

AI Adoption Roadmap

Vision and Objectives



The RN achieves consistent military advantage and effective deterrence by continuously exploiting AI across the spectrum of its outputs.

Increase lethality and availability of the current force through the deployment of AI-enabled capabilities

Conduct regular and credible demonstrations of AI-enabled capabilities

Increase the efficiency and effectiveness of business operations through deployment of AI-enabled capabilities

Amend and improve processes and infrastructure so that new AI-enabled capabilities are continuously developed and deployed at scale and pace

Recommendations

Management



Set objectives and key results

Key results should be tracked monthly at a senior level. Objectives and key results should be reviewed quarterly.



Establish a Navy AI Cell.

Establish a dedicated Navy AI Cell (NAIC). The NAIC is a single focal point driving implementation with visibility over all AI-related work.



Insert AI capabilities into programmes.

Follow an iterative approach to prove the value of AI powered capabilities using innovation funding.

Enablers

Set priority workstreams

7 workstreams identified for maturing enablers for AI adoption: Acquisition; Assurance; Governance; Data; Software, model management & deployment; People; Compute and other hardware.

Capture lessons and assign owners

Capture lessons from pathfinder projects and other activity regularly to inform additional activity to mature enablers allowing the continued tracking through the NAIC and OKRs.

Capability



Set priority capability areas.

6 priority capability areas have been identified for exploiting AI in the RN:

- Tactical Fire Chains
- Dynamic Situational Awareness
- Autonomous Systems
- Optimised Mission Planning
- Smart Logistics
- People, Finance and Commercial processes



Run capability sprints.

Run a series of month-long capability sprints, each focusing on a capability area and applying leadership attention and support to the projects.

Drive pathfinder projects to core.

Focus leadership on pursuing a limited number of high-value, high-readiness projects end to end. Current pathfinders are recommended to be:

- AI for acoustics
- Project CETUS for underwater autonomy
- Counter-Uncrewed Air Systems
- Increasing platform availability through predictive maintenance
- Predictive recruitment tool
- Uncrewed Surface Vessel collision avoidance

Validate and prioritise use cases continuously.

Establish a standardised method for validating the application of AI to increase capability. Maintain a dedicated use case database and continually (re)prioritise.

Direction of Travel

0-2 Years

- Achieve immediate capability gains whilst proving the route for future AI powered capabilities
- Establish and develop supporting infrastructure and processes as enablers for AI capabilities

2-3 Years

- Apply relevant lessons to ensure assurable, safe and effective AI is deployed within capabilities
- Accelerate development and deployment cycles for AI and software
- Standardise AI and software procurement within all programmes

3-5 Years

- Identify and close remaining capability gaps where AI provides opportunity
- Embed rapid adoption process for emerging technologies
- Delegate AI adoption down to lowest levels possible