Make Your Own Al for Financial Services



Executive Summary

The financial services industry is continuously innovating and advancing new technologies in the pursuit of increasing their customer base and finding new opportunities. They are using artificial intelligence (AI) for a number of scenarios that advance their businesses including personalized customer services, risk management, fraud detection and anti-money laundering while adhering to regulatory compliance. This is happening across the board and in all segments of financial services - capital markets, commercial banking, consumer finance and banking, and insurance. Moreover, PWC estimates that the incremental revenue from monetizing data could potentially be as high as US\$ 300 billion per year. H2O.ai, the open source leader in AI, is empowering leading financial services companies to deliver AI solutions that are changing the industry.

Al is Expanding the Opportunities for Financial Services Companies

Improve Customer Experiences -

Consumers have come to expect personalized experiences in all facets of life. All can be used in financial services to segment customers and drive personalized offers that increase conversion and retention in retail banking. Automated agents can help customers answer questions and solve issues on their own without talking to a person, a key to attracting and engaging millennials. Automatically alerting customers to fraudulent activity and taking action can increase customer satisfaction and reduce the likelihood of churn.

Industry FINANCIAL SERVICES

Use-cases in Financial Services powered by Al

1. Anti-Money Laundering (AML):
AML programs in capital markets and retail banking extensively deploy rules-based Transaction Monitoring Systems, spanning areas like monetary thresholds and money laundering patterns. Bad actors are able to learn these rules over time and change their methods to avoid detection. Al-based behavioral modeling and customer segmentation can be more effective in discovering transaction behaviors and identify behavioral patterns and outliers indicating potential laundering.

2. Credit-risk scoring:

Mortgage or auto loan lenders have relied heavily on past credit history or FICO score for credit scoring. Sophisticated machine learning models can understand the creditworthiness with additional data. Consumers that were deemed ineligible in the past, can be given credit, expanding the number of credit customers while providing a more precise prediction of risk.

3. Fraud Detection:

Alternative payment modes such as mobile wallets and in-app payments are driving increased payment volumes across both open loop and closed loop payments. The convenience of online payments confers anonymity which increases the risk of fraud at a scale that continues to grow. Fraud detection is now an Al domain, and algorithms spanning classical machine learning to neural networks are being leveraged to fight fraud

4. Personalized Consumer Experience:
Consumer banking generates petabytes of data every year and consumers want an experience specifically tailored to their needs. Forward looking banks strive to serve their clients when and where they need using Al-powered Chatbots for daily or banking needs. Knowing their customers from a 360-degree perspective allows banks to anticipate what financial products they might need and proactively offer customized products to them.

Drive Accurate Decisions -

Speed is often discussed as a critical advantage of Al driven automation in areas like equities trading. However, for most financial services companies, the accuracy of decisions can be more important. For example, quickly determining fraudulent transaction on a credit card is important, but inaccuracy in this process can lead to locked or replaced cards for valuable clients, a key customer satisfaction issue resulting in increased churn risk.

Ease Regulatory Compliance -

The rapidly changing regulatory landscape can be very challenging for financial institutions. Al can help companies comply with applicable laws in areas like anti-money laundering, customer data privacy, and asset management. Al systems are superior in many of these areas because they eliminate human error and can detect illegal activity that would be nearly impossible for people to recognize.

Why H2O.ai for Financial Services - AI to do AI

H2O.ai offers an award-winning automatic machine learning platform in Driverless AI and has been recognized as an industry leader in the Forrester New WaveTM: Automation-Focused Machine Learning Solutions, Q2 2019. H2O, open source, is already being used by hundreds of thousands of data scientists and is deployed at over 18,000 organizations across nearly every industry.

H2O Driverless Al empowers data scientists, data engineers, mathematicians, statisticians and domain scientists to work on projects faster and more efficiently by using automation to accomplish tasks that can take months and can now be reduced to hours or minutes by delivering automatic feature engineering, model validation, model tuning, model selection and deployment, machine learning interpretability, timeseries, NLP, automatic pipeline generation for model scoring and automatic documentation with reason codes, and now bring your own recipes and model operations and administration.

The new innovations and capabilities will enable customers to accelerate their AI transformations in the Financial Services industry.

Customer Case Study

A multinational financial services company based in the U.S.

The world-class data science team uses H2O Driverless AI for credit risk scoring, compliance, customer assistance, and market risk analysis in capital markets. Moreover, with a corporate-wide focus on risk mitigation and regulatory compliance, the H2O Driverless AI platform is instrumental with its machine learning interpretability capability.

VISION

Customer Case Study

Vision Banco, a leading financial institution in Paraguay

The use-cases Vision Banco cares about spans credit scoring, default prediction, fraud detection, churn prediction and recommendation engines. Having used H2O Driverless Al, they reduced the model process from months to weeks, and additionally, they are able to double the propensity for a customer to consider additional credit offerings.

Win with AI – Get Started Today

Al is critical to success in the financial services industry. Driverless Al enables financial services companies to quickly build personalized banking experiences, fraud and money laundering models, improve employee productivity and more. To learn more about H2O.ai and to get a 21-day free trial of Driverless Al visit us at www.H2O.ai

About H2O.ai

H2O.ai is the open source leader in Al and automatic machine learning with a mission to democratize Al for everyone. H2O.ai is transforming the use of Al to empower every company to be an Al company in financial services, insurance, healthcare, telco, retail, pharmaceuticals and marketing. H2O.ai is driving an open Al movement with H2O, which is used by more than 18,000 companies and hundreds of thousands of data scientists. H2O Driverless Al, an award winning and industry leading automatic machine learning platform for the enterprise, is helping data scientists across the world in every industry be more productive and deploy models in a faster, easier and cheaper way. H2O.ai partners with leading technology companies such as NVIDIA, IBM, AWS, Intel, Microsoft Azure and Google Cloud Platform and is proud of its growing customer base which includes Capital One, Nationwide Insurance, Walgreens and MarketAxess. H2O.ai believes in Al4Good with support for wildlife conservation and Al for academics. Learn more at www.H2O.ai

