A few years ago, I was struggling to figure out my next career move. I had successfully established the North American division of a global market research company with more than 30 Fortune 500 company clients, yet I felt something was missing. Uncertain what to tackle next, I was advised to explore “doing what you love, regardless of financial considerations.” I decided to try my hand at writing science fiction while still heading up the market research company. It turned out to be great advice.

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FROM THE EDITOR

The concept of science fiction prototyping grew from a personal process I used in my work as a futurist. At the request of several persuasive university professors, I elaborated on the idea in a textbook, Science Fiction Prototyping: Designing the Future with Science Fiction, which focuses mainly on computer science and engineering. The textbook is now used by design, business, and law students in more than 50 universities worldwide. I’m humbled by the visions that have bubbled up from these curious and serious minds.

Science fiction prototyping has also moved into the business world, and no practitioner is more adept at helping companies and organizations benefit from the process than Ari Popper of SciFutures. We first met Ari in this column last year (“Secret Science Fiction,” May 2013), and I asked him to update us on his work and how he’s using science fiction prototyping to innovate and change the future of businesses. —Brian David Johnson
firms—combined my love of science fiction with my professional experience helping clients solve business challenges. After three years, I’m stunned to see how science fiction prototyping is changing organizational culture and creating disruptive innovations.

SCIENCE FICTION AND DISRUPTIVE TECHNOLOGIES
It’s undeniable that we live in remarkable times, driven largely by emerging disruptive technologies. The world is changing rapidly, and businesses that can adapt will enter a period of radical growth and significant value creation. A huge prize awaits corporations that can quickly harness and implement these powerful disruptive technologies. Terms for this process vary: blue sky innovation, disruptive innovation, even creative destruction (though I prefer “creative creation” since “destruction” implies turmoil and distress, but radical change isn’t necessarily negative).

Whatever the terminology, very few corporations can readily adapt. I’ve found this is due to several factors, including an inability to fully understand or communicate what radical change involves, uncertainty about the potential societal impact of emerging technologies, and the fact that corporations are risk-averse and hardened to reject initiatives with uncertain outcomes. Science fiction prototyping can address these barriers.

The simple act of writing science fiction stories grounded in science fact facilitates our understanding of, appreciation for, and ability to integrate these technologies and their likely impacts. Fans of the genre will probably agree that science fiction succeeds when it conveys the effects of future technologies on characters readers can relate to. We engage with a story when the characters share our own basic aspirations and concerns.

Moreover, storytelling is a powerful way to change ingrained beliefs: researchers at the Ohio State University have shown that fiction is more effective at changing beliefs than nonfiction. The more realistic the portrayal of human interaction with emerging technologies, the more enjoyable the art is and the more likely we are to viscerally appreciate radical futures. In other words, good science fiction wrestles with complexity and succeeds when it simplifies and translates this complexity into human applications.

SCIENCE FICTION PROTOTYPING IN BUSINESS
Using science fiction prototyping in a corporate setting is a powerful way to generate new intellectual property. It provides a platform—and a process—to envision, create, and name new business tools, products, and services that are born from disruptive technologies. And because these products and services are brought to life through an engaging narrative, they will likely be relevant to real people with real needs.

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A successful example of this process is a class at MIT Labs where students read science fiction novels and then build prototypes from those stories. Another successful example is a corporate setting is a powerful way to generate new intellectual property. It provides a platform—and a process—to envision, create, and name new business tools, products, and services that are born from disruptive technologies. And because these products and services are brought to life through an engaging narrative, they will likely be relevant to real people with real needs.

A successful science fiction prototype will inspire and align a wide variety of stakeholders within and outside an organization. I have yet to find a better way to share a complex corporate innovation strategy than with a science fiction graphic novel, custom sci-fi movie, or illustrated short story that renders the likely impact of a new technology or ecosystem of technologies on real people in an engaging narrative format.

One of our services at SciFutures is to help clients create inspirational and transformative narratives of the future. Half the battle is getting folks to understand complexity; the other half is getting teams aligned. Having a common idea or mythology about a preferred future and a clear understanding of the corporation’s role within that future is proving to be very valuable. Once we establish the narratives and choose compelling disruptive ideas, we quickly build and test prototypes. Another successful example of this process is a class at MIT Labs where students read science fiction novels and then build prototypes from those stories.²

The SciFutures team was recently in Toronto for the ribbon cutting of two Lowe’s stores’ Holorooms—home improvement simulators that use state-of-the-art augmented reality technologies to help customers envision complex home renovation projects (see Figure 1). The idea was born out of a science fiction prototype and inspired by the Star Trek holodeck. The fact that we were able to successfully launch a complex, disruptive, and highly technical innovation for a large corporate retailer is testament to the power of the original narrative. It captured and aligned the imaginations of a highly structured and conservative culture.

T he idea of using science fiction prototyping was new to me and arose independently during a creative writing class. However, futurists such as Brian David Johnson at Intel...
were already applying science fiction prototyping to corporate culture. We are standing on the shoulders of giants and making great progress, yet science fiction prototyping is still in its infancy. As this tool is more widely adopted, we can expect to see more radical innovations in the world. Perhaps more importantly, as long as these stories are optimistic and inspirational, I believe we will also begin to see a radical and positive transformation in our society.

REFERENCES

ARI POPPER is the cofounder and CEO of SciFutures, a foresight and innovations agency that produces fictional narratives for companies using formats such as graphic novels and builds science fiction-inspired prototypes. Contact him at ari.popper@scifutures.com.