

Multi-level MLOps Bootcamp Case Study

How UNext Bolstered Deployment
Readiness For A Global AI Giant

Overview

Employable and deployable are two distinct enterprise terms.

While employability refers to the potential to get a job, deployability signifies the ability to complete a task. A deployable professional is one who:



Possesses specific contextual skills required for a client project

Has technical mastery over project-specific tools, technologies, and techniques



Showcases zero to minimal ramp-up time

And leads to immediate measurable contribution and value delivery on a project



This case study is a definitive documentation of how one prominent tech & AI giant realized the need for a strategic learning intervention to super-charge the deployability quotient of its select workforce.

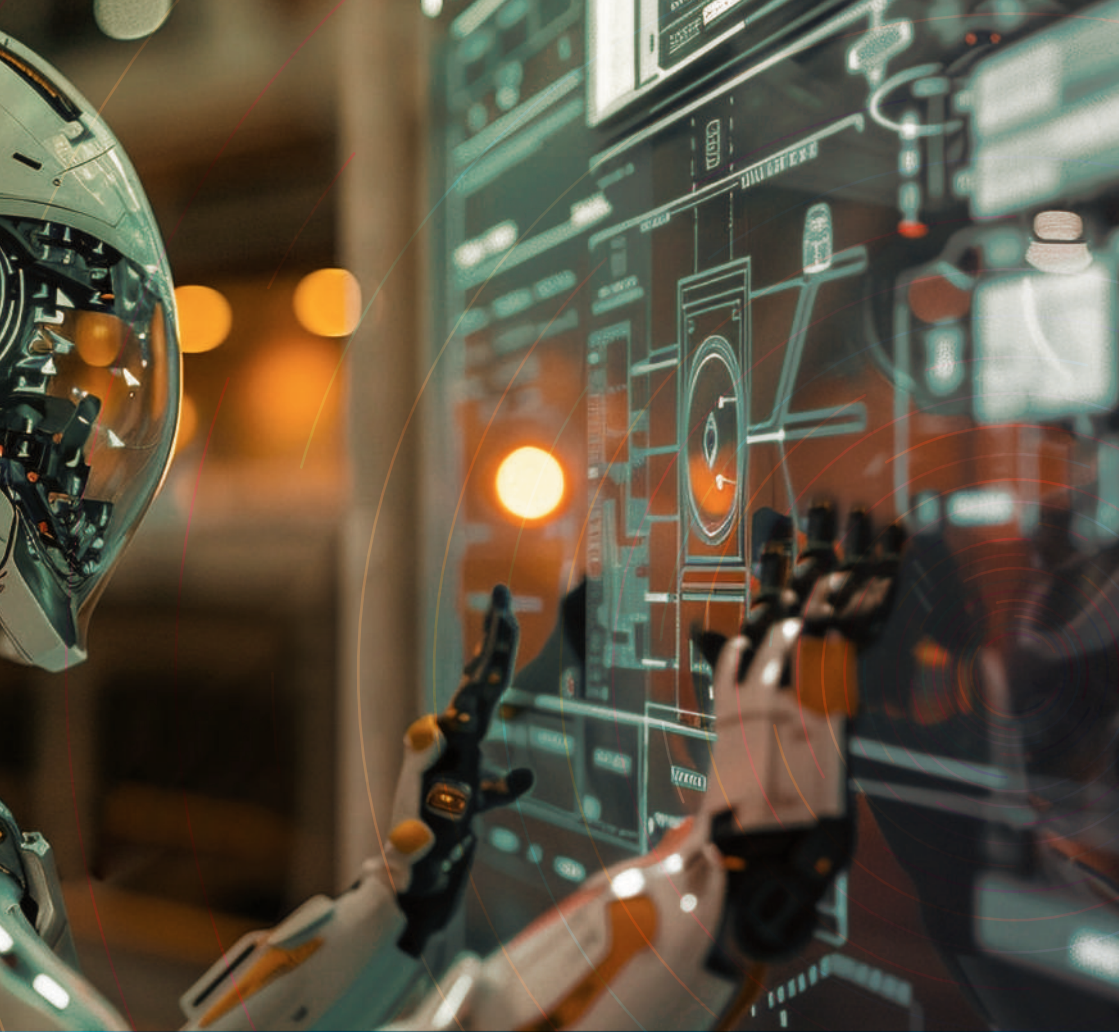


The Opportunity Statement

Enterprises in IT consulting require a project-ready talent pipeline. Conventional operational model where professionals are chosen and then trained in client requirements not only delay time to market and profitability but contribute to increased expenses and decreased servicing standards as well.

Our partnering enterprise, a prominent name in the IT consulting space, wanted to mitigate such incidents and build a strong talent pipeline of professionals with cutting-edge capabilities.





The organization realized that there was an increasing demand for technical professionals, specifically in the machine learning space. So, it wanted to proactively implement a training program that ensured its handpicked cohort of professionals developed expertise and mastery in machine learning.

The enterprise once again approached UNext – the longstanding, preferred talent transformation partner – for a super-specialized MLOps program.

The Solutioning

MLOps is a highly technical program that requires meticulous planning in terms of conceptualization and curriculum design. Challenges in the form of an inevitable demand for practical exposure and expertise persisted as well.

On discussing the requirements in detail with the client, we further understood that a one-size-fits-all program cannot be implemented. This was mainly because of the handpicked cohort from the organization involving professionals from diverse academic, technical, and hierarchical backgrounds.

All the professionals were to be trained and transformed into MLOps experts so they could translate their learnings into optimum client service experiences. To tackle this, we profiled learners into three classes:

A

BEGINNERS

B

INTERMEDIATE

C

ADVANCED

Starting from the basics, learners gradually picked up skills and capabilities in a sequential, incremental order. Each of the module featured:

- Virtual instructor-led sessions spearheaded by MLOps veterans
- Experiential learning modules involving capstone projects
- Post-program assessments to visualize knowledge gain and more

Program Snapshot

MLOps Basic	MLOps Intermediate	MLOps Advanced
Python essentials for MLOps	Model deployment	Advanced MLOps concepts
Basics of machine learning	Kubernetes deployment	Azure feature storage integration
Environment management	CI/CD pipeline integration	Azure cloud deployment models
Data versioning & EDA	Monitoring & logging	Capstone project
Capstone project	Capstone project	

The Result

The niche MLOps program was a grand success. Our learner profiling methodology was built on opt-in, opt-out model to ensure professionals who possessed certain mastery to skip modules. This ensured not only increased engagement but 100% program completion as well.

Our focus on experiential learning modules also ensured extensive competency gain and tangible results. For a better idea, here's the complete breakdown of learning outcomes of each learning journey by the end of each module:

MLOps Basic

- Build and deploy end-to-end machine learning pipelines tailored to their specific domain.
- Integrate Python programming, machine learning, data versioning, CI/CD workflows and environment management.
- Provide practical experience in solving real-world pharmaceutical data analysis and deployment challenges.

MLOps Intermediate

- Deploy production-ready machine learning models using REST APIs and serving frameworks.
- Design scalable and distributed deployment solutions using Kubernetes.
- Provide expertise in automating CI/CD workflows for seamless model deployment and delivery.
- Develop skills to monitor and log machine learning models using enterprise tools like the ELK Stack.
- Integrate all concepts into a comprehensive capstone project for real-world application in specific domains.

MLOps Advanced

- Automate model retraining workflows and track experiments using Azure Machine Learning tools.
- Provide hands-on experience with real-time and batch data integration through Azure Feature Store.
- Deploy scalable ML workflows in Azure environments using public, private, and hybrid cloud deployment models.
- Implement an end-to-end MLOps pipeline tailored to specific domains.

As a long-time collaborator, discussions to deploy a similar technically in-depth program for other teams are currently underway.

About UNext

UNext is India's leading online learning and talent transformation company. We provide a full-stack tech platform for universities and colleges to offer online courses and degree programs.

We take pride in being one of the largest enterprise and workforce development companies in India. Our endeavor is to empower our learners, university partners, and enterprise clients to achieve tangible outcomes and make a significant impact.

With an emphasis on continuous learning, we curate outcome-focused 360-degree workforce development programs in technologies such as Generative AI, Cybersecurity, Cloud Computing, Digital Transformation, Software Architecture, Leadership Coaching, and more.

We partner with clients across IT-ITeS / Automobiles / Healthcare / Manufacturing / Consulting / Retail / Pharma & more segments in training tech and non-tech audiences through bootcamps, role-based trainings and pre-joining programs.

Headquartered in Bengaluru, India, UNext Learning is part of and backed by the Manipal Education and Medical Group (MEMG).



Key Highlights

7,00,000+

Learners
Transformed Globally

1,60,000+

Online Learners

700+ Large Enterprise Clients

6mn+ Hours of
content consumed

Transform Your Workforce With Us

To deploy a similar program in your enterprise and
nurture future-ready professionals



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