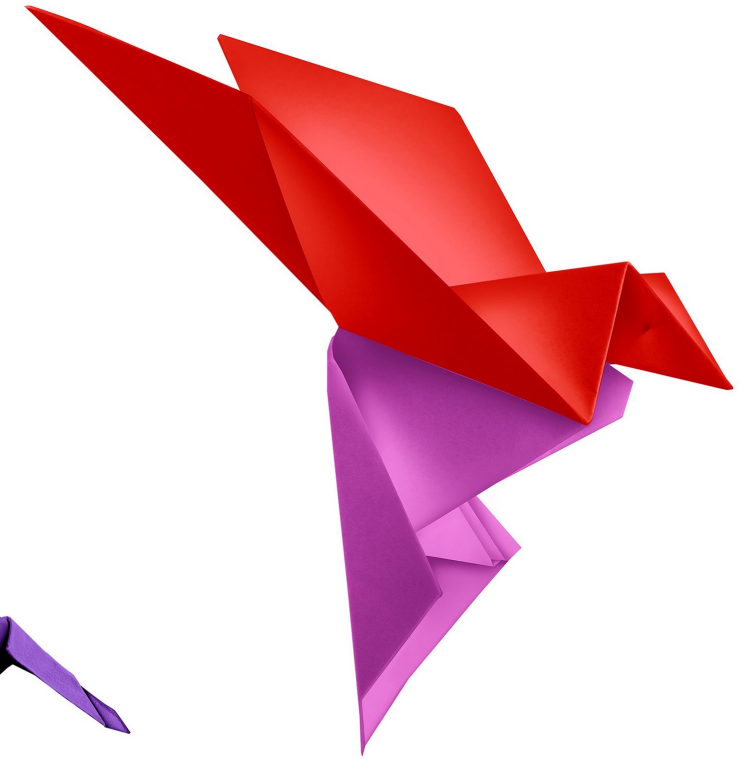
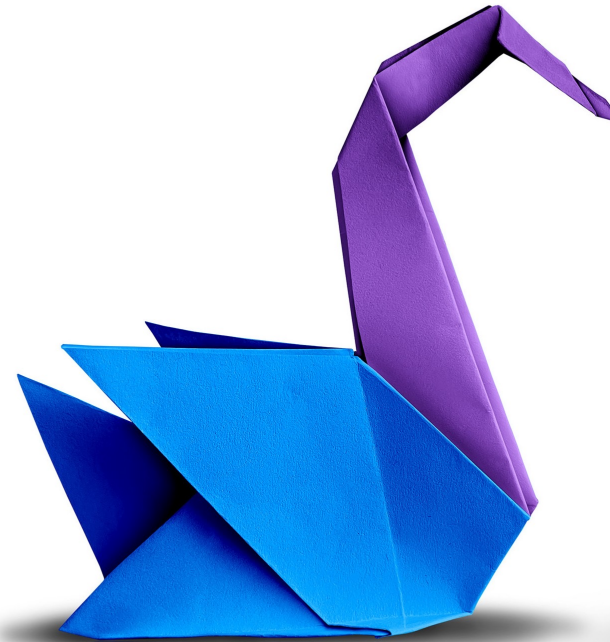
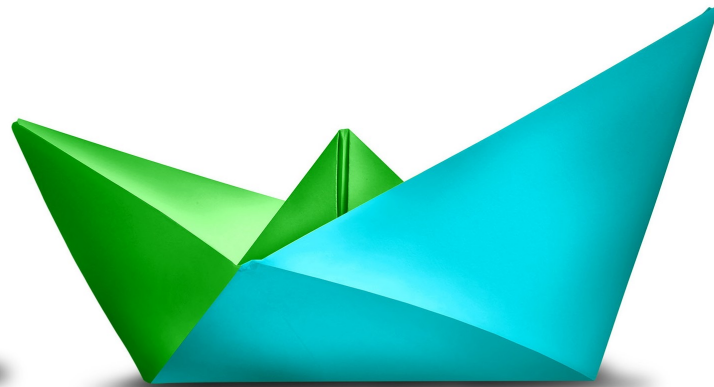


# Business Intelligence in the Age of AI



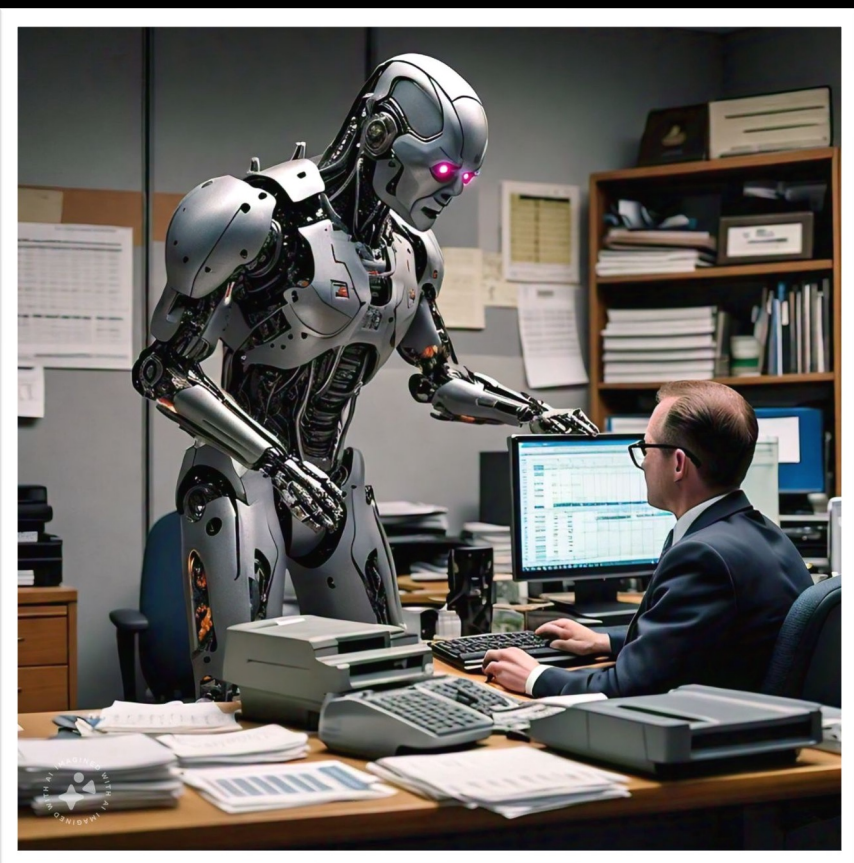
BE THE  
*Change*

# Video Killed the Radio Star!



A metaphor which conveys the idea that new technologies make older technologies obsolete and that such innovations transform the way in which we consume information.

# Will AI Kill the Actuary?

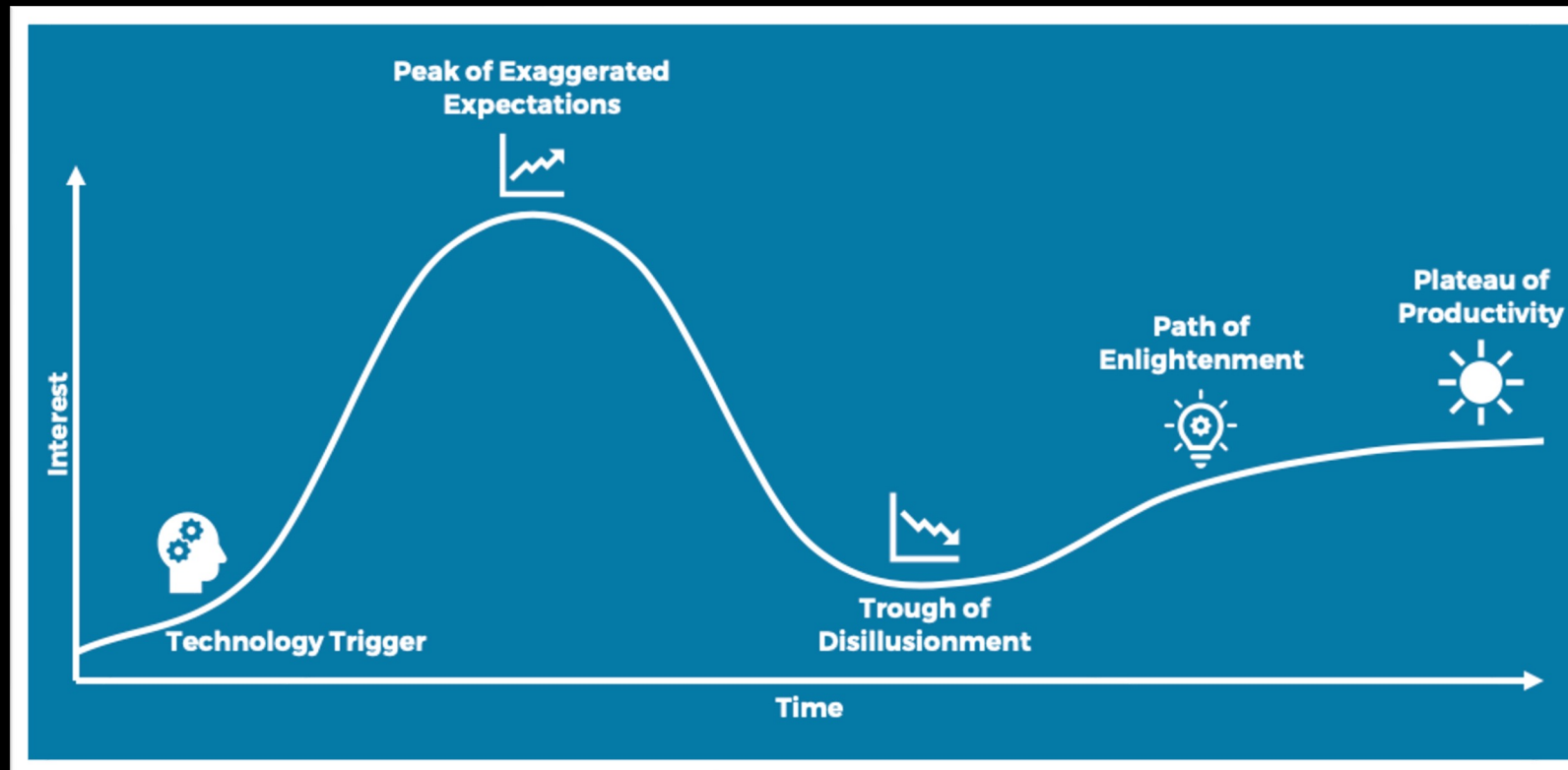


No, AI will not render actuaries obsolete (at least anytime soon). AI will empower actuaries to change the way in which businesses and consumers interact with and digest information.

Very exciting! A little disappointing?



# Technology Hype Cycle



## Technology Trigger

The emergence of a new technology triggers tremendous excitement and expectations

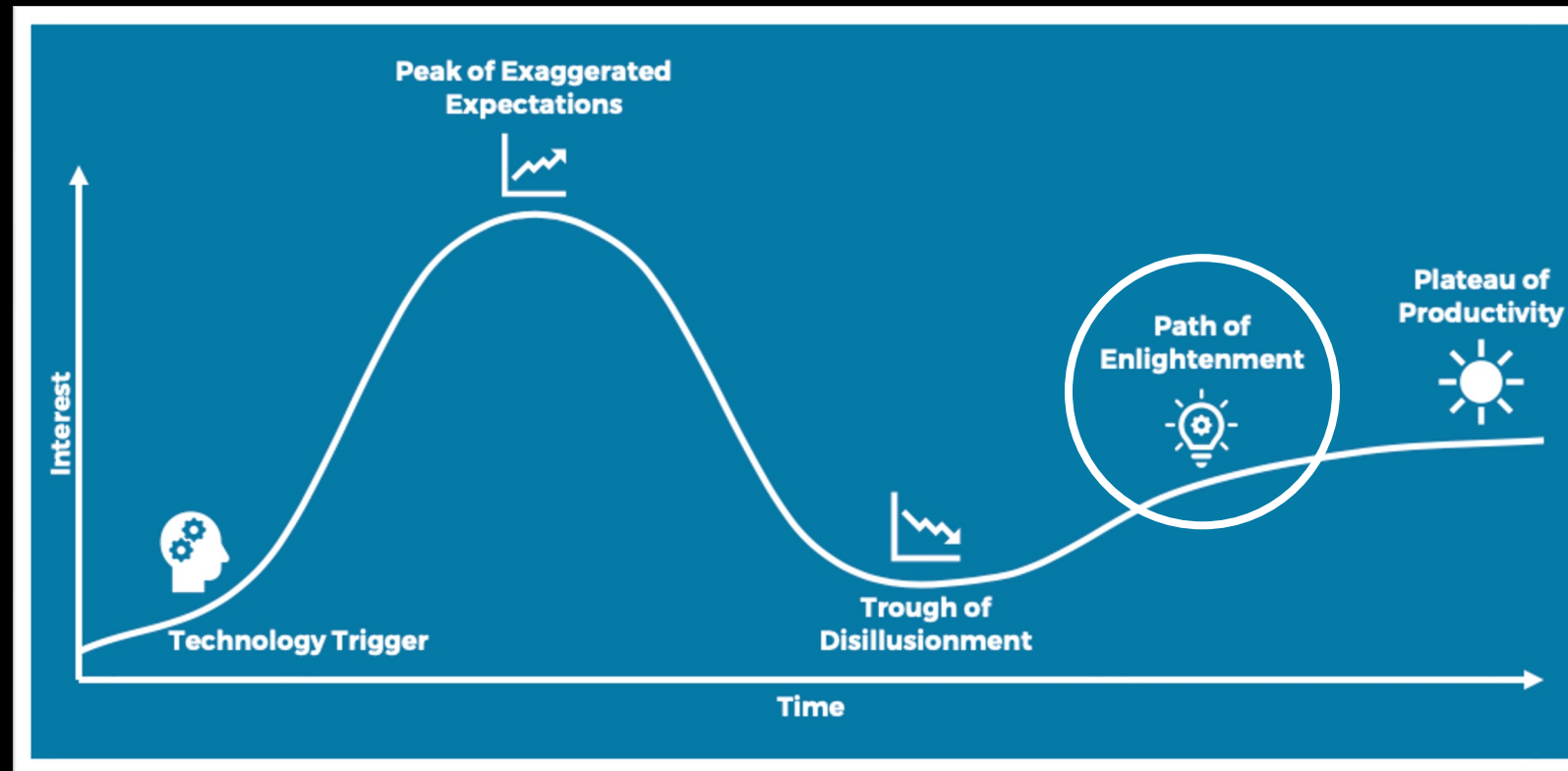
## Peak of Exaggerated Expectations

Expectations grow rapidly until expectations far exceed the capabilities of the innovation

## Trough of Disillusionment

Expectations dissipate and are replaced with disillusionment and scepticism

# Technology Hype Cycle



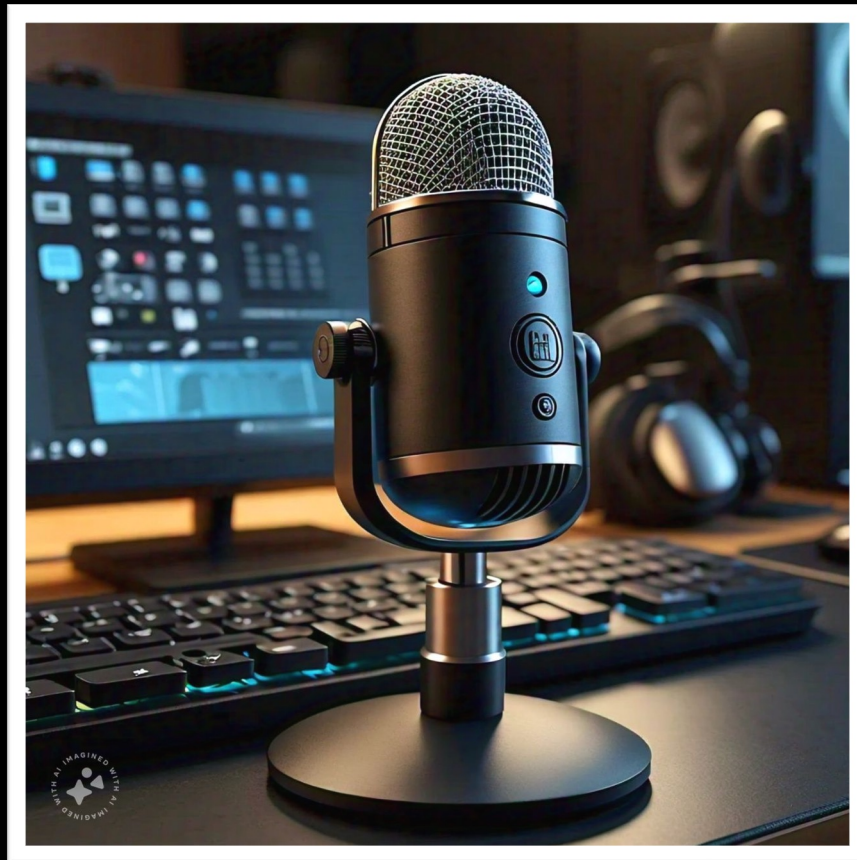
## Path of Enlightenment

With time, challenges are overcome and significant benefits are realised

## Plateau of Productivity

The innovation becomes mainstream

# Research and Development



**What does the path of enlightenment look like for us?**

The establishment of mechanisms which allow you to talk your data and which allow your data talk back to you, instantaneously and intelligible

# Research and Development



AI-Driven data  
interpretation tools

Ability to transition from reports and  
dashboards to AI-driven delivery mechanisms

Examples include our 2<sup>nd</sup> gen  
episode and patient groupers



# Interpretation Tools: Episode Grouper



Medical scheme claims data is unstructured. The data comprises of multiple seemingly disparate healthcare encounters. There are no clear links between healthcare encounters.

If we want claim data to talk, we need to give it structure. The Insight episodes grouper does exactly this by categorising healthcare encounters into clinically intuitive and statistically homogenous episodes of care.



# Interpretation Tools: Episode Grouper



Monday

Tuesday

Wednesday

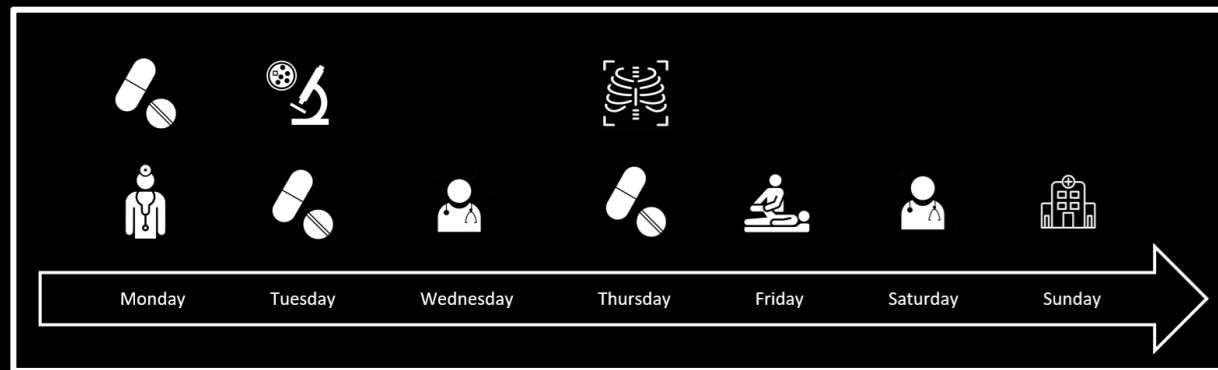
Thursday

Friday

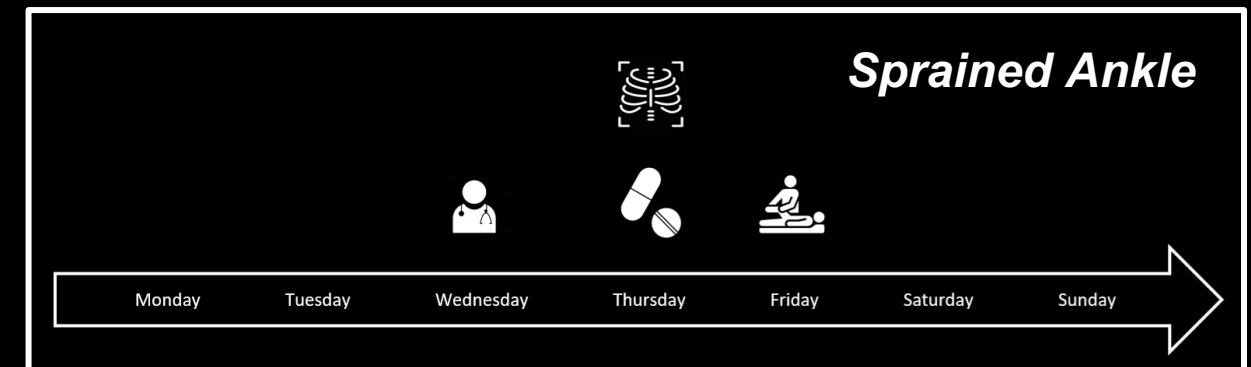
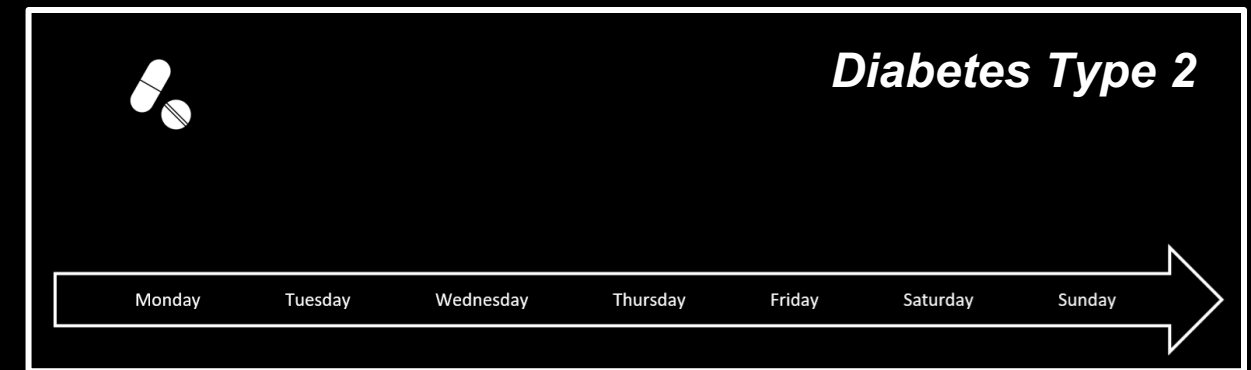
Saturday

Sunday

# Interpretation Tools: Episode Grouper



AI-driven  
rules engine



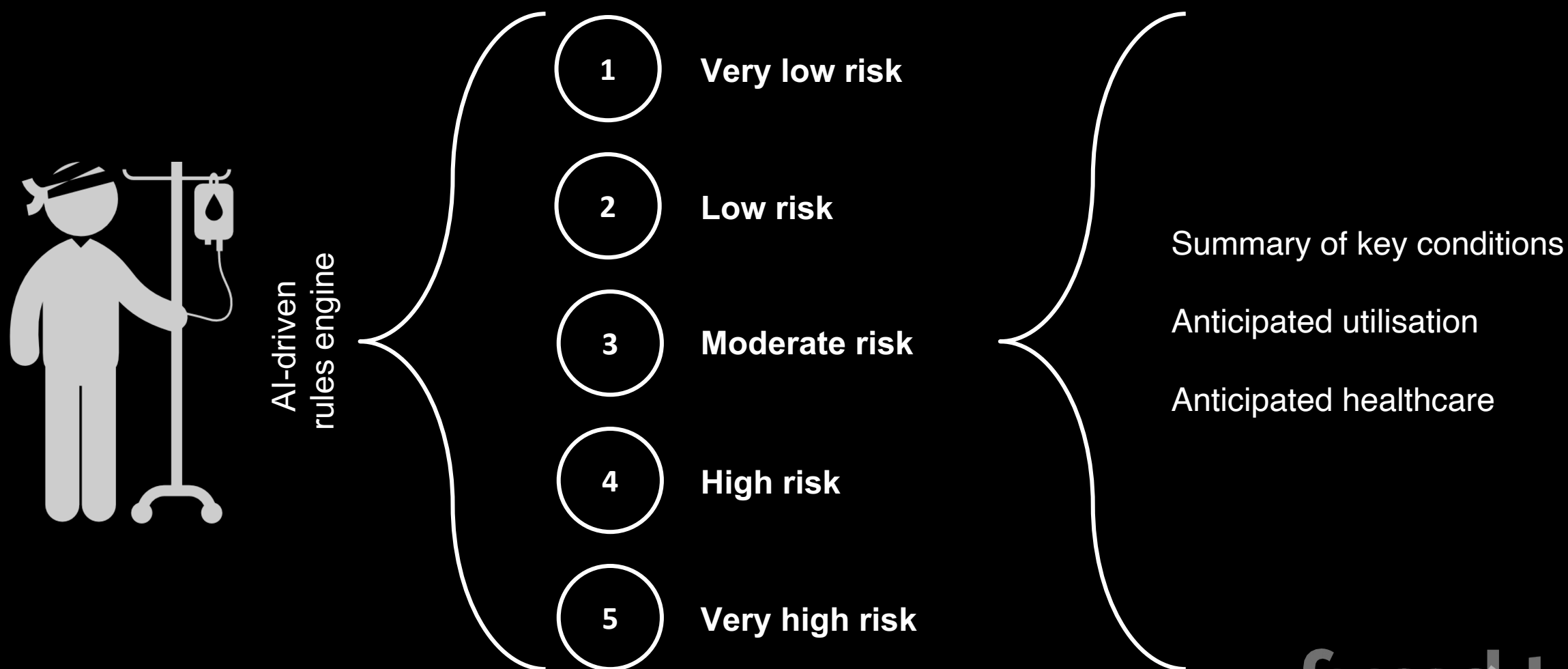
# Interpretation Tools: Patient Grouper



Medical scheme membership data is also unstructured. The level of risk associated with different cohorts of members is not always well understood.

If we want membership data to talk, we need to give it structure. The Insight patient grouper does exactly this by classifying patients according to their healthcare needs

# Interpretation Tools: Patient Grouper





# Interpretation Tools: Applications



1

Gives structure to the healthcare claims data and allows the data to find its voice heard (as we will soon demonstrate)

2

Facilitates better risk stratification and predictive analytics which allows for more focused interventions

3

Facilitates more clinically nuanced understanding of variations in the cost and quality of care which allows for more targeted interventions

4

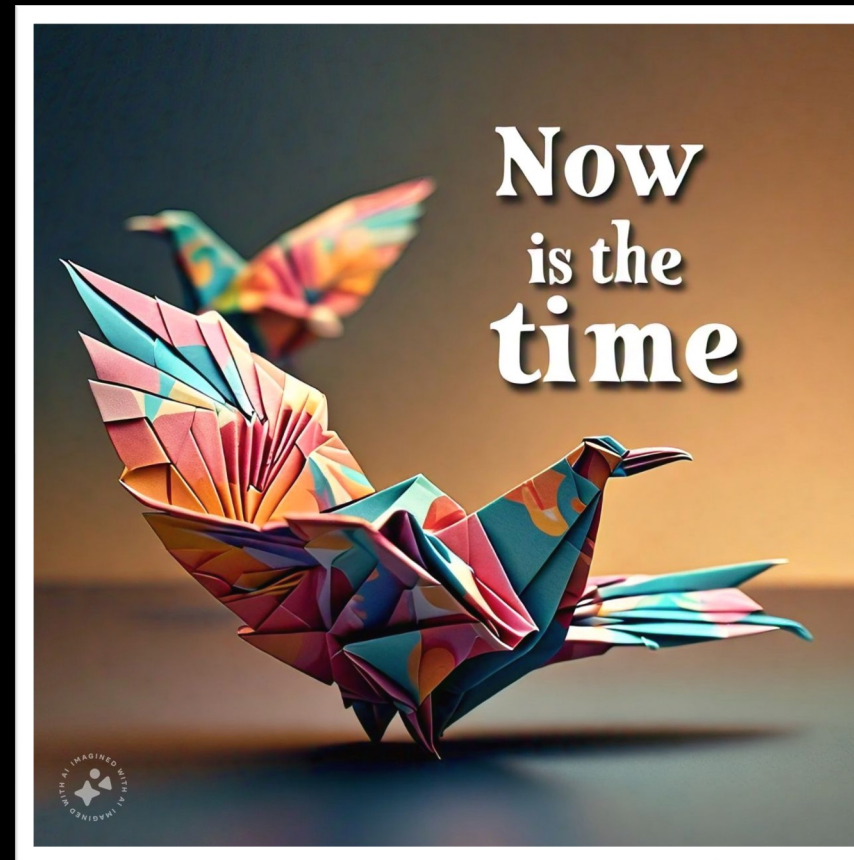
Facilitates a better understanding of patient journeys and comparative effectiveness which leads to more robust clinical protocols

# Interpretation Tools: Applications



One can argue that a data interpretation tools such as the episode and patient groupers are a “nice-to-have” and no specific applications require and these tools. One can also argue that a GPS is a “nice-to-have” and a map book is sufficient.

# Window of Opportunity



# Insight Digital Analyst (IDA)



Insight  
Digital  
Analyst



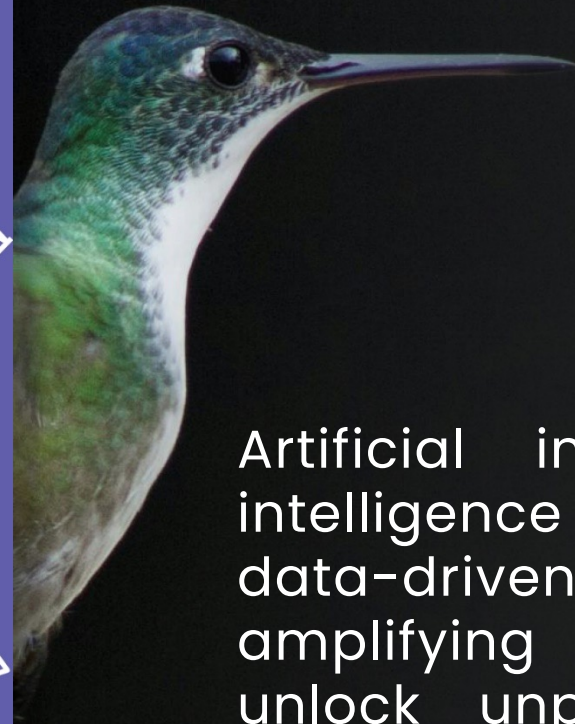
**SATYA NADELLA**

**CEO MICROSOFT**



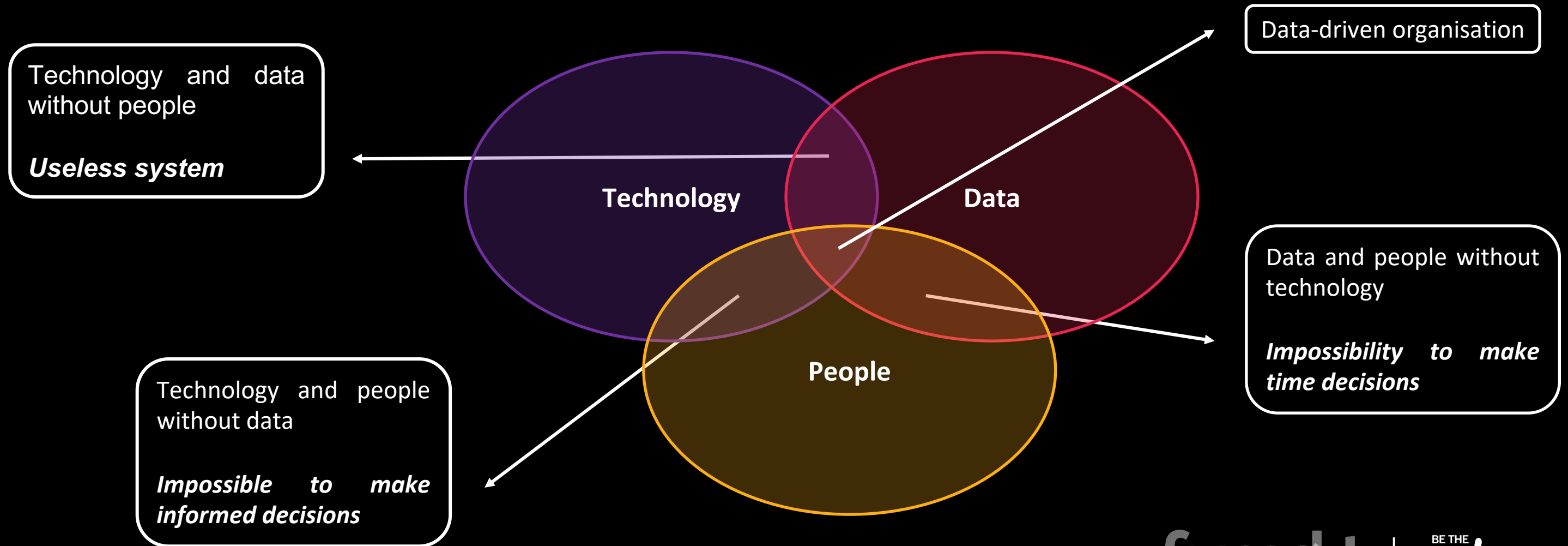
Conversational interfaces will become the dominant way people access data, as it allows for more natural and intuitive interactions.

**BERNARD MARR,**  
**FOUNDER AND CEO OF THE**  
**ADVANCED PERFORMANCE**  
**INSTITUTE**



Artificial intelligence and business intelligence are the yin and yang of data-driven decision-making, each amplifying the other's strengths to unlock unprecedented insights and competitive advantages."

# Data Driven Organisation



# Conversational Interfaces

## Understanding user intent

Analysing the meaning and context of user input is crucial for providing relevant and helpful responses in a conversational interface.

## Contextual awareness

Analysing the meaning and context of user input is crucial for providing relevant and helpful responses in a conversational interface.

## Synonyms and lexical relationships

Recognising synonyms, antonyms, and other lexical relationships between words can help to identify the user's intended meaning

## Natural language processing

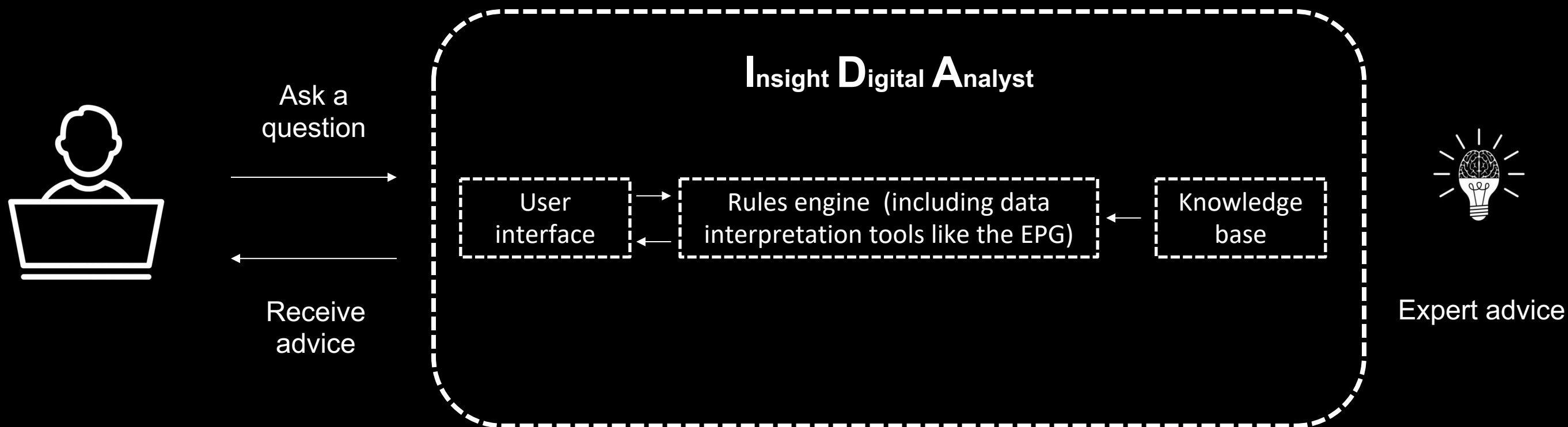
Leveraging advanced natural language processing techniques, such as entity recognition, sentiment analysis, and intent classification, can greatly enhance the semantic understanding of user input.

## Domain specific knowledge

Incorporating domain-specific knowledge and ontologies can enable more accurate interpretation of user input within the context of the application or conversational domain.



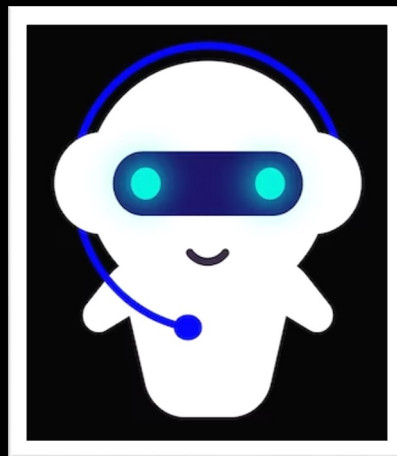
# AI Maturity



# Applications

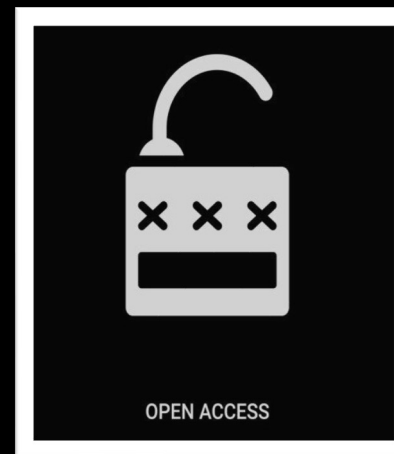
## Customer Engagement

More effective, more cost-effective



## Democratising Analytics

Increased access, increased agility

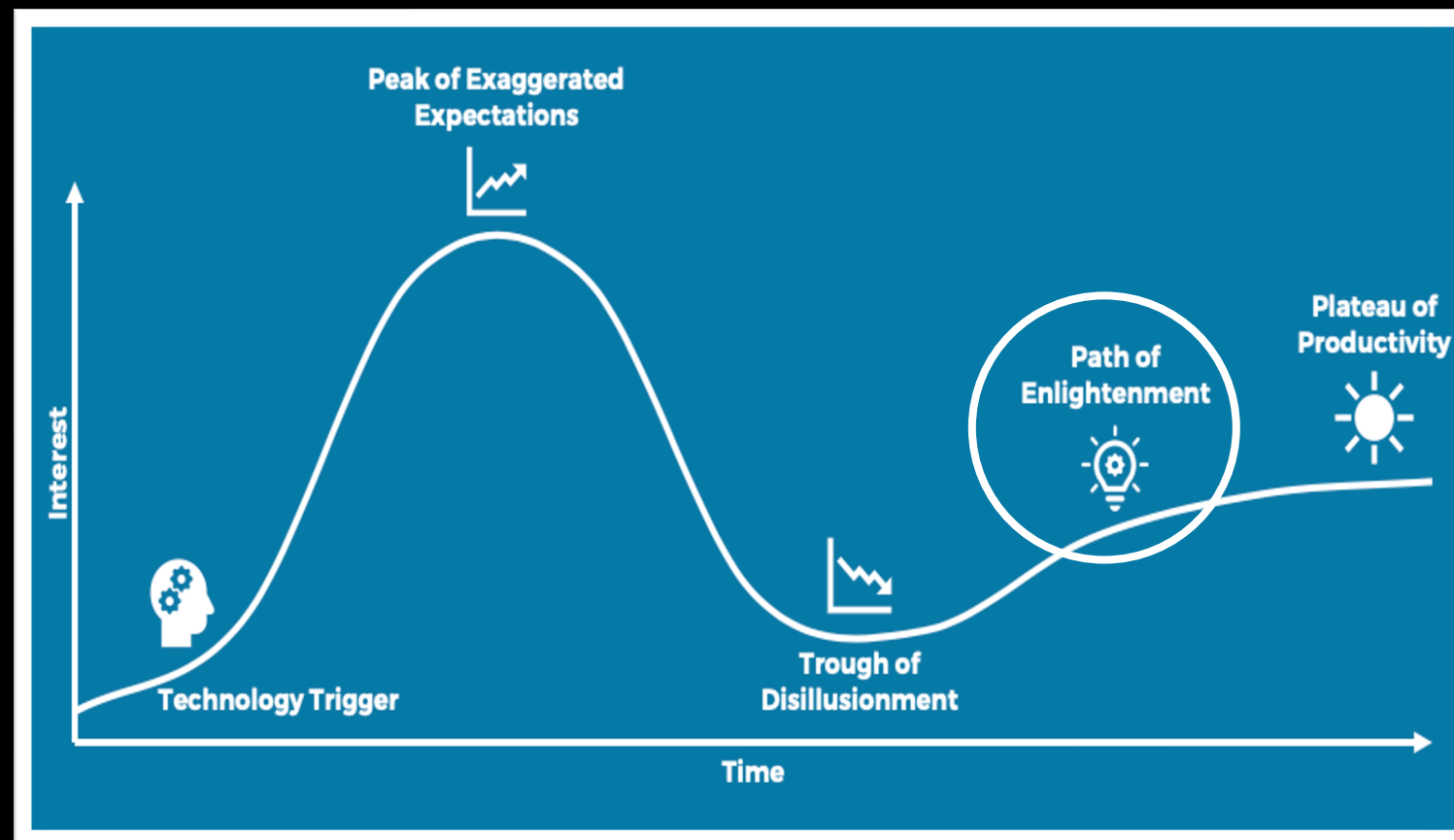


## Risk Management

Shining light on the unknown unknowns



# Living up to the Hype



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Thank you.