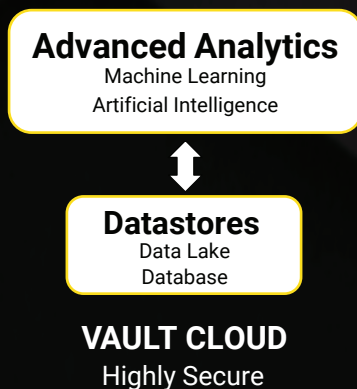# Advanced
## Information Analysis

Organisations have **classified datastores in highly secure environments**. Analysis of these datastores allow organisations to generate **intelligence that enhance their decision** making.

Advanced analytics are resource and cost intensive. Cloud providers provide the necessary **resources at cost effective price points**, but classified data requires **data sovereignty and governance considerations**. Vault Cloud is the only cloud provider that provide the necessary **high performance compute resources**, with **data sovereignty guarantees**. Vault is engineered for ISM compliance and has achieved the **highest certification available from the Australian Signals Directorate**. Our **Government Cloud** completes the security picture, with a government-exclusive community cloud model subject to Australian jurisdiction.

**Advanced Analytics**
Machine Learning
Artificial Intelligence

↕

**Datastores**
Data Lake
Database

**VAULT CLOUD**
Highly Secure

## Advanced Analytics

Information analytics consist of Machine Learning and Artificial Intelligence solutions and these technologies are evolving rapidly. As such the key components of the solutions are:
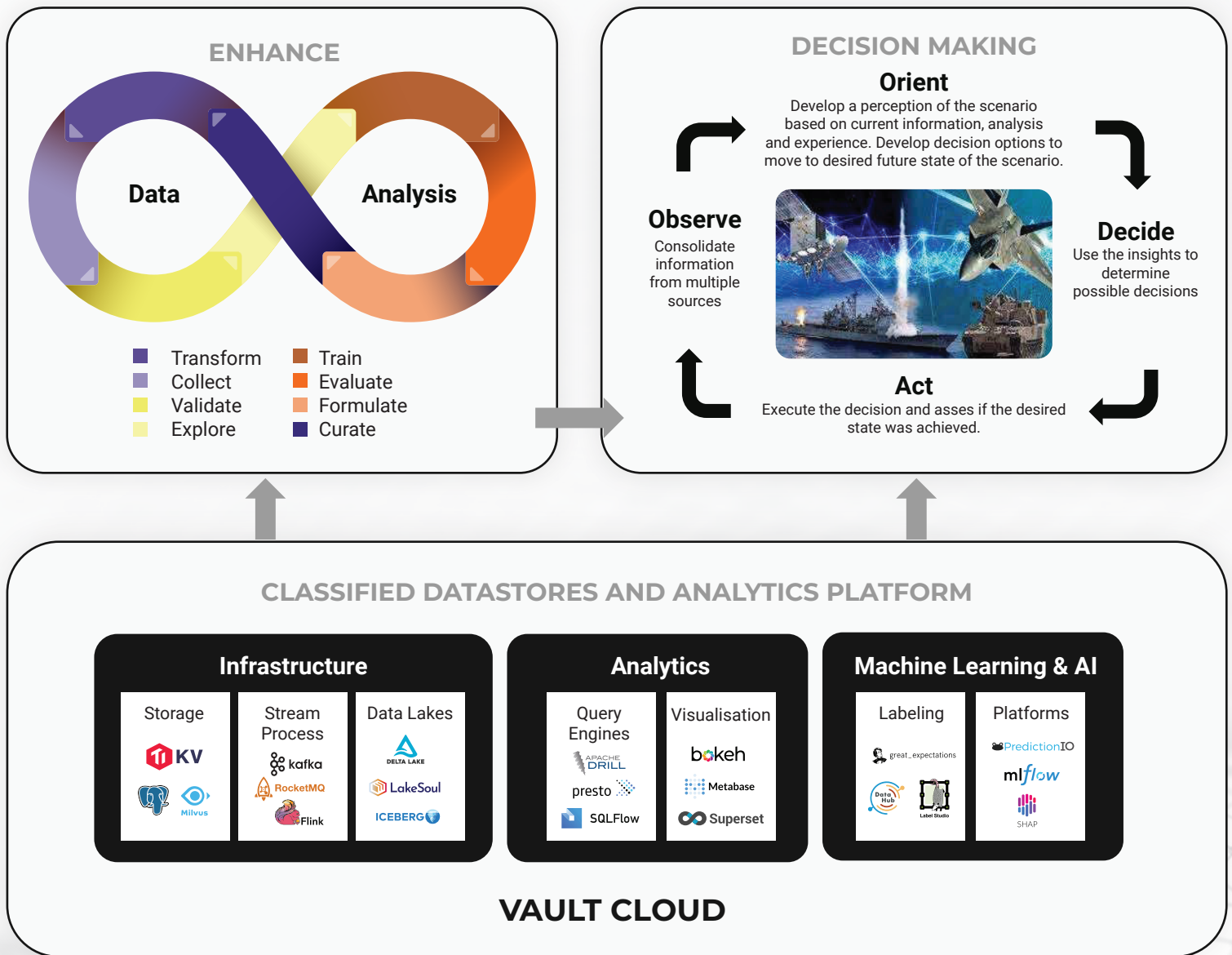
- Compute resources need to be high performance **GPU** and **NVMe SSD.** High performance compute resources are required for **real time** and batch analytics. Vault Cloud provides these at **hyper scaler cost efficiencies**.

- **Containerisation** has become the industry standard for technology delivery. Container orchestrators, such as Kubernetes allow **analytics solutions to evolve** in a modular fashion. Vault Cloud offers a managed Kubernetes service, Secure Container Cloud (SCC).

## Datastores

Organisations have their information in disparate datastores. There is a requirement to perform join analysis across these siloed datastores, as information from one datastore enriches the information from another and improves the quality of the analysis and thus decision making. Data mesh solutions need to be developed and the key considerations for organisations in highly secure environments are:

- Data protection.
- Data sovereignty

*** *Certifications and Accreditations: ASD Certified PROTECTED, IRAP Assessed PROTECTED , IRAP Assessed SECRET, IRAP Assessed SIG, Hosting Certification Framework - Strategic,  DISP Membership.*

# VAULT

## ENHANCE



**Data** — **Analysis**

- ■ Transform
- ■ Collect
- ■ Validate
- ■ Explore
- ■ Train
- ■ Evaluate
- ■ Formulate
- ■ Curate

## DECISION MAKING

**Orient**
Develop a perception of the scenario based on current information, analysis and experience. Develop decision options to move to desired future state of the scenario.

**Observe**
Consolidate information from multiple sources

**Decide**
Use the insights to determine possible decisions

**Act**
Execute the decision and asses if the desired state was achieved.

## CLASSIFIED DATASTORES AND ANALYTICS PLATFORM

### Infrastructure

**Storage**
- KV
- Milvus

**Stream Process**
- kafka
- RocketMQ
- Flink

**Data Lakes**
- DELTA LAKE
- LakeSoul
- ICEBERG

### Analytics

**Query Engines**
- APACHE DRILL
- presto
- SQLFlow

**Visualisation**
- bokeh
- Metabase
- Superset

### Machine Learning & AI

**Labeling**
- great_expectations
- Data Hub
- Label Studio

**Platforms**
- PredictionIO
- mlflow
- SHAP

## VAULT CLOUD

**KEY CUSTOMERS**
- Federal Government
- State Government
- AirServices
- Defence Industry
- Defence Supply Chain

**KEY PARTNERS**
- Fujitsu Australia
- Secure State
- xAmplify
- Unisys
- iseek
- Archtis
- Nvidia
- NRI

*Australia's National Cloud*