Mindful of Human Ethics in Digital Workforce

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In a recent issue of Technology Quarterly by the Economist, an article, entitled: **In Future … Humans will add to AI's (Artificial Inteligence's) Limitations**, expressed that '*The history of AI is of periodic bouts of over-excitement interspersed with "AI winters", in which (when) limits become apparent, enthusiasm drains away and funding is slashed.*' This evidently leads to a state that as humans become more and acceptably familiar with AI's mix of power and fragility, the humans may become reluctant to trust it with important decisions, in general.

Today's practices in AI homes in on the use of data sets accumulated from past records, and its leverage on a set of powerful learning algorithms. AI is hence able to develop a set of decision making patterns which encapsulates the wisdom from past experiences.

As in the old days, the term "garbage in, garbage out - GIGO" concisely summed up the importance of high-quality data. When the computers are given the wrong information to work with, the results they come up with are unlikely to be helpful.

Increasingly, biased AI systems are becoming a widespread problem just as Artificial Intelligence leaves the perimeters of the labs, and into the real world. At the same time, undoubtedly, the "democratization of AI" has significant and potential benefits by putting intelligent algorithms, and self-learning applications in the hands of the human users.

Yet, there is a very real danger that vulnerable groups in society could be hurt or have their rights impinged by biased AI. This is so, when proper training on data evaluation and spotting the potential for bias in data sets have not been established.

The reality is far less imposing. AI will be able to handle some of our daily tasks. It might be able to handle a few of our jobs. But it cannot do anything without humans behind it, not just to maintain and monitor it, but to provide the human touch that AI applications cannot. To top it off, biased AI can possibly do more ethical harm.

AI has led to the increased capability to handle a variety of tasks. But only humans have the empathy, understanding and suppleness that not only to guide AI, but to form the roles worth doing.

There are several reasons for the reality check. As a matter of fact, businesses, particularly big ones, often find change difficult to handle. It becomes especially obvious when the pivot involves massive streamlining. Firms tend to be misled by the success of the internet giants, which were perfectly placed to adopt the new technology. They were already staffed by programmers, and were already sitting on huge piles of user-generated data.

The uses to which they leverage AI, a minimum of which within the initial stage, relate to tasks such as improving search results, displaying advertisements and notifications, recommending new products or serves, and other similar tasks. Such activities were just about relatively straightforward to get by.

There is more to building an AI system than its accuracy in a vacuum. It must also do something that can be integrated into a working relationship between the human and the machine, and where the values of human ethics are in the digital workforce can be exemplified.

It was no more than two years ago that Google published a set of "AI principles", which suggested that AI systems ought to be "socially beneficial", "avoid creating or reinforcing unfair bias", and "be built and tested for safety".

Deciding on what application to use AI is more subtle problem to consider. Machine intelligence is incredibly different from its biological counterpart. This means that determining how difficult machines will find the task to perform is counter-intuitive. This is sometimes known to AI researchers as the Moravec's paradox – named after Hans Moravec, a Canadian roboticist, who noted that, though machines find complex arithmetic and system of logic easy to handle, they struggle with tasks like coordinated movements and locomotion which humans manage completely without any consideration, and intuitively.

Further, decisions taken by AI systems may affect everyone, everywhere, and anytime, entailing concerns about potential human rights issues. Thus, it is necessary to maneuver beyond traditional AI algorithms optimized for predictive performance and embed ethical and legal principles in their design, training, and deployment to confirm social good while still profiting from the large potential of the AI technology.

But it is not enough just to know that this bias exists. If we want to be able to fix it, we need to understand the mechanics of how it arises in the first place. The truth is more nuanced because bias can creep into the information well before it had been collected as well as at various stages of the deep-learning cycles of the (machine and/or deep) learning process.

By definition, a **digital workforce is** a scalable team of software robots that works alongside your human employees to accomplish repeated processes so humans can give attention to value-adding tasks. Rather than focusing on the time-consuming, arduous jobs, AI now allows employees to focus on how to harness the speed, reach and efficiency of AI to work even more intelligently. AI systems can also remove a significant amount of friction borne from interactions between customers and employees.

To fully benefit from the adoption of the Digital Workforce, it is important to consider at least three key metrics to measure the effectiveness of a digital workforce. It is important to continuously check for: usage, engagement and efficiency metrics to determine whether your **digital workplace** is improving productivity and team dynamics within your organization.

Unfortunately, the likelihood of making machines which will think raises myriad ethical issues. From pre-existing biases accustomed to training AI to dealing with social manipulation via newsfeed algorithms and privacy invasions via biometric authentication, ethical issues are cropping up as AI continues to expand in importance and utilization. This notion highlights the requirement for crucial conversations surrounding how we are able to responsibly build and adopt these technologies.

Consequently, as technology developers and manufacturers, marketers and people within the technology space, we have a social and ethical responsibility to be open to scrutiny and consider the ethics of AI, working to hinder the misuse and potential negative effects of these new AI technologies.

In the not so distant future, it will be not as if the world had created a second China, made not of billions of people and millions of factories, but of algorithms and humming computers.