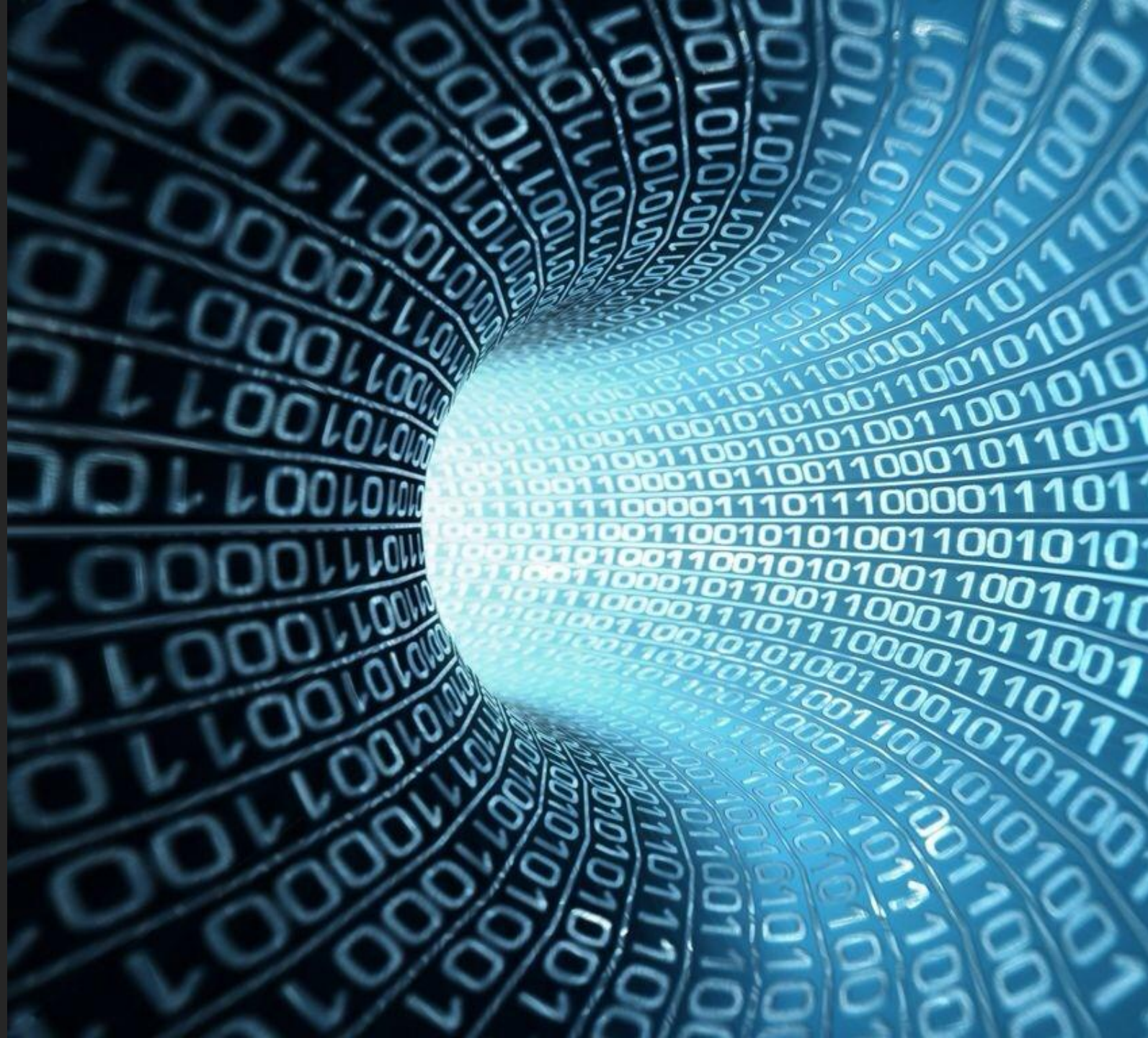

BUILDING SOLUTIONS
FOR DATA-DRIVEN
DECISIONS IN MINING AT
AIRTH SOLUTIONS

- JAY MOTKA





AIRTH SOLUTIONS



- Airth Solutions is a startup company established in 2020.
- Airth Solutions provides an integrated enterprise platform that consumes and provides processed mining data along with products that users can utilize to make data driven decisions and can see related financial impact.
- Since their start, Airth Solutions is slowly expanding from mining to other industries.

SOLUTIONS

- Mine Planning

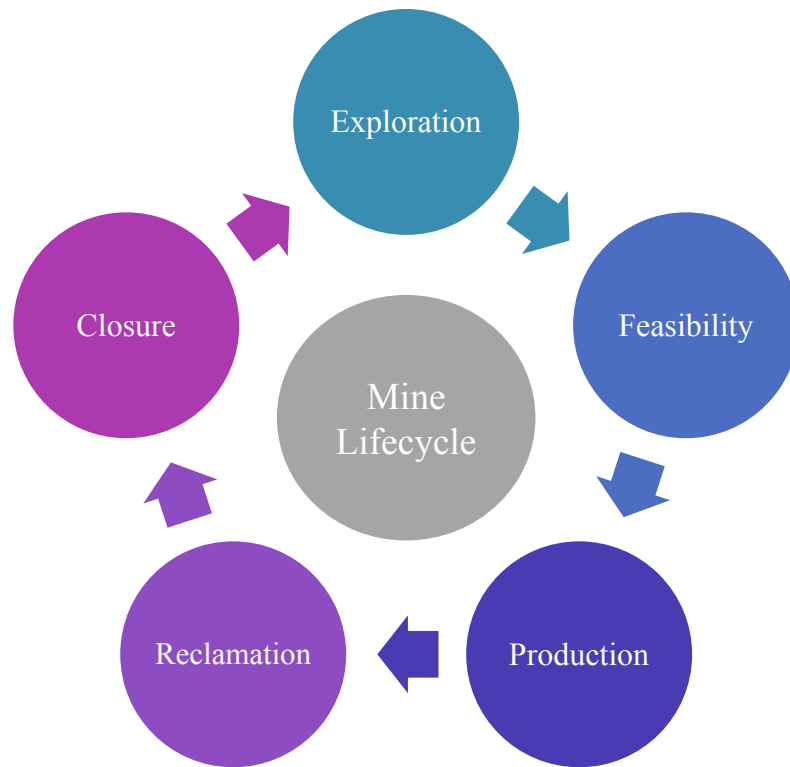
- Types of Mining:

1. Open Pit Mining
2. Strip Mining
3. Underground Mining

- Financial Analysis



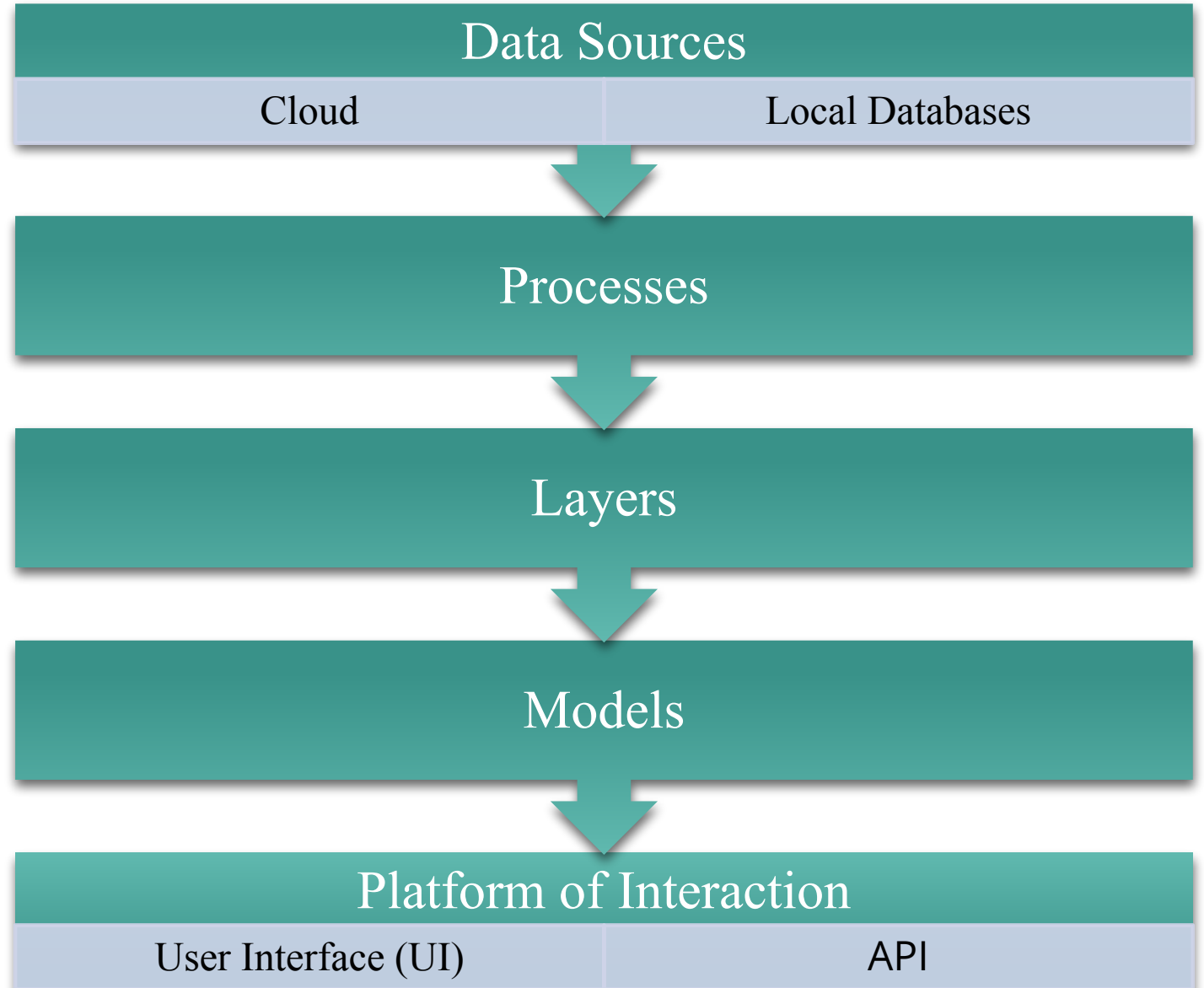
MINE STAGES AND DATA



- Exploration: Drilling and Sample Locations, Lab Processes and Resulting Ore and Metals
- Feasibility: Financial Data, Results from Exploration and Lab
- Production: Blasting, Fleet Management System (FMS), Hauling, Stockpiling, Processing, etc.

MY WORK

- Designing ins and outs of the product.
- Understanding different Key Process Indicators (KPIs) and their uses.
- Thinking up of use cases.
- Strategizing what data to buy or collect and which clients to approach on that front.



OTHER PROJECT: DATA SOLUTIONS IN HEALTH INDUSTRY

- A product to provide solutions to a healthcare company in France.
- Designed the entire product and its process map.
- Developed a product scope based on the product design to make a deal.



WHAT I LEARNED



Ins and outs of how the business in the industry works.



New technical skills related to cloud computing and DBMS, mainly AWS and Azure.



Exposure to visualization tools such as Tableau.



Got to apply many of my skills and technical knowledge in product designing and development.

THINGS THAT PREPARED ME

My Two Research Experiences

- Machine Learning
- Algorithms
- Data Processing

Core Physics & Astronomy Courses

- Problem Solving

CSC 110 - 120 PHYS 305

- Programming



THANK YOU

- JAY MOTKA

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