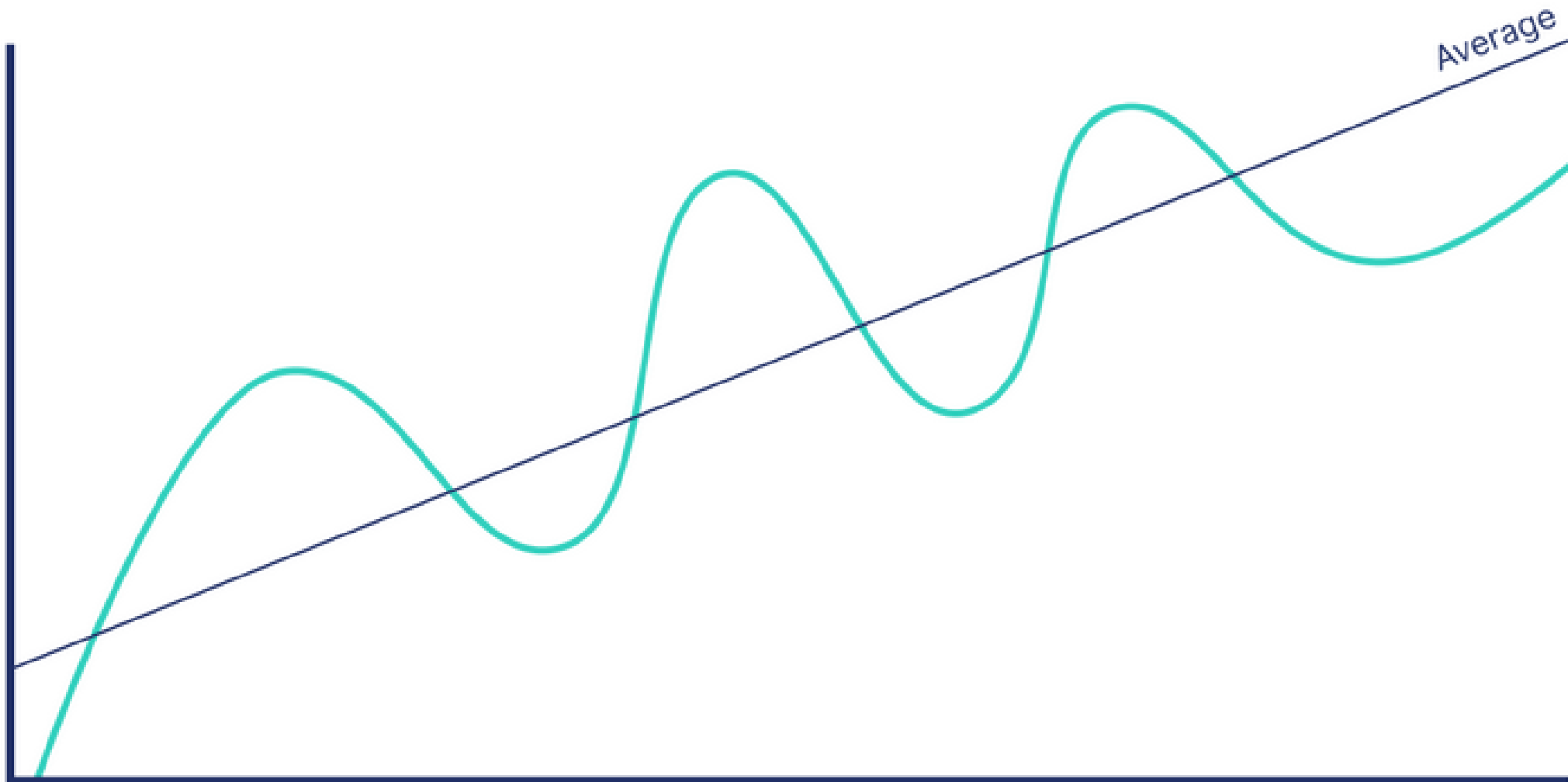


Regression to the mean

A statistical phenomenon that describes how variables with outliers on the first measurement are often closer to the mean when measured again.







Data Storytelling and Communication Skills for Data Leaders in the Era of AI

Chris Carter

1. From Complex AI Insights to Compelling Narratives
2. Building Trust and Credibility in AI Outcomes
3. Balancing Transparency with Simplicity



A little bit about me...

Head of Data & Analytics

AI Centre of Enablement

A little bit about me...

Rugbynomics

Using Data to Tackle Rugby's Biggest
Myths and Misconceptions

Available on Amazon and at all good
book stores!



“No one ever made a decision because of a number.
They need a story.”

Daniel Kahneman

1. From Complex AI Insights to Compelling Narratives

Know your audience and their 'so what'

Executive

What is the strategic impact and potential risk of this?



Frontline employee

How can this help me in my day-to-day work?



Speak the language your audience wants to hear



22 kg
6-year-old

2 meters

**Speed
at Impact**
6,26 m/s

**Force
of Impact**
8,600 N





Speak the language your audience wants to hear



22 kg
6-year-old

2 meters

**Speed
at Impact**
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**Force
of Impact**
8,600 N



Use everyday terms

From:

Regression

p-value = 0.05

RAG

Non-deterministic
output

K-means clustering

To:

Predicted future sales based
on past performance

We are 95% sure that this
result wasn't by chance

A model that can incorporate
up to date information

The models results may vary
slightly

Groups of similar individuals

‘Humanise’
the data



Outlier analysis





2. Building Trust and Credibility in AI Outcomes

A photograph of Donald Trump speaking at a podium. He is wearing a dark suit and a red tie. Behind him to the left is Mike Pence, and to the right is Melania Trump. The background shows an American flag and a window. A black banner with white text is overlaid across the middle of the image.

NO, I DON'T TAKE RESPONSIBILITY AT ALL.





Australian politics

Deloitte to pay money back to Albanese government
after using AI in \$440,000 report

WILL A ROBOT STEAL YOUR JOB?

KILLER COMPUTERS

Court hears crossbow attacker was edged on by digital
**A.I. CHATBOT TOLD
WINDSOR INTRUDER
TO KILL THE QUEEN**

dangerous AI'
clear weapons'

AI WAR
Robots will destroy
number of jobs

AI could be used to **TAKE OVER** the
through 'evil' fake news and lies

Forbes

FORBES > BUSINESS > AEROSPACE & DEFENSE

What Air Canada Lost In
'Remarkable' Lying AI
Chatbot Case



Be Transparent



Acknowledge the uncertainty, but put it in context

Don't shy away from the uncertainty that exists in these AI-derived outcomes e.g.

- The model is 90% certain
- This prediction is less reliable for small customer segments

Be transparent about where the human is in the loop, and where the AI is 'black box'

Reference the data sources that the AI model was trained on. Is there potential for hidden biases from the underlying sources?

What checks and balances have been implemented?

- How is the model performing in the real world?
- Can you validate the results with specific examples?

Validating AI results

Automation

Replacing manual work



Augmentation and Innovation

Adding incremental value



Validating automation results

Promotional
video of
suspected
scam



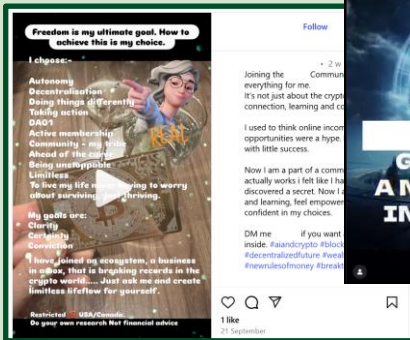
Get video's
transcript with
AI



AI analysis for
scam markers



Report
recommended
prioritisation to
the team



Model response

Output: Text

Question: Is there an implication of financial gain in the text and if so, how much money?

Answer: Yes, the document implies significant financial gain potential. It mentions possibilities such as making thousands of percent in a short time in the meme coin market, an example of buying Solana in 2020 for \$1,000 and selling a year later for \$133,934, and potential gains of 10X, 50X, or even 100X. It also references daily transaction fees potentially burning around \$140,000 per day, and a community coin that grew over 11,000% in two years. Additionally, it discusses commissions, bonuses, and rewards tied to investment packages ranging from \$50 to \$10,000, with doubling promotions and various income opportunities.

Validating augmentation and innovation results

From:

Segment	Members	Model Ave. ROI
A	1,263	\$4.13
B	15,894	\$2.53
C	28,678	\$1.35
D	22,549	\$1.10



To:

- Highest social media presence
- Average 2.4 kids in household
- Above average to high income
- Live within 2km radius of store
- Very responsive to promotions

Acknowledge the uncertainty, but put it in context

Uncertainty

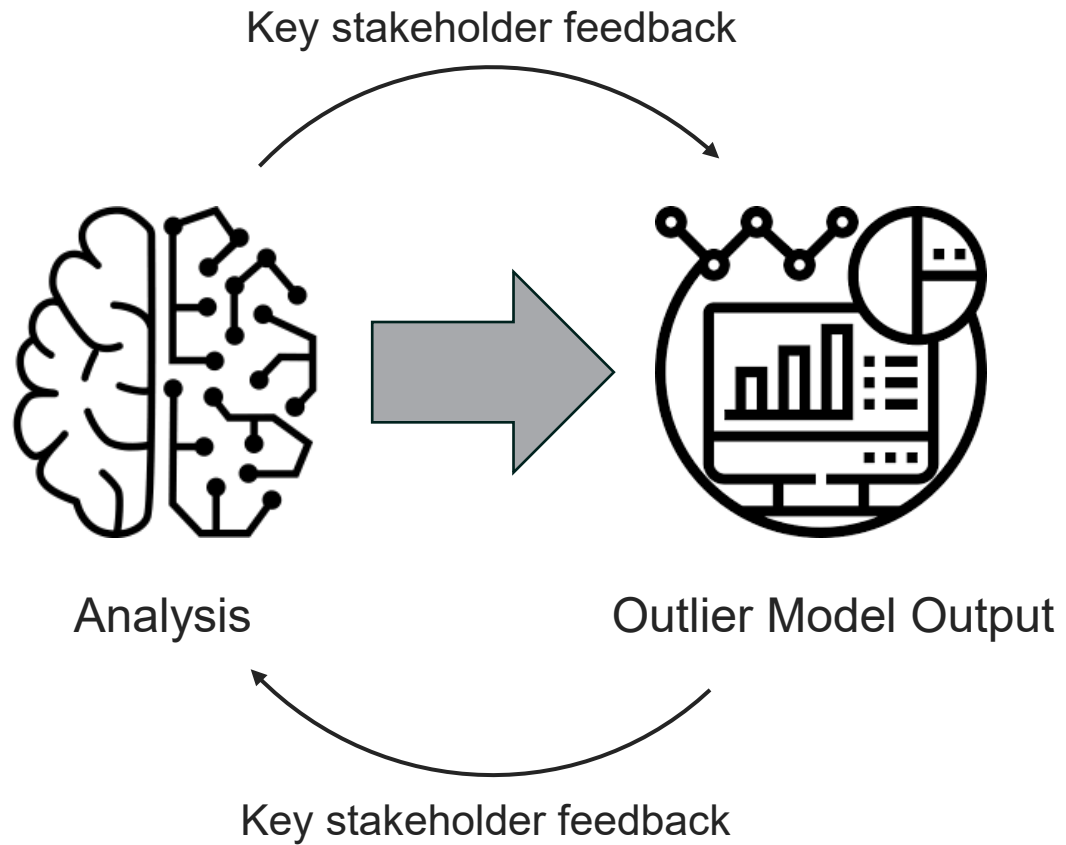


AI enables:

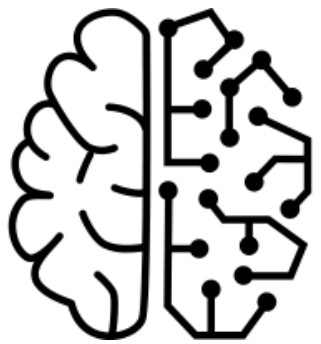
- More accurate analysis
- Faster results
- Cost savings

3. Balancing Transparency with Simplicity

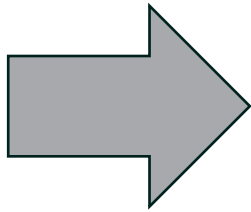
Balancing transparency with simplicity



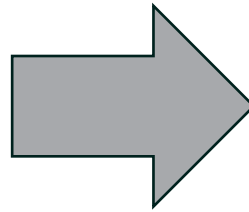
Balancing transparency with simplicity



Analysis



Outlier Model Output



Multi-layered
communication

Executive Leadership Team:

Faster and more accurate decision making = higher productivity

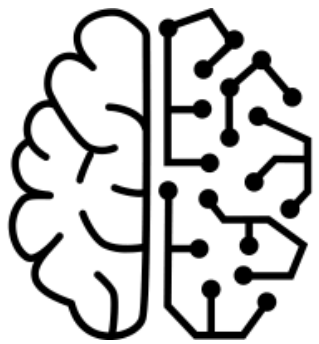
Managers:

We've validated these results on previous years data. In our estimation this will free up ~10% of frontline staff time

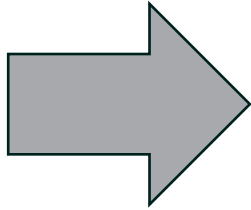
Frontline staff:

We've listened to your feedback on usability
This will free up your time for more interesting work
This works alongside your expertise

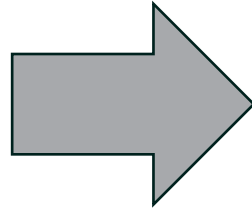
Balancing transparency with simplicity



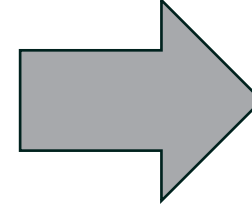
Analysis



Outlier Model Output



Multi-layered
communication

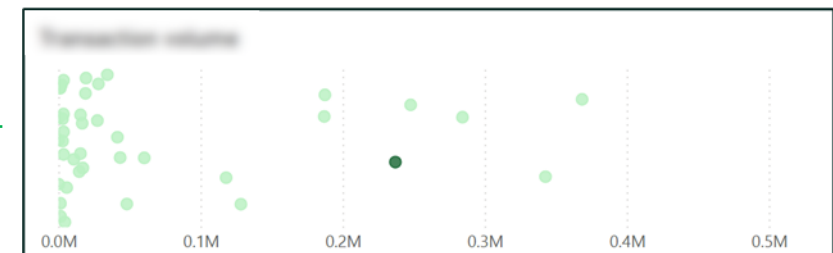
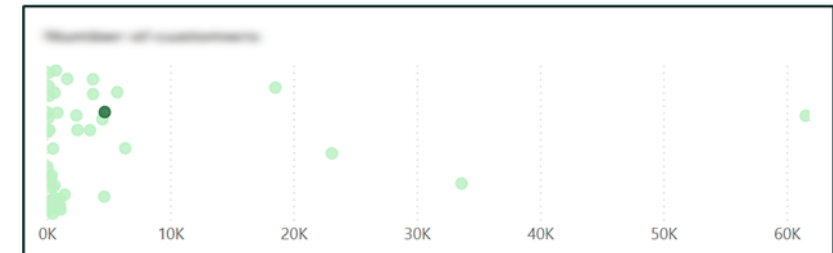
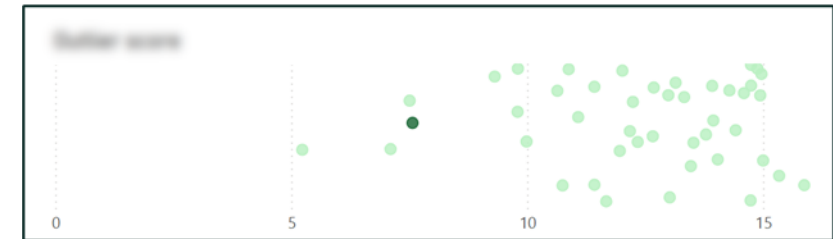
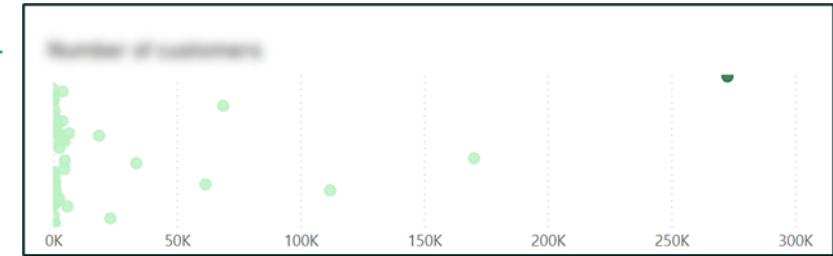


Make it real

Validate with real life
examples

Balancing transparency with simplicity

FSPNumber	FSPName	Tier	Outlier Score
1000001	1000001	A	15.87
1000002	1000002	A	15.34
1000003	1000003	A	15.00
1000004	1000004	B	14.97
1000005	1000005	B	14.94
1000006	1000006	A	14.88
1000007	1000007	A	14.75
1000008	1000008	A	14.75
1000009	1000009	C	14.74
1000010	1000010	A	14.60
1000011	1000011	B	14.42
1000012	1000012	A	14.29
1000013	1000013	A	14.04
1000014	1000014	A	13.95
1000015	1000015	B	13.92
1000016	1000016	A	13.79
1000017	1000017	A	13.53
1000018	1000018	B	13.47
1000019	1000019	C	13.33
1000020	1000020	B	13.15



“The human mind is a story processor, not a logic processor.

Jonathan Haidt

Thank you!