

ACTUARY OF THE FUTURE

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I Am Speed Change

By Alan Gard

Editor's note: In this issue of the newsletter, we are featuring the winners of the Disruptions to the Actuarial Profession Contest in 2019. We are proud to showcase Society of Actuaries (SOA) members' ideas about the future of the profession, and how future actuaries can adapt to the disruptor. The winners were selected based on materiality, originality, practical significance and overall quality. Second place was awarded to Alan Gard and his essay entry titled "I Am Speed Change." (Statements of fact and opinions expressed herein are those of the individual authors and are not necessarily those of the Society of Actuaries or the respective authors' employers.)

"I am speed." We hear that from Lightning McQueen in the opening line of the movie *Cars* as a positive mantra to get ready for a big race. Listening closely, the actuarial profession might hear it as if coming from a ghost. Except that ghost has a name, Change, and this is not a ghost. **I-am-speed change** is real. But it should scare us.

We are in an environment that is in a state of **I-am-speed change**. Weather is more volatile, increasing impacts from severe instances of hurricanes, floods and tornados. Car transportation is in flux with the growth of Uber/Lyft and the reality of autonomous cars not far off on the horizon. Health care is transforming as new care protocols with extreme price tags are coming into existence every day. There are now even treatments designed for individuals based on their specific genetics. Life spans are changing differently and less uniformly than they ever have before.

Public policy and regulation add to the **I-am-speed change** landscape. In the United States, our highly polarized political climate increases uncertainty as each party re-legislates what the other party has recently done. Voters are never happy so power shifts back-and-forth between the parties. With greater polarization also comes more radical policies to be done and undone.

Globally, there is **I-am-speed change** from things like Brexit, trade wars and international economic investments like China's Belt-and-Road Initiative.

One counterargument to **I-am-speed change** disrupting our profession is that data collection is accelerating at a blistering pace as well with the data universe about doubling every two years. What we are able to do with data is also advancing rapidly. However, the accelerating possibilities of predictive analytics add to the disruption rather than act as a countermeasure to it. Actuaries have not positioned themselves at the forefront of the data revolution, so this **I-am-speed change** of data acceleration and techniques puts the profession more at risk of being isolated into a smaller number of traditional roles.

Dealing with change has always been a natural part of our work. Technology and techniques have constantly advanced. The proliferation of the personal computer changed what we are capable of, and the profession survived that just fine. Regulation has always been a driver of change. What is different now?

What is different now is that what was "change" is now **I-am-speed change**. What is different now is the number of people who wake up each morning focused on bringing about big changes. What is different now is how interconnected the globe is—change in one place that would have been isolated before now changes the world.

Speed of change has not been a strength of the actuarial profession. The history of our standard of practice on data quality is instructive of the risk **I-am-speed change** presents to the profession. This ASOP was adopted in 1993 and revised in 2004 and 2011. The current version was adopted in 2016 to "keep pace with practice changes (for example, increasing use of nontraditional data sources for predictive models, and legislatively mandated data submissions)." On data quality, a cornerstone of

our profession, our past history—averaging almost eight years in between updates in practice—is not exactly a predictor of strong future performance in times of I-am-speed change.

We can look to a different type of scientist—the naturalist Charles Darwin-for insight on how to react to I-am-speed change. Darwin said, "It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change." In this context, the business problem we need to solve is not how to be the best data scientists or the best technologists. What we need to answer is: How can we be the most adaptable?

Adaptability is a combination of the willingness and ability to change. The willingness aspect is usually the more challenging, which is why change management rubrics start with motivation. But while actuaries may be stereotypically considered averse to change, many in the profession already are motivated to change. The widespread interest in predictive analytics is an example where there is an apparent and universal threat. We may have missed our opportunity to be at the cutting edge, but actuaries are good learners and are already taking steps to reassert our relevance. More broadly, we are not ignorant of what is going on in the world around us and connecting that to a need to change doesn't take an actuarial credential to see. The challenges are how urgent we are about changing, how anticipatory can we be in meeting the world where it is going to be, not just where it is today, and in how clearly we see what to do differently right now to change in a meaningful and effective way.

That all flows into the ability to change. That is mostly an equation that can be solved, and actuaries are good at those! For example, the problem of being behind on predictive analytics can be solved by emphasizing education and certification of actuaries in predictive analytics. That only addresses one part of a multiple part I-am-speed change problem, and missing whole parts of a problem leads to a failing grade.

One potential solution is to emphasize a generalist/specialist mindset across all aspects of the actuarial education, especially in the continuing education expectations.

Generalists have working knowledge and expertise across many dimensions. Specialists have deep knowledge and expertise on a limited number of topics. To be adaptable, we each need a combination of both. If we are only generalists, we won't have the sophistication to solve the most complex problems. If we are only specialists, we won't have the broad judgment necessary to make sure we are addressing the right question with the right data for the current environment.

Therefore, we need to take ourselves from a profession of generalists or specialists to one of generalists/specialists. The generalist in us helps us anticipate in what direction the environment will evolve. Being specialists too, will enable us to have deep solutions to the problems faced in that evolved world. Specialties should be focused on skills (e.g., predictive analytics, technology, and some not so obvious ones like design) rather than on industry knowledge (e.g., life and health insurance, casualty, or pensions). Knowledge is easily acquired, and in an I-am-speed change world knowledge becomes obsolete much more quickly than skills do. The actual specialties on which we may need to go deep may change over time, but once one learns how to go deep on something, it is easier to know how to go deep on the next thing.

Today, our continuing education requirements are mostly about checking the boxes. Professionalism: check. Organized activities: check. It's a cobbling together of whatever webinars and seminars fit into our busy schedules and company budgets. There is little intentionality about them going deep on a new skill or broadly expanding one's perspective across a wide number of global issues. These might be things we are doing, but they are more about our specific interests and circumstances rather than as a commitment to evolving the profession.

Focusing our continuing education requirements as a profession to keep us improving both in the breadth of understanding the global environment and in the depth of some specialty of our choosing will make us more adaptable, which is the key to survival in an I-am-speed change environment. We could expand the required hours while at the same time expanding what can be included in continuing education. We could require a certain number of hours each year focused on a single continuous specialty. We could then require the other hours to be spread across a wide array of topics with no more than one or two hours spent on any one of them. We could require some hours to be fulfilled on activities that are not actuarial in nature, at least yet. Similar models could be used in our credentialing process and in university-level actuarial education, but those will follow the lead of what we are demanding of ourselves. If we as a profession can widely manifest this generalist/specialist mindset, we'll keep our profession relevant through current and future disruptions.

Hopefully actions like this will enable us actuaries to talk about ourselves using the Lightning McQueen quote "I am speed" as a credible statement rather than hearing it as the Change bogeyman saying "boo." In Cars, Lightning is the disruptor. In Cars 3, Lightning is the one being disrupted by newer cars with fancier technology in a racing world with which he can't quite keep up. Lightning's way of adapting was to move into a mentorship role and leave the actual racing to the newer cars. I hope that is not the path that the actuarial profession chooses. Rather, let's choose to race ahead with an I-am-speed urgency to be the most adaptable in everything we do. Ka-chow! ■



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