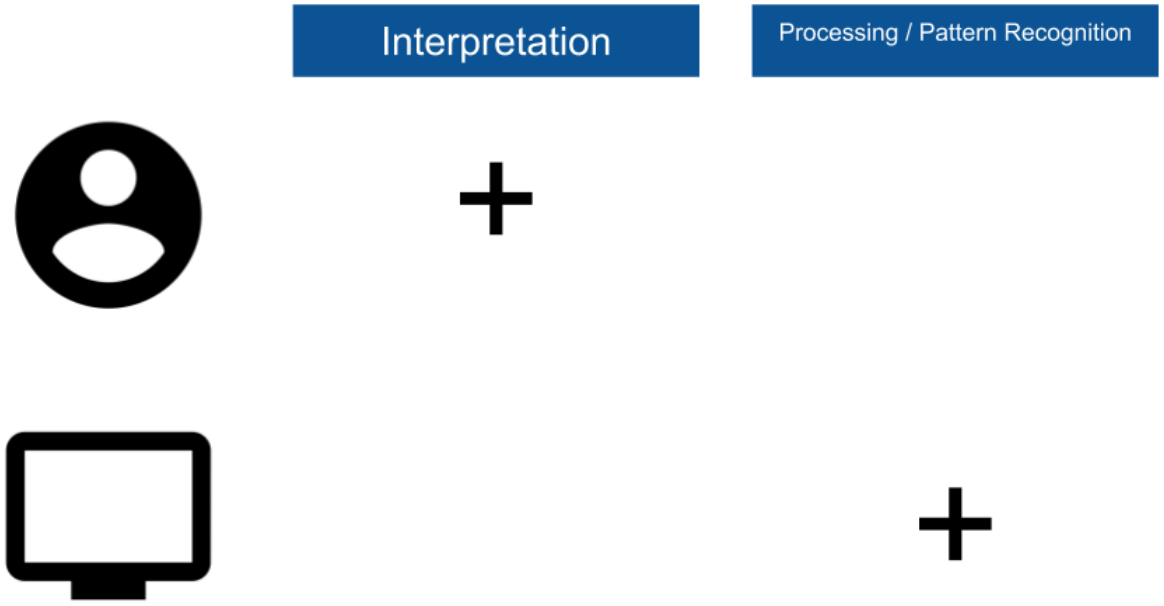
Drilling for Data Literacy

building responsive, relevant, rigorous, and reusable analytics

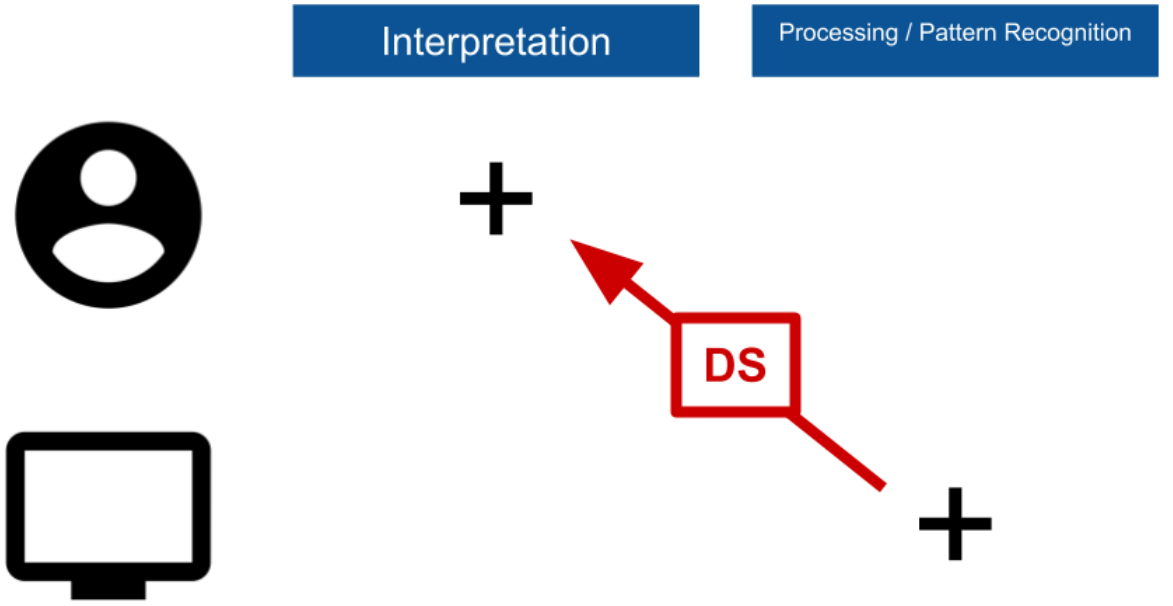
the overall classification of this brief is UNCLASSIFIED

10/22/2020

GAP Analytics: Core Philosophy



GAP Analytics: Core Philosophy



Goal: Maximize the time analysts spend interpreting patterns that matter

Drilling for Data Literacy

"Data in the 21st Century is like Oil in the 18th Century: an immensely, untapped valuable asset. Like oil, for those who see Data's fundamental value and learn to extract and use it there will be huge rewards."

"Data is the New Oil"

Joris Toonders, WIRED 2014

"More often than not, companies are not ready for AI. Maybe they hired their first data scientist to less-than-stellar outcomes, or maybe data literacy is not central to their culture. But the most common scenario is that they have not yet built the infrastructure to implement (and reap the benefits of) the most basic data science algorithms and operations, much less machine learning."

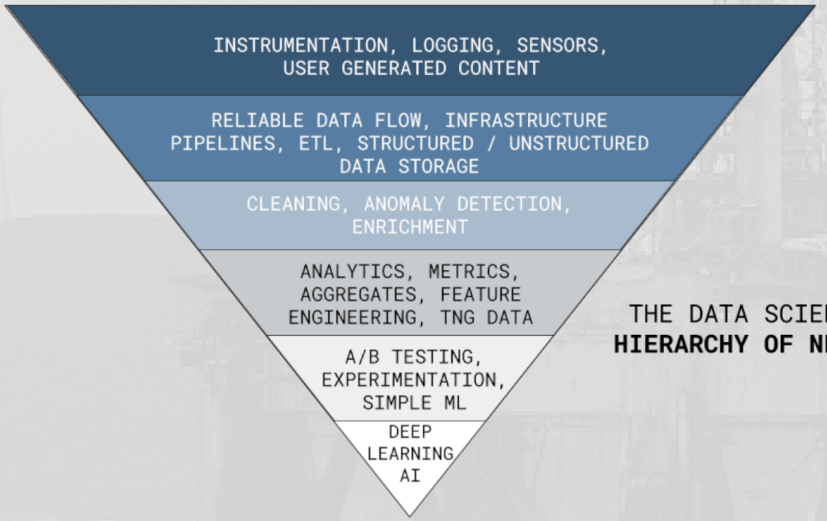
"The AI Hierarchy of Needs"

Monica Rogati, Medium 2017

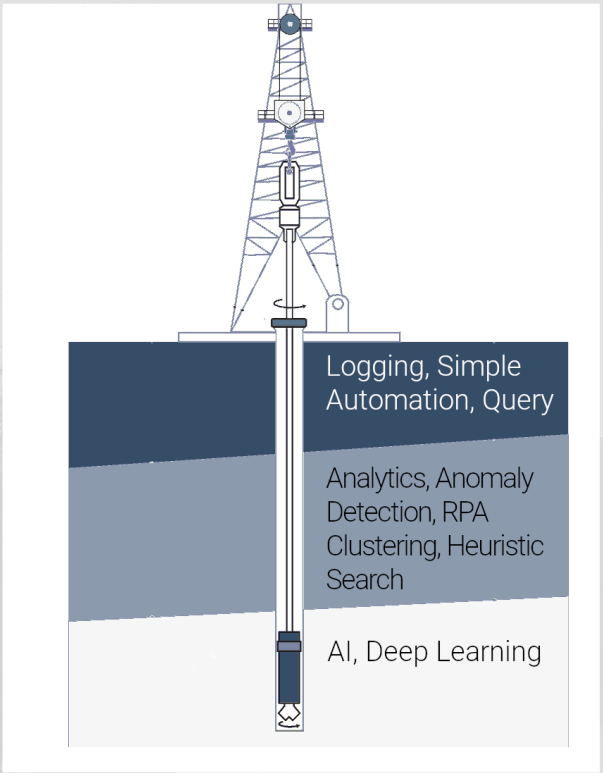
Data literacy is the ability to read, understand, create, and communicate data as information. Data literacy focuses on the competencies involved in working with data.

Drilling for Data Literacy

Depth analagous to **data literacy**



THE DATA SCIENCE
HIERARCHY OF NEEDS



Goal 1: Generate RPM

Rotation

- an **iteration** of an analytic pipeline development cycle concluding with **end-user feedback**

Outcomes

- mission impact
- improved digital literacy

Takeaway: Each rotation increases torque

Goal 2: Train for Torque

Torque

- the organization's ability to employ new **methods** and **technologies** for **mission impact**

Key Components

- Operational Understanding (Intelligence Professional)
- Methodological Breadth (Data Scientist)
- DevSecOps (Sofware Developer)

Outcomes

- more responsive, relevant, rigorous, and reusable workflows
- improved digital literacy

Takeaway: High standards produce torque

Goal 3: Resource to Reduce Friction

Friction

- repeated effort that fails to produce torque, impediments to rotation

Key Components

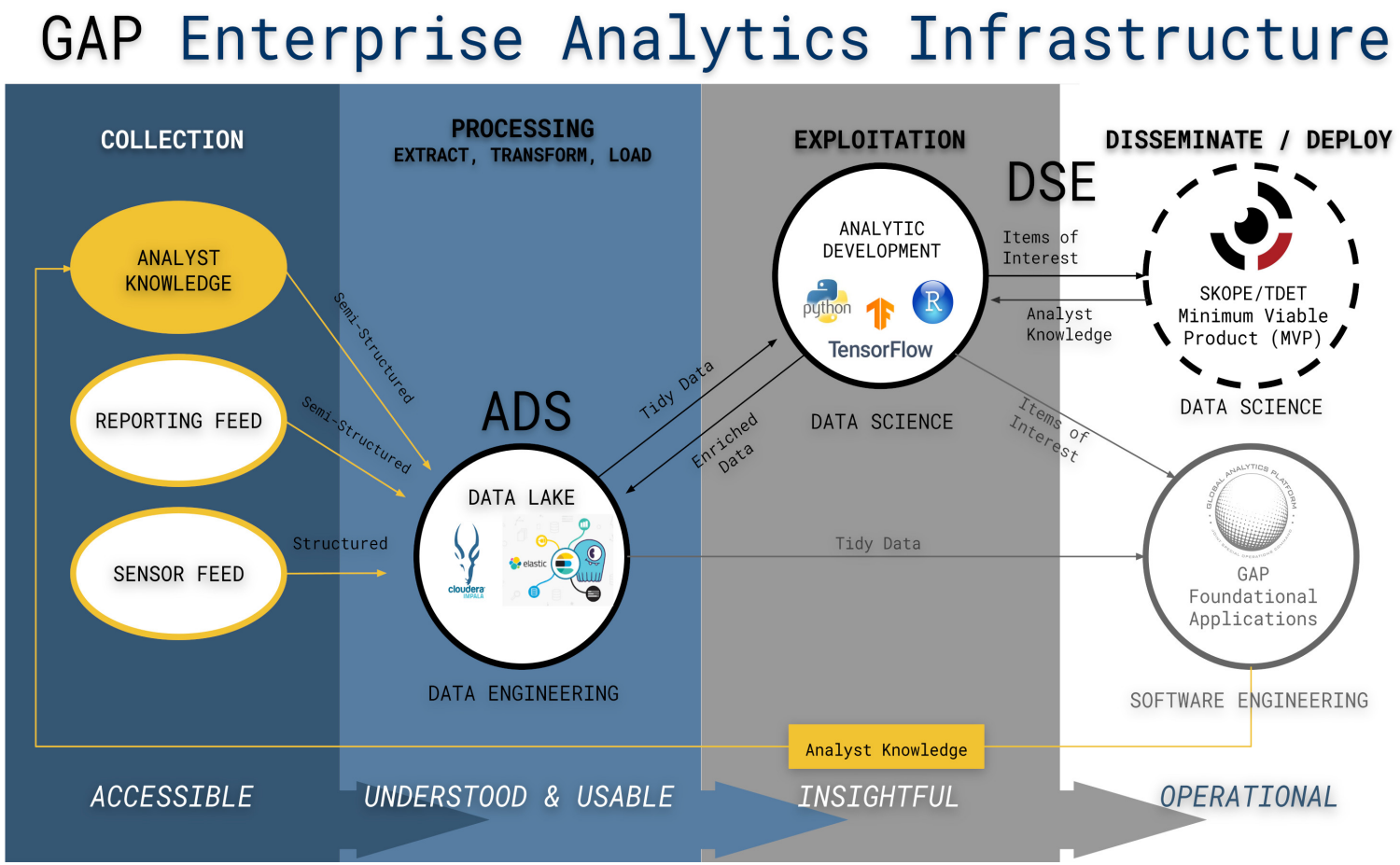
- poor data accessibility and usability (ADS)
- constrained access to tools and technologies (DSE, JTTP)
- barriers to the end-user(JADE)
- barriers to knowledge sharing (KnowledgeHub)

Outcomes

- improved responsiveness, relevance, rigor, reusability
- improved recruiting and retention

Takeaway: Reducing friction accelerates organizational learning

Platforms Enable Pipelines



Analytic Aimpoints

"We need to get to a place where our leaders care about data the same way they care about ammunition." GEN Austin Miller

Responsive

- able to extract insights at operational speed

Relevant

- able to deliver mission value and drive outcomes

Rigorous

- thorough, exhaustive, and accurate

Reusable

- consumable for other problems and by other practitioners