https://www.captive.com/news/2019/12/13/demotech-releases-third-quarter-2019-financial-analysis-rrgs>

12 <https://www.iii.org/article/background-on-captives-and-other-risk-financing-options>

13 “Best’s Special Report: Rated U.S. Captives Build Upon Strengths to Achieve Another Strong Full-Year Result in 2018,” 7/29/19, AM Best, <http://news.ambest.com/presscontent.aspx?refnum=28257&altsrc=122>

14 “20:20 Vision: Looking Back at 20 Years of the Protected Cell Company – June 2017,” Trident Trust, <https://tridenttrust.com/knowledge/insights/20-years-of-the-protected-cell-company-june-2017/>

preserve their diversity rather than adapt to fit specific criteria? How can technology allow our staff to have more personal interaction with insurance agents and brokers and our members, rather than wall them off from those interactions? How can technology help us to identify risks so that we can rate them appropriately, expand coverage and protect our members? And when algorithms say an account cannot be written, how can we figure out how to provide that coverage?

We do that by including pertinent questions in the application to capture the most detail we can on any one customer's risk portfolio. Our underwriters are trained to understand the nuance of loss exposures of different classes of business. Our experience with claims plays a big role in new coverages we develop to meet emerging risks. We have a product development committee specifically tasked with developing policies to cover claims that our existing policies do not cover, rather than focusing on finding ways to attach more policy exclusions. Taken altogether, expertise, experience and commitment are the drivers of innovation that our underwriters utilize to find ways of insuring our target sector.

The Challenge for Regulators

From a regulatory standpoint, InsurTech poses new challenges — ones that are not all technology-related. Regulators are demonstrating the need to focus on data algorithms and models. The National Association of Insurance Commissioners (NAIC) Big Data Working Group is urging regulators to pay particular attention to external vendors that may not be regulated, as their data could contain biases and inaccuracies. And regulators are also educating themselves on how to measure the appropriateness of various InsurTech algorithms in the market. It is important for regulators to look critically at how companies are utilizing InsurTech:

- What impact are algorithms having on entire classes of business or risks?
- Are algorithms limiting capacity for complex but important segments of our economy in the name of efficiency?
- Are algorithms operating within regulatory standards?
- Is technology hampering an agent's or broker's ability to meet their fiduciary responsibilities?

To best serve those customers who have already faced challenges in locating adequate coverage, regulators should be evaluating how InsurTech is changing carriers' business operations, and whether those changes are serving the markets they are charged with protecting.

Regulators also have an important opportunity to embrace and promote important non-technology related innovations that are changing the status quo. With such a heavy emphasis on driving efficiency and improving underwriting results, some insurers may be relying solely on technological innovation to sort out the market's needs. In the case of those accounts that need specialized coverage, innovation is not working to serve their needs at all.

Technology will undoubtedly come to have an impact on our industry. We need technology to improve efficiency and serve our customers, but technological innovation has not sorted out the needs of customers who require specialized coverages. We also must meet the needs of our customers through innovation in products and services, as well as the manner in which risk bearing entities are structured.

Our customers are facing challenges in locating adequate coverage. ART solutions are helping, yet more solutions are needed. To support well-functioning insurance markets, regulators can support consumers by helping to create the conditions for market-driven innovation and examining relevant lines of inquiry:

Are carriers providing products and services that meet the needs of small to mid-sized organizations?

How can alternative solutions keep the market competitive for consumers?

Are there some sectors for which ART solutions are the only means of assuring consistently adequate capacity?

Innovation comes in many forms. InsurTech may be fashionable, but it should be just part of the solution for today's hard market. Innovative approaches to underwriting, specialized coverages, custom risk management programs and ART solutions should be as much a part of the insurance innovation landscape as technology itself. [🔗](#)

Pamela E. Davis is the founder, president and CEO of the member companies of the Nonprofits Insurance Alliance.

Nonprofits Insurance Alliance (NIA) is the nation's leading P&C insurer exclusively serving nonprofit organizations. Founded in 1989 in Santa Cruz, CA, NIA is a social enterprise developing the long-term sustainability of the nonprofit sector. Learn more about Nonprofits Insurance Alliance at insurancefornonprofits.org/about.

¹⁵ "Insurance regulators in an era of advanced technologies," February 23, 2018, Deloitte, <https://www2.deloitte.com/us/en/insights/industry/insurance/advanced-technologies-insurance-regulators-challenges-opportunities.html>