Quick Answer: How Should CXOs Structure AI Operating Models?

12 February 2024 - ID G00762136 - 3 min read

By Chirag Dekate, Soyeb Barot, **and 2 more**

The pace of AI technology maturation and diverse approaches make it difficult to capture and sustain value from AI initiatives. Effective AI operating models that leverage current investments in people, processes and technologies enable IT leaders to drive successful AI initiatives.

Quick Answer

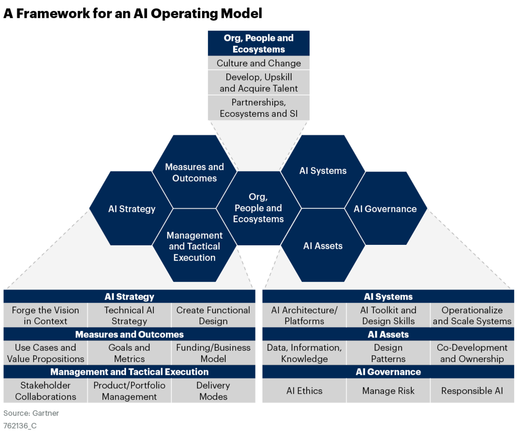
How should CxOs structure AI operating models?

- Benchmark your organization's AI maturity level to maximize value enablement from your organization's current state.
- Create an AI lab to identify AI use cases for your organization and deliver a pipeline of AI pilot candidates.
- Expand use of AI within the organization by supporting AI initiatives, encouraging cross-functional collaboration, and embracing methods, techniques and processes that accelerate new projects.

More Detail

A successful AI operating model embraces the core enterprise business strategy and coordinates multiple functions — D&A, enterprise apps and infrastructure — to capture, enable and sustain value from AI. AI operating models must enable diverse stakeholders, including the CDAO, CIO, CTO and CAIO, to work in close coordination and synchronize across their functions (see Figure 1 for a framework that outlines the common components and tasks of an AI operating model).

Figure 1: A Framework for an AI Operating Model



Benchmark Your Organization's Current AI Maturity Level

Begin structuring your AI operating model by benchmarking your current maturity level against internal requirements such as skills, capabilities and technologies. Also, benchmark against external factors such as the maturity of industry peers, emerging AI innovations and disruptions, and legislative activity.

Partner across senior leadership with the CTO, CHRO, CDAO, CIO and chief data scientists to assess the gap between your organizational AI skills and your AI project pipeline. Determine the role of each core business function in driving AI initiative success by defining both areas of ownership and each role's level of involvement.

Upskill current employees through customized programs by role (business end users, executive leadership, data scientists, data engineers, AI engineers, enterprise architects and I&O). Complement these reskilling efforts by creating environments that attract new AI talent to your organization. Smart resourcing of AI projects requires utilizing gap analysis — mapping project schedules to the availability of internal skilled resources. Prioritize development of AI operationalization skills to speed realization of value from AI.

The result of the benchmarking exercise should be to specify a functional design that maps strategy to tactics. Use existing data, analytics and infrastructure contexts to formulate a technical strategy. Focus on creating operational AI systems that manage multiple data, model and deployment pipelines to standardize data engineering, model engineering and deployment practices.

Create an AI Lab to Identify AI Use Cases and Pilot Candidates

Create and support an AI lab focused on agility. The lab should include an interdisciplinary team that nurtures implementation-focused collaborations of diverse enterprise stakeholders, including the CDAO, chief data science officer/CAIO/chief analytics officer, CIO and business stakeholders. Task the team with rapidly exploring proofs of concept (POCs), delivering into production successful AI pilots that are aligned with business value. The AI lab also must take a leadership role in maintaining the AI POC funnel.

Accelerate successful productization of AI pilots by establishing synchronous change management processes led by senior leadership. Empower the CIO and relevant enterprise architecture teams to utilize modernized advanced processes across data operations, cloud adoption and utilization of microservices to deploy AI. Strategically outsource AI projects when internal resources are constrained or unable to deliver initiatives in a timely manner.

In addition to an AI lab, create an AI management and governance function that owns responsibility for managerial and tactical execution of AI. The mandate of this function must include stakeholder collaborations, portfolio/project/program management and flexible delivery modes.

Expand Use of AI Within the Organization

To get AI in more business units and business processes:

- Encourage cross-functional collaboration.
- Support embedded AI initiatives to develop assets.
- Ensure that AI is surfaced in line-of-work applications and interfaces.
- Formalize a partnership with software engineering leaders to get more models into production.
- Lead development of a comprehensive process for scaling business-value-linked AI projects into production through iterative standardization and automation of best practices across all AI projects.

The goal is to create enterprise-contextualized, gold-standard processes that have been proven to work in your enterprise. Assign ownership of the outcomes to ensure long-term support, maintenance and manageability of AI products. Utilize AI design patterns that may be a mix of methods, composite techniques, processes and code. These enable a common language for communication around the business, and they act as a starting point and accelerator for new projects. These design patterns allow organizations to take an approach that has worked for one business unit and apply it to another.

Recommended by the Authors

Toolkit: Document the Mission of Your AI COE and Start to Staff It

Demystifying XOps: DataOps, MLOps, ModelOps, AIOps and Platform Ops for AI

Predicts 2021: Operational AI Infrastructure and Enabling AI Orchestration Platforms

Use Gartner's 3-Stage MLOps Framework to Successfully Operationalize Machine Learning Projects

A Guidance Framework for Operationalizing Machine Learning

Implementing an Enterprise Open-Source Machine Learning Stack