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Between the Giants: India's AI Strategy in the Age of US-China Competition (2018-Present)"

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Abstract

Intensive rivals between the United States and China in the field of artificial intelligence (AI) have important consequences for the AI strategy and development. India is based on complex geopolitical landscapes, as the two superpower is competing for control in artificial intelligence technology. The US-China AI competition is driven by the desire to achieve technological supremacy, which has far-reaching consequences for global innovation, economic growth, and national security. India, this rivalry presents both challenges and opportunities. On the one hand, it requires a strategic approach to safeguard national interests and ensure technological sovereignty, while on the other hand it also presents an opportunity to leverage the advances of both countries to strengthen our own AI ecosystems. This paper explores how the US-China AI competition influences India's policy decisions, research priorities, and investment strategies in AI. The study examines the potential for collaboration and competition in the AI domain, highlighting the opportunities and risks for India's technological advancement. By analyzing the strategies of the US and China, this paper aims to provide insights into how India can develop a robust AI ecosystem that ensures both growth and security. The findings aim to inform policymakers, researchers, and industry leaders on crafting an effective AI strategy that ensures sustainable development and national security for Indi

Introduction

Many have called this century the era of AI, and rightly so. Modern AI technology will transform health, military, communication, transport, business, and entertainment. But as AI shifted its focus, the US and China are playing another race, called the ‘AI Race.’) Technologies can transform almost every aspect of human life, from healthcare, defense, communication, and transportation to finance and entertainment. AI is becoming more essential, leading to a rivalry

between the US and China called the ‘AI Race.’ The AI competition is like the Nuclear Race of the 20th century: a competition for technical domination that will alter global socio-economic and geo-political structures for decades.Almost every component of artificial intelligence relies on technology and huge data resources, which are refined and finely tuned to drive AI system development and dominance.Since China and the U.S. have strengths and limitations in both sectors, the U.S. may be in a strong position to maintain its AI competitive lead over China. However, American advantage needs transitory and overlapping values-based affiliations and domestic capital directed to real American concerns about STEM education, lost industrial bases, foreign talent recruitment, and data AI ethics. China can quickly close the AI gap if the U.S. is not progressing in these domains. It's also true that more societies imply more value, and although the U.S. and China benefit most from AI integration throughout society, their global competition is embedded in international collaboration. Today's international community is fluid and unpredictable as all governments grapple with data sovereignty, the future of multinational companies empowered by AI across borders, and critical supply chain nodes affecting the AI sector and escalating national security concerns. Interconnectedness of global economy, uncertainty of AI usage and application, and decentralization of technological centers and crucial supply components modify dynamics where the U.S. and China need to cast the web to influence AI goals. India and China have stepped up to create AIs.They use various techniques and face distinct challenges. China has a centralised, state-led strategy, action plan, and goal to invest in AI, whereas India is developing but has issues with execution, support, and coordination. This topic is also crucial to China's governmental development ambitions. The 2017 “New Generation Artificial Intelligence Development Plan” outlines a 2030 plan for China to become the global AI powerhouse. In AI research, data structure, and talent development, China has invested heavily and recruited heavily. State-majority-controlled firms like Baidu, Tencent, and Huawei make up its AI value chain. Government funding for an AI-based industrial platform helps these enterprises create AI applications autonomously. Chinese population size provides vast data, which is vital for AI growth. AI is widely used in Chinese security, health, civic, and automotive sectors. China is competitive in AI development due to top-level policy, investment, and technology regulation.

India uses AI more dispersedly than China, which uses it strategically. India understands AI's function and has a plan, but it lacks China's stringent and coordinated activities. The 2018 National AI Strategy from NITI Aayog in India highlights AI's societal advantages and suggests using it to healthcare, agriculture, and education. No clear vision for AI has made it sluggish and shaky, he said. Implementing AI policy in the nation is difficult due to political desire, institutional diversity, state interests, and federal structure. India has one of the most robust AI ecosystems, although China has more investment. AI research in India is largely done in universities and a few IT firms, which limits innovation as in China's SICT enterprises.

India has serious infrastructure issues. China is leading the way in creating world-class AI research labs and data centers, while Indian AI is behind. Lack of high-quality data for AI and connection challenges in remote areas plague the nation. India also has big data development concerns including privacy, digital immaturity, and limited internet penetration in certain places. India has rich data in agriculture and healthcare, but there are no organized data collecting mechanisms, limiting huge AI. Another important concern is talent retention. India has a strong STEM education culture, and many IT graduates are conversant with AI and machine learning. However, people from India relocated to the US and other wealthy nations for better AI research and employment opportunities. China recruited worldwide talent using fiscal incentives and monetary assistance to create an AI research ecosystem. Through state-led AI-friendly initiatives, China has maintained its top position.

India has various AI business potential specific to it. AI's ability to tackle national social and economic concerns is its biggest benefit. India has a large population and can build AI solutions for most developing nations, making the technology more useful in farming, health, and education. AI can create cost-effective, mass solutions that improve service use and efficiency. AI-based diagnostics and remote consultation may help solve the country's health sector issues. Additionally, the Indian startup ecosystem, particularly in Bengaluru, has lately been developing AIs and may grow.

Geographically, India has an advantage over other nations. China uses AI more aggressively to serve its military and security objectives, whereas India may be more moderate. India has a unique opportunity to engage with developing global powers like the US and lead an open AI future by concentrating on AAIS solutions to benefit society. English-speaking engineers are abundant, allowing collaboration with international organizations and universities...

Literature Review of the topic:

The emergence of artificial intelligence (AI) has become a key element in the technological competition between the United States and China, with both nations heavily investing in AI as a central driver of their economic and geopolitical agendas. Researchers such as Brynjolfsson and McAfee (2014) and Jouini and Berar (2020) emphasize that AI is not only a tool for economic advancement but also a strategic asset in the realm of national security. Positioned between these two technological giants, India has developed its own AI strategy aimed at fostering national growth while participating in global AI governance without directly aligning itself with either superpower. The AI strategy outlined by NITI Aayog in 2018 prioritizes inclusive development, with a particular focus on sectors like healthcare, agriculture, and governance (Rao, 2019; Kumar & Varma, 2019).

India's approach to AI is centered around the concept of "AI for All," with the goal of ensuring that the benefits of AI are widely accessible across the population. Bedi and Khan (2020)

highlight India's ambition to build a collaborative AI ecosystem, but Chatterjee et al. (2020) argue that the country faces substantial obstacles, such as inadequate funding, concerns over data privacy, and the digital divide. India's policy framework emphasizes cooperation with global organizations like the Global Partnership on AI (GPAI), with scholars like Mishra (2021) noting that India aims to play an active role in shaping international AI governance in ways that align with its democratic principles. Despite its potential, however, India falls behind China in terms of state-sponsored AI infrastructure and private-sector investment.

India's AI policy has also faced criticism regarding implementation, particularly due to limited investment in research and development, a shortage of AI education, and infrastructure gaps (Sharma & Gupta, 2022). Srinivasan (2020) argues that AI initiatives in India must be designed to ensure equitable growth, particularly benefiting marginalized communities. However, Iyer (2022) points out that these objectives are impeded by infrastructural deficits and the absence of a unified national AI strategy. Although India's tech sector is growing, it struggles with scaling AI solutions because of these systemic challenges.

In summary, India's AI strategy exists within the broader context of global competition between the U.S. and China. While the country has made progress, particularly in using AI for societal good and fostering international partnerships, significant challenges remain in realizing its full AI potential. The literature suggests that to stay competitive and influential on the global stage, India must continue to invest in AI research, enhance its digital infrastructure, and ensure that the benefits of AI are broadly inclusive.

Questions associated to the Research:

1. HOW USA – CHINA rivalry is affecting the structural perspective how India is strategizing artificial intelligence and development?
2. Towards understanding the impacts and depictions of artificial intelligence in India social and economical factors influencing AI technology?
3. How India is managing relations between being a strategic collaborator of both the US and China and at the same time pursuing strategic autonomy in AI development?
4. HOW ethical concerns and policy decisions made by India influenced the development and deployment of Al technological advancements?

Theoretical Paradigms associated to the topic:

Global interest and investment in AI have increased due to dramatic breakthroughs in machine learning, computer capacity, and 'Big Data.' AI has the potential to transform health, education, transportation, security, weaponry manufacturing, and cyber security. States are scrambling to acquire this new technology, therefore researchers are considering its effects on IR.Some experts

are optimistic that AI may improve global health and trade liberalization, while others are paraphernalic, arguing that AI promotes disputes and erodes.It is believed to revolutionize life as we know it, affecting healthcare, education, transportation, military, weapons development, and cybersecurity. As governments race to acquire this new technology, researchers are considering its effects on international relations. Some experts believe AI may enhance global health and commerce, while others fear conflict escalation and degradation. The Realism theory in International Relations (IR) helps explain the dynamics of AI development in India and China. Most IR theories are realism and support the premise that the international system is anarchic with players seeking power, security, and self-interest. Power drives international relations, and states are agents who act in their rational self-interest and seek security. In order to gain prestige, protect themselves, and secure their riches, India and China are employing AI to achieve their political and strategic aims.

Concept of Realism and the Pursuit of Power through AI:

At the heart of Realism is a premise, that states behave in manners that are likely to increase their power and their security. In the case of AI both China and India regard the building of AI as a vital mechanism to enhance their country power position and secure their standing in the international system. China has already developed a clear plan of how it wants to achieve the leadership by 2030 under the strategy outlined in the "New Generation Artificial Intelligence Development Plan of the People's Republic of China" issued in 2017. It is quite realistic by mindset origin, as China sees AI not just as the instrument, but as a way to become a global superpower of the new kind capable of challenging the United States in both military and economic dimensions. This paper thus analyses China's serious and sustained efforts in AI in the broader context of its attempt to garner power in a world that increasingly operates by win-win bipolarity. Majd critics have pointed out that the realist school of thought would suggest that within an anarchical international system states will look to pursue power and that China's pursuit of AI power is a rational tool to bolster its power and military.

Like China's approach, India's approach to AI is also more decentralised and driven by the principle of 'inclusive development', but, basically, it is also motivated by the desire to serve the national interest. India does not have the level of state synthesized plan and coordination as China does; however, India understands that the development of AI is critical to improving its chances on the global stage. India's National AI Strategy was released in 2018 by NITI Aayog with a view to realize AI's potential for transforming society in terms of improving quality of life with focal areas in health care, farming and education. But according to the Realist view, the interest of India in the AI is also having another reason – to strengthen its place in the world that become more and more depend on the technology. India wants to invest in the AI technologies, despite the fact that its approaches are not as aggressive as those of China, to strengthen its technological position, which is crucial for the preservation of the country's great power status

and the recognition of its place in the new world order. With AI, India wants to achieve strategic equities in South Asia – particularly in relation to China which is perceived as a competitor.

The Competitive Nature of AI & the Anarchic World:

Realism refers to the international relation theory that lays much focus on the structure of interstate system as anarchic hence the need for states to self-possessed in order to survive. The present AI race between India and China is the perfect representation of the above competitive environment. They also both realize that AI is not only going to define future economic development but will be instrumental in the future in military application as well. The advancement in broad classes of AI technologies including autonomous weaponry, and cyber-security and surveillance systems is set to revolutionize the power landscape. From REALIST perspective, this rivalry is perhaps natural because both, China and India are vying to control technological and military might. The country sees AI as a core part of the plan to compete with the United States, especially in technology and military. When AI is on its course of changing the international system, its capability is considered as a way through which China can establish its dominance locally and internationally. India's strategy however, as is more moderate, is also defined by the same mechanism of India's need to address the prospect of China's increasing technological dominance. It is well understood in India that lack of AI capabilities may lead to an emergence of external threats which may essentially diminish its regional power. Therefore, India's AI strategies, while targeting social cause, align with the competence of the Realist paradigm of national security and economic prowess.

State-Centric Decision-Making and the strategy of AI:

According to the Realism political theory that is dominant in the study of International Relations the state occupies a central place. In Realist theory, the world consists of sovereign states which behave as unit and rational players in the international system whose primary objective is to enhance their level of security. The India and China AI vision has their programs and agendas deeply rooted in state-guided policies. In China, therefore, due to the centralized authoritarian system of governance, decision making is easy and quick and they are in a position to marshal resources towards the development of artificial intelligence swiftly. The Chinese government has led the formulation of AI policies, has orchestrated the development of AI technologies and invested in these through the strategies of its major technology firms, including Baidu, Alibaba, and Tencent. In a Realist view, this means that AI development is directed to fit more into China's overarching strategic objectives. India however can be said to be struggling with a more fragmented system where development of AI is tackled by several individual state entities, private enterprises, and academic institutions. However, the Indian government has understood the role of AI in national development and security31 due to its AI Strategy. Lacking a unified and unambiguous focus of AI development like in the case of China, the state in India plays a

key role in determining the general orientation of the AI industry and coordination of its activities across sectors. Both in the U.S and China state-driven development of the AI highlights the Realist premise that national power and security interests are determined by government decisions especially in the definition of technology and military power.

Strategic Partnerships and Distribution of Power:

Litigation is also an important characteristic of the international system as well as the balance of power within these alliances. China as well as India has understood that AI is a critical element that defines their geopolitical alignments and countervailing against foes. China's rise to domination of AI is part of its larger strategy to become a superpower that can compete with the USA. AI is critical for China's geopolitical plan of becoming a powerhouse in both technology and military domain. To India, AI is a way to counter the rising power of China especially in the Asian region. India's increasing partnership with the United States concerning research in AI effectively represents the Realist rationale for collaboration to deal with risks. Intersectoral collaboration in the AI sector helps India avail advanced solutions and at the same time guarantees that it will not be dominated by Chinese technologies in the future.

USA and its AI centric Dominance:

The US is committed to ensuring the proper embrace of AI technologies that serve as tools to make people in America and around the world safer, more secure, and more prosperous. The US aims to properly develop and employ AI technology for good, promoting safety, security, and prosperity for Americans and others worldwide.

The US overshot at the conclusion of the war, allowing it to dictate its security objectives to other countries seeking access to the world's greatest market. An international system based on liberal values, which underpinned globaliza, made it possible to define those interests in terms of a rules-based order that protected smaller countries' sovereignty and promoted mutual economic growth.The US aims to properly develop and employ AI technology for good, promoting safety, security, and prosperity for Americans and others worldwide.

The US could force its security interests on other nations seeking to enter the U.S. market due to its postwar preeminence. The definition of those interests in terms of a rules-based order that protected smaller countries' sovereignty and facilitated mutual economic growth was a welcome change from historical norms, in which powerful states dictated terms to smaller ones and international economics was zero-sum. The liberal international order paved the way for globalization, alleviating poverty and reducing bloodshed between major countries. It ended the Cold War and gave the West the upper hand, but the Soviet Union could not keep up. Recent technological advances are signaling a positive bias on productivity growth, which is fueling the growth in advanced economies

that has eluded them for three decades. The US aims to properly develop and employ AI technology for good, promoting safety, security, and prosperity for Americans and others worldwide.

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The globe admires, envies, and resents the US's growing supremacy in artificial intelligence. Advancements in technology are boosting productivity projections, enabling growth in advanced economies previously unattainable for decades. Early this year, Google CEO Sundar Pichai declared AI a crucial area of human endeavor. I think it goes deeper than electricity or fire."

It's a bold remark, but it's one of several made in 2018 that reflect the technology's apparent potential and allude to a recurrent storyline in news coverage: the future is here and AI is the future. The AI Index 2018 Report notes that publications, patents, conferences, and jobs in AI are still rising to record highs around the world, t the well-being and security of people everywhere. The US aims to properly develop and employ AI technology for good, promoting safety, security, and prosperity for Americans and others worldwide.

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It's a bold remark, but it's one of several made in 2018 that reflect the technology's apparent potential and contribute to a prevalent storyline in news coverage: AI is driving the future. The worldwide value of AI business is expected to rise 70% to US$1.2 trillion from 2017 to 2018. The AI Index 2018 Report indicates a record influx of AI-related publications, patents, conferences, and job vacancies worldwide. Though attempted in 2018, the National AI plan was released in early

2019. Artificial intelligence is becoming increasingly vital to society, so the U.S. government started planning how to handle it. By constructing and sustaining U.S. Ethics, employment, and national security issues may be addressed by AI. The Joint Artificial Intelligence Center was established in 2018 to accelerate the development of AI applications across the US Department of Defense. The US has more venture capital invested in AI start-ups than the rest of the world, according to Stanford HAI's latest AI Index record. The US aims to properly develop and employ AI technology for good, promoting safety, security, and prosperity for Americans and others worldwide.

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Venture capital investments in AI startups in the U.S. surpass those in the rest of the globe. The US leads Stanford HAI's AI Index Report, with twice as many newly financed AI startups, private investment, patents, repository citations, publications, and conference citations as the next top nation. US enterprises account for approximately two-fifths of the worldwide semiconductor supply chain's value. U.S. foreign policy should be founded on this inherent strength. However, the diplomatic focus must shift from commodities commerce, which has been significant since the Middle Ages, to AI dissemination. an emerging global technological revolution that might impact global security and well-being. The US aims to properly develop and employ AI technology for good, promoting safety, security, and prosperity for Americans and others worldwide.

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The empirical evidence suggests U.S. AI is far more open and effective than the competition. Partner countries may not share U.S. security goals, but policymakers everywhere are pursuing economic growth, moving up the value chain, and managing aging demographics. The value of AI is obvious to these countries.

Corporate and Technological Advancements in the arena of AI:

Google CEO Sundar Pichai called AI "one of the things humanities is preoccupied with" earlier this year. It goes deeper than electrical or fire power.

It's a dramatic remark, but it's one of several made in 2018 that represent the technology's apparent potential, pointing to a prevalent pattern in news coverage: AI is the future's guide. The research, ‘artificial intelligence for business services: worldwide value in 2017-2018,’ predicts a

70% increase in AI business value to US$1.2 trillion by 2018.According to the AI Index 2018 Report, worldwide numbers of papers published, patents submitted, conferences held, and jobs offered in the area have reached historic highs.Although AI was coined less than sixty years ago at a Dartmouth summer research meeting, many 2018 milestones indicate a record year for AI.Each of them points to a similar theme in this year's news coverage: AI is driving the future. From 2017 to 2018, AI business value is expected to rise 70% to US$1.2 trillion. The AI Index 2018 Report indicates a record influx of AI-related publications, patents, conferences, and job vacancies worldwide. Despite its vast history, artificial intelligence was first defined almost 60 years ago during a Dartmouth College summer study project. Several 2018 milestones show AI had a big year.

AI in the Domain Industries

AI experts are still being hired and money is constantly invested, but in 2018, it seemed like no area was unaffected. AI-powered self-driving vehicles and buses made news multiple times.Phoenix got a Waymo commercial AV system last month.AI is being used in agriculture to monitor and anticipate crop health and yield due to climate change.Many contact centers use AI to recognize consumer speech tones to teach service-oriented professionals.Robotic surgery may improve some surgeries, and virtual nursing aids can help affordably.Not even the humanitarian industry resists adopting technology to speed up assistance delivery and disaster relief. than fire or electricity."

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Multi-Dimensional Role of AI:

It's no surprise that IT businesses employ specialists and invest in AI research, but in 2018, it seemed to affect every industry. AI applications in automotive and transportation have made headlines with the promise of self-driving vehicles and buses. This month, Waymo inaugurated a commercial self-driving vehicle system in Phoenix.

AI is being used in agriculture to monitor and forecast crop health and output due to climate change problems. To educate more responsive support workers, several contact centers are using AI systems to identify consumer emotions in conversation. In healthcare, robot-assisted surgery enhances difficult operations, while virtual nursing aides provide cost-effective assistance. The

humanitarian sector is investigating the use of technology to speed up assistance distribution and disaster relief.

China’s Stance about AI:

Within two years, China's AI landscape has changed in how AI requirement is seen and discussed.Since the mid-1900s, some of the most prominent AI experts in the West have warned that AI systems may develop so strong as to threaten humanity.AI safety awareness has spawned new technical subfields and government organizations in the US, UK, and elsewhere. Future AI systems may pose catastrophic risks to humanity. Growing concern about AI safety has spurred new study and the establishment of government AI safety institutions in the US, UK, and abroad. For much of the past five years, it was unclear if Chinese scientists and officials shared these unusual risk worries. There is increasing evidence that China shares similar worries. Many recent studies, declarations, and government documents point to China as the place where AI safety is an essential problem that has to be handled and demands significant investment in methodologies and future legislation. Discussions on advanced AI safety have started in China's elite technical circles and are slowly spreading to policymakers. The CCP's July 2024 "Decision on Accelerating the Promotion of AI Development" advocated for AI security protections, which might be significant.

There are still many questions about China's AI safety threat perception and its efforts to address it. While it may be a concern in the US, greater political and technological importance of these problems is crucial for AI safety and regulation worldwide. China is the US's main opponent in cutting-edge AI, and their competition defines AI on Earth. China's officials dread falling farther behind the US; therefore, they're pushing for more complicated AI. How China creates frontier AI systems—the hazards it identifies and the protections it implements—will impact the safety of systems produced in China and elsewhere.

China has good AI conditions. The nation has launched special projects of the National Key Research and Development Plan, including Intelligent Manufacturing; implemented the “Internet +” and AI Three-Year Activities and Implementation Program; and taken other steps in science and technology research and development, applications, and industrial development. After many years of literature accumulation, China has made significant advances in AI, both in International Scientific and Technology Papers published and in inventions patented with significant breakthroughs in core crucial technologies. They lead the world in voice recognition and visual recognition technologies; they leap-frogged development in adaptive autonomous learning, intuitive sensing, comprehensive reasoning, hybrid intelligence, swarm intelligence, etc.; and they gradually entered practical AI innovation and entrepreneurship of Chinese information processing, intelligent monitoring, biometric identification, industrial robots, and ser Several excellent leading firms have expanded fast. Encourage China's AI competitive advantages to

include technical skills, big data resources, organization integration of the massive market need for applications, and an open market.

China's AI overall development level is still below that of developed countries, with no significant original innovation in AI basic theory, main algorithms, key equipment, high-performance chips, major products and systems, fundamental materials, components, software and interfaces, etc. At now, Chinese scientific research departments and corporations have minimal voice in ecological circles and worldwide AI supply chains. Artificial intelligence requires improvements to core structures, rules, laws, and standards.

India and the field of Artificial Intelligence

The market for AI in India is anticipated to enhance to $ 8) billion by 2025 at CAGR over 40 percent from the year 2020 to 2025.That progress is a part of the more extensive AI bubble, a number of successes in key technologies that led to the rapid development of a chosen section starting from the late 2010s and rising to prominence in the early 2020s.In this year globally, the protein folding prediction by Google DeepMind and the emergence of generative AI models by Open AI have set the new trends this year.Just like in the case of China, so in India too AI has reshaped healthcare, finance, and education sectors with added support from the government AI strategy such as NITI Aayog's 2018 'National Strategy on Artificial Intelligence'.dvancements starting in the late 2010s and gaining prominence in the early 2020s. Globally, breakthroughs in protein folding by Google DeepMind and the rise of generative AI models from Open AI have defined this era. In India, the development of AI has been similarly transformative, with applications in healthcare, finance, and education, bolstered by government initiatives like NITI Aayog's 2018 National Strategy for Artificial Intelligence.

Legislation in Artificial Intelligence:

The Indian government has engaged NITI Aayog, its top public policy think tank, to develop AI standards and regulations. In 2018, NITI Aayog unveiled #AIForAll, the National Strategy on Artificial Intelligence, to incorporate AI into health care, agriculture, education, smart cities, and transportation.

In August 2021, NITI Aayog announced the "National Policy on AI" incorporating the "Principles for Responsible AI" in India. These concepts encompass decision-making, organizational structure, and external influence on society, such as automation's job effects. August 2021 saw the publication of the second component, "Operationalizing Principles for Responsible AI," which is separated into three parts: Regulatory and Policy, Capacity Building, and Market Incentives.In 2023, the Indian Constitution was changed to include the Digital Personal Data Protection Act, which helps regulate artificial intelligence platform privacy.Guidelines from the Ministry of Electronics and Information Technology require the

platform to obtain prior agreement before utilizing low-performing AI models and for AI models to label their final products to prevent exploitation.India is member of the GPAI, a global cooperation to responsibly employ artificial intelligence.rules for responsible AI development and deployment.

NITI Aayog, India's foremost public policy think organization, is developing AI standards and legislation. In 2018, NITI Aayog launched #AIForAll, the National Strategy for Artificial Intelligence, concentrating on healthcare, agriculture, education, smart cities, and transportation.

NITI Aayog published "Principles for Responsible AI," India's AI deployment ethics, in 2021. These principles address systemic concerns like decision-making and accountability and societal ones like employment automation. The August 2021 second part of this article, "Operationalizing Principles for Responsible AI," implements these ethical principles via regulatory and legislative interventions, capacity building, and ethical incentives.

The worldwide Partnership on Artificial Intelligence (GPAI) encourages safe AI use via worldwide collaboration, including India. The 2023 GPAI Summit in New Delhi included interdisciplinary discussions on responsible AI, data governance, and future development.AI policies are being developed by Indian bodies like BIS.dian laws encourage appropriate AI development and use.

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The Digital Personal Data Protection Act of 2023 addressed AI platform privacy problems in India.The Ministry of Electronics and Information Technology advises platforms to get permission before employing unstable AI models and designate AI-generated content to prevent exploitation.

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Both India and the U.S. are concerned about China. They remain skeptical of the other side's commitment to the Asia-Pacific process. Indian strategists also worry about China-US war and dual leadership or a G-2. This is owing to the U.S.'s perceived instability and the belief that it

would ultimately choose China due to the Sino-American economy's interconnectedness. [[[* US trustworthiness is questioned because there is a fear that it would desert India for China.

The US-China relationship is particularly concerning since increased collaboration threatens Indian interests. It would eliminate one of Washington's grounds for tighter ties with New Delhi. A China-U.S. crisis or war might disrupt the region and drive India to identify with one of the nations. Any deepening of the China-India confrontation might lead to regional instability, and the U.S. may have to join one side. The U.S. may face bilateral, regional, and international issues from excessive India-China relations. India and the U.S. have an interest in containing China's ambitions. Both may not want to see President Xi Jinping's vision of Asia's future and America and China's role in it. India and the U.S. are right that China will remain a major influence in Asia regardless of the cooperation. The issue is how. Their concerns have grown since 2009, allowing the two sides to discuss China and the Asia-Pacific area more openly. East Asia is discussed. There is a trilateral discussion with Japan, and ministerial-level engagement and increased Japanese involvement in Indian-US naval drills have been discussed. The Obama administration has often called India part of its 'rebalancing.' In Australia in November 2014, President Obama stated the US "back[ed] a larger presence in the Asia-Pacific for India." The Modi administration has focused Indian foreign policy on the area. The Indian PM has implicitly addressed Chinese actions in the area and perhaps in the Indian Ocean by encouraging nations with "expansionist mindsets" to trespass on others' territory and oceans. Unlike his predecessor Olindo, his administration supports South China Sea freedom of passage without exclusive declarations with Vietnam and the U.S. The prime minister said in an op-ed that the India-U. S alliance would enhance global peace, security, and stability, particularly in the Asia and Pacific area. New Delhi also said that in September, President Obama and he agreed that regional peace and security were crucial to Asia Pacific growth..."

Impact of artificial intelligence on Indian economy

The National Council of Applied Economic Research (NCAER) has predicted India's GDP to grow by 7.4% in the fiscal 2022-2023. The advancement in artificial intelligence is estimated to affect the India's GDP in the forthcoming years in a majonometer fashion. The National Association of Software and Service Companies (NASSCOM) stays that such AI will add $967 billion to the Indian economy by 2035. This will assist India to get a $ 5 trillion GDP goal in 2025 by 10%.

AI is making a significant impact on the unique and fast-growing Indian economy and is also transforming traditional management methodologies. The massive scope is highlighted in predictions of the McKinsey Global Institute; that the effects of AI on the Indian economy will be staggering $15.7 trillion by 2035. Furthermore, there is a growing account that the growing industry of using AI processes is likely to be a major source of employment. The industry body

of the IT-BPM sector in India, NASSCOM has estimated that the country will have generated nearly 400000 new employment by 2025 which establishes how drastically AI has altered the landscape of employment.

According to PwC study, the employment impact of AI suggests that India might create 9 million new job in 2035. The benefits of business integration with AI systems can be illustrated with reference to the Indian environment, to various types of organisations and industries. AI is being applied in functions across all sectors, starting with the financial sector, retail and the manufacturing industries. Indian banks are employing AI for instance in enhancing fraud prevention and enhancement of customer services in offering a safer.

and seamless experience. As such Indian retailers are deploying AI to assist in the supply chain, to enable product recommendation and to guarantee total optimization. Manufacturers in India have benefited greatly to increased use of AI in their companies in a bid to improve on their quality and make efficiency gains at cheaper cost, this shows how valuable AI is.

Ethical considerations

Ethics are moral principles that govern a person's behaviour or the conduct of an activity. As a practical example, one ethical principle is to treat everyone with respect. Philosophers have debated ethics for many centuries, and there are various well-known principles, perhaps one of the most famous being Kant's categorical imperative 'act as you would want all other people to act towards all other people'.2 AI ethics is concerned with the important question of how human developers, manufacturers and operators should behave in order to minimise the ethical harms that can arise from AI in society, either arising from poor (unethical) design, inappropriate application or misuse. The scope of AI ethics spans immediate, here-and-now concerns about, for instance, data privacy and bias in current AI systems.

India’s approach to the development and deployment of artificial intelligence (AI) is significantly shaped by ethical considerations and policy frameworks designed to ensure responsible technological advancement. The government has introduced strategic initiatives such as the

National Strategy for Artificial Intelligence (NSAI),

NSAI, outlines a roadmap for AI innovation while addressing critical ethical concerns, including data privacy, algorithmic fairness, and bias. The ethical framework prioritizes the creation of inclusive AI systems, ensuring equitable access to AI technologies across diverse socio-economic groups and minimizing the digital divide. Furthermore, India’s policy focus includes the regulation of AI applications in sensitive sectors such as healthcare, education, and finance, with an emphasis on principles of transparency, accountability, and non-discrimination. The

government has also emphasized international collaboration to establish global standards for AI governance, promoting a balanced regulatory environment that fosters innovation while safeguarding public interests. Additionally, India's commitment to the development of AI talent and research aligns with its ethical stance, fostering a robust ecosystem that prioritizes responsible AI practices. Through these policy and ethical considerations, India aims to harness the transformative potential of AI, ensuring its benefits are distributed equitably while mitigating potential risks to privacy, fairness, and social equity.

Conclusion:

This machine intelligence can identify other patterns, trends or anomalous behavior that may not be apparent with a human operator, which helps with awareness of the environment and a quicker decision-making process when an opportunity or threat arises, AI also helps with resource management and allocation and therefore can handle the logistics of cyber defense, other important factors of warfare. It has been established that artificial intelligence has altered the procedure of states in managing military and economical relations. The underscored technology shifts the requirements of our armed forces including the provision of humanitarian aid in other countries The warfare of the 21st century includes using the weapon AI-weapon autonomous drones, jets, virus on chips, malware to compete and fight the rivals Recent advancements in the field of artificial intelligence indicate that India stands third after the US and China in many important segments to include data analytics, the algorithms of artificial intelligence, the hardware accelerator, the machine Chief of these is China which leads in 57 of the 64 critical technologies explored by researchers around the world. While the US led in 60 technologies between 2003 and 2007, the country now leads in only seven areas, according to the rankings set between 2019-2023, namely: quantum computing and vaccine and medical countermeasures.

But it causes doubts on ethic issues, open information access, and possible negative outcomes. Therefore, as AI becomes more advanced there is need for the nations to consultancy the use of this technology in order to increase the military power and at the same time to avoid the break of the world peace. The US and China thus need to talk and come to an understanding of the norms and rules governing the use of the tool [AI]. Some transparency, ethical considerations, and standards for AI usage development and deployment between countries could be harmonized due to which they not capable of misunderstanding each other's intentions and capabilities.

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