Agenda

THE FUTURE OF AI

THE FUTURE OF AIOPS

THE FUTURE OF MOOGSOFT

What is AI?

The reverse engineering of cognitive algorithms deployed by the brain with the goal of observing, understanding, and manipulating complexly structured and dynamic environments.

Why? - because traditional programming techniques are pretty rubbish at dealing with highly complex and dynamic environments!

What is AIOps?

The application of AI-based algorithms to IT operations use cases with the goal of reducing MTTR and, by iteratively increasing the quality of resolutions, increasing MTBO.

We use don't use AI because it's cool. We use it because it is necessary!

THE FUTURE OF AI

The Three Dimensions of AI

Inference

Pattern Discovery

Data Set Selection

The Three Laws of AIOps

The amount of self-descriptive data generated by IT systems (i.e., data from which, if not corrupted, aspects of underlying IT system state changes could be inferred) grows by an order of magnitude every five years.

The entropy of that self-descriptive data set varies inversely with the square of its size.

The cost of ascertaining the occurrence and nature of an IT system state changes grows exponentially with the entropy of the self-descriptive data set generated by that system.

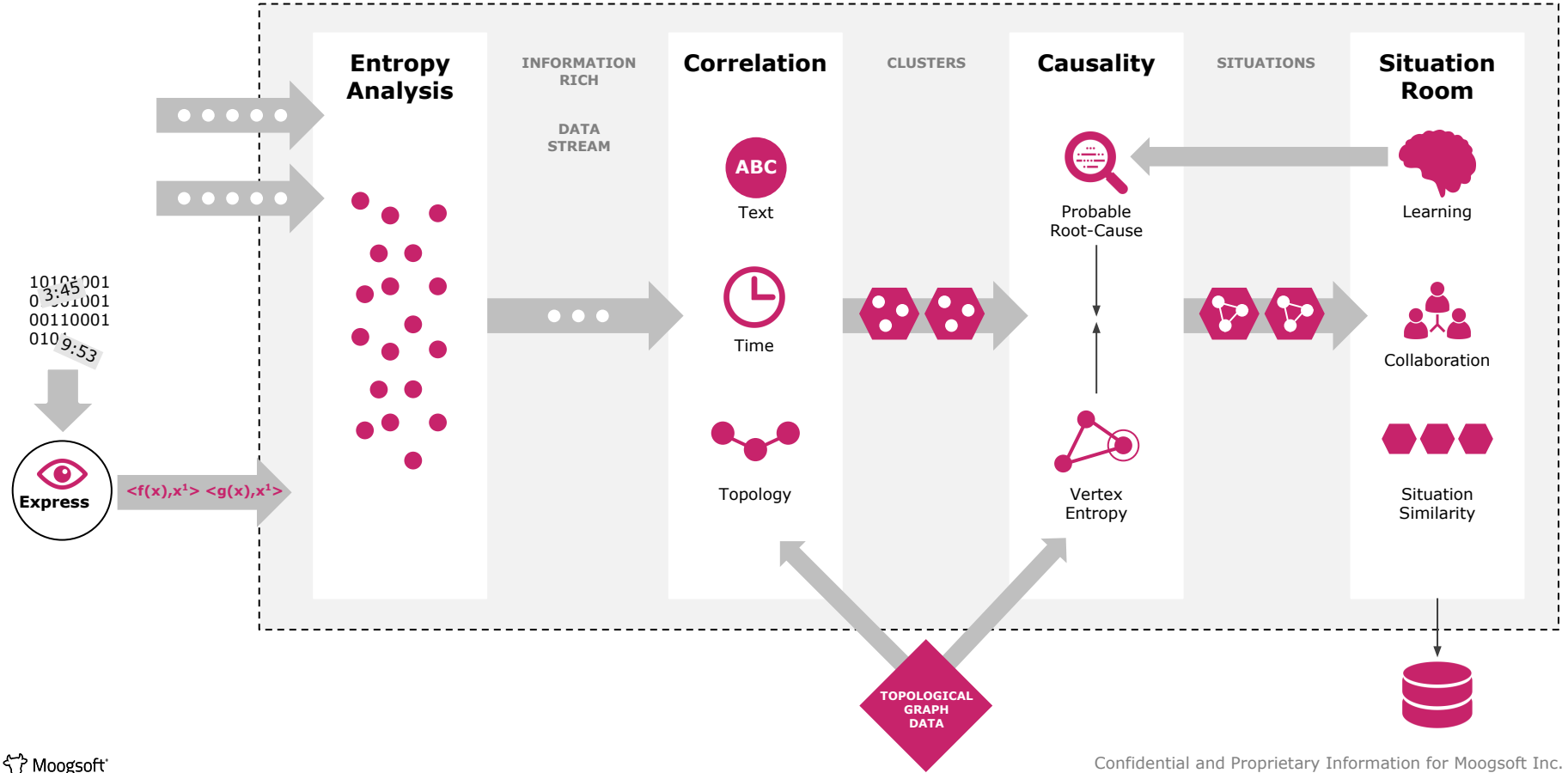Centralized Static Data Lakes ▪ ▪ ▶ **Distributed Ephemeral Streams**

Observation and Analysis ▪ ▪ ▶ **Anticipation and Engagement**

THE FUTURE OF MOOGSOFT

AIOps Platform

Entropy Analysis

INFORMATION RICH

DATA STREAM

Correlation

- **ABC** Text
- Time
- Topology

CLUSTERS

Causality

- Probable Root-Cause
- Vertex Entropy

SITUATIONS

Situation Room

- Learning
- Collaboration
- Situation Similarity

Express

$<f(x),x^1>$ $<g(x),x^1>$

10101001
0 3:45 001
00110001
010 9:53

TOPOLOGICAL GRAPH DATA

Moogsoft