

# Amdocs' MLOps Foundation Solution: A secure platform for scalable ML model production

Enterprises in the financial sector stand to gain immensely from the strategic use of data science and machine learning (ML). Already, organisations are leveraging these technologies for a multitude of critical tasks, including credit risk assessment, investment monitoring and optimisation, customer churn prediction, asset management, asset mix optimisation, fraud detection, and anti-money laundering.

## Enterprise challenges with machine learning

Getting even a single ML model into production is a highly difficult task for many organisations. But an even harder is building a platform and capability that enable data science teams to produce and deploy models consistently, efficiently and at scale. For example, the components needed to design, develop, train, promote and monitor models are often hastily put together, creating barriers to scaling. Approval processes, such as reviews for bias and ethics, need to be conducted on a case-by-case basis. And monitoring models in production can be highly manual, distracting the data science team from more valuable work.

At Amdocs, we implement both best-practice, cloud-based data science platforms and also end-to-end Machine Learning Operations (MLOps). Our approach empowers your data science teams to efficiently bring projects into production, easily monitor them, and manage each project like a data product using best-practice DevOps-style processes and tools.

## Amdocs' MLOps Foundations solution – Empowering data scientists to take ML models from concept to production at scale

The Amdocs MLOps Foundations solution brings a structured approach to MLOps, aligning technology, processes, and methodologies to create, deploy, and monitor data science projects and ML models at scale. Customers using this approach have seen a 30% increase in their data science teams' productivity and a more than 60% increase in the value delivered.

Amdocs brings accelerators, templates and knowledge of best practices that have been honed in 12 years working with the most highly regulated industries including financial services, healthcare, communications, and airlines.



## The solution offers:

- **A secure, mature platform:** including architectural blueprints and code for rapid infrastructure deployment and configuration.
- **Rapid development to production:** providing a fast track for taking ML models to production with DevOps practices, CI/CD pipelines, release workflows and built-in monitoring.
- **Enterprise-level security:** featuring identity and configuration guardrails.
- **Cost controls:** including tools for observability, monitoring and financial operations (FinOps) workflows.

With 12 years' experience working with highly regulated industries like financial services, healthcare, communications and airlines, our accelerators, templates and best practices provide the support you need for your MLOps journey.

## From MLOps to GenOps

As GenAI continues to advance, we're applying our proven methodologies to bring GenAI applications, such as automated content creation and advanced data analysis, into production. By leveraging our MLOps expertise, Amdocs is accelerating the development and implementation of these projects, creating what is now known as the field of GenOps. For more information on the Amdocs MLOps Foundation solution or our GenOps offerings, contact us at [cloud@amdocs.com](mailto:cloud@amdocs.com)

### MLOps Foundations is part of Amdocs' GenAI Readiness approach, which includes:

- Data readiness
- MLOps foundations
- ML operations
- MLOps advisory
- GenOps

## Machine learning foundations for a leading digital bank

A major bank in the Asia-Pacific (APAC) region, already on their ML journey, sought to deploy an ML operations foundation to rapidly deliver ML use cases at scale.

### Challenges

- Each model development process required manual provisioning of infrastructure and environments.
- The data science team spent too much time on non-core activities.
- There was a need to streamline organisational processes to reduce friction in getting models to production.

### Results after implementing the Amdocs MLOps Foundations solution:

- Onboarding time for new data scientists was **reduced from months to days**.
- Time to bring an ML model from development to production was **cut from 3 months to 6 weeks**.
- Response time to security events **decreased from hours to minutes**.
- Response time to high-spend events was **shortened from days to hours**.