GeoDataDecisions

Adding statistical objectivity to resource certainty & footprint.

Pure Play Data Science underpinned with 30 years in mining

…high-performance data science engine turning complex data into smart, strategic and actionable insights through machine learning, advanced analytics and artificial intelligence.

we are motivated to leverage our mining & critical infrastructure capabilities for…

Accelerating Feasibility Decisions by leveraging all available exploration data, inserting objectivity into traditionally subjective decision-making processes, enabling faster, more reliable outcomes.

Scaling Across Geological Systems redefining the efficiency of resource discovery and development with advanced repeatable data science methods.

Mitigating the Global Skill Shortage Risk by reimagining and accelerating the development of future geo-workers, paving the way for a new generation of highly skilled professionals.

offerings are focussed on

Data management

Method repeatability

Result precision

Data

GDDs Uniqueness

- Ingest any type of data in any format.
- Process as much data as possible e.g., GBs and TBs
- Aggregate all the data across same geo-referencing

Case Study	Use Case
- GDD has processed 70 million samples at once and is capable of processing more. - GDD integrated all the data with three distinct types of referencing into a unified reference.	- GDD will ingest TBs of data from your different sites. - GDD will aggregate the data from those sites to achieve a same geo-referencing.

GDDs Uniqueness

- Controlled, we use ML not DL - repetitive
- Data agnostic e.g., no specific set of data required.
- Commodity agnostic e.g., can predict any mineral, critical mineral and oil & gas pockets.
- Scalable e.g., can be applicable to current mines, nationwide mines and mines across the globe.

Case Study	Use Case
- GDD has predicted minerals such as Gold and Copper. - GDD has predicted critical minerals such Arsenic. - GDD has discovered Oil & Gas pockets in Australia.	- GDD will process your site/s data to train the model architecture. - GDD will predict undiscovered commodity deposits for each site.

GDDs Uniqueness

- Pin-pointed predictions with high resolution at 50m3.
- Predicts depth and grade.
- All results with statistical confidence

Case Study	Use Cases
Our case studies have delivered: - 91% confidence - Gold - 71% confidence - Copper - 87% confidence - Arsenic - 94% confidence - Gas - 88% confidence - Oil	- Test the hypothesis that additional $ millions or $ billions of undiscovered commodities can be precisely located. - Test the hypothesis that your deposit statements are statistically valid. - Test the hypothesis that across your tenements significant exploration costs can be saved.

Procedures

People in the Organisation

Platform technology

Procedure by Milestones

Client data

- Name & description of received datasets
- Additional required datasets
- Unavailable datasets

- File types & shape of each dataset

- Metadata to understand the table names, attributes and values.

- Define the criticality

- Discover different scale/grid available with relevant properties information
- List of all datasets with associated grid.

- Intelligent grid scaling & normalisation

- Grid & voxel creation

- Data preprocessing
- Feature engineering

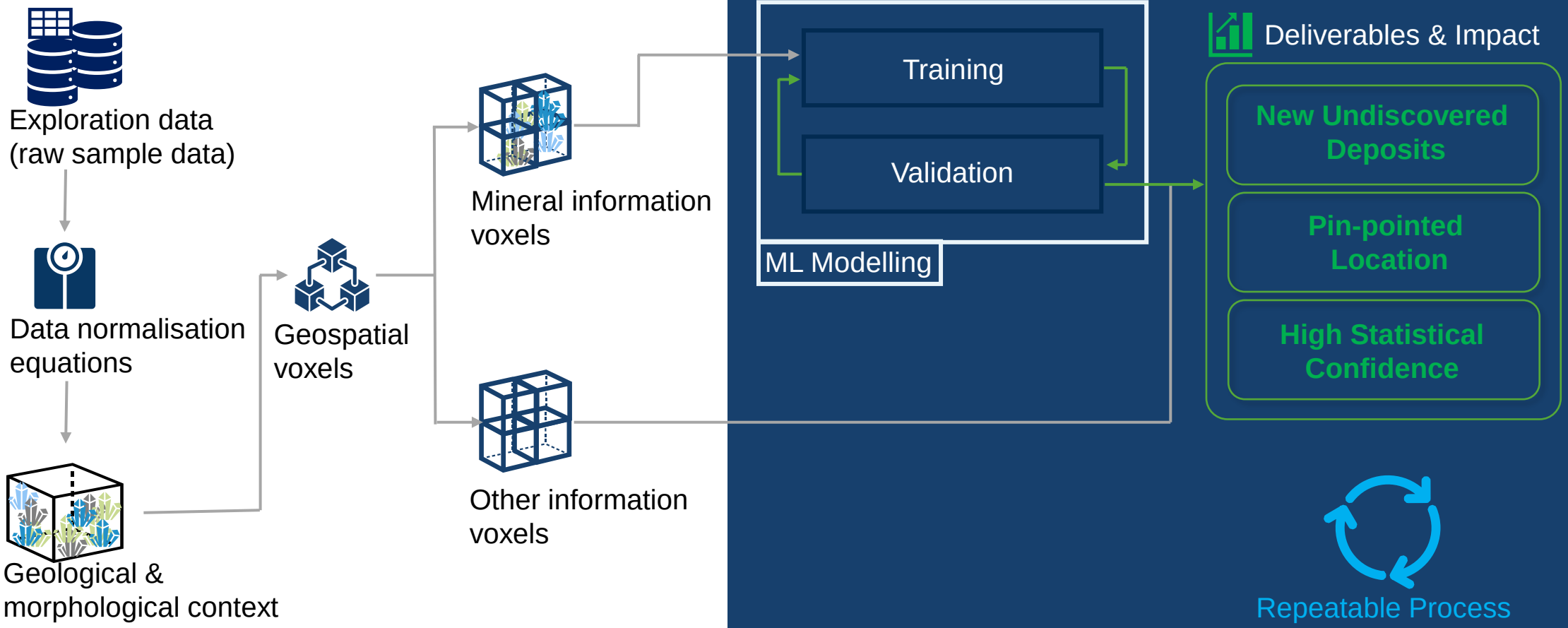
- Model training
- Model validation & testing

- Cross validation & fine tuning

- Model performance evaluation
- Model predictions

Data Readiness | Methodology Implementation | ML Lifecycle

Machine Learning Process Flow



Capabilities

Compared with others

Market [Ai&ML]

core capabilities

Variables	GDD	Geo-Statistics	Mine Plan	Mine Economics
Resource Estimation	✓	✓	✗	✗
Certainty	✓	✓	✗	✗
Reserve Estimation	✓	✗	✓	✗
Location, Grade, Tonnage	✓	✗	✓	✗
Capital & operating cost	✓	✗	✗	✓
ROI, Profit margins	✓	✗	✗	✓

competitor capabilities

Aspect	GDD	Others
Geological & Morphological Context	✓	✓
100% Objectivity	✓	✗
Ore Depth	✓	✗
Ore Tonnage	✓	✗
Ore Pure Amount	✓	✗
Ore Reserve Predictions not Estimations	✓	✗
Economic Feasibility	✓	✗
Environmental Footprint	✓	✗
Mining Planning – Early Concept	✓	✗

about us

We are a young, forward-thinking company applying science and Industry 4.0 technologies to reshape how data assets are perceived, used and leveraged—ultimately driving shareholder value and investor confidence.

Led by a visionary CEO and a team of highly capable professionals, we tackle complex, often overlooked data challenges. Our approach builds integrated ecosystems that deliver measurable results, trusted sustainable outcomes faster.

Our strategy is niche and differentiated. As a pure-play data science firm, we work across to unlock value from client data assets. Our guiding questions are simple: Where is the data? What is it? Why does it matter? How can it generate value?

We extract value by harvesting all available data, lessen machine learning bias, reducing noise and delivering trustworthy simplicity.

With our leadership team in place, we are now expanding capabilities across our ecosystem to scale impact and innovation.

Core leaders

Genene Kleppe

With over 30 years of experience spanning mining, critical infrastructure, technology and strategic asset management, I specialise in transforming data assets into economic value.

Jay Patel

Committed to enhancing industry workflows to be robust, efficient, secure and sustainable, I am focused on advancing Industry 4.0 and responsible AI practices. By driving innovation in data asset management through data science, my mission is to strengthen the long-term resilience and sustainability of critical industries.

Ecosystem

Graduate Program – starting with Internships through to employment for those on the right side of the cut.

Project Management Services through Andrew Curren & Agonis Group.

Geological & Environment & Environmental Legislations augmentation from a variety of local and international companies depending on specialisation.

Economic advisory through our Bank, the Commonwealth Bank.

Data science augmentation through Peter Inge & insightfactory.ai

Technology partners are:

- Snowflake
- MS Azure
- AWS

Next steps

Which priority problems shall we start working together on?

Who is our key contact person?

What is your timeframe?

Governance: We prioritise governance and trust. Our standard engagement process:

1. Mutual Non-Disclosure Agreement
2. Collaborative Scope of Work outlining clear decision milestones
3. Flexible commercial models — fixed fee, subscription or performance-linked.

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