



# Secret Science Fiction

Brian David Johnson, *Intel*

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**Science fiction prototypes let us explore the futures we want to live in, but, more importantly, they help us explore the futures we want to avoid.**

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**T**here are massive collections of amazing science fiction stories that you'll most likely never be allowed to read.

The creators of these stories range from best-selling *The New York Times* authors to emerging talents and even some purposely anonymous imagineers. This secret science fiction explores space travel, biotechnology, quantum computers, and even time travel, and the tales are filled with heroes and villains, exotic locales, and cliff-hanger endings.

But few people will ever be allowed to read these tantalizingly taboo stories because they're science fiction prototypes written for global corporations, governments, the military, and other organizations to explore key strategies, technologies, and products that are as valuable as patents, state secrets, and intellectual property. Welcome to the world of secret science fiction prototyping.

These researchers use science fiction based on science fact to

create science fiction prototypes that explore the human, cultural, ethical, and legal impact of technology and science. For some time now, organizations have been using these prototypes as a tool both to explore the implications of these factors and as an internal communications vehicle to capture concepts so that a wider audience can discuss them.

Science fiction prototyping is far more interesting as a communications tool than an interoffice memo or a product specification. It also captures the human experience with science and technology—something neither memos nor specifications can do effectively.

## THE DARK SIDE OF SCIENCE FICTION PROTOTYPES

Science fiction prototypes can provide an effective communication tool for understanding the real-world implications of technology and science because they let people explore bad things through fiction. Things blow up. Characters die. In fact, these elements are often the

foundations of good storytelling. But for the reader to suspend disbelief, the main character needs to have real flaws like all humans, make mistakes, and, ultimately, learn something.

The setting of the story, the real place, can be just as important as the characters. In fact, the setting often becomes a character itself. Think of London in the writings of Charles Dickens or Arthur Conan Doyle's Sherlock Holmes. A setting that's dangerous or filled with conflict often enhances the story.

Writers are constantly in search of compelling problems that will generate interesting drama. Not being able to access your email might be a real problem that could mess up your day, but it doesn't provide the context for a compelling story.

Real peril means that people can get hurt or die, as they often do in fiction. The documents and processes that characterize most communication and planning cycles don't convey this engaging exposure to threats and danger. Long-term



## TO OUR READERS

We'd love to hear from you! What role does imagination play in your research and development? Was science fiction your inspiration to become

an engineer? Does science fiction drive you today?

Send your science fiction prototypes to [brian.david.johnson@intel.com](mailto:brian.david.johnson@intel.com).

strategic plans are usually filled with facts and figures, not fights and firearms. PowerPoint slides don't make us cry with their drama, and people don't die in emails.

This is where the power of science fiction prototypes can create engagement. Stepping out of day-to-day business practices and writing or reading a piece of fiction allows people the freedom to explore science and technology in new ways. It frees them from expectations and boundaries. It's expected that science fiction will include a good dose of peril and drama. This allows even the most conservative engineers, planners, scientists, or executives to roll up their sleeves and comprehend the often brutal and ugly real-world implications of their work.

### DESIGNED BY SCIENCE FICTION

I met Ari Popper through a mutual friend. "He's using science fiction prototyping as a way to introduce innovation in major corporations like Pepsi and Lowe's," Brad Berens explained. "You have a bunch of futurist acquaintances in common."

When I did meet Popper at a breakfast in San Francisco, it was a little creepy because we instantly discovered that we were kindred spirits. I'm a futurist who uses science fiction to prototype and build possible futures. Popper is the CEO of SciFutures, a consultancy that uses science fiction to help its clients develop innovative new products. Two new acquaintances

seldom agree on so many things so quickly.

Popper started SciFutures early in 2012 with the idea that science fiction stories based on real data and experience have the power to transform companies. Because he has a background in market research, Popper understands the importance of data and research.

"But when did you realize that you could use science fiction to develop futures for you clients?" I asked.

"It's that visceral moment when you actually see the future in your fiction," he explained to me. "That's what hooked me, and that's what hooks my clients. When you use science fiction in this way, it makes the future real. You realize that it can really happen and that it has real-world implications not only for the market but also for real people."

SciFutures uses stories and visuals in collaborative working sessions in which clients explore possible scenarios and alternative futures for their companies. When I asked Popper for examples of SciFutures work, he smiled and replied, "A lot of what we're doing is top secret. The best case study I wish I could share is one we're currently building, but it's triple confidential."

An example that Popper could share was some work his consultancy did with PepsiCo exploring the future of water and water purification in cities. The challenge was how to get the world's second largest food and beverage company to move forward from reducing the plastic used in making

its bottles to reimagining the future of accessible hydration for the megacities of 2030.

"I'll never forget the first workshop we conducted where the power of science fiction narratives unlocked a killer application that inspired and rallied the team," Popper told *Sci Fi Magazine*. "We revealed an idea that has the probability of becoming one of the more significant innovations in that company's history."

But ask him what that story was about, and he'll smile coyly and tell you that he can't share it. "It's confidential," he responds.

That's the world of secret science fiction. These stories must remain locked away. Their contents are just as confidential as the amazing innovation that will change a company's future.

"I'm not kidding," Popper smiled as we finished our breakfast.

"I really believe the ideas we've come up with over the past year will radically transform our client's business." He paused and then said, "But I can't tell you about them."

### THE STRANGEST MEETING I'VE EVER ATTENDED

The strangest meeting I ever attended took place around a collection of confidential science fiction stories.

It was just after lunch when we returned to the conference room, a typical windowless meeting place occupied by a long, heavy table surrounded by about 20 chairs. The meeting participants opened their laptops, checked their phones, and shuffled through papers as we settled in for a long afternoon of work. There was nothing out of the ordinary until I started talking.

"Before we begin," I said, "I want to acknowledge that the material we're going to cover this afternoon isn't typical." Everyone looked up and began to listen intently, perhaps due to the serious tone of my voice.

"I realize that the subject matter and content of these stories are pretty rough," I continued. "I also want to be respectful of the fact that this material can be offensive and upsetting to people. There's no requirement that you stay in this meeting. I completely understand and respect anyone's decision to be excused from this discussion."

I paused. All eyes were on me. No one moved. No one smiled. Everyone took it very seriously.

I'd never had to give a disclaimer at the beginning of a corporate meeting before. It was a strange thing to do, but it was important. The science fiction prototypes we discussed that afternoon were very dark. They explored some messy and uncomfortable implications to possible advances in science and technology. What was most upsetting were the human implications of what happened in the stories. The participants understood the reality of the situations the stories described, and

it wasn't a good one. People got hurt. People died.

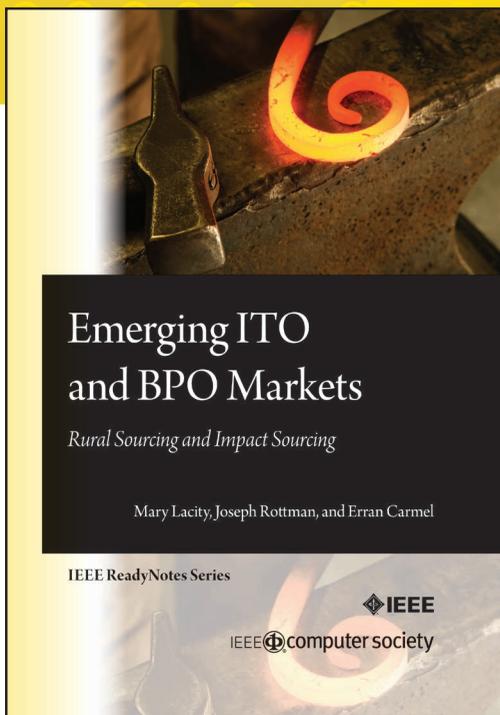
**T**hese secret science fiction prototypes let us explore the futures we want to live in, and they can spawn amazing innovations. But, more importantly, they help us explore the futures we want to avoid. They give us a format for discussing the things we want to guard against. Sometimes writing down descriptions of these dark futures and examining them with others to better understand them is uncomfortable. But it's necessary to explore that darkness so that we can build a better future.

I often feel it's a pity that more people don't get to read these dark visions of futures that organizations all over the world are working hard to avoid. It's a shame they can't explore that darkness and then talk about it with their friends, families, and colleagues. Such conversations really could change the future.

Perhaps we need more secret science fiction prototypes to serve as thoughtful and detailed requirements specifications for our future. We can't be afraid of that darkness. It's important to explore it with others so we can do everything possible to make sure it doesn't actually become our reality. **C**

***Brian David Johnson**, Science Fiction Prototyping column editor, is Intel's first futurist. Johnson is charged with developing an actionable vision for computing 10 to 15 years in the future. His latest book, *Vintage Tomorrows: A Historian and a Futurist Journey through Steampunk and into the Future of Technology (Make, 2013)*, is available on Amazon ([www.amazon.com/Vintage-Tomorrows-Historian-Steampunk-Technology/dp/1449337996](http://www.amazon.com/Vintage-Tomorrows-Historian-Steampunk-Technology/dp/1449337996)). Contact him at [brian.david.johnson@intel.com](mailto:brian.david.johnson@intel.com) or follow him on Twitter @IntelFuturist.*

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