UNITED STATES MARINE CORPS ARTIFICIAL INTELLIGENCE
STRATEGY

FOREWORD

The Marine Corps artificial intelligence (AI) strategy is a milestone in the Service's digital modernization effort. This strategy provides a framework for integrating AI across all levels of the Marine Corps to support better and faster decision-making, reducing minutes to seconds across a myriad of functions. There are five goals, each supporting the creation and exploitation of optimizing decision advantage. The Marine Corps total force will come to understand that transformation to responsible AI models will improve how we access the right data, at the right time, and in the right place.

Success on the modern battlefield depends on several critical requirements, one of which is a comprehensive understanding of the operational environment. This understanding enables military forces to adapt, prepare for multi-domain operations, and enhance situational awareness. The war in Ukraine continues to demonstrate that AI is improving decision-making speed. This strategy sets the conditions for delivering modern AI capabilities to support decision advantage in expeditionary advanced base operations and littoral operations in contested environments.

Marines understand innovation, and this strategy will provide the pathway to invest in Marines with an aptitude for data analytics and data-centric operations.[1] I am confident our Marines have the knowledge and ability to enable the commanders' decision making across each war fighting function. On the digital battlefield, from receipt of mission to the execution of tactical tasks, AI is an enabler for faster decision making and success.

Our fight for and with information needs AI now.

Lieutenant General, U.S. Marine Corps
Deputy Commandant for Information

PCN: 50100770600

"In this era of strategic competition with the PRC, the advantage will always go to the country that uses AI and associated technologies better, faster, smarter and safer."

- DepSecDef Hon Kathleen H. Hicks

OVERVIEW

Marines leverage technological advancements to fight smart, streamline business operations, and close kill chains faster and more reliably than the adversary. Artificial intelligence (AI) is one such rapidly emerging technology that, when applied correctly, can significantly change the way Marines train, plan, and fight.

AI is defined by the Department of Defense (DoD) as "the ability of machines to perform tasks that normally require human intelligence."[2] This technology has applicability across the Marine Corps warfighting functions, business operations, and supporting establishments to enhance decision-making and improve operational efficiency.

The DoD's *AI Hierarchy of Needs*[2] has quality data as its foundation. Deploying AI from enterprise to the edge depends on efficient data management practices and data generation, collection, labeling, and curation. To align with the DoD's broader objectives, the Marine Corps' approach will integrate enterprise capabilities, at echelon and at scale, empowering Marines to *Fighting Smart*.[3]

PROBLEM STATEMENT

AI continues to evolve rapidly, creating challenges for the Service in the areas of doctrine, organization, leadership, materiel, training and education, personnel, facilities, and policy development. Data management is the largest and most impactful set of challenges facing AI employment today. The Marine Corps has ongoing strategic efforts to modernize data management, which allows this document to focus on the following AI-centric challenges:
- Misalignment of AI with mission objectives.
- Growing gaps in AI competency.
- Difficulty deploying AI at scale from the enterprise to the tactical edge.
- Legacy governance frameworks stifling innovation.
- Barriers to collaboration and partnerships.

The Marine Corps must smartly advance our approaches toward effective, efficient, and responsible acceleration of AI -- with a comprehensive understanding of the risks and pace of our adversaries -- to enable advantage during competition and warfighting. Addressing these challenges will require significant resources.

SCOPE

This strategy will guide enterprise efforts to set the stage for subsequent direction and guidance. It is applicable to the Total Force, Joint, allies, and partners and should be leveraged as a core document to align resources and activities.

VISION

Empower Marines with advanced AI capabilities -- supported by informed leadership, strategic partnerships, a skilled workforce, and lean governance -- to enhance lethality and efficacy to ensure a decisive information advantage during competition in modern warfare.

GUIDING PRINCIPLES

The Marine Corps AI Strategy is a component of the digital modernization effort *Fighting Smart*.[3] : This strategy emphasizes leveraging information, including data and intelligence, as a dynamic component of combat power. By doing so, it enables Marines to enhance decision-making speed and effectiveness during their assigned missions. Recognizing that information is central to all aspects of military operations, this approach serves as the foundation for intelligence, command and control, and communication.

The following principles are fundamental to the Marine Corps' approach for adopting, integrating, innovating, and sustaining AI across the Service. Each principle provides a valuable component to the AI implementation framework.

- **Accelerate** the integration and utilization of AI at scale to provide reliable information and insights for enhanced decision-making and operational effectiveness, in accordance with the DoD's RAI principles.

- **Empower** Marines with the knowledge, skills, and tools to rapidly implement AI. This requires developing a workforce proficient in AI and unleashing them to be innovative in seeking novel solutions for existing and future challenges.

- **Grow** an AI workforce able to oversee, adopt, and integrate AI capabilities across the enterprise to the tactical edge.

- **Set conditions** to integrate and enable functional data management to ensure data is visible, accessible, understandable, linked, trustworthy, interoperable, and secure (VAULTIS).[2]

- **Build and strengthen** strategic partnerships to accelerate adoption, foster innovation, and enhanced interoperability with academia, industry, Joint, and mission partners.
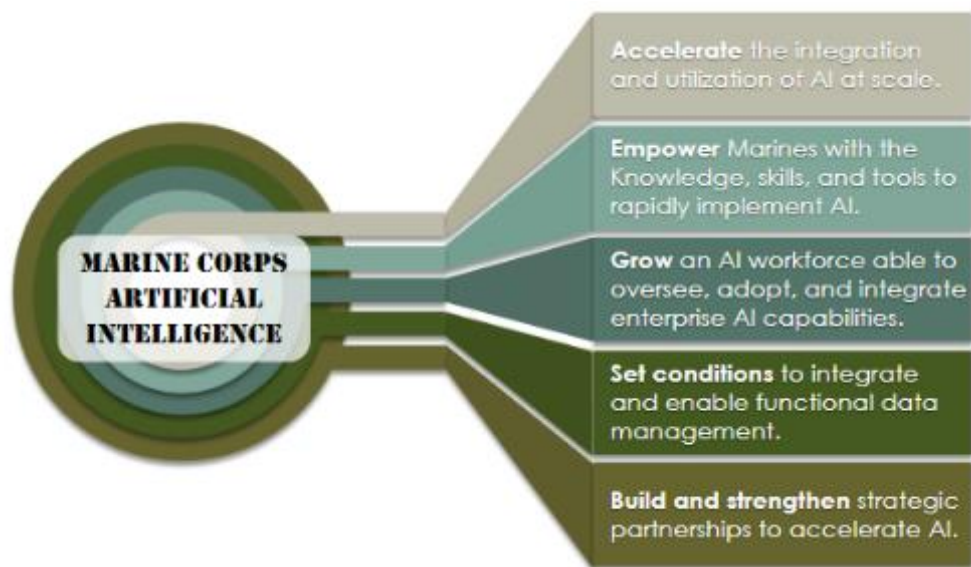

Figure 1. Guiding principles supporting Marine Corps Artificial Intelligence.

GOALS

The Marine Corps' vision for AI is further broken down into the following goals, where each goal contains the required objectives to successfully meet the Service's AI vision:

1. AI Mission Alignment
2. AI Competent Workforce
3. AI Deployment at Scale
4. AI Governance
5. Partnerships and Collaboration

GOAL 1:
AI MISSION ALIGNMENT

The primary aim of this strategy is to gain a comprehensive understanding of mission-specific problems where AI offers a solution. This is accomplished by utilizing three distinct sources to collect and analyze use cases. The Deputy Commandant for Information Service Data Office will oversee the submission, review, and prioritization of this process.[4]

OBJECTIVE 1: ALIGN WITH DOD DIRECTIVES
Capture higher-level priorities within the DoD, Department of the Navy (DON), and the Commandant of the Marine Corps for priority use cases to align effort.

OBJECTIVE 2: ALIGN WITH SERVICE CAPABILITIES
Collect and assess use cases based on Service requirements to understand where AI is suited to address and overcome mission challenges. Service-level requirements are the primary method to develop and deliver Service capabilities.

OBJECTIVE 3: ALIGN WITH TACTICAL INNOVATION
Harness the innovative spirit of Marines to understand where and how AI best aligns to the mission. The greatest insights on the utility of AI are gained by applying creative solutions to mission-critical problems. These problems can be framed in terms of evolving requirements to perform current tasks at dramatically increased scope, scale, tempo, and precision to address evolving threat capabilities. Together, top-down guidance and bottom-up implementation, refinement, and feedback will foster an iterative approach across diverse applications.

This approach supports the application of AI across the enterprise and the refinement of technical capabilities for specific needs. It enables commanders and leaders in operationalizing and integrating AI capabilities to modernize workflows, processes, and tactics to gain decision advantage.

GOAL 2:
AI COMPETENT WORKFORCE

Develop an AI workforce that can build, support, and sustain AI systems and technologies.[1] Immediate action is required to address current skill and knowledge shortfalls, while the long-term solution of transforming the Marine Corps workforce is being planned and executed.

OBJECTIVE 1: STOP-GAP TRAINING AND EDUCATION

Immediate upskill of the workforce at all levels of the Force on the applicability of AI. Leveraging current talent within the Marine Corps to conduct stop-gap training and education on AI that improves the overall understanding of this capability and where it can be applied.

OBJECTIVE 2: AI TALENT MODERNIZATION

In alignment with Talent Management,[11] identify compensation opportunities for critical components of the AI workforce, modernizing areas where technology can streamline operations, and conduct organizational realignments that ensure better alignment of individual abilities, skills, and desires with the warfighting needs of the Service.[5]

OBJECTIVE 3: AI-READY WORKFORCE

In accordance with Defense Workforce Framework (DWF) role alignment, this objective will align AI workforce requirements for the Service and AI training and education programs for leaders, Marines, and civilian Marines, tailored appropriately to all ranks and grades.

"we … need to ensure Service leaders are properly educated and trained to understand the opportunities, challenges, and limitations of utilizing data to support decision-making."

Gen David H. Berger, USMC
38th Commandant of the
Marine Corps

GOAL 3:
AI DEPLOYMENT AT SCALE

Establish enterprise-to-edge infrastructure, develop and publish standards, and integrate security that enables reliable, fast, and effective AI solutions.[6] Deploying AI at scale depends on the necessary tools to enable AI operations that support continuous integration and continuous deployment. Adoption and reuse of existing Joint, allied, and mission partner capabilities will be maximized before developing unique capabilities, with integration.

OBJECTIVE 1: DATA CULTURE

Develop a culture of data literacy and stewardship,[7] to include an appropriate understanding of organizational data needs for mission success at each command that integrates with higher headquarters, Service, and Department level entities.

OBJECTIVE 2: DATA MANAGEMENT

Support the ongoing implementation to modernize data management, standards, and curation as critical requirements to deploy AI at scale.

OBJECTIVE 3: AI MANAGEMENT & STANDARDS

Develop and communicate policy and guidance in accordance with all applicable requirements for model and algorithm development, test, evaluation, validation, and verification. This includes considerations for model drift, hallucinations, adversarial and non-adversarial vulnerabilities.

OBJECTIVE 4: AI INFRASTRUCTURE

The Service Data Office will establish a working group to determine AI infrastructure requirements that integrate seamlessly with the DoD's vision for a federated model across the Joint Force, mission partners, and allies. The AI infrastructure broadly refers to both enterprise level infrastructure and expeditionary capabilities intended for tactical employment in austere environments.

OBJECTIVE 5: INTEGRATION AND DEPLOYMENT

Integrate continuous integration and continuous deployment pipeline capabilities into the development, security, and operations methodology.

OBJECTIVE 6: CYBERSECURITY

Cybersecurity is integral to the development, deployment, and maintenance of AI capabilities. The Marine Corps will adopt best-in-class AI capabilities and software coupled with cybersecurity to protect our advantage against potential threats.

GOAL 4:
AI GOVERNANCE

Establish policy, governance, and lines of communication for AI initiatives that ensure AI technologies are deployed in accordance with RAI[8] guidelines. Develop a clear framework for oversight, resource alignment, and enterprise communication.

OBJECTIVE 1: RESPONSIBLE AI GOVERNANCE

Establish governance for safe, secure, ethical, and responsible AI with resource alignment across the Force. This structure ensures that AI initiatives are aligned with strategic objectives, fostering an environment to leverage AI effectively and responsibly. This governance will be lean but effective to encourage innovation[4] while providing and enforcing standards and compliance.

OBJECTIVE 2: POLICIES AND GUIDANCE

Publish policies and guidance for responsible AI innovation and the management of AI algorithms, while identifying and removing policy barriers.[9]

OBJECTIVE 3: COMMUNICATION

Improve communication across the Service regarding AI initiatives, capabilities, tools, challenges, and frameworks to foster a collaborative approach to AI integration and change management.

GOAL 5:
PARTNERSHIP AND COLLABORATION

Establish and strengthen partnerships and collaboration[10] that facilitates the exchange of knowledge, resources, and technologies. This will accelerate AI innovation and adoption within the Marine Corps, ensure alignment with broader defense objectives, and enhance interoperability with key partners. These partnerships will improve collective capabilities and provide cumulative resource savings.

OBJECTIVE 1: JOINT AND MISSION PARTNER INTEROPERABILITY

DoD and international mission partner interoperability offers the best-in-class capabilities across the Joint Force and trusted partners. Proper alignment and coordination will enhance capabilities with reduced resources.

OBJECTIVE 2: ACADEMIC PARTNERSHIPS

Identify opportunities for increased partnership with academic institutions. Partnering with academia allows Marines to tackle the most challenging AI problems with cutting edge ideas, experts, and resources. These partnerships push the envelope on what is possible, while providing Marines invaluable education that enhances the Total Force.

OBJECTIVE 3: INDUSTRY PARTNERSHIPS

The Marine Corps will partner with industry to harness technology solutions and adopt established best practices.[6] Industry vendors provide a wealth of knowledge and experience, often ahead of government organizations. Through strengthened partnering, the Marine Corps will leverage this knowledge and adopt technology for rapid modernization.

IMPLEMENTATION

A detailed Implementation Plan (IPLAN) will outline the mechanisms for achieving the strategic goals. To aid in the IPLAN, the following will be established.

- A repository of candidate AI use cases to store submissions from across the Service.
- A mechanism to manage the AI use case process that feeds into Service-level decisions and actions[4].
- AI task groups (AITG) across the Service to support commanders in identifying their use cases, acting as the AI advisor, and serving as the key link between Headquarters Marine Corps, Fleet Marine Force, and supporting establishments.[3] The AITGs will be responsible for execution of the IPLAN to this strategy.

Ways		Means				Ends
GUIDING PRINCIPLES		**INTERMEDIATE OBJECTIVES**				**GOALS**
Empower Marines with the knowledge, skills, and tools to rapidly implement AI.		Use Case Process	DoD and DON Directives	Service Capability Development	Innovation & Bottom-up Feedback	**GOAL 1:** AI MISSION ALIGNMENT
Grow an AI workforce able to oversee, adopt, and integrate enterprise AI capabilities.		Immediate Upskilling Marines	Modernize & Compensate	Conduct Organizational Realignments	AI Training & Education Programs	**GOAL 2:** AI COMPETENT WORKFORCE
Accelerate the integration and utilization of AI at scale.		Culture of Data Stewardship	AI Infrastructure	Train, Test, Evaluate & Validate	Data Tagging & Cybersecurity	**GOAL 3:** AI DEPLOYMENT AT SCALE
Set conditions to integrate and enable functional data management.		Responsible AI Governance	Policies & Guidance	Improve Communication with Service	Integrate, Partner, & Collaborate	**GOAL 4:** AI GOVERNANCE
Build and strengthen strategic partnerships to accelerate AI.		Academic Partnerships	Industry Partnerships	Joint Forces	International Allies	**GOAL 5:** PARTNERSHIP AND COLLABORATION

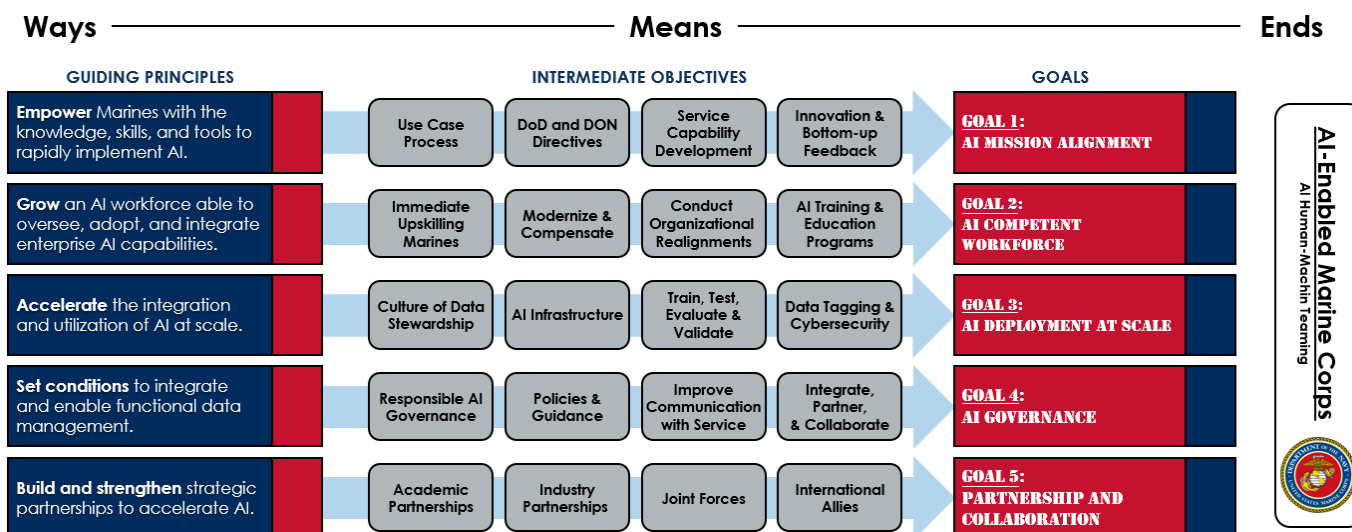AI-Enabled Marine Corps
AI Human-Machin Teaming

Figure 2. USMC Artificial Intelligence Strategic Implementation Framework

CONCLUSION

To compete, fight, and win our Nation's battles, the Marine Corps must embrace technological advancements, leverage a well trained and equipped workforce, and actively seek out collaborative partnership opportunities. Future successes will increasingly rely upon the Service's ability to rapidly adapt, innovate, and evolve to compete with peer adversaries and maintain warfighting advantages.

The approach presented in this strategy provides a logical framework that aligns to Joint and National initiatives and sets the Marine Corps on a path to maintain pace with the rapidly evolving AI landscape, outpacing our adversaries and enemies across the competition continuum. Leveraging the esprit de corps and innovative nature of our Marines and civilians will allow us to remain agile, focused, and ready to *Fight Smart*.[3]

"We are in a good position to accelerate our lethality and modernization while we tackle the challenges that confront our combatant commanders, allies, and partners."

Gen Eric M. Smith, USMC
39th Commandant of the
Marine Corps

NOTES

1. Department of Defense Artificial Intelligence Strategy, 2018.
2. Department of Defense Data, Analytics, and Artificial Intelligence Adoption Strategy, Jun 2023.
3. *Fighting Smart* (pending signature).
4. MCO 5231.4, *Marine Corps Data and Artificial Intelligence*, Mar 2024.
5. Force Design 2030, Annual Update, Jun 2023.
6. US Department of Defense Responsible Artificial Intelligence Strategy and Implementation Pathway, Jun 2022.
7. DC I Data Management Implementation Plan (Draft).
8. DepSecDef Memo, *Implementing Responsible Artificial Intelligence in the Department of Defense*, May 2022.
9. OMB M-24-10, *Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence*, Mar 2024.
10. Executive Order 13859, *Maintaining American Leadership in Artificial Intelligence*, Feb 2019.
11. Talent Management 2030, Annual Update, Mar 2023.