



Enterprise Data Literacy

— Myth or Reality?



ELEVATING
— ENTERPRISE —
DATA LITERACY

Wendy D. Lynch PhD.



Leaders know data literacy is important



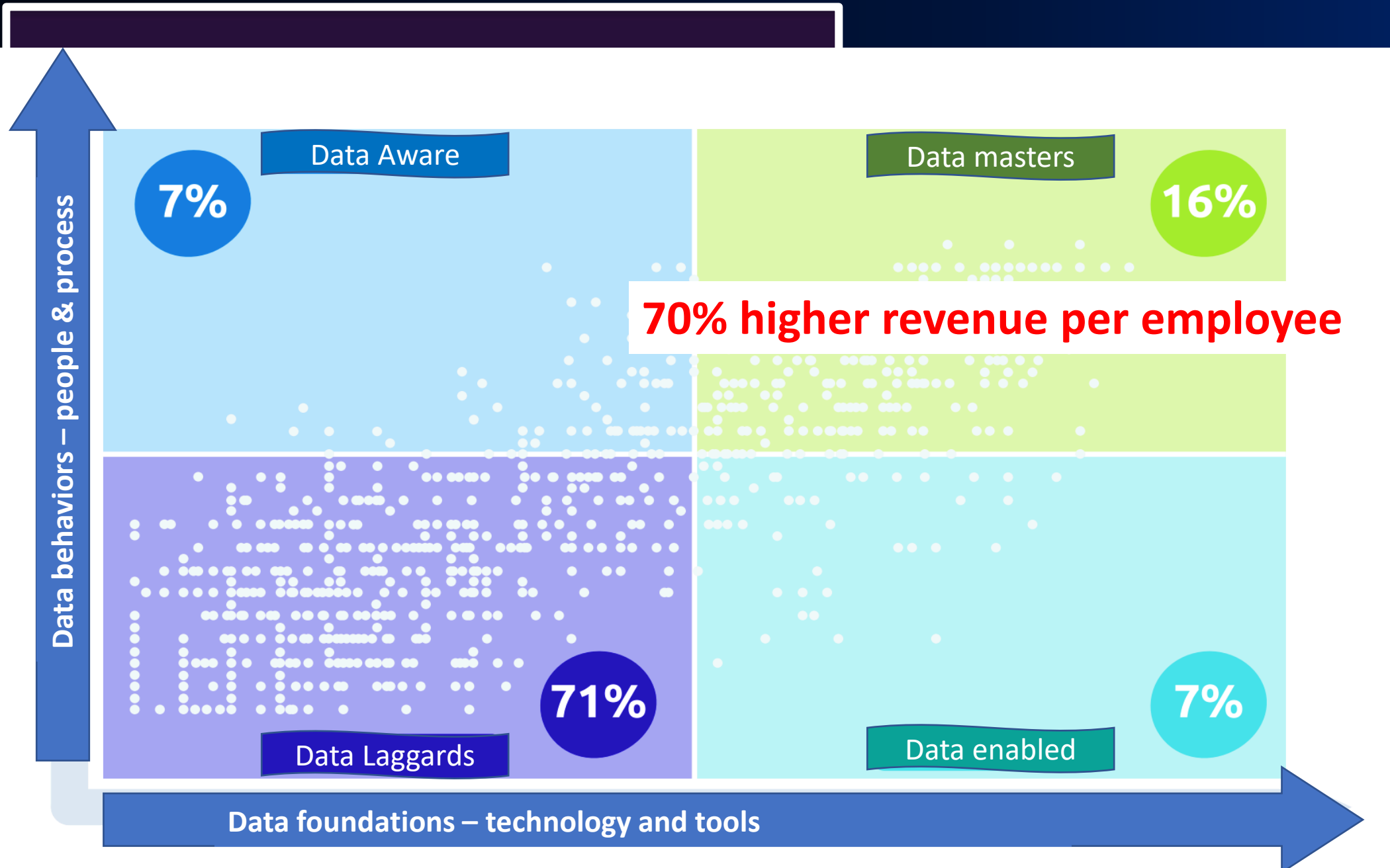
And now, AI literacy is gaining attention

Leaders face a variety of risks if they do not build their workforce's data skills

Question asked: "What risks is your department or team facing if your people do not have adequate data skills?"

Risks of low data literacy



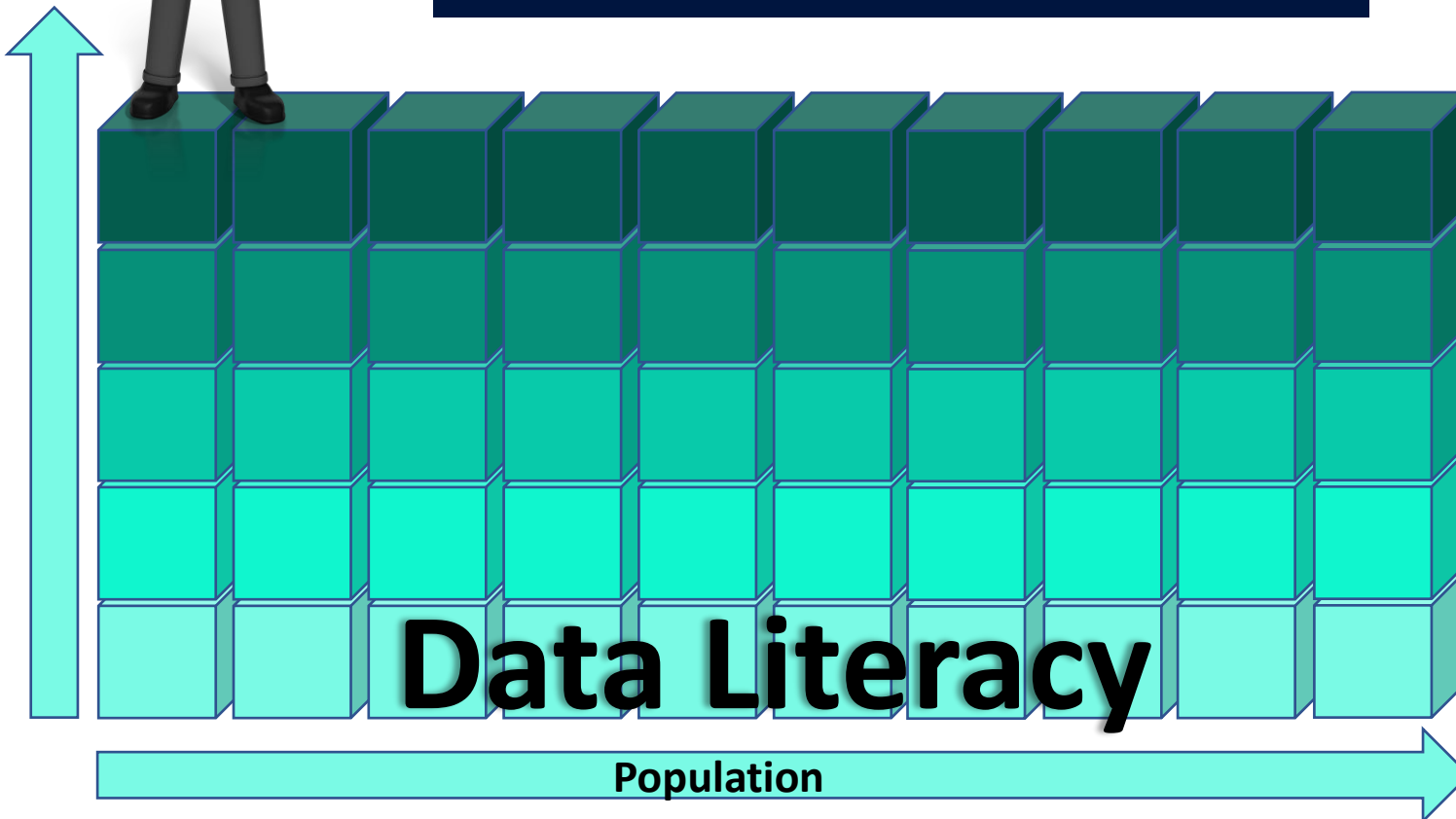


No Surprise...



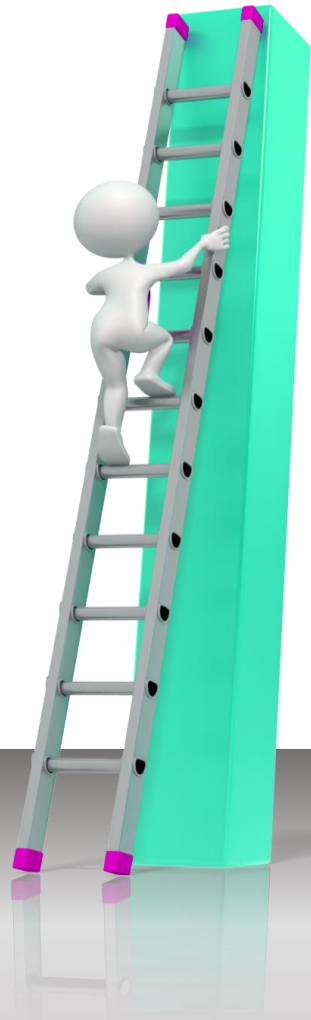
Ninety percent of business leaders believe data literacy will be critical to their success.

Proficiency
With
Data



Teach/perform analysis
Explain complex analytics
Convince with
Understand
Read/recognize

How literate?



We can all be data brilliant

Data Literacy is set to be the second language of business.

At the very least, individuals should know how key business terms and metrics are defined, particularly those relevant to their function. Ideally, they should also have a basic grasp of statistics and the ability to interpret charts and analytics accurately.

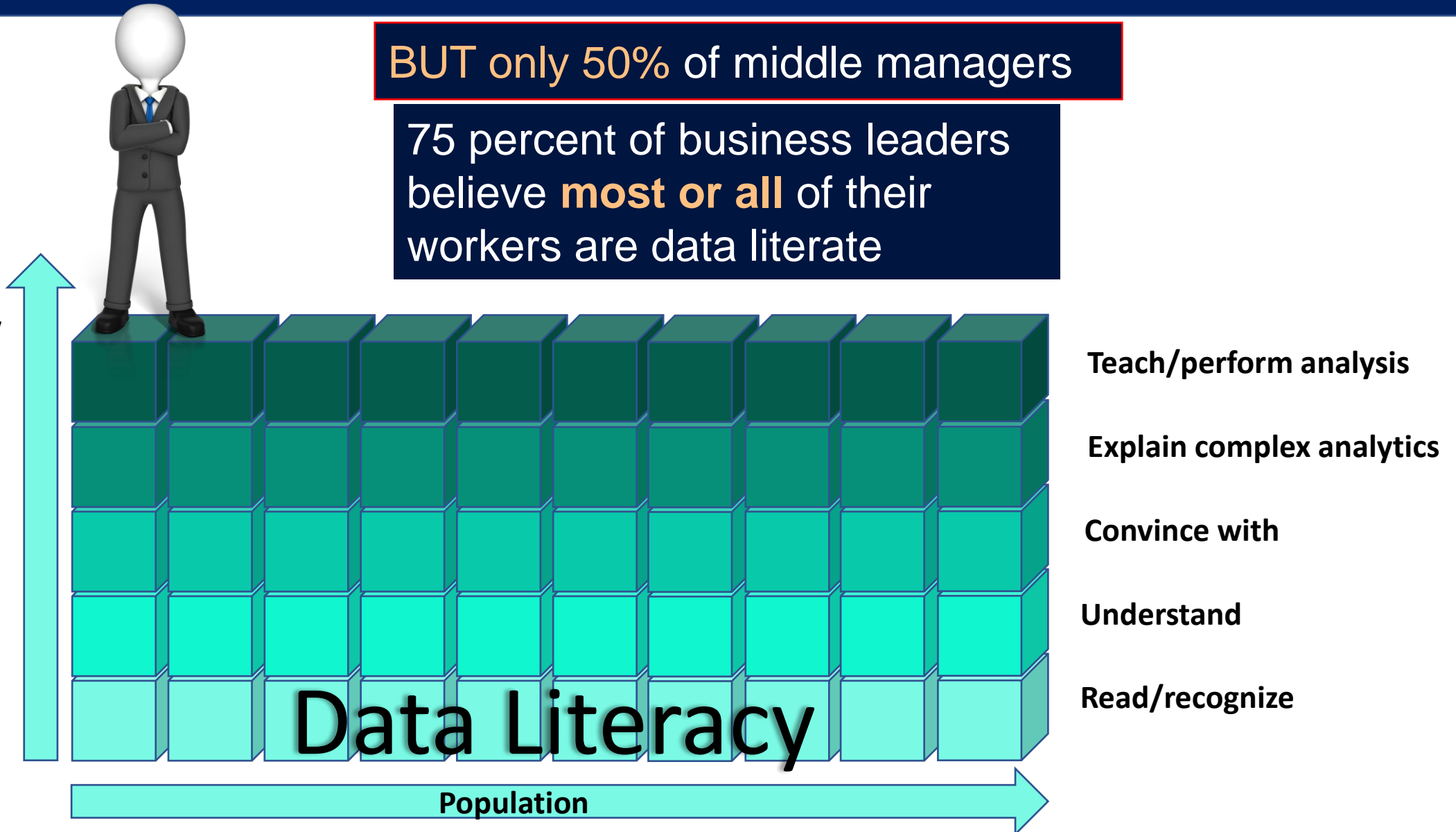
The least literate teams were identified as Human Resources and Sales

Who is literate now?

BUT only 50% of middle managers

75 percent of business leaders believe **most or all** of their workers are data literate

Proficiency
With
Data

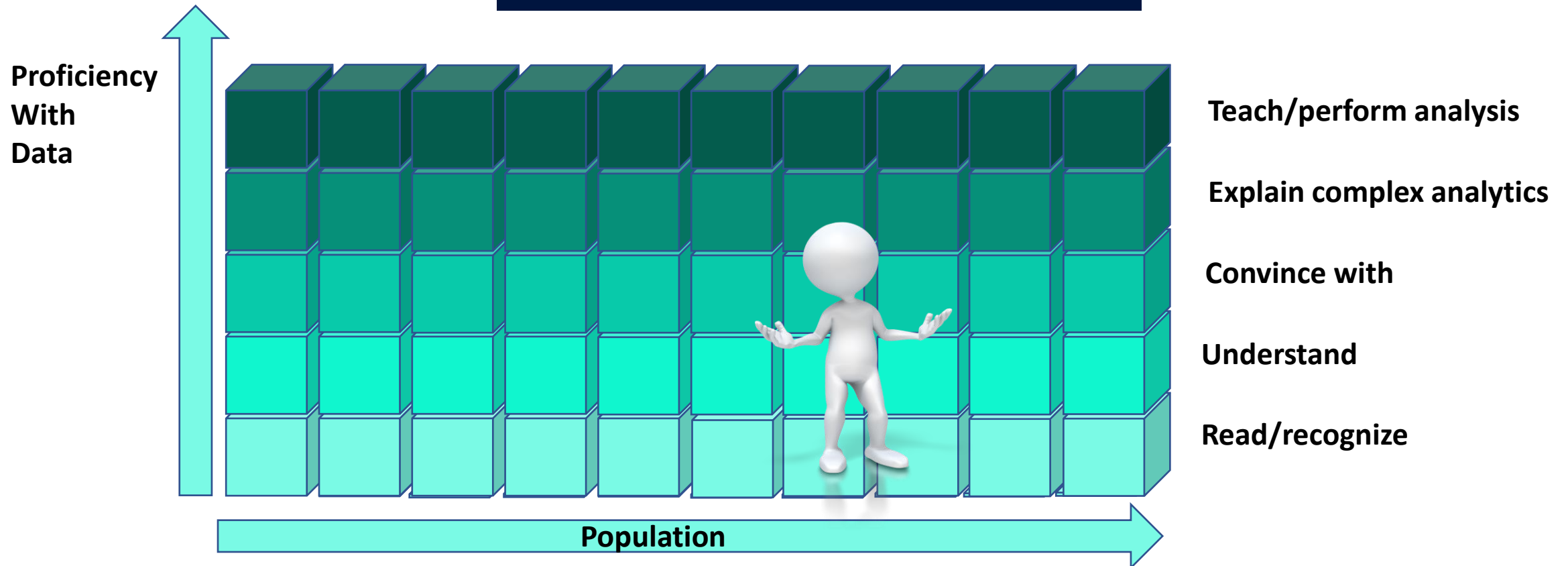


Who is **actually** literate now?

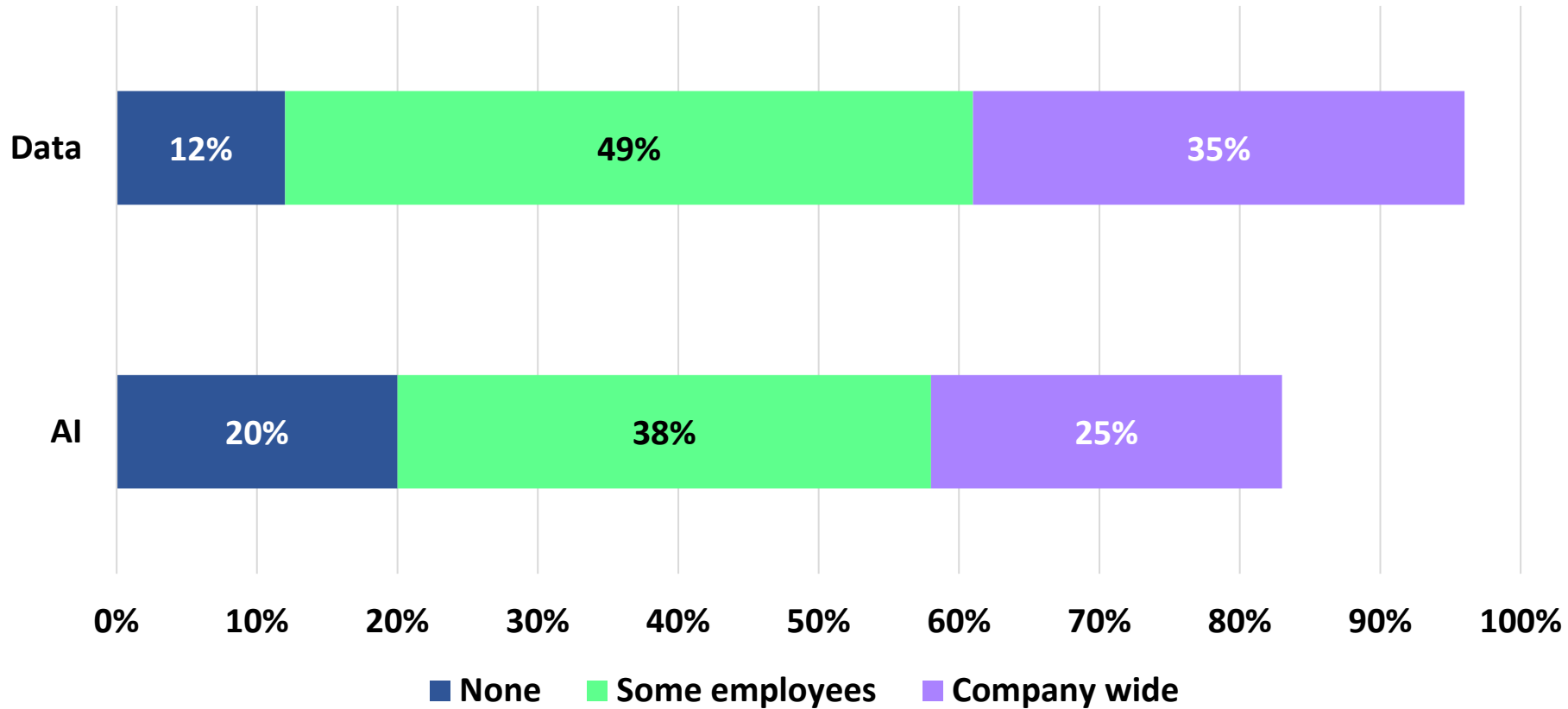
25 percent of employees are confident in their data skills.

Some studies report as few as **8%** are highly skilled.

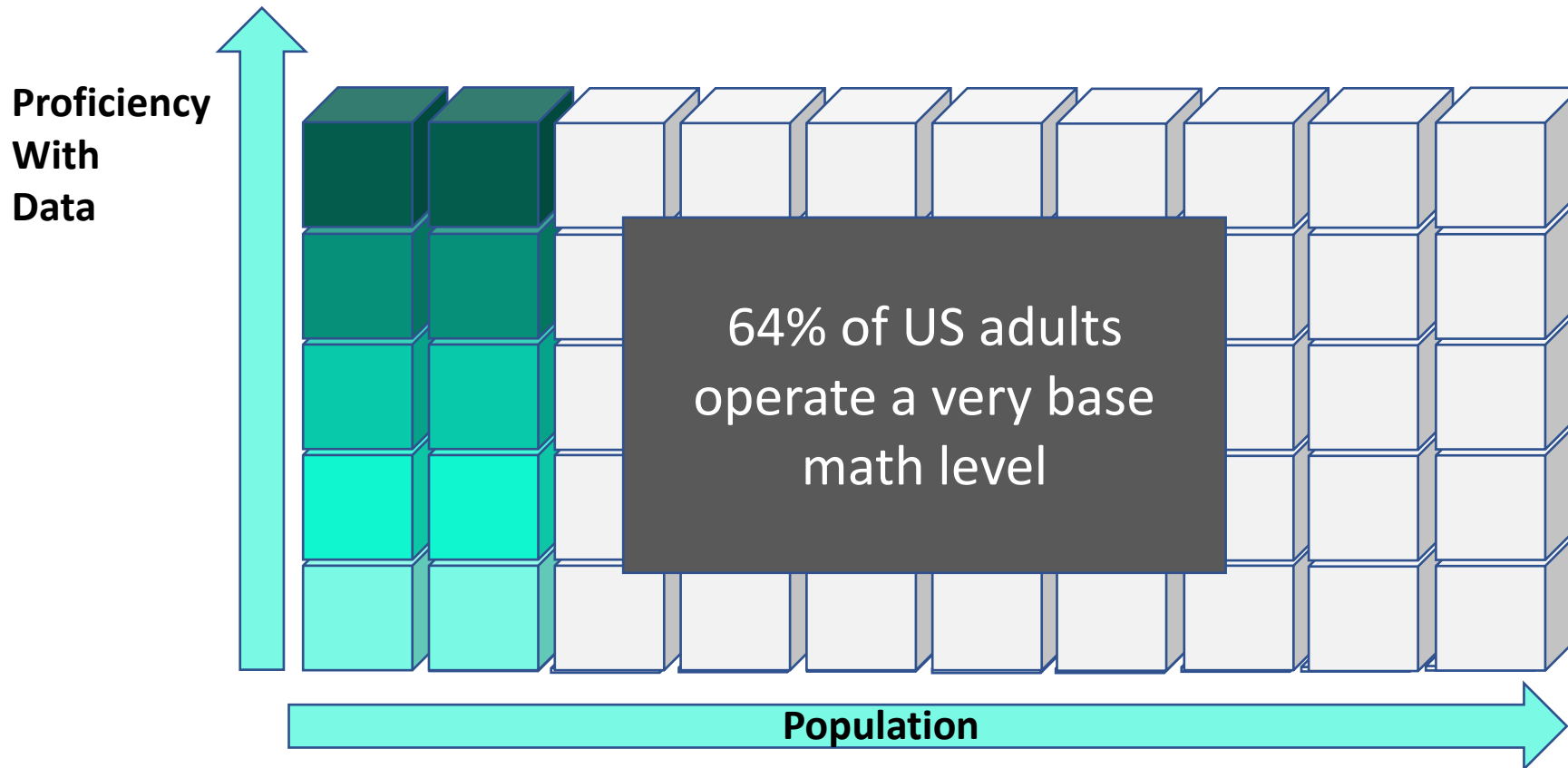
Only 32 percent of executives are data literate.



Literacy Training 2024



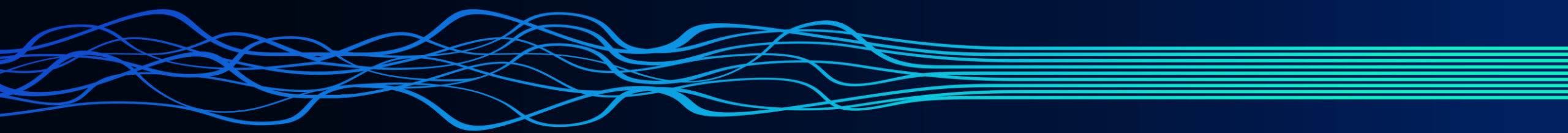
And what can we expect ?



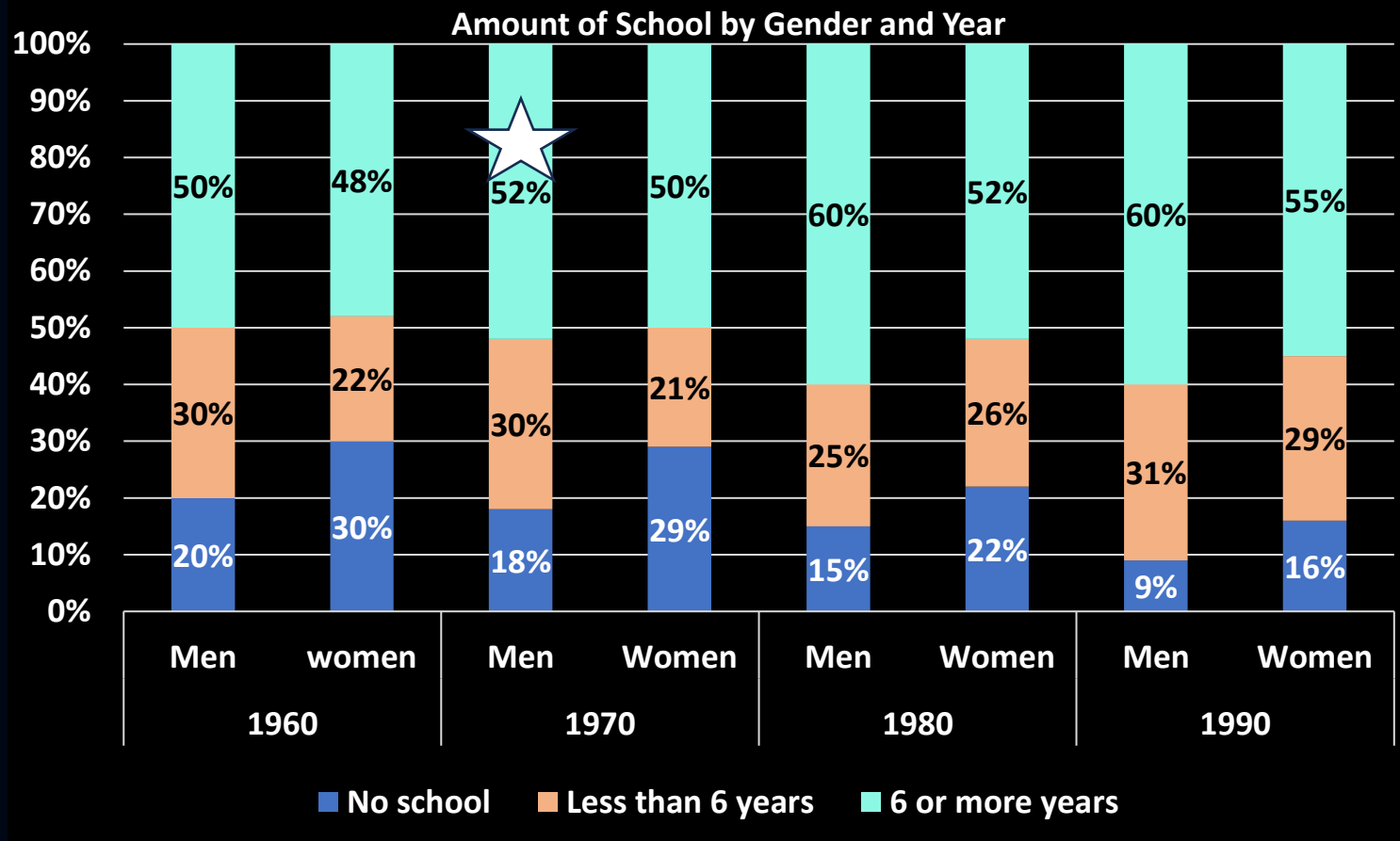
There are some limits to the number of people who will become highly data literate.

What this means

Proficiency levels	U.S. adults 16+	Skills	Sample task
Below level 1 Nonliterate 0-175	10%	Perform basic tasks: counting, arithmetic with whole numbers.	Review four price tags, which include the date packed, then indicate which item was packed first.
Level 1 Below basic 176-225	20%	Perform one-step tasks: count, sort, perform math, understand simple percentages (such as 50%).	Calculate how many layers of candles are in the box that says there are 105 candles in the box and shows there are five rows of seven candles.
Level 2 Basic 226-275	34%	Perform two or more calculations — simple measurements, spatial representations and estimates — and interpret simple tables and graphs.	Review a motor vehicle logbook with columns for dates of trip, odometer readings and distance traveled; then calculate trip expenses at 35 cents a mile plus \$40 a day.




The reality.....



Level 4/5

Percent who can:
Identify the percentage of men who had more than six year of school in 1970

9%



Seriously,
One in three

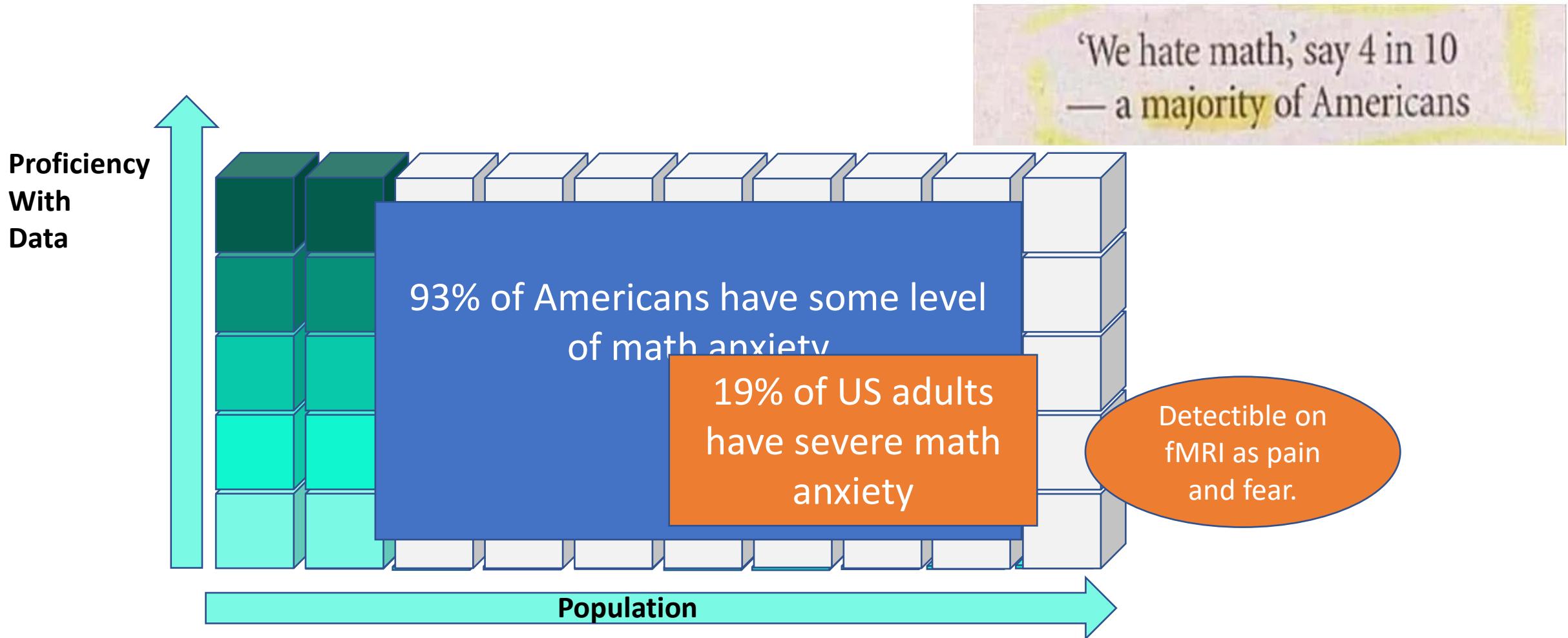
American adults
cannot understand fractions



A chalkboard with handwritten mathematical expressions in white chalk. The expressions include $\frac{1}{10} + \frac{5}{10} = \frac{6}{10}$, $\frac{6}{10} - \frac{3}{10} = \frac{3}{10}$, and $\frac{7}{8} =$. The numbers and symbols are written in a cursive, hand-drawn style.

Plus....

Besides aptitude, there are attitudes and worries.

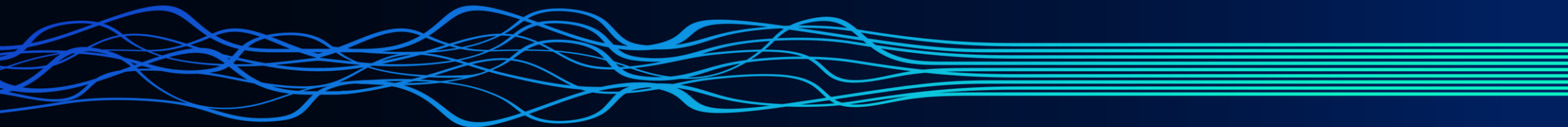




analytic-**translator**
.com

It's not just being unfamiliar or unskilled

The vast majority dislike or fear numbers



Weight loss is easy!!



Exercise
is easy!!



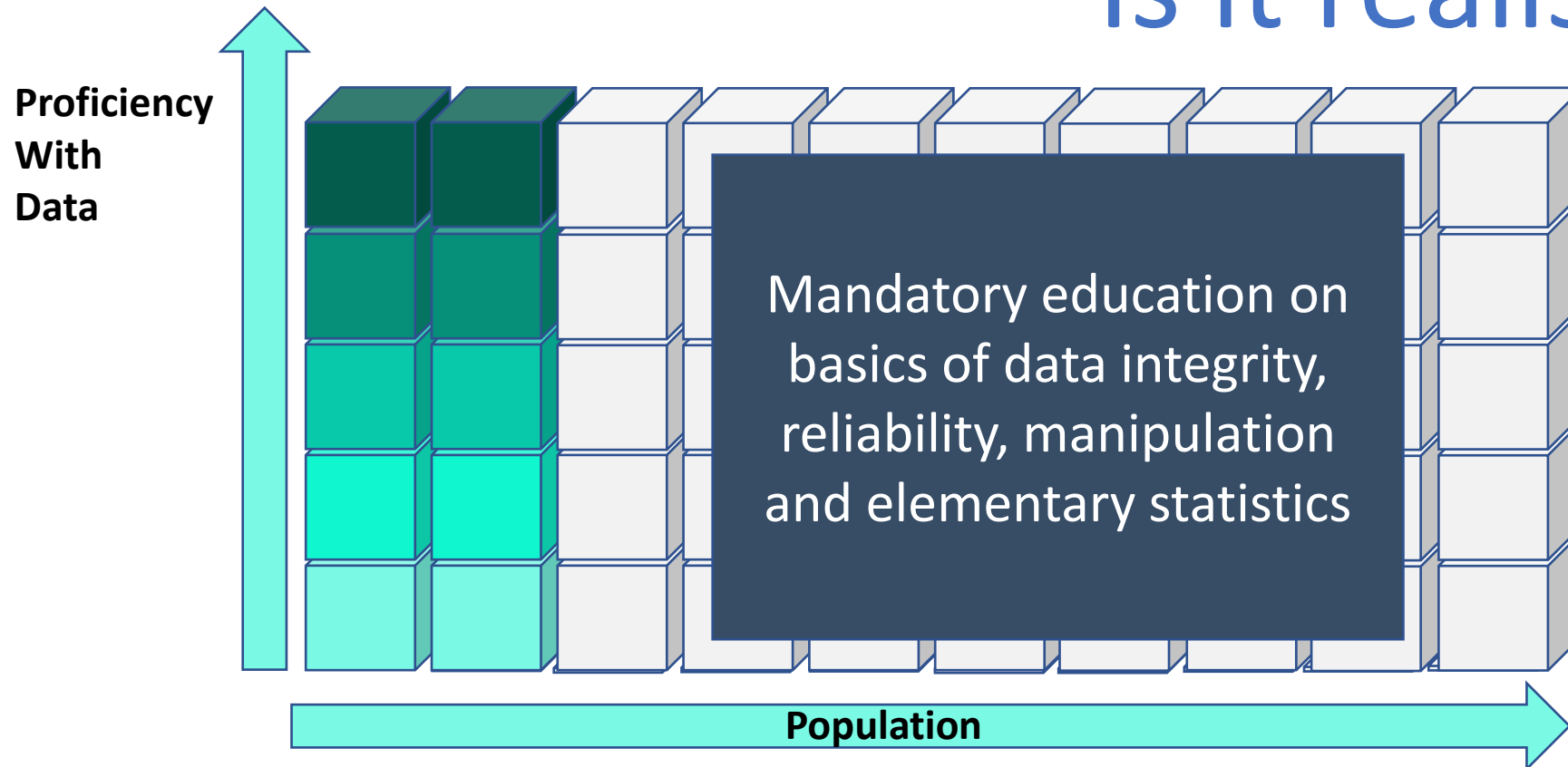
Data
science is
easy!



How do we improve data literacy?

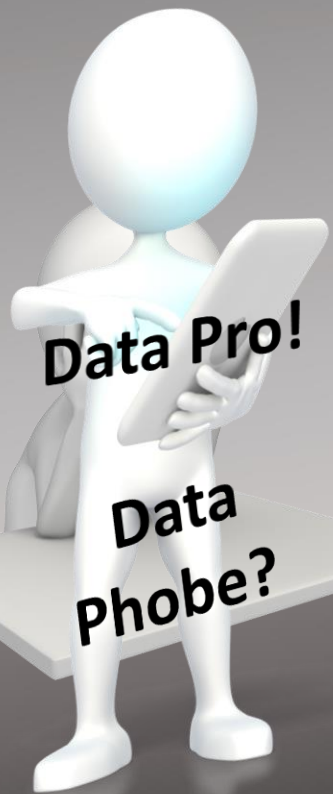
An admirable goal.

Is it realistic?



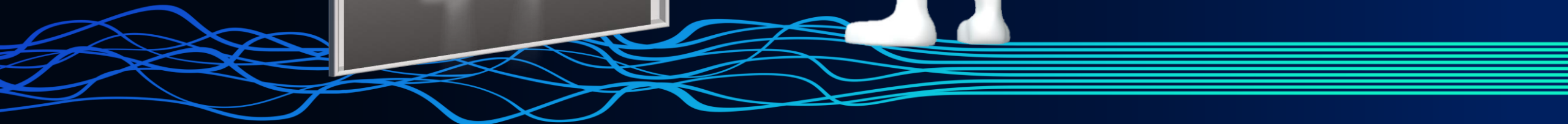


Or?



Data Pro!

Data Phobe?



FORBES: The Problems with Data Literacy

Assuming data illiteracy is the reason companies fail to realize value from data creates a toxic divide between data producers and consumers.



analytic-translator.com

Next concept: Strategic Alignment (a.k.a. Business Literacy)

People and processes are aligned in their purpose and goals.

A photograph of four people in a meeting, looking at a laptop screen. The image is overlaid with a semi-transparent blue filter.

Employees must understand strategy to implement it.

Why Your Employees Need to Understand 'The Why'

Companies whose people are aligned on strategy grow revenue 58% faster and are 72% more profitable

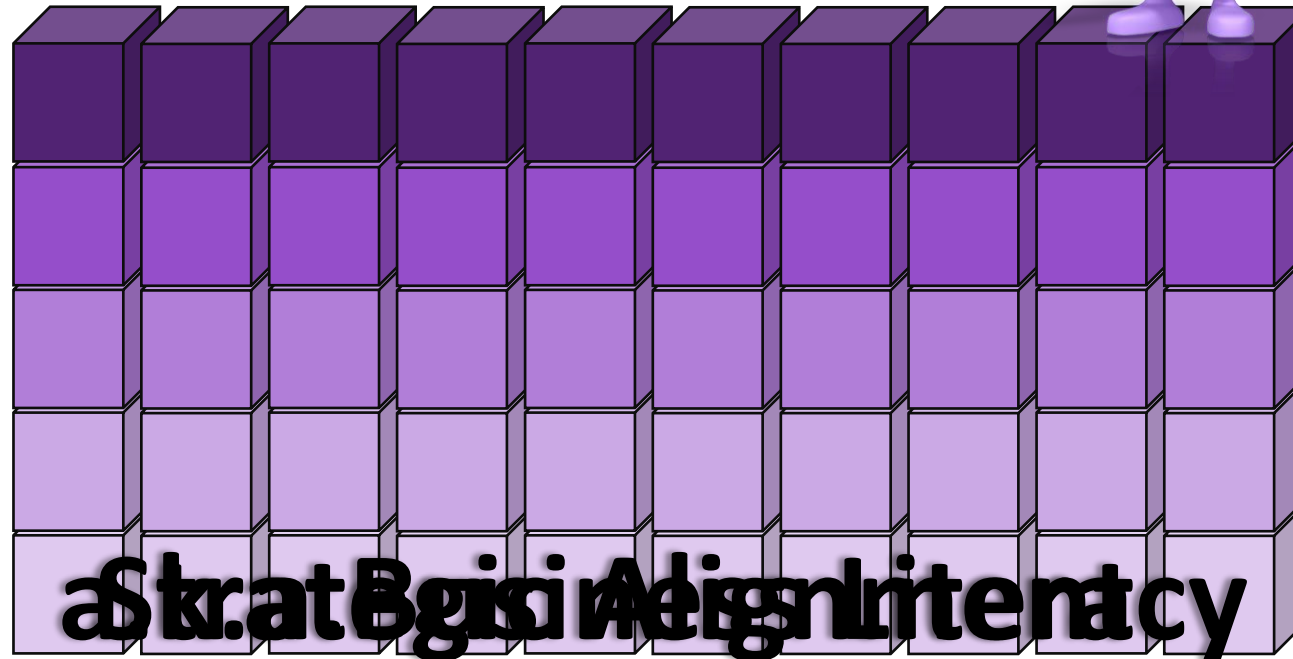
Leaders think strategy is clear

20% of executives have HIGH confidence

52% of executives have confidence that **most employees** can explain company strategy



Strategic Alignment



Create strategy

Tie decisions to strategy

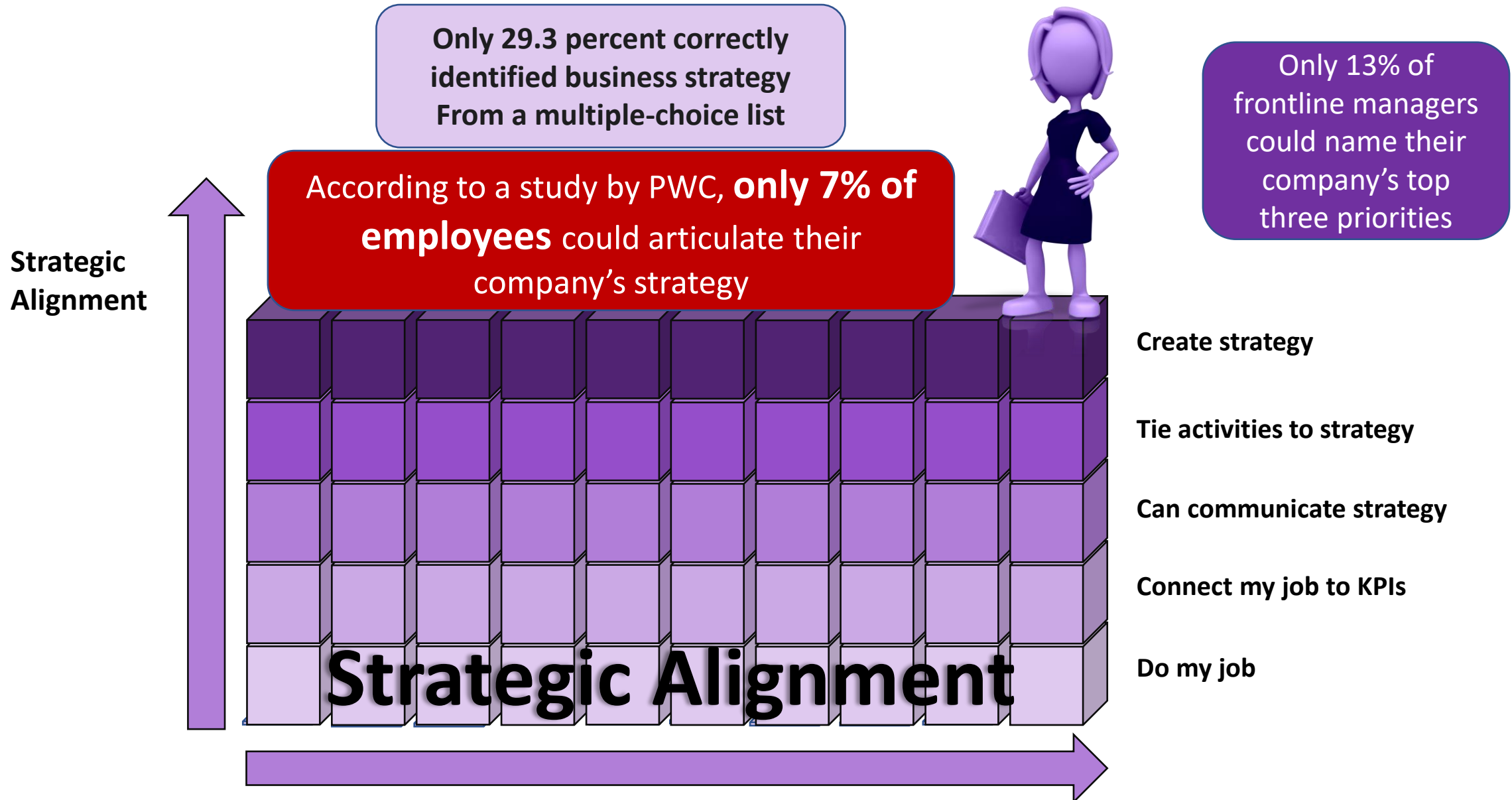
Can communicate strategy

Connect my job to KPIs

Do my job

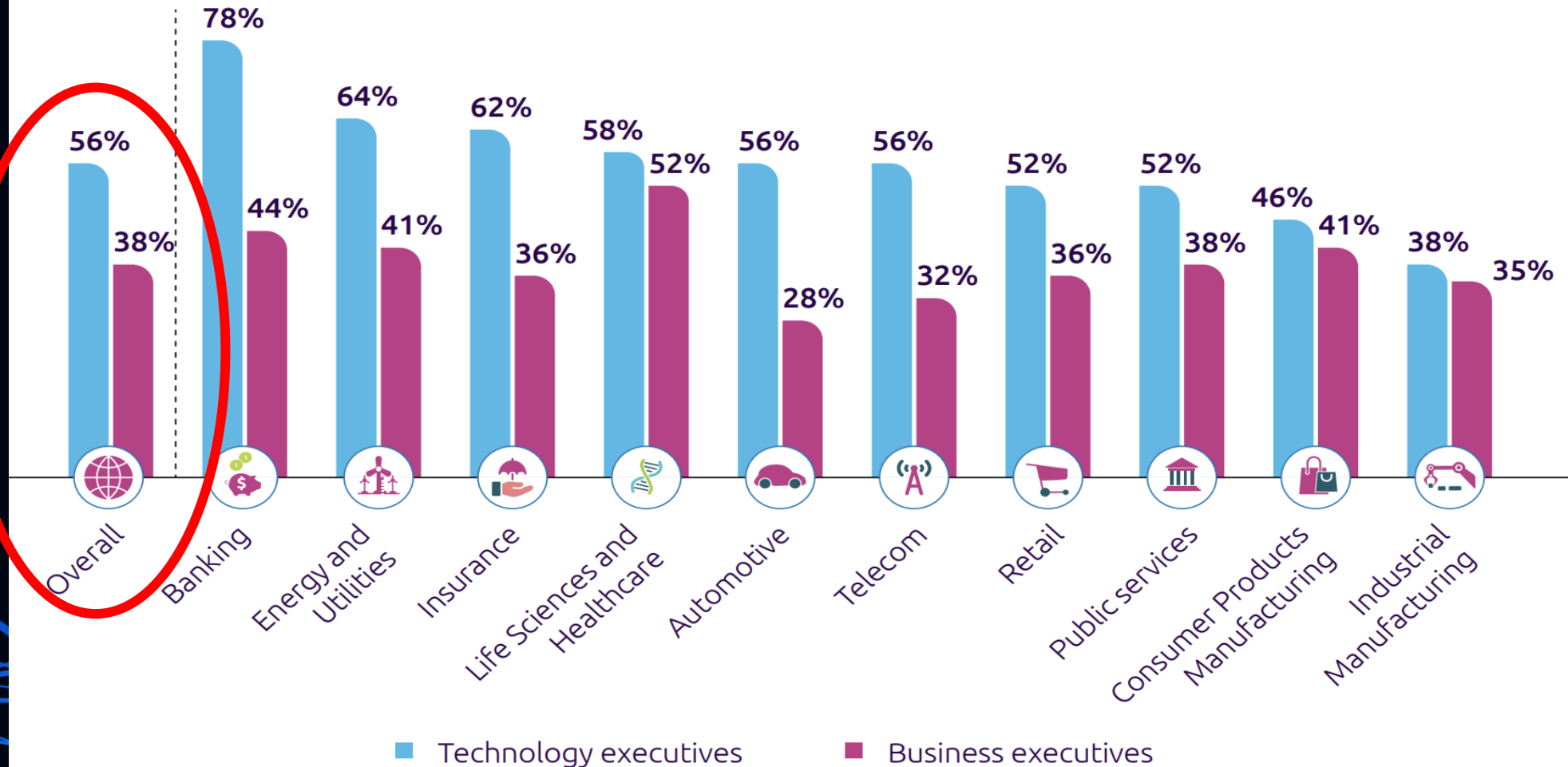
population

How many understand strategy?



Business and technology executives differ on whether data strategy is aligned with organizational vision

Our data/analytics strategy is aligned with overall business strategy

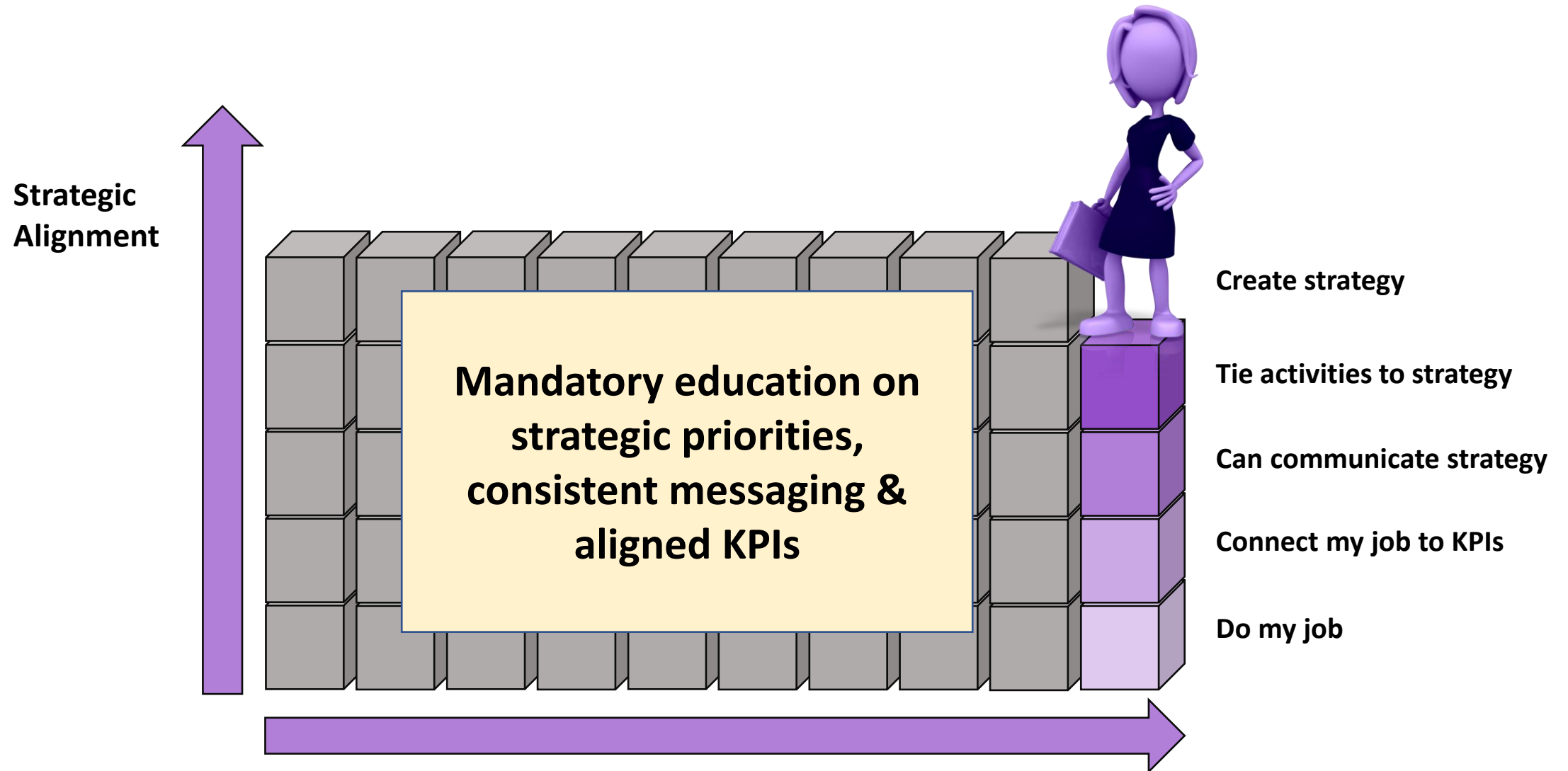


Get everyone aligned.
Because I said so.

Strategic Alignment is easy!



How do we increase business literacy?



Next concept: Emotional/Social Awareness (a.k.a. People literacy)

52% of HR leaders say they will be hiring managers based on their emotional intelligence

Managers with high EQ had teams that averaged **15-20% higher** revenue

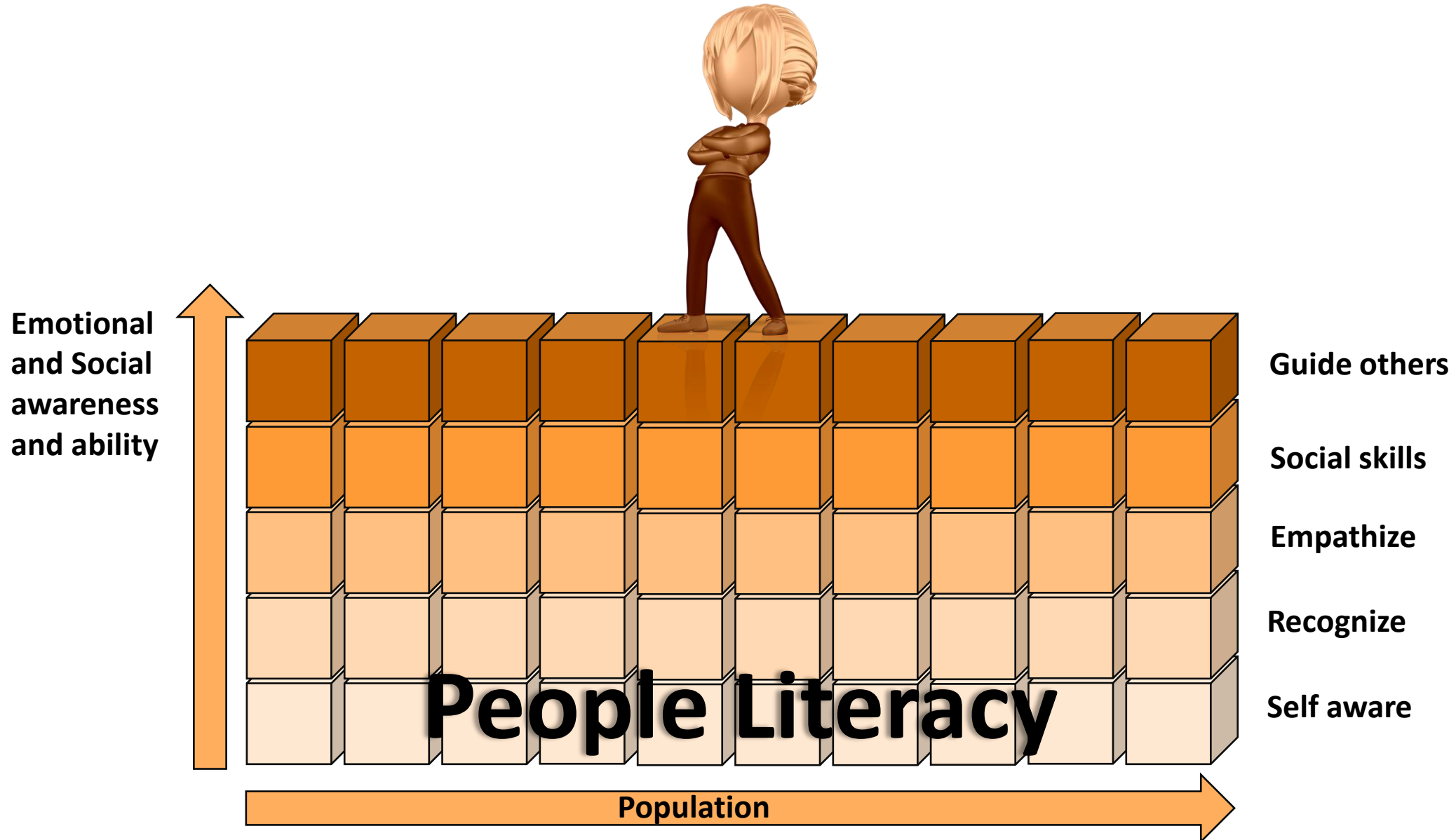
80% of long-term job success depends on EQ, while only 20% on IQ

Forbes

LEADERSHIP

The Importance Of Emotional Intelligence In Business

What is it?



The EYES test

sarcastic

stern

irritated

thoughtful



suspicious

dispirited

encouraging

sympathetic

36 sets of eyes. Identify emotion that is expressed. Indicates empathy.

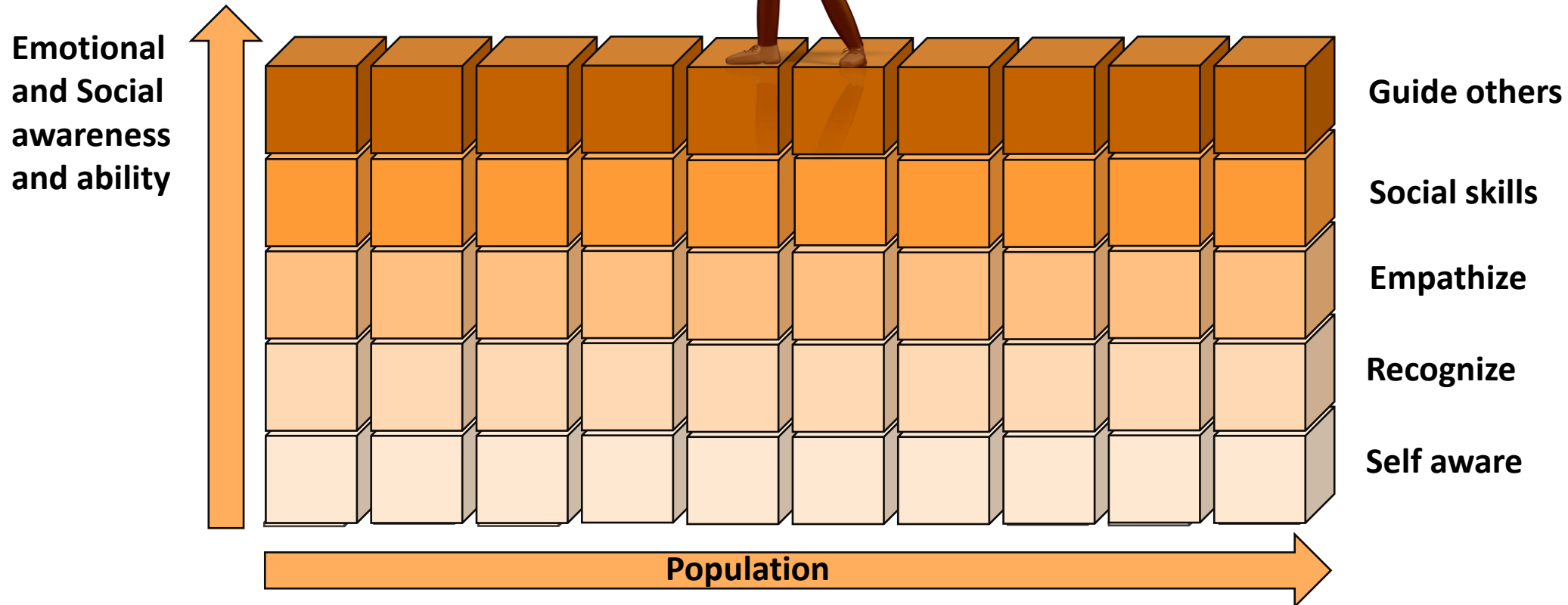
Average score is 23.

People majoring in science and business have significantly lower empathy than people in social sciences.

How many have people literacy?

Only 36% of people are able to recognize and identify emotions.

95 percent of people think they're self-aware, but only 10 to 15 percent actually are



Why it's especially important for data efforts

Forbes

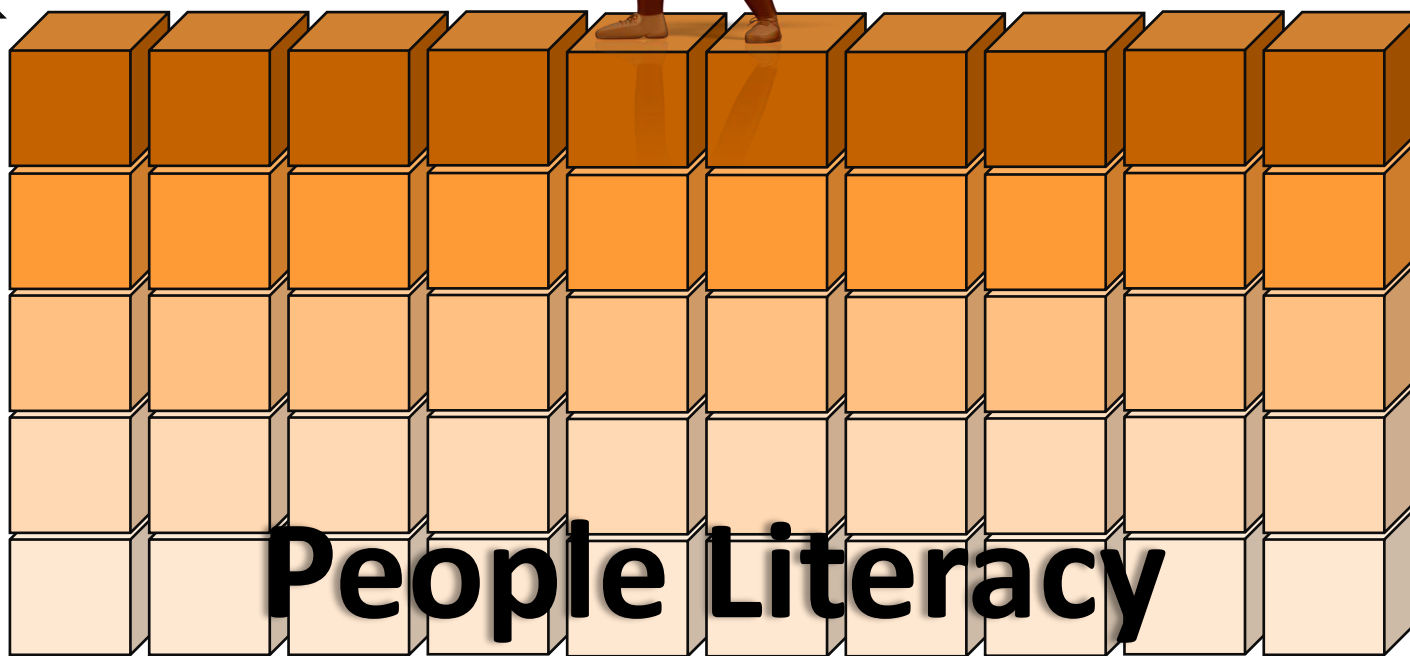
Digital Transformation Is
80% EQ And 20% IQ

It's people issues that make or break it

90% of companies intend to accelerate
digital transformation.

70% of transformation projects fall short.

Emotional
and Social
awareness
and ability



Guide others

Social skills

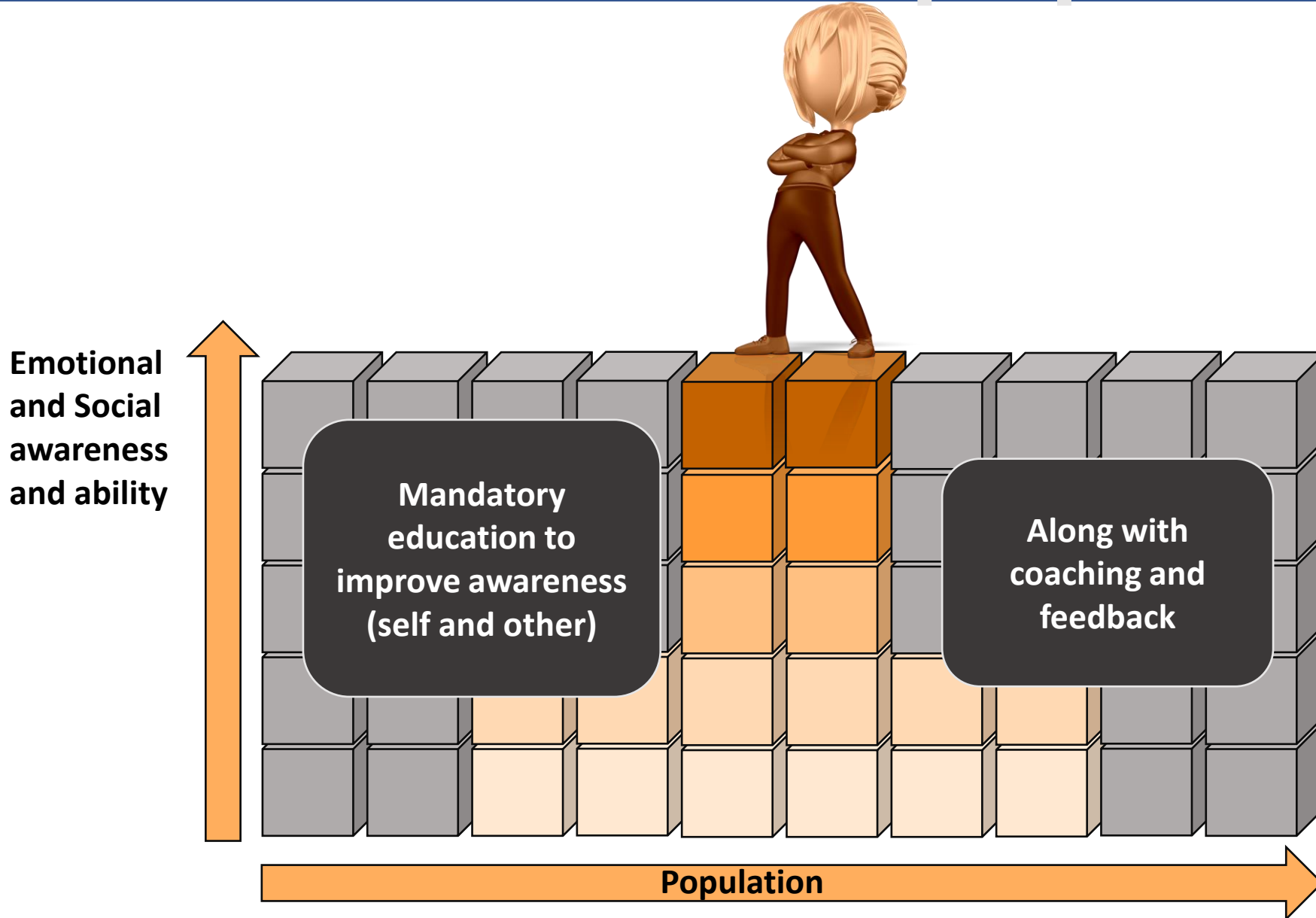
Empathize

Recognize

Self aware

Population

How do we increase people literacy?

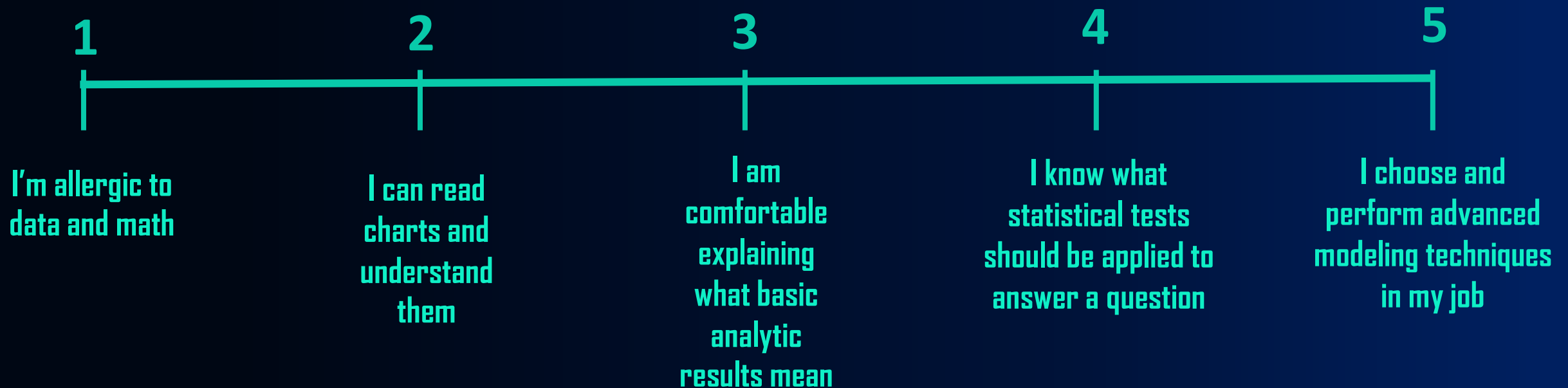


Emotions are
easy!!



Record your own answer

How would you rate your **data** literacy



Record your own answer

How would you rate your **business** literacy:

1

2

3

4

5

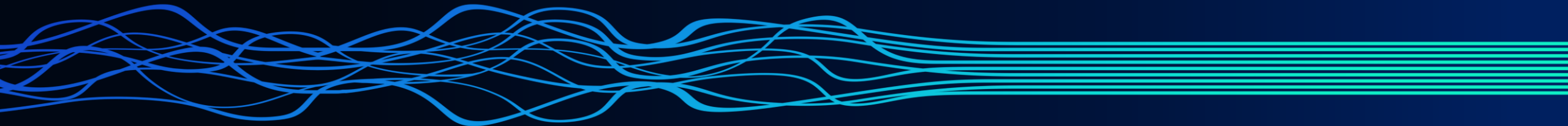
I just do my
job

I know how
my work ties
into company
goals

I can give a
comprehensive
explanation of
business strategy
for my company

I know how our
company is
performing on all its
key metrics

I develop corporate
strategy and create
the metrics that
measure it, and
communicate it



Record your own answer

How would you rate your **people** literacy:

1

2

3

4

5

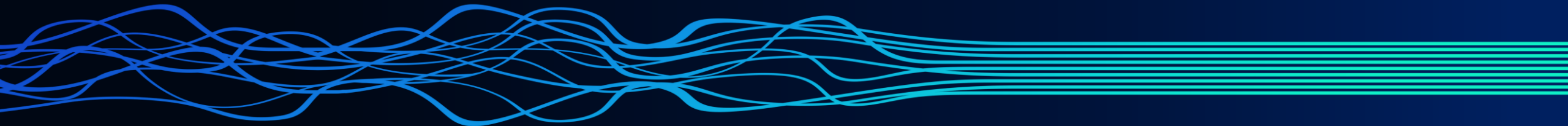
Emotions just
get in the way
of getting
things done

I can't always
tell what
others are
feeling

I can accurately
identify my own and
others' feelings

I empathize with
others and am
comfortable
handling and
acknowledging
negative emotion

I teach others how
to recognize and
handle emotional
issues and situations

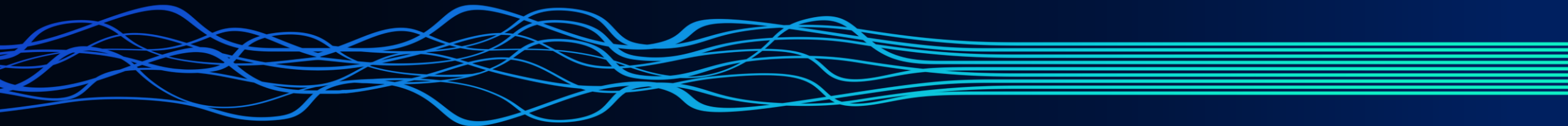


How many 3's or higher?

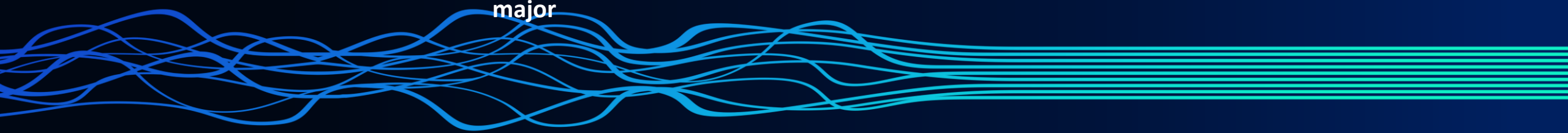
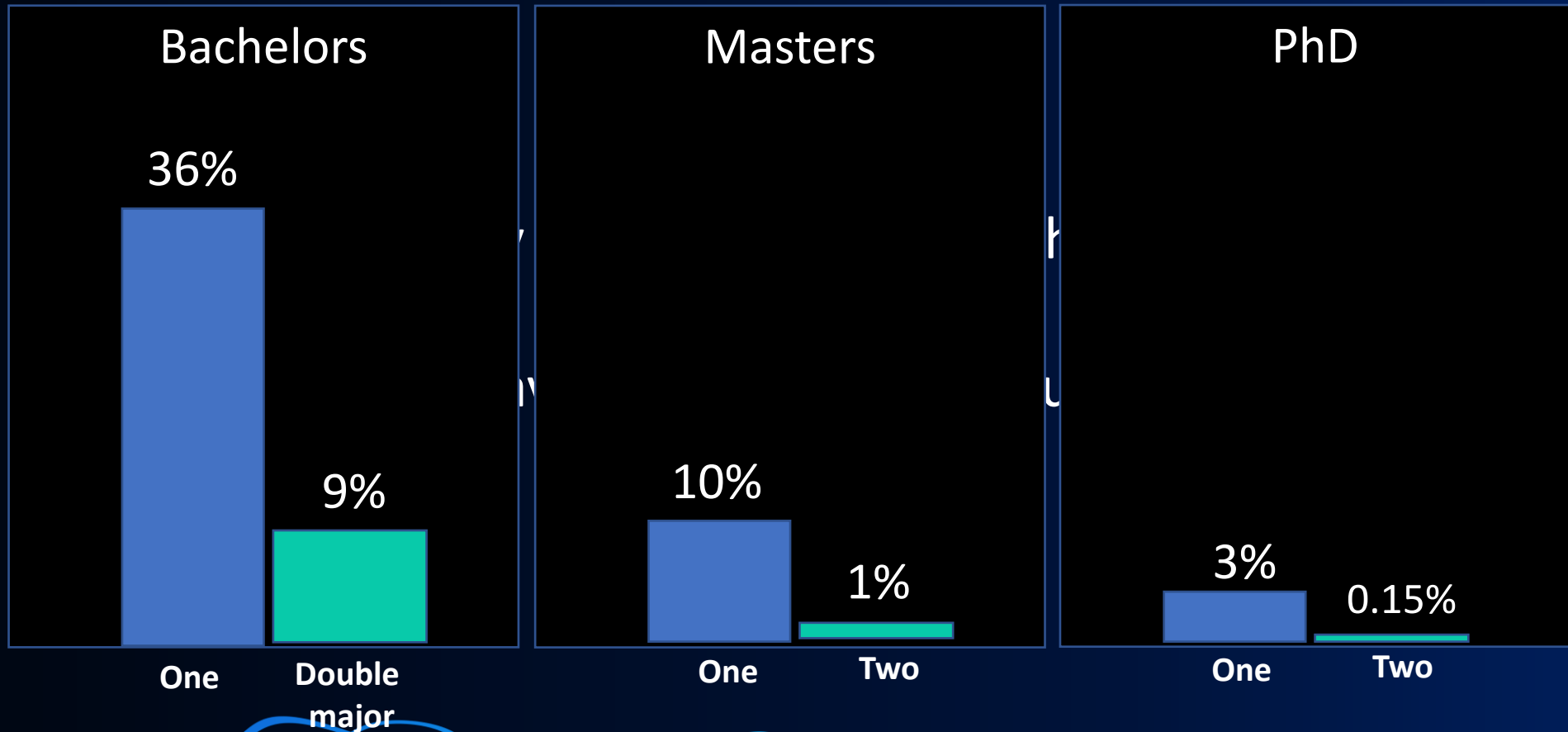
How many 5's?

More than half say they **score a 3** or higher in multiple areas.

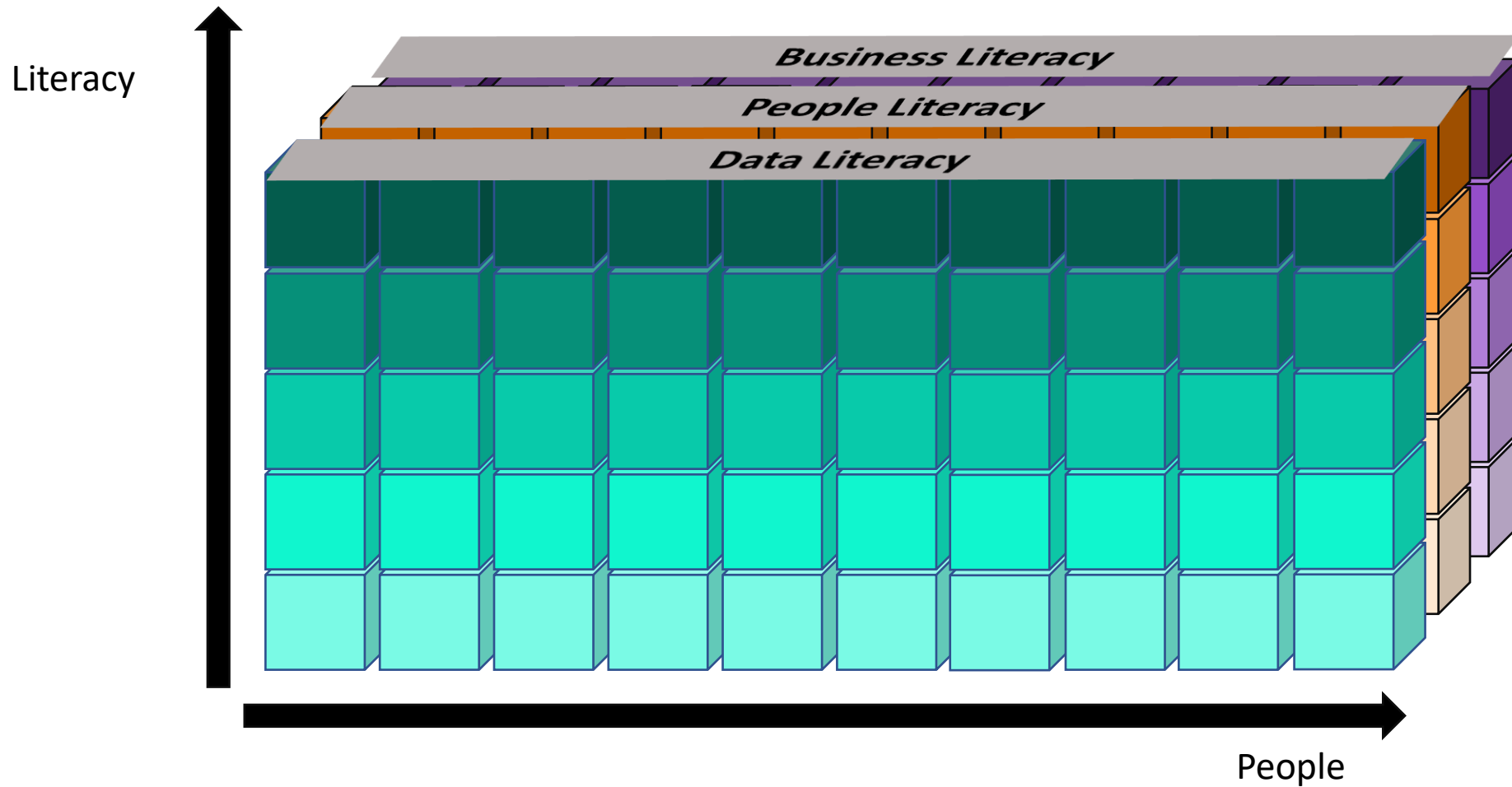
VERY few, if any, say they **score a 5** in multiple areas.



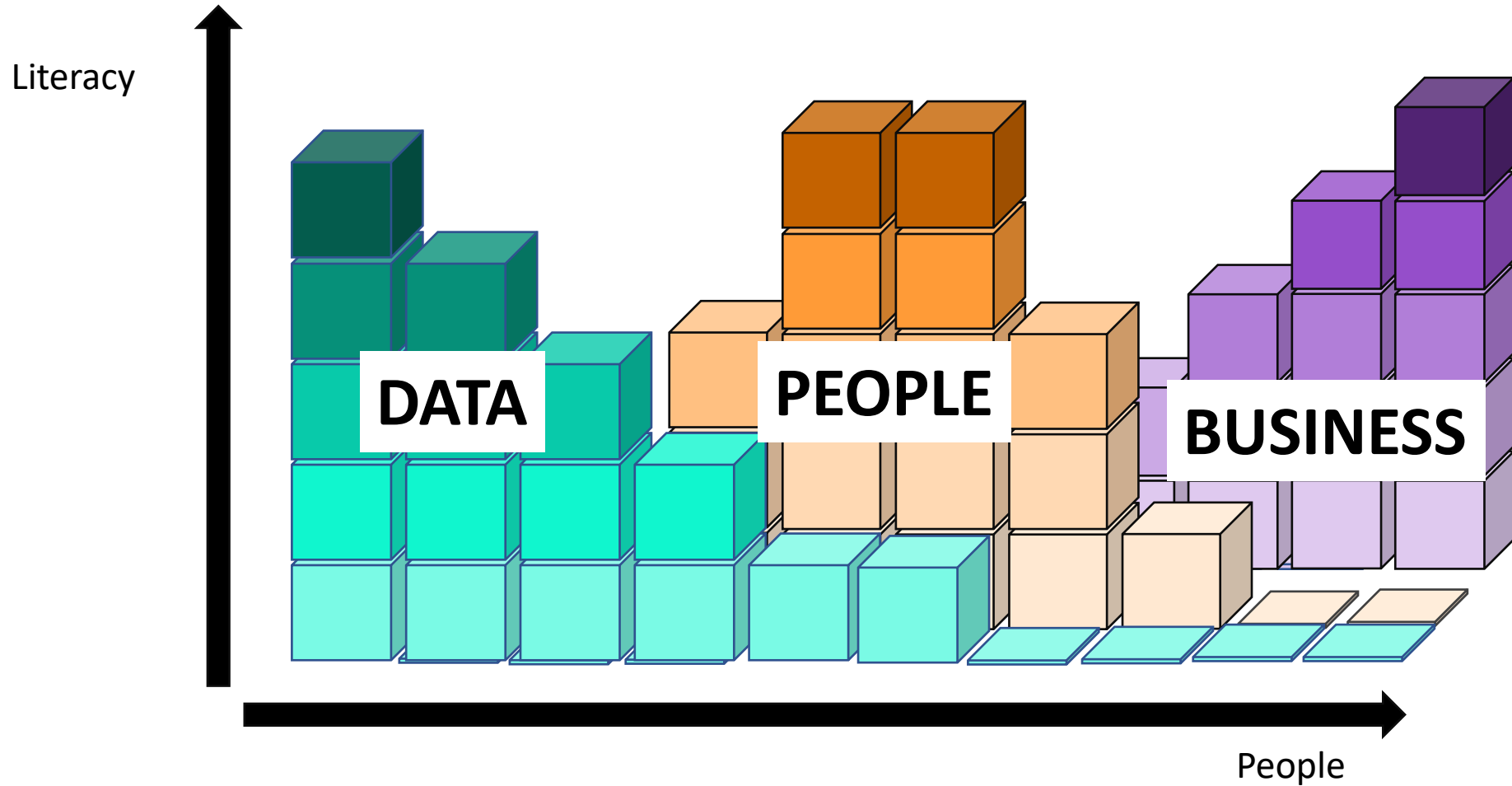
Very few have high expertise in more than one area



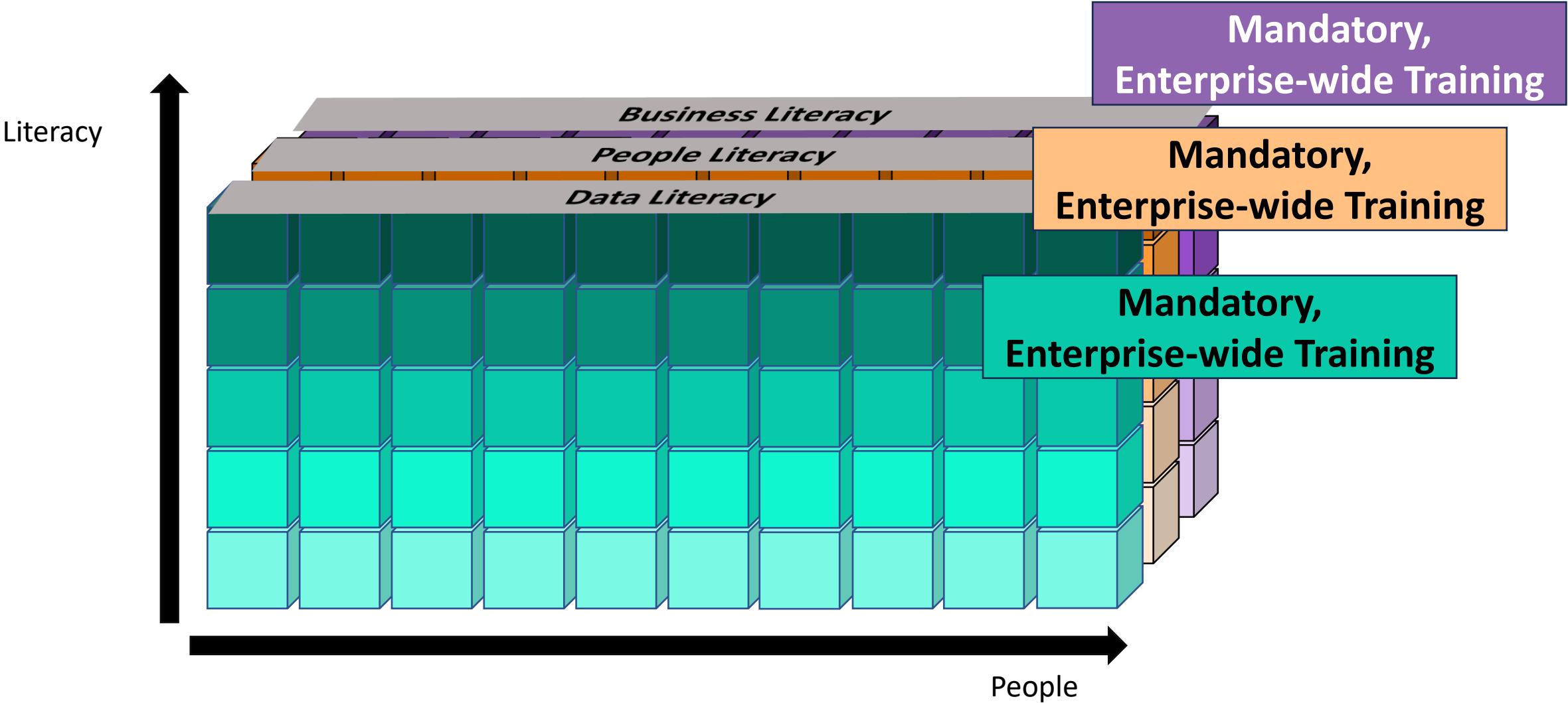
What we want: High Literacy



What we have

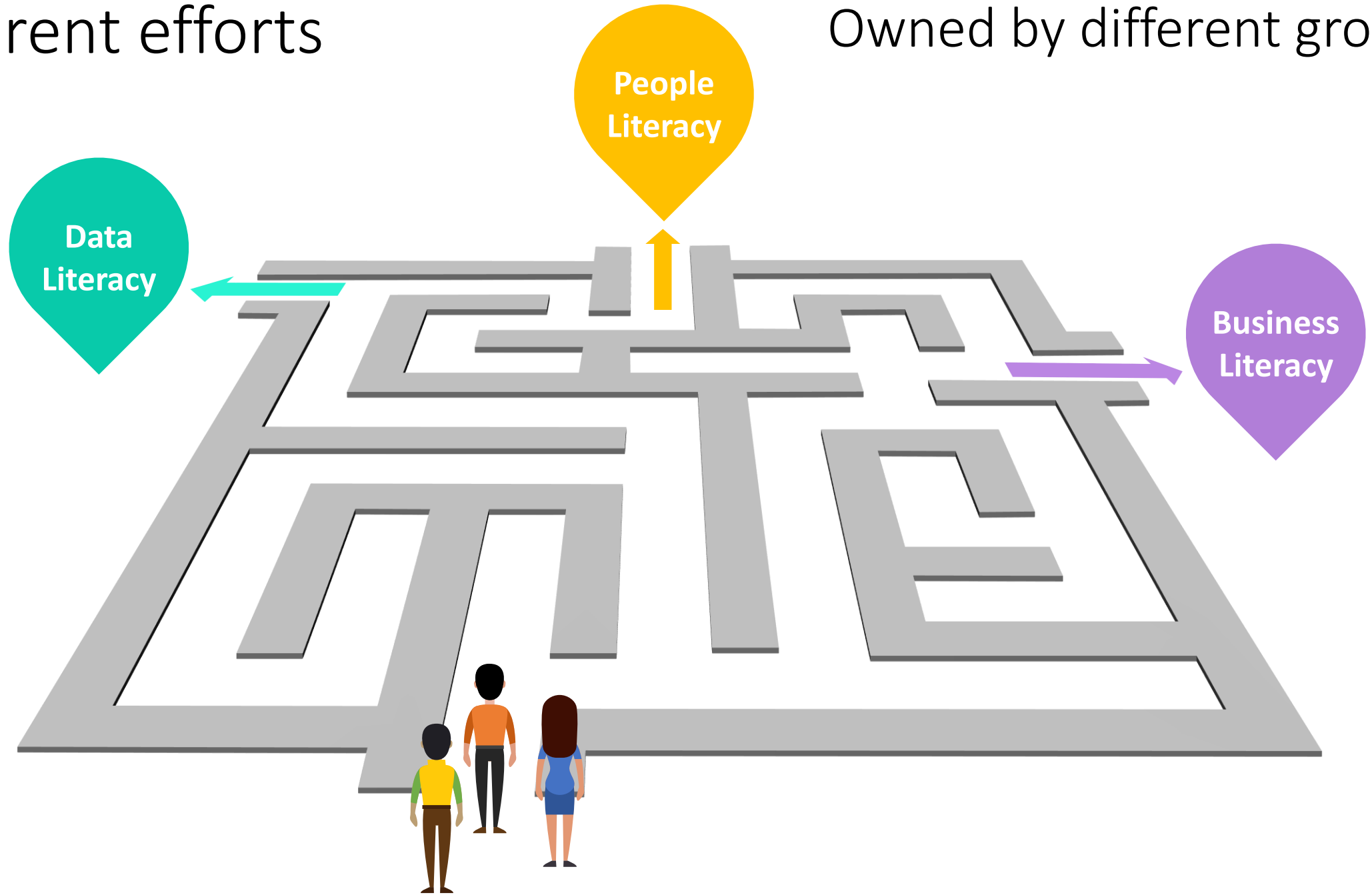


What Each Area Suggests



Different efforts

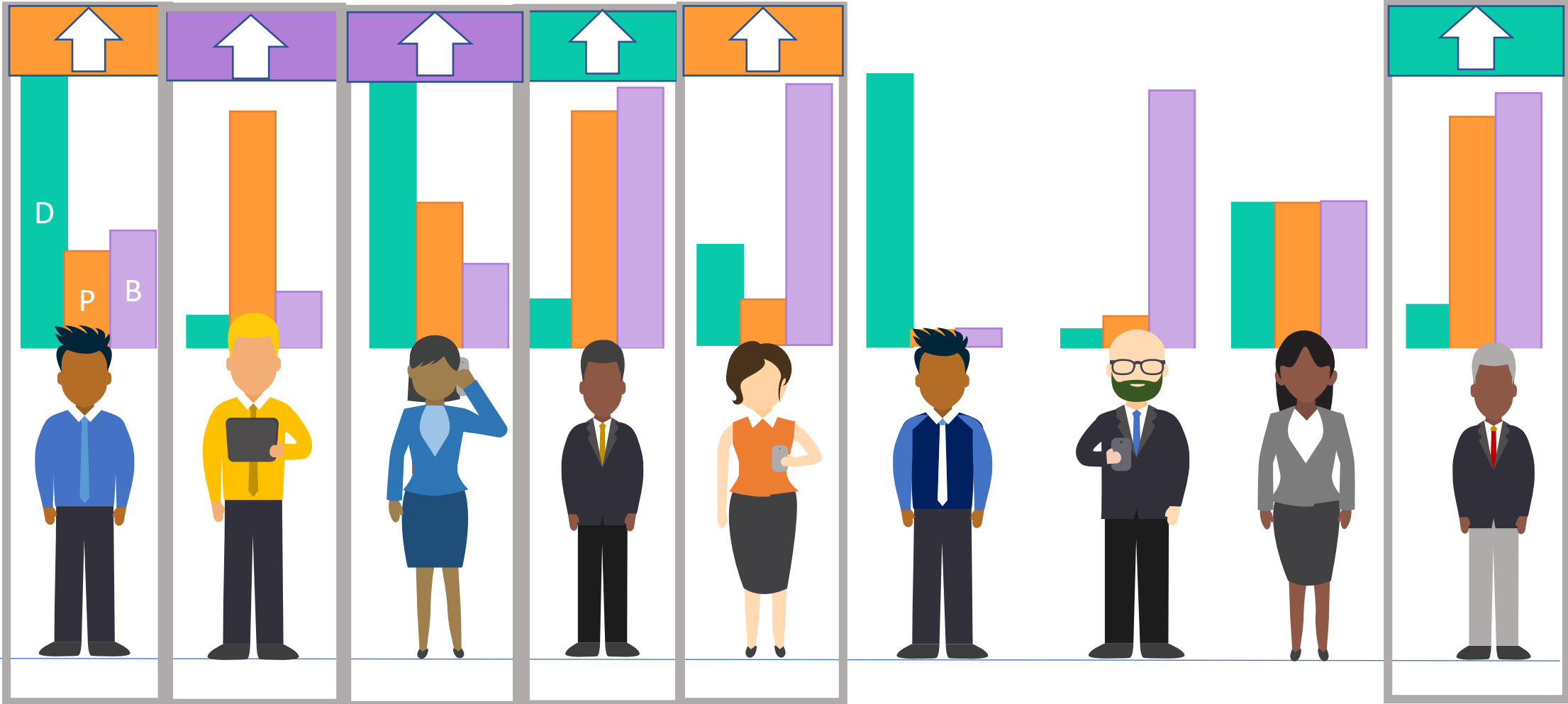
Owned by different groups



We all have different strengths

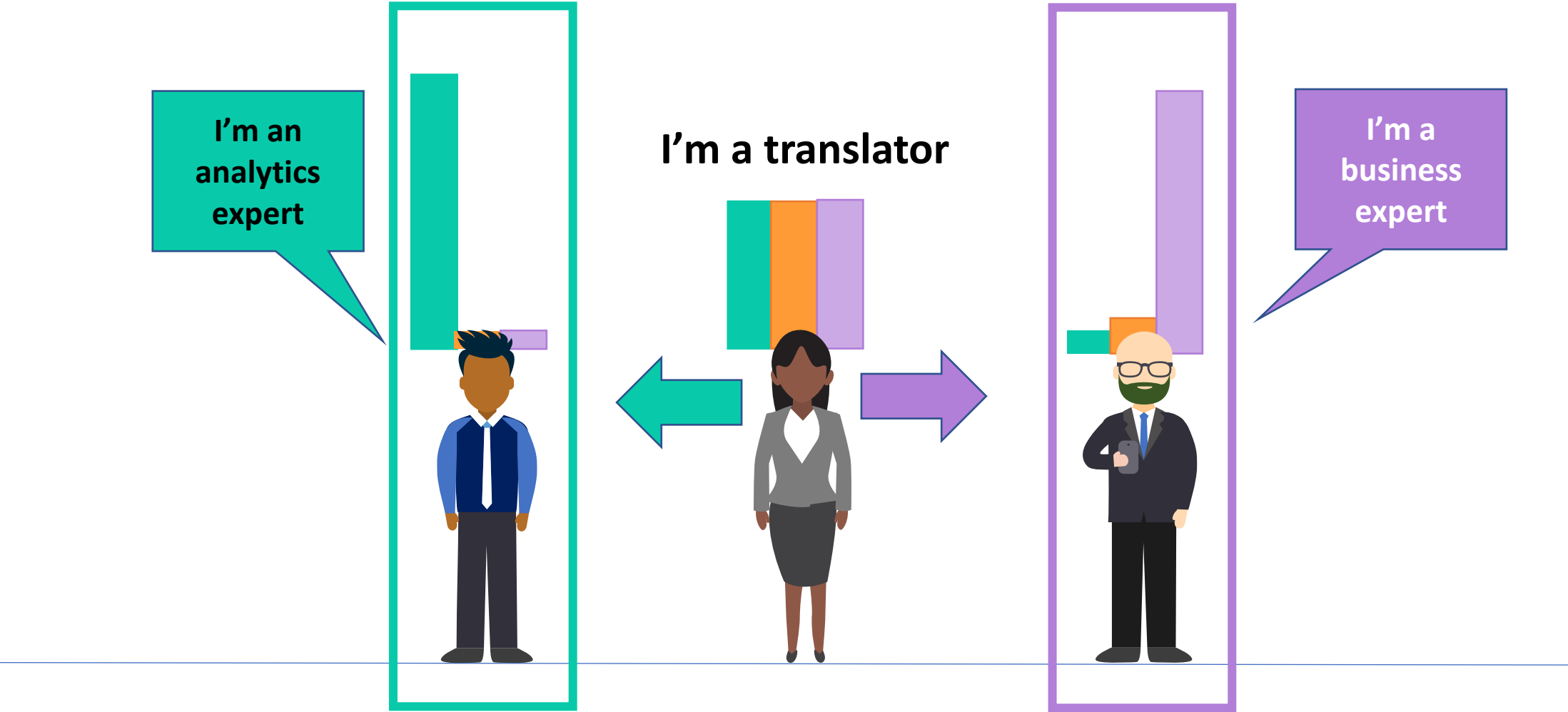


We all have different strengths



....and weaknesses

We all have different strengths



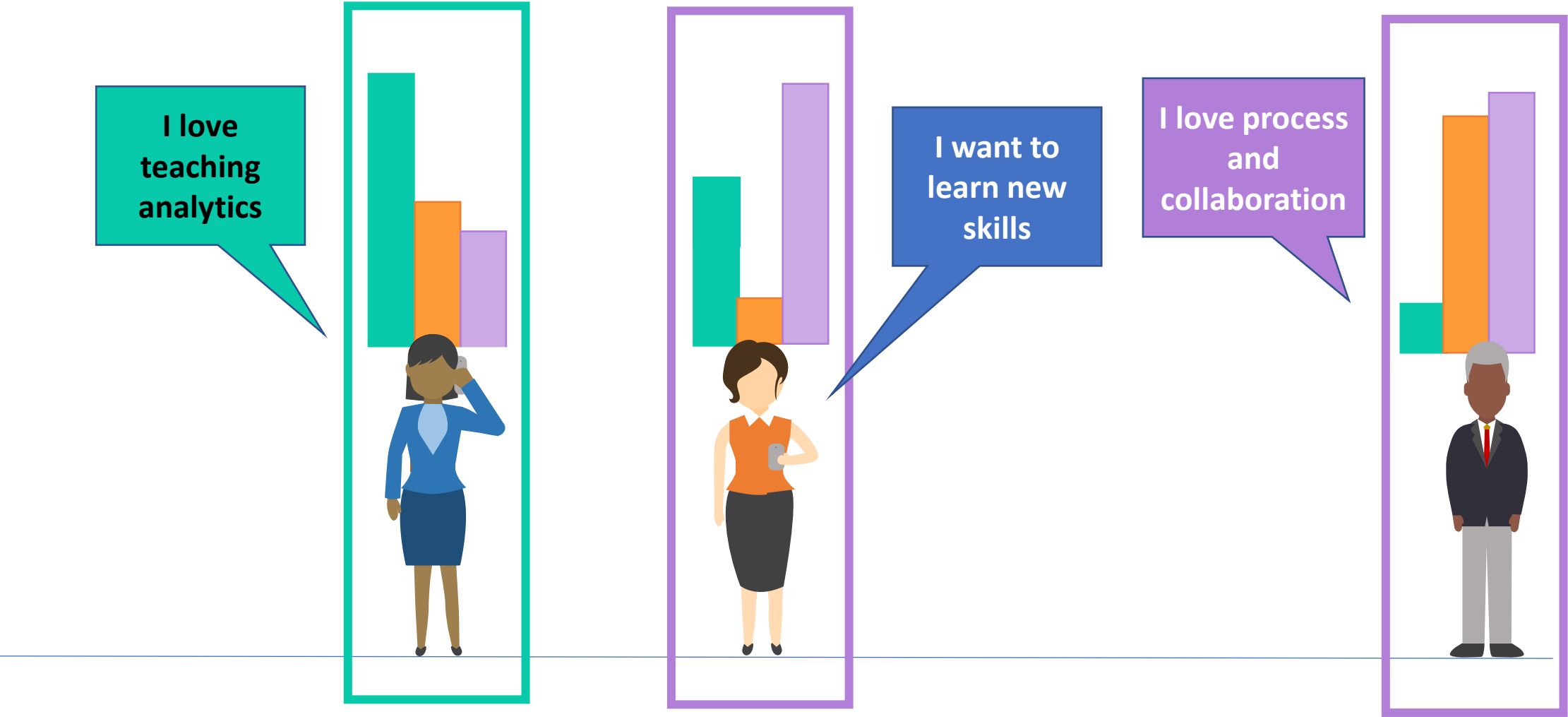
...for some that is translation

We all have different strengths



...and interests

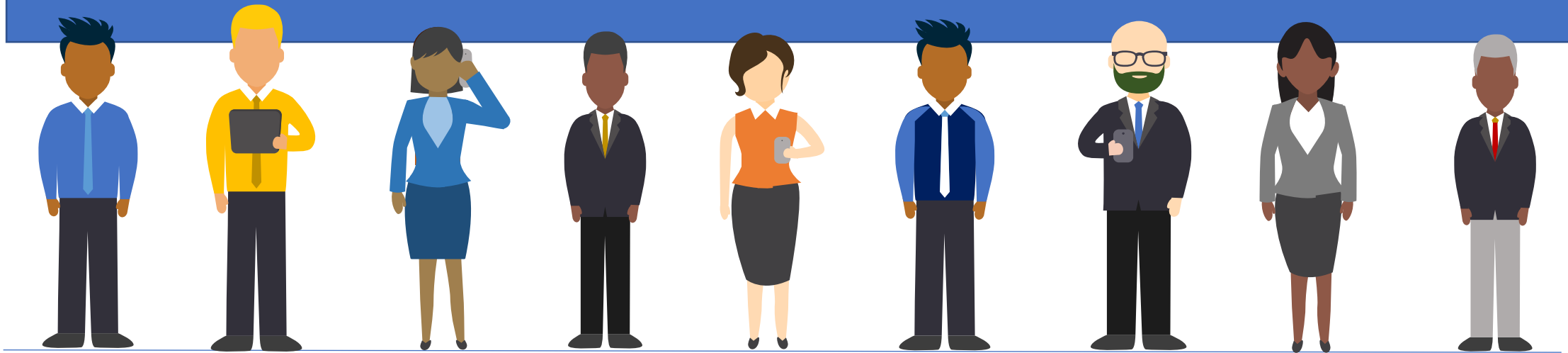
We all have different strengths



...for some it is tech-savvy end-users

Collectively, we have many strengths

Making aligned decisions
(with evidence and empathy)



...that we can leverage

If we think about data literacy

Separately

vs.

Within Context

1. Data literacy is a solitary solution

Maybe it belongs in a broader, integrated context

2. By itself, data literacy will make decisions data-driven

There are strategic and social requirements

3. Everyone can/must become highly literate

Realistically, people have varying strengths

4. We want non-experts to become more expert

Maybe there are combo-roles
(translators, tech-savvy biz., citizen developers)

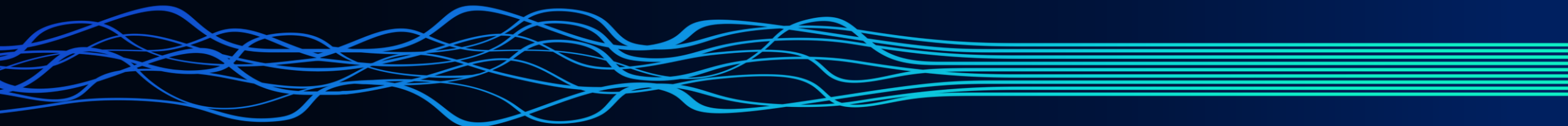
5. Creates a superior-inferior dynamic

Recognize strengths, fortify weaknesses



To consider:

- Can your data literacy efforts be put in context?
- Which departments/professions might collaborate?
- How does a holistic perspective shift your approach?
- What combination roles might be useful?



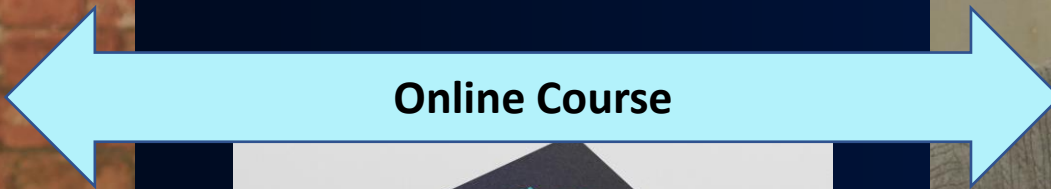
Hosted at Dataversity!



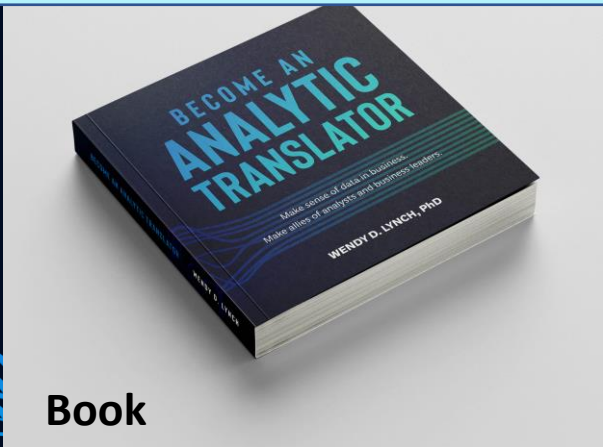
Lee Derz, MBA.



Anna Lyza, PhD.
LEAD DATA SCIENTIST



Online Course



Book

