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# Trend Topic: Why Actuaries Should Welcome Automation

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Every day, there's a new headline about technology disrupting business—Uber and Lyft shaking up the taxi industry, robots replacing workers on the auto production line, self-checkout kiosks being put in and cashiers being phased out. It's a lot to take in, and the thought of technology replacing people can be unsettling.

However, for professionals like actuaries, technology—and namely automation to start with—creates many opportunities for those willing to embrace it. Instead of time spent on repetitive tasks or hours invested in spreadsheets, there is now the potential to set up parameters and have robotics perform some of this repetitive work. That means actuaries can focus more on the things that can advance our roles as strategic partners with an improved seat at the table.

In our consulting roles, we work primarily with insurance companies, and we're seeing a lot of them taking steps toward this kind of automation. Companies have started to automate actuarial processes ranging from actuarial model setup and run processing to how they populate content in memorandums and reports.

The processes we follow and our day-to-day tasks will change, but our commitment to our stakeholders and our professional standards must remain steadfast. We cannot blindly trust output from machines. In a world where more and more work is done by machines, we must learn to interact with that work, critically assess it, and spend relatively more time in a review capacity.

For example, instead of spending time running and re-running financial models, actuaries can spend more time reviewing sensitivity testing to see whether the model results make sense. And when we shift our efforts to work that truly can't be done by machines, the work we perform and manage and the results we produce will be both more efficient and more valuable for our employers, clients and other stakeholders, including the public.

The ripple effects from changes in the way work is done will also impact how we source and develop actuarial talent to meet

the future needs of the profession. As we apply technologies from outside of traditional actuarial software packages, actuaries will need to expand their technology skillset. When we automate processes from which junior actuaries would have typically “learned the ropes,” we need to rethink how actuaries learn and develop, particularly at the more junior levels in their careers (e.g., more focus on an apprenticeship model). In addition, when we fundamentally change how actuaries work from less stewardship activities to more strategic counsel, the skills for an actuary will need to evolve.

These changes will not happen overnight, of course, but we need to start planning now, so we are prepared for the future. That includes reimagining both the core skillsets for actuaries and the opportunity for greater added value in our work, updating our education and development systems, planning for workforce changes and undertaking a bit of change management ourselves. And most important, we need to understand how to strategically educate our stakeholders about the advantages the actuary of the future can help them achieve.

Quite simply, as our workload shifts away from raw computation, our jobs will expand and evolve, not evaporate. While understanding how to perform manual calculations and build models is, and always will be, important, we can potentially make a bigger impact by predicting risk, testing our assumptions and helping people and companies mitigate and capitalize on that risk to avoid undesirable outcomes and optimize results.

We are helping insurance companies expand their capabilities for actuarial people, process and technology through our firm's Exponential Actuary solution. The insurance industry is in the early stages of disruption both broadly and in the context of the actuarial profession. Although certain insurance organizations and departments have been early adopters and are blazing trails, the majority of the change—and opportunity—is in front of us. By adopting these enablers and new business models, the future outlook for the actuarial profession is bright. It will enable actuaries with the right skillsets to add greater value to organizations through more strategic activities. ■



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