Artificial Intelligence Offers Turbo-Charged Solutions **While Raising Concerns Regarding Security and Professional Integrity**

Artificial Intelligence (AI) has emerged as a hot topic in recent months and will likely continue to be front and center as 2024 unfolds. Government at all levels are struggling to determine both how and to what extent AI needs to be regulated and what impact such regulation may impact competition if not enforced uniformly.

The awareness of AI's potential benefits and threats has intensified with the emergence of Generative Pre-trained Transformer (ChatGPT). Developed by OpenAI and initially released in late 2022, ChatGPT has accelerated the discussion regarding the opportunities and concerns raised by AI. Although its basic function is to replicate human conversation in both oral and written form, it can also generate code and even debug programming.

The business world in general and the accounting profession specifically is front and center when it comes to exploiting this emerging advancement in technology. AI is increasingly being employed to automate business processes that prior generations of technology could not address.

Applications range from the sales cycle to account reconciliations. In addition, the forecasting of budget items and predictions of market variables are increasingly relying on the power of AI.

In the continuing pursuit of efficiencies and new opportunities, both industry and service firms are eagerly exploring the potential of AI. Developing AI applications will require significant capital investment and not be without risks. Only time will tell which applications will yield the intended benefits. The public firms are in many ways at the forefront of the effort to develop the technology.

DON CARPENTER, MSACC/CPA, is clinical professor of accounting at Baylor University. Contact him at Don_Carpenter@baylor.edu.

In late 2023, EY announced that it was debuting EY.ai., a technology platform resulting from a $1.4 billion investment. As part of its development program, EY partnered with Microsoft and separately with Dell Technologies to develop AI-based applications for its business and to assist clients with theirs.

The platform has embedded AI into existing technologies such as a chatbot that responds to employee payroll questions and AI tools to aid assurance teams in assessing risk. In addition, AI enhancements have been made to EY Fabric, a proprietary platform to assist clients with AI implementation.

EY is not alone in embracing AI as the profession becomes ever more technologically driven. It is estimated that the Big Four have invested over $9 billion to date in AI driven technology. PwC has implemented an AI-based system known as GL.ai to analyze documents and prepare reports. KPMG has invested in predictive tools and document readers.

An article by Deloitte may best outline how to categorize this massive investment:

- Product: AI embedded into a product

> The short-term impact of AI depends on who controls it; the long-term impact depends on whether it can be controlled at all.
>
> —Stephen Hawking

KEY TERMS:

ARTIFICIAL INTELLIGENCE

AI APPLICATIONS

CHATGPT

or service to provide enhance customer benefits;
- Process: AI technology to streamline workflow and increase productivity;
- Insight: AI designed to aid decision-making such as forecasting and budgeting.

AI applications are not limited to the Big Four but also offer valuable tools for businesses as well. Due to its ability to process vast amounts of data and improve its effectiveness through continuous iterations, it can be of great use in predictive analysis and forecasting. It may prove useful in analytical applications such as impairment analysis or purchase price allocations.

AI can also make detection of exceptions or anomalies quicker and more accurate, enhancing internal controls. It may eliminate the need to rely on samples but instead review an entire data set, potentially revolutionizing both internal and independent audit procedures. And finally, AI has greatly improved optical character recognition, allowing documents such as contracts and reports to be read and analyzed by machine.

However, AI has raised ethical and security concerns. A meeting in September 2023 between noted U.S. executives such as Elon Musk (Tesla), Mark Zuckerberg (Meta), Bill Gates (Microsoft) and Sundar Pichai (Google) and U.S. Senators focused on the need to regulate AI. It was widely reported that all agreed on the need for regulations but there was no consensus on what form and to what extent regulatory oversight should be shaped.

On a social level, such issues as the impact AI may have on employee well-being, protection of creative and proprietary rights, and disruption to the social framework have been spotlighted. Last year's strike by the Screen Actors Guild brought some of these risks into the spotlight. One of the points of contention involved the ability of the film studios to use actor's voices and images into perpetuity without their consent or compensation.

The Writers Guild voiced concern that AI can write or rewrite their material or use their material to be trained to produce original scripts. Although not directly related to the accounting profession, these issues highlight the concerns that AI raises in any profession.

AI has also been shown to be an effective tool in the dissemination of false information. In addition, it can violate privacy and promote bias. According to Stephen Hawking, "The short-term impact of AI depends on who controls it; the long-term impact depends on whether it can be controlled at all."

In response to concerns regarding AI, President Joe Biden issued an executive order in October of last year as an initial salvo in regulating its development and application. The broad order seeks to establish guardrails to protest privacy, avoid equity issues, protect jobs and prevent unethical uses.

The field is evolving rapidly and business professionals are not exempt from both the opportunities and risks it presents.

Want to learn more about emerging trends in AI? TXCPA offers a number of CPE programs. Go to our website to learn more and register.