Discussion 5: AI would be beneficial

Discussion Topic:

There have been a lot of studies on how to predict the manner in which people will react or respond in certain scenarios.
This week's article discusses how AI improves industries that may not seem to be ideal candidates.
Can you identify other industries or use cases where AI would be beneficial and could save money and/or increase efficiency?

My Post:

Hello Class,

Artificial Intelligence (AI) is expected to have a considerable impact on all industries, directly or indirectly, as early as the beginning of 2025, when the first AI agents will start to be implemented. Eric Schmidt, former Google CEO, AI consultant for the US military, and one of the most influential figures in AI, stated during a speech at Stanford University, that AI "is going to have an impact on the world at a scale that no one can yet fully comprehend" (Financial Wise, 2024, 3:37). In his speech, he used the word "impact" 11 times. The video was later removed by Stanford University because his comments about Google were deemed too controversial; however, the video is all over the internet. Ultimately, the impact of AI on society could be extremely beneficial or extremely damaging, depending on how it is implemented and for what goals.

AI is starting to impact industries that may not seem to be ideal candidates for AI implementations. One of these industries is mining. AI-power systems are being introduced to improve mine sites' efficiency by improving resource estimation accuracy. AI can efficiently examine geological data patterns and incorporate historical mining data resulting in more precise estimates of mineral reserves than traditional methods. This can help the mining companies make more informed decisions regarding investment, production planning, and resource allocation (IMAC, 2025).

Additionally, "AI has the potential to streamline mining operations and optimize asset management" (IMAC, 2025, p.1). AI can be integrated into Internet of Things (IoT) devices and sensors allowing real-time data collection. This will enable mining companies to monitor equipment performance, evaluate operational metrics, and identify potential bottlenecks. AI can also analyze the collected data to generate insights and predictions that can improve the companies' decision-making and prevent unplanned downtime.

Furthermore, AI-power systems can automate mining systems improving efficiency and safety in mining operations (IMAC, 2025). AI systems are getting better at controlling autonomous vehicles and machinery and becoming more efficient than human operators at performing tasks with precision, navigating complex terrains, and optimizing routes. This could minimize errors and risk of accidents; therefore, improving safety. AI can also monitor equipment health, detect anomalies, and schedule maintenance activities improving uptime and extending the lifespan of mining equipment.

However, AI implementation in the mining sector can also have negative effects; particularly the automation of mining systems has the potential to limit employment opportunities and even result in layoffs, as it would replace jobs traditionally held by human workers. In other words, the automation of mining operations, from autonomous vehicles to predictive maintenance, from data analyses to robotic drilling and excavation, would inevitably lead to job displacement. This raises troubling and complex questions about AI alignment; that is how AI systems can be developed and implemented to align with societal values and human needs. It is essential for society to understand those challenges and to ensure AI implementations that are balanced and beneficial not just to companies but to society as a whole.

To summarize, AI continues to evolve and is implemented in industries that may not seem to be ideal candidates, such as mining. This demonstrates that AI has the ability to impact all industries in the near future. Additionally, AI has the potential to be extremely beneficial or extremely damaging depending on how society implements AI and for what goals. Thus, it is crucial to ensure that AI implementations are balanced and beneficial not only for companies but also for society as a whole. The words of Eric Schmidt “AI is going to have an impact on the world at a scale that no one can yet fully comprehend” (Financial Wise, 2024, 3:37), resonate as both a warning and a promising future.

-Alex

References:

Financial Wise. (2024, August 18). *Eric Schmidt Full Controversial Interview on AI Revolution (Former Google CEO)* [Video]. YouTube. https://www.youtube.com/watch?v=mKVFNg3DEng

IMARC (2025, October). *From changing a tire to uncovering the next lode: How AI is revolutionizing the mining industry | International Mining and Resources Conference (IMARC)*. IMAC Global. https://imarcglobal.com/news/articles/how-ai-is-revolutionising-the-mining-industry