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SNAPSHOT
CNA's Artificial Intelligence Maturity Model for Government Agencies

CNA's AI Maturity Model intends to account for the full scope of government agency AI activities. It is organized into five domains, which describe the highest-level components of agencies' AI maturity. Domains are grouped into subdomains, each of which describes a more tangible and specific element of AI maturity. The subdomains are designed to be as exhaustive, actionable, and distinct as possible. Subdomains are further divided into topics, which are the most detailed components of agency AI capabilities in this model. See cna.org/aimaturity for the full model.

Domain	Subdomain	Topic
1. Productive governance models are established	1.1. Coordination, strategy, and planning	1.1.1. Participation of individuals inside the organization 1.1.2. Engagement with external stakeholders 1.1.3. Plan development 1.1.4. Policy and standards development 1.1.5. Architecture documentation 1.1.6. Organizational structure and process for governance 1.1.7. Implementation process
	1.2. Compliance and accountability	1.2.1. Compliance, reviews, and audits 1.2.2. Separation of duties 1.2.3. Incident reporting 1.2.4. Proficiency standards
	1.3. Appeals and alternative systems	1.3.1. Human oversight of the use of AI outputs 1.3.2. Alternative processes 1.3.3. Appeals
2. Efforts are sufficiently resourced	2.1. Datasets	2.1.1. Data quality 2.1.2. Data accessibility
	2.2. Infrastructure	2.2.1. Computing infrastructure 2.2.2. Data storage infrastructure 2.2.3. Testing infrastructure 2.2.4. Infrastructure accessibility
	2.3. Procurement	2.3.1. Procurement processes
	2.4. Workforce and expertise	2.4.1. Skills and workforce planning 2.4.2. Recruitment and retention 2.4.3. Fostering of emerging talent 2.4.4. Enhancement of AI literacy

Domain	Subdomain	Topic
3. Outputs are impactful	3.1. Performance	3.1.1. Performance indicators and metrics 3.1.2. Performance testing 3.1.3. Monitoring of model evolution 3.1.4. Feedback and optimization
	3.2. Use cases	3.2.1. Identification of use cases 3.2.2. Evaluation of use cases 3.2.3. Facilitation of AI advancement in the field
4. Products and results are trustworthy	4.1. Representative	4.1.1. Engagement with external stakeholders 4.1.2. Participation of internal offices that represent stakeholders 4.1.3. User experience
	4.2. Transparent	4.2.1. Descriptive documentation of AI systems 4.2.2. Identification of AI content 4.2.3. Development of transparent systems 4.2.4. Data transparency 4.2.5. Communication of AI system performance 4.2.6. Third-party systems
	4.3. Unbiased	4.3.1. Characterization of bias and discrimination 4.3.2. Metrics for evaluating bias 4.3.3. Monitoring for biased outcomes 4.3.4. Unbiased training data
5. Products are safe and secure	5.1. Cybersecurity and privacy	5.1.1. Mitigation of vulnerabilities 5.1.2. Assessment of safety and security impacts 5.1.3. Cyber response 5.1.4. Data security and privacy
	5.2. Risk management	5.2.1. Risk management approach 5.2.2. Risk tolerance 5.2.3. System risk assessments

About CNA

CNA is a not-for-profit analytical organization dedicated to the safety and security of the nation. With nearly 700 scientists, analysts, and professional staff across the world, CNA's mission is to provide data-driven, innovative solutions to our nation's toughest problems. It operates the Center for Naval Analyses—the federally funded research and development center (FFRDC) of the Department of the Navy—as well as the Institute for Public Research. The Center for Naval Analyses provides objective analytics to inform decision-making by military leaders and ultimately improve the lethality and effectiveness of the joint force. The Institute for Public Research leverages data analytics and sophisticated methods to support federal, state, and local government officials as they work to protect the homeland, the American people, and industry.

To learn more about CNA's Artificial Intelligence Maturity Model for Government Agencies, contact AIMaturity@cna.org