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Deep Tech Needs More Than Government Advice

Union Minister of Commerce and Industry Piyush Goyal's recent remarks at the Startup Mahakumbh 2025 in New Delhi stood out for their rare candour. Questioning Indian startups' obsession with food delivery and quick commerce apps, Goyal asked bluntly, "Do we have to make ice creams or chips? Is retail trade our only ambition?" It was a much-needed reality check from a senior minister, urging Indian entrepreneurs to look beyond convenience apps and towards deep-tech sectors like robotics, artificial intelligence, and semiconductors.

This departure from the usual applause-only approach deserves acknowledgement. Government representatives typically prefer to paint a rosy picture about the India growth story, glossing over uncomfortable questions about the nature and direction of that success.

But as refreshing as his words were, they also raise an unavoidable question: if India's startup ecosystem is indeed falling short on deep-tech innovation, what has the government done to change that trajectory?

Goyal's comparison with China was particularly pointed. Chinese startups today lead in electric vehicles (EVs), battery technology, and semiconductors — industries that not only generate profits but also shape global influence. In contrast, India's startup landscape has been dominated by consumer-facing ventures promising faster deliveries rather than frontier technologies.

Yet, this is not a simple case of entrepreneurs lacking vision or ambition. As Zepto's CEO Aadit Palicha pointed out, his 3.5-year-old quick commerce company employs 1.5 lakh people and contributes over Rs 1,000 crore in taxes. These are substantial achievements in a country where job creation and tax compliance remain challenges.

Still, the minister's call to look beyond low-hanging fruits is timely. But such a call must be backed by action. Between 2014 and 2024, China invested a staggering \$845 billion in its startups, compared to India's \$160 billion, as pointed out by industry veteran Mohandas Pai. That figure highlights the enormity of the challenge. Deep-tech innovation requires not just entrepreneurial spirit but serious capital, infrastructure, and sustained policy support.

This is where the government's role becomes critical. India's R&D spending remains below 0.7% of GDP, compared to China's 2.4%. Venture capital naturally gravitates towards consumer tech, not because entrepreneurs lack imagination, but because the risk-reward equation in deep-tech is skewed without state-backed patient capital. It is only recently that measures like the removal of the Angel Tax have begun to signal an intent to create a more conducive environment.

Moreover, India has already demonstrated what is possible when government support meets private sector capability. The response of the Indian pharmaceutical sector during the Covid-19 pandemic is a case in point. Backed by enabling policies and expedited regulatory clearances, Indian pharma firms not only met domestic demand but became the pharmacy of the world — supplying affordable vaccines and medicines even to developed nations. It was a striking example of how Indian industry can rise to global leadership when provided with the right ecosystem. This success story underscores the core point — Indian entrepreneurs are capable of competing globally when supported by visionary policies and facilitative governance.

The same approach is needed now for sectors like semiconductors, battery technology, and advanced manufacturing.

That is not to say there are no bright spots already. Companies like Qure.ai in healthcare AI, Agnikul Cosmos in space technology, and Log9 Materials in battery innovation are pushing boundaries. But these are exceptions rather than the norm, often operating despite systemic constraints rather than because of supportive policies.

The government's flagship Startup India initiative, launched in 2016 with the promise of tax breaks, incubators, and funding support, has had its successes. But the reality on the ground suggests that deep-tech ventures still face daunting bureaucratic hurdles, delayed clearances, and limited access to large-scale funding. In contrast, China's coordinated strategy offers tax holidays, land grants, and robust talent pipelines aimed squarely at dominating future technologies.

Goyal's remarks, therefore, should not be seen as an indictment of Indian entrepreneurs but as a mirror reflecting the need for a stronger policy push. If the ambition is to see Indian startups building the next generation of EVs, semiconductors, or AI breakthroughs, the government must go beyond rhetoric. It must create an environment where deep-tech founders have access to risk capital, streamlined clearances, world-class infrastructure, and advanced skill-building opportunities.

India's startup ecosystem has created jobs, improved efficiencies, and generated substantial economic value. But the next leap — from consumption-led innovation to cutting-edge deep-tech leadership — will require more than inspirational speeches. It will require policy muscle, long-term investment, and the removal of systemic roadblocks. Piyush Goyal has held up the mirror. The next move must come from those who hold the levers of power.

comment



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Some others expressed their interest in integrating the BRICS.

It is surprising to see how the position of the so-called Western countries (the G7), once considered all-powerful — when nothing was done without their consent or approval, dominating and exploiting third world countries — is today being surpassed by some previously colonised ones. Naturally, no one wants to lose their position of prominence, seeking to continue to say the last word on various matters, as do the ruined nobles who do not give up on imposing a particular image and exercising the special rights defined for them.

Old colonies: With suffering and loss of many human lives, almost all countries freed themselves, first from the colonisers, gaining autonomy to organize and overgrow in the economic sphere, and then focusing all their attention on food, education, healthcare, promoting Agriculture,

The politically inspired intergovernmental Economic Group, G7, was born to expand the market economy, their basis for rapid growth. It emerged to respond in a coordinated manner to threats, such as energy security and others. The group comprises countries seen as the richest, with a total population of 780 million: Canada, France, Germany, Italy, Japan, United Kingdom and the United States.

The combined GDP of the G7 countries was \$44.64 trillion in 2022. They comprise about 10% of world's population and account for almost 30% of GDP measured in purchasing power parity (Statista).

More recently, the BRICS emerged as a counterweight to the world order dominated by the US and its Western allies. The BRICS are an alternative global mechanism promoting economic and social growth, especially when international institutions are tense.

The BRICS countries comprise Brazil, Russia, India, China, and South Africa, with a population of 3.3 billion, China and India having 1.4 billion each, and the other three having around 420 million. The combined GDP of BRICS countries is over \$60 trillion, higher than that of the G7 countries.



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Locals should report roadside cooking by tourists

It is learnt that the government has directed the police to take strict action against tourists who carry gas stoves and LP cylinders to cook food by the roadside, a practice which is tarnishing Goa's image as a tourism destination.

All tourist vehicles will reportedly be thoroughly checked at Goa's borders and gas stoves and cylinders found in their possession will be seized. It seems necessary to extend this ban to stoves and carrying kerosene in cans. Even then, low-budget domestic tourists could be using firewood for cooking by the roadside. With trees being cut for road-widening, firewood, dry twigs and dry leaves that can be used for cooking will never be in short supply. Police should also seize cooking vessels used for cooking from tourist vehicles. It is learnt that tourists can rent out a place to cook and eat. Will gas stoves and gas cylinders be provided to the tourists to carry out the cooking at such rented places.

These tourists do not want to spend on hotel accommodation and having meals in the restaurants. The only thing they buy in Goa could be liquor bottles. They either sleep in the vehicles or on top of it. Some even sleep on the beach sand, in the parks and open fields. They then leave behind all the garbage for the local authorities to clear. The police force may not be sufficient to act against roadside cooking. It

G7 and BRICS must commit to developing countries

Manufacturing and Services, for the good of their citizens.

Some have taken giant leaps in vital areas like Intellectual, Scientific and Technological spheres. Still, others freed themselves from economic systems that oppressed them, moving towards free initiative systems (as India) with a call to all citizens to participate in the country's recovery.

Economic and other improvements: In poor and exploited countries, when there is a specific amelioration in economic aspects, all sectors can evolve quickly, given the availability of financial resources.

Until a few years ago, it was the G7 that dictated the rules and set the agenda for action. Today, BRICS has growing importance, with ample reach, representing a population almost three times the population of the G7. It has a rapidly growing economic power and an increasingly important role in science and technology.

For a long time now, no country could fail to take China as a reference for growth during a dazzling period of impressive progress from the 1990s to 2020 due to its advances in manufacturing and building of high-class infrastructures.

China began to slow down about four years ago. At the same time, India and other smaller Asian nations continued consistently at their pace, albeit with less but consistent growth rates (6.5% per year in India).

China and India were constantly looking at each other. Could India grow at the same pace as China? India's long stagnation, due to its economic model copied on the one of the Soviet Union, from independence to 1991, with a centrally planned economy, contrasted with China's, which from 1980 was lively and liberal in its economy, although authoritarian and centralised in its politics.

Good governance is crucial : A country's governance is vital for its development. Generally, when people have initiative and capabilities, allowing them work within the political frame is the best solution. The worst seems to be of a government, even democratically elected, wanting to impose ideology-based policies that the people do not support and end up destroying the country's initiative and economy. I am thinking of Venezuela and Argentina till some years ago.

When, in addition to democratic choices, the government wants the best for the citizens and the country, creating attractive conditions to launch initiatives and take risks is the best way to move the country forward. The creativity of citizens, combined with their capability for entrepreneurship, is definitely the lever to get any country moving fast to unimagined situations.

G7 and BRICS must help others: The two major groups want to present themselves as an alternative to each other. Still, it would be in the interest of the poorest populations worldwide that they collaborate and align their objectives to help all countries, especially those in Africa, Latin America and Asia, achieve good development.

In Africa, the exploitation of the colonisers and the forcible imposition of the new organisation modeled along the lines of the colonising country, with the invention of slavery and apartheid, the dominators ended up destroying the social fabric. "They sold" more than 12.7 million enslaved people to send to America and left Africa irreparably destroyed, with a social organization that had nothing to do with their traditional one.

Therefore, it seemed logical that the G7, mainly composed of former colonisers, should pay decisive attention to helping Africa. The way to help must be simple but effective: buy them (each to their ex-colony) what they produce in agriculture or industries and invest in them to create and export more and more. The best way of helping any country is trading with it!

The BRICS, along with Spain, should pay more attention to South Hemisphere countries (Latin America and South Asia, namely the Philippines) and trade with them so that they can reach high levels of development.

Hopefully, the Group of Twenty (G20) appeared as a forum for international economic cooperation between the world's leading economies. It was established in 1999 to discuss economic and financial issues. The G20 has since expanded its focus to include climate change, trade, and sustainable development.

Besides what one country does by its initiative to help others, with some coordination of actions, the global impulse could help developing countries to grow quickly, strengthening local institutions to become protagonists of stability. And promote high-quality education, which will, in some time, prepare professionals to serve the population in healthcare and wealth creation.

It would be engaging the G20 in its meetings to review the progress in helping and sharing positive experiences that countries individually had in supporting them. The recent G20 Joint Finance and Health Ministerial Meeting in Rio de Janeiro highlighted the potential of the swaps (debt-for-health) to alleviate debt burdens while strengthening health systems.

(The Author is Professor at AESE-Business School (Lisbon), at I.L.M. Rohtak (India), author of The Rise of India)

letterstotheeditor

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Make no mistake, they are coming after all of us. Martin Niemoller enunciated the silent complicity of the intellectual class and clergy which enabled the rise of the Nazis thus, "First they came for the communists and I did not speak out because I was not a communist, then they came for the Jews but I did not speak out because I was not a Jew, then they came for the Catholics but I did not speak out because I was a Protestant; then they came for me and there was no one left to speak for me." It takes just an iota of common-sense to understand that.

Vinay Dwivedi, Benaulim

Trump's tariffs remind of Nixon's shock

In 1971, Republican President Richard Nixon stunned the world by severing the US dollar's link to gold, dismantling the Bretton Woods system and reordering the global financial landscape. Over five decades later, another Republican, Donald Trump, unleashed a different kind of economic tremor: protectionist reciprocal tariffs aimed at redrawing trade balances in America's favour.

The similarities are striking — both men made unilateral moves that disrupted established systems. But the world of 2025 is not the world of 1971. Then, the US was the undisputed economic hegemon. The dollar reigned supreme, China was a non-factor,

and global trade was US-centric. Today, China leads global trade, the world is multipolar, and America's dominance is contested on all fronts — from AI to rare earth.

Nixon's shock reset the rules. Trump's actions may undermine them — and US leadership with it. As the US steps back from multi-lateralism, others are stepping in. New alliances, alternative currencies, and regional trade blocs are re-configuring the global order.

If 1971 was about asserting hegemony, 2025 may mark the moment hegemony slips away — not with a bang, but with a tariff. The world is no longer waiting for the U.S. to lead. In fact, it may be preparing to move on.

Gopalaswamy J, Chennai

Manoj Kumar, a true legend

In the demise of actor, film director, screenwriter, lyricist and editor Manoj Kumar Indian cinema has lost one of the finest actor and most successful film makers who redefined the art of film making with a speciality of its own.

Born as Harikrishna Giri Goswami changed his name to Manoj Kumar inspired by a character assayed by his favourite hero Dilip Kumar.

His commitment and dedication to movie making makes him one of the greatest Indian actor cum film maker of all times. He was also one of the most successful film

people'sedit

FROM BEING AWAKE TO AWAKENED

CHANDER GUPTA

Homo sapiens exist alternately in two states: either asleep or awake. When we are asleep, our body and mind get rest and rejuvenation. At the same time while we are asleep, some stirrings at subconscious level manifest in dreams. These stirrings at subconscious level, at the time we are asleep, dilute the soundness of our slumber.

The quality of sleep is contaminated by dreams in which we are both an actor and the sole spectator. The dreams which sprout from our own subconscious must be having roots in our past and prejudices.

The way subconscious stirrings keep us a bit wakeful while we are asleep, the same way the subconscious buzz lulls us into sleep mode when we are awake. Our subconscious catches us unawares in both our states of being awake or asleep. Paradoxically, our subconscious is more dominant when we are in awake state.

Are we 'awakened' when we are awake? The answer will be 'not always'. During much of the time when we are seemingly awake, we are actually in 'sleep' mode. This analogy with computer systems underlines the point that human brain tends to lapse into sleep mode when it is not in awakened mode. Awakening happens when we emerge from the depths of subconscious.

What happens when we are in 'sleep' mode i.e. when we are awake but not awakened? We fumble, falter, stumble, react, forget, and so on. Obviously there are pitfalls in acting, or rather reacting, from the sleep mode. We tend to forget things. After we are awakened by some jolt, we exclaim 'oh! it did not occur to me'. If we are not in fully awakened state, we tend to over-react to situations that suddenly confront you. We commit mistakes. We fail to seize opportunities.

Who will awaken you? It will only be sparsely that someone else jolts you out of your slumber before it is too late. We have to ourselves cultivate in a sustainable manner the practice of awakening ourselves when we are awake.

A few simple tips illustrated here for awakening yourself, if practiced regularly, will further lead you to evolve on your own more such techniques. At the time when you access your email account, stop and correctly recall your login credentials. Don't we often at first attempt enter wrong particulars because we are in sleep mode? Don't we often at first attempt press the wrong button on the switch board? Switch to awakened mode by stopping and figuring out the correct button before your finger presses a button involuntarily. While moving the key in the keyhole of a lock for opening it, first think whether it is to be moved clock-wise or anti-clockwise. Likewise while moving the cap of a bottle to open or close it, the anti-clockwise and clockwise principle should be followed. Observe your surroundings and register details in your mind. Inhale deeply with your eyes closed for five minutes or so after every five- six hours. Listen carefully. You can keep awakening yourself if you follow practices like these a number of times in a day.

Evolve from just being awake to 'awakened'. The more awakened you keep yourself, the less interfering will be your subconscious. The awakened state not only eradicates negativity from the subconscious but more decisively lets you take hold of the reins of the life in your own hands.

makers in Indian cinema. He was particularly known for acting and making films with Patriotism and nationalism as the main themes. His films 'Shaheed',

'Purab Aur Paschim', 'Upkaar', 'Roti Kapda Aur Makaan', 'Kranti' are cinematic masterpieces that have made it's way into the Indian cinema hall of fame. Apart from patriotic movies, he also showcased his excellent acting mettle in hit movies like Woh kaun thi?, Himalay ki God mein, Gunnaam, Shor, Dus Numbari, Pathar ke sanam, Shor and Sanyasi to name a few.

His ability to balance romance, drama, and social messages makes him a legend.

Songs played an important role in his movies and most of them are evergreen numbers that have passed from generation to generation without fading. Manoj Kumar's contribution to Indian cinema earned him a National Film Award, Padma Shri in 1992 and in 2015, he was honoured with the Dadasaheb Phalke Award. He instilled a sense of love and pride for the country through his films.

M Pradyu, Kannur

Gone but will never be forgotten

As we mourn the sad demise of filmmaker and actor, Manoj Kumar, who expired on April 4, who is always be remembered as Bharat Kumar for patriotic movies, he gave the film industry and his movies moved people into patriotism. We always pray for the repose of his soul and may his soul Rest in Peace.

Cajetan Peter D'Souza, Mumbai