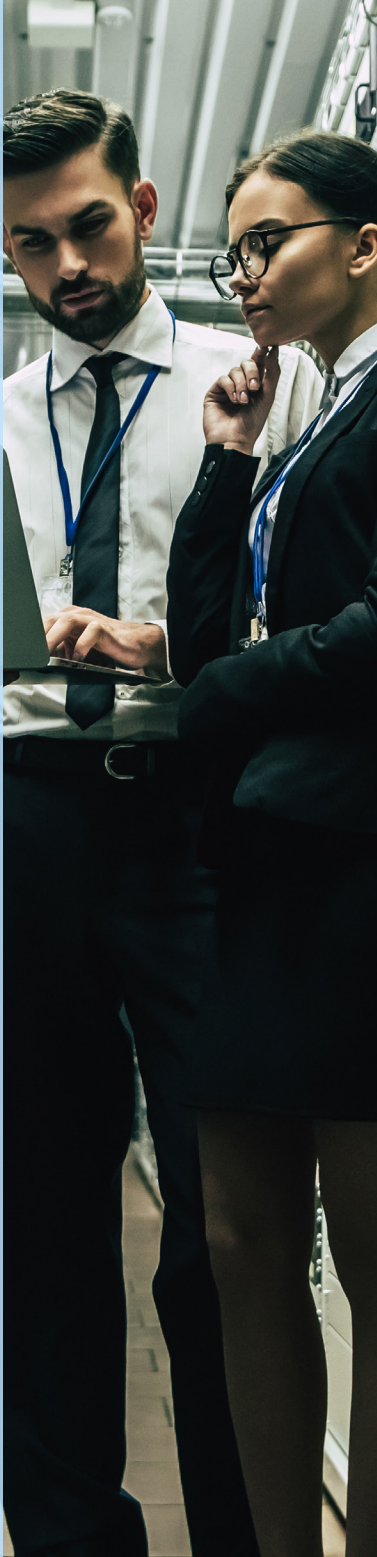


**INFOSYS
APPLIED AI
HUB**



The ability to scale up the AI model at enterprise level maximizes competitive advantage. To achieve this and to democratize AI across enterprise operations, businesses must embrace the data-driven intelligence revolution. However, certain aspects may appear as

roadblocks to enterprises seeking to adopt AI today – inadequate AI/ML (artificial intelligence/machine learning) skillsets of employees, substandard quality of data for training the models, and the lack of mindset required to move to an AI powered organization.

Challenges in AI Adoption

Today, AI initiatives are considered a key objective in digital transformation and an accepted driving force to predict and achieve significant business outcomes. While many businesses are adopting AI and maximizing their competitive advantage, most use it for nothing but a few specific business processes.

Challenges faced with the quality of data, difficulties in finding the right skills and creating the required mindset are some of the main factors that keep businesses from moving beyond the proof-of-concept stage and scale AI across the organization.

AI models are only as good as the data used to train them. Therefore, data quality issues such as lack of well-prepared and curated data to train, deficiency of right integrations with data sources in data science/ML platforms, and data governance problems, among others, can prove challenging. Further, lack of awareness about the potential of AI also prevents stakeholders from seeing the new world of possibilities.

In some common scenarios, business users may not come forward with their AI use-cases, or challenges in their tasks that can be solved by AI, due to ignorance about AI/ML technologies. Data scientists too can find themselves lost in their AI experiments if they lack the right computing environment and a head-start to run multiple models. They also require the ability to automatically iterate across these models and come up with most ideal outcomes. And, finally, data analysts may struggle to find solutions if the right integrations with data sources are not available to them.

Even with the best efforts of business analysts, data scientists, and data analysts, companies often face challenges in the governance of the AI lifecycle.

An AI/ML platform that allows users to build, evaluate, train, and deploy models at speed as well as scale can facilitate the advancement of AI-powered digital transformation in enterprises. That is exactly what Infosys Applied AI Hub does.

Create the future with Infosys Applied AI Hub

Infosys Applied AI Hub is an AI/ML platform initially built for the global telecommunications holding company AT&T, enabling them to future-proof their business using enterprise AI.

A few years ago, every business unit within AT&T created models in silos, leading to repetitive effort. AT&T wanted to democratize the usage of AI across the organization to speed up model discovery and creation while enhancing accuracy and reducing deployment cycles. The Infosys AI/ML platform helped the organization achieve these goals successfully.

The platform has matured over time and delivers outcomes (in terms of usage) by 994 data scientists. It has 236 use cases, 5017 submitted AI models, and 117 published AI models. Today, Infosys Applied AI Hub can be used by any enterprise to shape their future with AI!

Infosys Applied AI Hub revolutionizes model discovery and solution deployment by combining intelligent ML algorithms with data sets, thereby empowering data scientists and data analysts to create accurate and scalable business solutions faster.

It allows business users without extensive knowledge of AI/ML technology to leverage a wide range of auto models including proprietary and open-source models, enabling both data scientists and business analysts to work on the same platform.

Templates available on the platform enable citizen data scientists to build models with minimal effort.

Data scientists can also evaluate models against standard statistical matrices and make use of graphical representation of key statistics for model development.

Infosys Applied AI Hub can also be used for crowdsourcing where a challenge can be presented to citizen data scientists or professional data scientists to come up with the best performing model for a business use case. The owner of the problem can choose to run this challenge in a competitive or collaborative mode and select the top performing model according to on-score (based on the evaluation criteria chosen), or custom criteria that suits their business case. The selected model can then be productionized or can be used to improvise on an existing production model.

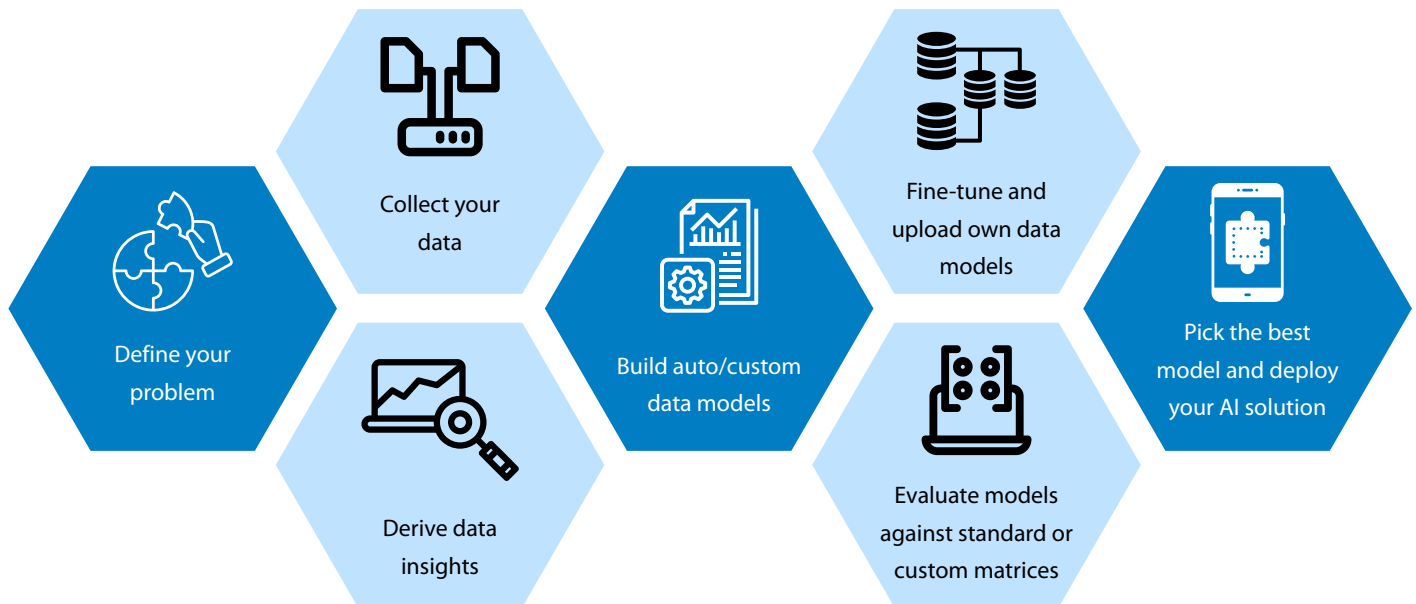
Infosys Applied AI Hub supports regression (with timeseries), binary and multi-classification and propensity problems.

Technology stack



What does Infosys Applied AI Hub do for You?

Our AI platform assists you at every step. Infosys Applied Hub will:



Infosys Applied AI Hub lets data scientists collaborate to power the next big ideas at AT&T



Key Features to Power your Organization with AI

Support for a range of use cases: Infosys Applied AI Hub can be used to solve hundreds of business-critical use cases, including demand forecasting, churn prediction, lifetime value prediction, and more.

Choice of computation options: Infosys Applied AI Hub provides various computation options available with Jupyter. Users can choose from high/medium/low GPU instances depending on the size of data to be processed.

Luminous data insights: For every dataset, Infosys Applied AI Hub analyzes and generates a schema with a visual representation of statistics, enabling users to understand data

distribution and develop the model with ease. Some of the model interpretation charts include sensitivity analysis, ICE & PD plots, scatter plots, and confusion matrix.

Auto models: Infosys Applied AI Hub generates a wide range of auto models including proprietary and open-source models. H2O's best-in-class models like DriverlessAIrobot, H2O AutoML and open-source models based on algorithms such as Random Forrest, XGBoost, LightGBM, CatBoost, Arima, and Prophet are auto-generated for the use cases, helping the user to rapidly create AI solutions to drive immediate business impact.

Readily available model templates or EZ Starters: Model templates created on top of the ML algorithms are available within the platform. This enables citizen data scientists to build models with minimal effort without having to build from the ground up.

Easy integrations: Using Databricks, users can connect to various distributed data sources, such as ADLSg2, DEEP, Snowflake and perform high data-intensive operations.

Standard and custom evaluation matrices: Users can evaluate how well a model fits a dataset either by choosing from a standard set of statistical matrices available (RMSE, MSE, R-Squared, SMAPE, MAPE, MAE) or by defining a custom matrix.

Model repository: Users can upload models to Databricks MLflow (an open-source platform for managing the lifecycle of ML models) allowing them to package ML code in a reusable, reproducible form to share with other data scientists or transfer to production.

Easy deployments: Infosys Applied AI Hub containerizes the data model into application programming interfaces (APIs) to enable faster deployment.

Who Benefits from Infosys Applied AI Hub?

Various stakeholders in the organization can experience the benefits of our AI platform:

Business leaders

Accelerate digital transformation and scale AI across your

enterprise with a platform that helps build and productionize AI/ML solutions in a faster and scalable way.

Business analysts

Use auto models to analyze and turn datasets into predictions without having AI/ML knowhow.

Data scientists

Citizen data scientists can make use of readily available templates to fine-tune these as their own models.

Expert data scientists can build or bring their own models into the platform to test model accuracy as well as to rate their models through crowdsourcing challenges.

Data analysts

Readily view summary statistics for faster model development.

Harness the power of AI

AI/ML technologies are all set to change the future, and not without reason. AI-powered digital transformation offers organizations several high-value benefits. Infosys Applied AI Hub allows various stakeholders in your organization to leverage this power without deep knowledge or expertise in the area, and without investing excessive effort. The proven effectiveness of our platform, the numerous cutting-edge features, and the capability to offer AI solutions faster and at scale can help your enterprise become future-ready with a competitive edge.

Please write to appliedai@infosys.com to know further about this solution

For more information, contact askus@infosys.com



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