Trump's tariffs and the prospects of a new 'AI winter'

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"Today, as the costs of training large models skyrocket, regulatory scrutiny rises and global tech tensions deepen, the conditions for another AI winter are not far-fetched." (Getty Images Photo)

AI's next 'winter' may pause the hype, but may have advantages of sparking reflection, fairness and sustainable innovation

Since 2011, the world has been experiencing one of the most vibrant periods in the history of artificial intelligence, often referred to as the third AI spring. The rapid evolution of generative models, particularly the emergence of ChatGPT, has not only accelerated AI development but also dramatically expanded its adoption across a wide range of sectors. Meanwhile, from an international relations perspective, as governments struggle to establish regulatory frameworks, the technological rivalry between the United States and China has intensified.

With U.S. President Donald Trump's return to power and the deepening of the U.S.-China rivalry, a new tariff war is taking shape, one that may significantly alter the trajectory of AI in the years to come. The history of artificial intelligence has never been a story of smooth, uninterrupted progress. It is cyclical, characterized by bursts of innovation and periods of disillusionment and retreat. These downturns, known as "AI winters," have historically arrived when expectations outpaced reality and capability, funding dried up or geopolitical and economic disruptions intervened. Today, with the prospect of sweeping new tariffs on Chinese technology, we may be

nearing the threshold of another AI winter. But perhaps, unlike previous ones, this winter wouldn't mark a failure; it might instead serve as a much-needed pause for reflection.

Lessons from past

While today's AI landscape feels unstoppable, history tells a more sobering story. AI has endured multiple "winters," namely periods when rising expectations collapsed under the weight of technical limitations, failed promises, and shifting political or economic priorities.

After AI became a new trend in 1965, the first AI winter arrived in the mid-1970s. Early hopes that machines could replicate human reasoning were shattered when systems started to struggle. Specifically, dramatic translation failures and limited speech recognition highlighted the gap between expectations and capability. Funding dried up, and AI was dismissed as overhyped.

The second winter came in the late 1980s. After the rise of expert systems, rule-based programs designed to mimic decision-making, governments again poured billions into AI. But these systems proved brittle, unable to adapt or scale. As expectations outpaced results, funding was slashed and optimism faded once more.

In both cases, AI winters were not just technical failures; they were also political and economic corrections. Governments and industries pulled back when AI could not deliver immediate, tangible returns. Today, as the costs of training large models skyrocket, regulatory scrutiny rises and global tech tensions deepen, the conditions for another winter are not far-fetched. And if history is any guide, a new winter doesn't come gradually; it descends fast, and it reorders priorities.

Tariffs, chips, techno-nationalism

In his second bid for the presidency, Trump has promised sweeping economic protectionism, especially in terms of tariffs on Chinese imports, including key tech components like semiconductors. These tariffs are not just economic weapons; they are geopolitical signals. His vision is one of decoupling: weakening China's technological rise while trying to restore U.S. dominance in critical industries, including AI.

But the semiconductor ecosystem, the literal hardware backbone of AI, is deeply globalized. Chips designed in the U.S. are fabricated in Taiwan, dependent on Dutch photolithography machines, Japanese chemicals and rare earth minerals often processed in China. Disrupting this intricate web with tariffs risks not only diplomatic fallout, but tangible damage to supply chains. What would the result be? Rising production costs, supply bottlenecks and ultimately, slower AI development.

Moreover, AI thrives on hardware and openness, the sharing of models, research, datasets and code. Trump's nationalist approach to AI mirrors an **emerging techno-authoritarianism** where global cooperation is viewed as a threat, not a strength. The more states weaponize AI and restrict flows of talent and technology, the more likely we are to see stagnation rather than innovation.

Winter worth having

When we talk about a possible AI winter, of course, it is normal to add a negative connotation with that. However, at a time when AI development is moving so fast, and we are following so slowly, maybe we should not rush to fear the winter. As the Turkish saying goes, even misfortune may bring hidden blessings, and perhaps an AI winter would be no exception.

The previous winters were painful because they forced the field to shed illusions and recalibrate. Today, amid the constant innovations, a slowdown might offer something we desperately need: time to think. Time to reassess our blind trust in large models and to invest in smaller, more efficient and more interpretable systems. Time to decenter AI from a few Silicon Valley giants and reintegrate it into public institutions, <u>universities and open-source communities</u>. Time to proceed with the necessary regulations that would help protect not only human rights but also humanity. Time to ask whether speed, scale and profit should continue to define technological progress.

Due to human nature, it is tempting for us to view every disruption as a threat, every political shock, market correction, or regulatory pause as a setback. Yet, in a world obsessed with acceleration, winter could offer balance, not a retreat from AI, but a more sustainable and inclusive path forward. So, if the Trump tariffs help trigger a broader slowdown in AI development, it will not spell the death of the field. Rather, it may mark a necessary transition.