PROSPECT 33

Global Data Lab

GDL

Overview

Embark on a transformative journey with our Global Data Lab, designed to revolutionize the way Al solutions are built and implemented for Capital Markets. Our Lab ensures a seamless and effective integration of cuttingedge technologies into your business.



Al Powered Process Excellence for Wholesale Capital Markets

We deliver transformation in Wholesale Capital Markets combining AI & Machine Learning with Business Process Excellence.

Key Benefits:

- Performance: 3-5x improvement in time & cost efficiency
- Risk Reduction: Enhanced decision-making and compliance
- Resilience: Less key-man dependency and agile operations
- Measurability: Data-driven insights for continuous improvement
- Expertise: Dedicated to Wholesale Capital Markets sector

We help our clients:

- Realize revenue opportunities
- Optimize Business Process
- Improve Risk Management



Explore. Partner. Build.

Exploration Phase:

Our unique exploratory approach focuses on identifying the most promising opportunities and developing the next generation of Al solutions tailored to the dynamic needs of Capital Markets.

Joint Partnership:

A powerful collaboration between P33 data scientists and your in-house Subject Matter Experts (SMEs) allows a synergistic partnership that brings a deep understanding of your business challenges and ensure the development of solutions that address your specific requirements.

Al Project Lifecycle:

P33's proprietary approach to the AI project lifecycle combines our traditional transformation expertise with a modern approach to AI model development. This comprehensive strategy ensures a smooth and efficient transition from ideation to implementation, resulting in a lasting impact on your organization's performance.





MDaaSTM Model Development as a Service

MDaaS[™] is a comprehensive solution designed to facilitate the seamless integration of advanced AI capabilities into your business. It covers the entire lifecycle of AI model development, ensuring a tailored and efficient approach to meet your unique needs.

- **Product Vision:** Establishing a clear direction for your Al project.
- Analysis & Requirements Definition: Identifying specific needs and objectives.
- Proof of Concept (PoC) Phase: Exploring and validating initial ideas.
- Solution Refinement: Enhancing and fine-tuning the Al solution.
- Model Development: Utilizing our DaSMoDe™ framework for optimal results.
- **Project Governance:** Ensuring compliance and oversight throughout the project.
- Solution Deployment & Productionalization: Seamlessly integrating the Al solution into your operations.
- Model Validation & Monitoring: Continuously evaluating and improving the Al model's performance.

Methodology & Project Portfolio

Through the use of our advanced Global Data Lab (GDL) and proprietary DaSMoDe™ methodology, we have consistently delivered high-performance, tailored solutions, driving AI/ML solutions to reduce risk, optimize business process and increase revenues.





DaSMoDeTM Data Science Model Development Methodology

DaSMoDe™ is our proprietary methodology that combines the best of scientific experimentation and agile software development, ensuring a continuous flow for data model creation. This unique approach allows your organization to stay agile and ahead of the competition.

- Rapid Model Testing & Elimination Quickly identify and discard underperforming models, saving time and resources.
- Comprehensive Model Validation
 Assess the most promising models using various validation methods, train/test splits, and hyperparameter tuning.
- >>> Experimentation & Tuning

 Continuously refine and optimize models for peak performance and reliability.



Credit Risk Early Warning Sentiment Analysis Tool

- Partnered with a leading US bank
- Developed an Al-driven Sentiment Analysis tool for sell-side capital markets risk function
- Enabled portfolio managers to monitor negative news sentiment and risk exposure
- Streamlined portfolio credit risk management with Early Warning Indicators (EWI)

Combating Money Laundering and Petroleum Smuggling

- Utilized graph databases and algorithms to analyze connections in the Middle East
- Identified potential links between individuals, companies, and illicit activities
- Demonstrated the potential of graph databases in detecting and combating financial crimes in complex environments

Transaction Monitoring & Client Risk Scoring

- Reduced false positives and negatives for more focused investigations
- Utilized graph algorithms to enhance accuracy of the gradient boosting model
- Expanded functionality by incorporating new crime dimensions from FATF reports

People Analytics for Capacity Planning and Employee Retention

- Analyzed data from a platform monitoring workforce activity patterns
- Trained models to predict utilization of users and teams, and voluntary attrition risk
- Utilized ~1 million entries from 9000 employees across 27 Financial Services Institutions

Data Quality: Missing Value Imputation

- · Partnered with a major US trading firm
- Developed creative, explainable supervised learning models
- Enabled organizations to utilize datasets previously incompatible with ML due to missing values

Portfolio Risk Management

- Prioritized trade investigations using outlier classification
- Utilized supervised learning methods for explainable output

ML-Based Investment Regime Identification & Portfolio Optimization

- Tailored investment strategies, risk management, performance attribution, and macro-driven strategies
- Utilized clustering techniques and ML models to predict investment returns and optimize portfolios

GPT/LLM for Knowledge Base Natural Language Querying

- Leveraged ChatGPT for natural language interrogation of large data volumes
- Enabled unprecedented insight into business data without training a model on specific data



We offer a comprehensive suite of AI/ML solutions tailored to the unique needs of the Wholesale Capital Markets industry. By leveraging our advanced Global Data Lab (GDL), our proprietary DaSMoDe™ methodology, and our extensive use-case history, we have consistently demonstrated our ability to deliver high-impact, scalable, and innovative solutions.

Our Model Development as a Service (MDaaSTM) approach ensures seamless collaboration with our clients, as we build custom AI/ML models on their behalf, either in their environment or within our state-of-the-art GDL. This flexibility guarantees an efficient and effective AI/ML model development process, catered to each client's specific requirements.

- Proven track record in delivering successful AI/ML solutions
- State-of-the-art Global Data Lab (GDL) and DaSMoDe™ methodology
- · Extensive use-case history showcasing our expertise
- Flexible MDaaS[™] approach tailored to client needs



>> Deep Domain Experience

- Risk & Compliance
- Operations
- Finance
- Front Office
- Human Resources

>> AI/ML Expertise

- NLP
- Large Language Models
- Deep Learning
- Reinforcement Learning from Human Feedback
- Tree-based Supervised Learning Models

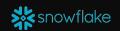
>> Proven Track Record

- 15+ years in Wholesale Capital Markets
- 35+ data scientists
- 100 data scientists by EOY '23











For more information, please email gdl@prospect33.com

www.prospect33.com