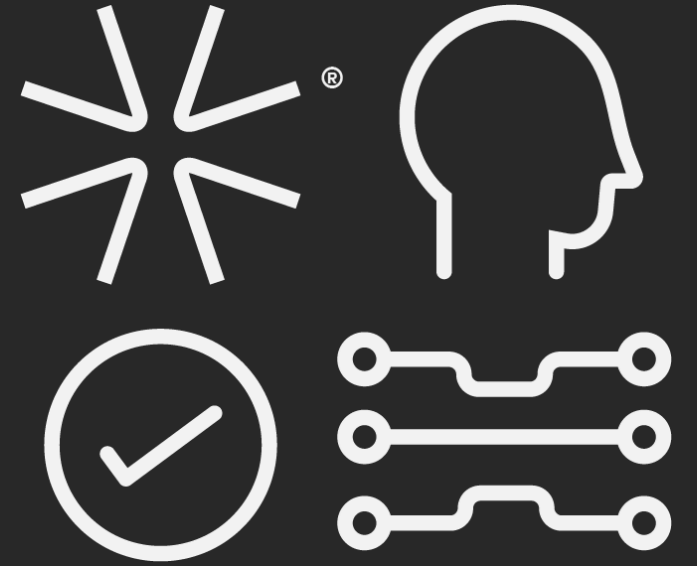


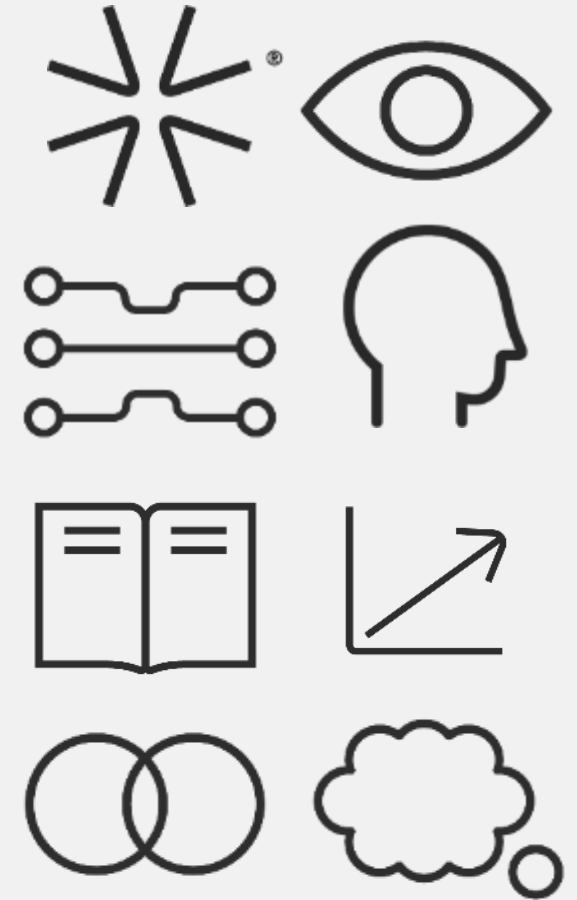
AI legislation: A regulatory hurdle or an opportunity for strategic growth?



World AI Summit Amsterdam
Yiannis Kanellopoulos,
Founder & CEO
October 2024

What we do

We help large organizations to build AI technology that is trusted and thoughtful*



*thoughtful (adjective)

_absorbed in or involving thought

_showing consideration for the needs of other people

✱ code4thought ®

The two perspectives on AI Regulation

Governance Challenges

Fee burning, non-earning activities

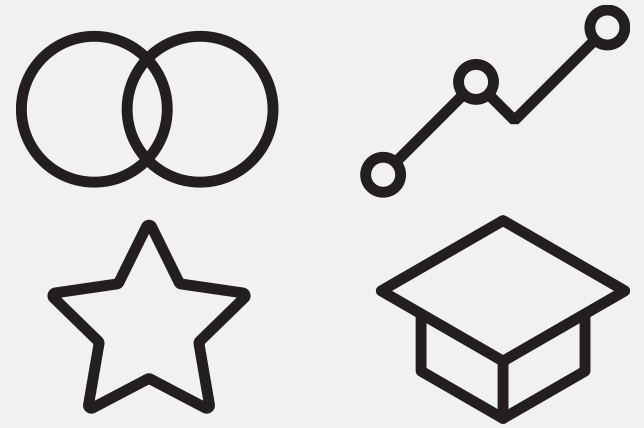


System / Product / Service Improvement

Enhancing quality and business value



AI Governance as a Regulatory Hurdle

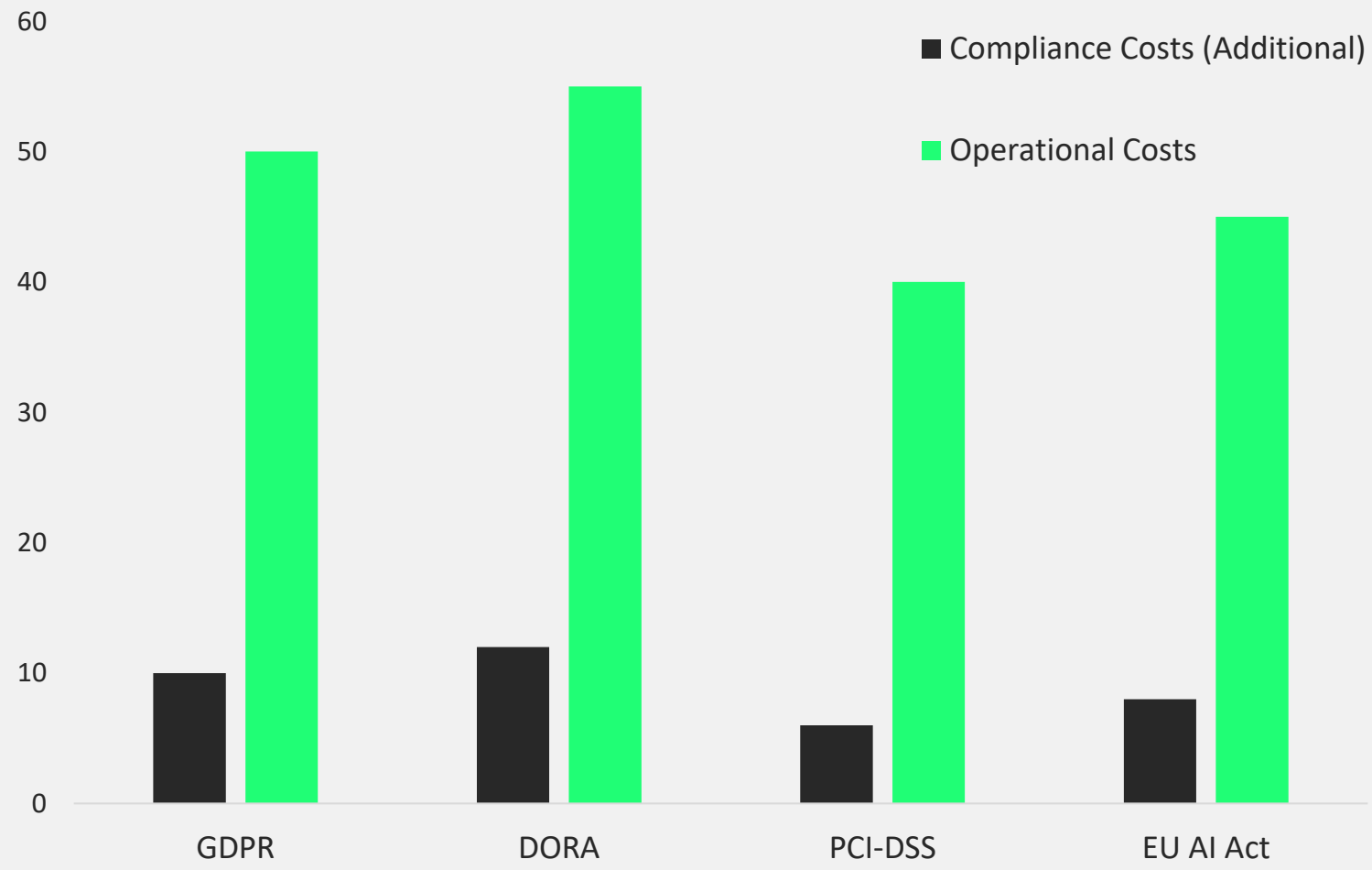


"After GDPR, DORA, PCI-DSS, Internal Audits, now we have the EU AI Act.

In the meantime, we have to keep serving our business."*

*CIO of large European financial institution

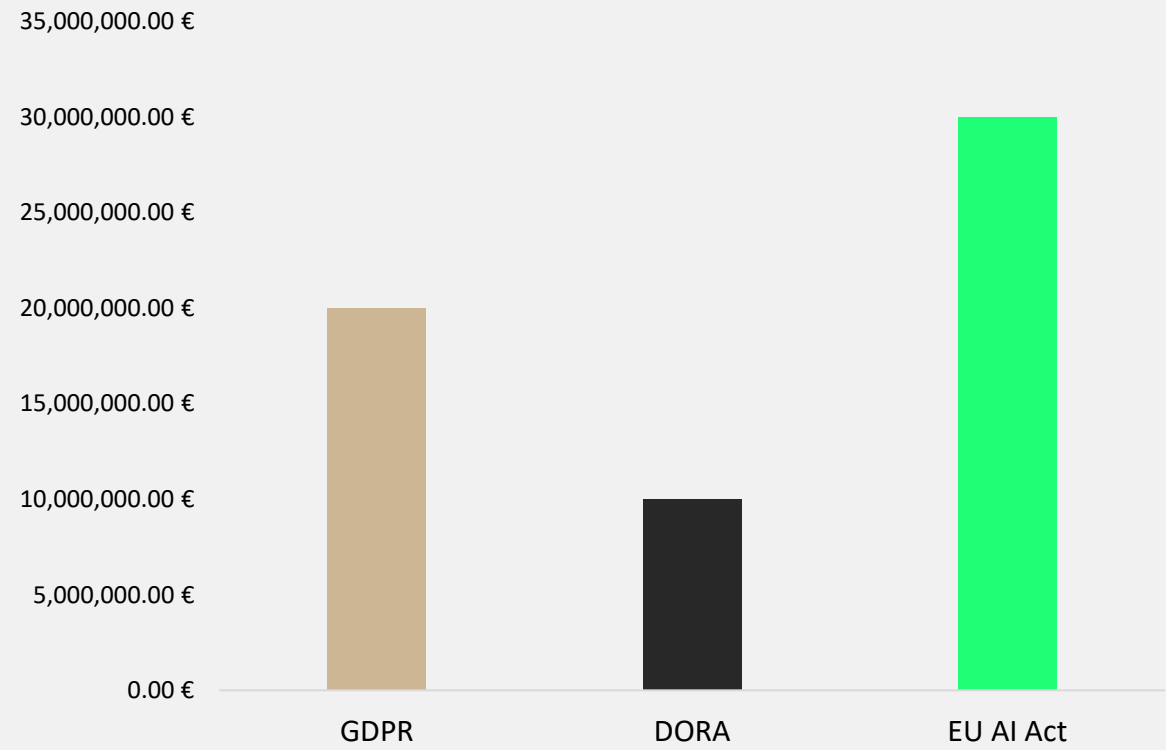
AI Governance as a Fee-Burning Hurdle



The hidden costs of non-compliance

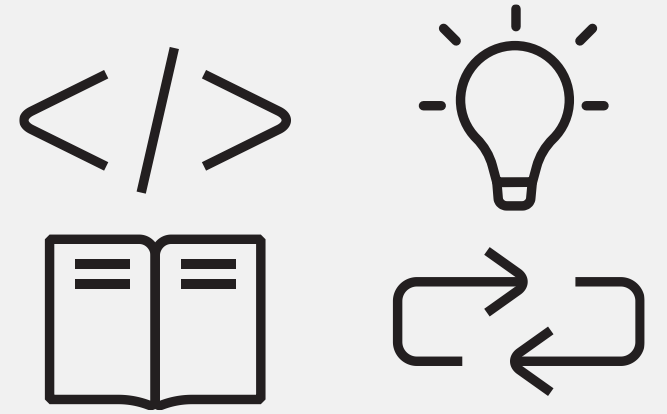


Fines per Regulation



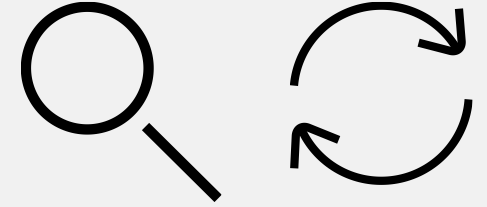
Another perspective

"What the EU AI Act actually suggests is for our engineers to do their job properly."*



*CIO of a large European insurer

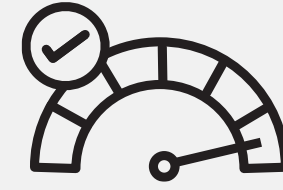
Pivot to the opportunity



"As the gravity of decisions made by AI systems increases, so does our need to ensure they operate fairly and transparently. Nowhere is this needed more than in the medical device space, where the judgments of AI powered tools can literally be a matter of life and death."*

*CIO of a European healthcare startup

On AI performance: a common misconception

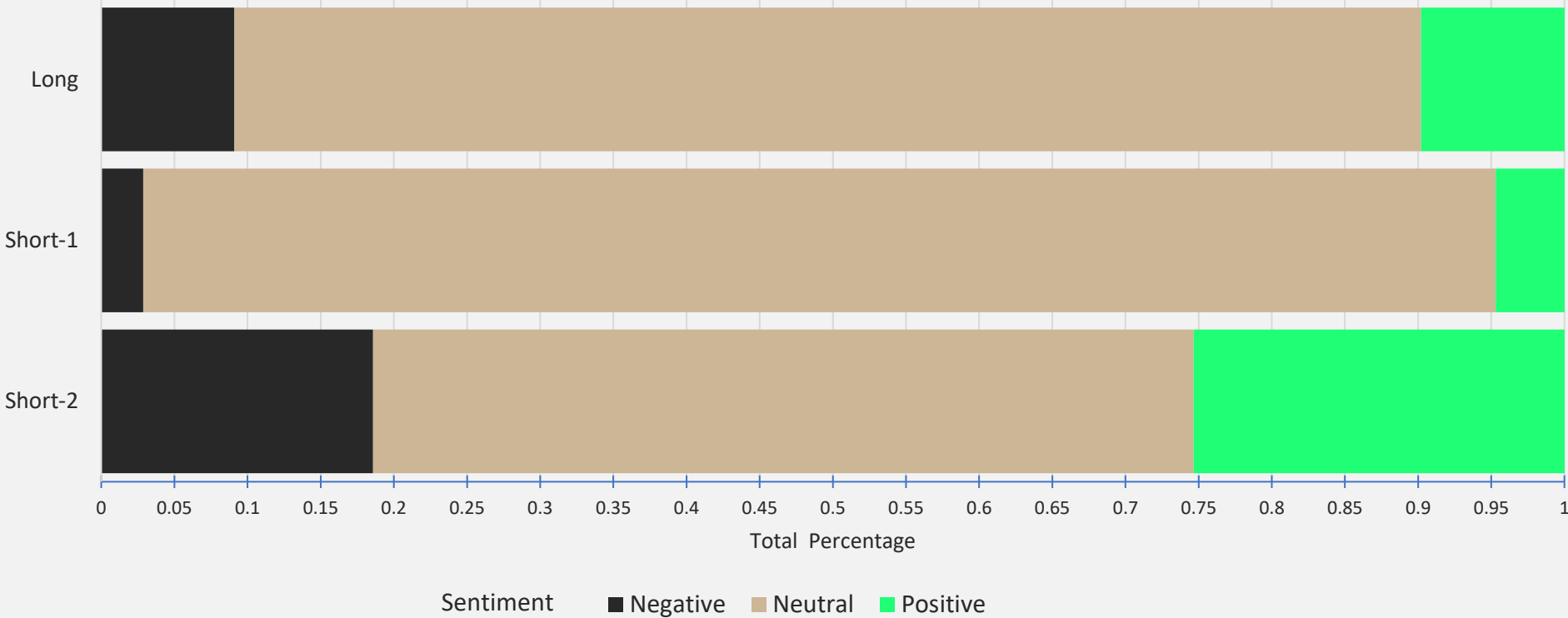


"I was under the impression that AI systems did not need testing. Performance is a good enough indicator."*

*CIO of a large technology
incumbent

When optimizing for the wrong metric

Sentiment distribution of each tested database



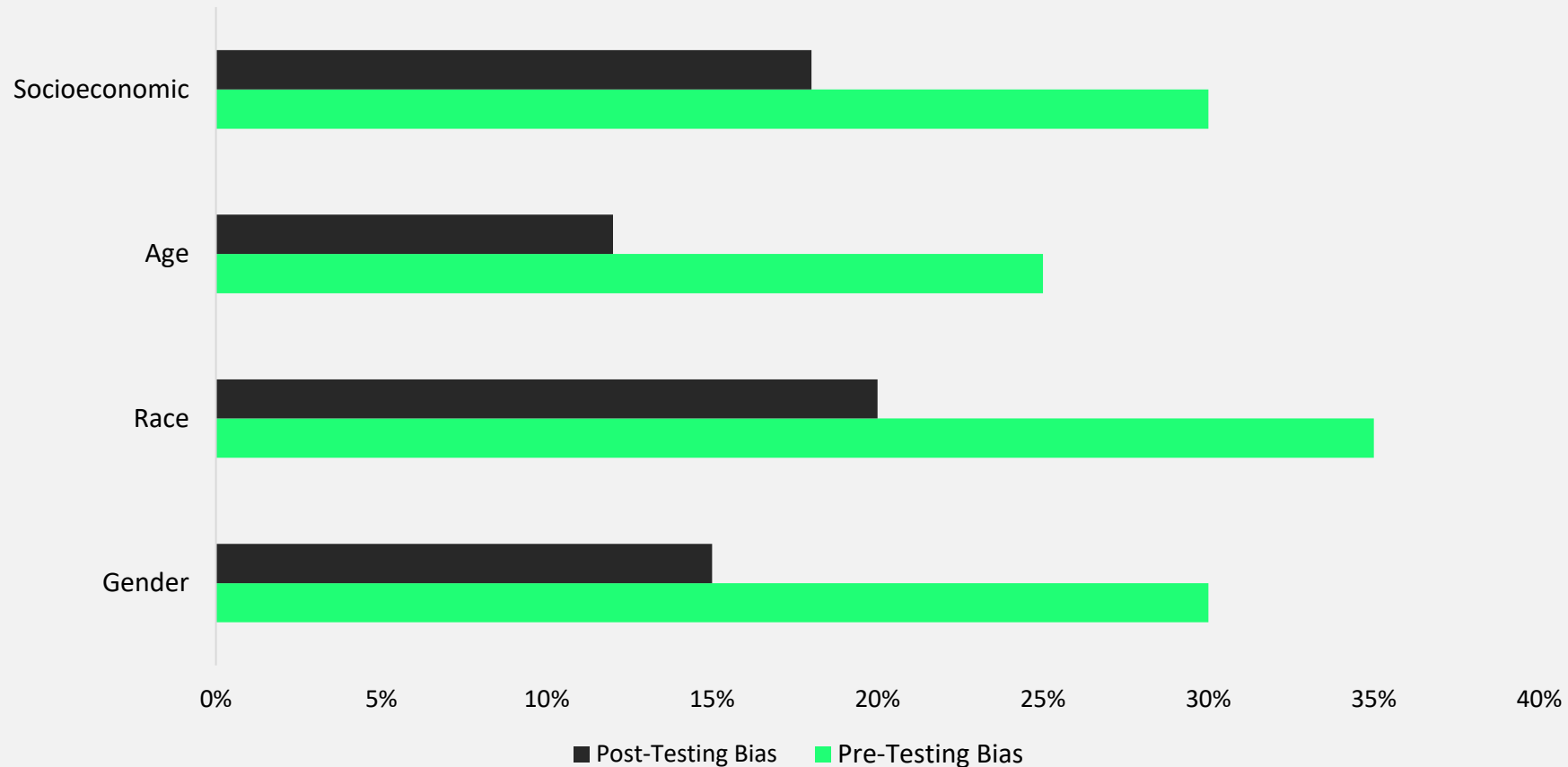
_Sentiment distribution is skewed towards the neutral class for all datasets.

_Classification accuracy is not an adequate metric for evaluating imbalanced datasets unless we are interested only in the majority class

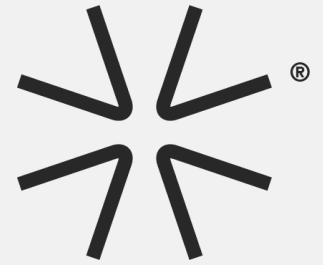
Bias Testing in AI



Benefits of Bias Testing on Bias Reduction



Bias Testing

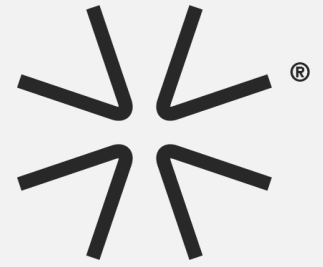


There are signs of adverse impact for most of the “Marital_Status” and “Education” categories

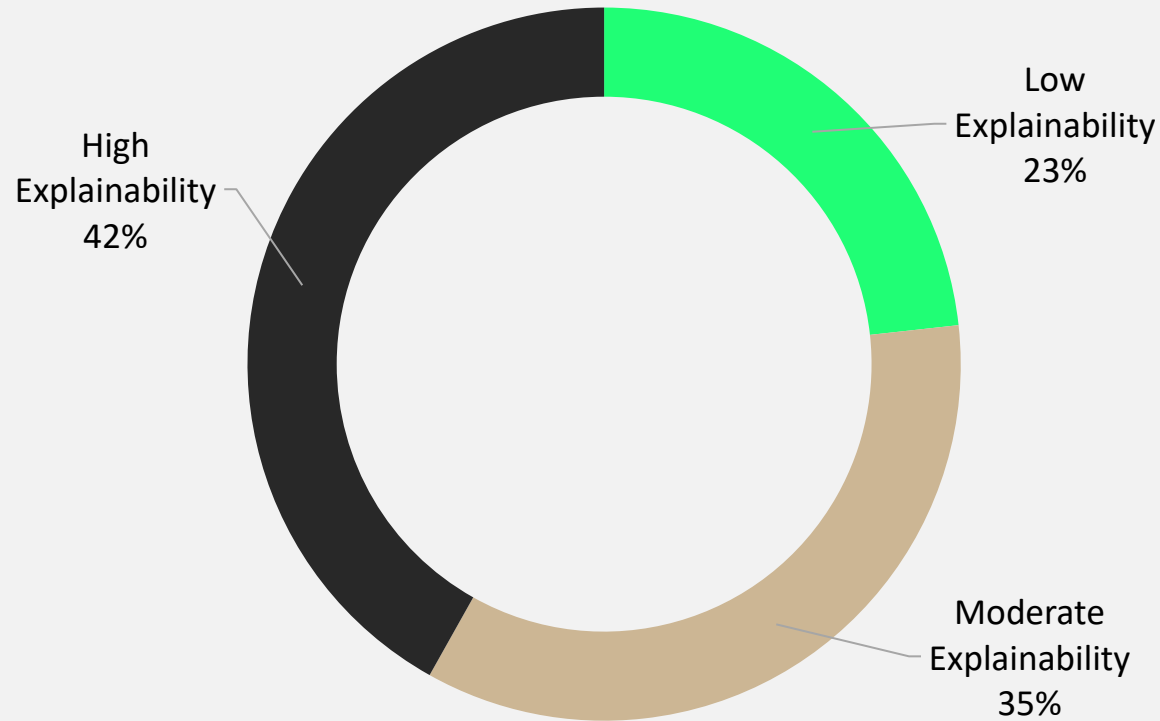
Marital status	Selection rate	Impact ratio
Divorced	0.2174	0.6495
Married	0.2131	0.6365
Single	0.3348	1
Widow	0.0668	0.1995

Education	Selection rate	Impact ratio
a. Elementary School	0.0099	0.0245
b. Middle School	0.0735	0.1814
c. High School	0.2844	0.7014
d. Technical School	0.4054	1
e. University	0.2868	0.7075
f. MSc	0.3030	0.7475
g. PhD	0.2051	0.5060

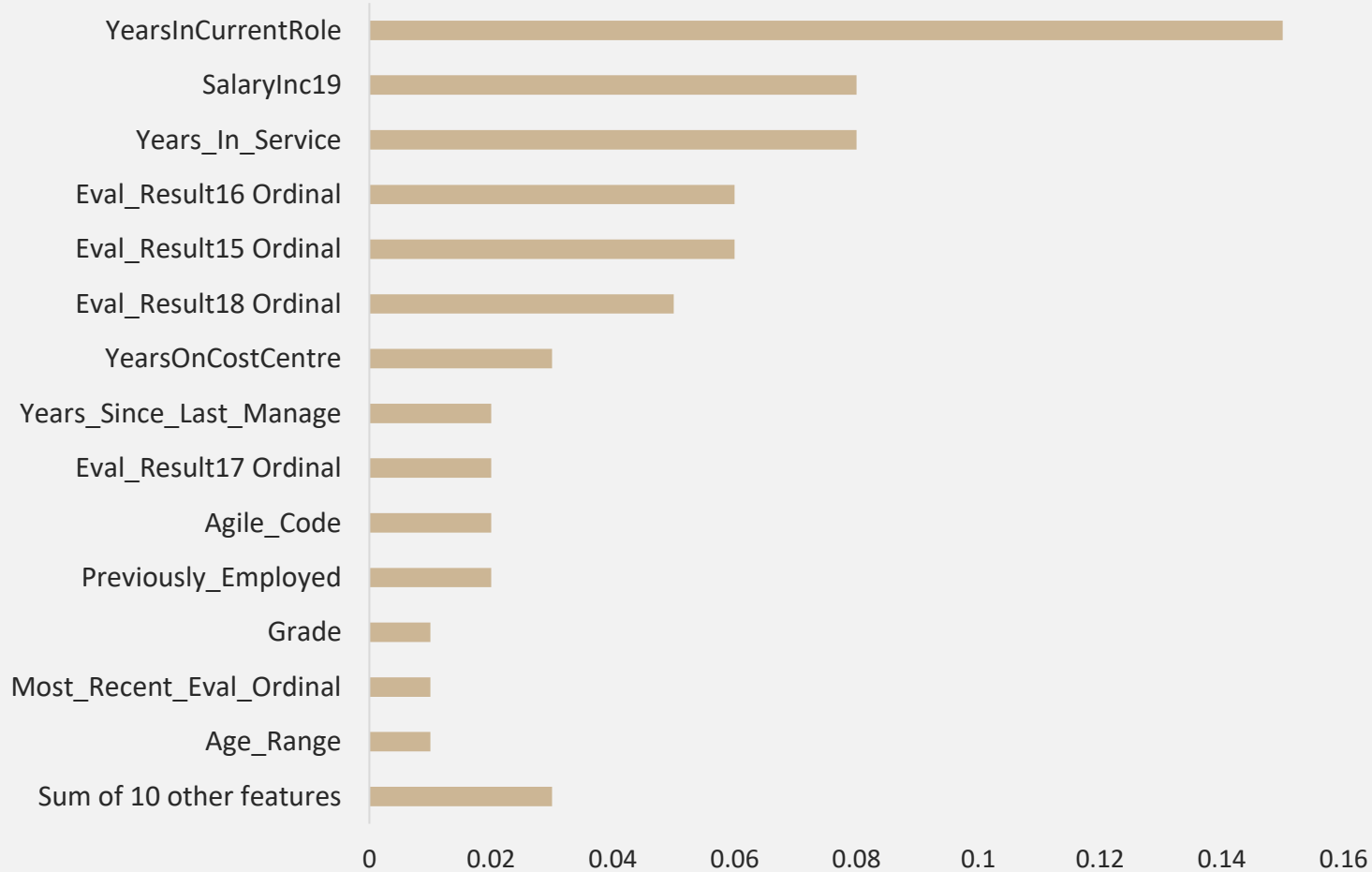
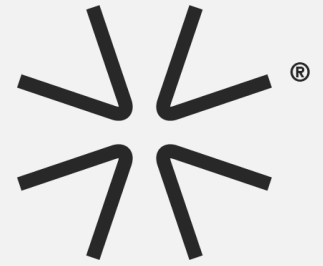
Explainability: A business value multiplier



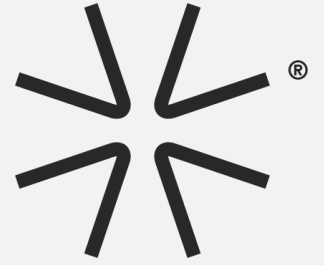
User Trust Based on Explainability Levels



Understanding the inner workings of your AI system



Closing Remarks



Regulatory Compliance can lead to strategic growth

- _If done properly leads to better products and better services.
- _Prerequisite to open new markets (e.g. NYC Bias Law).

Regulation as a strategic opportunity

- _Compelling reason to start building thoughtful systems.
- _Regulatory frameworks provide guidance and can be agents of change.

Come to our

booth #B4

to have a chat and
see a demo of our

iQ4AI platform.

 code4thought [®]



Thank you! * code4thought®