

TOTAL LEARNING ARCHITECTURE

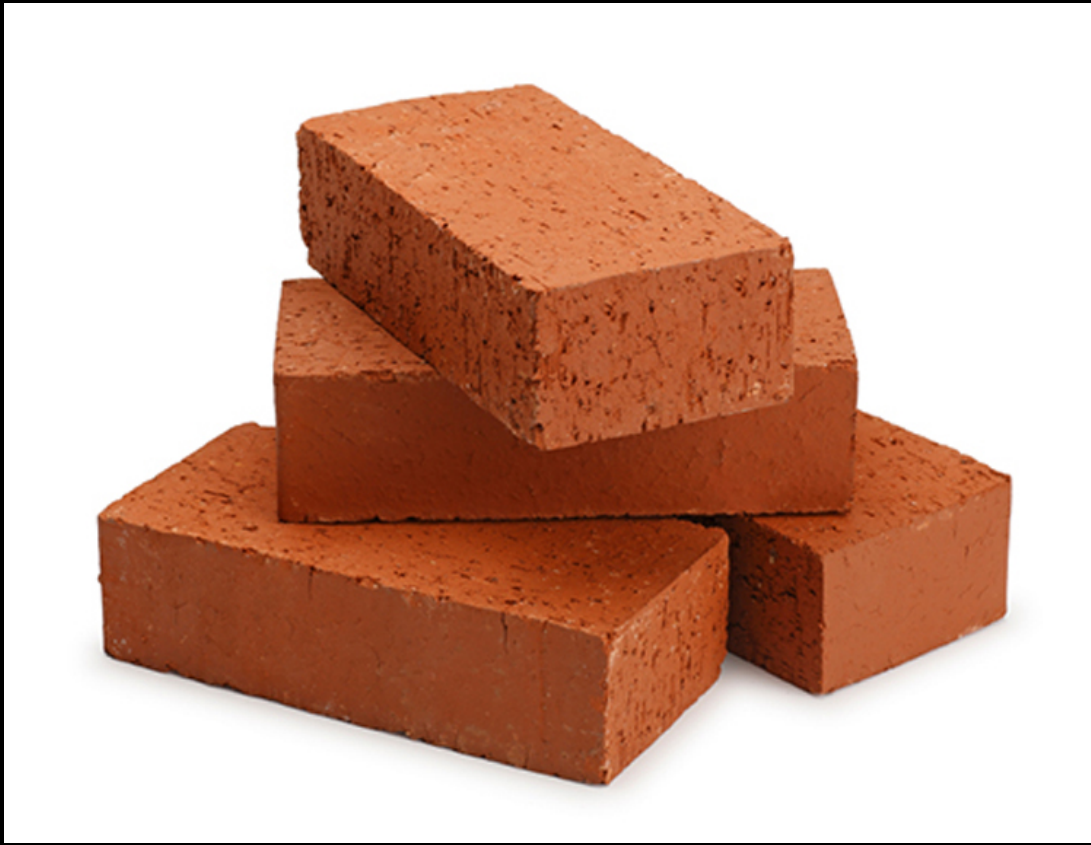
3 Analogies





Analogy
Number 1:

Bricks and Mortar



Bricks are analogous to things



Mortar is the glue that holds everything together

Operational T&E Domains

e.g., Local Policies and Learning Activities for
USMC, Air Force, IC Community and Others

Applications

e.g., Competency Management / Recommenders
Human Resources / Talent Management

Common Software Services

e.g., Activity Streams (xAPI), Discovery,
Messaging, Launch, Transcripts, Registration

Shared Data Environment

e.g., LRSs, Metadata registries
Learner Profiles, Competency Frameworks

Network and Facilities

e.g., Data Centers, DISA, NMCI

Learning Activities

In the TLA, specifications and standards are what holds everything together



Together, they create a foundation to build upon





Analogy
Number 2:

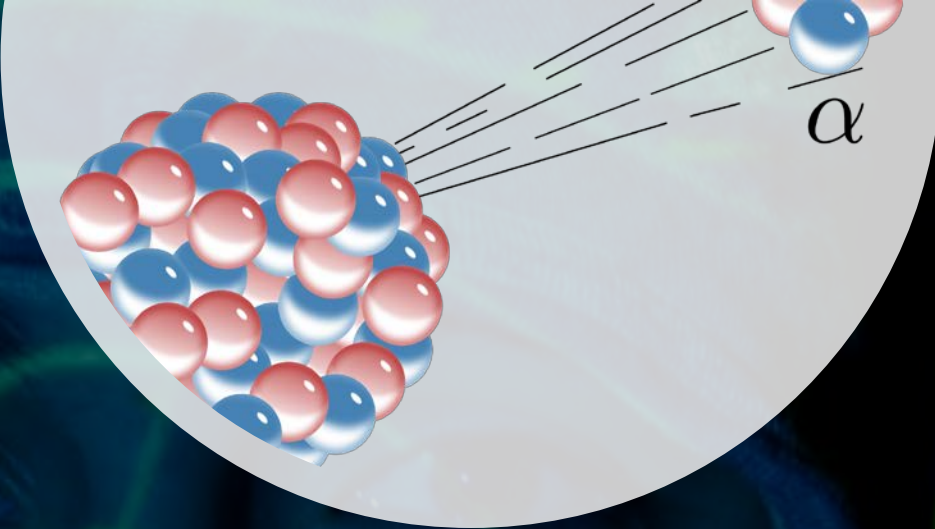
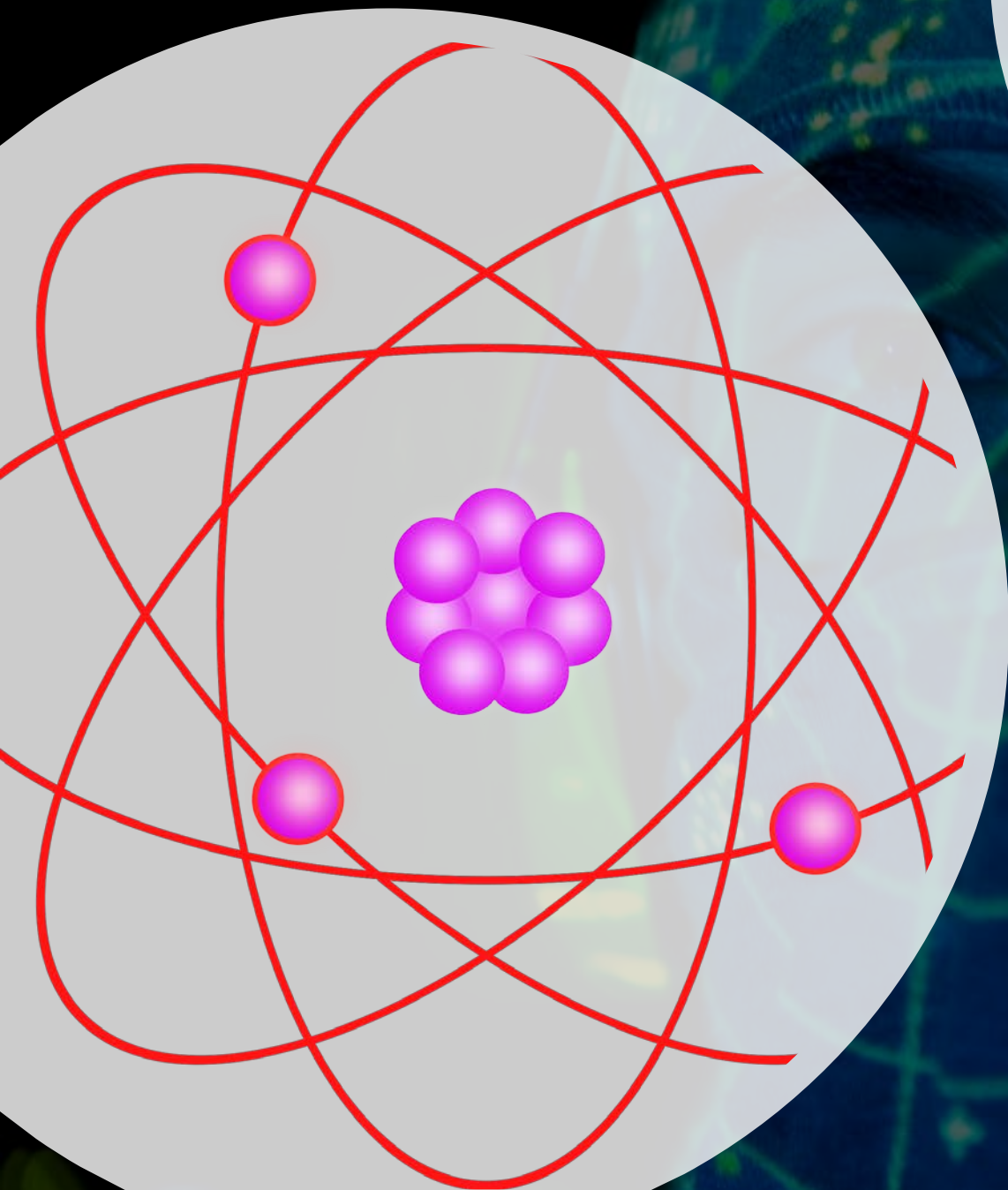
Beads come in
all shapes & sizes



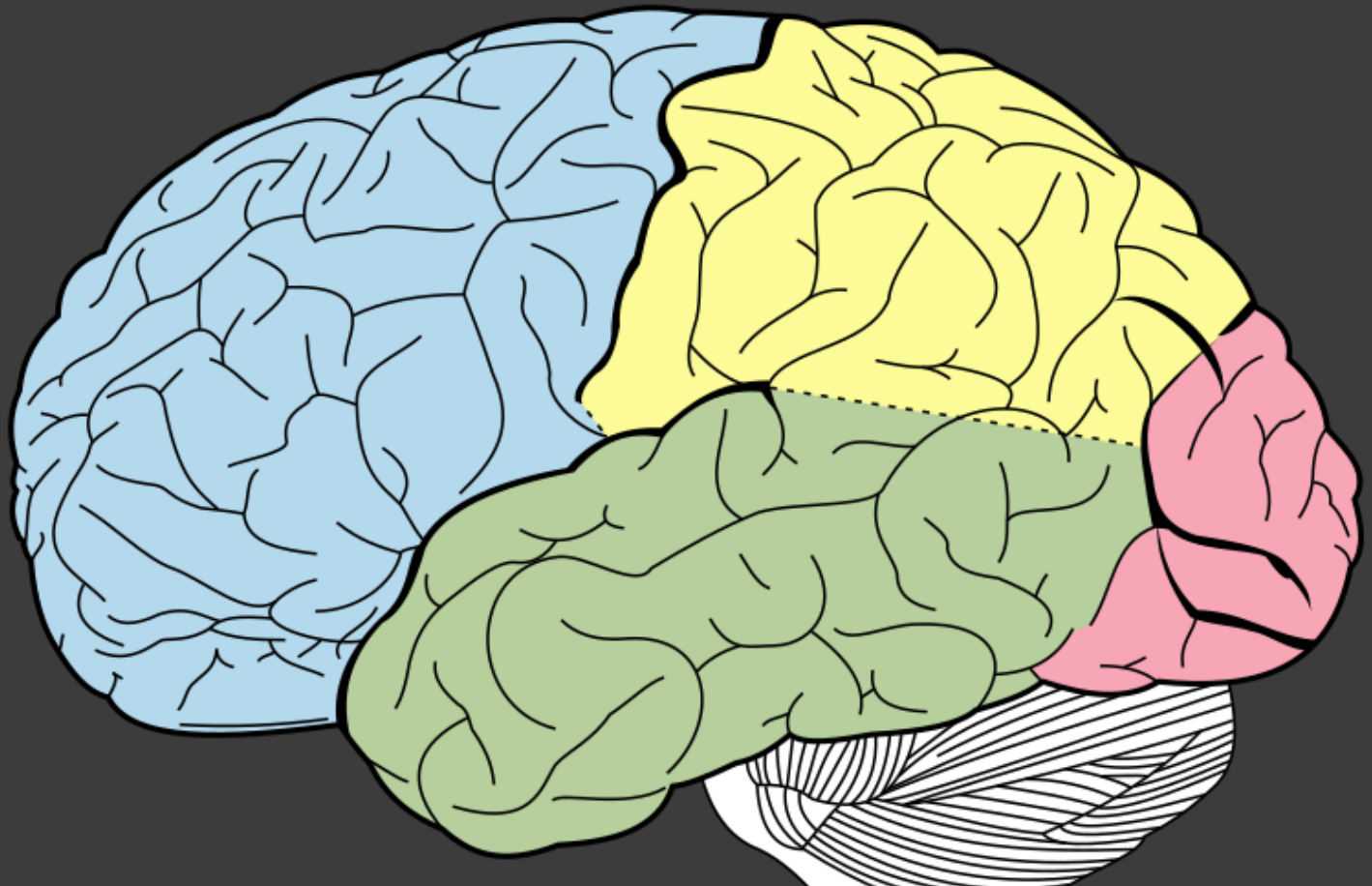
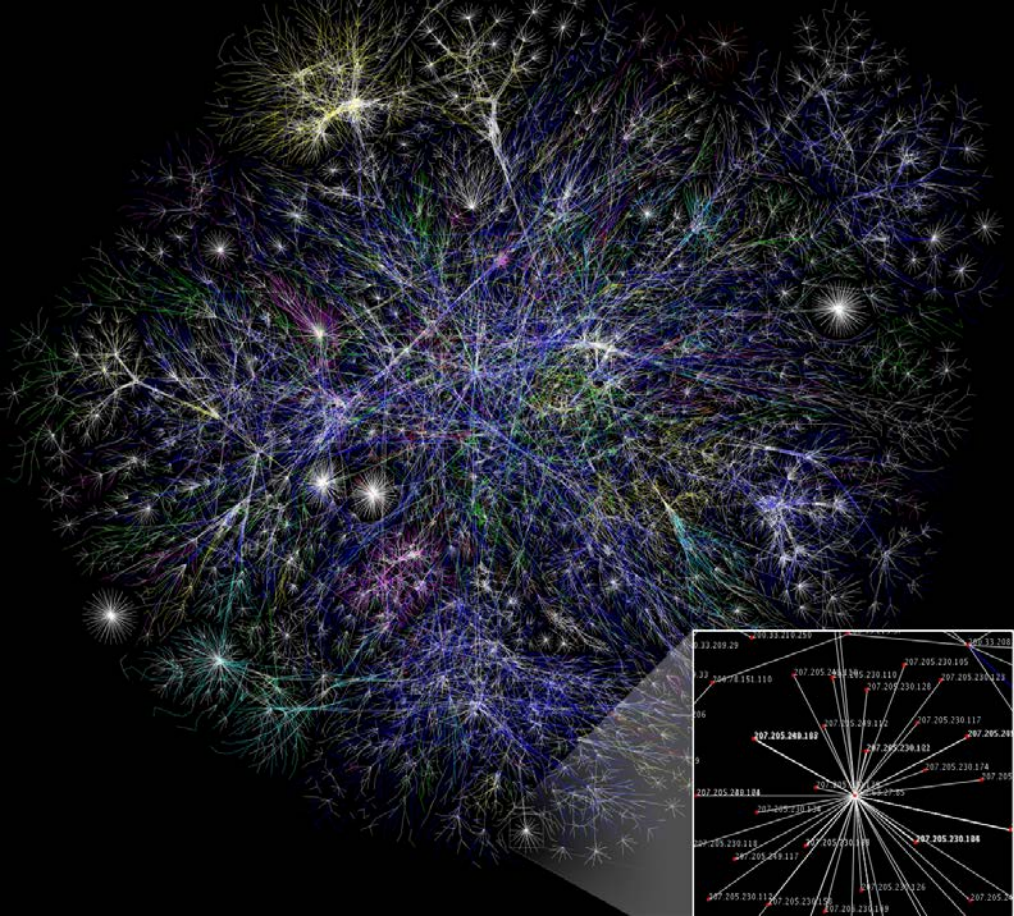
Beads are strung
together into Jewelry

The cord is what ties all the beads together





But in the TLA, it does so
much more



The purpose is to provide insight



Last Analogy:
Intermodal
Shipping Containers



A long time ago in a galaxy
far, far away



308089 9
22G1

MAXGROSS 30.480 KGS
ARE 67.200 LBS
2.230 KGS
4.920 LBS
PAYLOAD 28.250 KGS
62.280 LBS
CUB.CAP. 33.2 CUM
1.170 CUFT

CIMC

Shipping vans are
transported across the
globe

Other Container Systems

- (1922) NYC container
- (1924) von-Haus-zu-Haus
- (1925) Mack
- (1927) English Railway container
- (1928) Victorian Railways – refrigerated container
- (1929) International Competition
- (1930) GWR Container
- (1931) International Chamber of Commerce
- (1933) International Container Bureau:
- (1936) SAR Wolseley break of gauge
- (1946) Queensland Railways milk container, 2,000 imperial gallons (9,100 L; 2,400 US gal), road-rail
- (1978) RACE (Australia) – slightly wider than ISO containers to fit slightly wider Australian Standard Pallets
- (1994) ACTS roller containers for intermodal transport by rail and road (Central Europe)
- (1998) PODS
- (2005?) SECU (Sweden, Finland, UK) – big 95 t (93 long tons; 105 short tons) container.

It was trivial to build the box, the difficulty was in building consensus on the standards for how to build the box

- January 1968: **ISO 668** defined the terminology, dimensions and ratings.
- July 1968: **R-790** defined the identification markings.
- January 1970: **R-1161** made recommendations about corner fittings.
- October 1970: **R-1897** set out the minimum internal dimensions of general purpose freight containers.

• Before Shipping Containers •

Before shipping containers, loading cargo cost **\$5.86 per ton**.⁵

Before containers, cargo could be loaded at around **1.3 tonnes per hour**.⁴

In 1955 **0%** of goods were shipped using containers.⁹

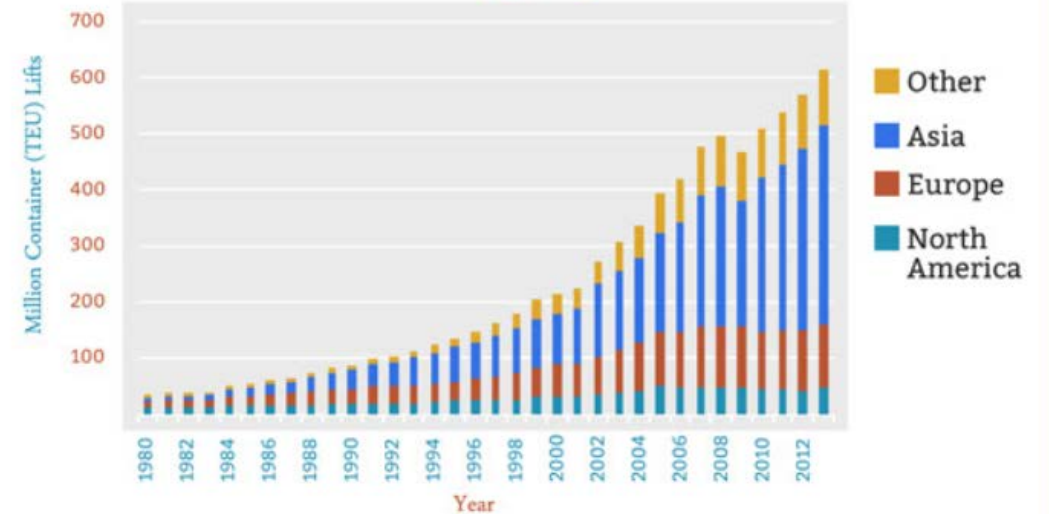
• Afters Shipping Containers •

It now only costs **\$0.16 per ton** to load cargo.⁵

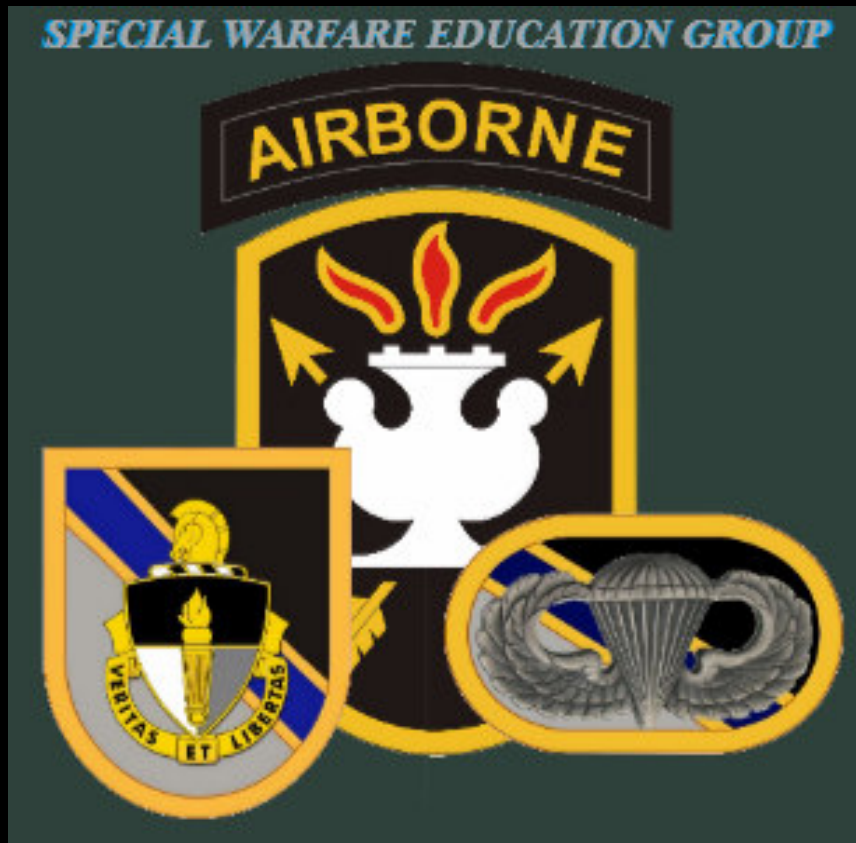
Cargo can now be loaded at a rate of over **10,000 tonnes per hour**.⁴

Now over **90%** of every purchased item has been shipped inside a container.⁹

Growth of Shipping Containers⁶



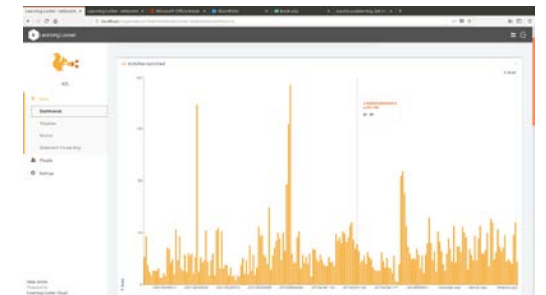
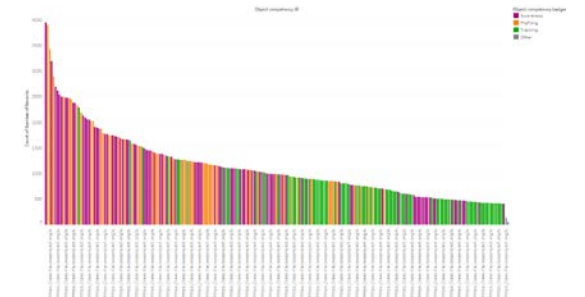
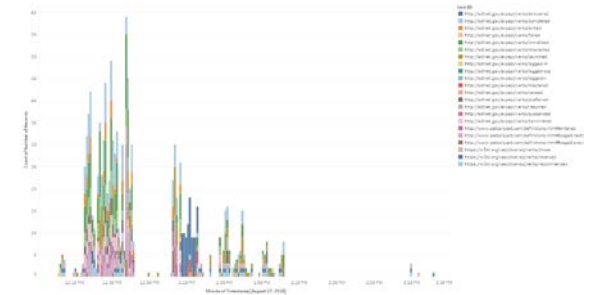
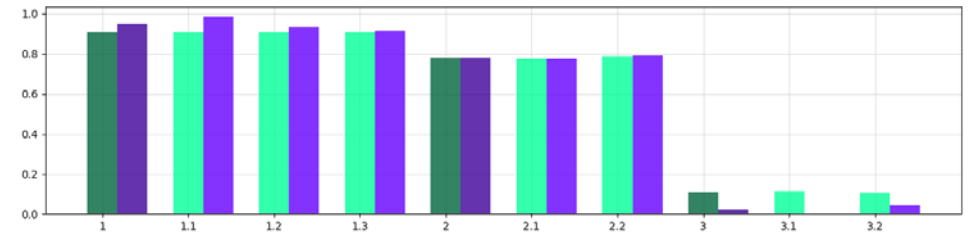
Look at the payoff – Global Adoption



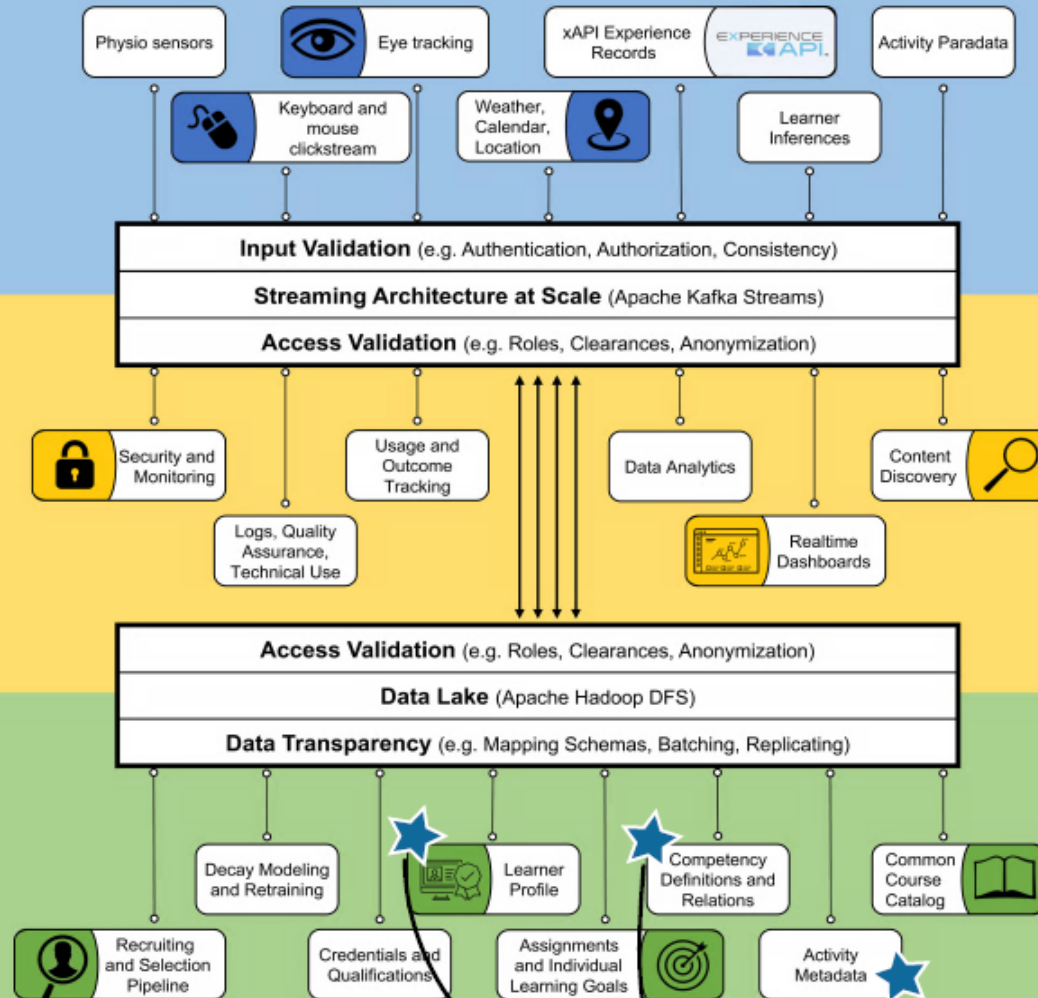
TLA Test and Demonstration – August 13-17

TLA Hackathon at iFEST

August 26-27



Total Learning Architecture



Tell Us What You Think!

Use the markers to your right to help us define the data elements that should be used to describe learners, competencies, and activities.

Learner Profiles

Competency Definitions and Relations

Activity Metadata

YOUR INPUT MATTERS!!
Tell us what you think on the posters to the right.