

The Future of Work and the Safety Profession

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Letter to the Editor

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Work, as we know it, is rapidly changing. Indeed, this trend has raised a lot of concern in different quarters.

Even as I write this, I begin to imagine a day in the near future when all you have to do is feed keywords into an AI bot, and it generates up to ten different versions of a single article!

Virtually all-existing industries have experienced a giant leap in technological advancement in recent years: agriculture, healthcare, finance, power generation, utilities, education, aviation, manufacturing, etc.

It is "worrisome" that the rate of evolution in modern technology is astronomical; so much so that the founder of Tesla, Elon Musk, recently cautioned that artificial intelligence will have negative impact on human civilization, a comment which founder of Facebook, Mark Zuckerberg, instantly retorted as false and misleading [1].

Of course there are three sides to the technology disruption debatefor, against and undecided. And to be honest, I don't know where I am.

Artificial Intelligence is being trained (by humans for now) to be able to do what humans currently do - but only better, faster, safer, and in some cases; cheaper [2]. Each of these adjectives may be independently explored to make a case for A.I., and you would be right.

However, in the health and safety profession, I imagine 40% of OHS jobs disappearing by 2030, earlier in advanced industrial nations, but later across Africa, South America and Asia; considering nascent nature of health and safety management framework, and developing industrialization.

For instance, Ford motor company already have a virtual reality ergonomics lab that closely monitors workers movements during car assembly [3]. Imagine the wealth of data that is being generated on man-machine interaction and failure modes? Now consider that being replicated across all industries, and then algorithms begin to byte.

With the huge data available from equipment performance and failure modes, human errors, accident investigation and regulatory citations, and performance metrics of leading organisations, it is easy to visualise all these going into building an artificial intelligence database; effectively eliminating the need for a human to develop, implement, manage and audit a safety management system.

Similarly, a lot of equipment manufacturers are already integrating Internet of Things into their equipment components; with a view to not only make the machine smarter, but also able to provide performance data with safety implications.

Who gets paid: Human or robot?

In my opinion, disruption by emerging technologies is inevitable.

Of course, costs of new technologies keeps going down with time and increased investment (solar and virtual reality comes to mind), making them more scalable and widely adopted, but they create (fewer) new jobs.

Our focus as human workers should be on continuous professional development on a societal scale, since new technologies don't entirely run on their own - there would forever be human components.

For instance, a lot of debate around ethics and moral judgement is still being deliberated for technology-specifically-robotics, [4] so ultimately, there is still breathing, feeling human who call the shots. Also, some technologies still require human supervision, although that might mean fewer pairs of human eyes, ears, hand and feet.

Various authorities have set out competency framework and skills requirement for health and safety professionals, and it was recently harmonized at the Singapore Accord [5].

But now, I believe there's a turn in tide.

Just as we have core skills, soft skills, and transferable skills, I think it is high time we add disruption skills. I imagine data analytics and autonomous inspection skills becoming increasingly important for the OHS professional of the 21st century.

Ultimately, the professionals who stay competitive will be those who upskill as technology evolves.

References

- 1. USA Today (2018) Elon Musk says AI could doom human civilization. Zuckerberg disagrees. Who's right? In M D Cava. USA TODAY.
- 2. Brady T (2018) Robots in the Workforce: The Benefits of Human and Robot Collaboration. MIT Tech Review.
- 3. Martinez M (2015) Virtual technology streamlines Ford's manufacturing. The Detroit News.
- 4. Conroy G (2017) Self-Driving Cars Could Make Moral Decisions Like Humans With a Simple Algorithm. Science Alert.
- Singapore Accord (2017) XXI World Congress on Safety and Health at Work. Singapore: International Network of Safety and Health Practitioner Organisations (INSHPO).