AI Kill Chain and Autonomy
Getting Ready for Future Tech Warfare

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The increasing use of artificial intelligence (AI) technologies on the battlefield is not just enhancing military operations, rather it is redefining the modern warfare. On battlefields, AI-driven systems have already demonstrated that they can analyse satellite, drone and ground sensor data to provide commanders with a real-time, detailed view of adversary activities. Simply put, AI can be personified as military personnel equipped with sophisticated digital technologies, perfect memory, without any need for a routine sleep schedule to revive and operate. A weapon platform with onboard AI identifies threats and suggests tactical moves, which are future-proof and ready to integrate tomorrow's tech today. However, concerns remain about AI weapons' potential to act independently without any need for human agency. To tide over such concerns, militaries must ensure that human judgement is embedded into AI warfare technologies when force is used. It must be ensured that AI may have prepared the kill chain, but humans must make the final call.

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Through exploratory research, the study delves into the integration of AI on battlefields, combining human and machine intelligence to achieve success. From spotting threats to battlefield dominance, AI is transforming modern warfare through automated weapons equipped with integrated algorithms. Tier-one military powers have been vying with each other to lead the AI frontier. Those who fall behind are irrelevant. Embracing a smart battlefield is the key to future tech warfare, driven by artificial intelligence and autonomy.

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Introduction

What if soldiers do not fight the next war? What if algorithms fight it? Modern war will no longer be won or decided by who has more soldiers, tanks or aircraft. Still, by controlling data more efficiently than the enemy, countries need to develop an AI-driven kill chain designed to dominate future battlefields. The integration of satellites, drones, radar, cyber intelligence and battlefield sensors into a single digital network—where Artificial Intelligence (AI) processes threats in seconds rather than through human-led decision-making cycles—is at the core of this revolution. AI systems can detect an enemy launch, identify the target, prioritise the threat, and recommend, or even execute, a strike almost instantly. This means faster air defence responses, more accurate long-range strikes, and seamless coordination among the Army, Navy and Air Force.

The ongoing Russia–Ukraine conflict and the Israel–Iran conflict of 2025–26 have demonstrated that data superiority, rather than sheer firepower, is a key determinant in modern conflicts. The Russia–Ukraine conflict serves as a testbed for advanced military AI systems, with both sides experimenting primarily with drones and autonomous sea-skimming drone boats equipped with embedded software and imagery that enable them to complete their missions even after losing connectivity with the operator.

In late 2020, the Nagorno-Karabakh war was fought by Armenia and Azerbaijan like a normal war, but it provided a glimpse of future wars. The use of autonomous loitering munitions, or kamikaze drones, in the war can be considered the first war in history to be fought partly with autonomous weapons.[1] The Nagorno-Karabakh war served as a stark reminder of autonomous drone technology, conveying a clear message: this is the future. It is a future approaching us fast, integrating into the AI kill chain. The

Turkish-made quadcopter Kargu-2—designed to hit a broader range of targets and operate with greater autonomy from human control—is known as the 'Fire, Forget and Find' drone.[2] This drone, as a loitering munition, has proliferated in the war. Today, autonomous weapons are being used to locate and destroy targets over long distances without human intervention, and AI is turbocharging this revolution.

The Kill Chain is not just about new weapons; it is a programme with implications for warfare, human control and power. It is a real-world development. The goal is to extract the most essential knowledge for a next-generation autonomous warfare system: the AI Kill Chain. This deeply integrated system merges AI with precise satellite targeting and real-time decision-making.

Warfare: Change is Coming

What is warfare? Is it still the classic definition of blood being shed, people being killed, and humans fighting face to face with each other? Or is it a broader understanding of the use of autonomous systems fighting a robotic engagement zone?

In terms of where war is headed in the future, humans will likely remain central to the war, but there will be increased reliance on autonomous technology across all spheres of operations, on land, in the air, and even at sea and in space. AI is emerging, leveraging new technologies alongside existing ones to develop a fighting system that meets the military's needs and operational requirements. AI is part of a set of emerging revolutionary technologies transforming future warfare, and that transformation will be profound. AI has partly altered the character of war, and robotics are significantly changing the nature of the national security paradigms and military operations. These technologies are transforming the global security landscape, rapidly altering the very definition of warfare worldwide.

Change is coming, driven by AI. It is up to humanity to keep pace with it, so that together, humans can decide their future. The key lesson is that if there is to be more artificial intelligence, we must preserve the human element, because without it, war truly becomes inhuman. That is the future of warfare.

A few examples are:

1. In 2020, the US Air Force demonstrated the use of AI on board a US U-2 Dragon Lady spy plane, with an onboard pilot using an AI algorithm to

control the aircraft's sensor and navigation systems. The algorithm was designed without a manual override.[3]

2. China used AI for target identification, including US military aircraft on runways, with an accuracy of 92 per cent, and naval targets in maritime environments.[4]
3. Russia's Su-35S, a heavy, long-range, multirole fighter, utilises an onboard information and control system called IUS-35, which consists of several separate computers that combine information channels into a single feed that provides 'intellectual support' to the pilot for target acquisition and aircraft combat manoeuvring.[5]

Single Battlefield: Two Opposing Armies

Imagine a battlefield where two opposing armies have the same weapons capabilities, but one of them has AI integration, and the other does not. Both armies are trying to outdo each other to win over the other. To do so, they both try to get ahead of each other, by gathering intelligence on the other in terms of territory, most valuable military targets, and pinpoint exact locations. Accordingly, steps are taken to determine which strike weapons to use and military platform to deploy to target and destroy weapon systems on the ground with impeccable accuracy and to assess its practicability. This is how the Kill Chain paradigm works: Find, Fix, Target, Engage and Assess. It is how war is fought and how the nature of war is changing.

Find: Military personnel use sensors to locate objects. Both sides have sensors looking into each other's territory: cameras are fitted on a satellite, drones in the air scan for targets, a reconnaissance team on the ground, or radars sense what is flying through the air. The data from the sensors is then recorded and sent back to a central command centre. The command decides what to do next based on the data from these sensors. Analysts sift through all those images, and this is where the first significant advantage for the Military with AI, specifically computer vision, lies.

For example, during the 2026 US–Israel–Iran conflict, a Chinese company, MizarVision, a start-up in Hangzhou, published a commercial satellite photo of Prince Sultan Air Base in Saudi Arabia, where an AI model identified US military aircraft by type (15 KC-135 tankers, six KC-46s, six E-3 Sentry AWACS planes—roughly a fifth of the US Air Force's global AWACS fleet—two E-11A Battlefield Airborne Communications Nodes, plus C-130 Hercules transports and C-5 Galaxy heavy lifters, the backbone of Operation Epic Fury). This is the same base Iran targeted with ballistic

missiles on the night of 28 February 2026. The satellite images—Iran had access to the same intelligence that MizarVision made public. Military bases can no longer remain secret when commercial satellites photograph every ramp, AI labels every airframe, and analyses are conducted. Every deployment is observable, catalogued and shared in near real-time by companies with no security clearance and no allegiance to any party. The next war won't be planned in secret; it will be watched from orbit by everyone, in every major human language, simultaneously in near real-time.

Fix: A Command Centre is equipped with computer vision software that processes all incoming visual data to tag each object with its identification and precise location. Machines automatically review those images to identify enemy tanks and planes as well as enemy formations. With a high probability, they determine whether it is a tank or an aircraft, using the drone that captured the image to provide the exact coordinates. Armies that lack AI is doing the same thing, but without computer vision algorithms. Analysts pore over every single image. They manually identify targets, such as tanks and airfields, and plot them on a map. Maps exist only within Command Centres, which have not even begun sharing these targets and intelligence with other command centres. Meanwhile, AI computers at various military command centres automatically add their findings to a cloud-based database accessible to other command centres. An AI-enabled military fuses all kinds of data, including vast torrents of information on enemy movements, logistics, and the deployment of military hardware, to hunt out anomalies.

Target: Maps fill up much more quickly, with potential targets and even context for each target. A commander who sees the targets has to make many decisions. Are the targets worth hitting or valuable enough? What platform is to be used? A plane with smart bombs, an artillery battery, and a cruise missile, which are the basic tactics of any command decision. However, this is the beginning of the kill chain. An AI-enabled Commander helps with difficult decisions. The computer algorithm fuses all this data, making predictions and inferences that yield recommendations for the commander. It takes into account not only the target to be hit but also many other important factors, such as the number of aircraft, munitions and soldiers, as well as fuel and other logistics. The optimal way to destroy that target is with aircraft, munitions, the time factor and operational scenarios. The fundamental work is often done by military personnel with pen, paper, maps and spreadsheets, which can be accomplished much more quickly by AI software than by a resourceful human team. While the traditional army still manually plots potential targets, the AI-enhanced military commander reviews a list of targets generated by

the software. The AI software proposes that the military could target the potential priority targets.

For instance, by 2 March 2026, Iran smartly hit with waves of missile retaliation, and 27 US military bases were hit. Also, the Israeli General Staff HQ, the Command HQ, the Mossad HQ and the Satanayhu residents were hit and destroyed. Further, Iran systematically hit oil refineries, water desalination plants, ports and airports. As information from the Chinese satellite surveillance system (Sovereign AI) came in, targeting, guidance and assessment links were available to Iran in real-time. Target accuracy was improved to within 10 meters. Such a connection could be possible with AI-driven war-planning and advisory capabilities, meaning that military assets have nowhere to hide.

Engage: A commander evaluates the software's recommendations and decides to target the prime with a suitable weapon platform. A mix of humans and machine software starts preparing to engage with a few taps on a screen. This all happens very quickly and smartly. The other army commander begins to assemble an initial list of valuable targets. The AI-enabled Commander has the time to consider other potential targets. The software is recommending a suitable weapon platform to destroy the next prime target. This represents a significant shift in the character of warfare, where precision-guided munitions are available throughout the battlefield.

Assess: The AI-enabled army can execute these attacks much more quickly, with significantly more information, all enabled by algorithms that crunch vast amounts of data. Though both armies have the same military hardware, what matters more is what is inside. What really matters is the software and algorithms inside. This is the direction warfare is taking in the real world, with a growing reliance on software. In the ongoing Russia–Ukraine conflict, software and computer vision-enabled drones complete the final leg of their flight and hit their targets even when signals have been jammed.

For instance, Jilin-1 Satellites turned US strikes on Iran into a free military masterclass. China's massive Jilin-1 constellation—now with 138 high-resolution imaging satellites—was passively recording every detail of the US–Israel strikes on Iran that kicked off around 28 February 2026. From aircraft munitions loading and mid-air refuelling ops to precise missile launch trajectories, flight routes through the Gulf, and real-time air-defence responses, China and Russia (via the Zorkiy-2M satellite) were building a comprehensive digital archive of American tactics and procedures. No shots fired, no casualties taken—just decades worth of priceless R&D intelligence gathered for free while the US fights and Iran absorbed the hits. It was the

ultimate asymmetric win: Washington paid the combat price; China and Russia quietly studied and adapted for the next era of warfare. The US bombed; China and Russia learned.

Like the US and its allies have been developing over the past few decades, efforts are on to replace manual processes with software and databases using modern battle management software. In the 21st century, C4I2SR came up. That is Command, Control, Communications, Computers, Intelligence, Information, Surveillance and Reconnaissance, automating that whole process. Over decades of work, all sensor data is stored in databases, where it is analysed by other software and people, and displayed to Commanders, who make decisions that feed back into the system. These C4I2SR systems have many points where AI can step in to detect, prioritise, optimise, organise and highlight information, enabling the army to make better decisions faster. AI smoothens all the processes.

Table 1 List of Military AI Systems/Programmes

AI System/ Programme	Developer	Year	Mode	Operation
Project Maven	Palantir, US Department of Defence	April 2017–2022	Massive amount of aerial and satellite imagery.	Pick out potential enemy targets.
Project Convergence Capstone 5	US Army	March–April 2025	Data from high-tech sensors is integrated into a single platform and software.	Help commanders make decisions.
Project Spotter	UK	2022	Massive amount of aerial and satellite imagery.	Pick out potential enemy targets.
Project Gospel	Israel	2019	Data like medical imaging, physical facial expression images, and videos of Hamas members.	Determine the targets that the Israeli Air Force would engage.

Project Lavender	Israel	October 2023	Data collected from devices on individuals, including their sex, age, physical appearance, movement patterns, social networks, and personal items.	Identify potential Hamas and Palestinian Islamic Jihad operatives and locate their residences.
Project Where's Daddy	Israel	Late 2023–Early 2024	Data collected from devices on individuals, including their sex, age, physical appearance, movement patterns, social networks, and personal items.	Targets and informs Israeli forces when Hamas and Palestinian Islamic Jihad militants return home.
Dynamic Reconfiguration of the Kill Chain	China	2024–25	Satellite feeds real-time data. Yaogan-series recon drones deliver ISR—central nodes, from KJ-500 or KJ-2000 AWACS.	Designed to overwhelm enemy forces in high-intensity conflict.
National Strategy for the Development of Artificial Intelligence Through 2030	Russia	2019	Software development, developing AI open-source libraries, enhancing Data Access & Quality, and improving hardware to support AI projects.	Guaranteeing National Security.

Project Proteus	France	2022–2030	From reconnaissance and weaponisation to automated targeting and action, accelerate decision-making.	Rapid-response anti-drone system modernising short-range air defence with cannons.
Project Pandreon	France	2027 (Plan)	Automate threat detection and enhance decision-making within the kill chain.	AI-driven robots for reconnaissance and engagement boost capabilities and counter jamming.

Source: Author's personal collection (through various literature), February 2026.

Maintaining Superiority: Advantage Assets

Many developed and developing nations have been riding on the AI wave, accelerating its use to enhance their military capabilities. Countries will continue to develop and enhance strategic approaches to use AI for defence and national security purposes. AI has transitioned from an innovative opportunity to a viable market to an industry product. In this decade, it has produced measurable value in virtually every aspect of our lives—including in stock markets, medicine, space industry, education, social media and defence. This paradigm shift *vis-à-vis* AI will be the most pronounced and impactful within the national security sector. What was once considered speculative will now become strategic, as nations strengthen their capacity to integrate AI and build tactical and operational advantages. As countries develop their respective AI arms, this global race to acquire these capabilities is intensifying, with heightened efforts in the United States, Russia and China (Tier-one military powers), as well as the UK and France, competing to harness the technology's potential before their adversaries do. The development of AI technologies is emblematic of the 21st century struggle to gain and maintain dominance globally. In addition to the race to develop superior technologies,

nations are also trying to understand how these technologies affect society as a whole.[6]

Today's battlefield is complex, and the same will be true of future battlefields. The way AI technology streams information to Commanders significantly reduces the time required to make decisions and reduces their uncertainty by ordering or filtering through large volumes of information. Human operators would spend countless hours sorting through data; AI systems filter the relevant data from the remaining data and present possible outcomes to decision-makers, allowing them to explain the potential ramifications of each choice. Decisions made with the support of an AI system accelerate the decision cycle and help decision-makers make faster, more accurate choices.[7] This level of automation and intelligence is unmatched, giving a significant advantage to armies in any conflict scenario.

AI systems offer several advantages. One advantage is that it does not involve a single headquarters that can be targeted or disrupted, or its communications jammed. Instead, AI processing power will be distributed to every individual, allowing it to be spread across all military assets within the tri-service.

Supremacy: AI Coordination and Autonomy

A key capability dominating the discussion around the future of AI is autonomy. Machine learning underpins further advances in AI. The idea is that a system or software can be programmed and taught to learn from a vast amount of data that is fed into it. The software learns to recognise specific patterns and generalised rules, and then concludes those patterns. The more the system learns, the better its performance, and with increased performance comes speed—a microsecond decision, which no human can make. In war, microseconds matter. It means the difference between life and death, which translates to winning and losing. This creates an operating reality in which engagements can search for rival capabilities, dodge counter-engagements, alter engagements, and prioritise targets with autonomous systems deployed, thereby posing acute threats to ground forces, aerial assets, cyber assets and capabilities, and defences dependent on artificial intelligence. This is aimed at efficiently deploying these artificial intelligence systems today and tomorrow, and at reaching most of the operational territories on land, in the air, at sea, in cyberspace, and at exo-atmospheric hypersonic velocities, without constant control inputs or interactions. This development will be crucial for attaining military supremacy in the next war, where micro drones, autonomous

weapons, and machine-learning-enhanced swarming engagements within an AI kill chain will be significant in maintaining it.[8]

For example, Turkiye conducted its first fully autonomous air combat test on 30 November 2025. The country successfully executed the world's first unmanned dogfight with its fighter drone operating autonomously in close formation and firing a BVR air-to-air missile. This test represents an essential milestone in the AI-based combat aviation, and Turkiye is at the forefront of Autonomous Unmanned Combat Aviation. Besides, the country also showcased the capability to fly 'Two Unmanned Fighter Jets in Close Formation', underscoring significant advancements in AI for flight controls and sensors. The landmark marks a future in which air combat increasingly relies on autonomous systems, AI coordination, and pilot-free missions, reshaping how nations achieve aerial superiority through technology.

New Military Doctrine: Mesh Loop

A new kind of military doctrine, one where the ability to win a conflict in the first few minutes, becomes more critical than sustained fighting capability. In this scenario, whoever can turn off the enemy's command and control systems, destroy their key military assets, and neutralise their response capabilities in the opening moments of a conflict effectively wins the war before it really begins.

In the new doctrine, in addition to weaponry, the provision of intelligence and the steps of the kill chain are crucial, as weapons are of limited use without critical information. For example, it involves pairing a space asset with an ISR asset, a command-and-control asset, and a naval asset that were not previously connected. Building a mesh network based on a typical digital architecture with equal access to both data and artificial intelligence is crucial. A space asset locates the enemy using its sensors, but it is unable to complete the identification or gain target quality coordinates, so it queues the Intelligence, Surveillance and Reconnaissance (ISR) asset like surveillance drones to get close enough to get both an accurate identification and target location and these are passed to a command-and-control asset that has a database loaded with various effects from kinetic to non-kinetic based on the Commander's intent programmed into the algorithm. It selects a suitable weapon to strike the enemy asset.

For example, the United States Anduril and Overland AI integrate Anduril Lattice Command and Control with Overland off-road autonomy to fuse aerial and ground sensors, enabling network, detection, tracking

and coordination for autonomous responses in ISR, convoy protection, and counter-UAS missions, reducing operators' workloads and accelerating tactical decision-making at the edge—the UAV and UGV combo to enhance C-UAS operations including the Thunder, a Group 5 autonomous attack rotorcraft. Nevertheless, the most crucial aspect is the human in the kill chain, who holds final decision-making authority to execute the strike based on the algorithm's intent for the mission type, as defined by the orders built into the network. Every other part of the kill chain is completed machine-to-machine at the speed of light. The US military awarded Anduril Industries a US$ 20 billion contract to integrate AI-enabled Lattice software, sensors and automated systems into a unified command-and-control platform by 2036.

As part of its overall growth plan to build capability for future warfare, the Indian Army (IA) declared 2026 the 'Year of Networking & Data-Centricity'. The Indian Air Force (IAF) developed an Integrated Air Command and Control System (IACCS) to support its air defence operations. IACCS will utilise the Air Force Network (AFNET). This fibre-optic backbone connects all airborne and ground-based radar assets to exchange critical data among the various command-and-control elements of IAF Operations. The Indian Navy (IN) uses the exclusive Rukmini Satellite, based on the GSAT-7 satellite, which provides software-defined radio with secure encryption, enabling secure communications over the Internet and long-range high-frequency (LHF) and very low-frequency (VLF) radio. The Indian Navy will develop or acquire advanced, futuristic technologies such as Quantum Cryptography, Quantum Networking, Laser Communications and Ultra High-Capacity Wireless Communications (UHCWC).[9]

In the Kill Chain, it is necessary to demonstrate the integration of advanced fighter jets, armed drones and space assets to ensure that the next-generation technology platform, sensors and weapons can communicate, share information and learn from each other. Additionally, it enables long-range precision within the same mesh network, and this trend is expected to continue with every new connection.

Currently, the leading military nations (Tier-one military powers) are developing and implementing military plans and operations that leverage AI capabilities to remain at the top of the global power structure. These nations are utilising AI to create an advantage over their competitors on the battlefield. Additionally, they are engaging and investing in the private sector by providing substantial financial resources to launch new research and development initiatives. This has led several AI start-ups to seek monetary support from defence contractors. Most militaries are using every available

lever to ensure maximum value for this technology for both civilian and military applications.

While many countries are still developing their AI strategies and laying out their international strategy, the ability of AI to substantially improve a country's security is beyond question. AI will influence the future of defence and security. With ever-changing geopolitics and the evolution of AI technology, advancements in AI warfare are expected to be taken even further in the near future. As the industry grows rapidly, establishing a strong, competitive and resilient AI industry presents a tremendous opportunity to build a strong, stable military and national security for the future.[10]

Table 2 Number of Newly Funded AI Companies (2013–2024)

S. No.	Country	Number of AI startups (2013–2024)
1.	United States	6,956
2.	China	1,605
3.	United Kingdom	885
4.	Israel	492
5.	Canada	481
6.	France	468
7.	India	434
8.	Germany	394
9.	Japan	388
10.	South Korea	270

Source: 'Visualising Global AI Investment by Country', *Visual Capitalist*, 21 April 2025, available at https://www.visualcapitalist.com/visualizing-global-ai-investment-by-country/, accessed on 17 January 2026.

The advantages that AI offers have set the stage for a global race in AI innovation and application. It is virtually inevitable. In warfare, the military that adopts new technology always has an advantage, even if it is momentary. With a systematic approach to adaptation, institutions should have an improved capacity to develop new ideas. Opening up the capacity to create, test and absorb new ideas is a key outcome of a practical military institutional approach to adaptation. It must result in a more rapid development of ideas, technologies, organisations and doctrines that can be absorbed at the 'speed of need', not the current 'speed of committee'.[11]

Table 3 AI Investment in $B (2013–2024).

S. No.	Country	Investment ($B 2013–2024)
1.	United States	$471
2.	China	$119
3.	UK	$28
4.	Canada	$15
5.	Israel	$15
6.	Germany	$13
7.	India	$11
8.	France	$11
9.	South Korea	$9
10.	Singapore	$7

Source: 'Visualising Global AI Investment by Country', *Visual Capitalist*, 21 April 2025, available at https://www.visualcapitalist.com/visualizing-global-ai-investment-by-country/, accessed on 17 January 2026.

Swam Drone: Hive Mind and Flash Wars

Most likely, a swarm of lethal micro drones equipped with facial recognition and software will be deployed on a future battlefield; it is a matter of when, not if. China's Jiu Tian (High Sky), a gigantic drone mothership that has been operational since its first flight on 11 December 2025, is a 16-ton drone comparable to the US Global Hawk and serves as the world's first flying drone carrier. A modular 'beehive belly compartment' represents the drone's primary feature. It can launch up to 100 smaller drones or loitering munitions mid-flight, flooding contested airspace with a swarm that can saturate even the most advanced radar systems through sheer number. With its operational ceiling at 15,000 meters and range at 7,000 kms, this mothership can fly for 12 hours and loiter far above standard air defences. Utilising AI-assisted hive mind coordination and networking, these swarms share targeting data, adjust flight paths, and strike from afar.[12] With AI, it feels like the hive mind is entering reality. It is no longer one target; it is hundreds. To sustain the momentum of potential innovation and application in the race to counter swarm drones, similar weapons are needed. Humans cannot keep up with a drone swarm. The issue of speed leads us to a critical, emerging danger posed by autonomous weapons. The swarms of unmanned systems could comprise

air, ground and naval systems, with different units operating together and carrying out coordinated attacks in a synchronised manner, which indeed requires a high level of AI-enabled autonomy. Such attacks may be beyond human control. To counter these systems, a similar AI system is needed, as human soldiers will be insufficient to detect and respond in such conditions. It is like hitting iron with iron or AI countering AI. A level of independence is required.[13]

There is no merit in playing it safe in warfare, as the adversary is pursuing the same strategy and developing countermeasures. When an attack or even just a thought that an attack is imminent triggers autonomous systems to react, and the opponents' similar systems react, a rapid escalation can occur. Hence, flash wars. In the future, flash wars may become a possibility and countries need to address this potential threat. Thus, a new paradigm of warfare is imminent.

Future Warfare: Soldiers of Tomorrow

The digital world has become intertwined with our physical and biological worlds. Science fiction informs future warfare. One thing that always comes up in this area is whether the Terminator is coming; people go straight to the Terminator (a 90s Hollywood movie about a *Robotic Assassin*).

In future warfare, an experienced, battle-hardened soldier will have finely honed instincts that incorporate AI into the battlefield, endowing AI with the same level of trust that they share with their fellow soldiers. Developing trust in AI through practice is possible, and people are gaining this experience through their use of smartphones and engagement with AI software for daily tasks, such as Siri, Alexa, or even ChatGPT.

For instance, Ukraine's 7th Air Assault Corps unit—first in the country—put exoskeletons on its gunners from the 147th Artillery Brigade and sent them to the Pokrovsk sector, in March 2026. The 2 kg aluminium devices reduce physical strain by up to 30 per cent, run on AI-based movement analysis (10 intelligent operating modes), and can be controlled via a mobile app, allowing custom settings. Results: soldiers tire less, load faster, and hold their combat edge longer.

AI in the military can perform tasks repeatedly and consistently. Because of their ability to continually monitor movement, work without requiring rest or getting tired, and perform tasks in dangerous situations that would typically be done by a person, such as mining and retrieving injured soldiers from combat zones, AI systems are expected to be integrated into combat

missions that are considered 'dirty and dangerous'. These operations will utilise autonomous vehicles designed specifically for these functions.

The Russia–Ukraine war has followed a similar strategy where Russian unmanned ground vehicles (UGVs) Impulse-KPTM have been used for mine-laying and Courier UGV for offensive manoeuvres. Besides, the Russian Kuryer ground-based robotic system is being used for fire support of assault detachments, the defeat of fortified targets, reconnaissance, the evacuation of the wounded, and the performance of engineering tasks and the delivery of valuable cargo, as the UAV damage area on the battlefield increases. The messy and hazardous are very well suited to artificial intelligence. Instead of human soldiers, if the task can be delegated to a robot that can do the dirty work, it leaves the other functioning soldiers to focus on the attack or defence.

For example, the South Korean SGR–A1 automated sentry gun, developed by Samsung, is deployed in the Korean Demilitarised Zone (DMZ).[14] Moreover, it can engage anyone detected without an authorised access code. The SGR–A1 features heat and motion detectors atop a 5.57-millimetre machine gun that can identify potential targets more than 4 kms away.[15]

The separation of humans has a beneficial aspect as it allows for complex operations to be conducted in locations (or missions) that would be impossible to send human combatants into, and AI will allow for specific, skilled capabilities (previously reserved for humans) to now be potentially performed by artificially intelligent machines or robots.

AI and RMA: Shifting to the Future

Historically, warfare has taken advantage of technological advances, as outlined in the Revolution in Military Affairs (RMA) (a progressive shift towards future wars utilising increasingly sophisticated weaponry). Since the introduction of gunpowder and, more significantly, the development of atomic weapons, nations that are rigid or traditional in their methods of warfare have not enjoyed the same degree of success as those with more progressive approaches. As the world continues to evolve, the state and nature of war will change as well. The development of 'fire and forget' weapons and 'self-guided munitions' have been just one example of how the introduction of new military technologies has enhanced warfare. The continued advancement of technological warfare will confer numerous advantages on combatants. It is up to military leaders and militaries to take advantage of all opportunities

created by new and emerging technologies, including advances in artificial intelligence, to maintain their combat edge.

A human soldier and an AI algorithm examine the same data, working almost in tandem as they develop targeting, intelligent and command decisions on the battlefield. However, imagine what it would be like when the human soldier is removed altogether, as AI powers ever-faster systems that outstrip human capabilities. The bond between humans and machines can work efficiently—AI systems communicating with highly trained soldiers, an unparalleled symbiosis.

The contested space in future warfare is moving towards unmanned and autonomous systems. Visions of a wave of robotic combatants being sent across a kill zone as part of a kill chain come to mind for the near future, with precision, firepower and surveillance capabilities surpassing current limits, as well as processing speeds and cyber-kinetic capabilities that are only now being envisioned. The fusion of intelligence and information with opportunity, enabled by a machine that can understand and process data far more quickly than humans, will be decisive in achieving military advantage in the next big war.

In future conflicts, AI will provide an opportunity to remove human emotion from the kill chain if authority to make that kill is delegated to a machine. Whether it is desirable to remove human emotions from the battlefield through technology is an interesting question. There might not be a ban on killer robots because they are militarily and economically useful. In a military context, AI is all about controlled precision, the opposite of robots going rogue.

India's Stance: Today and Tomorrow

On this subject, a few serving and retired Indian Army Officers are being contacted via an online platform to develop an understanding of India's stance on the use of AI in the military Kill Chain today and tomorrow, and to share their inputs on the topic.

One Lt Gen (Retd) commented that 'Militaries all over the world do it. Similarly, India will not want itself to be left out'.

Other serving Lt Col weighed in on the same:

- Use of AI in the Military Kill Chain is a norm in today's warfare. We have seen its effectiveness in the ongoing conflict between Ukraine and Russia—the use of smart drones in modern combat. India should not lag.

- We are catching up in the race with the US, Russia and China. It would entail high-speed operations in the kill chain and, as a countermeasure, demand higher speed. False positives need to be addressed. Self-reliance in this network-centric warfare to prevent sabotage would also be pivotal.
- In progress and with a stance of national protection.
- India actively integrates AI for enhanced ISR, decision support, autonomous systems and cybersecurity while emphasising human oversight, ethical use and indigenous capability-building for future warfare.

During the Chanakya Defence Dialogue, held on 24–25 October 2024, in an exclusive interview with *Firstpost*, Indian Army Chief General Upendra Dwivedi was asked about the use of AI in the military. The General said, 'The data becomes very important. Artificial Intelligence is at a very mature stage and will come up much later. We have the data at various places, but we have to integrate it gradually. While incorporating that data, we should not disclose any information beyond what is confidential.' The General further said, 'In the initial stages of AI, we have been able to achieve. Now, how to plug the security gaps? That's something we are having a challenge with, and we are not fully prepared towards that.'[16]

India must be prepared. India's Defence Artificial Intelligence Council and the Defence AI Project Agency have been working on AI-enabled military programmes since 2022, indicating that the country is also undertaking similar initiatives. The Indian military must adapt if the government is to maintain its superiority, or at least parity with its adversaries, by demonstrating sufficient military strength and the willingness to utilise it to preserve the status quo. AI is the mother of all technology. The ability to make decisions faster than the adversary often confers a decisive advantage. Countering the rapidly advancing Chinese military, India needs autonomous weapon systems powered by AI. AI is mighty; it is coming and will likely be optimised for the command and control of military operations within a decade or so, and then combined with robotics.

India already has what most countries do not—massive talent and massive data. The intent is there—big missions, significant investments, global interest. However, intent alone is not enough. Ground-level execution is everything. Less money on events. More funding for fundamental research. Direct grants to university labs. Compute credits and support for real builders. Outcome-based audits, so we measure real progress. Incentives linked to

patents and real products. Complete transparency on where public money goes and what results it creates.

AI leadership does not come from stages. It comes from laboratories, R&D, and builders who are actually creating it. If we shift from headlines to outcomes, India can absolutely become an AI power. What is the most significant change India needs for real innovation? Real funding and accountability. Only then can we be an AI power.

There is a need to push developed countries to integrate AI platforms, carry out predictive analytics, and automate command systems across every domain of war. This kill chain also increases autonomy, cyber resistance and decision-making without human delay. In the wars of tomorrow, the side that connects sensors to shooters the fastest will win, and India must race to ensure it controls those digital battlefields.

Funding AI: Tier-One Military Powers

Advanced technologies, such as AI and Robotics, will rapidly change the nature of warfare. As neighbouring countries, such as China, which has invested US$ 247 billion in its 2025 military budget, will be able to utilise these technologies. In 2023, Chinese companies spent US$ 458.5 billion on research & development (R&D), up from the previous year's 8 per cent increase (2022). Additionally, China is implementing a US$ 1.4 trillion, six-year plan to overtake the US as the world's leading innovator, focusing on AI and aiming to become a global leader in science and innovation by 2035.[17]

The US, Russia, China and Israel are likely to become forerunners in robotics and in the significant integration of man–machine relationships on the battlefield over the next 10–15 years, representing a substantial and fundamental shift. The US plans to spend US$ 32 billion in 2026 for an AI-enabled warfighting paradigm, up from US$ 16 billion in 2025. The Chinese and the Russians are also heavily investing in the research and development of those systems. Military budgets worldwide for AI show spending nearly doubled, from US$ 4.6 billion in 2022 to US$ 9.2 billion in 2023. By comparison, however, global military spending on AI is projected to increase to US$ 38.8 billion by 2028.[18]

In December 2025, a viral video circulated across social media networks depicting the deployment of a humanoid robot created by China to monitor the India–China border. The footage shows a white, bipedal figure standing motionless on rugged, hilly terrain or rather a fixed surveillance device.[19] The

robot will be able to operate continuously in extreme conditions, such as sub-zero temperatures, low oxygen levels and high winds, by using thermal imaging devices and long-range cameras to detect movement and relay information to a command centre in real-time. A great deal of speculation exists regarding whether the Chinese humanoid spy robot is real or fabricated; however, one thing is certain: flakes of the AI autonomous system are coming, and we cannot deny it.

Likewise, China has deployed AI ground robots, the first generation of autonomous robotics, for limited use at the border crossing between China and Vietnam. The Walker S2 model robots developed by Shenzhen-based UBTECH Robotics Corp. are planned to be stationed at the Fangchenggang border crossing in Guangxi, a coastal region near Vietnam.[20] It is only a matter of time before advanced robots are deployed in the high mountains, in freezing weather, along the India–China Line of Actual Control (LAC) for surveillance and border guarding.

India's best option is to look beyond the traditional war-fighting capacity; that is what the RMA teaches. It should be R&D and 'Make in India' together, not just 'Make in India'. Spending 0.6 per cent of GDP on R&D will not make much difference. An AI ecosystem is needed in India, spanning research to on-field deployment, as in China. Decades ago, Chinese tech was looked down on by the Western countries as inferior, but now China beats them at their own game. Chinese automaker BYD overtakes Tesla, reaching as far as Brazil, and Unitree Robotics beats Boston Dynamics with its mind-blowing Kungfu humanoid robots in the Spring Festival Gala 2026. It is the game of persistence, perseverance and perspective.

Key Considerations

One key conclusion is that AI is a critical component of the future of warfare. Kill chains will be accelerated significantly, and the way to achieve that is through AI pattern recognition. A camera looking at targets and installations, and the AI is going to be a better system for spotting hidden enemies than any human can do, and the speed of that kill chain will be massively advanced because it will be all computerised. Because sensor data is such a significant part of this capability, cloud computing companies like Microsoft and Amazon, as well as private start-ups, are entering the defence market, delivering exceptional, military-grade software and technology. Now, software can perform analysis, synthesis and decision-making, working faster, more accurately, and more efficiently than previously required the work of many people. Technology

allows us to do this. Like any technology, it is not one way or the other. It ultimately comes down to how well it is understood and how effectively it is utilised. RMA teaches what? The basics of warfare: adapt, change and engage with the shifting paradigm. We cannot stay stagnant; somewhere, we need to move ahead, like it or not, AI is coming, and we cannot deny the truth simply because we do not have the technology ready yet.

An example of the use of new technology for military operations occurred on 3 January 2026 in Caracas when US Special Forces successfully whisked away Venezuelan President Nicolas Maduro from his home and transported him to the United States. For this operation, the US is believed to have used advanced drones as well as Directed Energy Weapons (DEWs) or Amplified Sonic Boom Weapons (ASBWs) to neutralise Maduro's security. Those DEWs/ASBWs may include naval and ship-mounted systems, airborne lasers such as the Boeing 747 YAL-1, or handheld, soldier-compatible DEWs/ASBWs. Defence technologies developed by American defence companies such as Anduril and Shield AI are transforming the battlefield.[21] Designed to operate with minimal human input, the weapon combines kinetic power and electronic warfare into a single autonomous system. Shifting towards AI-driven autonomy, precision and electronic dominance is becoming the new standard.

The most critical question today is decision-making and autonomy. Who is in control and actually making the decisions based on what the machine is telling them, so they understand the software? An effective Commander knows when a potential target might work. He knows when not to rely on it or trust the inputs. A Commander scrutinises those targets and seeks which protocol to adopt, from weapons-tight to weapons-free. It is much more like human control. There is still a human in the loop, not out of the loop. A human with an intelligent algorithm automating strike decisions is more akin to warfare, which is shaping up to be a defining part of future warfare. An intelligent self-learning and self-arming machine deciding what it is going to do, how it is going to do it, and when it is going to do it. Decision-making is the greatest challenge in artificial intelligence, particularly in determining whom to kill and who not to kill. The answer to maximising the potential of AI systems in future conflicts may not lie in removing humans entirely from the loop, but somewhere in between.

For example, German Helsing HX-2 is an electrically propelled X-wing loitering munition featuring quad motors with an approximately 100 km range. GPS-denied visual navigation, AI-assisted target recognition, EW resistance, modular warheads, swarm-capable software integration, and

human-in-the-loop engagement control for precision strike and a contested battlefield environment, developed based on lessons learned from the Ukrainian front.

AI algorithms are already being used on the battlefield to select targets. Today, warfare is about autonomy and man-machine symbiosis, which is delivered above all by software. No doubt, machines make mistakes, so do humans. The reality is that no one can stop the integration of AI technology into warfare. No one is going to decide on its legality, ethics, or safety. As long as one country chooses to develop, the rest of the world will follow. Things never stop by themselves. Emerging geopolitics will propel the AI Kill Chain into military doctrine, whether it is accepted or not.

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