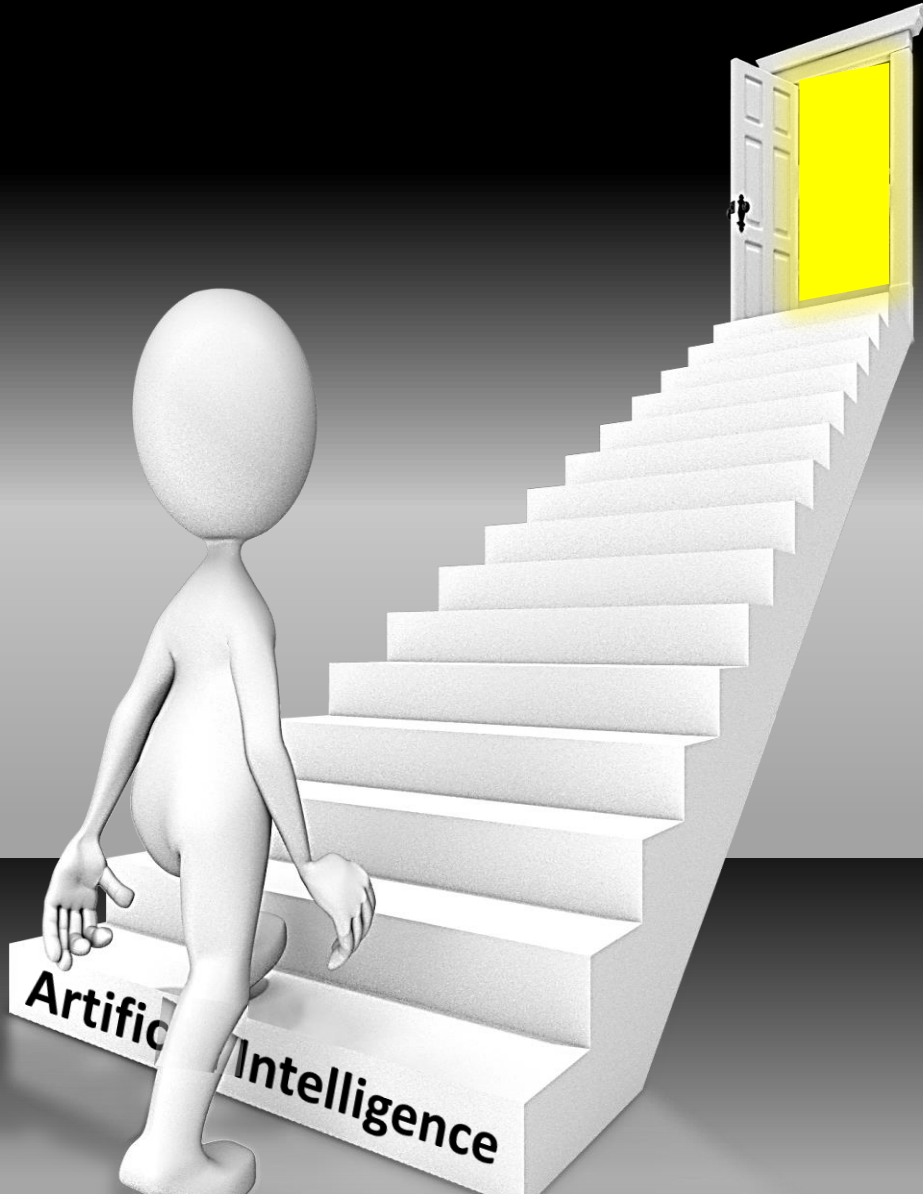


How Will **AI** Change:

**DATA LITERACY &
ACCESS TO INSIGHTS ?**



analytic-translator
.com



ELEVATING
— ENTERPRISE —
DATA LITERACY

Wendy D. Lynch PhD.

High Literacy

Ninety percent of business leaders believe data literacy will be critical to their success.

Basic definition:

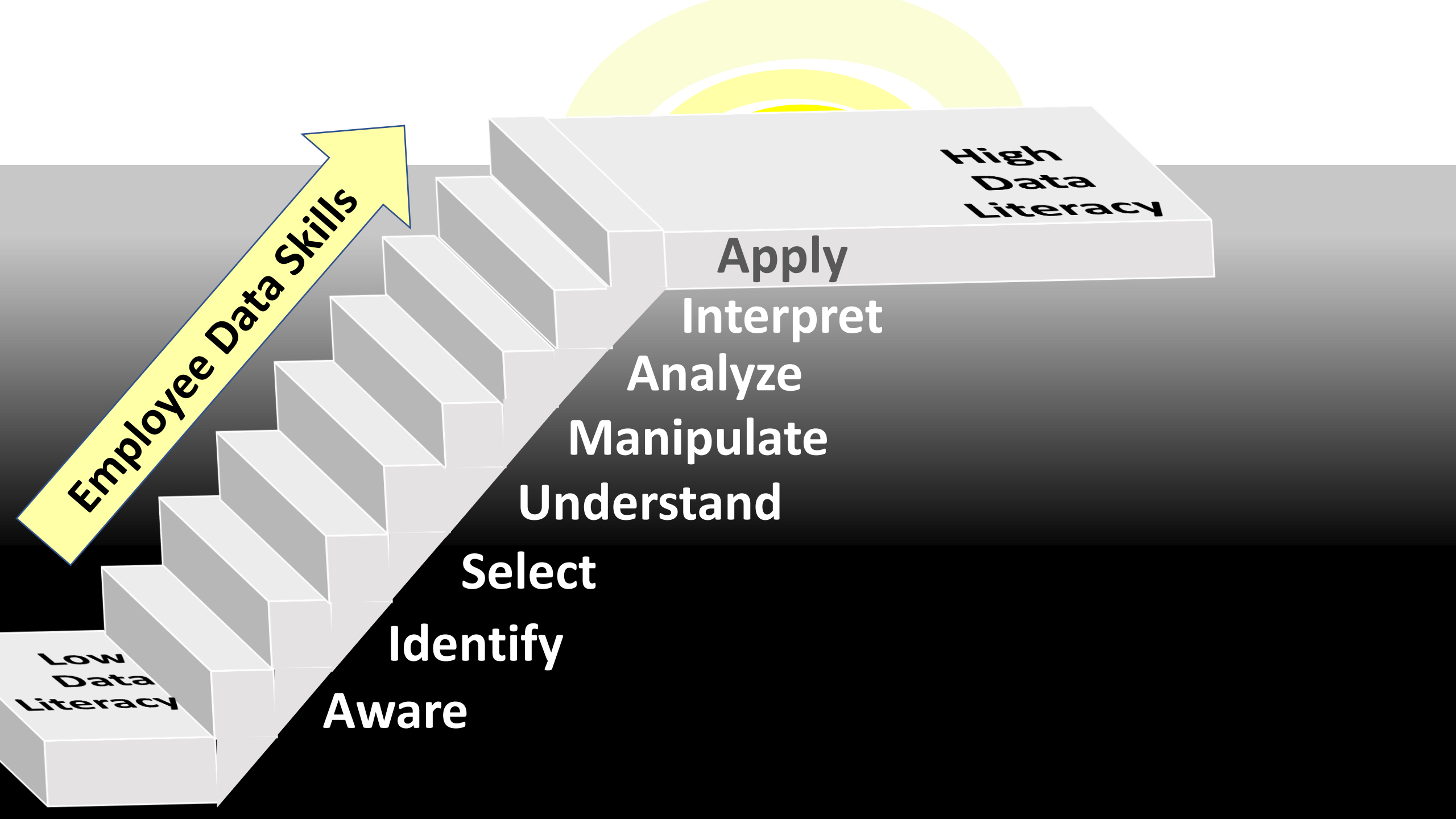
Ability to

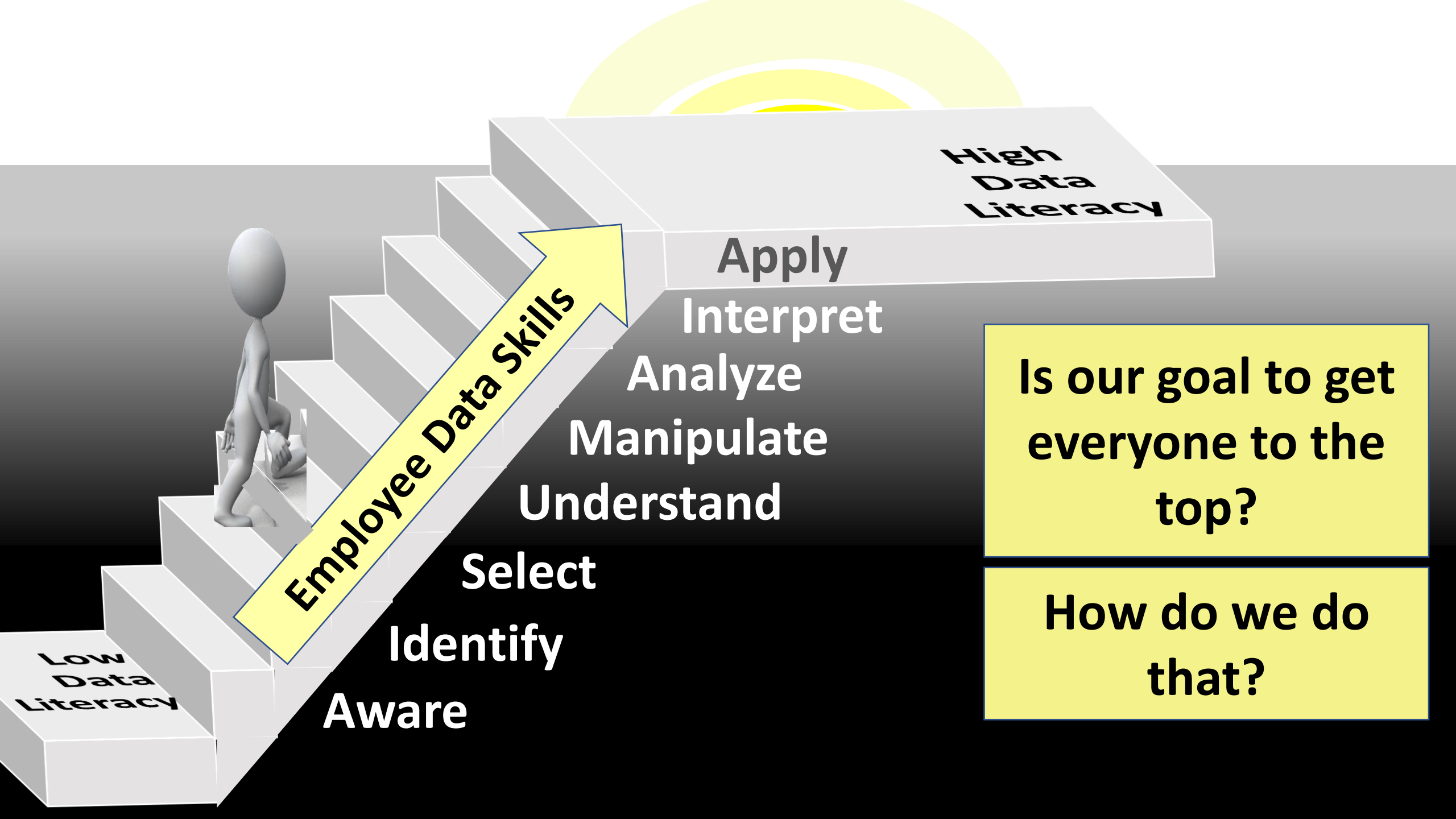
- Read,
- Write, and
- Argue

with data

Low Literacy







**High
Data
Literacy**

**Apply
Interpret**

Analyze

Manipulate

Understand

Select

Identify

Aware

**Low
Data
Literacy**

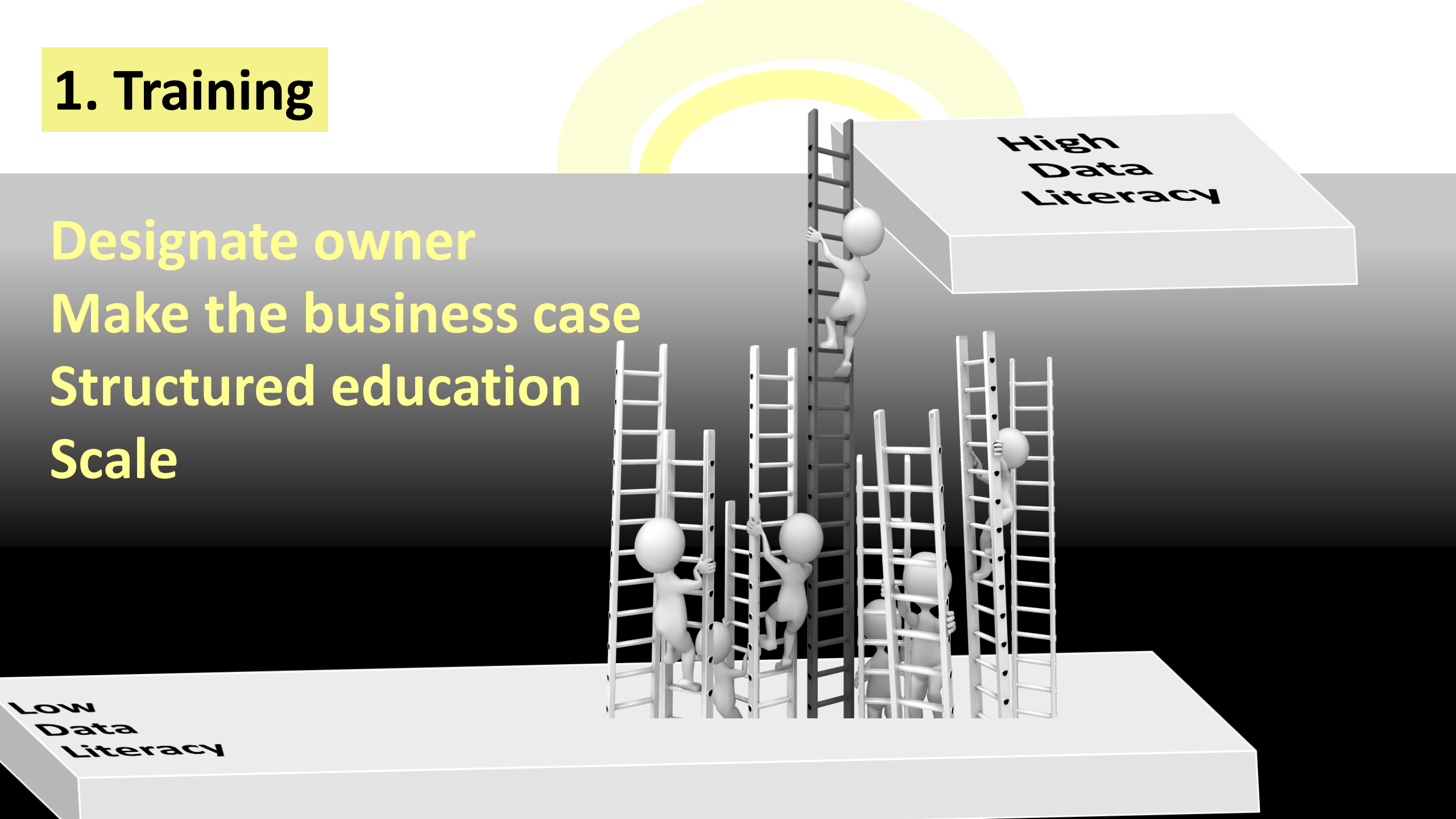
Employee Data Skills

Is our goal to get everyone to the top?

How do we do that?

1. Training

Designate owner
Make the business case
Structured education
Scale





High Literacy

Seventy-nine percent of **leaders** say they equip employees with the data skills they need

BUT.....

But only **forty percent** of **employees** say they're provided the data skills they're expected to have

Low Literacy

Leaders Overestimate Current Levels of Literacy

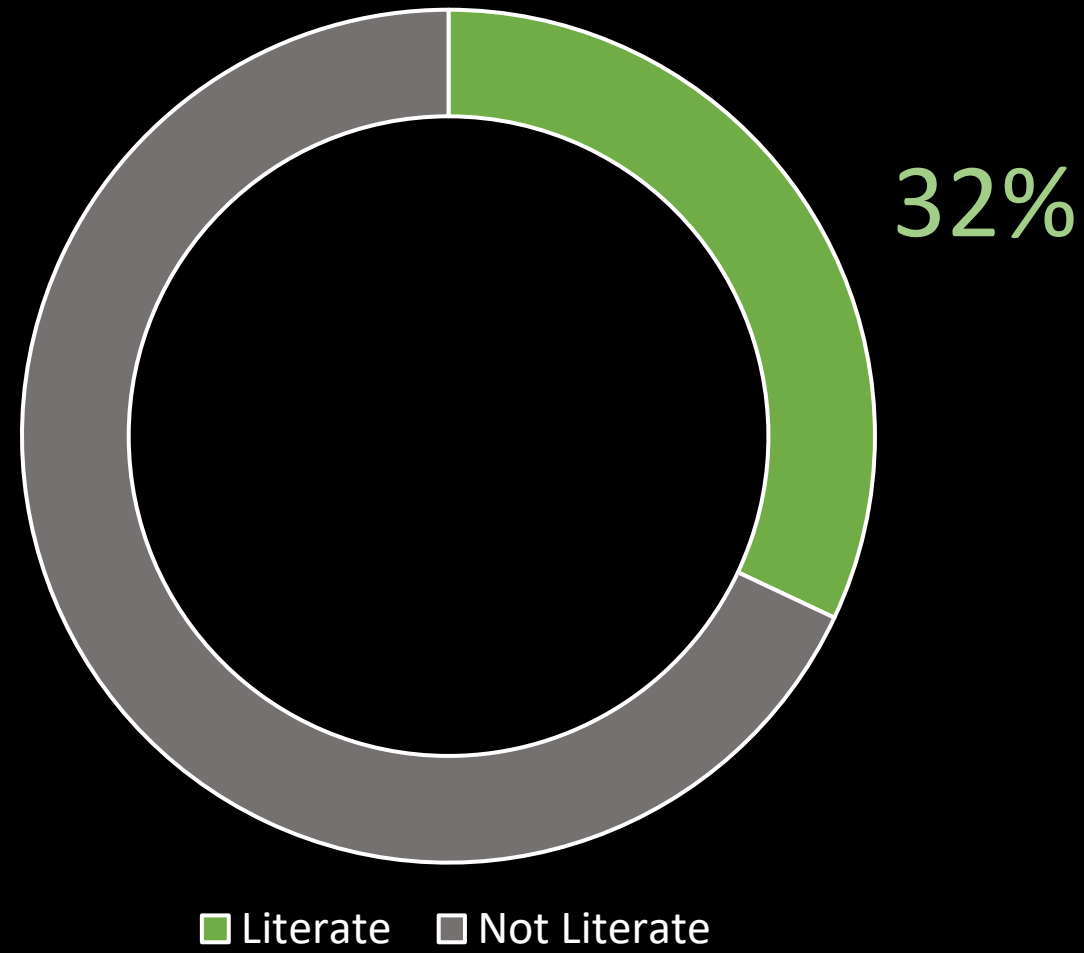


Recent studies find that only 21% of employees are confident in their data skills

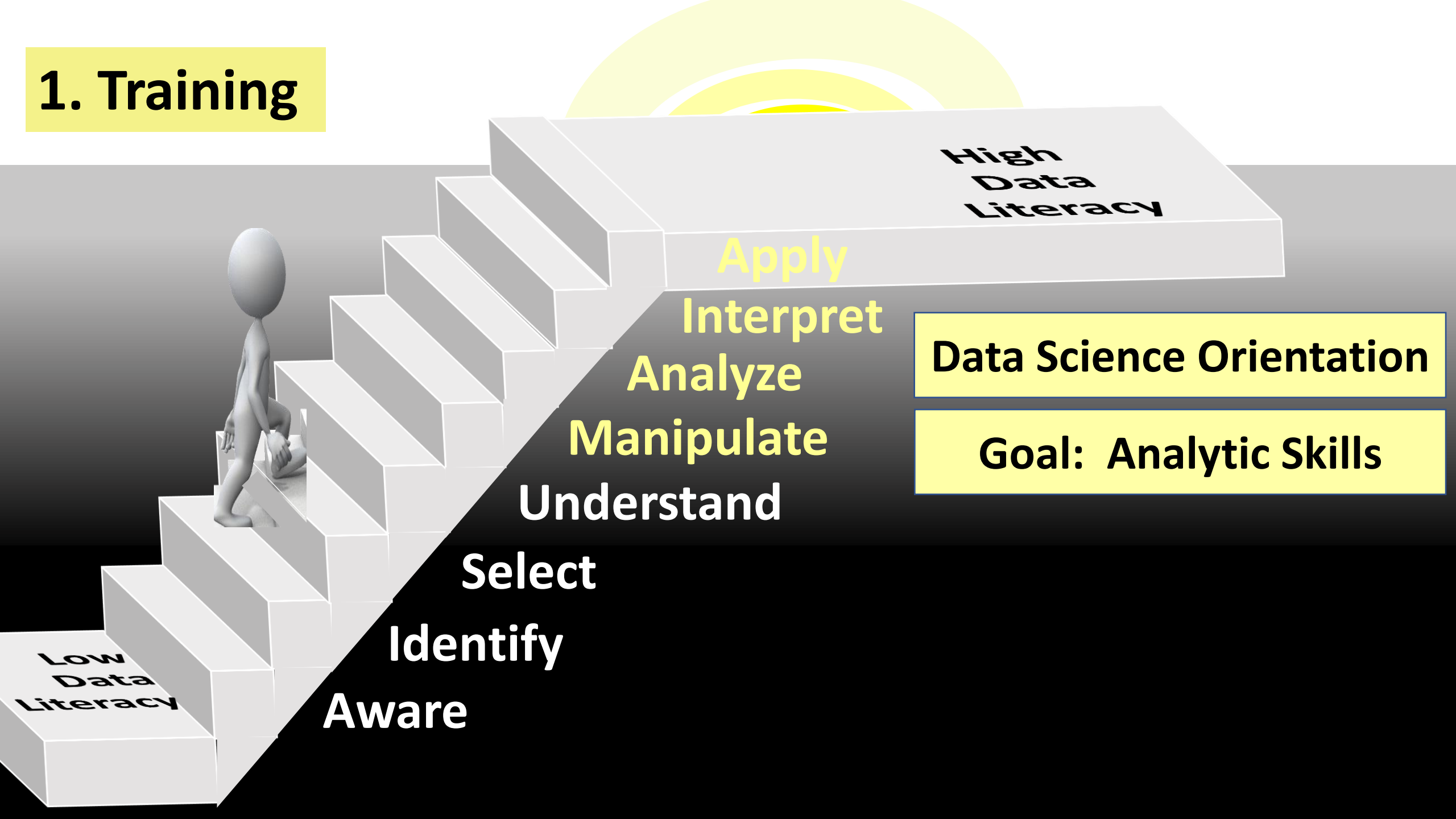
Other studies estimate fewer than 10% have high literacy



Percent of C-Suite Executives Considered Data Literate



1. Training



High
Data
Literacy

Apply

Interpret

Analyze

Manipulate

Understand

Select

Identify

Aware

Data Science Orientation

Goal: Analytic Skills

Low
Data
Literacy

What will it take?

Is it realistic?

For every organization?

For every employee?



Is Literacy Really the Goal?

Or is it to be: Highly Insight Driven

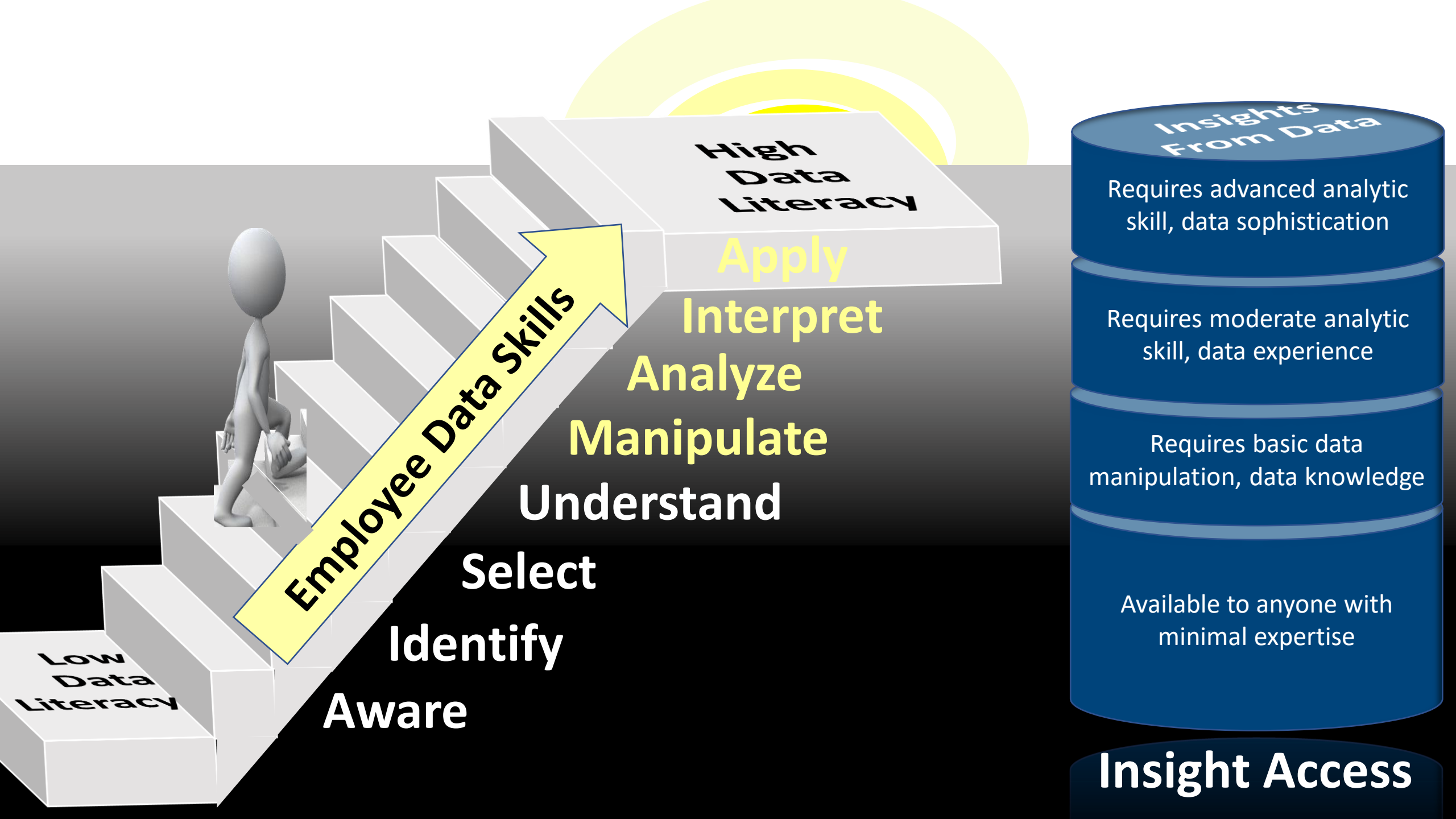


Company-wide intelligent, information-driven decisions and actions.

Consistently

- Use timely information
- Notice problems and opportunities
- Ask better questions
- Make better decisions
- Extract insights at all levels

Low Literacy



Low
Data
Literacy

Aware

Identify

Select

Understand

Manipulate

Analyze

Interpret

Apply

High
Data
Literacy

Employee Data Skills

Insight Access

Available to anyone with
minimal expertise

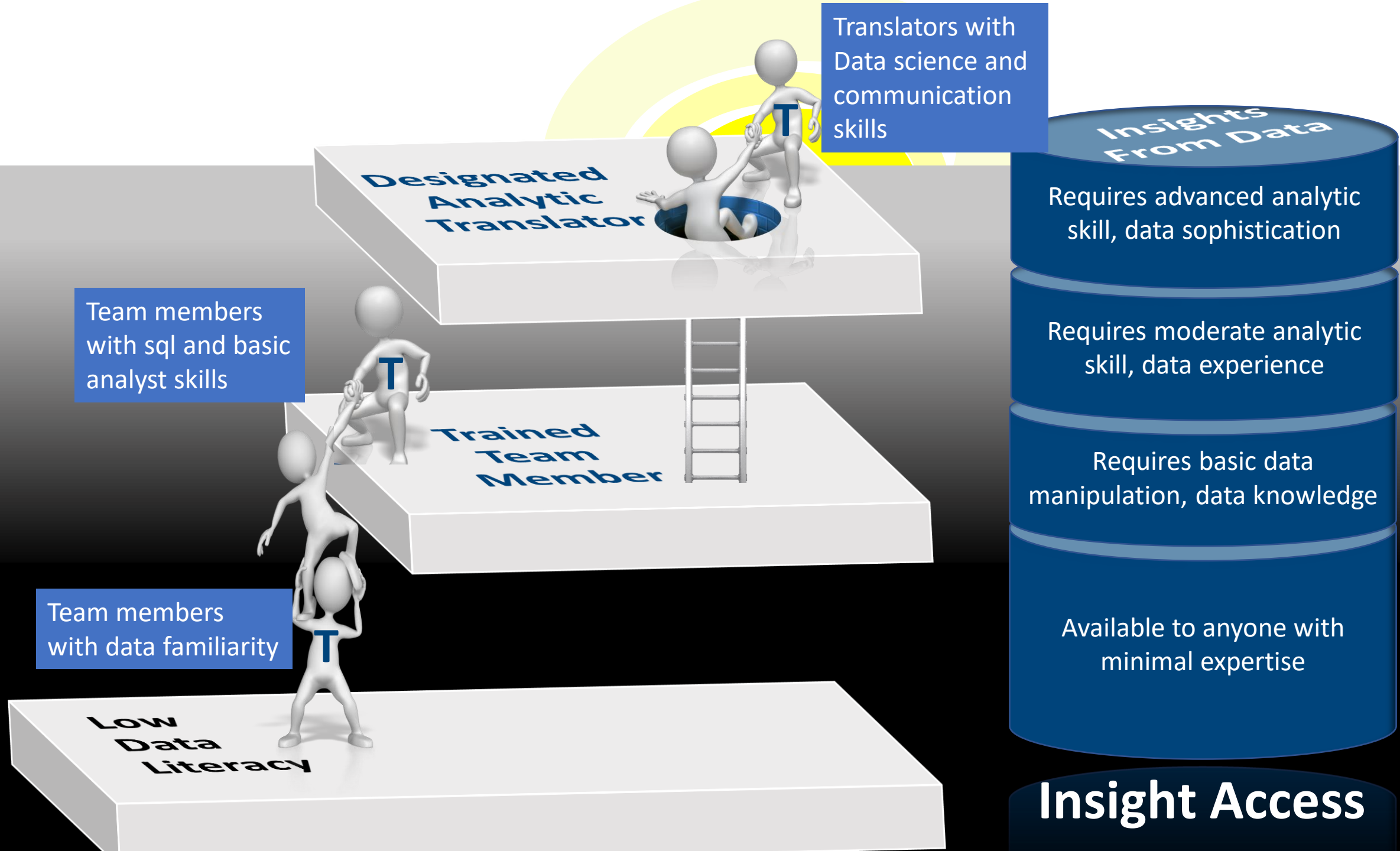
Requires basic data
manipulation, data knowledge

Requires moderate analytic
skill, data experience

Requires advanced analytic
skill, data sophistication

Insights
From Data





Translators with Data science and communication skills

Designated Analytic Translator

Team members with sql and basic analyst skills

Trained Team Member

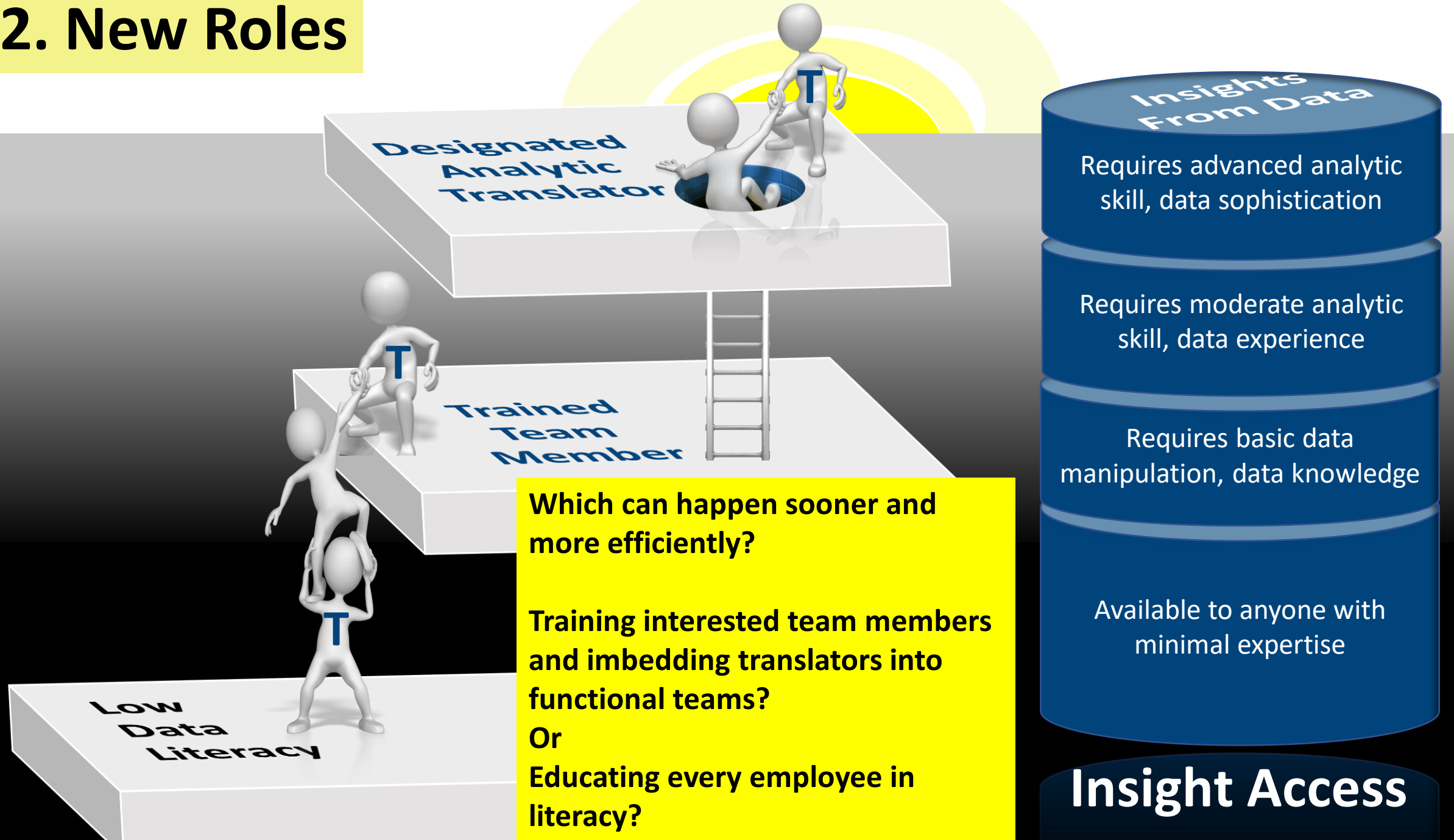
Team members with data familiarity

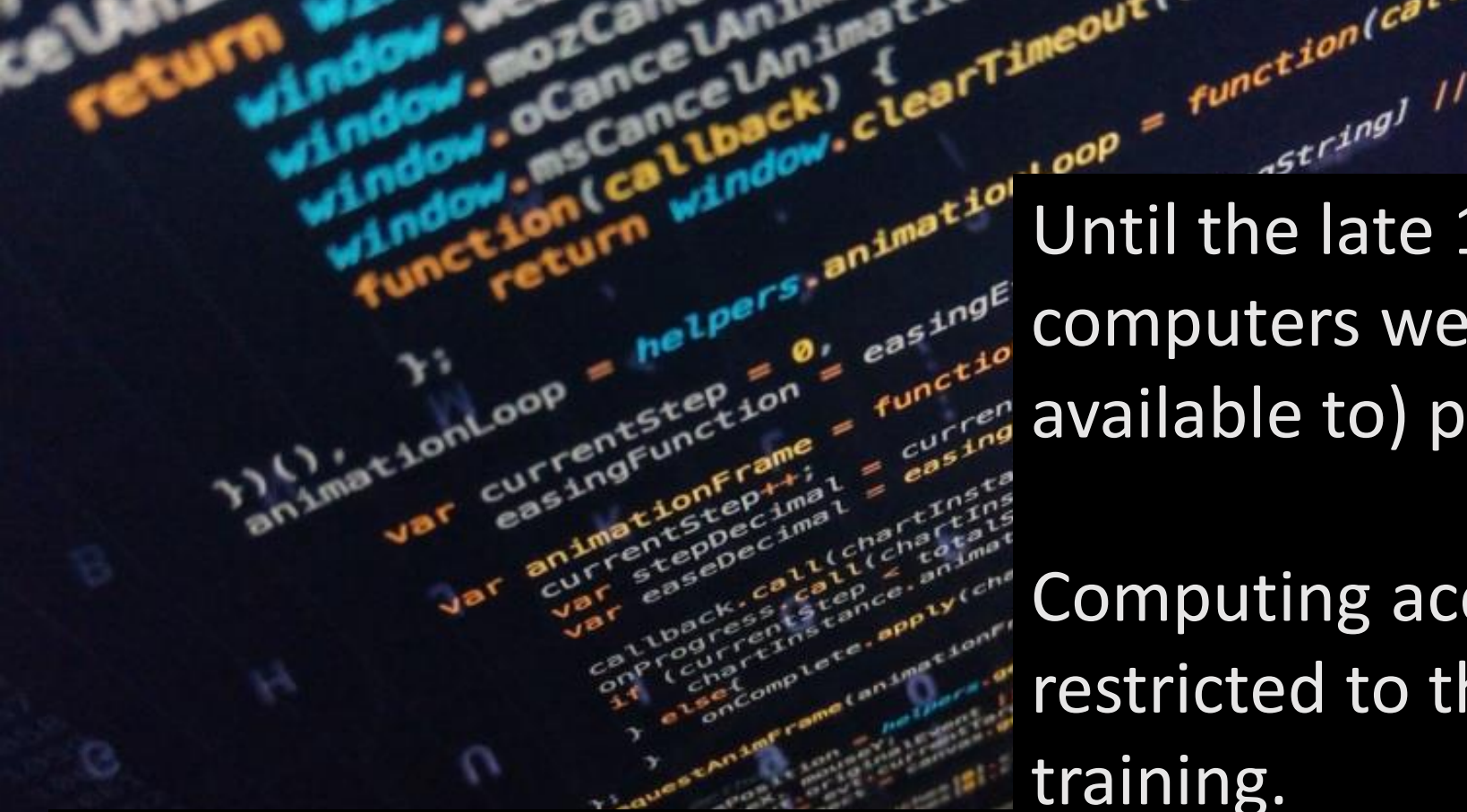
Low Data Literacy

- Insights From Data
- Requires advanced analytic skill, data sophistication
- Requires moderate analytic skill, data experience
- Requires basic data manipulation, data knowledge
- Available to anyone with minimal expertise

Insight Access

2. New Roles





Until the late 1970s computers were only used by (and available to) programmers.

Computing accessibility was restricted to those with specialized training.

Democratization of computing

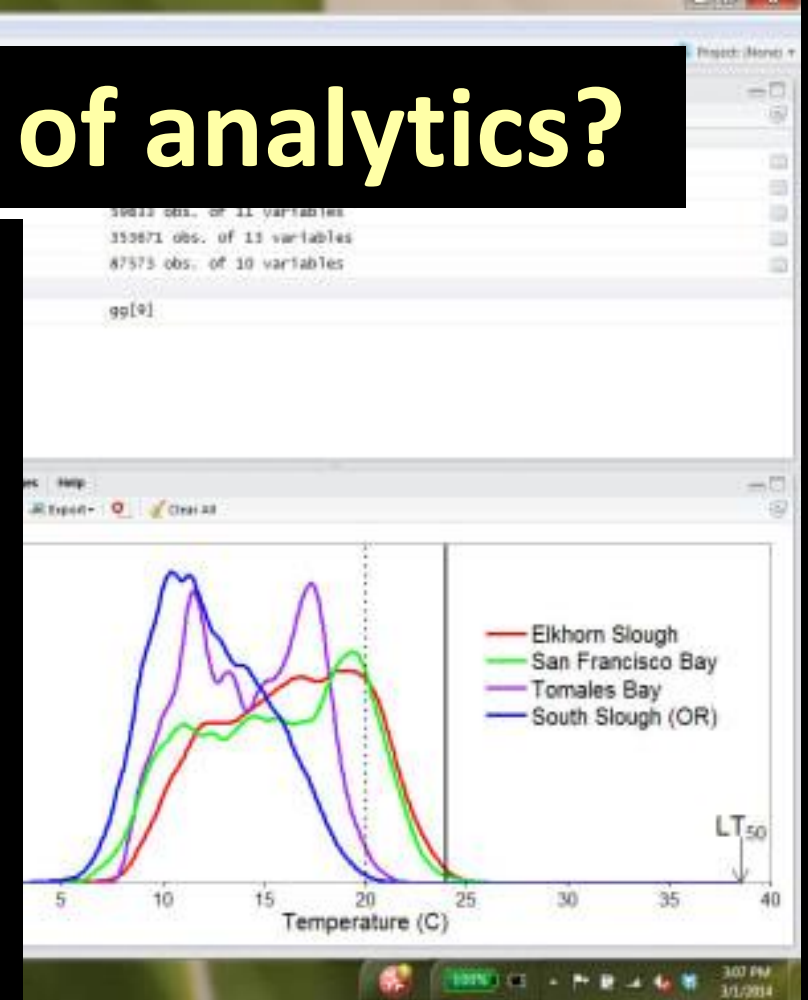
Advances in hardware, PCs, and GUI opened access to the general public.

Will there be democratization of analytics?

With guidance, ML algorithms can already recognize, catalog, curate and classify data.

Once cataloged and connected, business rules and working definitions can be applied, with AI learning more and more data types

With NLP, CHatGPT and GPT-4 can convert spoken questions into SQL and produce graphics.





**High
Data
Literacy**



**Moderate
Data
Literacy**



**Low
Data
Literacy**



**Insights
From Data**
Requires advanced analytic
skill, data sophistication

Accessed through natural
language

Accessed through natural
language

Available to anyone with
minimal expertise

Insight Access

3. New Access

High
Data
Literacy



Moderate
Data
Literacy



Low
Data
Literacy

Insights
From Data

Requires advanced analytic
skill, data sophistication

Available to anyone with
minimal expertise

Which can happen sooner and
more efficiently?

Educating every employee in
literacy?

Or

AI and Chat getting smart enough
for drastically improved access ?

Insight Access

Is Literacy Really the Goal?

Or is it to be: Highly Insight Driven



Company-wide intelligent, information-driven decisions and actions.

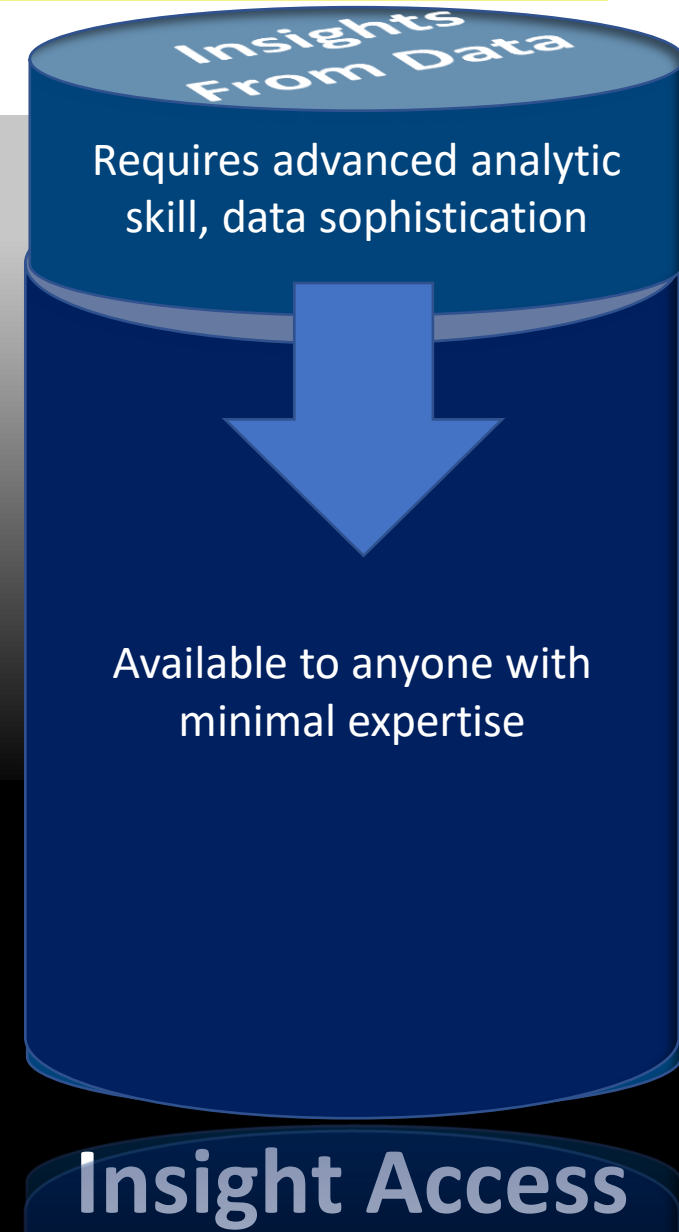
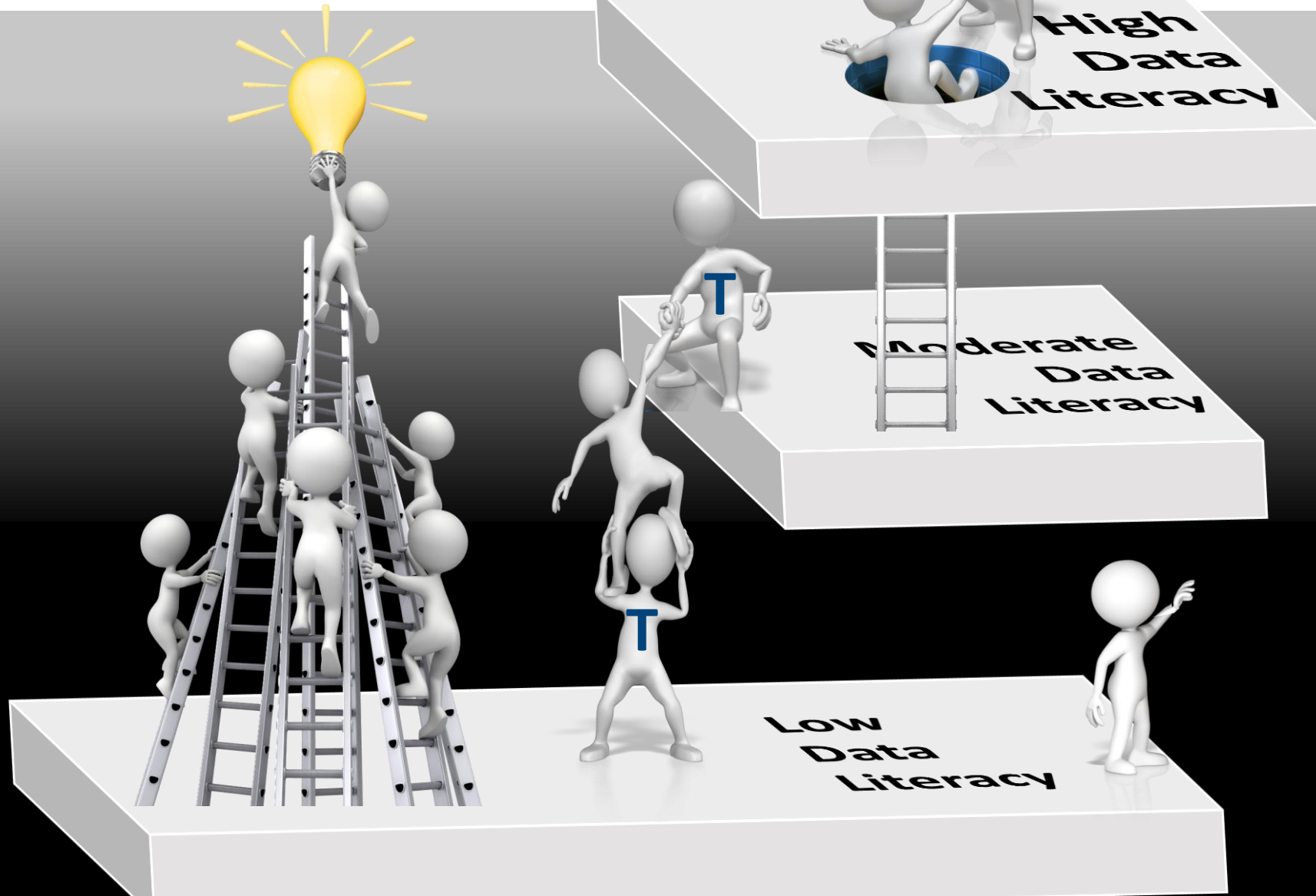
Consistently

- Use timely information
- Notice problems and opportunities
- Ask better questions
- Make better decisions
- Extract insights at all levels

1. Training

2. New Roles

3. New Access



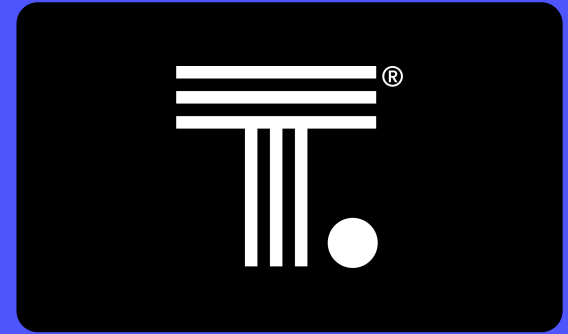


Sonny Rivera
Chief Analytics Evangelist at ThoughtSpot



Aashish Singhvi
Founder / CEO of DvSum

How will AI change data literacy and access for everyone?



Sonny Rivera

Sr. Analytics Evangelist

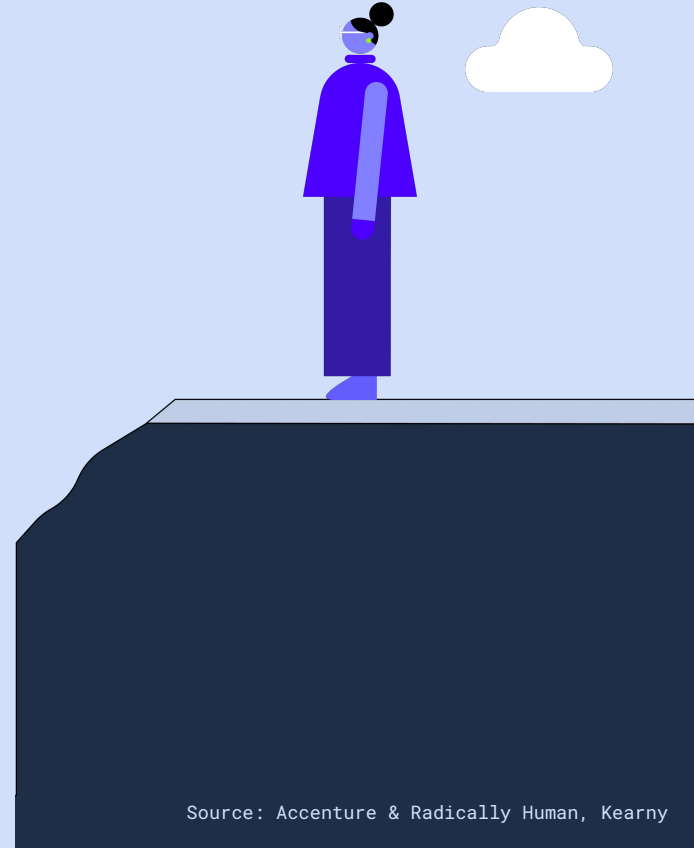
 @rqrivera

The gap between data-driven leaders and laggards continues to widen



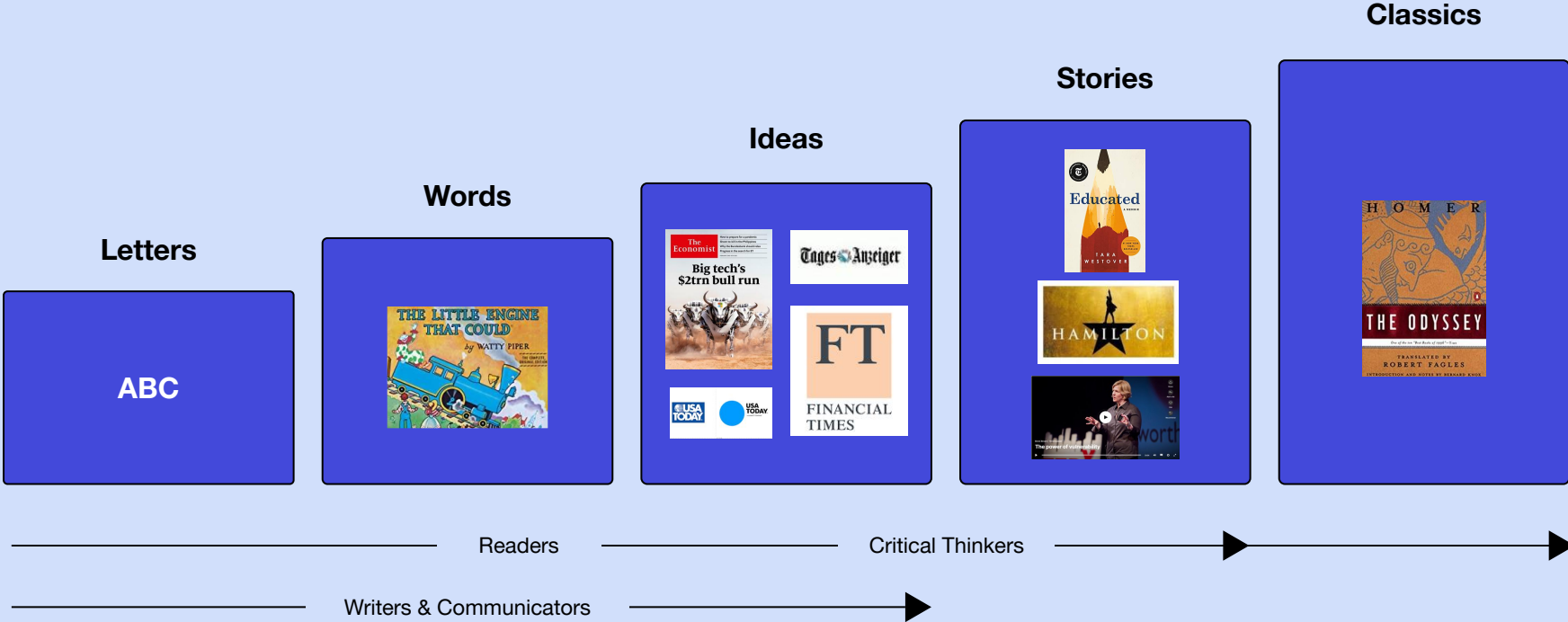
4x
Revenue growth

81%
Higher profits

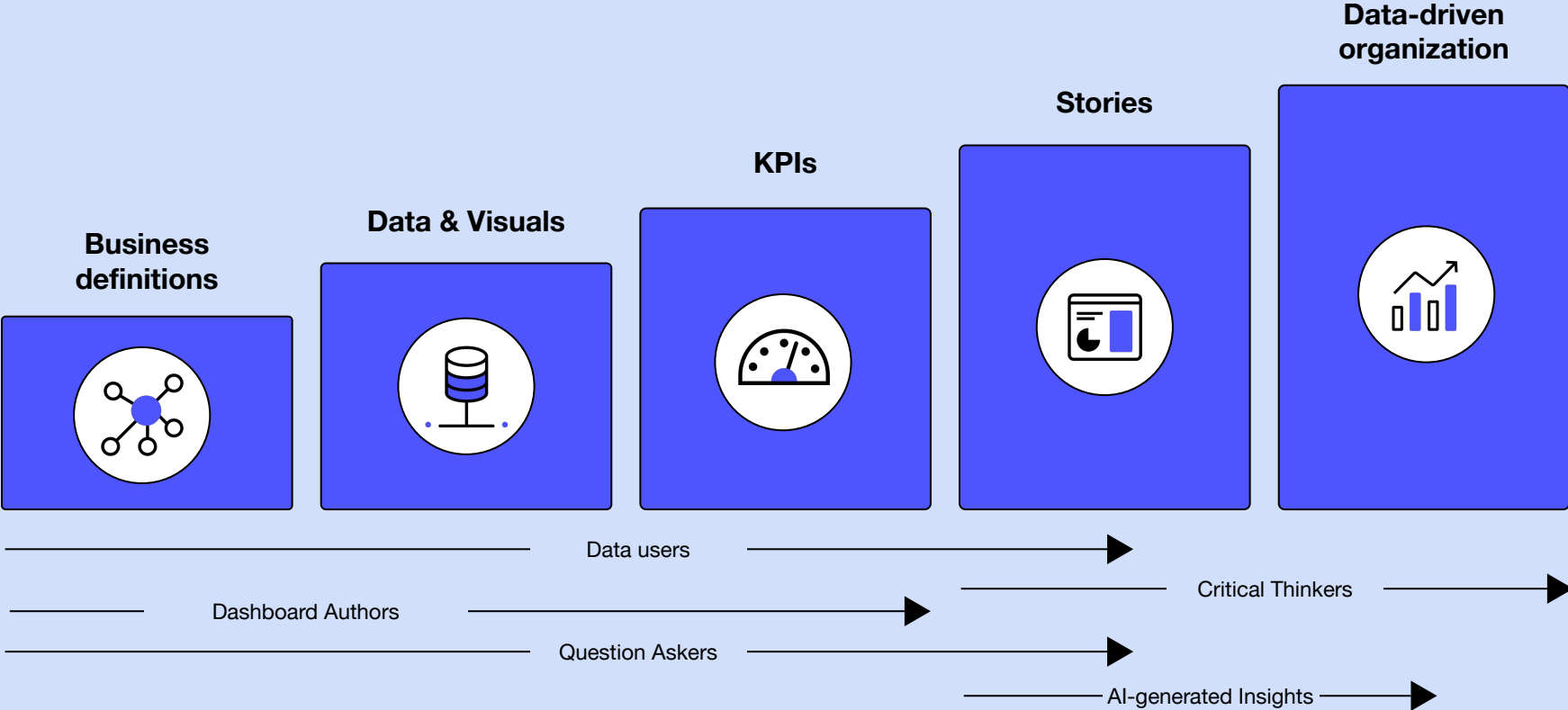




Building Blocks for Data Fluency: An Analogy



Building blocks for data fluency





DEMO

ThoughtSpot Sage

Throughout 2023, generative AI will be infused throughout the data and analytics workflow to accelerate the creation of data products by business domains.

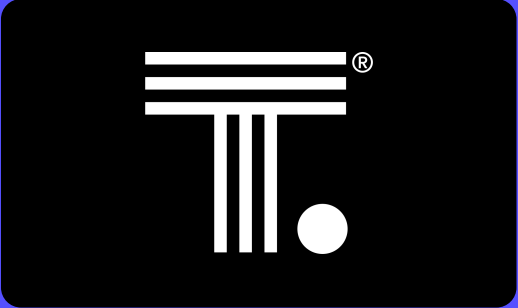
The opportunities are only limited by imagination and constrained by technical debt and legacy thinking.

First movers who embrace human-in-the-loop and AI ethics will have a lasting and outsized advantage.



Resources

Free Trial



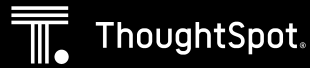
Data Literacy Guide



Podcast



Thank you!



PRESENTED BY THOUGHTSPOT
**THE DATA
CHIEF**



D V S U M

How will AI change Data Literacy

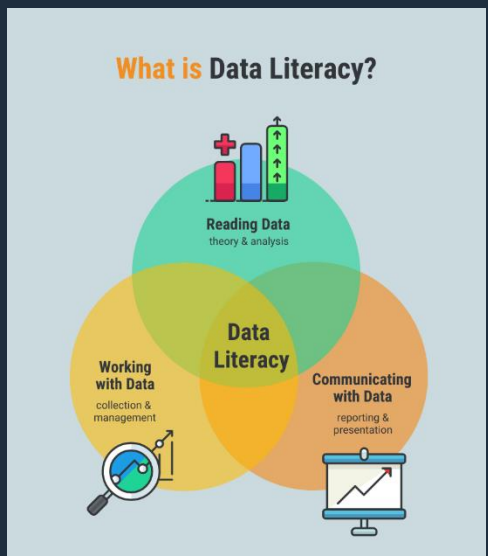
Aashish Singhvi
Aug '23

Contents



- Typical Approach to Data Literacy
- Challenges & Pitfalls
- How can AI help?
- DvSum Solution

Typical Approach



Source: Venngage



Source: Qlik

Data literacy skill levels

	★☆☆	★★★	★★★★
Reading Dashboard User <small>Dashboard usage, analysis, interpretation, conclusions, implications, caveats</small>	Creating insights by filtering existing dashboards	Conclusions	Implications Cautions
Writing Dashboards <small>Creating insights by creating dashboards or data models</small>	Editing Existing Dashboard	Build new workbooks and perform ad-hoc analyses	Create new impactful and actionable Dashboards (for own and team)
Writing Data Models <small>I</small>	Write simple queries and edit existing queries (for ad-hoc analyses)	Create Data Models and know where to find the right data	Create new data model Explore existing data models for compatibility
Speaking <small>Present, discuss and ask the right questions, concerns and be the strategy leader</small>	Presenting Explain needs	Discuss Ask the right questions	Convince and Convey Strategic plans based on data

*See Tableau dashboard for content of each level

Source: BOL.com

Challenges in current approaches



Friction with users.
Excessive Focus on
Methods &
Techniques



Difficult to
measure
quantifiable value



Toxic divide
between Data
Producers and
Consumers



What we really need to solve is..

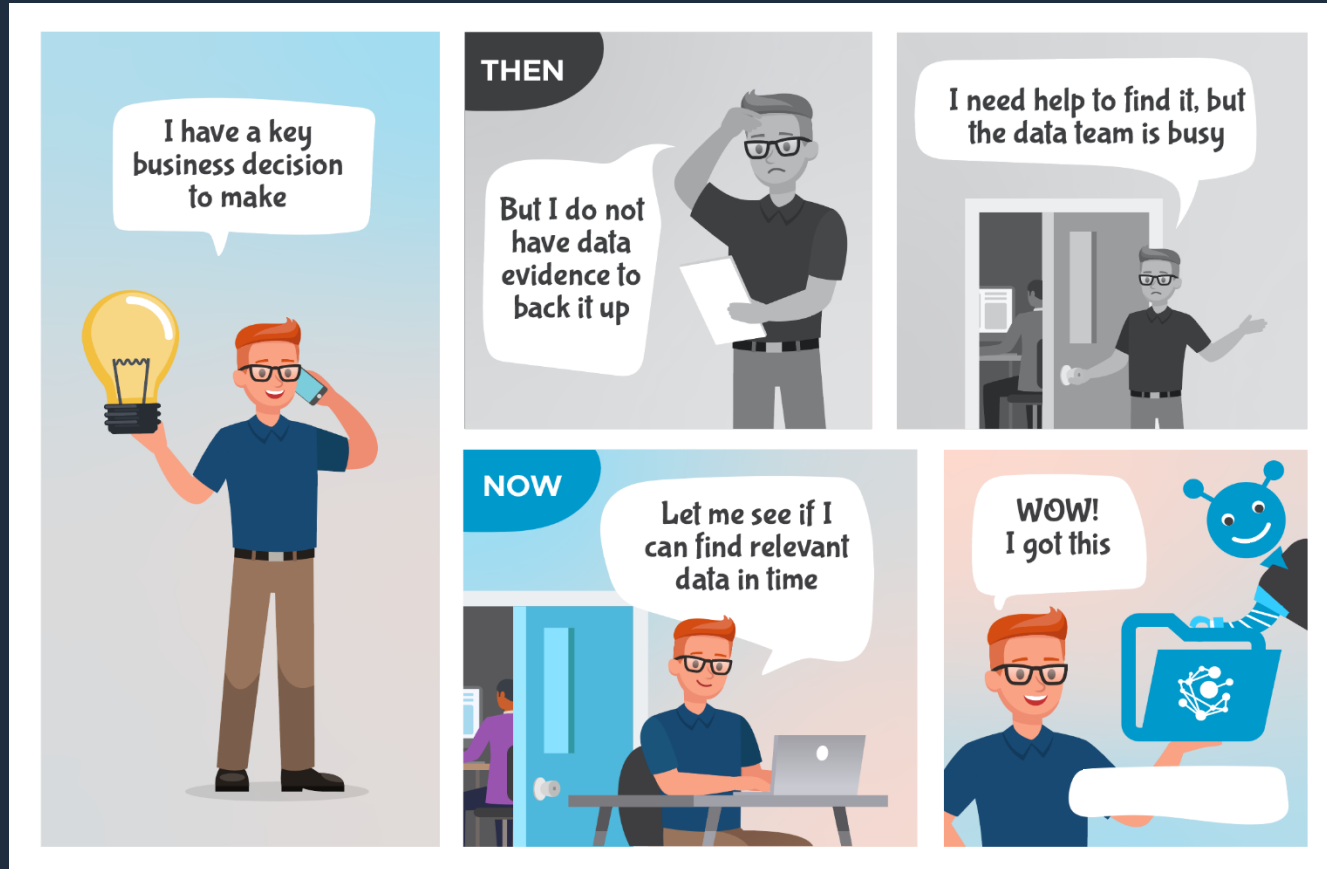
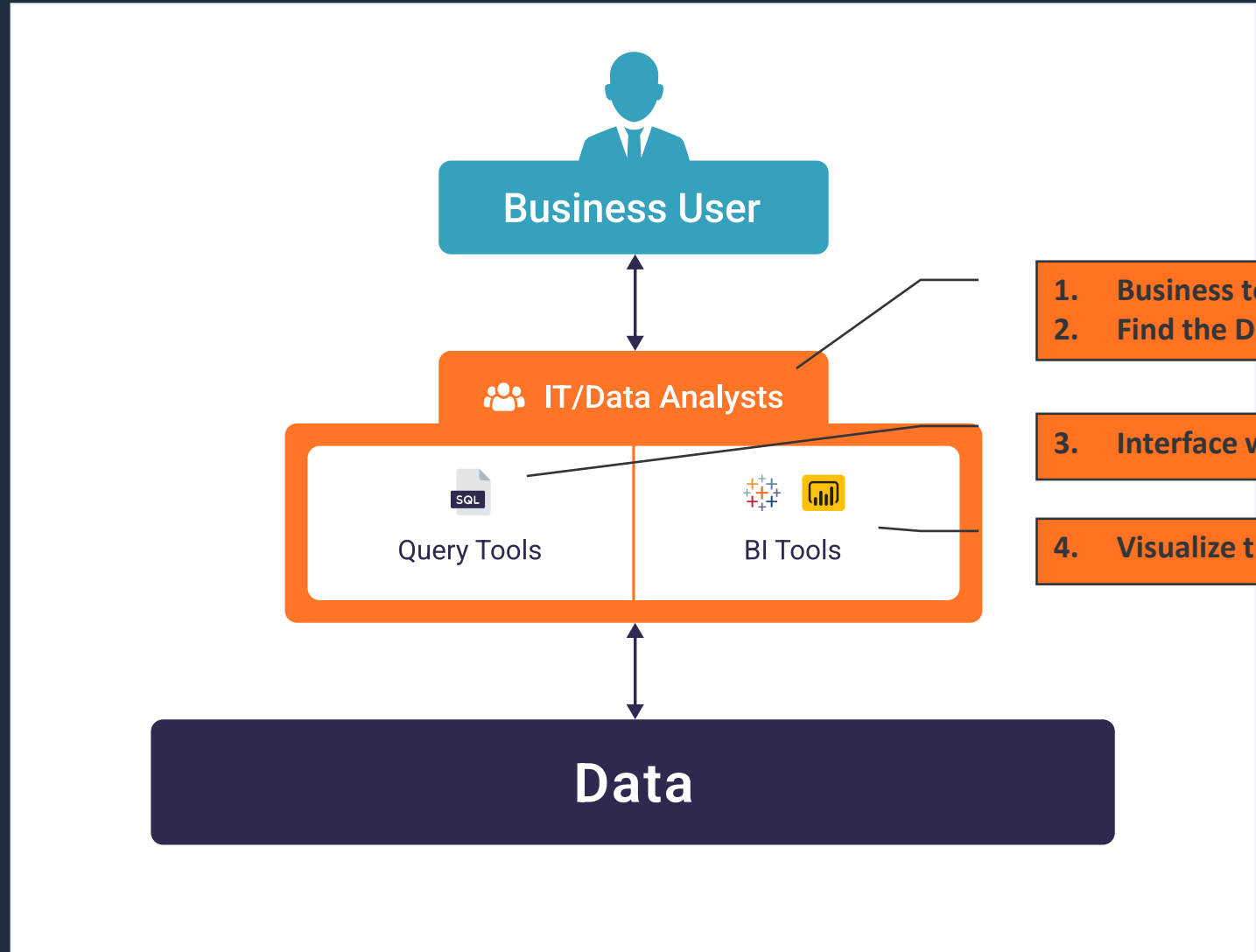


Illustration by Oval Edge

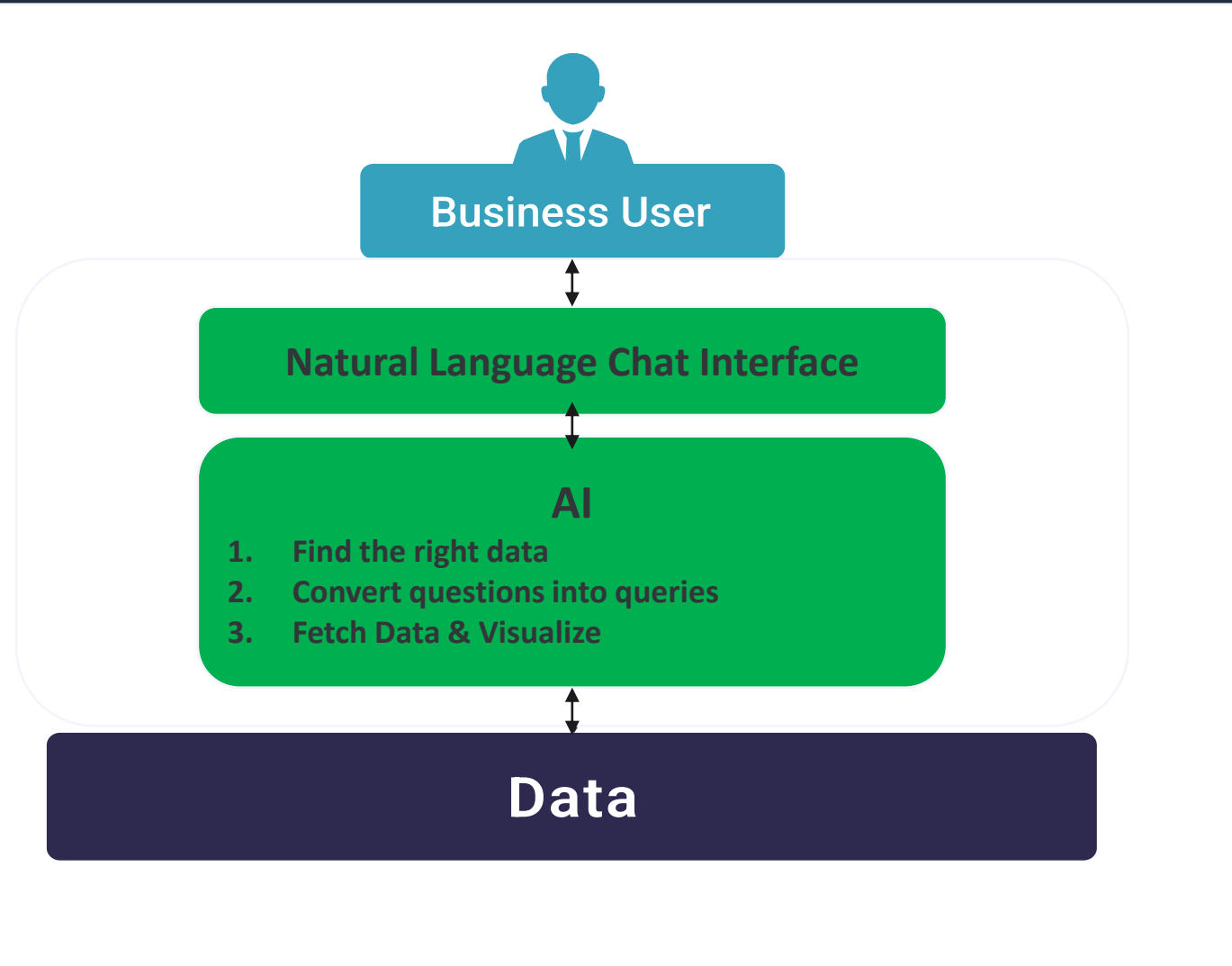
Enable business users to get data & insights

1. themselves
2. when they need it
3. **without expecting them to become data / BI analysts**

Barriers to achieve true business self-service



Leverage AI to solve the problem



DvSum CADDI: Chat with your Data

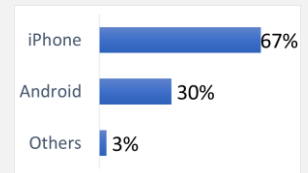


Simply ask questions in natural language

“How many of our Therapy patients use Android vs iPhone?”



Gets relevant results and insights from **your** in real-time



What's in the Box



User just needs a browser. No technical skills required.



Generative AI

Powerful Natural language processing and understanding. Uses the same Gen AI that powers **ChatGPT**



Data Intelligence

DvSum automatically creates technical and business understanding of your data



Data Query + Visualization

Results are accurate facts from your data fetched in real-time

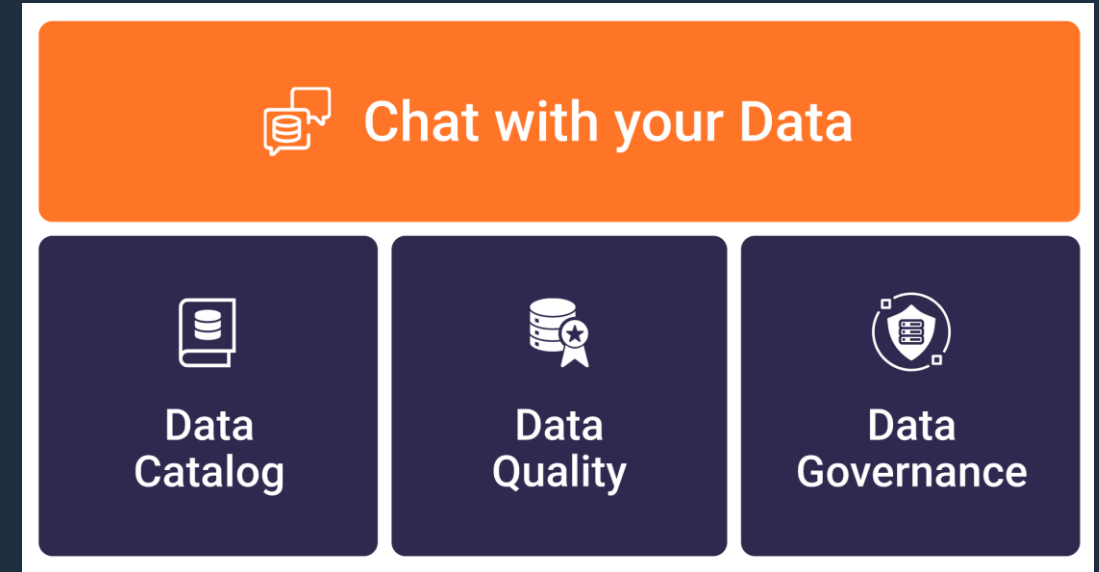
Built on a strong data foundation

1. Data Catalog to find the right data

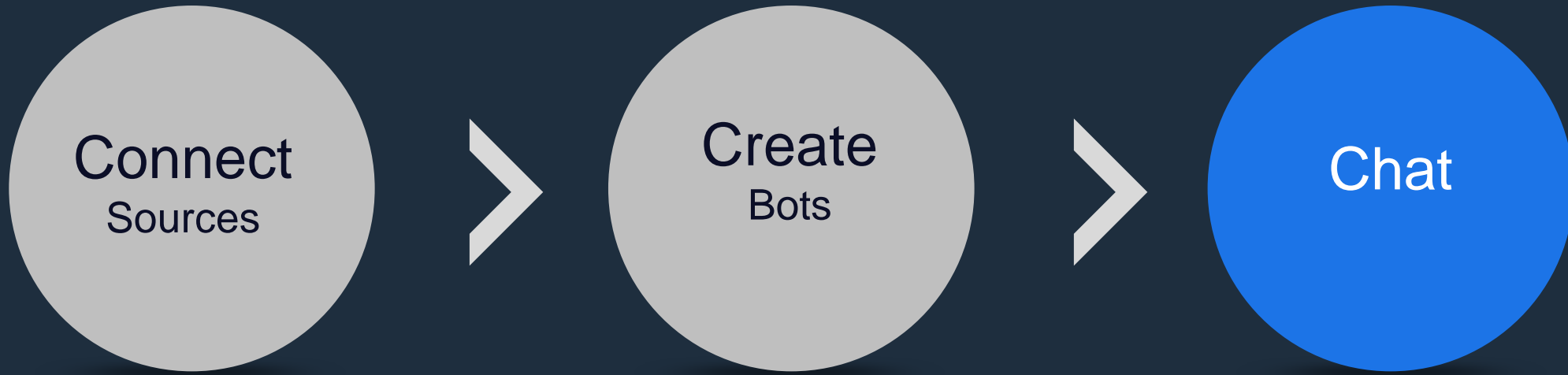
1. Rich Technical Metadata
2. Business Glossary to translate Business Terminology to Data Definitions

2. Data Governance Features to ensure Access & Privacy compliance

1. Data Classification
2. Masking, Access Policies



Easy Setup. Little to no training required



1. Connect your on-prem or cloud data sources.

2. Create a Bot defining the scope of data for Chat. Share access to users

3. Users start chatting with data. Feedback mechanism for continuous learning

< 1 week

Business Value



Empower Business Users

More data-driven decisions without complex Data Literacy programs



Reduce IT and Analytics BI Effort by ~60%

Off-load Self-Service BI, Ad-hoc analysis to the end users. Increase Analytics team productivity to focus on Advanced Analytics use-cases.



Faster Time to Business Decisions

Increase Business Agility by allowing decision-makers to find data and insights on-demand to drive quicker actions.



D V S U M

Unleash data insights

dvsum.ai

THANK YOU

Aashish Singhvi

aashish@dvsum.com

(214) 912 0670

About DvSum

- **Mission:** Enable organizations to unleash data insights for maximum business performance
- Based in Silicon Valley, California

Data Insights Platform

- **CADDI - Chat with your data**
- Data Catalog
- Data Quality
- Data Governance



Our Customers:
Companies behind
famous brands



Some things to think about.....,

- Is this a step forward or a just potential for serious misinterpretation?
- Does it eliminate the need for data literacy, or just modify what users need to know?
- Are there natural guardrails to help users and prevent misuse?
- Given that systems like OpenAI make things up that are completely fictitious, what prevents these systems from doing the same?