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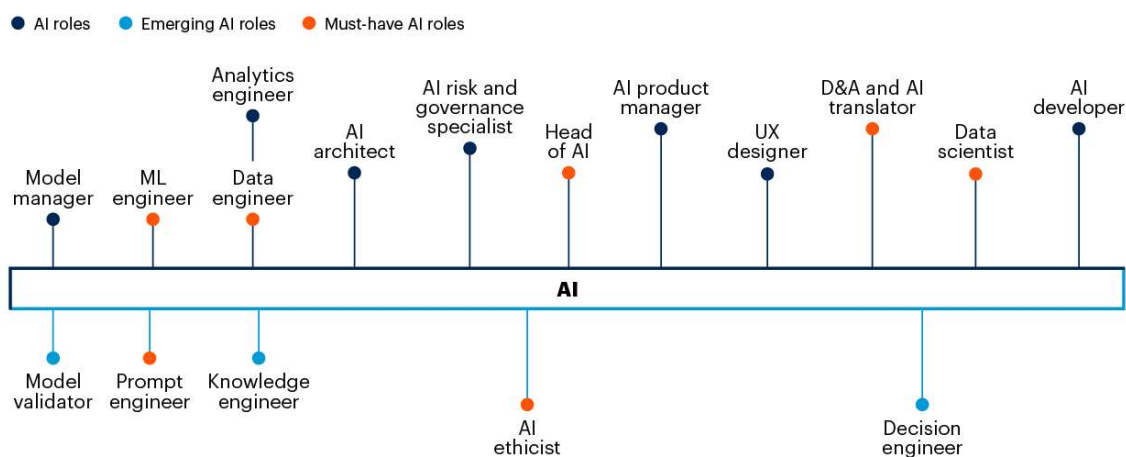
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The New Roles in Artificial Intelligence

(as taken from Gartner Research)

The sheer diversity and complexity of AI projects combined with a requirement for rapid time to production create the need to find key AI roles to achieve successful AI projects

Roles for AI



Source: Gartner
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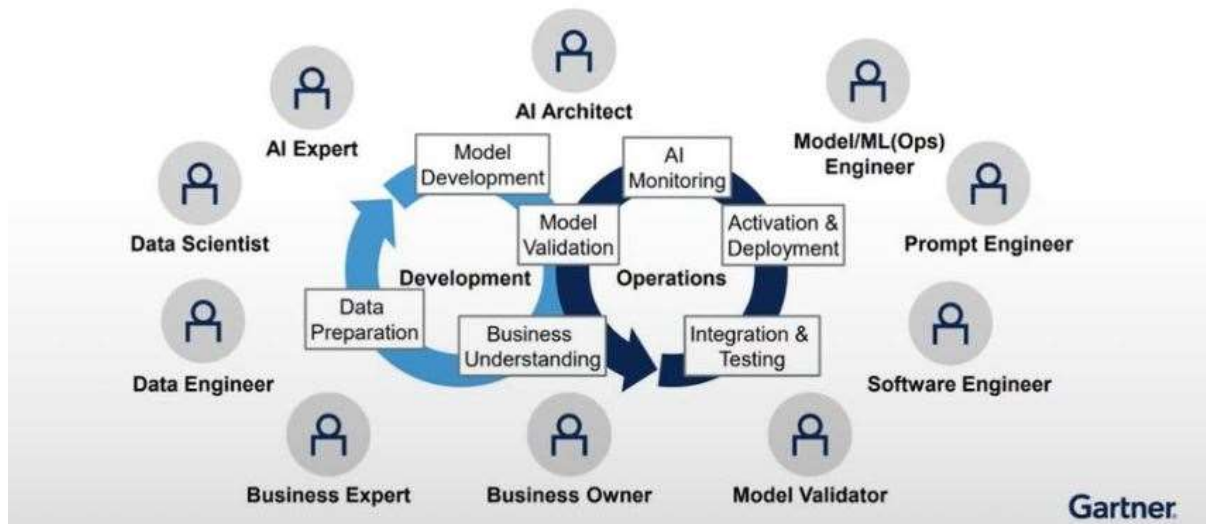
Organizations face challenges in scaling artificial intelligence (AI) projects because they lack the requisite skills, collaboration, tooling and know-how to create and manage a robust, production-grade AI pipeline.

Through 2023, Gartner estimates that 50% of IT leaders will struggle to move their AI projects past proof of concept (POC) to a production level of maturity. To reduce this high failure rate, organizations need to build the right roles for AI success.

“In many organizations, data scientists are still wearing too many hats due to a dearth of talent across other roles,” said Arun Chandrasekaran, Distinguished VP Analyst, Gartner

AI is a team sport. Roles required at different stages of Software Lifecycle

To successfully operationalize and scale AI initiatives, organizations need to build diverse AI roles and skills.



“AI is a team sport,” said Chandrasekaran. “On their AI team, CIOs and technology innovation leaders need to have data scientists, data engineers and complement the team with AI architects and machine learning (ML) engineers. Together they can envision, build, deploy and operationalize an end-to-end ML/AI pipeline.”

That team should never operate in isolation and should collaborate with business domain experts, IT experts, and other relevant staff and stakeholders to deliver successful AI initiatives.

Roles and Responsibilities of AI architects and ML engineers

Finding the right resources and how they work together as part of the AI team becomes pivotal for the success of AI projects. Two newer roles are complementing the AI team: AI architects and ML engineers.

AI's core roles and responsibilities	
 Role	 Responsibilities
Data engineer	Makes the appropriate data available for data scientists; focuses on data integration, modeling, optimization, quality and self-service
Data scientist	Identifies use cases, determines appropriate datasets and algorithms, experiments and builds AI models
AI architect	Is the glue between data scientists, data engineers, developers, operations (DevOps, DataOps, MLOps) and business unit leaders to govern and scale the AI initiatives
ML engineer	Deploys AI models through effective scaling and ensuring production readiness, ensures continuous feedback loop

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The AI architect is laser-focused on the transformational architecture efforts that AI introduces. Their primary responsibility is to orchestrate the deployment and management of models in production and provide inputs on the applicability of ML and deep learning models within AI's various disciplines, such as natural language processing or image recognition.

Source: <https://www.gartner.com/smarterwithgartner/how-to-staff-your-ai-team>