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DEVELOPING REAL, ETHICAL FRAMEWORKS FOR SCI-FI-ESQUE BUSINESS TECHNOLOGY RISKS

BY / ERIC KRELL

One of today's most influential principles concerning technology ethics was penned by a novelist more than 75 years ago: "A robot may not injure a human being, or, through inaction, cause a human being to come to harm." This rule is the first of the "Three Laws of Robotics" Isaac Asimov invented for one of his stories back in 1942. ⚡ While it's discouraging that a fictional line from the World War II era qualifies as an ethical guidepost for 21st Century technology use by businesses, it spotlights the troubling absence of modern ethical frameworks for artificial intelligence (AI), robotics process automation, data analytics, the internet of things (IOT), programming and other emerging technologies.

There are sound reasons for this gap. A wide range of advanced technologies has burrowed deeply into organizational processes during the past decade, and most of these advancements pose unique risks and ethical dilemmas. Big data, analytics and the proliferation of IOT sensors, can pose serious threats to consumer privacy and financial security, as the Experian hack and similar incidents have demonstrated. Industrial robotics on the shop floor and robotic process automation (RPA) in the back office can put human workers out of jobs, raising questions about organizations' responsibilities to retrain displaced employees.

The above risks largely stem from the mismanagement of those technologies. AI and machine learning pose different risks and ethical quandaries because these technologies turn over varying amounts of human decision-making to software programs. This exciting but daunting capability has some business and academic leaders sounding warnings. Last summer, thousands of global AI academics and business leaders, including Elon Musk and Steve Wozniak, signed an open letter regarding AI military applications that called for a ban on "offensive autonomous weapons" that operated "beyond meaningful human control."

In the business realm, there exists substantial wiggle room between what current laws and regulations prohibit regarding technology usage and what companies can do with that technology. That's why the Data & Marketing Association sends a crystal clear directive to its members: "Do not do just what is legal, but do what is right."

ZEROING IN ON WHAT IS **RIGHT** VIA EFFECTIVE TECHNOLOGY ETHICS GUIDELINES REQUIRES **BUSINESS LEADERS** TO ADDRESS THE FOLLOWING CHALLENGES:

⚡ MATURE BUSINESS ETHICS PROGRAMS ARE NOT YET STANDARD.

Ideally, ethical issues related to emerging technology risks would be addressed by existing business ethics frameworks; gaps that failed to account for brand new risks would be closed by updating these frameworks. In practice, however, ethics capabilities within many organizations tend to receive injections of attention, money and improvement only after major ethical lapses occur. This is why housing-crisis-era (or Enron-era or savings-and-loan-crisis-era) headlines, such as "The next big corporate trend? Actually having ethics" (from a July 2017 *recode* article), still appear today.

⚡ TECHNOLOGY ADVANCES QUICKLY.

"Technology," according to a 2017 *The Atlantic* article calling for a code of ethics to govern IOT applications, "is evolving faster than the legal and moral frameworks needed to manage it." While true, this dynamic does not excuse companies from examining how to bake ethical considerations into business processes related to the conception, development and use of new technologies.

⚡ ADVANCED TECHNOLOGY ENCOMPASSES MUCH MORE THAN AI:

In case you've haven't heard, Frankenstein is celebrating a big birthday this year. Experts warning about AI's threats delight in drawing parallels to the monster author Mary Shelley introduced to the world in 1818. While AI's impacts warrant fierce debates, these issues should not deflect attention from less wow-inducing technologies that require similarly rigorous ethical considerations. A decade ago, I conducted a series of interviews with a data-savvy marketing executive who loved to brag about the amazing accuracy with which his analytics could predict a consumer's lifetime spend (at his hospitality company's properties), average daily spend and (too) much more with the customer's ZIP code, pet ownership status and one other piece of personal data. The notion of "doing what's right" never crossed his lips nor, it seemed, his mind.

Ethics Install: COMPLETE

TECHNOLOGY

THE BOTTOM LINE CAN BE A HIGH HURDLE.

In the *recode* article mentioned earlier, Convercent Chief Executive Officer (CEO) Patrick Quinlan asserts that the first step toward the "ethical transformation" companies need to embrace (as they pursue digital transformation) includes "acknowledging ethics and values as important, and making the decision to prioritize it above the bottom line." That's no small task, especially in instances where an organizational value (e.g., transparency) conflicts with a strategic objective (e.g., make customers happy). In his book *Hooked: How to Build Habit-Forming Products*, author Nir Eyal cites a product design expert who asserts that it is acceptable to deceive customers if doing so is in the customer's best interest. Eyal helpfully offers a simple, but valuable, decision-support tool entrepreneurs can use to help them decide if they "should"—not "can," as Eyal emphasizes—attempt to develop habit-forming products. The tool, a matrix, asks two crucial questions: Does the product materially improve the user's life (or not)? And, would I use the product (or not)? These questions, which can be applied to technology development and usage, are not designed to produce definitive answers (though, they sometimes could), but to get product developers to think early and often about the purpose and far-ranging implications of their creations.

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ABNORMAL (UNETHICAL) BRAIN
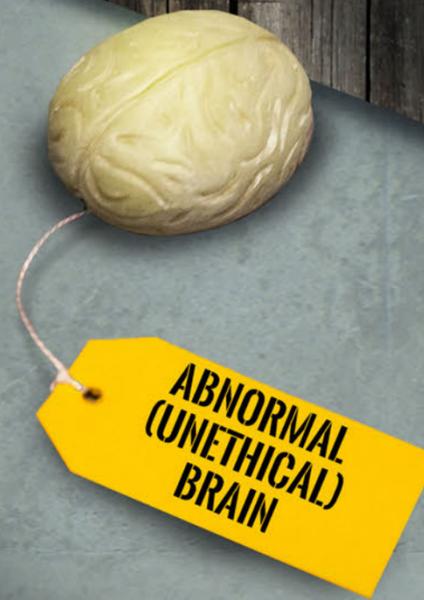
Despite these hurdles, technology ethics awareness, discussions and frameworks are advancing in business—and within universities grooming future leaders. University of Notre Dame's John J. Reilly Center for Science, Technology and Values publishes an annual list of emerging ethical dilemmas and policy issues in science and technology. The annual Baylor University Dale P. Jones Business Ethics Forum has examined a wide range of ethical issues, including technology, for the past dozen years.

The IEEE (Institute of Electrical and Electronics Engineers), the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity, is undertaking a massive effort to establish a framework for ethical considerations for technology developers and product designers. More of these efforts, and progress, is needed if real ethical guidelines are to be consistently applied to the science fiction-esque technologies most companies are implementing.

In a column published in a 1981 issue of *Compute!* magazine, Asimov acknowledged that his fictional "Three Laws of Robotics" were routinely cited, "quite seriously," in non-fiction publications as a model of conduct that technology developers should follow. Although he protested that his three laws were obvious, Asimov confirmed they were highly applicable to real-life technology activities. He emphasized that his laws were "the only way in which rational human beings can deal with robots." He concluded with a sober warning that also remains valid today: "...I always remember (sadly) that human beings are not always rational."

Happily, business leaders and other human beings are more apt to behave rationally and ethically when the right guidelines are in place. Getting them there does not require technological wizardry but good, old-fashioned character, commitment and collaboration.

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