Artificial Intelligence and Machine Learning

Quickly extract new insights using TransUnion's latest analysis techniques.

Why TransUnion is the right data science innovation partner

☑ **Dozens of data scientists** around the globe constantly monitor the latest developments in AI

☑ **Rich and diverse data assets** combine traditional and alternative credit data

☑ **Versatile and nimble technology infrastructure** enables rapid innovation and easy access to new insights

☑ **Customer-centered approach** ensures analyses fit your unique needs

Transformative advances in computing technology and the proliferation of data have led to the rapid rise of artificial intelligence (AI) and machine learning (ML) to unearth vast amounts of new insights.

TransUnion invests time and resources to adapt emerging ML methods for use in our solutions and services, including the field of Explainable AI (XAI), a research area that focuses on developing techniques to make AI and ML decision-making models interpretable and trustworthy.

Extracting value using ML techniques in model development

In a highly regulated environment, especially when consumer data is involved, balancing performance and explainability is key and has been at the center of our research and development (R&D) program.

TransUnion has been using machine learning techniques for many years to aid model development across the customer credit lifecycle, providing significant lift in predictive power over standard approaches while maintaining explainability and stability.

These new ML techniques have been especially useful in:
- **Identifying** promising customer segments
- **Selecting** important attributes
- **Creating** new attributes from behavioral traits detected in thin data files

Artificial Intelligence (AI):

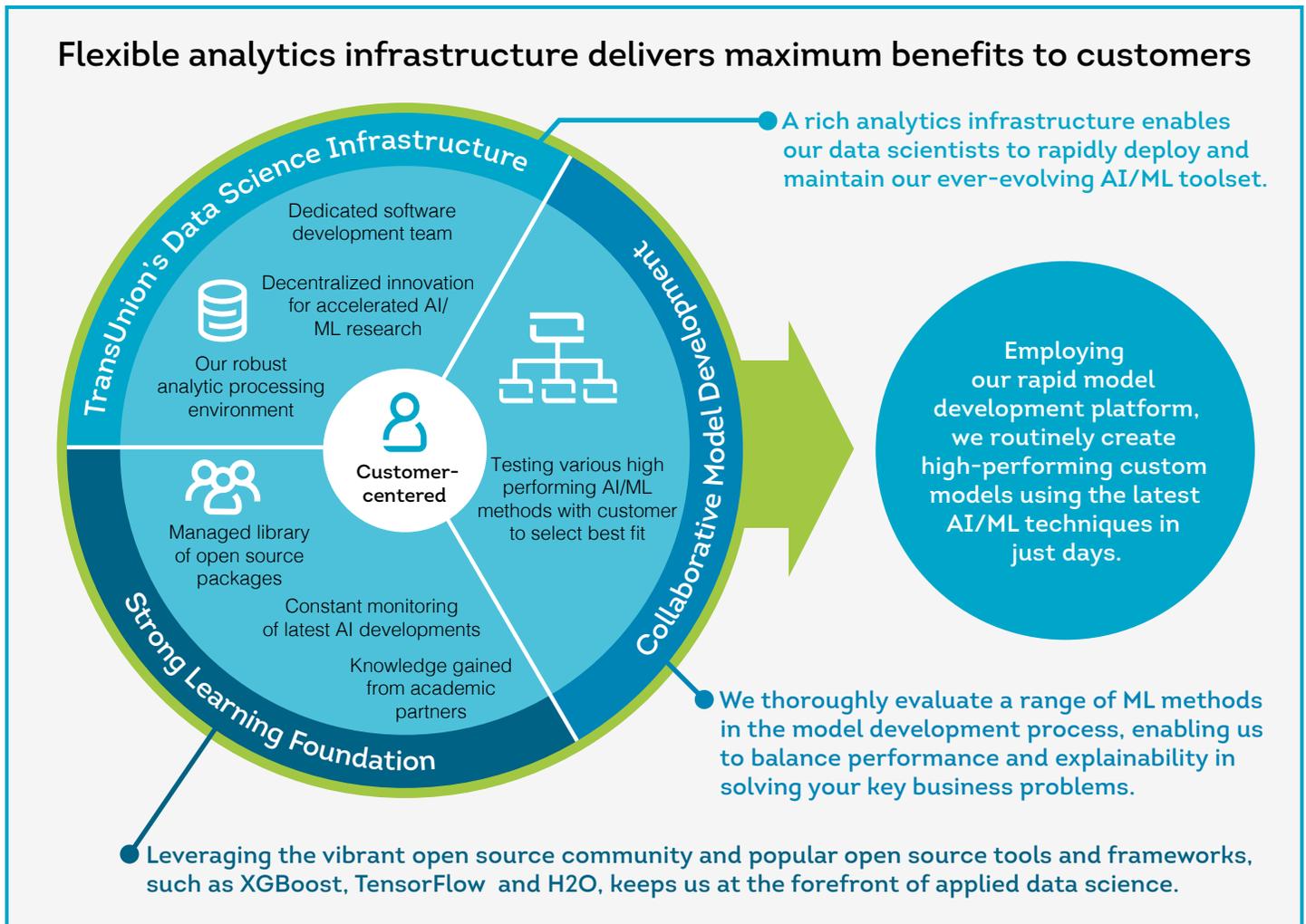Any technique that enables machines to perform tasks that are characteristic of human intelligence.

Machine Learning (ML):

Statistical methods to enable machines to improve their decision making (i.e. a way of achieving AI).

Visit: **transunion.com/solution/advanced-analytics**

Dedicated R&D for speed and innovation

A dedicated software development and ML engineering team in the heart of our Data Science and Analytics group is specifically focused on quickly and thoroughly evaluating emerging ML tools and techniques, cataloging their properties, strengths and weaknesses, and adapting them to solve business problems that matter to our customers.

TransUnion does not constrain itself to any particular AI/ML method. Keeping a flexible stance has allowed us to rapidly welcome new ML techniques to help solve our customers' unique needs.

Flexible analytics infrastructure delivers maximum benefits to customers

TransUnion's Data Science Infrastructure

Dedicated software development team

Decentralized innovation for accelerated AI/ML research

Our robust analytic processing environment

Customer-centered

Collaborative Model Development

Testing various high performing AI/ML methods with customer to select best fit

Strong Learning Foundation

Managed library of open source packages

Constant monitoring of latest AI developments

Knowledge gained from academic partners

A rich analytics infrastructure enables our data scientists to rapidly deploy and maintain our ever-evolving AI/ML toolset.

Employing our rapid model development platform, we routinely create high-performing custom models using the latest AI/ML techniques in just days.

We thoroughly evaluate a range of ML methods in the model development process, enabling us to balance performance and explainability in solving your key business problems.

Leveraging the vibrant open source community and popular open source tools and frameworks, such as XGBoost, TensorFlow and H2O, keeps us at the forefront of applied data science.

LEARN MORE

Find out how TransUnion's expertise in analytics can help your business build predictive solutions that satisfy your explainability needs. Visit **transunion.com/solution/advanced-analytics** today.

TransUnion