Al Poses New **Ethics Issues for Companies**

Who's to Blame When a Robot Makes the **Decisions?**

By Ellen Sheng

As it gets smarter, artificial intelligence is performing more complex tasks. Whether it's diagnosing and recommending treatment for a medical condition, identifying and executing investments, or evaluating a loan application, Al's growing capability raises legal and ethical issues of having machines, rather than people, make decisions. Who is responsible when a decision goes awry?

Part of the difficulty of answering that question stems from the fact that the internal logic used by machine learning-a segment of artificial intelligencecan be opaque or difficult to explain. Despite what the terminology suggests, machine learning does not replicate human intelligence.

Consider the incident last year when Facebook's Al Research Lab described using machine learning to train two robots at deal-making. At one point, the robots deviated from human language to devise their own for negotiating. Such developments raise concerns about accountability and hidden biases, as well as liability.

The use of automation for a widening range of functions is creating some interesting challenges for lawyers when establishing liability and accountability. A sizable gap remains when it comes to assigning responsibility for decisions made and actions taken by artificial intelligence.

"Historic models we have been looking at for liability are up for grabs," said Michael Sinclair, an attorney with Norton Rose Fulbright, a global law firm.

Framing the Issue

The unintended consequences of artificial intelligence can be framed in two ways. There's accountability, which focuses on what is done during the design phase. Then there's liability.

Much of the focus around the ethics and regulation of artificial intelligence centers on accountability.

"There is always going to be something that will go wrong," said Martin Abrams, executive director and chief strategist of the Information and Accountability Foundation, based in Texas. One way to limit these unintended consequences is a concept referred to as stakeholder-focused stewardship, he said.



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"It's not about data but the issues around people," Abrams said. There's now more discussion about the ethics of artificial intelligence in part because more observational data is being used and the processing has become more automated. The intersection of massive personal data input and processing by artificial intelligence creates several legal and ethical quandaries.

One example might be cars with smart braking technology. Self-driving cars may be on the horizon, but meanwhile, auto makers are installing increasingly sophisticated systems that monitor driver behavior and the road. Smart braking technology anticipates when a driver will apply the brakes and road conditions.

These are all considered observational data points. When aging drivers who are slowly becoming less observant on the road start scoring lower on attention span, should a smart vehicle report this kind of observational data to the DMV?

Another example might be a smartphone app that tracks numerous observational data points such as location, movement, number of emails written a day, and so forth. Organizations are then able to assess what users are doing, but the accuracy of the assessment may be questionable.

An app called Ginger.io asks questions and tracks numerous data points to evaluate mental health-related behavior. If a user reports being highly depressed, but the collected smartphone data shows the person has been very active during the day, it would run counter to the reported mental state.

"Organizations need to have a process to assess what companies are doing with the data is ethically sound, not just compliant with the law," Abrams said.

In the Ginger.io example, "observational" data needs to be kept secure and private. Keeping personal data secure can be more difficult than anticipated.

"Machine learning, when exposed to training data, creates correlations using the data. This means that it becomes hard to separate the data from the system," said Sinclair of Norton Rose Fulbright. "This is a big issue for companies wanting to license in data to train Al systems."

Also, under Europe's General Data Privacy Regulation, if it has been offered to European citizens, the "logic" used to make a decision must be explainable to the user.

Liability is the other aspect that must be considered. Artificial intelligence makes figuring out who is at fault much more complicated.

"With a driverless car, if there is an accident (in the absence of mechanical fault) the question of liability gets pushed up the supply chain away from the driver. Is it the business that designed the AI system, the programmer, the business that provided the training data or the training, the manufacturer of the car or the retailer who will be liable?" Sinclair said. "Such issues demonstrate that AI has a very disruptive effect on traditional liability allocations."

Commercial Interests

Al also raises the issue of intellectual property rights. If artificial intelligence can autonomously generate data and create works, Sinclair said, what are the IP rights in those situations?

Many intellectual property rights laws around the world require a human creator, or at least a sufficient connection with a human. So regulators will need to figure out how to deal with Al-created works in the near future. There's also a flip side: What happens if Al autonomously does something or creates a work that infringes the IP rights of a third party? Who would be liable in such a situation?

These are questions that legal experts and regulators are examining, and there are no answers yet. Al is developing rapidly, and companies, eager to use AI to their advantage, are seeking ways to achieve legal and ethical compliance. That path will be complicated, with mistakes along the way.

"If you're ever afraid of making a decision because something might go wrong, then you'll never make progress," Abrams said.

Ellen Sheng is a writer and editor with a focus on business finance, fintech, and U.S.-Asia investments.



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