APPLIED DATA STORYTELLING TECHNIQUES IN POWER BI

Anders Mayland Larsen
Data Analyst @ Pandora
Behavioral Economist

DATA SATURDAYS

twoday kapacity

Fellowmind

CatMan Solution

redgate

STRUCTURED CONCEPTS.

delegate

ARROW

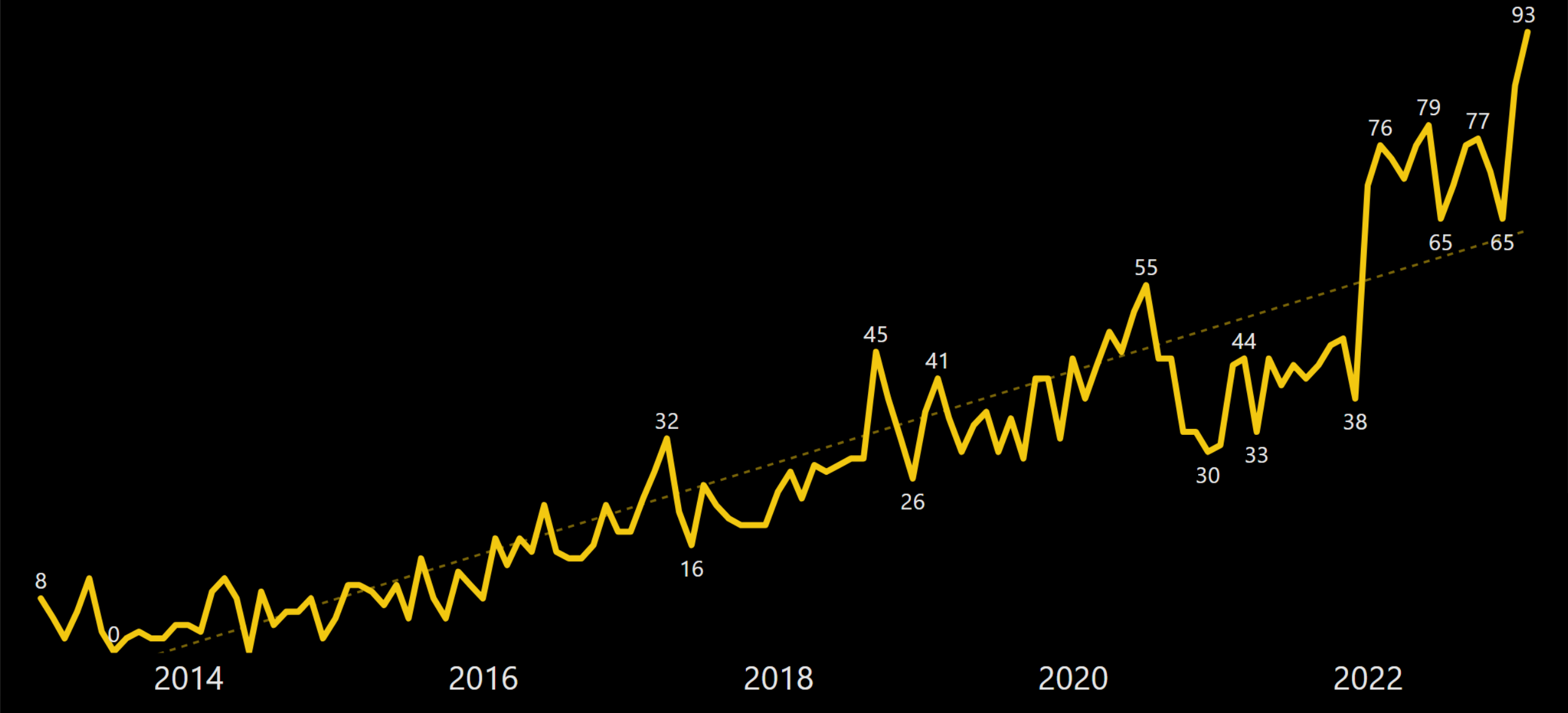
BIWISE
BASED ON INTELLIGENCE

INSPARI

PANDORA

Classification: Pandora Internal

The **popularity** of the term "**Data Storytelling**" on Google has increased by **191 %** since **December 2019**.



Data Storytelling Definition

"Data storytelling is the concept of building a compelling narrative based on complex data and analytics that help tell your story and influence and inform a particular audience."

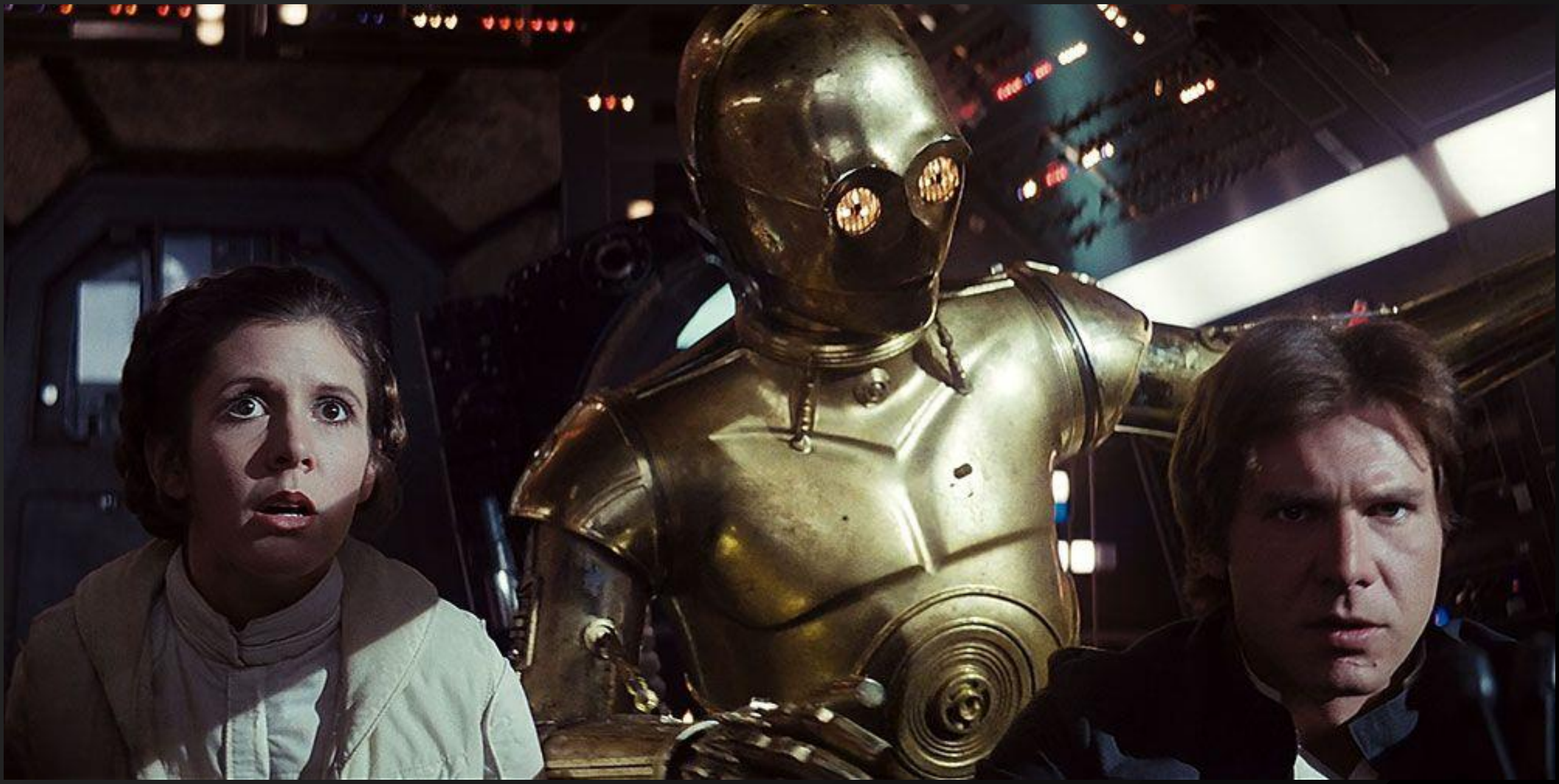
Source: https://powerbi.microsoft.com/en-us/data-storytelling/

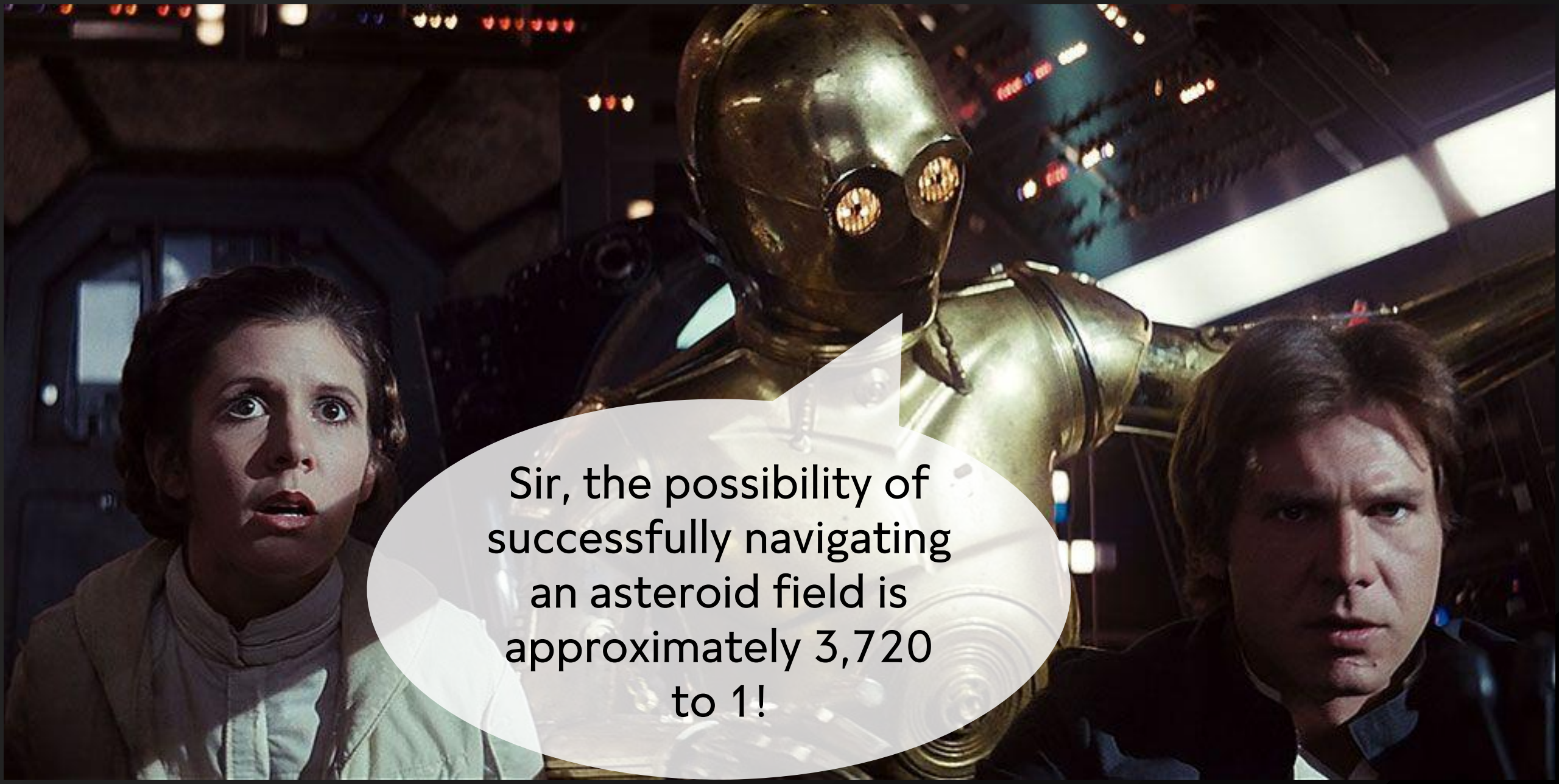
Data Storytelling Definition #2

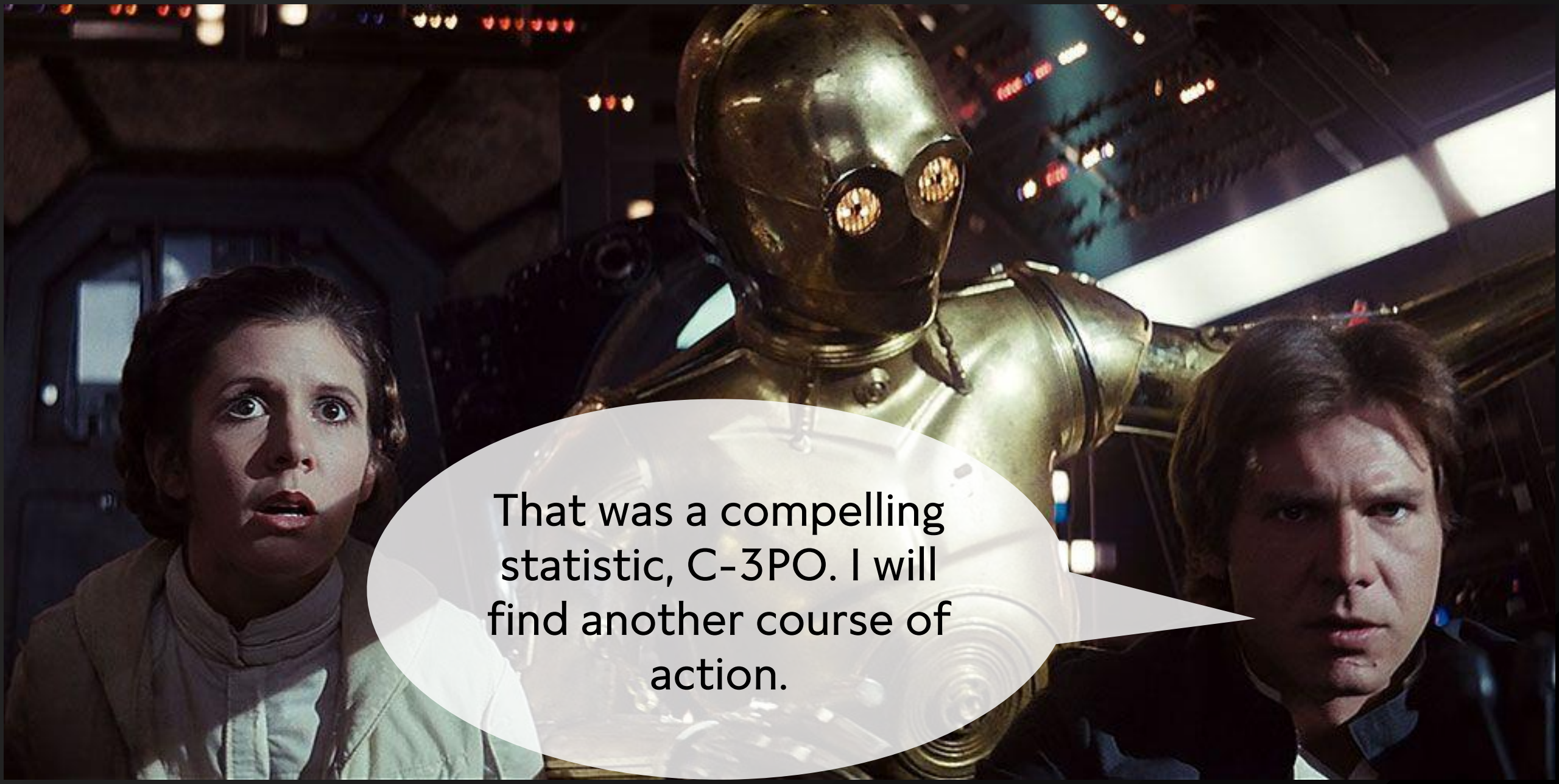
"Data storytelling is the concept of building a ~~compelling~~ narrative based on ~~complex~~ data ~~and analytics~~ that ~~informs~~ communicates insights to a particular audience."

Data Storytelling Definition #2

"Data storytelling is the concept of building a narrative based on data that communicates insights to a particular audience."




Sir, the possibility of successfully navigating an asteroid field is approximately 3,720 to 1!


That was a compelling statistic, C-3PO. I will find another course of action.

Never tell me the odds!

Where did C-3PO fail?

C-3PO

Where did C-3PO fail?

C-3PO

1. Cherry-picking Insights

Where did C-3PO fail?

C-3PO

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2. Biased data

Where did C-3PO fail?

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1. Cherry-picking Insights
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3. Lack of narrative

Where did C-3PO fail?

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4. Lack of visual anchor

Where did C-3PO fail?

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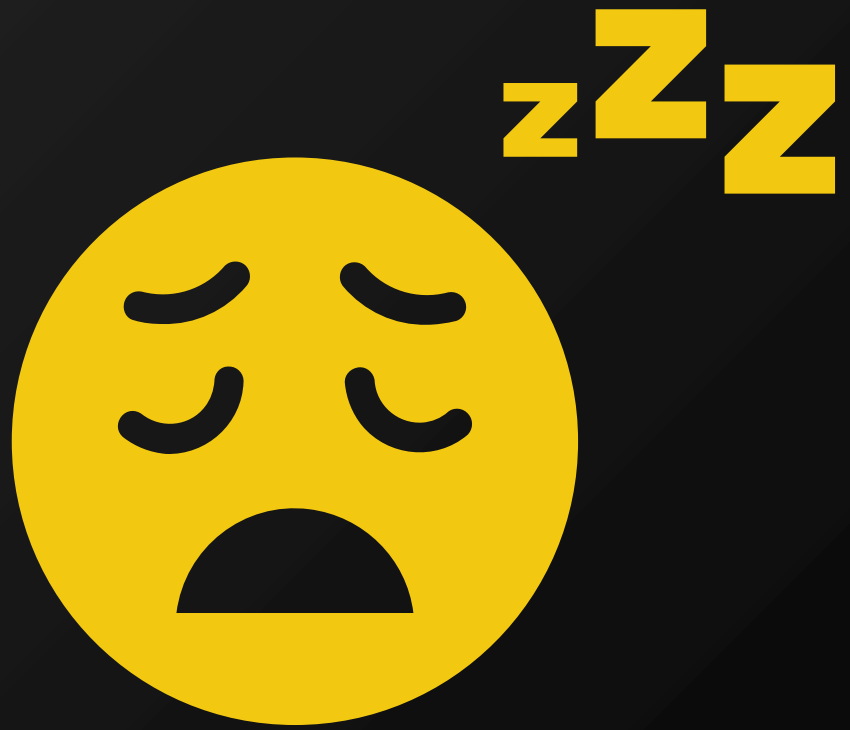
Many forms of data communication fail

-Reports
-Dashboards
-PowerPoints
-Etc.



Retail Analysis Sample

Ask a question about your data

Total Stores
NEW & EXISTING STORES

104

This Year's Sales
NEW & EXISTING STORES

$22M

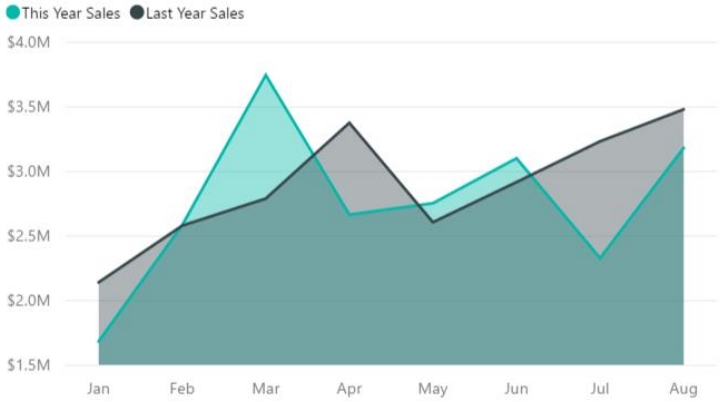
This Year's Sales
BY CHAIN

New Stores, New Stores Target
YEAR TO DATE

This Year's Sales
NEW STORES ONLY

$2M

This Year's Sales, Last Year's Sales
BY FISCAL MONTH



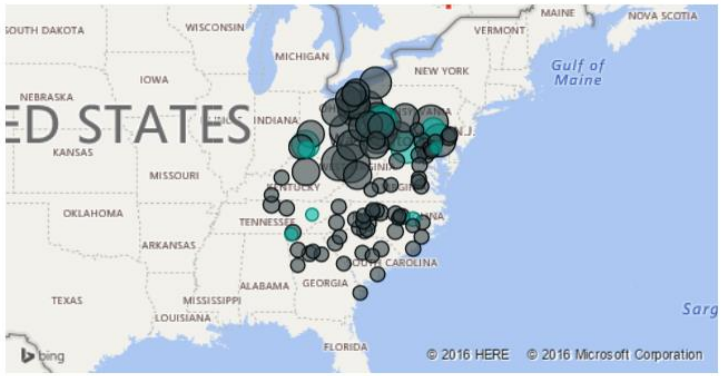
Total Sales Variance %, Sales Per Sq Ft, This Year's Sales
BY DISTRICT

New Stores
NEW STORES ONLY

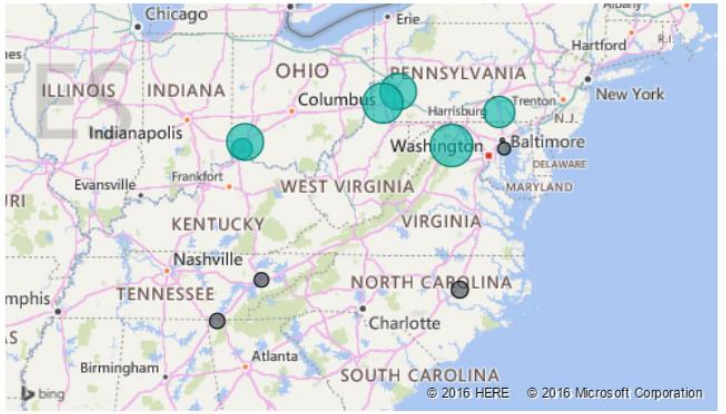
10

Stores Opened This Year
BY OPEN MONTH, CHAIN

This Year's Sales
BY POSTAL CODE, STORE TYPE



This Year's Sales
BY CITY, CHAIN



Sales Per Sq Ft
BY NAME

Two key factors in decision making

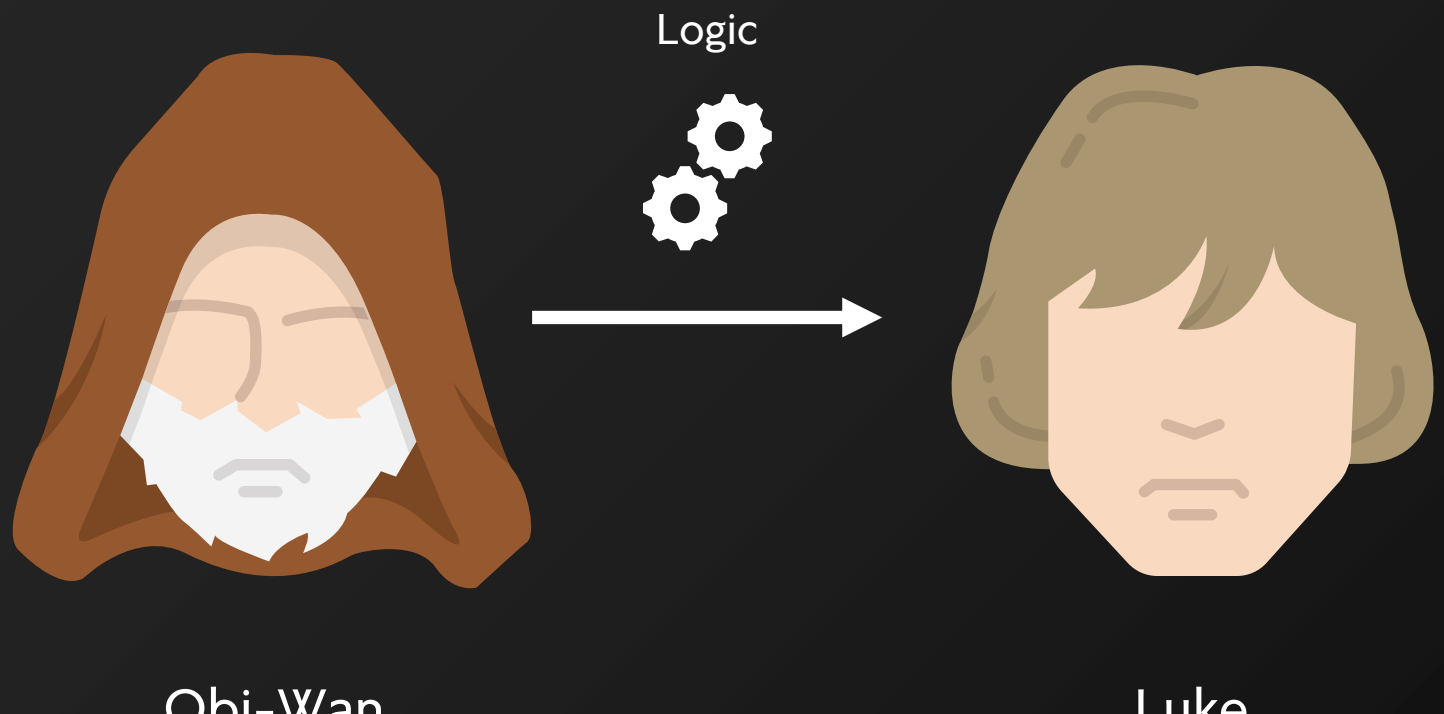
Luke

Two key factors in decision making

Obi-Wan

Luke

Two key factors in decision making



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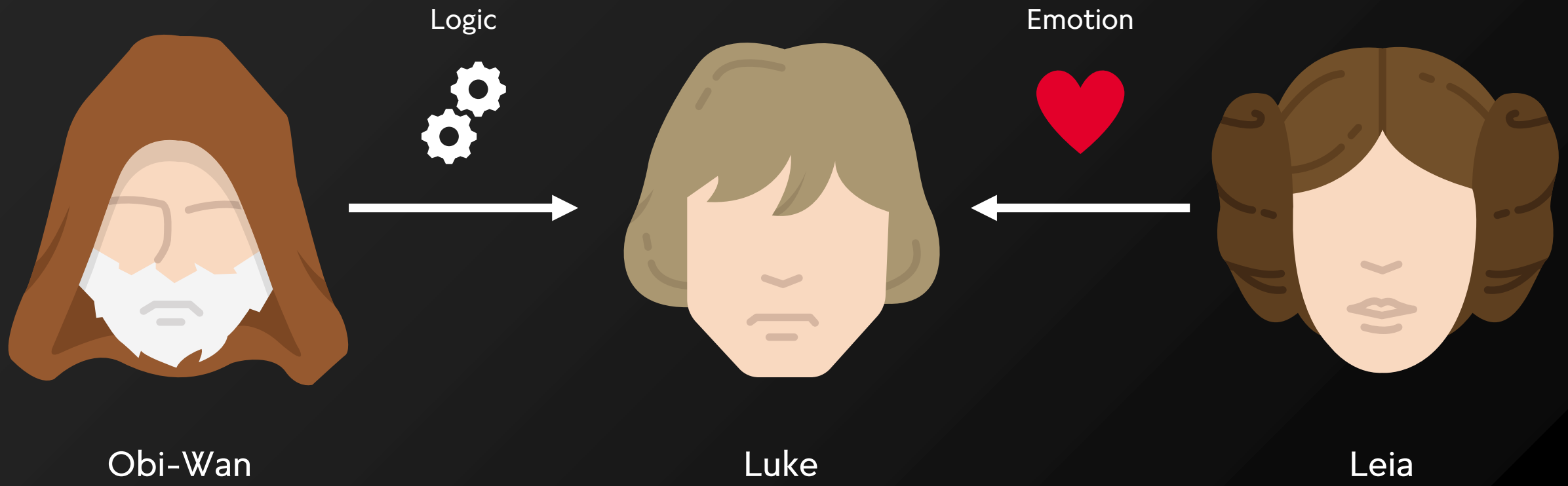

Disruptive insights

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Misuse of the term “Data Storytelling”

Data storytelling is a tool like any other.

The “Story Zone”

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Source: Brent Dykes (2019)

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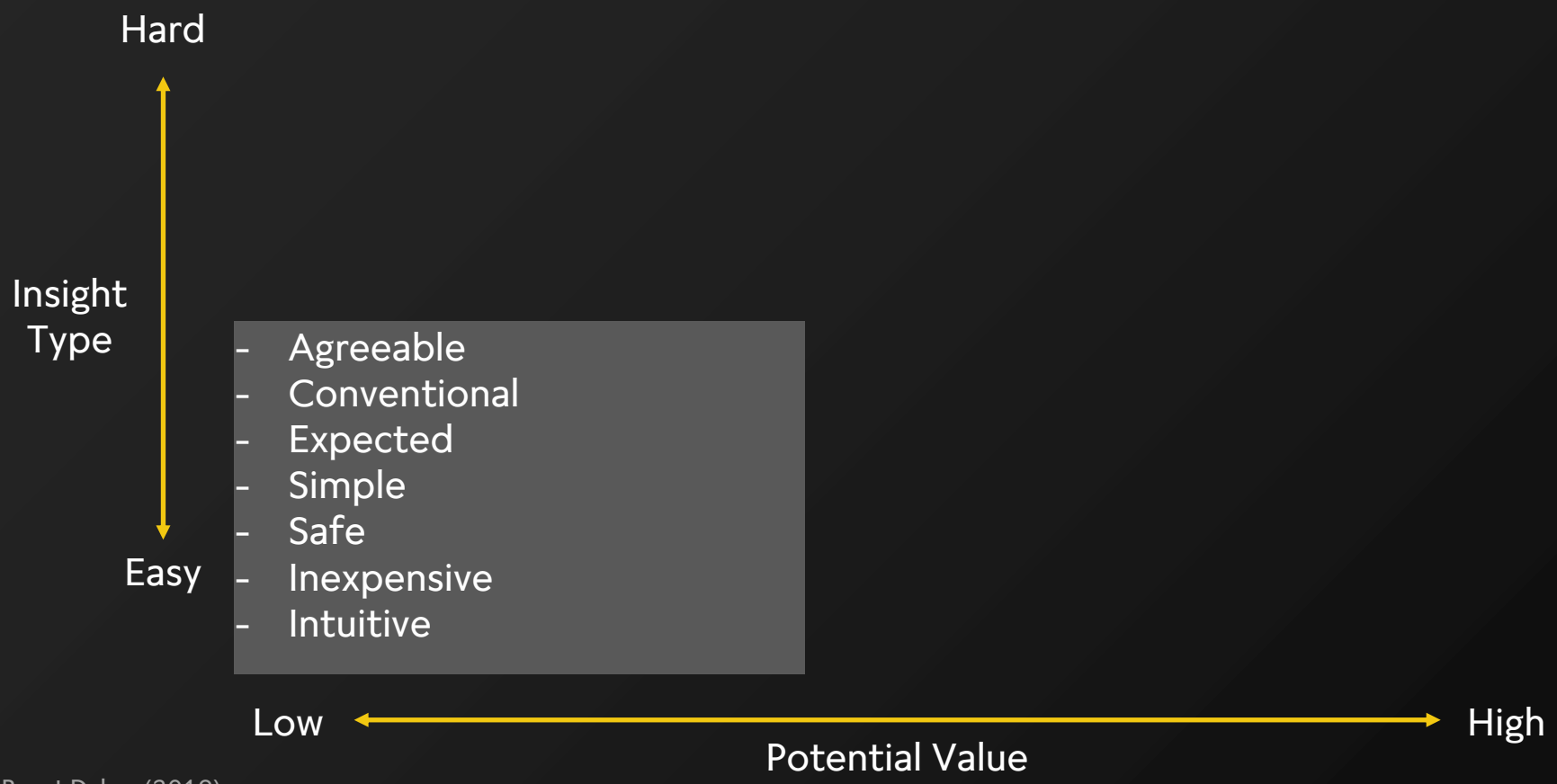

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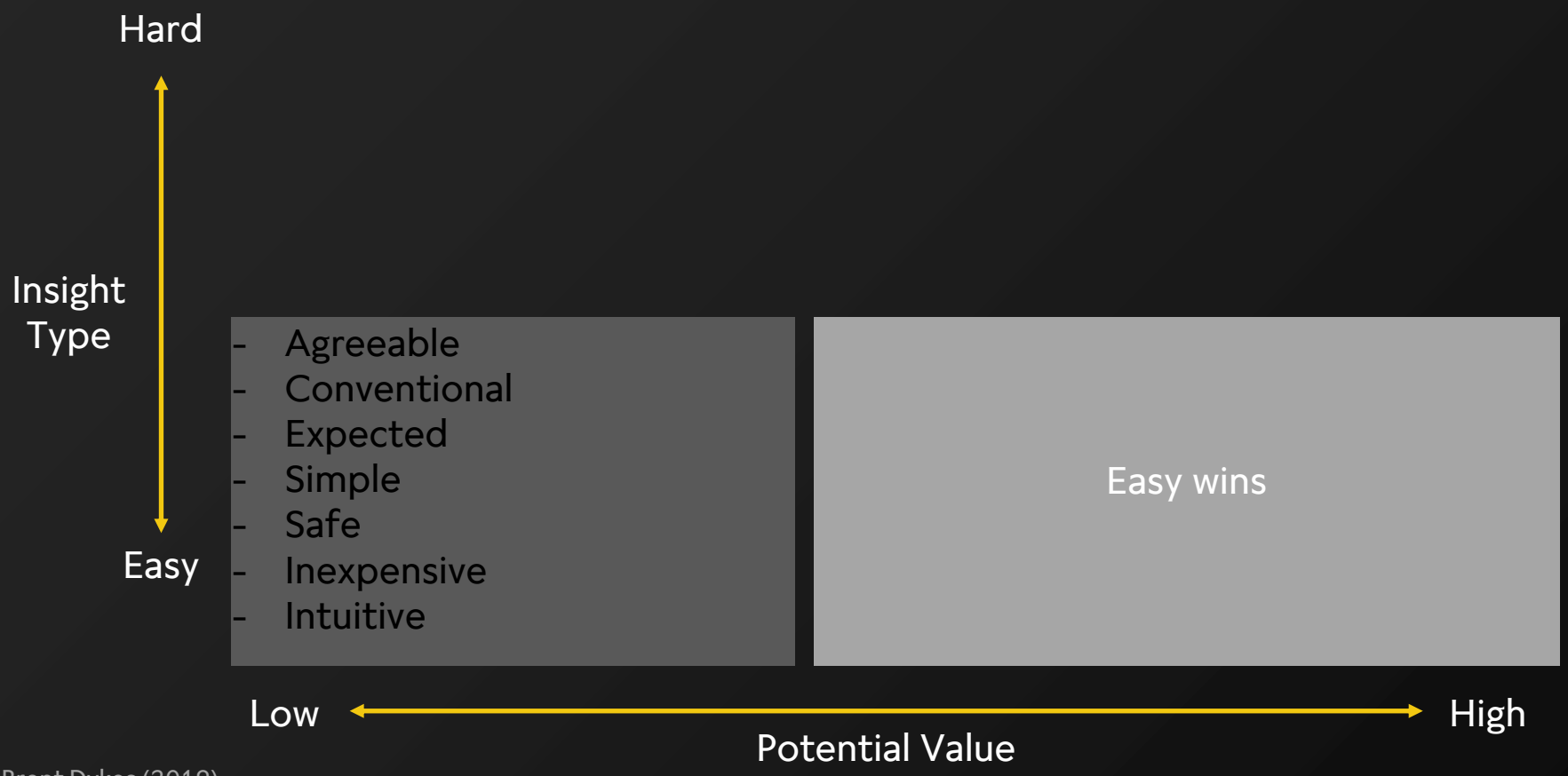

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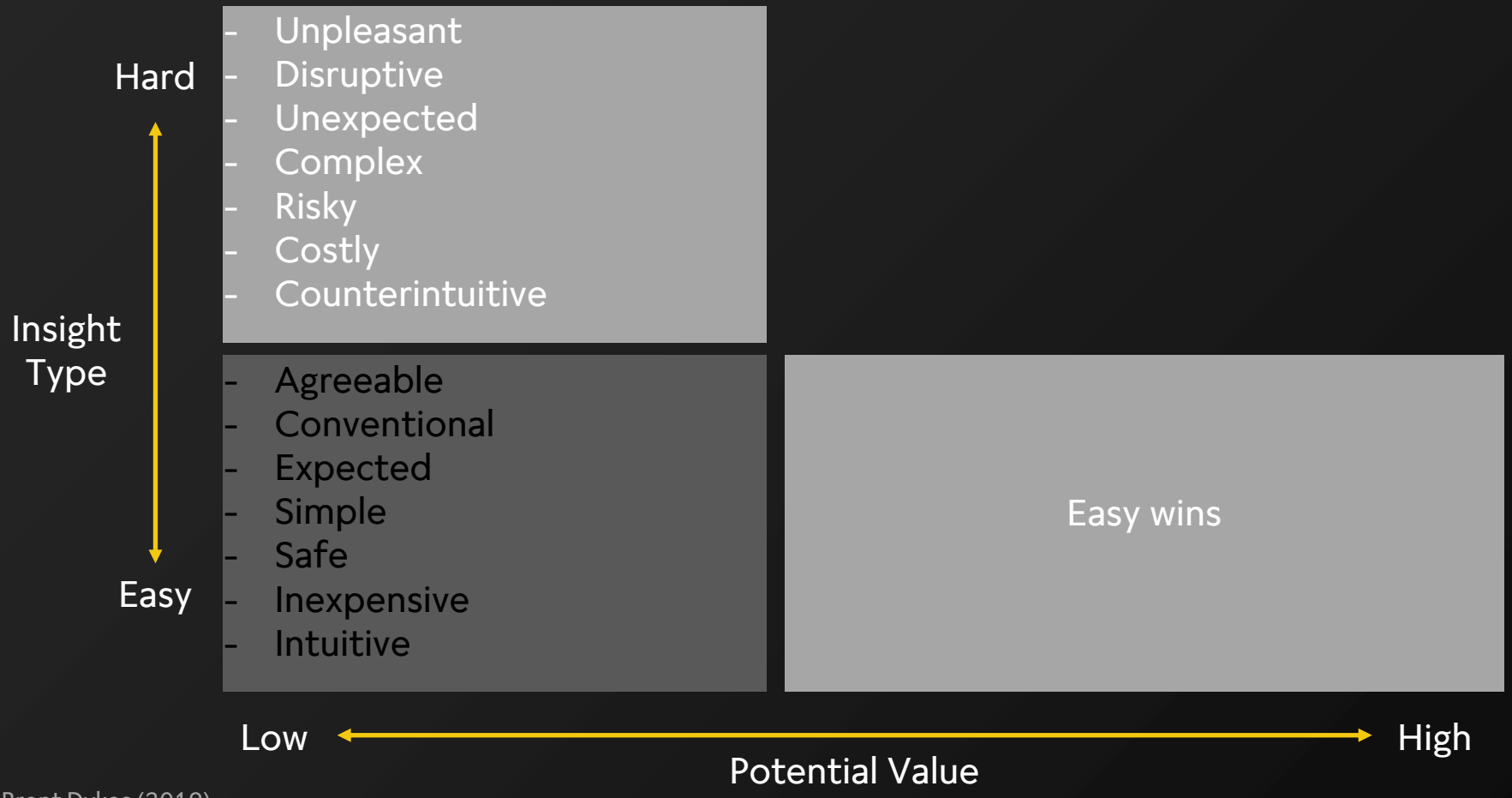

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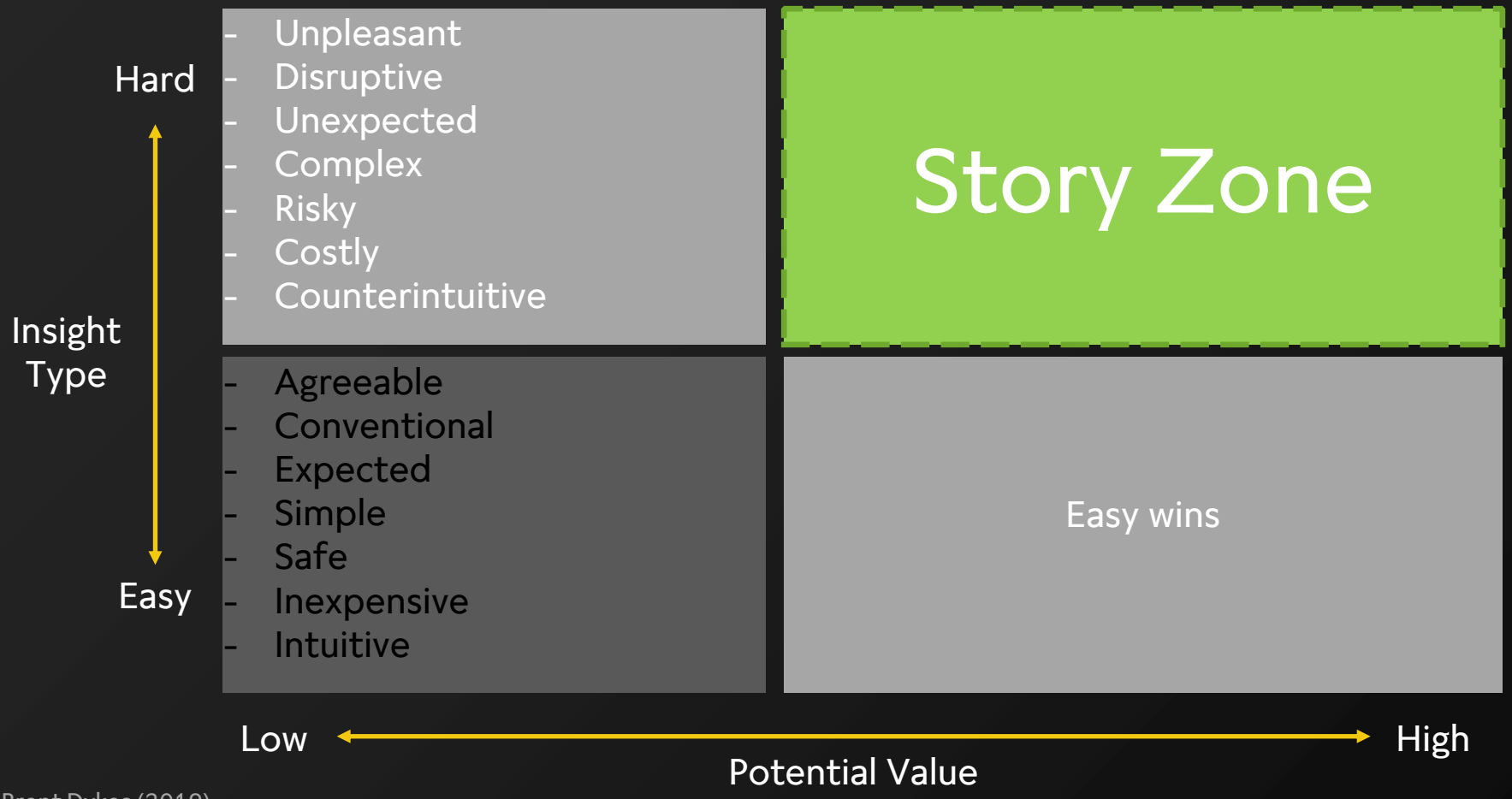

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Historical insights fit for a data story

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The Three Elements of a Data Story

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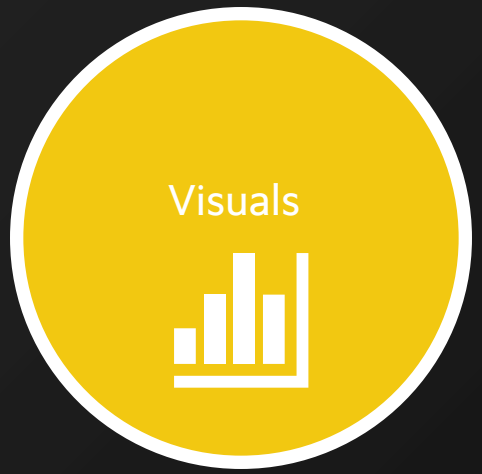

Ancombe's Quartet

I		II		III		IV	
x	*y*	*x*	*y*	*x*	*y*	*x*	*y*
10.0	8.04	10.0	9.14	10.0	7.46	8.0	6.58
8.0	6.95	8.0	8.14	8.0	6.77	8.0	5.76
13.0	7.58	13.0	8.74	13.0	12.74	8.0	7.71
9.0	8.81	9.0	8.77	9.0	7.11	8.0	8.84
11.0	8.33	11.0	9.26	11.0	7.81	8.0	8.47
14.0	9.96	14.0	8.10	14.0	8.84	8.0	7.04
6.0	7.24	6.0	6.13	6.0	6.08	8.0	5.25
4.0	4.26	4.0	3.10	4.0	5.39	19.0	12.50
12.0	10.84	12.0	9.13	12.0	8.15	8.0	5.56
7.0	4.82	7.0	7.26	7.0	6.42	8.0	7.91
5.0	5.68	5.0	4.74	5.0	5.73	8.0	6.89

Source: https://en.wikipedia.org/wiki/Anscombe's_quartet

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8.0	6.95	8.0	8.14	8.0	6.77	8.0	5.76
13.0	7.58	13.0	8.74	13.0	12.74	8.0	7.71
9.0	8.81	9.0	8.77	9.0	7.11	8.0	8.84
11.0	8.33	11.0	9.26	11.0	7.81	8.0	8.47
14.0	9.96	14.0	8.10	14.0	8.84	8.0	7.04
6.0	7.24	6.0	6.13	6.0	6.08	8.0	5.25
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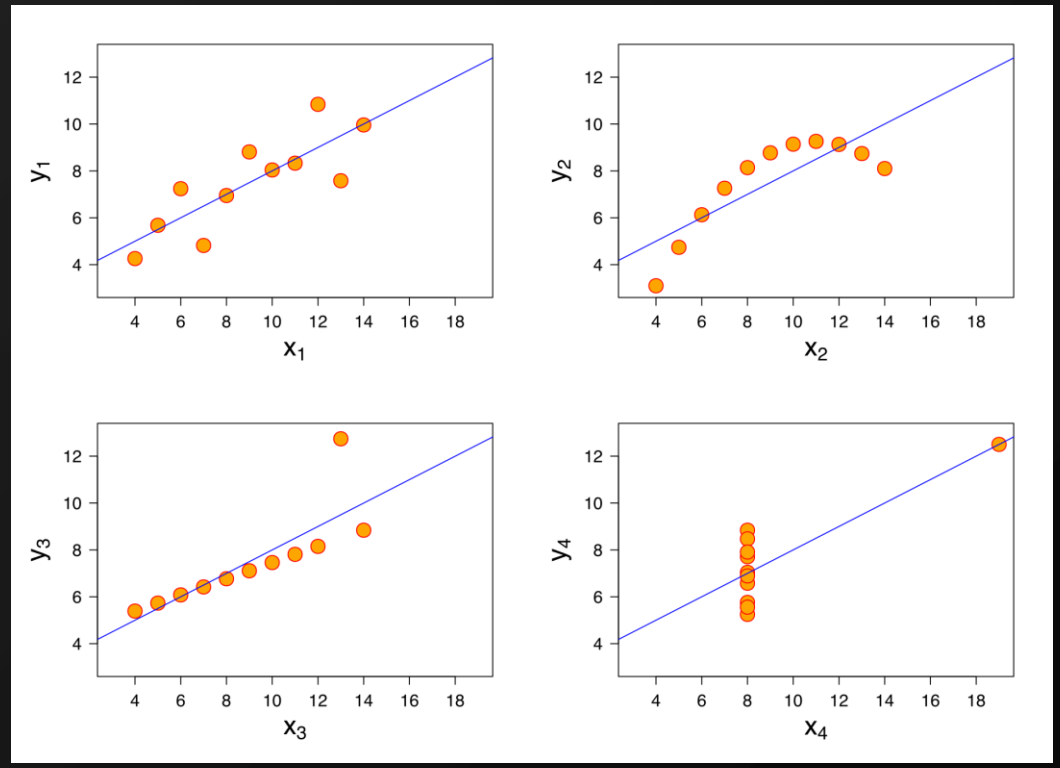

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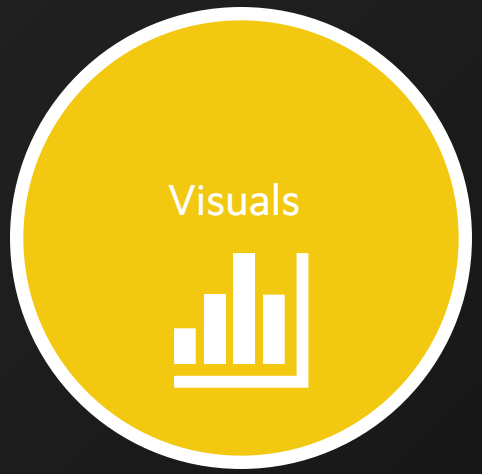

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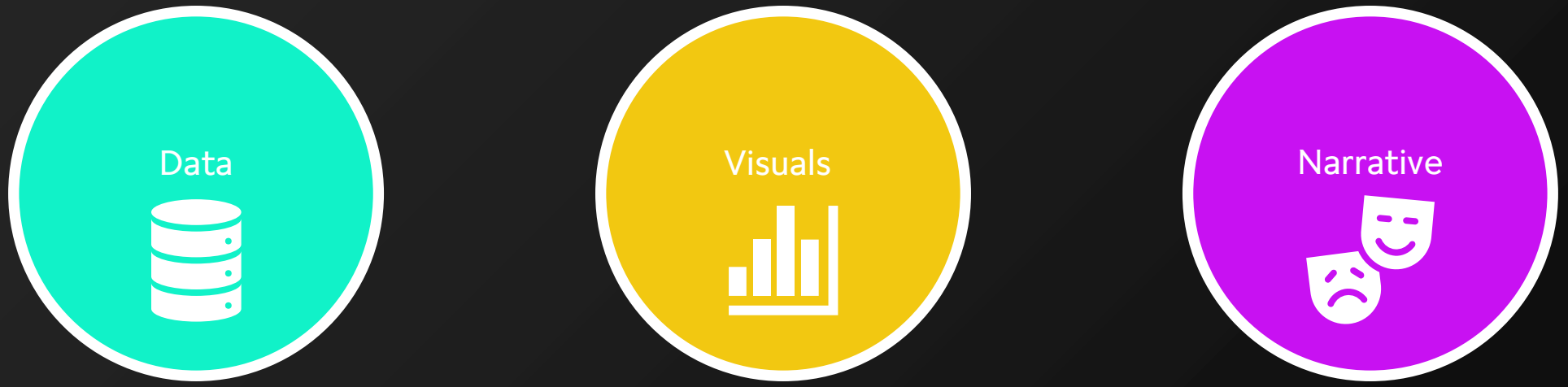

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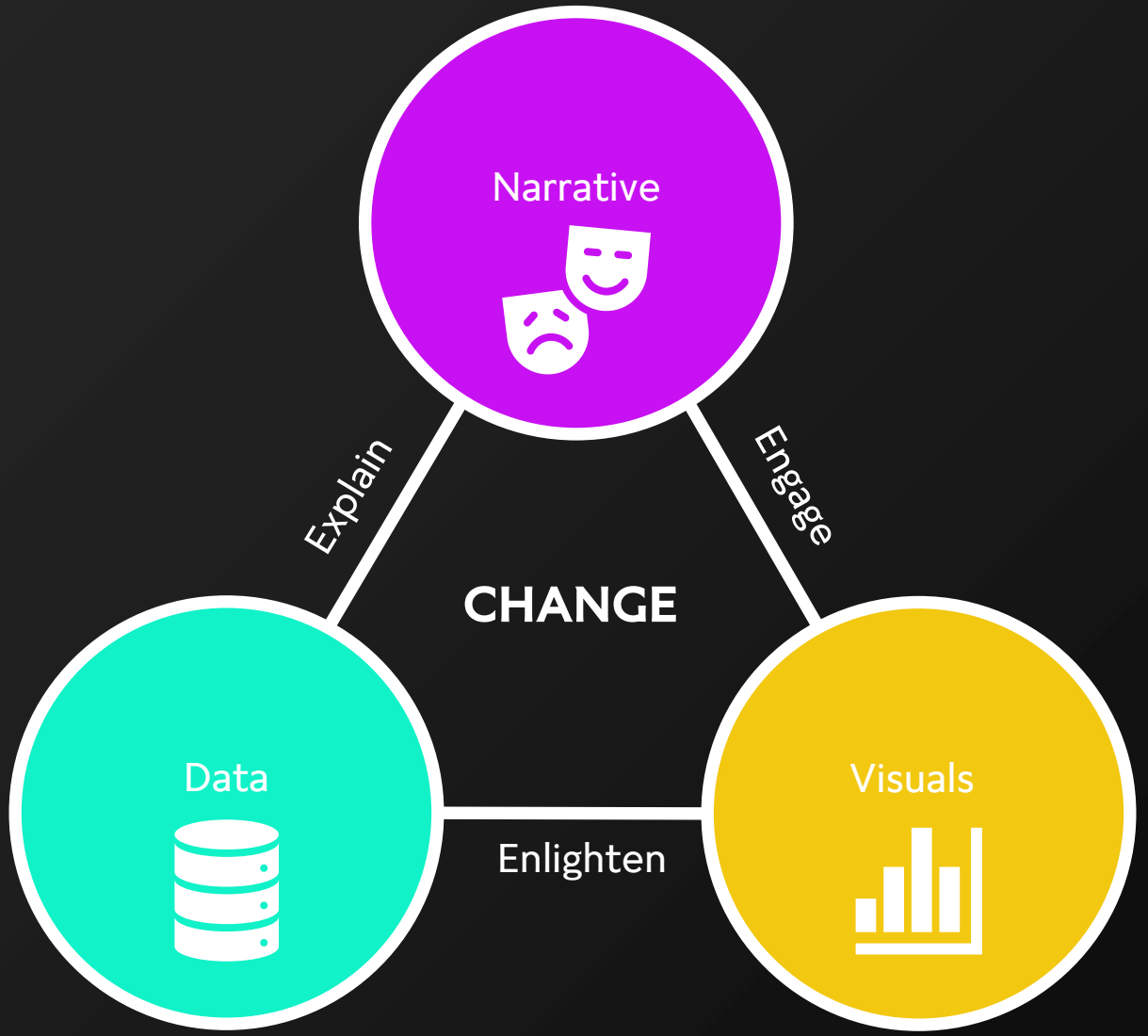

Data Storytelling Arc

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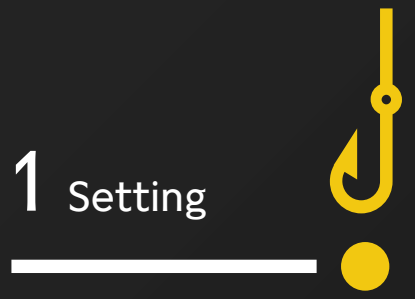
1 Setting

Source: Brent Dykes (2019)

Data Storytelling Arc



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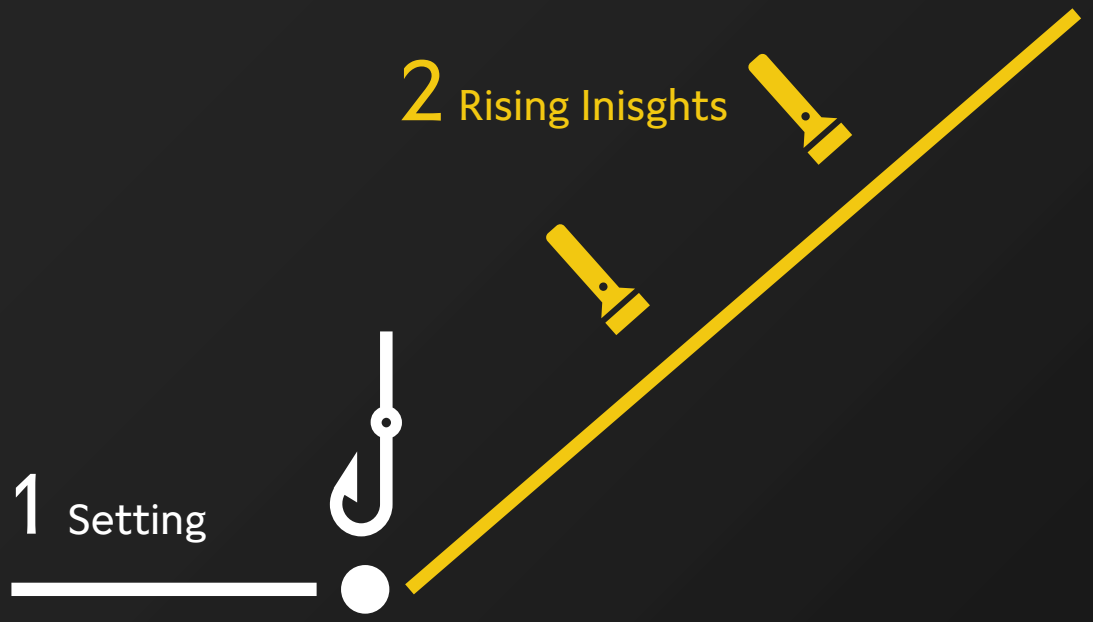

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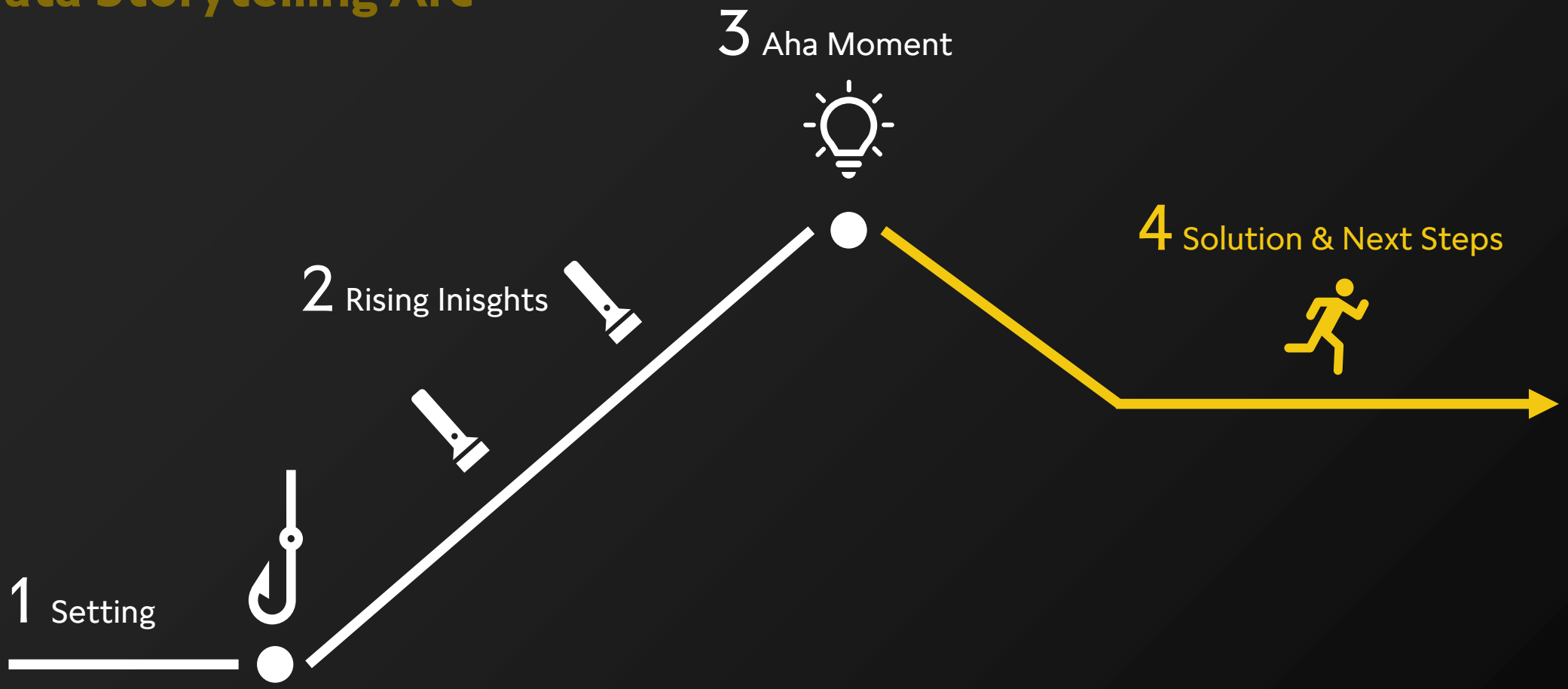

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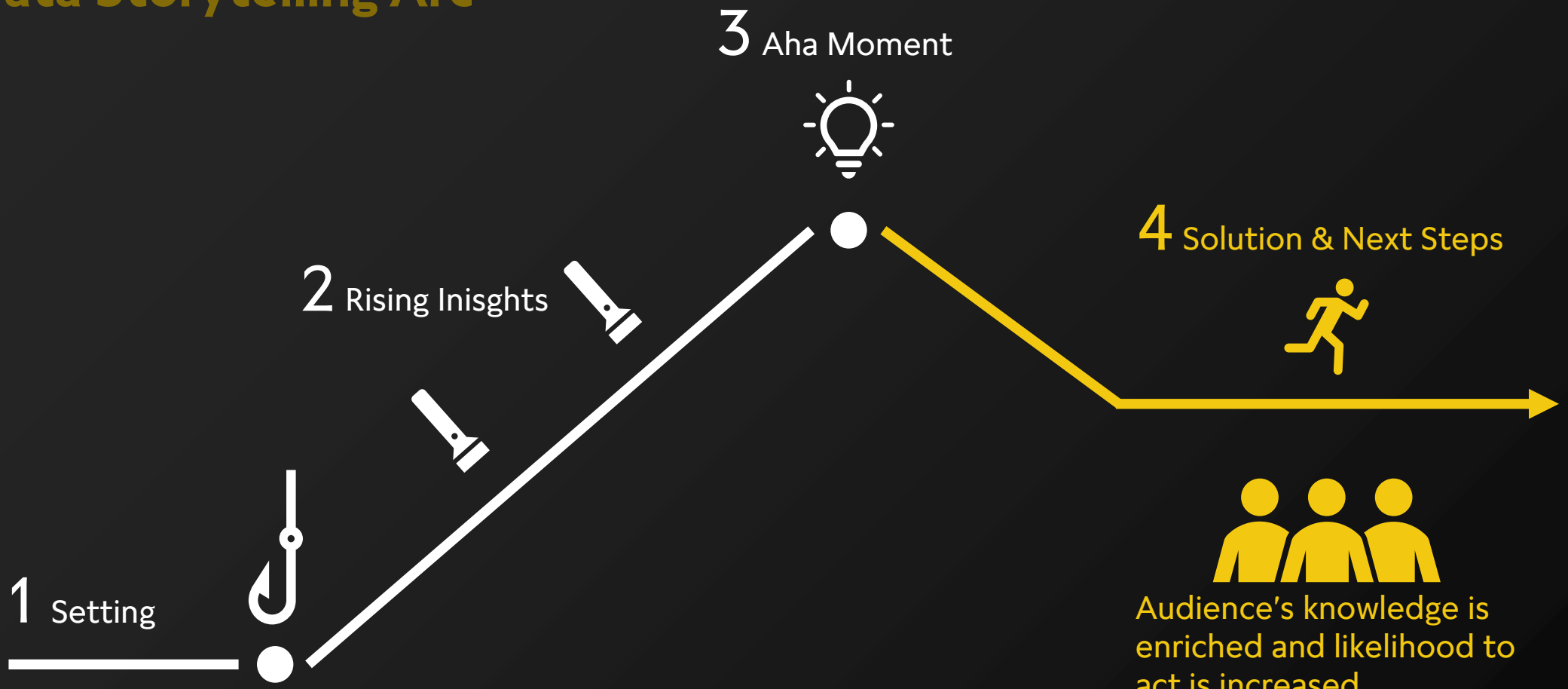

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6 Essential Data Storytelling Components

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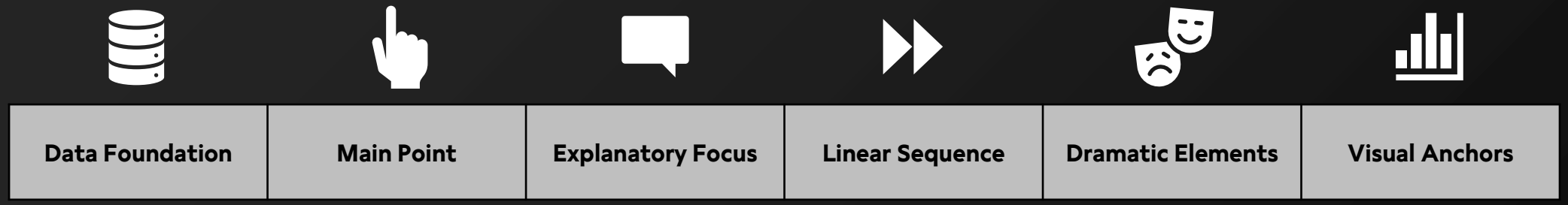

Data Foundation	Main Point	Explanatory Focus	Linear Sequence	Dramatic Elements	Visual Anchors

Source: Brent Dykes (2019)

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Curated Reports	Yes	Maybe	Often	Maybe	Maybe	Yes
Infographics	Yes	Maybe	Maybe	Maybe	Maybe	Yes
Data Visualizations	Yes	Maybe	Maybe	Maybe	Maybe	Yes
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DEMO

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Thank you!

Any questions?