Customer retention using Next Generation AutoML

2021 ACCIS Annual Conference

Mesrur Börü

Senior Data Scientist

17.06.2021

Our Mission

At TAZI AI Systems Inc., our mission is to create complete solutions that are easy to deploy by our clients based on **our proprietary machine learning technology platform**

➢ **Working System in Four Weeks**

➢ **Explainable & Self-maintaining AI System**

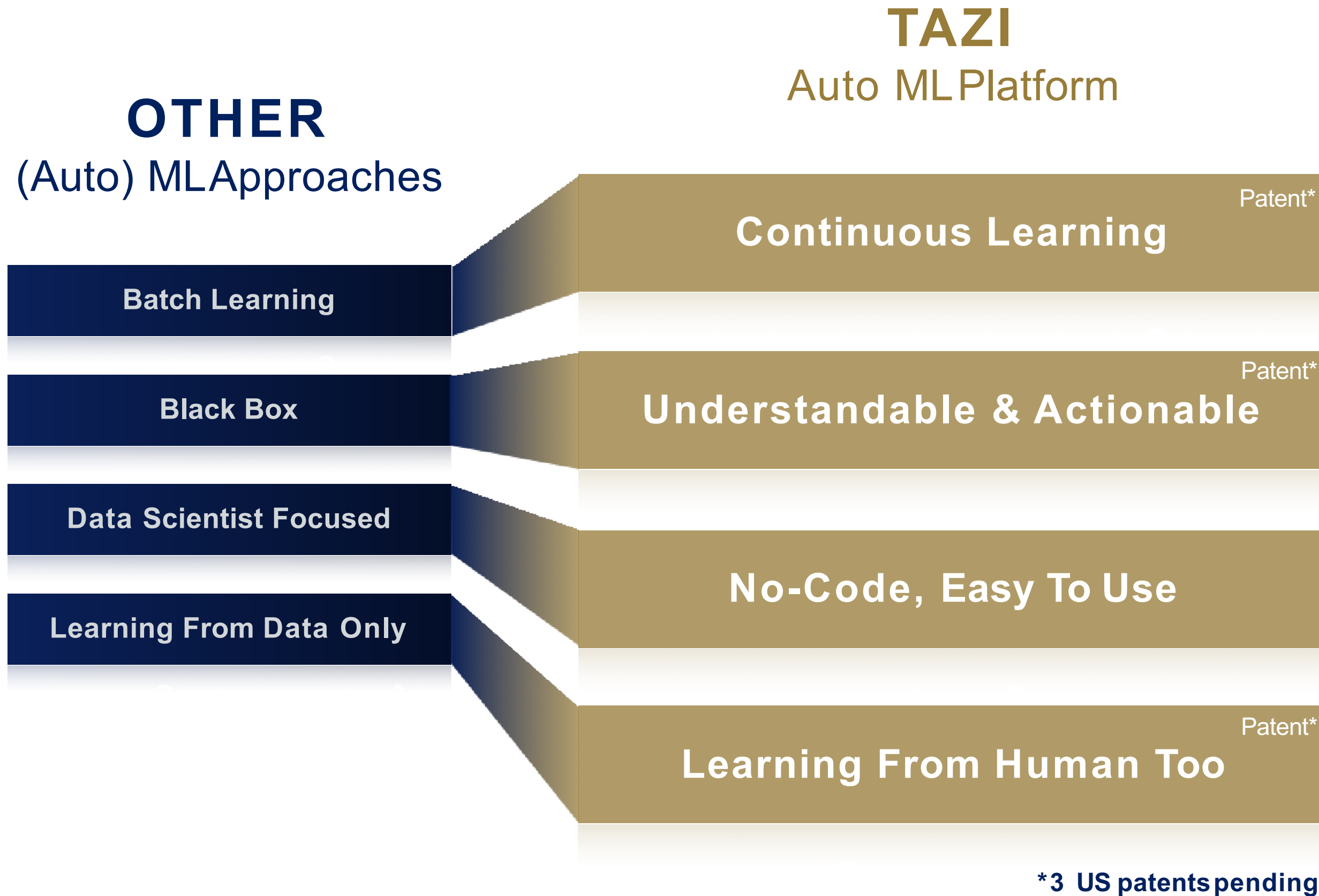➢ **30 use cases, 20 satisfied customers**

Technology - Differentiators

TAZI
Auto ML Platform

OTHER
(Auto) ML Approaches

OTHER	TAZI
Batch Learning	**Continuous Learning** Patent*
Black Box	**Understandable & Actionable** Patent*
Data Scientist Focused	**No-Code, Easy To Use**
Learning From Data Only	**Learning From Human Too** Patent*

*3 US patents pending

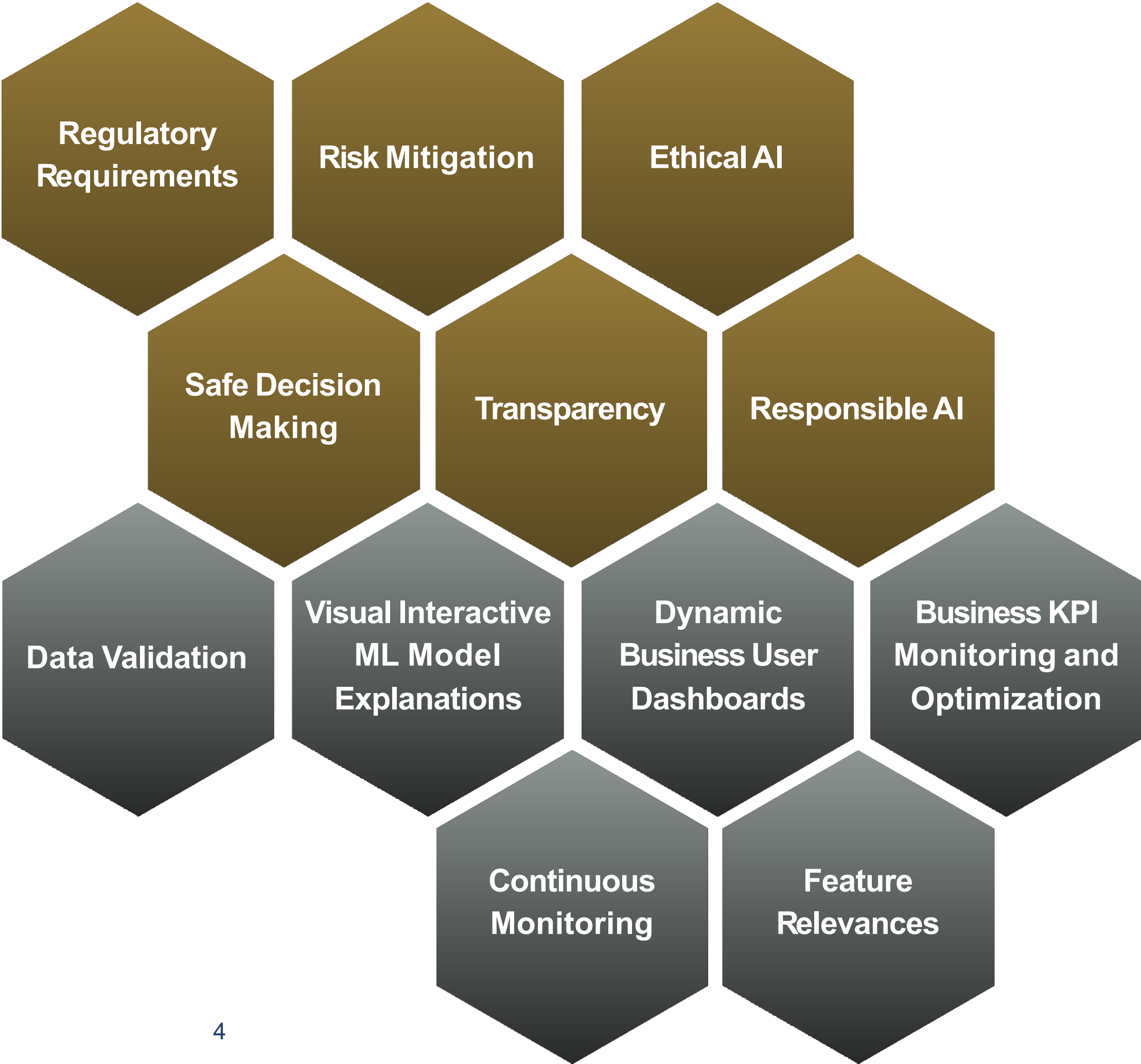**COOL VENDOR 2019**

"TAZI's core design approach is to **earn trust** from its users and to **learn from them**, in addition to learning from the data. ... Tazi's **explainable AI** approach includes understanding of ML **models, inputs, outputs** and **their business value."**

Gartner
Cool Vendors in AI Core Technologies,
May 2019, G00387275

Explainable AI Allows Humans to be in the Driving Seat

Regulatory Requirements

Risk Mitigation

Ethical AI

Safe Decision Making

Transparency

Responsible AI

Data Validation

Visual Interactive ML Model Explanations

Dynamic Business User Dashboards

Business KPI Monitoring and Optimization

Continuous Monitoring

Feature Relevances

Case Study

About Is Investment

➢ Established in 1996

➢ The investment banking arm of İşbank Group, Turkey's 2nd largest bank

➢ Serves its clients through 10 dedicated offices and 1,200 Group branch network

➢ Wide array of services including services are mainly focused on the fields of corporate finance, investment advisory, asset management, brokerage and research.

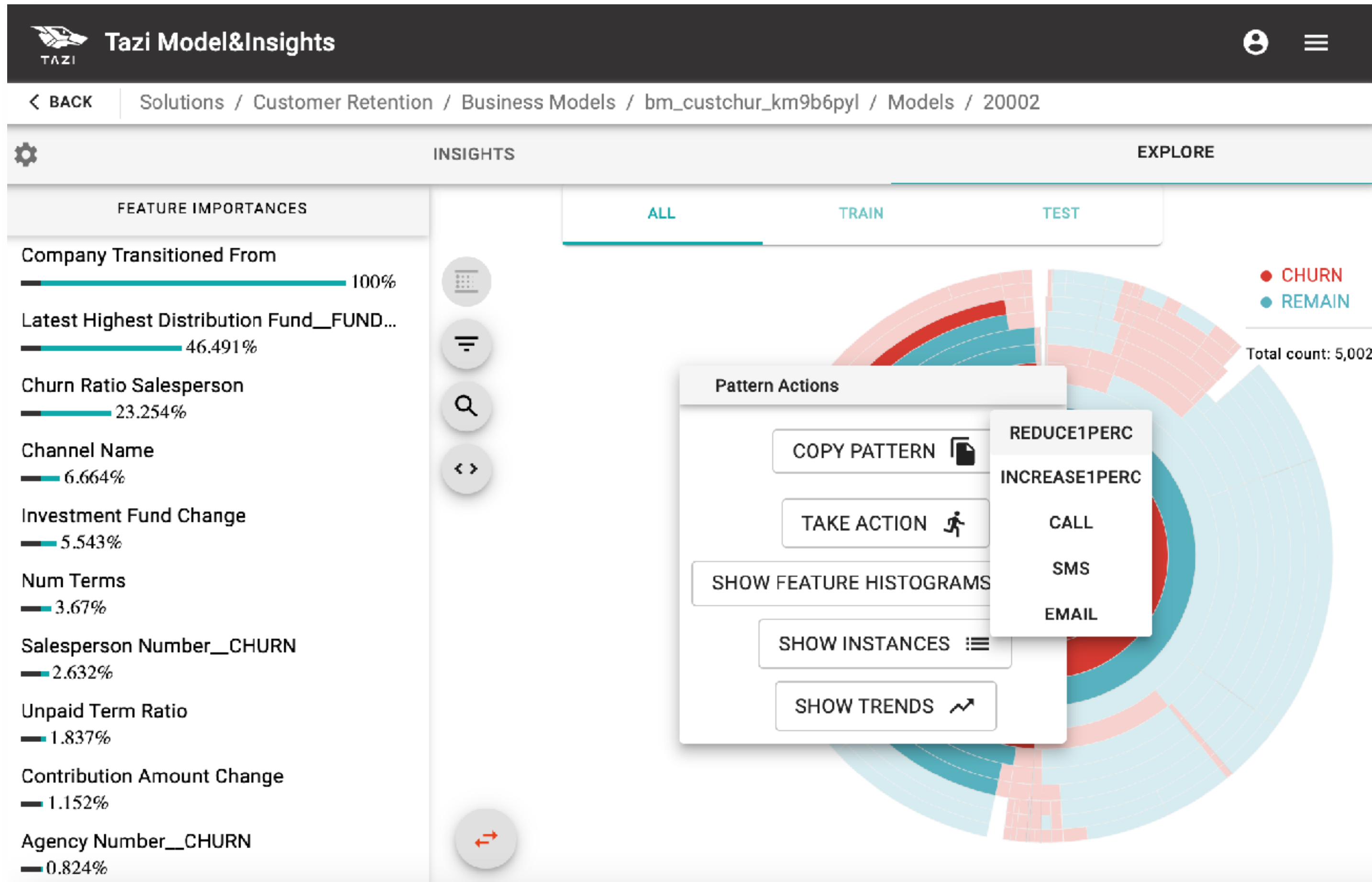## Use Case

➢ Customer Retention

Investment Banking – Why AI based customer retention solution?

➢ High competition makes new customer acquisition even harder compared to other industries.

➢ Ever changing patterns in stock market makes it harder for rule based systems to capture customer behaviours.

Investment Banking – Importance of Explainable AI

- Explainable AI provides transparency towards senior management and regulators

- Explainable AI helps business users to trust the machine learning models

- Explanations provide a solid ground for business to create strategies to increase customer retention

Investment Banking – Importance of Continuous Learning

OUR APPROACH

Continuous (Adaptive) ML

➢ Update themselves as external factors change.

➢ Update themselves as customer behaviors change due to new strategies.

➢ Data science team can focus on new projects instead of spending time to maintain and update existing models.

OTHER

Batch ML

➢ Fail to capture changing patterns in external factors.

➢ Fail to capture changing patterns in customer behavior due to new strategies.

➢ Updating & maintaining existing models takes time of data science team which can be spend on new projects.

Customer Retention Solution

Customer Retention

15%

Decrease in Churn rate

Investment company

➢ Explainable AI helped develop business strategies

➢ Adaptable continuous learning models captured the changing patterns during Covid

➢ Customer Retention Solution helped to build a solid employee performance evaluation system

June 2021

Customer Video

Finance Use Cases(1)

Retention/Churn	Credit Risk Detection and Prediction	Non Performing Loan Recovery Prediction	Money Flow Detection	Propensity Score Prediction (Up/XSell)
17%	**75%**	**33%**	**93%**	**48%**
churn decrease	risk detection for next quarter 70% for prediction	operational cost saving with 90% accuracy in 60% top scored customers	accuracy detecting types of transactions. 95% accuracy when more information on sender is included.	Performance increase in determining who will purchase personal finance credit
Investment company	**Local Bank SME**	**Debt Collection Agency**	**International Bank**	**Local Bank**

June 2021

Finance Use Cases(2)

Card Copying Fraud Detection	Check Fraud Prediction	Stock Market Prediction	Profitability Monitoring	Debt Recovery Prescription
95%	**56%**	**100%**	**3%**	**33%**
Equal weighted accuracy	Euro per year of fraud predicted within a 9mos window	Reduction in cloud costs, positive ROI	Revenue increase with appropriate actions on micro segments	Payment pattern accuracy
National Payment Switch	**National Credit Scoring Bureau**	**Stock Data&Trading Platform**	**Auto Insurance**	**Finance Company**

Customer retention using Next Generation AutoML

Contact Us

Mesrur Börü

mesrur@tazi.ai

Sandra Lopez Claveria

sandra@tazi.ai