A GUIDE TO PRACTICAL NEXT STEPS FOR AI IMPLEMENTATION

ITS AMERICA

AI Governance Group: The Delivery Function

Carrying out effective implementation of AI across transportation organizations

The Delivery Function translates AI strategy into transportation deployments, scaling solutions from pilots to production while ensuring safety, security, and alignment with sector priorities. It aligns AI initiatives to organizational goals through clear metrics and strong governance, with cybersecurity, safety, and public trust embedded throughout delivery.

The Delivery Function includes teams in:

- Project Delivery
- Procurement
- Research and Innovation
- Technology Implementation
- Public Affairs

From Proof of Concept to Scale

AI implementation typically progresses through three stages:

1. **Proof of Concept (PoC)**

   PoCs are designed to demonstrate feasibility for a specific use case. They are often developed in controlled or research environments and focus on validating concepts, methods, or technologies with limited scope and risk.

2. **Pilot Deployments**

   Pilots involve the design and implementation of AI solutions in real-world environments. They build upon lessons learned from PoCs and require greater organizational commitment, resources, and cost. Pilots provide critical insight into operational performance, user interaction, and system impacts.

3. **Scaled Implementation**

   Decisions to scale AI solutions require a comprehensive strategic business case and cost-benefit analysis. Evidence gathered from pilot deployments helps assess impacts, benefits, and risks relative to transportation goals, providing the foundation for informed investment and broader deployment.

Key Considerations for AI Delivery

several core considerations guide responsible and effective delivery:

Context of Application and Level of Risk

- Define the context in which AI is applied, and the associated level of risk.
- Determine if a solution is safety-critical or non-safety-critical determines the rigor of governance, assurance, and oversight required.

Solution-Level Decisions

- Ensure AI solutions are human-centric, secure, safe, and fair by design.
- Balance performance with security and resilience when making informed choices about data, compute, architecture, and deployment models (e.g., edge or cloud).

Governance and Assurance Processes

- Embed AI assurance in every implementation,
- Clearly define and track risks and mitigations through key performance indicators, and reporting to the AI Governance Group.
- Build workforce and public trust through transparency, explainability, and ethical safeguards.

Data and Technical Capabilities in Place

- Coordinate with operational teams to ensure data and technical readiness, including appropriate technology stacks, third-party solutions, partnerships, and outsourcing.
- Follow recognized best practices and applicable federal guidance for procurement and third-party engagements.

Human-Centric Approach

- Design AI solutions around end users and communities, emphasizing effective human–AI interaction, intuitive interfaces, and transparency and explainability.
- Monitor real-world impacts and ensure safety and efficiency through workforce upskilling across the AI lifecycle, end-user education, and ongoing community engagement.
- Embed a layered technical and human assurance stack across the AI lifecycle. This should combine system level controls, such as validation, monitoring, and guardrails, with clearly defined human oversight roles, escalation pathways, and decision accountability.

Building Toward Maturity

The Delivery Function plays a critical role in advancing organizational AI maturity. By applying structured delivery practices, strong governance, and continuous learning, organizations can move from experimentation to sustainable, high-impact AI uses. The AI maturity model outlines key actions at each stage of implementation, helping organizations deliver AI solutions that are trusted, effective, and aligned with transportation outcomes.

For more detail on these concepts, please refer to the full **A Guide to Practical Next Steps for AI Implementation** developed by ITS America in partnership with Cambridge Consultants.