
TVA's AI Journey

Jessica Baker

Sr. Director Enterprise Data, Analytics, & AI

TVA Information Technology

Agenda

AI Governance: A Framework for Empowerment

Intro to TVA

TVA's AI Journey

- Where We've Been
- Where We Are Today
- Where We're Going

Wrap up – Q&A

Delivering on Our Mission for the People

Energy | Environment | Economic Development



**Provide affordable,
reliable power.**



**Steward the Valley's
natural resources.**



**Partner for
economic growth.**

How To Mitigate the Risks of AI?

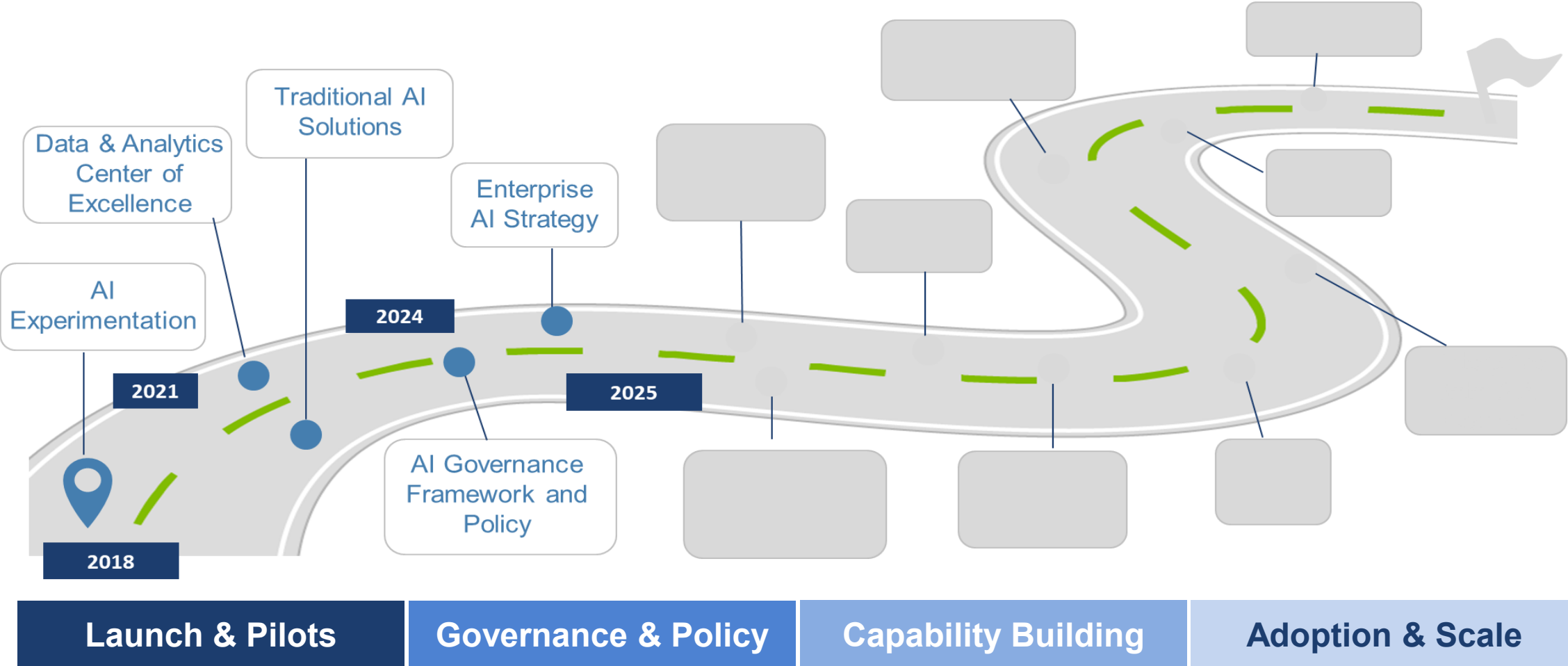
Where We Started

- **Safety & Security:** Vulnerabilities
- **Integrity & Ethics:** Unintended Consequences
- **Operations:** Reliability of Results
- **Cost:** Investment Cost/Benefit
- **Competencies:** Workforce Capabilities and Change Management



TVA's AI Journey

Where we've been → Where we are → Where we're headed

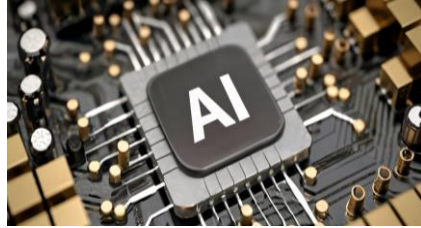


Regulatory AI requirements



Executive Order (EO) 13960 Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government (2020)

Guidelines and standards for the Federal government to ensure AI technology is developed, implemented, and managed in a manner that is ethical, secure, and accountable.



The White House Office of Science and Technology: *Blueprint for an AI Bill of Rights* (2022)

Protect individual rights, privacy, and ethics in the development and use of AI by defining guidelines and regulation to AI development with focus on fairness, transparency, and accountability.



Executive Order (EO) 14110 on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence (2023)

Strengthen guidelines, requirements and standards for the use of AI. Understand AI, having the people, tools, and skills necessary to develop and use AI safely and ethically. Enable innovation and drive the workforce with AI within the Federal government. Act and do as a world leader in AI and ensure consumer protections and privacy of data and be a leader.



Office of Management and Budget (OMB) Memorandum 25-021 *Advancing Governance, Innovation, and Risk Management for Agency Use of Artificial Intelligence* (2025)

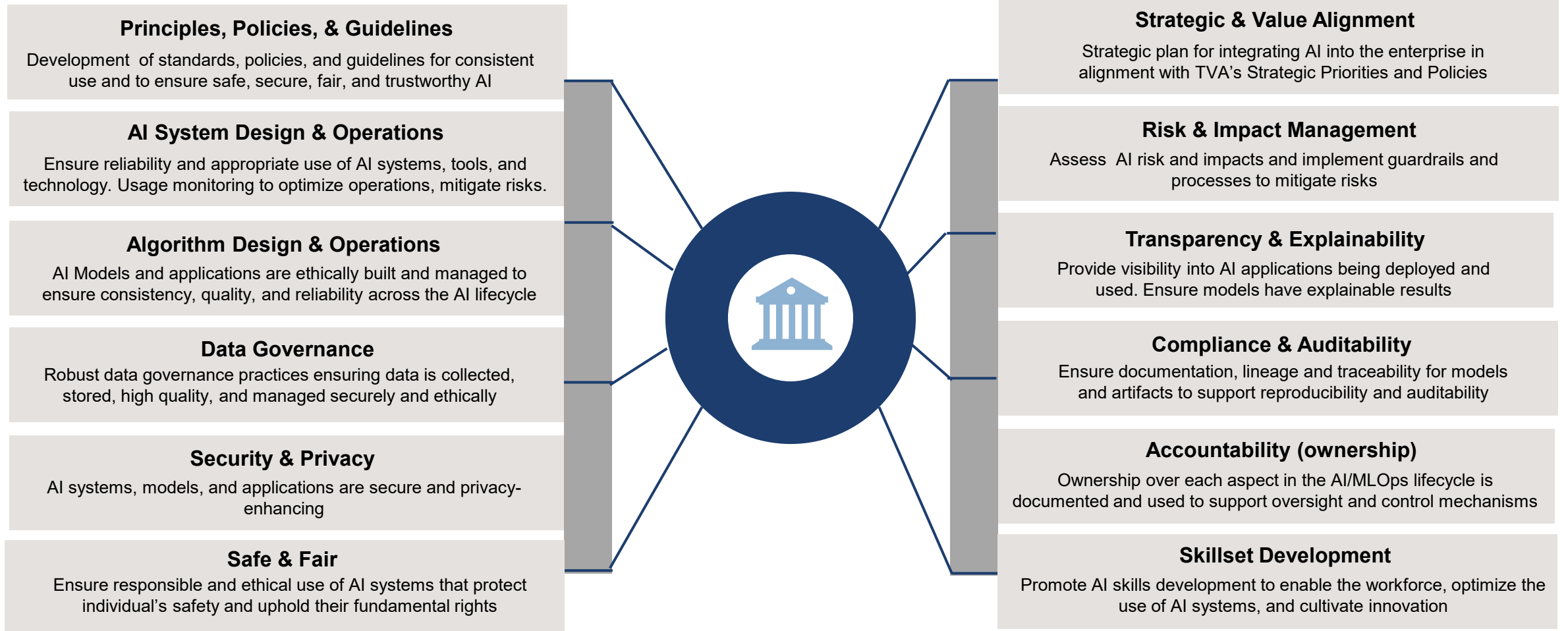
Strengthening AI governance, the advancement of responsible AI innovation, and managing the risks from the use of AI. Development of strategies to promote innovation safely, fairly, and remove barriers to its use through tactical and comprehensive policies and standards.



OMB Memorandum 25-022 *Advancing the Responsible Acquisition of Artificial Intelligence in Government* (2025)

Outlines new requirements for federal agencies acquiring AI. It emphasizes cross-functional collaboration across the agency, risk management, and competition through interoperability, performance-based acquisitions, modular contracting.

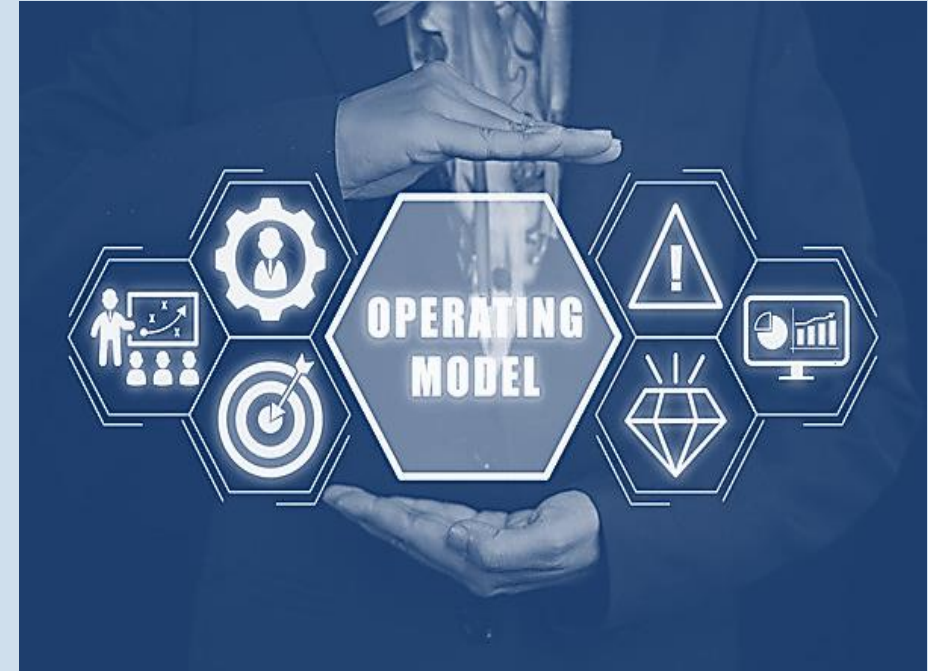
AI Governance Framework



Where We Are Today

How To Operationalize AI?

- **Operating Model:** Federated Workforce & Execution
- **Data:** Trust, Reusability, Accessibility
- **Tools & Platforms:** Enterprise Solutions
- **Prioritization:** Evaluation Model
- **Business Enablement:** Data & AI Literacy

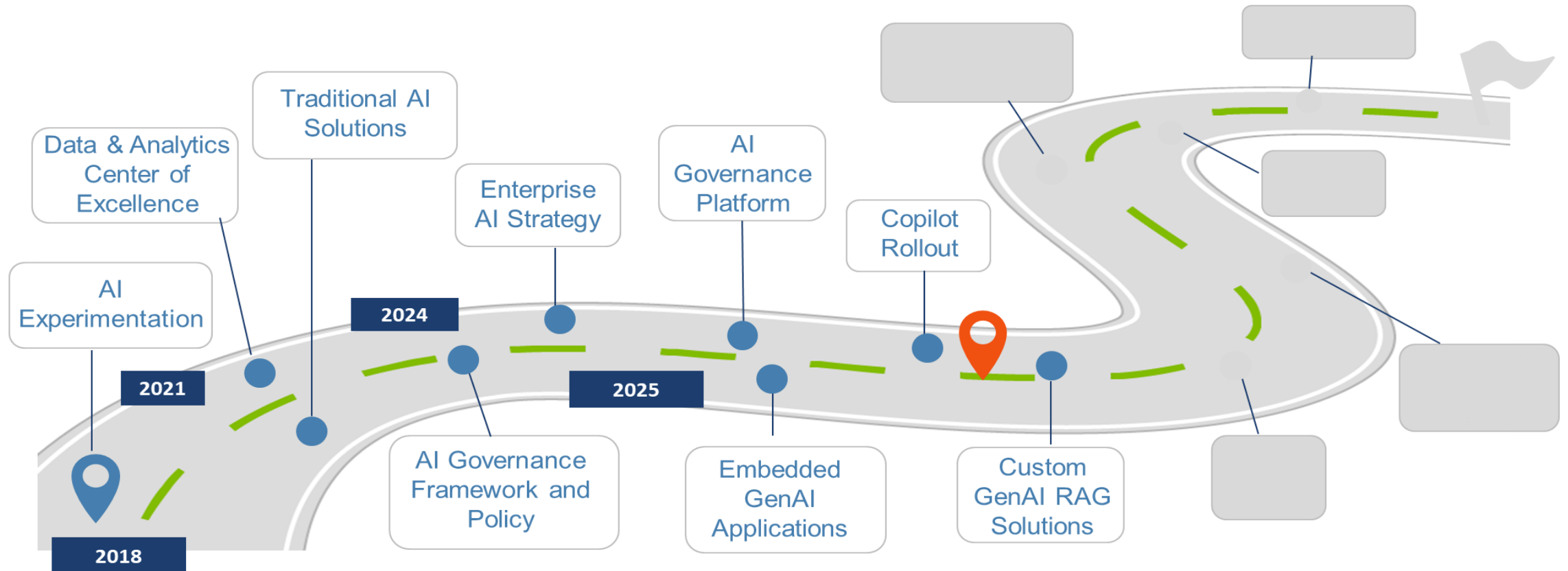


TVA's AI Journey

Where we've been

Where we are

Where we're headed



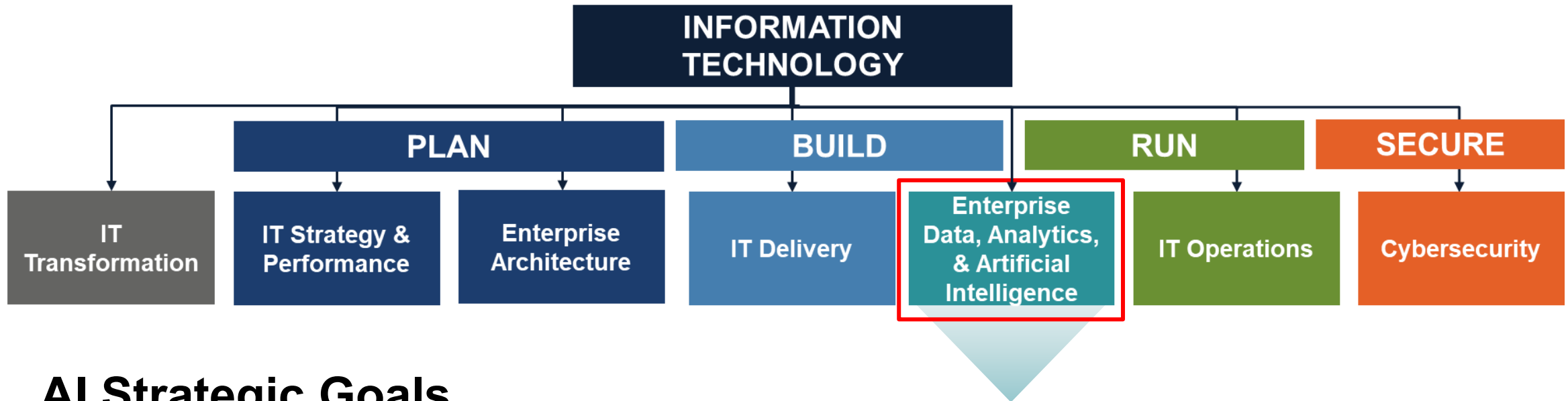
Launch & Pilots

Governance & Policy

Capability Building

Adoption & Scale

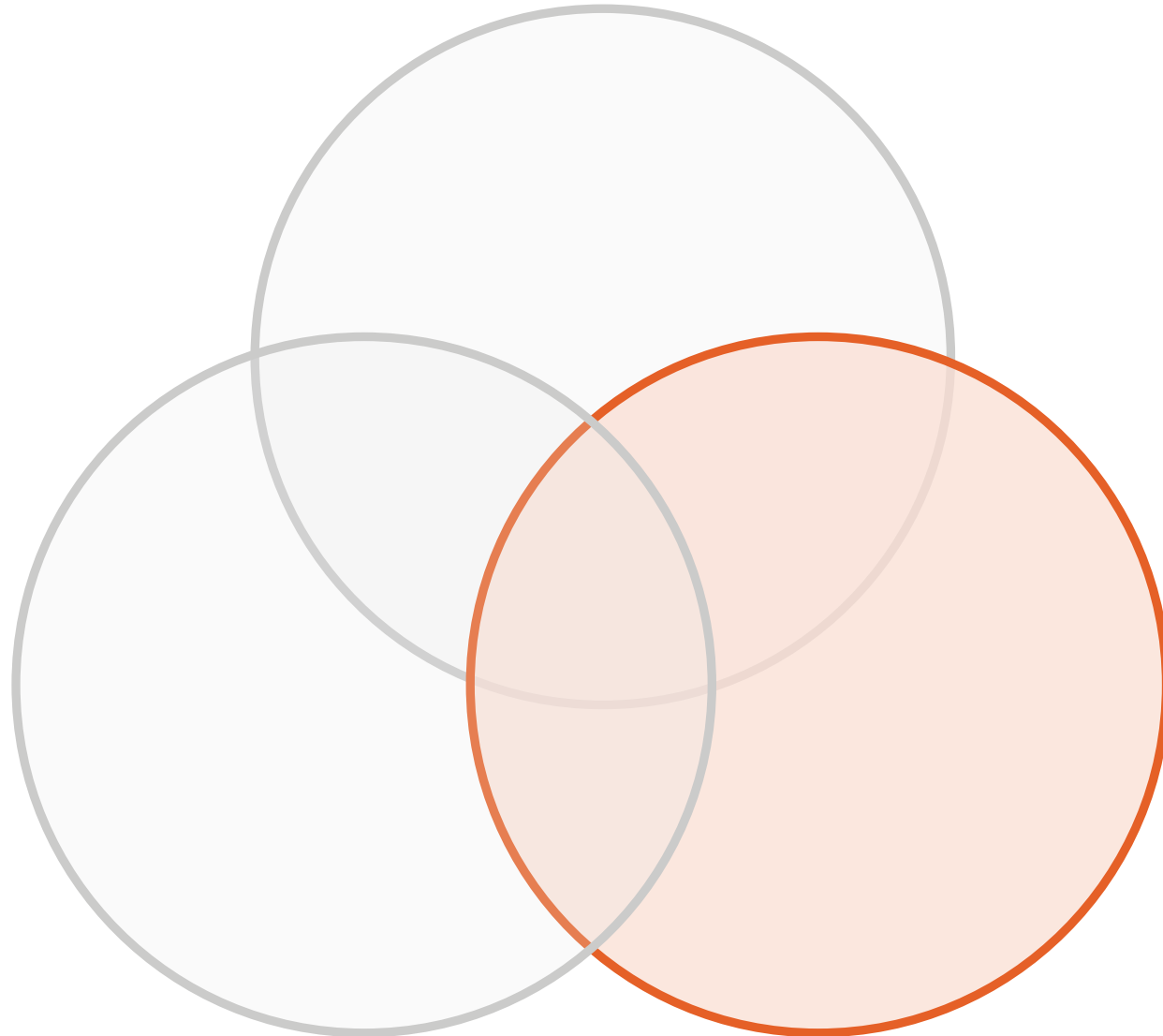
Organizational Alignment and Strategy



AI Strategic Goals

- 1 Ensure AI Governance & Responsible Use
- 2 Leverage Secure AI Tools & Technology
- 3 Build Enterprise AI Capabilities
- 4 Deliver Value With AI

Building AI Foundation at TVA



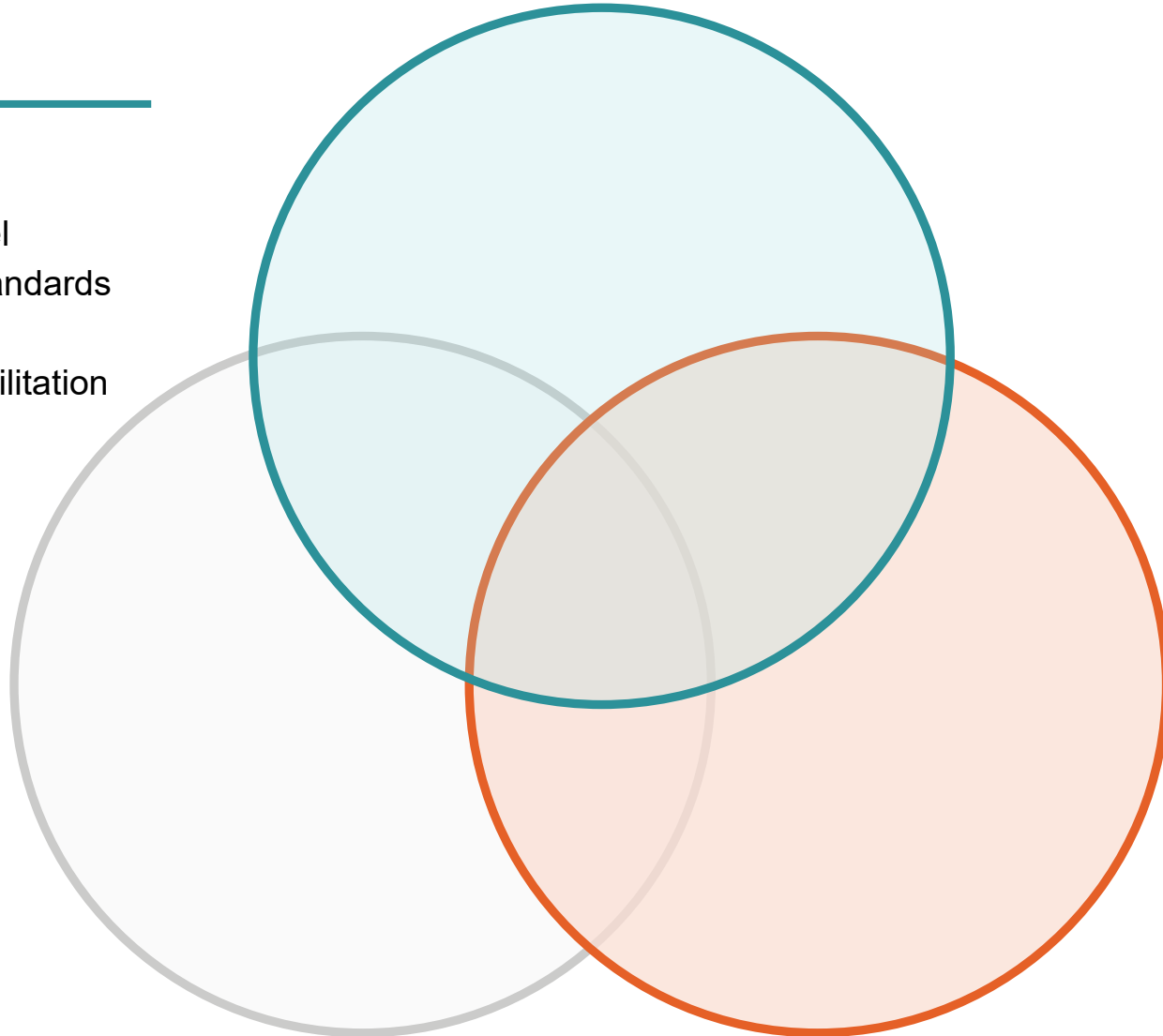
Cybersecurity

- AI Enterprise Risk
- AI Ethics Program
- AI & GenAI Policy
- Governing Body
- Cyber Governance

Building AI Foundation at TVA

Data & AI Team

- Data Governance
- AI Governance
- Strategy & Operating Model
- Governance Platform & Standards
- Use Case Evaluation
- Training, Consulting, & Facilitation of Change Agent Network



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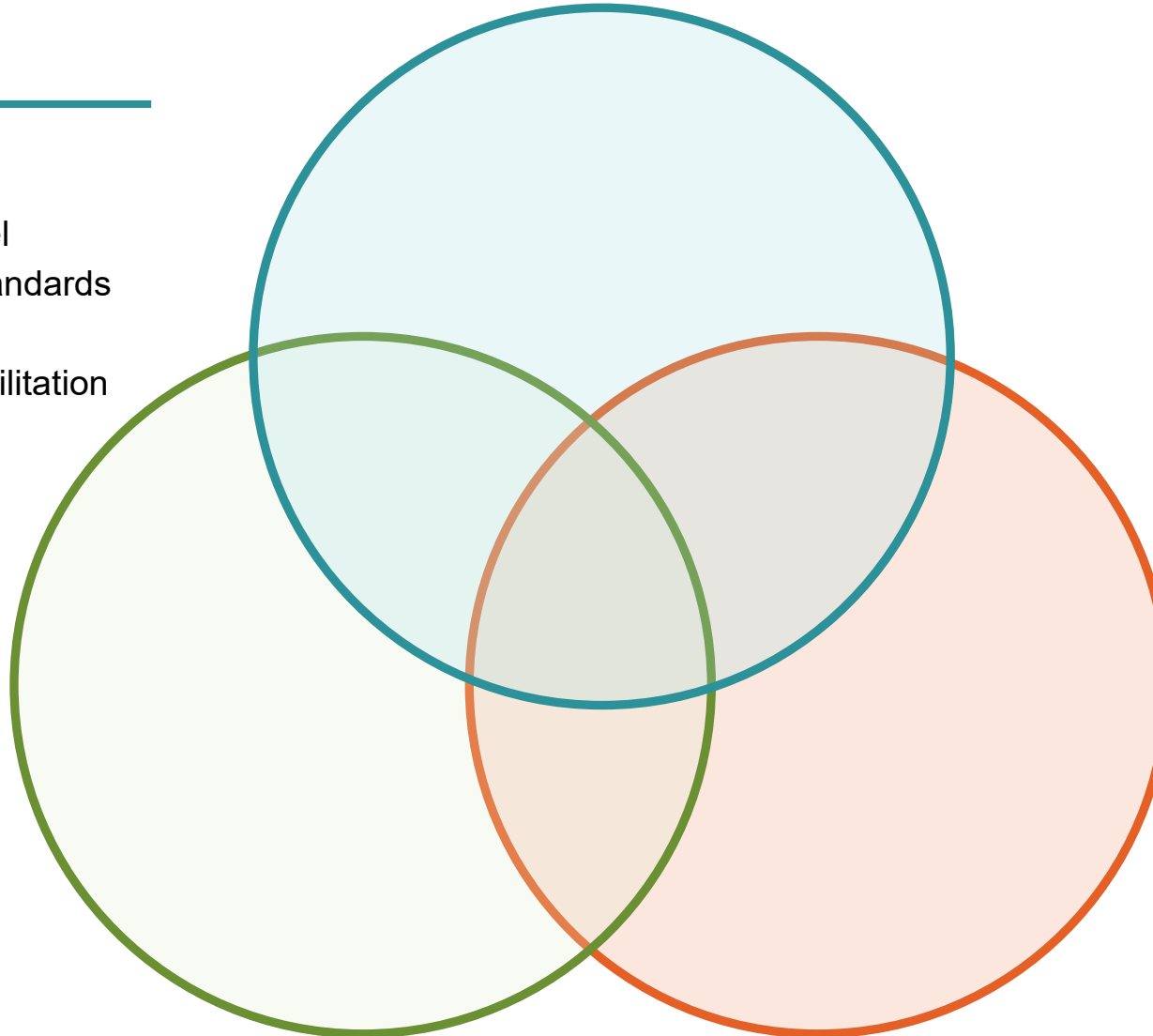
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Business Units

- AI Technology & Use Case Request
- Workforce Capabilities
- Communications & Change Management



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Business Units

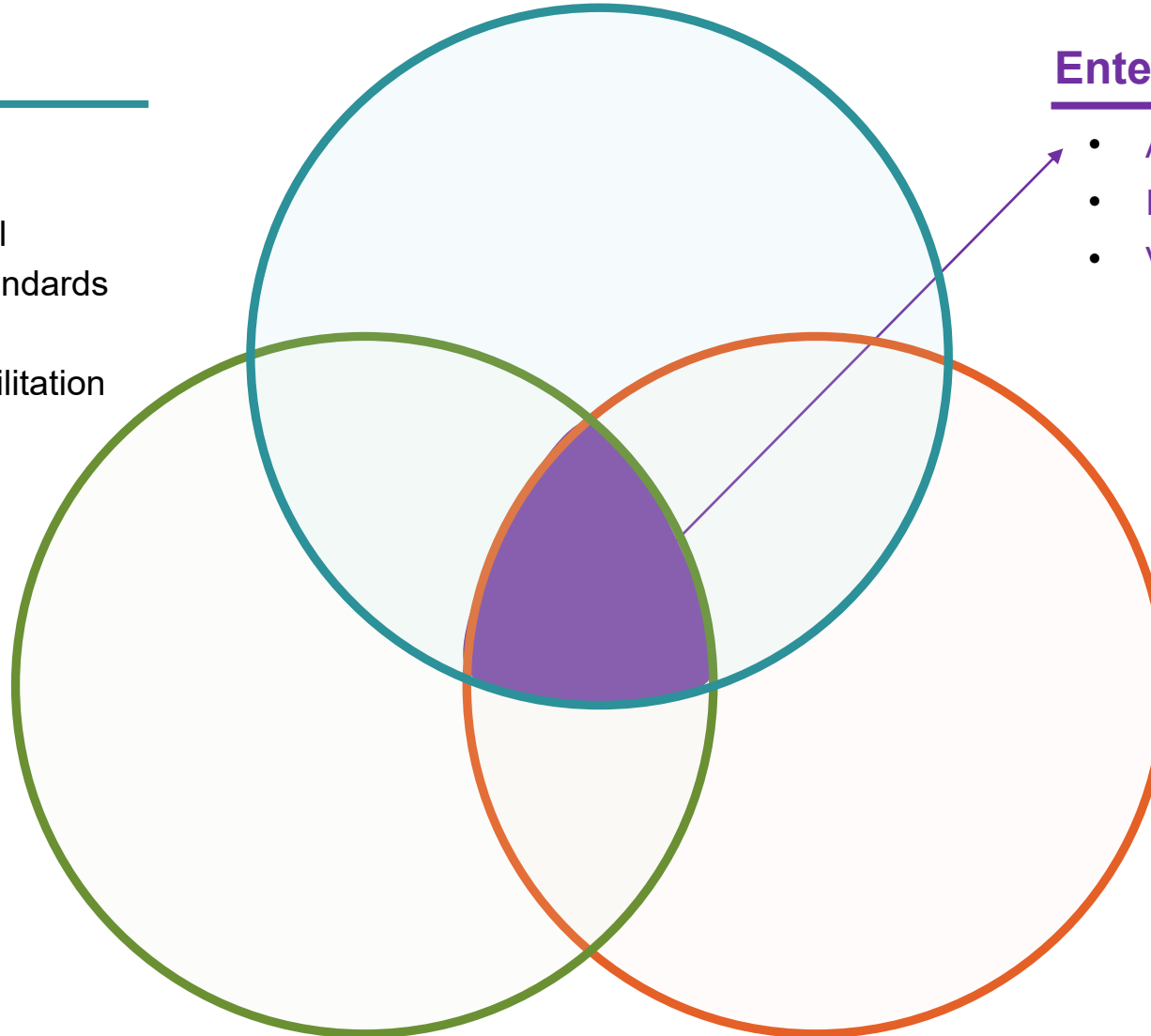
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Enterprise AI Maturity

- AI-Enabled Business Strategy
- Investment
- Value Capture

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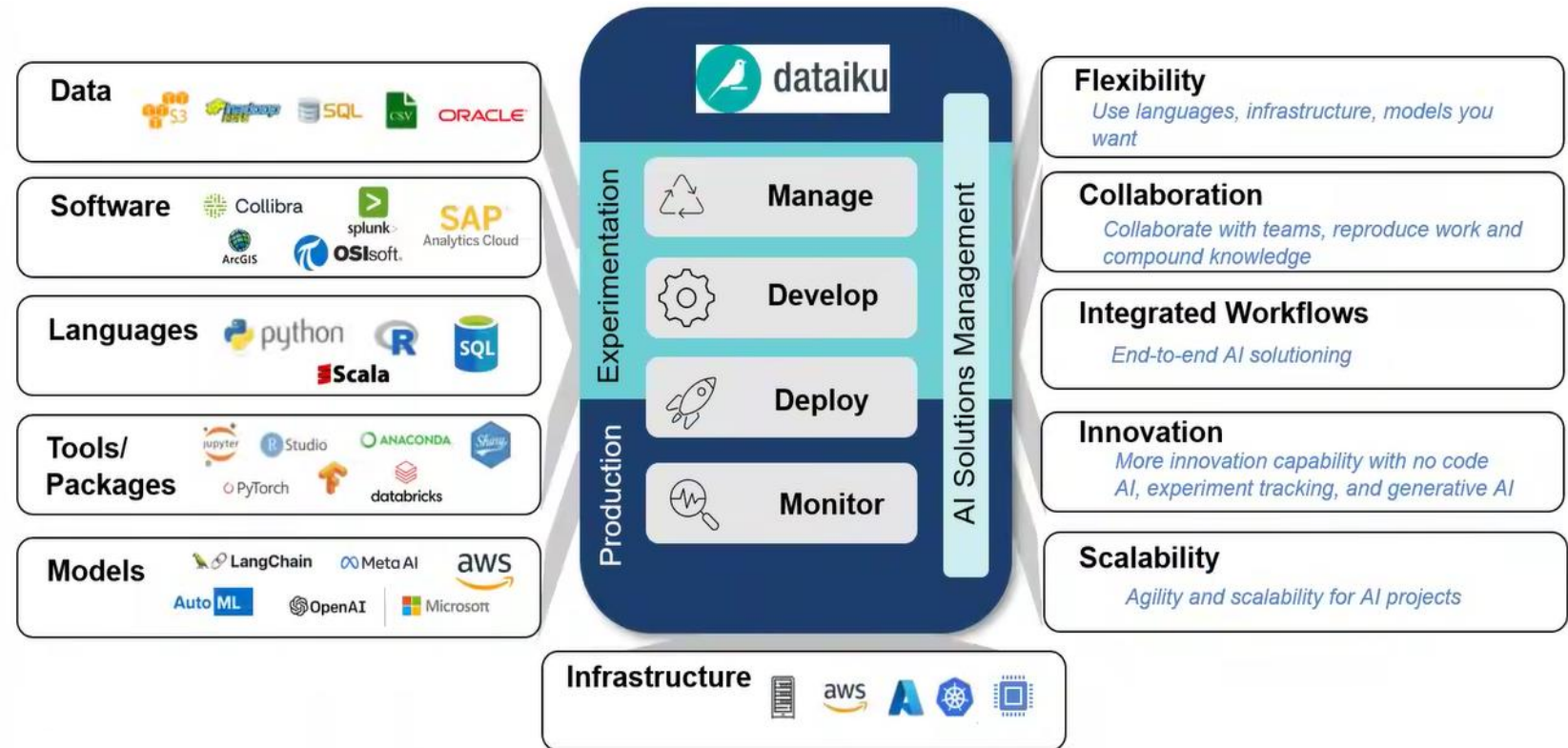


AI Governance Platform: Dataiku

Central Control Tower

- ✓ Track Development progress
- ✓ Validate workflows
- ✓ Catalog & Repository
- ✓ Deliver Responsible AI
- ✓ Monitoring

Centralized program oversight is crucial for maintaining visibility and reducing risk



How To Deliver Value From AI at Scale?

Where We're Going

- **Alignment:** Enterprise Strategy
- **Compliance:** Lifecycle Management
- **Deployment:** Repeatable Playbook
- **Value:** Realize Benefits
- **Adoption:** Embed In Daily Work

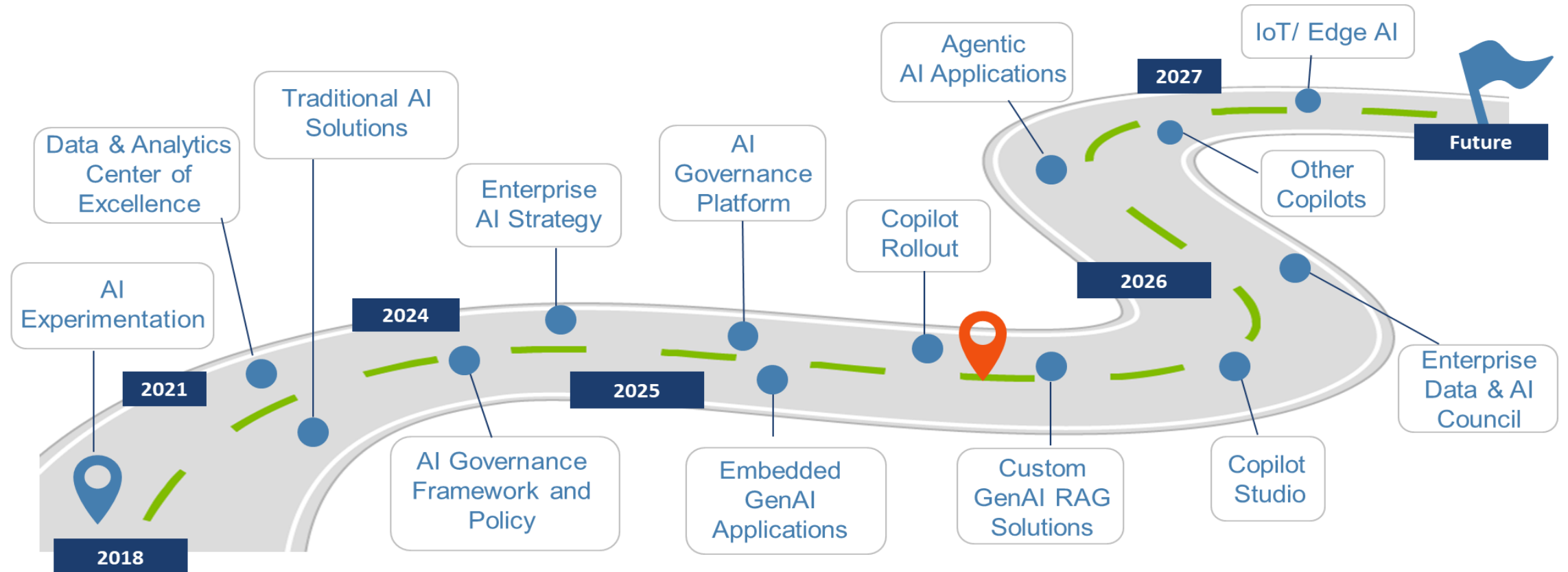


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Where we are

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Launch & Pilots

Governance & Policy

Capability Building

Adoption & Scale

AI Scaling Roadmap



Lighthouse Projects

Prove the value and light the way



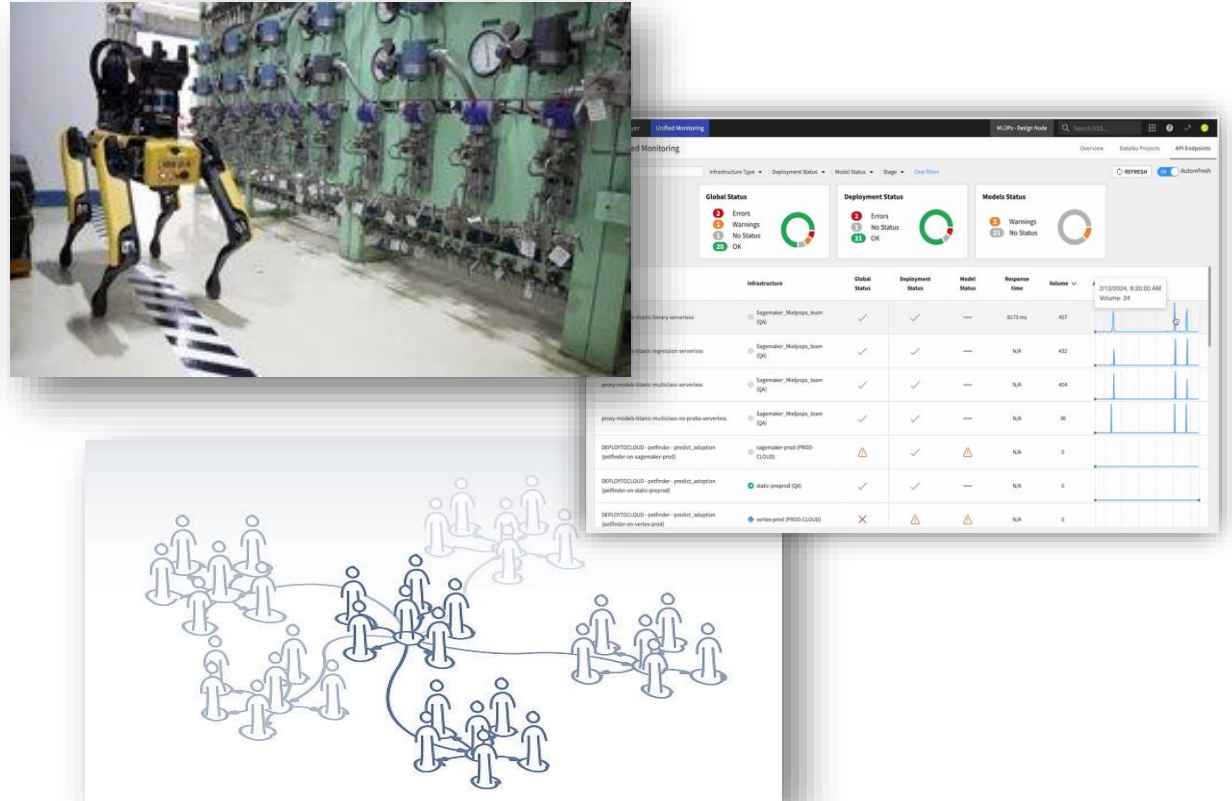
Citizen Developers

Empower the edge within guardrails



Federation

Scale by distributing execution with central governance



Promoting Responsible & Secure Adoption of AI



AI Standards & Policies

Align Innovation with AI Governance, Data Governance, Cybersecurity, and Regulatory policies



Promote Ethical Use of AI

Development of ethical AI that ensures privacy, fairness, transparency, and safeguards TVA's reputation and trust



Invest in AI Talent

Prioritize training employees on AI risks, development, and use



Strategic Priorities

Align AI Strategy and use cases with TVA's Enterprise Technology Strategy



Foster A Culture of Innovation

Encourage collaboration, innovative solutions, and investments into AI

Questions?

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