

## AI MYTHS AND REALITY

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The recent rally in US markets has in large part been fueled by the profit potential of artificial intelligence (AI). The chip maker Nvidia has had an impressive run rising over 200% in the past year, at the time of this writing. Its chips are being used in virtually every device.<sup>i</sup> I imagine this to be like what it must have felt like to live through the electrification age of the 1920s. But what is AI really? What is its potential and what are the risks we face with its adoption? There are unfortunately no black and white answers. In this article we will examine what AI is today and how it is being used, while also examining the socio-economic challenges that are occurring because of the adoption of this technology.

What is AI exactly. Let's start by what it is not. AI is not a consciousness that can think autonomously. There are various forms of AI. Weak AI (WAI) is the form we use today. It can analyse vast amounts of data, describe the data and recognize patterns so that decisions can be made. Essentially it can help to solve problems faster. Weak form always requires an operator to think up and create the parameters under which the AI functions.

Generative AI (GAI) is a form of AI where the systems themselves can perform tasks and can learn and apply knowledge like a human. Recent strides by Open AI's Chat GPT and Google's Gemini have ignited imaginations while providing interesting revenue streams for each company. Although these applications appear advanced, they are still in their infancy as is the field. This form of AI is decades away from reaching its true potential. Despite where the technology is in its cycle, the potential for increased productivity cannot be ignored.

Super intelligent AI (SAI) is another form of AI that exists in theory. This form is more science fiction than reality. Under this form, SAI surpasses human intelligence and is consciously aware of itself. It can create and think beyond the capacity of the species that created it.<sup>ii</sup>

The first quarter of 2024 built open the gains from the final quarter of 2023 in large part due to the impressive potential of AI. Microsoft, through its strategic partnership with Open AI, has been able to turn the potential of AI into a commercial reality through its cloud computing business Azure and some other applications. Earnings per share beat market expectations by an impressive 5.83% the last quarter which is no small feat given the size and complexity of the business. As a result, the stock rose approximately 15% in Q1 of 2024. On the hand Alphabet, the parent company of Google, failed to execute on its Gemini (previously BARD) AI applications. The stock fell by 14% from its February highs after announcing its previous quarterly earnings. Suffice to say, the market appears to be quick to reward and quick to punish companies based on their merits of actual cash generation involving AI. That dynamic is very different from the Dot Com boom in the late 1990s where just the mere mention utilizing the

internet drove stocks to high multiples compared to historical norms despite having no earnings to back them up.

The most incredible earnings story out of the gates related to AI has been felt in with the chip makers. Nvidia is the best example of this, but it's not the only company participating in the growth of this space. Advanced Micro Devices released their own chips to compete for market share and the results have impressed market participants. The stock has appreciated approximately 85%, at the time of this writing, over the past year. What we have yet to see is how the adoption and utilization of AI is improving the productivity and therefore profitability more broadly in mainstream firms. It's possible that early adoption has yet to produce material tangible results. It's also probable that we have yet to create the tools in the financial analyst community to tease out the gains generated by AI versus business as usual.

A common risk to the overall economy that is associated with AI is that more and more tasks are being automated, leading to jobs being threatened. Both white- and blue-collar jobs could be in the crosshairs. Imagine for an instant that self-driving technology is perfected to the point where the vast majority of cars on the road are autonomous. The likelihood is this would lead to less traffic violations and accidents. As such, we would require less police officers and less emergency room doctors. As ominous as this sounds from an employment standpoint it ignores the anti-thesis which is that it could lead to a more effective and productive use of current employment. Without having to focus on traffic violations, police officers could focus more on preventing crime like fighting rising car thefts. Emergency room doctors could be retrained to specialties where higher wait times are prevalent. Taken from this point of view, AI could be an incredible catalyst for improving outcomes for everyone.<sup>iii</sup>

There is good reason for the markets to be optimistic about AI. Certainly, the potential for productivity gains and new revenue generation cannot be ignored. But to be fair, outside of a handful of companies that are at the forefront of the AI revolution, we have yet to see the gains from its application. Despite this the market has rallied incredibly on the prospects of what AI can deliver. Markets can often overvalue potential and subsequently punish investors at an unforeseen future date. This brings up the importance of diversification and not chasing returns. In the long run markets tend to reward investors for their patience and pragmatism. Maintaining a healthy diversification strategy allows investors to participate in some of the gains of market fads while protecting them from major downslides. Investors who are unsure on how to allocate their investments among multiple classes of assets should seek out the help of a professional. We are likely to hear a lot more about AI in the coming years as it makes its mark on the world. Let us all be thoughtful in how we adopt AI into our daily lives.

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<sup>i</sup> <https://investor.nvidia.com/stock-info/stock-quote-and-chart/default.aspx>

<sup>ii</sup> [https://www.linqto.com/blog/artificial-intelligence-what-is-it-why-it-matters/?matchtype=&keyword=&cid=21141302290&agid=&device=c&placement=&creative=&target=&adposition=&devicemodel=&GA\\_loc\\_physical\\_ms=9000935&aceid=&network=x&gclid=EAlaIQobChMItYHf1OGwhQMVBXBHAR3FWgAVEAAYAiAAEgJadfD\\_BwE&utm\\_term=&utm\\_campaign=PMax\\_Stripe&utm\\_source=adwords&utm\\_medium=ppc&hsa\\_acc=7219273531&hsa\\_cam=21141302290&hsa\\_grp=&hsa\\_ad=&hsa\\_src=x&hsa\\_tgt=&hsa\\_kw=&hsa\\_mt=&hsa\\_net=adwords&hsa\\_ver=3&gad\\_source=1](https://www.linqto.com/blog/artificial-intelligence-what-is-it-why-it-matters/?matchtype=&keyword=&cid=21141302290&agid=&device=c&placement=&creative=&target=&adposition=&devicemodel=&GA_loc_physical_ms=9000935&aceid=&network=x&gclid=EAlaIQobChMItYHf1OGwhQMVBXBHAR3FWgAVEAAYAiAAEgJadfD_BwE&utm_term=&utm_campaign=PMax_Stripe&utm_source=adwords&utm_medium=ppc&hsa_acc=7219273531&hsa_cam=21141302290&hsa_grp=&hsa_ad=&hsa_src=x&hsa_tgt=&hsa_kw=&hsa_mt=&hsa_net=adwords&hsa_ver=3&gad_source=1)

<sup>iii</sup> <https://ssir.org/articles/entry/ai-impact-on-jobs-and-work>