Artificial Intelligence in Safety—The Promise vs. The Reality

AI is currently all the rage and you can't attend a safety conference these days without someone giving some kind of presentation on it. Most of what I've been hearing are broad-brush assertions about what AI can "potentially" do for safety. But I'm not seeing as many practical, real-world examples of what people are actually doing with AI and how they're leveraging it for their own safety strategies and initiatives.

With that in mind, I thought I'd share a few of the practical ways that I've been using AI applications in the past few months.

ChatGPT & Copilot for Safety Procedures & Presentations

We've also been looking into using generative AI, typically ChatGPT and Microsoft Copilot, to create first drafts of safety procedures and PPT presentations. The operative word is "drafts." Although the AI output may be a good trigger/starting point, somebody with expertise must vet it for accuracy (generative AI is notorious for "hallucinations") and customize it to be organization specific. Even so, use of the generative AI applications can save a lot of up-front

development time.

Copilot to Analyze Behavioural Data

We use Copilot to assess/trend all our behavioural observations which we make using smartphones and barcode technology. This application saves us a ton of time on analysis because we don't have to sift through the observations individually or enter them into some other tool like Excel and run pivot tables or other data analysis on the observations. Copilot also provides great visuals of the data that everybody can understand.

I've also had some success with Copilot away from the office when my family doctor cautioned me that my blood pressure was starting to trend up. He suggested that I take and track my BP for a couple of months and then come back and see him. So, that's what I did. I then took the aggregate of all readings and asked Copilot to graph the two-month trends and give a summary of high, low and average. The doctor was quite pleased and said it was the most detailed BP summary he'd ever seen.

Getting the Most Out of AI

As with any other tool, if you don't know how to use AI, you won't get good results. The first thing to do is educate yourself. I completed an AI certification course before I dove into it and you might want to consider doing the same.

The next challenge is to pick the right AI tool. There are literally hundreds of AI tools on the market, with more and more coming every day. Here's a list of the current top 100. But as in all things in safety and in life, do your homework and due diligence before you even commit to using any AI tool for any reason.

You need to clearly define your needs and purposes and select the product that gives you the best chance of meeting those defined needs and purposes. There are other things about the AI application that you also need to consider like:

- Whether it's open or closed source.
- Whether it's compatible with your organization's IT infrastructure.
- Whether its deployment would pose any legal problems, such as privacy concerns, copyright infringements, or violations of current contractual obligations.

Once you pick an AI tool, you need to use it effectively. To get good quality results, you must provide clear and unambiguous instructions. Never assume that you can trust the first draft of anything that AI generates. Always check and verify the content before actually using it. And be careful of rabbit holes that can bring you to some strange places.

* * * *

I hope these observations and suggestions will prove helpful in your endeavor to deploy AI to improve safety. And in case you're wondering, no, I did not use AI to generate this article.

Wayne Pardy *is an international award-winning safety professional who has assisted many organizations develop and enhance their HSEQ management systems and software as a consultant, trainer, author, speaker and auditor. He is currently the HSEQ Manager with Quality Plus Inc.*