

platform X

Comprehensive Automated Machine Learning Solution

Platform X hosts an Automated Machine Learning (AutoML) application to empower domain and business experts in banks to use Machine Learning (ML) and Artificial Intelligence (AI) for creating business values. Business and analytics teams can develop and implement advanced AI projects without coding and understanding the underlying algorithms.



Automated End-to-end
AI-ML Project Development
and Implementation



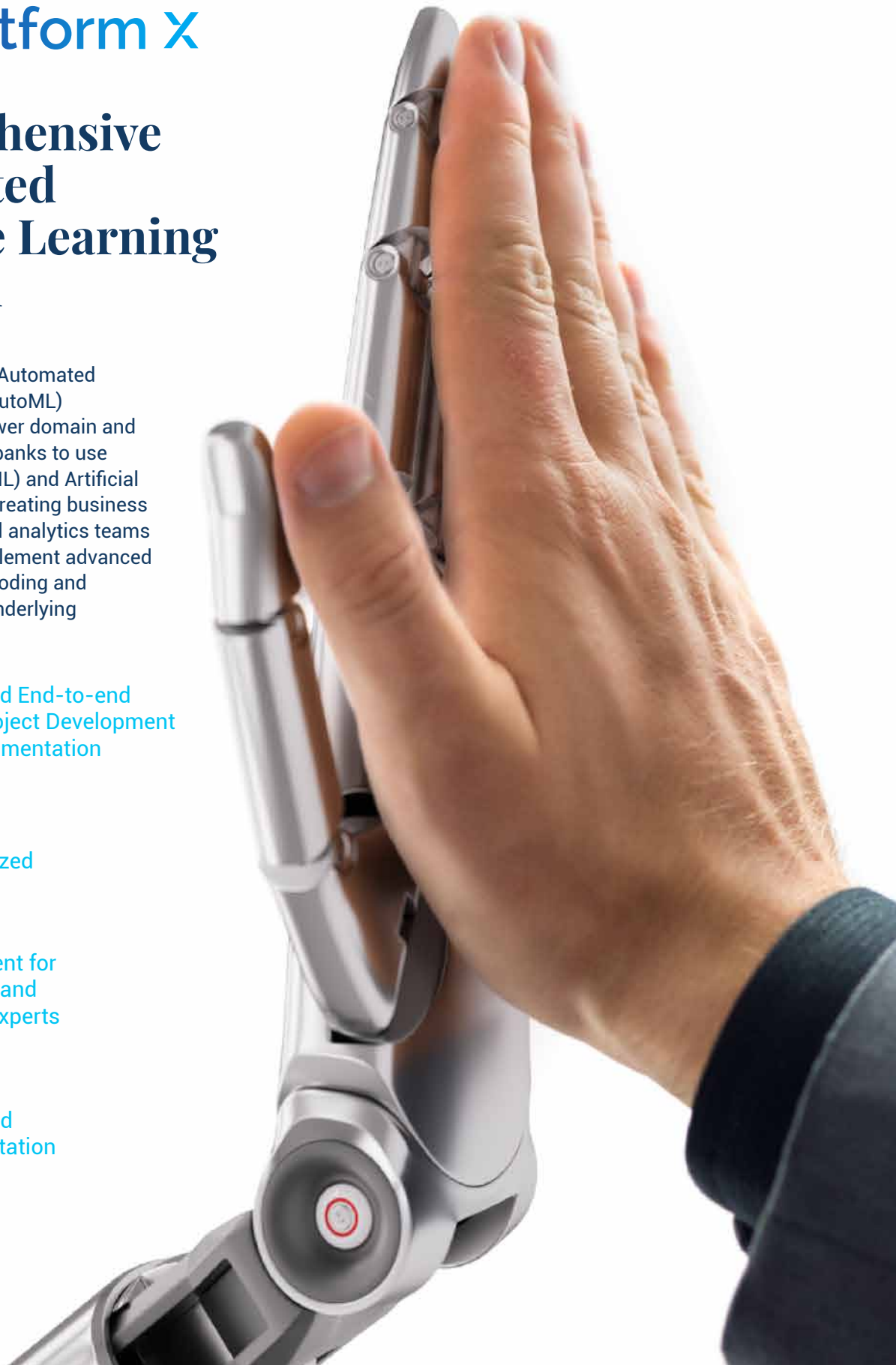
Fast and
Standardized



Transparent for
Business and
Domain Experts



Automated
Documentation



Common Challenges

Machine Learning is revolutionising the way we do business, with data driven analytical interventions to automate business decisions. However, most of the banks do not have data science team and technical expertise to execute end-to-end AI-ML projects. Building human expertise and large data science teams for manually executing AI-ML projects is expensive and time consuming. This has impacted the adoption rate of AI and ML in banks and lending institutions.

“If we can take the human out of these machine learning applications, we can enable faster deployment of machine learning solutions across organizations, efficiently validate and benchmark the performance of deployed solutions, and make experts focus more on problems with more application and business values.

These would make machine learning much more accessible for real-world usages, leading to new levels of competence and customization, of which the impact can be indeed dramatic”

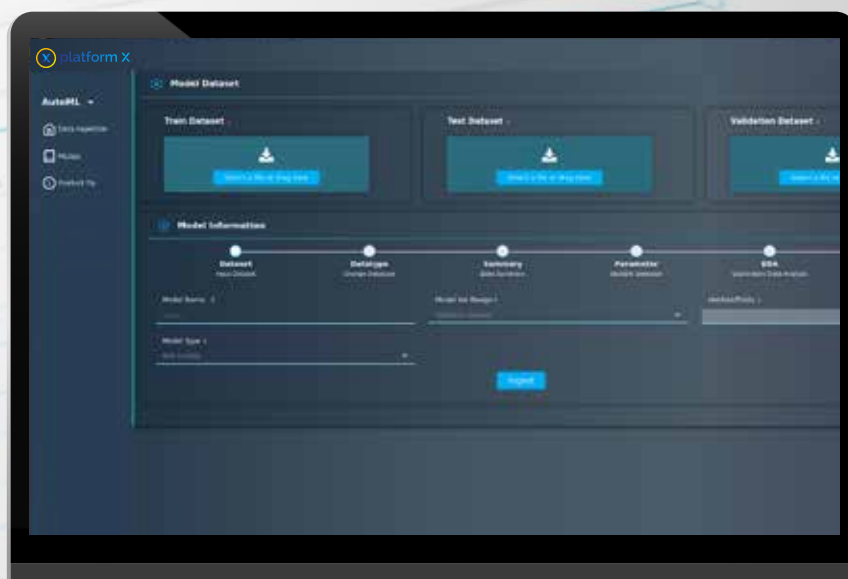
Source:
‘Taking the Human out of Learning Applications’, Quanming Yao, Mengshuo Wang, Yuqiang Chen, Wenyuan Dai, Yu-Feng Li, Wei-Wei Tu, Qiang Yang, Yang Yu

Key Solution Features

Platform X makes it easy to build and deploy advanced Machine Learning models to solve business problems faced by banks, fintechs and financial companies. Domain experts just need to focus on **'What to automate using Machine Learning'**; while Platform X takes care of **'How to automate'**.

Platform X smartly makes all technical decisions for you. It helps you in understanding which data pattern is meaningful and which is not. It explores underlying patterns in the data and learn from these patterns to build self-learning and predictive models that can make useful business decisions.

Further, it runs multiple cutting-edge algorithms on your data and identifies which algorithm best fits the dataset. And to make it even better, it helps you explain your models easily to business as well as to the regulators. Automated documentation layer saves weeks by automating model documentation process.



Platform X is your inhouse data scientist for high performance and fast model development cycle



Data
Requirement

Data sample of few hundred data points is sufficient for building ML models for most business problems.



Algorithm
Coverage

Supports traditional algorithms such as Linear Regression and Logistic Regression as well as advanced algorithms such as ElasticNet, Gradient Boosting, XGBoost, Random Forest, Deep Learning.



Use
Cases

Easily build high performance scorecards and models for underwriting, risk scoring, collections, marketing analytics, channel analytics, customer analytics, etc.

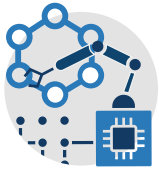
Team Skills

Empower your business, data science, and analytics team to leverage the power of AI without the need to understand technical intricacies of different algorithms. We have abstracted out the technical inputs needed to build the machine learning pipeline for financial models.



Automated Model Tuning and Selection

Platform X automatically performs hyperparameter tuning and finds the top N models on a given dataset. The solution also supports manual tuning for expert data scientists. It also recommends the best model from N candidate models based on performance on the out-of-sample dataset.



Structured Machine Learning Pipeline

Adopt best practices to build ML models to improve model generalization to the out-of-sample dataset and avoid overfitting.



Model Output Explainability

Easily explain the output of a model, to ensure full transparency for regulatory and internal purposes. Explore a model, its important features and easily understand why it made a specific prediction using multiple visualizations.



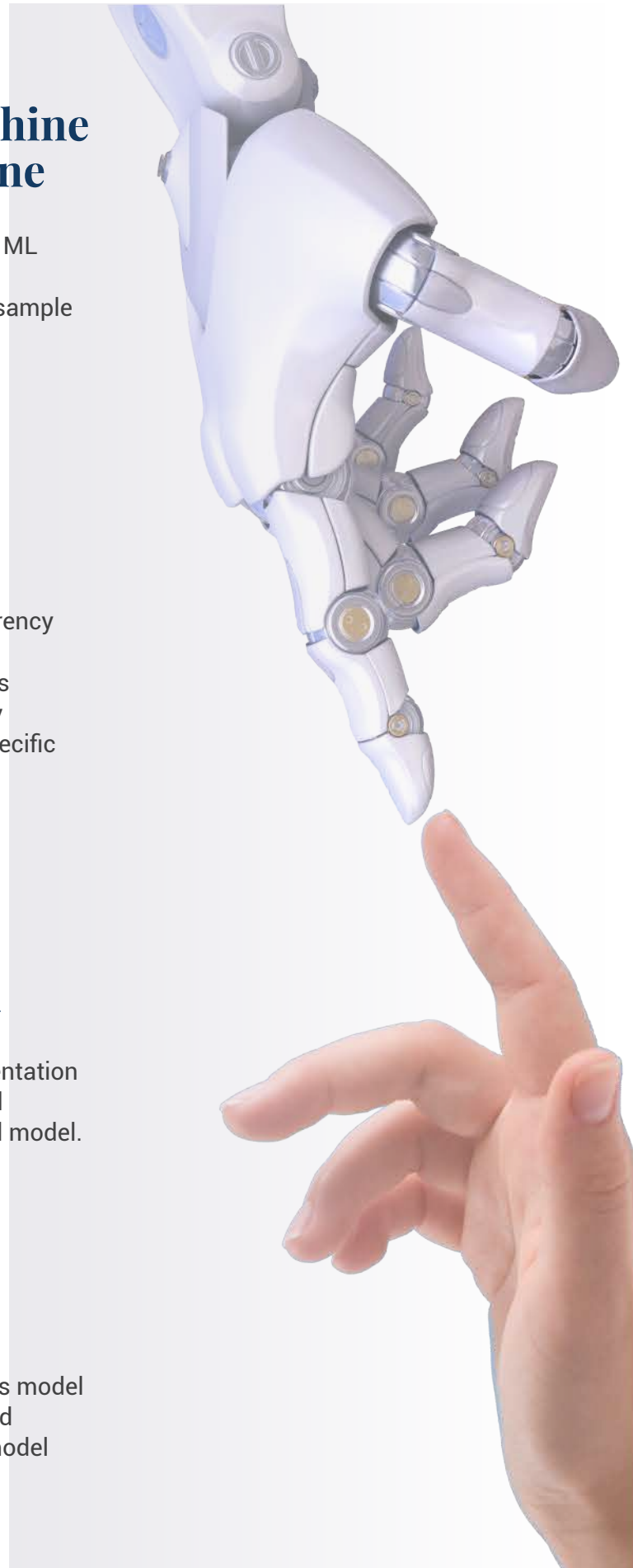
Model Documentation

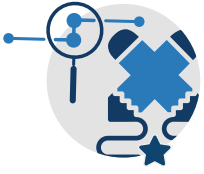
Customizable model documentation template to generate detailed documentation for a selected model.



Integrated MLOps

Automatically logs and tracks model hyperparameters, metrics and artifacts to easily replicate model output at a later stage.





Challenger Models for Traditional Models

Quickly generate benchmark challenger models for your existing scorecards and models to identify areas for model performance improvement. Transparently identifies important features that can be incorporated to existing models and build challenger models in a fraction of the time it takes to build models using traditional workflow.



EDA, Visualizations and Reports

Pre-configured reports and visualizations used in the financial industry to speed-up EDA, feature transformation and feature selection.



Model Deployment

Automatically deploy the model as API service or as the model object with both on-prem and on-cloud deployment options.

Technical Features



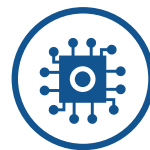
Multiple teams can work together- enabling collaboration



Platform Framework creates new computation sequences, models and result data sets without coding



Designed to support two-way integration with existing data sources and rating system



Advanced metadata technology automatically traces, versions, compares and details all results



Built for On-premise as well as Cloud Deployment and concurrent, interactive work-group



Robotic Process Automation reduces the time and cost footprint of analytical tasks, allowing banks to realize significant efficiency gains



Designed and powered by various machine learning algorithms automating the cognitive processes

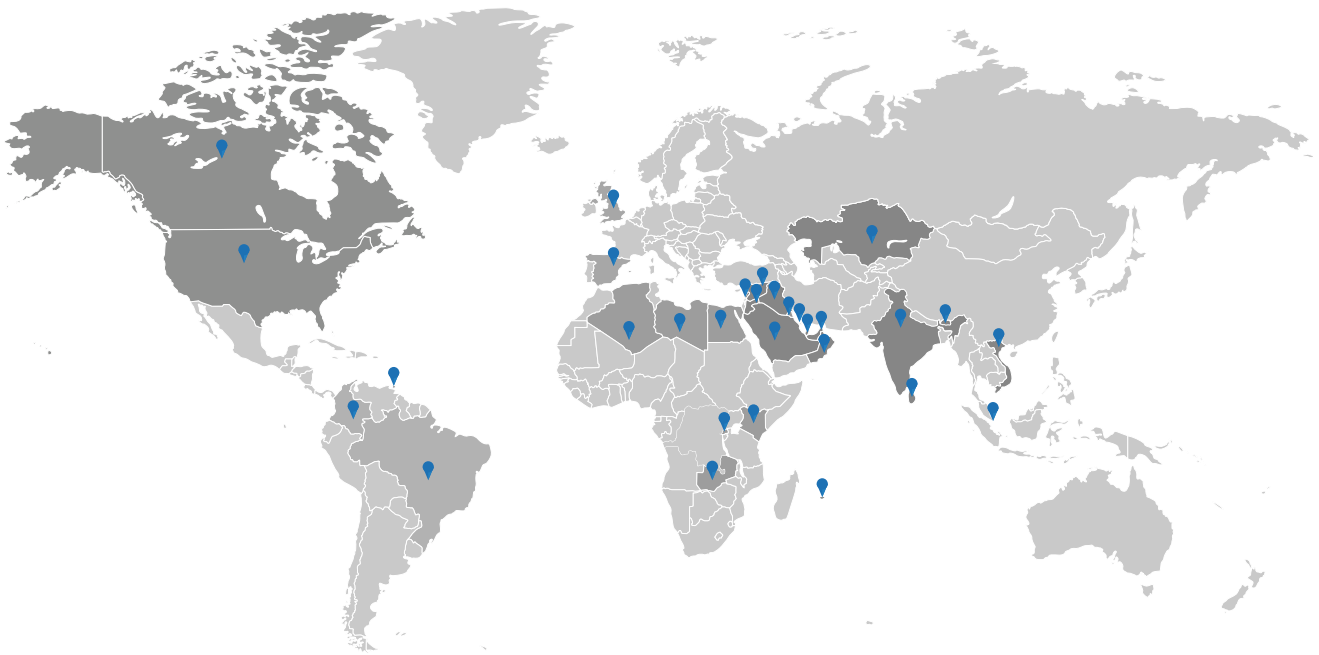


Metadata allows for rapid changes to methodology and approach when required by regulators/business requirements

About Us

Financial Institutions have started automating routine tasks and eliminate inefficiency, but higher order and expensive Analytical Processes requiring intelligence and human decision-making are not automated. Generic automation platforms would not be able to handle Analytical Processes that require deep-domain knowledge.

CogNext, incubated by Aptivaa, intelligently incorporates cognitive technologies such as AI-ML and NLP into robotic process automation. Combined with our domain knowledge, CogNext brings Automation at Scale for Financial Institutions, thus assisting the knowledge worker by removing repetitive, replicable and routine analytical tasks.



100⁺

Clients



30⁺

Countries



15⁺ Yrs

Experience

Aptivaa

INDIA | UAE | UK | US

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