

Lost in Translation

Data-driven
Intelligence

Why it Takes
More Than Literacy
to Make Data Meaningful

Business
Application

We have a problem

•87% of data science projects never make it into production

MAGAZINE SPRING 2021 ISSUE • RESEARCH FEATURE

Why So Many Data Science Projects Fail to

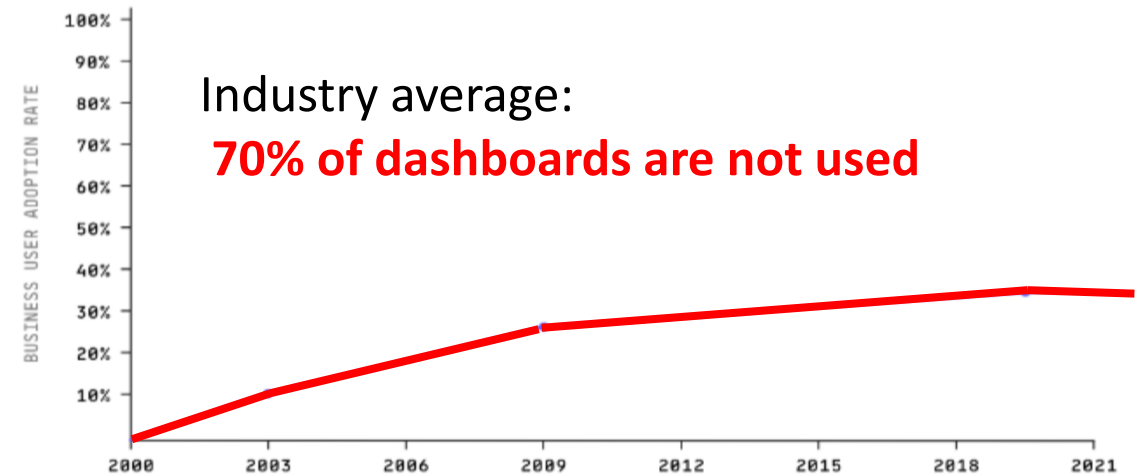
Analytics And Data Science

Companies Are Failing in Their Efforts to Become Data-Driven

by Randy Bean and Thomas H. Davenport

February 05, 2019

Despite 20 years of investment dashboard adoption falls flat



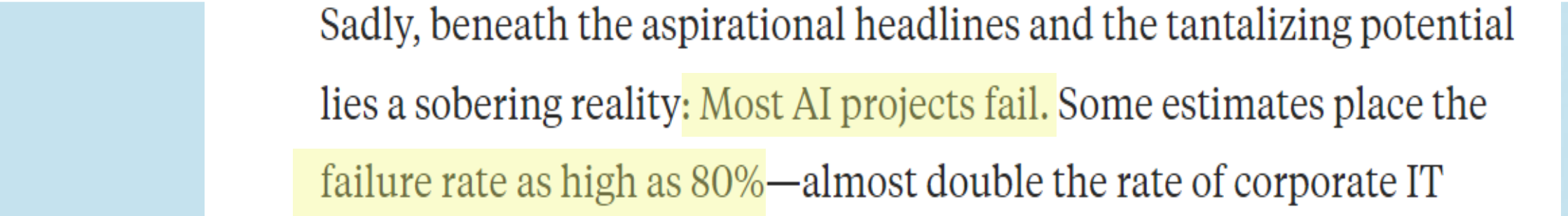
Source: A Decade of Data eBook

AI And Machine Learning

Keep Your AI Projects on Track

Most go off course. To make sure yours succeed, consider these five steps. by Iavor Bojinov

From the Magazine (November–December 2023)



Sadly, beneath the aspirational headlines and the tantalizing potential lies a sobering reality: **Most AI projects fail.** Some estimates place the failure rate as high as **80%**—almost double the rate of corporate IT project failures a decade ago.

Data. It's critical.

Data-driven
Intelligence

97% of leaders want to use data for better decisions to

- Reduce risk
- Make faster decisions
- Make more money
- Plan for the unexpected

93% of leaders know that the right business Intelligence can make or break their success.

In reality... it's overwhelming

- **73%** say their lack of trust in data has stopped them from making any decision at all.
- **89%** believe that the growing number of data sources has limited the success of their organization.
- **86%** say the amount of data is making their professional lives more complicated

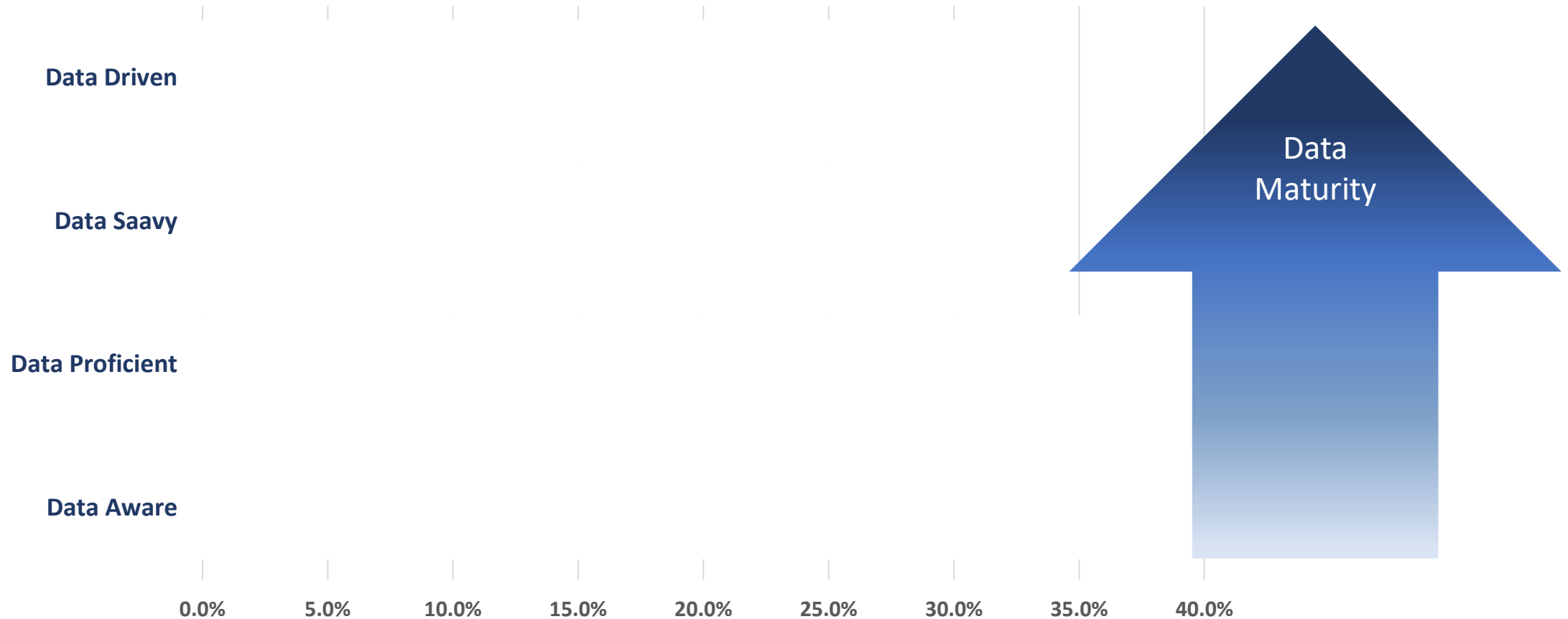
Or, discounted

The background of the slide features a silhouette of a person in a business suit carrying a briefcase, standing on a dark, rounded hill. In the distance, a city skyline with various skyscrapers is visible against a light, hazy sky. The overall color palette is monochromatic, using shades of blue and teal.

- **78%** of leaders say decisions are being made ahead of time and then data are used to justify them
- **74%** of employees believe that the opinions of the top paid executives are valued more than data.
- **70%** of leaders wish an automated robot would just make decisions for them.

While most companies focus on data, only about 16% are 'data-driven'

What is the data maturity level of your organization?





**Data
Advantage**

How we get there

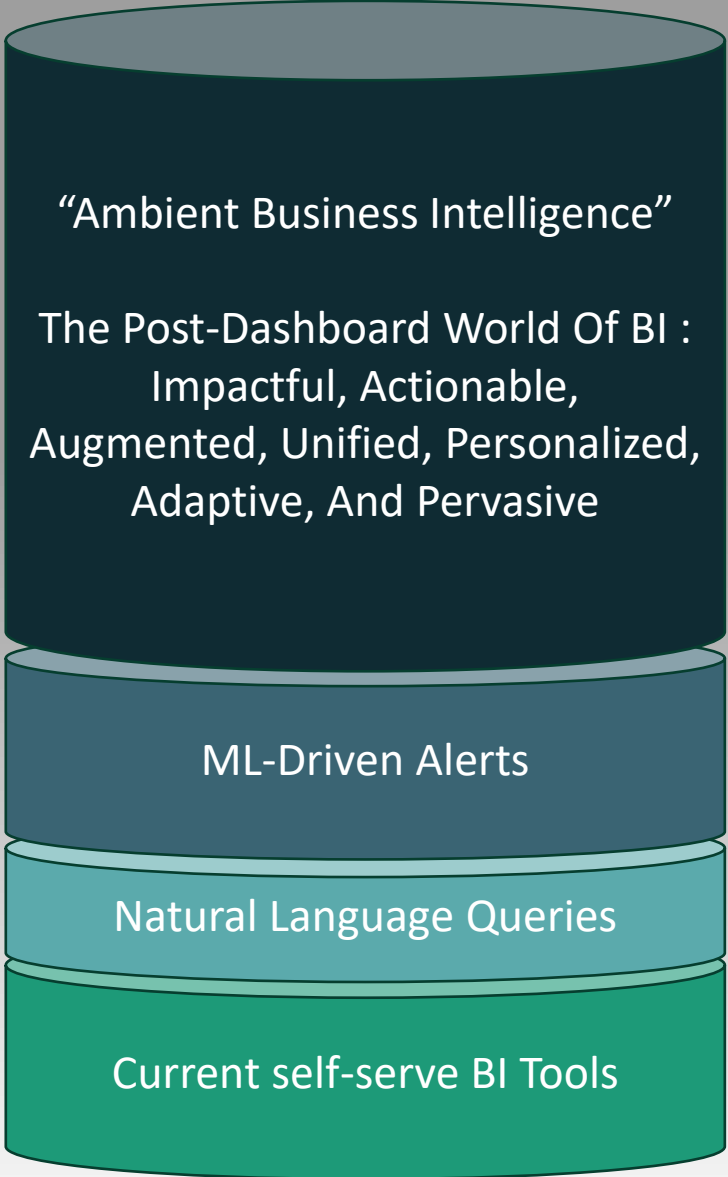
How do we enable data-driven decisions?



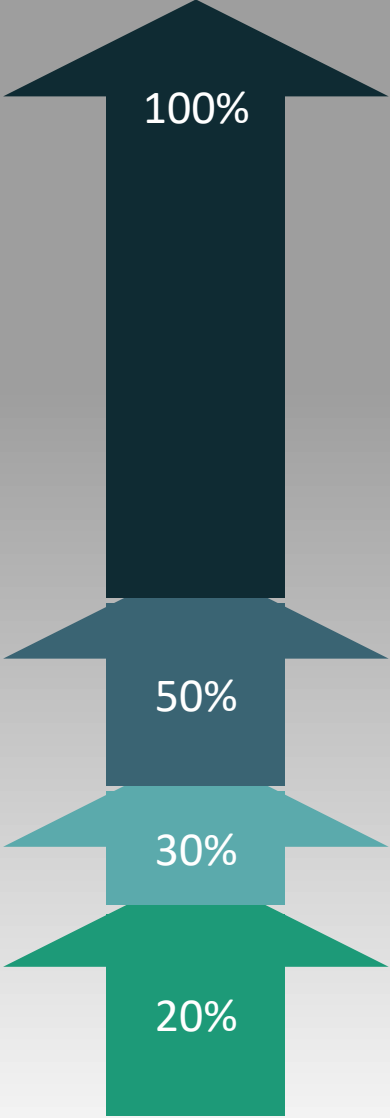
AI-enabled data intelligence

Access to data-driven business intelligence

Forrester. July 2024: Bringing data insights to the other 80% of business intelligence users



Percent with Access



How do we enable data-driven decisions?



AI-enabled data intelligence

Great idea... but when?

And if they don't trust data now...

How do we enable data-driven decisions?



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Decade Of Investment In Big Data And AI Yield Mixed Results

Randy Bean Contributor @

Randy Bean is a noted Senior Advisor, Author, Speaker, Founder, & CEO.

A decade of transformation. What lies ahead?

Looking back a decade to when this survey was first launched, Big Data and AI were nascent capabilities which received minimal investment. Firms had begun to think about what it would mean to be data-driven, but few had developed formalized programs and articulated a corporate commitment. The function of a Chief Data Officer was non-existent, except within a small handful of companies. Today, Big Data and AI are mainstream, but there is still much to do.

<u>Principle Challenge to Becoming Data-Driven</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
People Business Process Culture	80.9%	92.5%	90.9%	92.2%
Technology	19.1%	7.5%	9.1%	7.8%

The Literacy Tower

Conventional Wisdom:

We just need to get more people to the top!

Apply

Interpret

Analyze

Manipulate

Understand

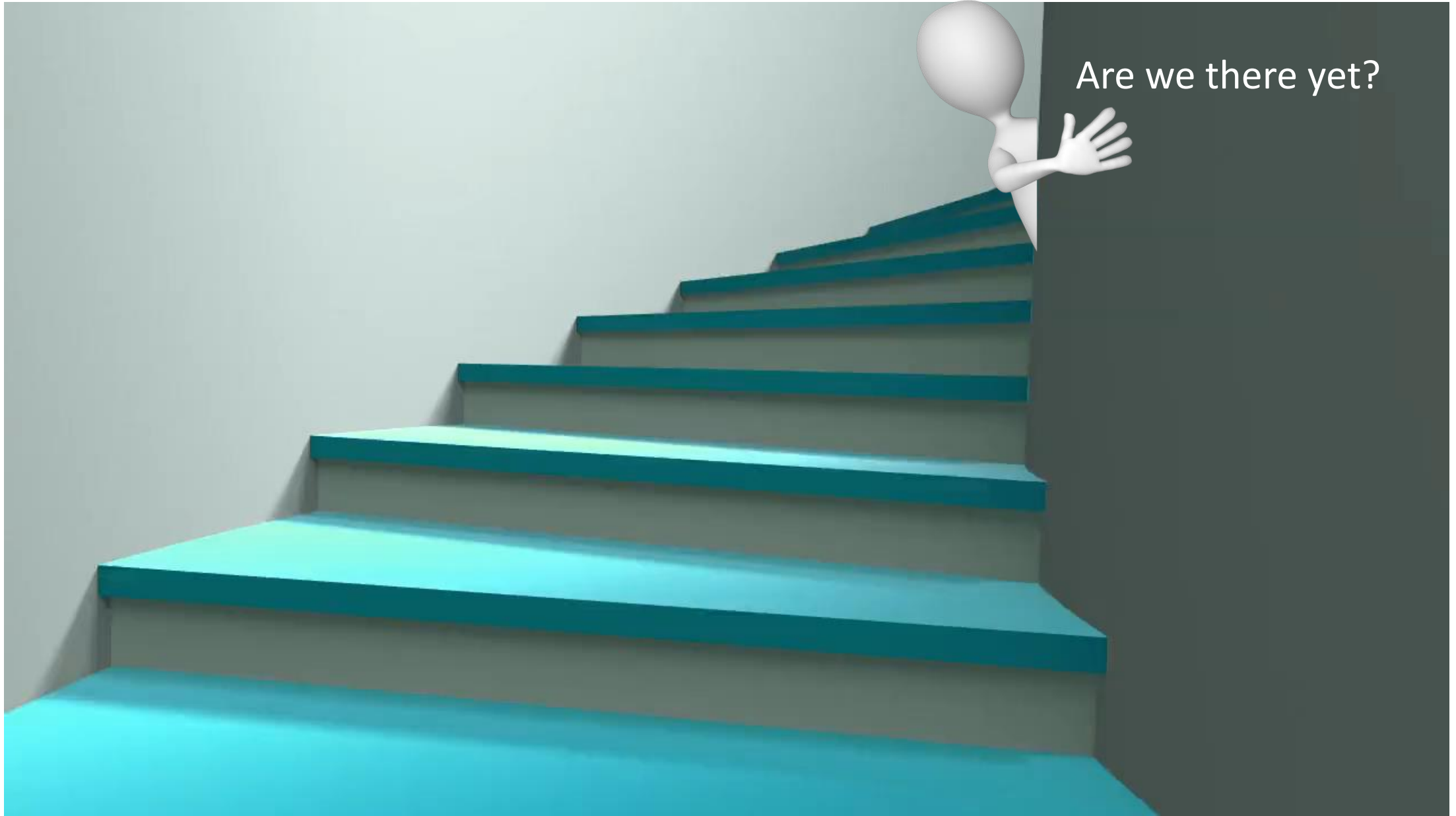
Select

Aware



Data-driven





Are we there yet?

How long does it take?

Apply

Convert those results into clear evidence for a decision.

Interpret

Understand implications, significance, accuracy, weights, bias

Analyze

Run descriptives, comparisons, basic Stats. Models?

Manipulate

Sort, clean, order, join, segment.

Understand

Know what they are looking at. Basic descriptives, comparisons.

Select

What metric is called, what to ask for, what other related metrics are needed

Aware

What is available. Limitations.

Characteristics. Format. Frequency.

Definitions

Data-driven



Applied Data Science Program: Leveraging Effective Decision-

12 Weeks • Live



Step 2: Polish up on your math skills

If you are coming from a quantitative background, data science should be an easy transition. Before analyzing data with high-tech tools, you need to get to the foundation of data analysis, which starts with plotting data points on graphs along the X and Y axes and finding correlations and trends between different variables.

To make sure you can write efficient code and draw accurate conclusions, here are some recommended math concepts to master:

- Statistical methods and probability theory
- Probability distributions
- Multivariable calculus

How long does it take to become a data scientist?

As we outline in our [data science FAQs](#), on average, to a person with no prior coding experience and/or mathematical background, it takes around 7 to 12 months of intensive studies to become an entry-level data scientist. However, there are so many skills in data science that you can keep learning for your entire career.

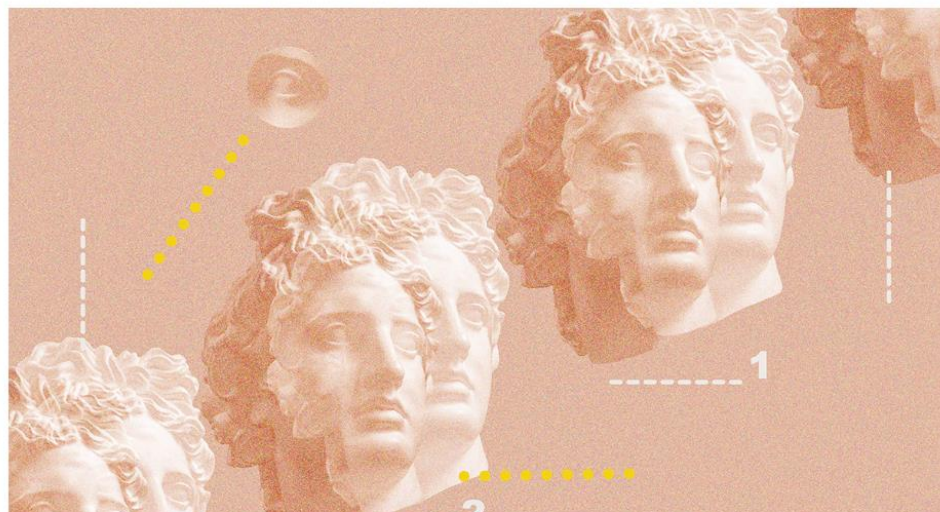




The Risks of Empowering “Citizen Data Scientists”

by Reid Blackman and Tamara Sipes

December 13, 2022



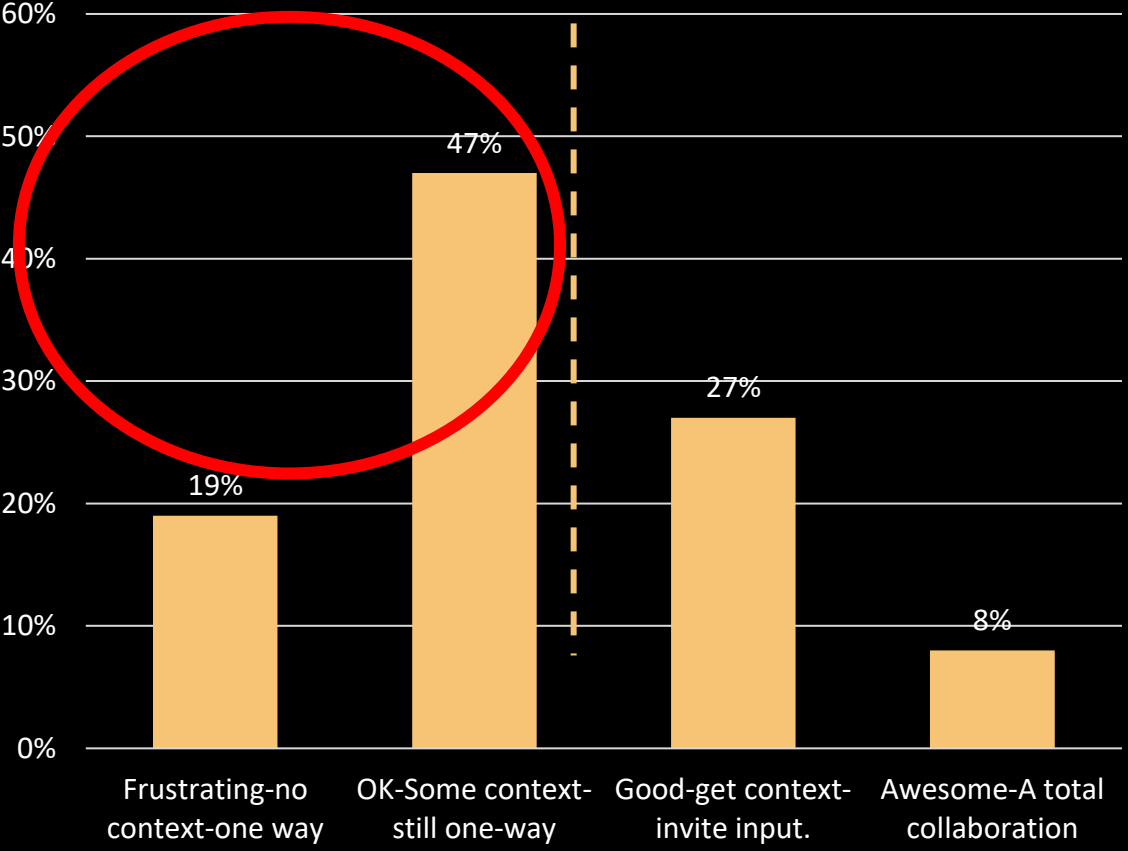
The Risks of Democratizing AI in Your Organization

Putting your AI strategy in the hands of novices comes with at least three risks.

Data scientists: Still the sexiest job - if anyone would just listen to them

Only about one in five machine learning models developed by data scientists make it to actual deployment, survey finds. What's the problem?

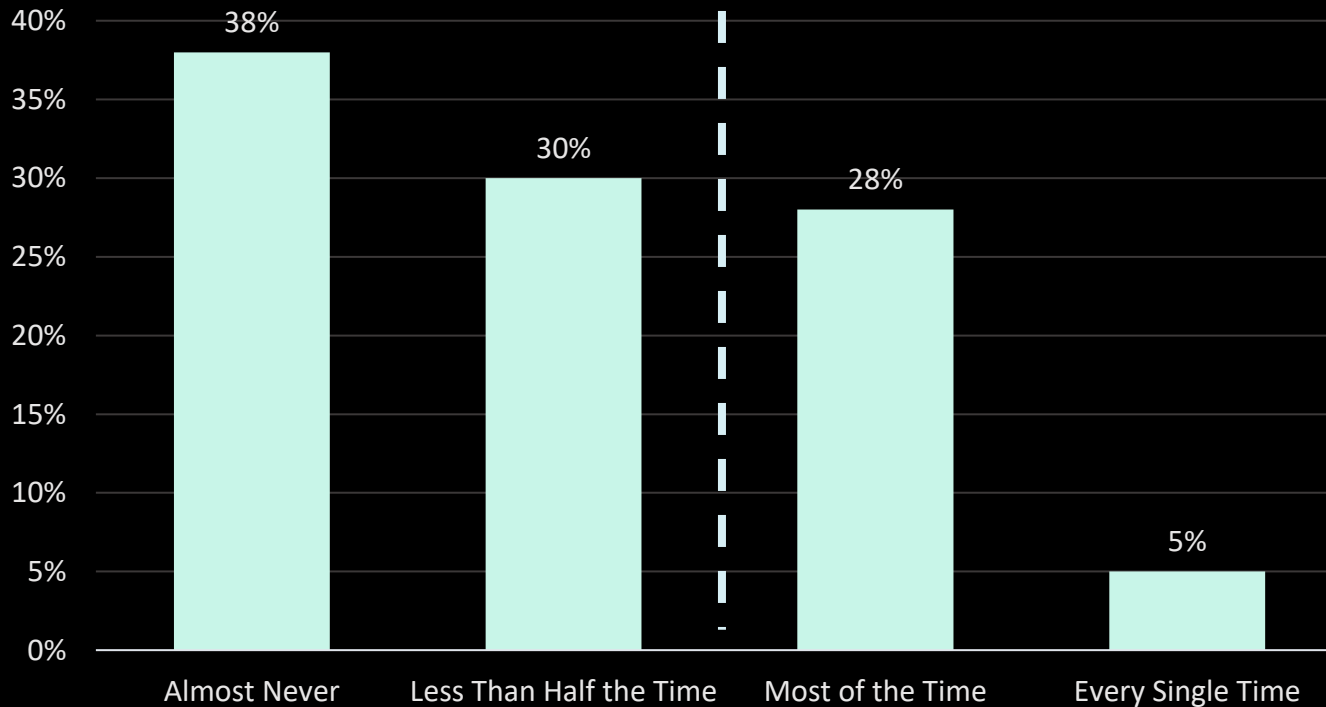
Analytic team describes requests from business. Is the process collaborative, do they want your opinion?



“They give me a request with little or no context. They don’t ask for my input.”

When you get a request...

How often are you able to provide the exact answer they want, the first time, with no rework?



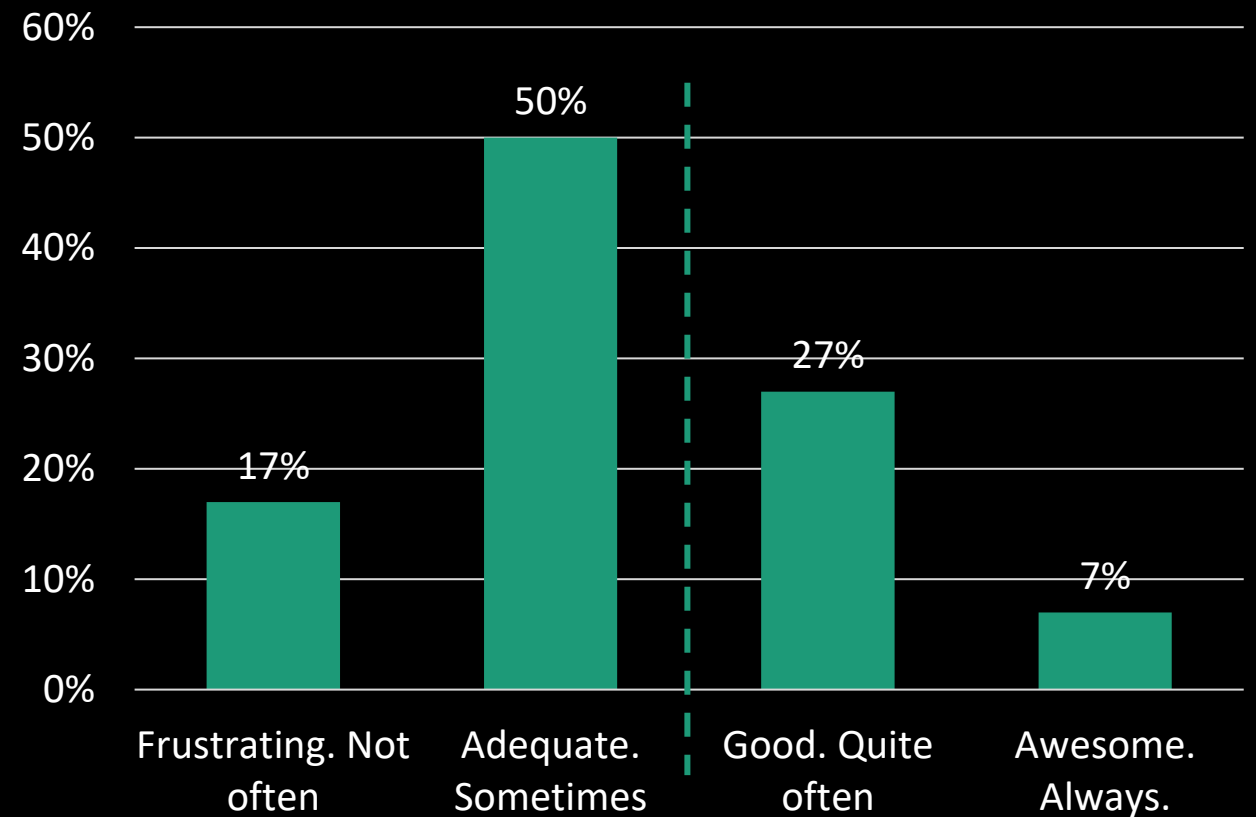
"I answered 'most of the time.'

Because, technically, I did give them exactly what they asked for.

Even though it wasn't what they wanted."

“They don’t give me what I need in a way I can understand....”

Business describes interactions with data analytic teams. How often you get (and understand) the exact answers you need.



How do we enable data-driven decisions?



AI-enabled data intelligence

Great idea... but when?

And if they don't trust data now...



Wide-spread data literacy
adoption

How much? How long?

And, if trained data experts are having this
much trouble.....

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When Translations Arise Between Data Scientists and Business Stakeholders, Revisiting Metrics

“Success comes from both sides caring enough, and working hard enough, to express their quantitative goals and results using metrics that are intelligible to their teammates.”

Every time a data scientist hands off a report with the outcome of an experiment in terms of a quantitative metric with no clear translation into a business outcome, she is the lazy writer asking her reader, the business stakeholder, to do an awful lot of work.

Every time a business stakeholder asks for ‘business value’ from a data scientist without doing the hard work of grappling with what, quantifiably, that’s supposed to mean, he is the lazy writer asking his reader, the data scientist, to clean up his disorganized thoughts.

Completely different success pathways



Data-driven

Business-driven

Completely different success pathways

Accuracy,
Integrity,
Innovation

Data-driven

Maximize
Business
Value

Business-driven



The Literacy Tower

**Conventional Wisdom:
We just need to get more
people to the top!**

Investor/Owner perspectives

Business projections

Product Pathways

Financial Metrics

Value Creation

Customer Goals

Business Goals

Business-driven



How long will it take?

Communicate investor/owner concerns

Project future earnings/liabilities

Prioritize product portfolio, product design

Know financial performance (margins)

Identify supply chain, potential weaknesses

Understand customer landscape, concerns

Aware of competing business priorities



Business-driven

Business literate data professionals



Investment/Growth prospects
Practicalities



Can we train both sides well enough to bridge the gap?

Data literate business professionals



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Two-way literacy

Another great idea.
But think of your most resistant executive.....

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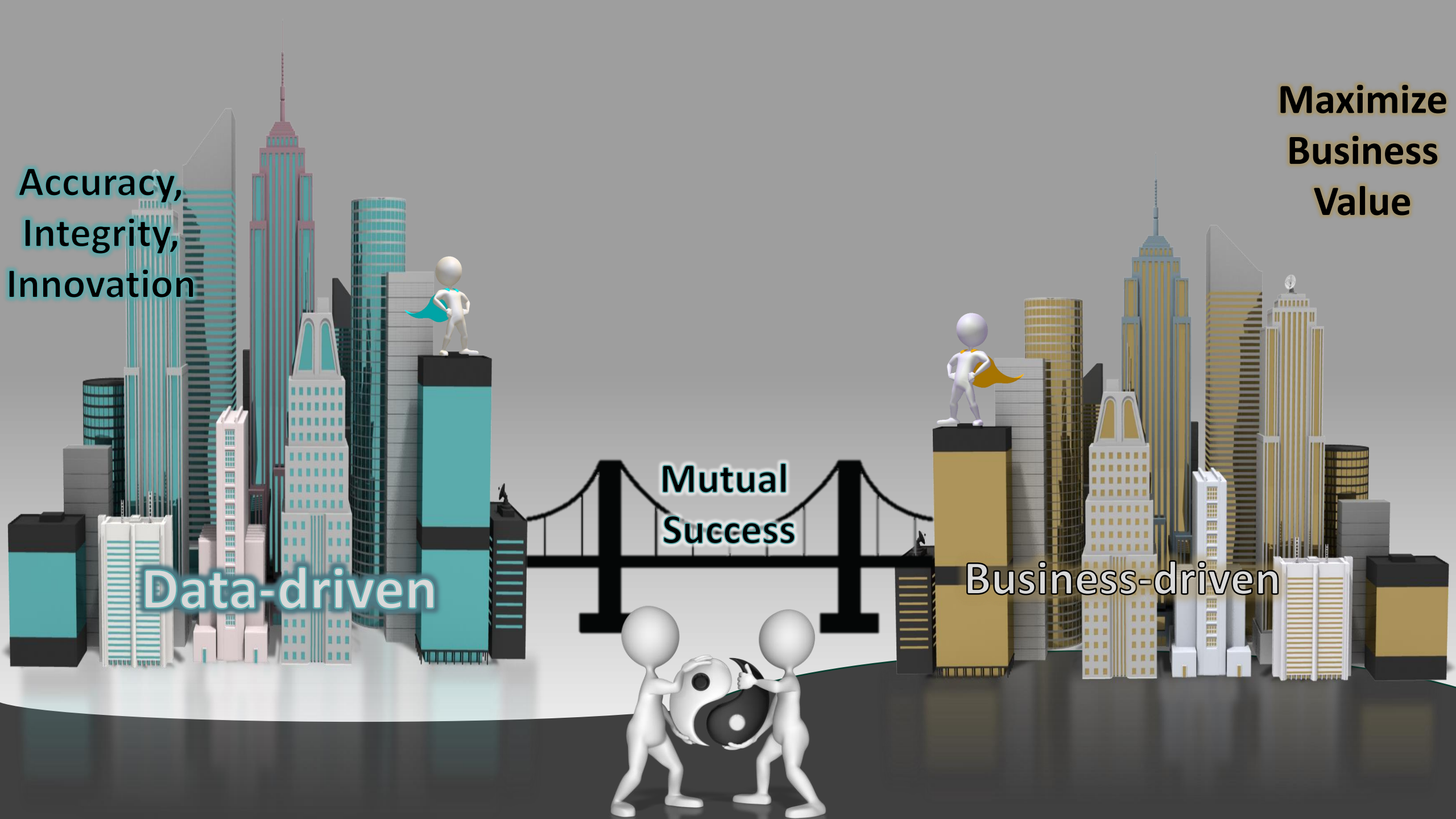
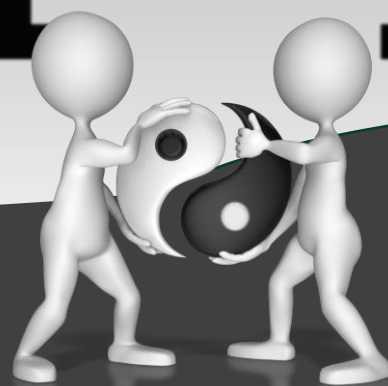
Accuracy,
Integrity,
Innovation

Maximize
Business
Value

Data-driven

Mutual
Success

Business-driven



Apply

Interpret

Analyze

Manipulate

Data-driven

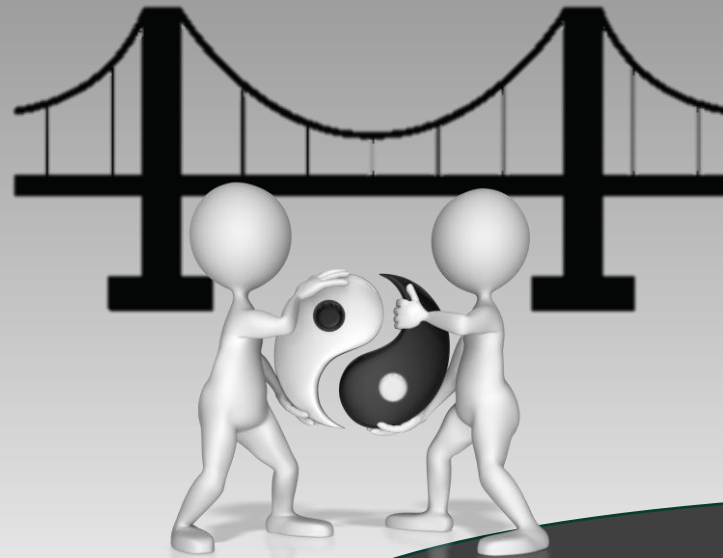
Investor/Owner perspectives

Business projections

Product Pathways

Financial Metrics

Business-driven



Bridge: Knowledge

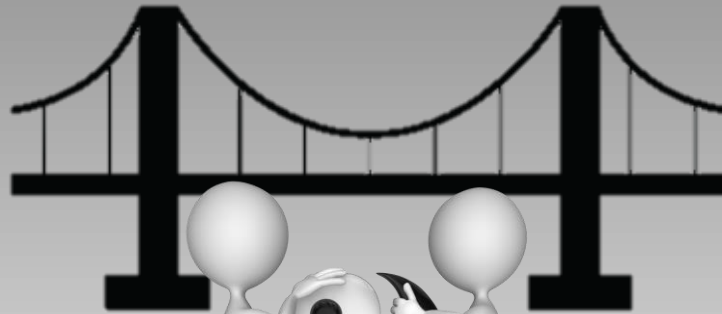
Accuracy,
Integrity,
Innovation

Data People Value Business Objectives

Maximize
Business
Value

Businesspeople Value Data Objectives

Data-driven



Business-driven



Bridge: Values

Understand data terminology

Explain business priorities

Translate requirements

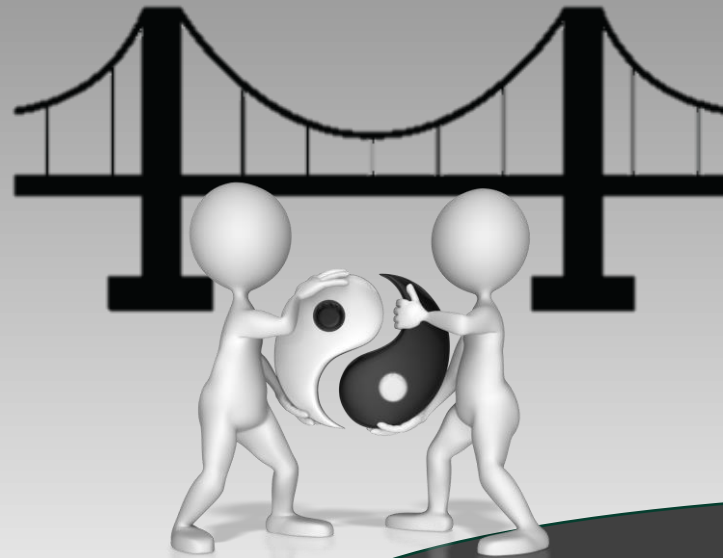
Interpret context of requests

Understand business terminology

Explain complex analytics and data

Translate mixed findings

Interpret context of results



Bridge: Communication

Empathy and understanding

Build connection

Acknowledge frustrations

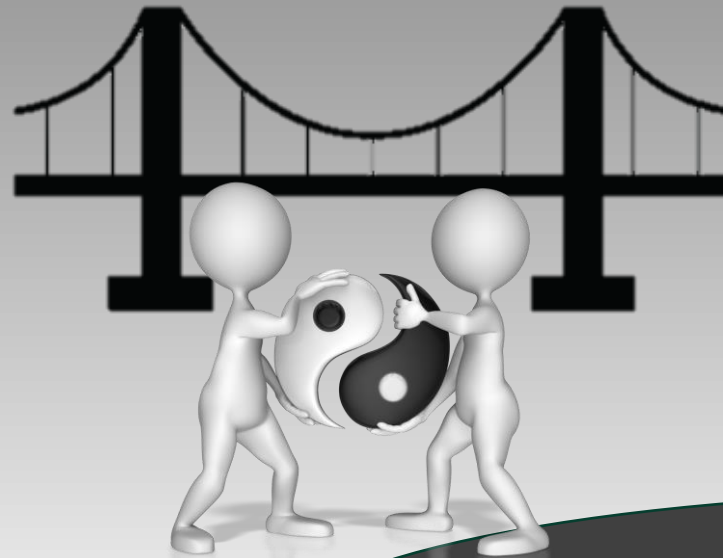
Demonstrate appreciation

Empathy and understanding

Build connection

Acknowledge frustrations

Demonstrate appreciation



Bridge: Allegiance

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Bridge with designated
translator

An option worth considering?

Achieving the best of both

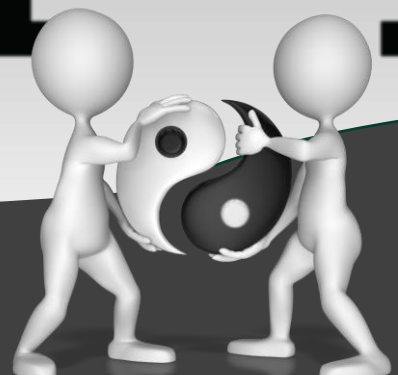
Maximize
Business
Value

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Data-driven

Business-driven

Mutual
Success



Now available at Dataversity!

Training

Become an Analytic Translator

Coming soon: Communication for
data professionals



analytic-**translator**
.com