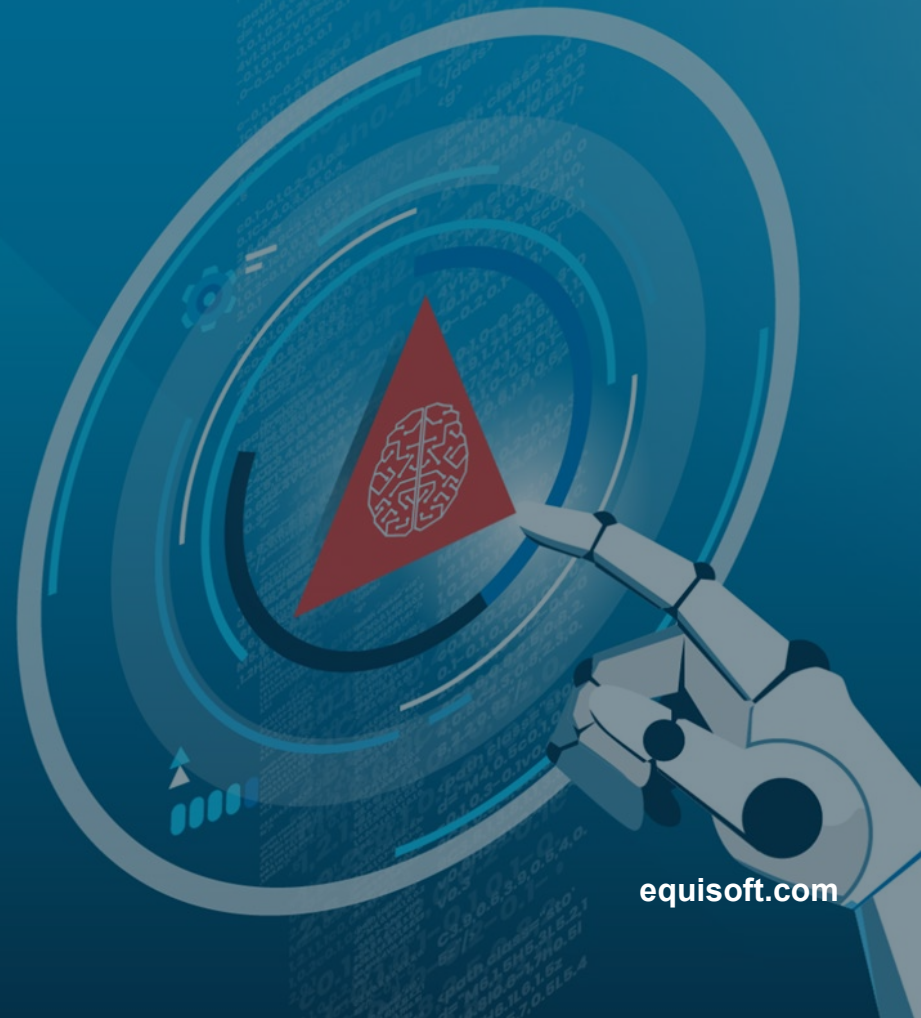




# Achieving Strategic Objectives through Machine Learning: Insights and Applications

Leslie Lee Fook, Incus  
Ghassan Karam, Equisoft



[equisoft.com](http://equisoft.com)

# Our speakers



**Ghassan Karam, ASA, ACIA**

Director,  
Core Insurance Solutions



**Leslie Lee Fook**

Director,  
AI, Analytics & Automation



# Categories of AI Today, Theoretical and Future



Purpose AI

## ANI

Artificial  
Narrow Intelligence



## AGI

Artificial  
General Intelligence



## ASI

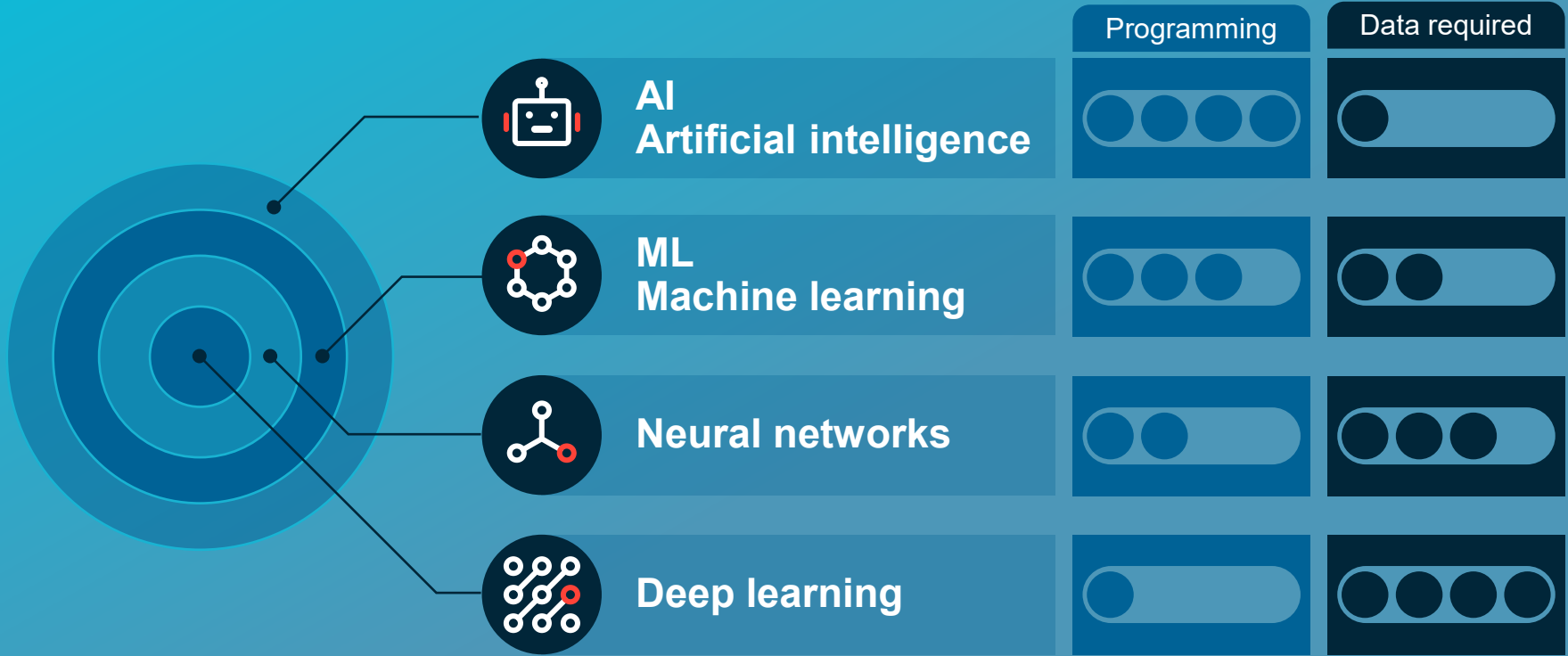
Artificial  
Superintelligence



# Do we really understand the Hype?

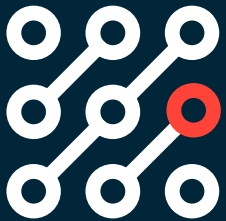


# While We All Get Excited by AI It is ML That We Are Really After!



# The Game Changer: Generative AI

Deep learning



Generating new content based on  
**historical data and prompts**

Gemini



ChatGPT

LLaMa  
∞ Meta

# The Game Changer: Generative AI

Gemini



ChatGPT

LLaMa  
Meta

Fine tuning



Prompt engineering

+ Better Results

- Data heavy

- Very expensive

+ Quick & versatile

- Specific skillset

- Limited by model capacity & bias

# Very Accessible but Commercially Challenging!



OpenAI

Fine tuning \$\$\$







# The Commoditization of Generative AI

- ▶ Open-source
- ▶ LPU vs GPU
- ▶ Adapted to devices (resource constraints)



# The Commoditization of Generative AI

This trend marks a significant shift in how businesses and developers can leverage AI



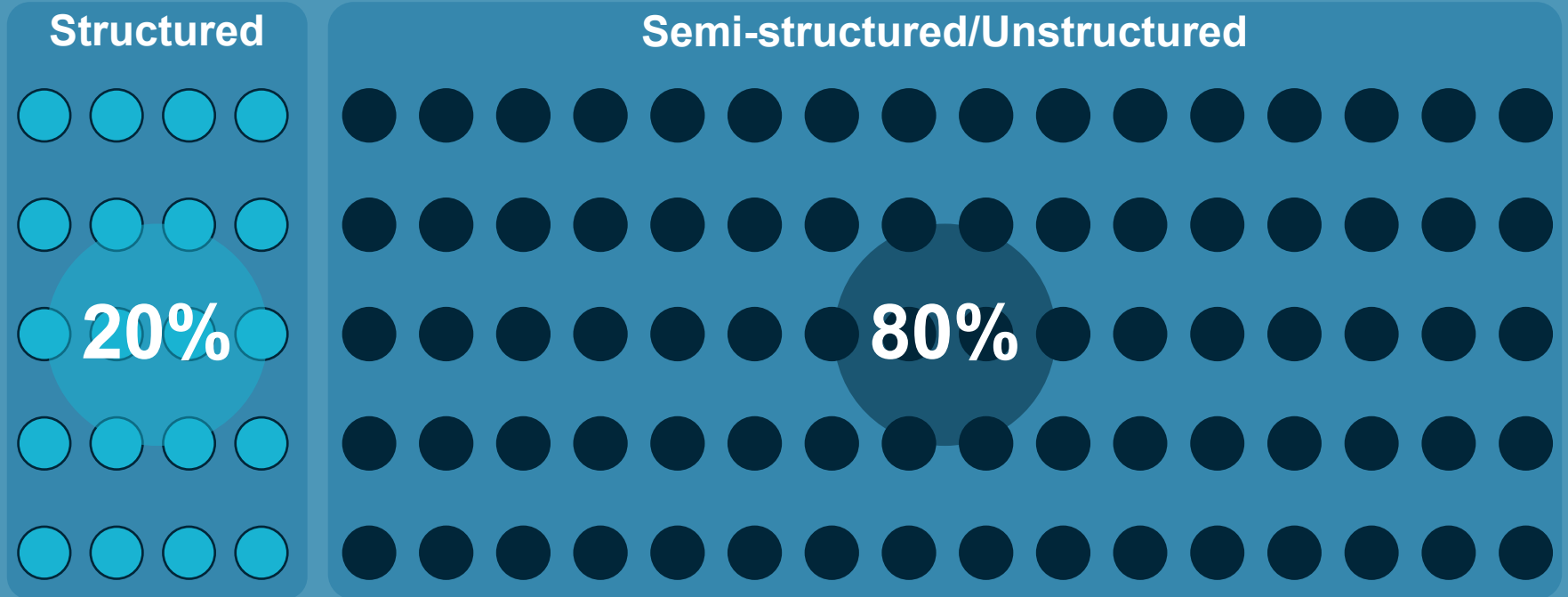
Insurance  
Companies  
are Data Rich

# Typical Size of Information in an Insurance Company

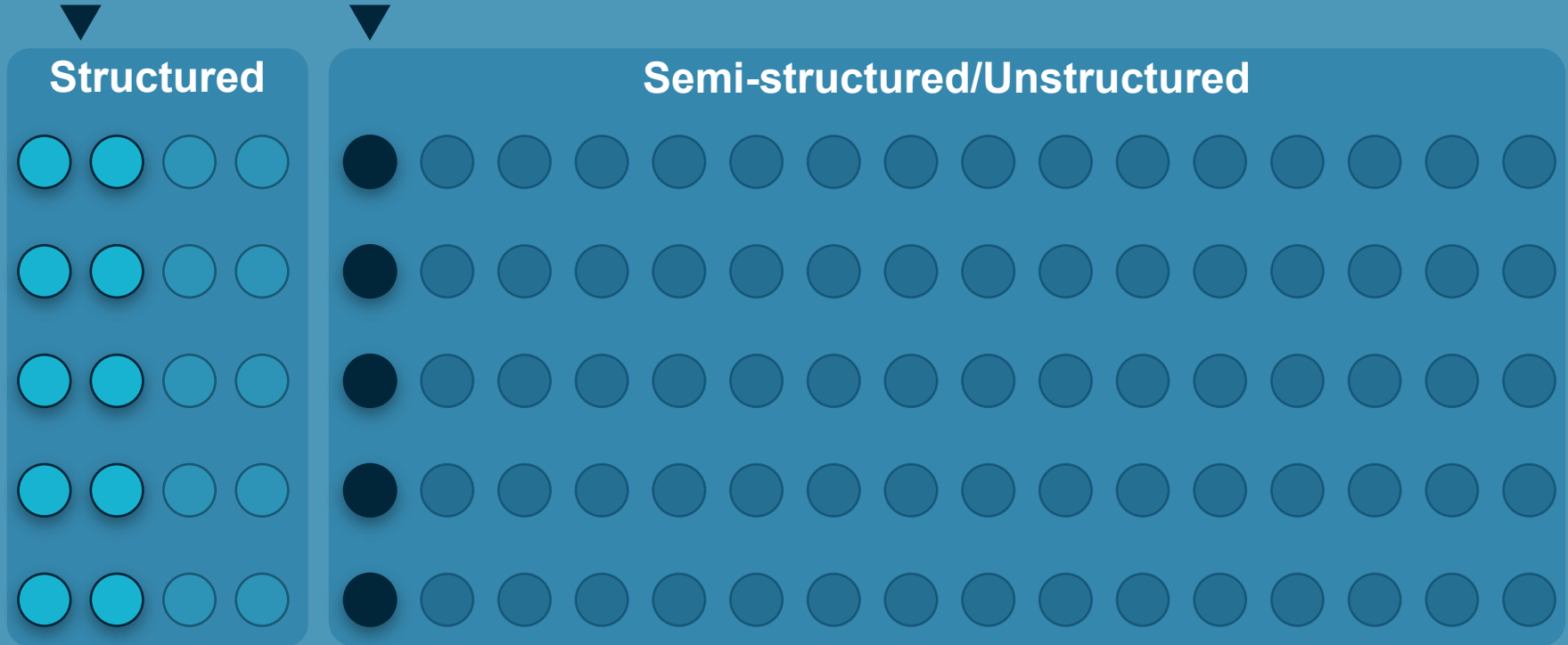


100TB

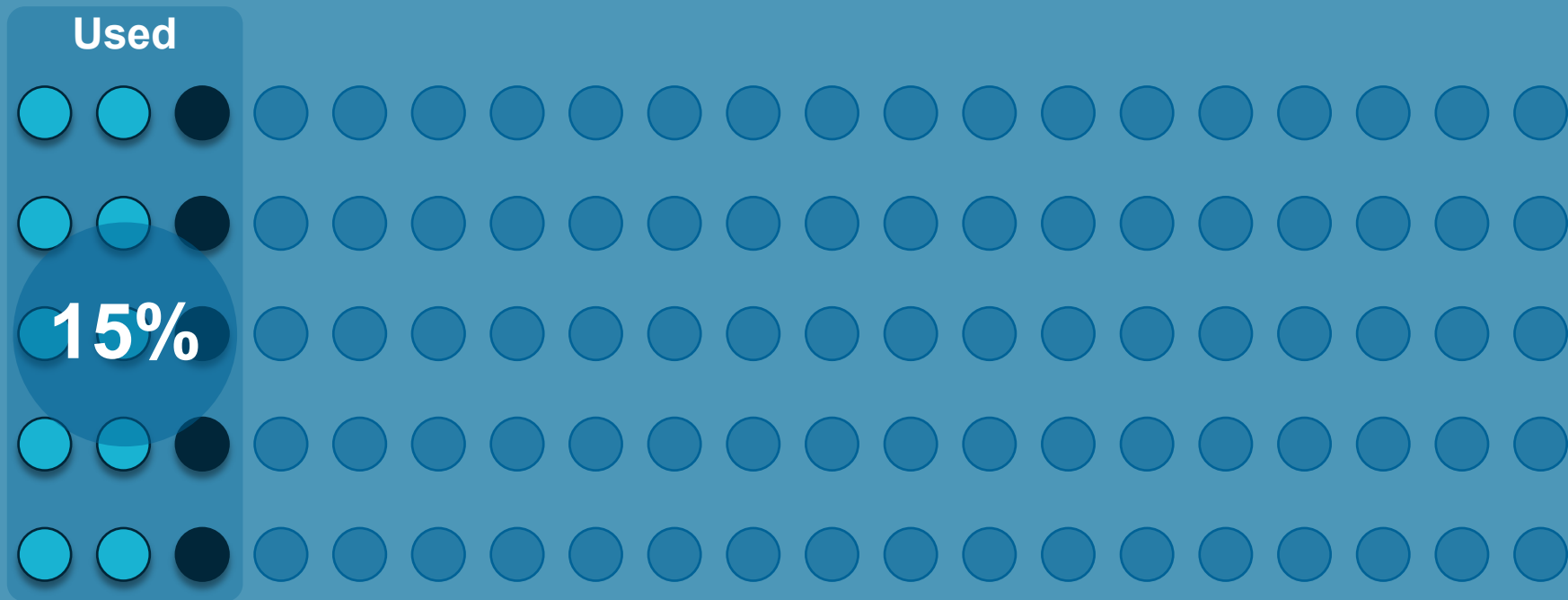
# Structured, Semi-structured and Unstructured Data



# Only 50% of Structured and 5-10% of Unstructured Data is Used



# Overall, only 15% of Data is Used in Insurance Companies







# Innovate using these commodities & unused data to drive business value

Generative  
AI

+

Unused  
data





# AI Improving Insights and Oversight

# Everyone is Already Doing Traditional Analytics

## Traditional

### Descriptive

Risk & Pricing

Compliance

Forecasting & Reserving

Customer Segmentation

### Predictive

Fraud Detection

Claim Prediction

# Generative AI for Advanced Analytics

## Advanced

### Descriptive

Risk & Pricing

Compliance

Forecasting & Reserving

Dynamic Customer  
Segmentation

Trends & New Insights

### Predictive

Advanced Fraud Detection

Enhanced Claims Prediction

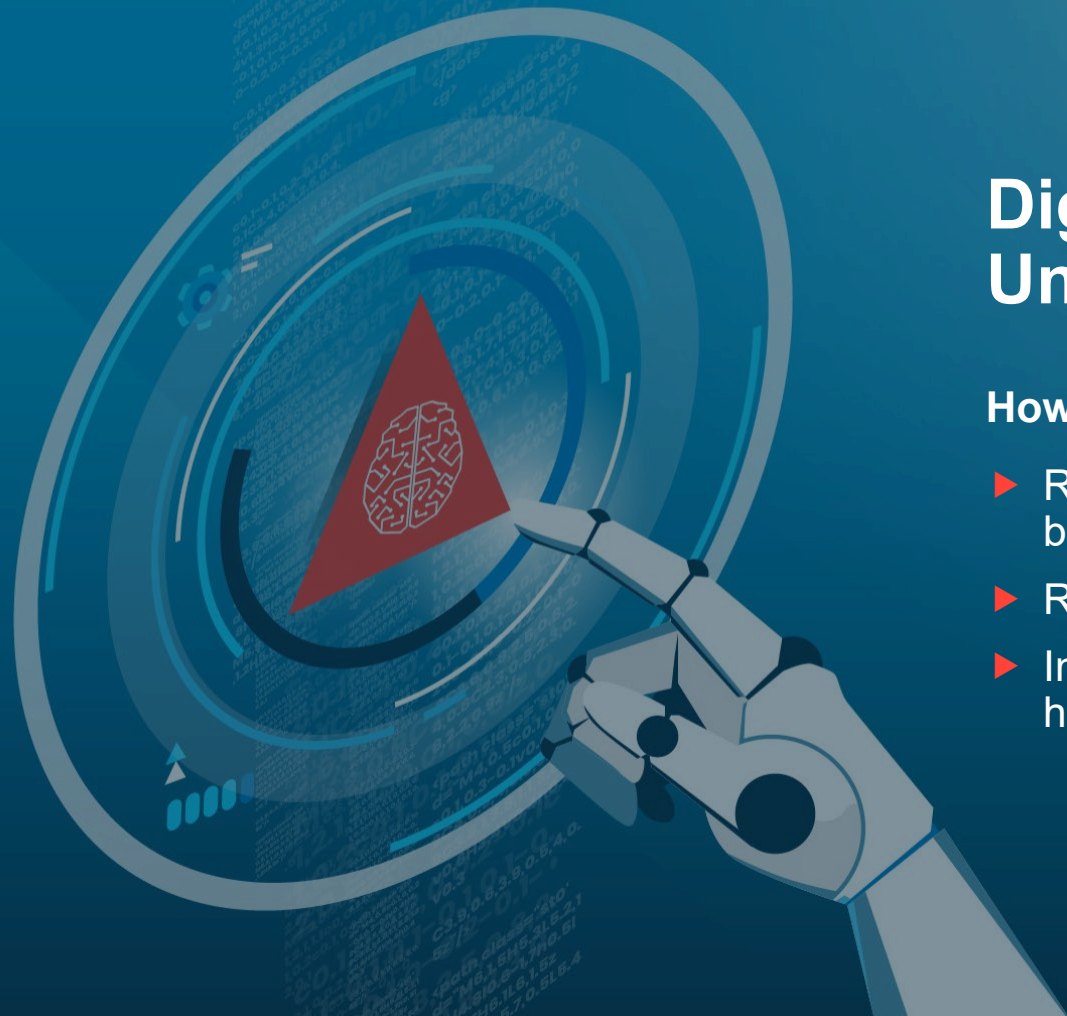
Customer  
Behaviour Prediction

### Prescriptive

Personalized  
Retention Strategies



# AI Assisting & Accelerating Decision Making

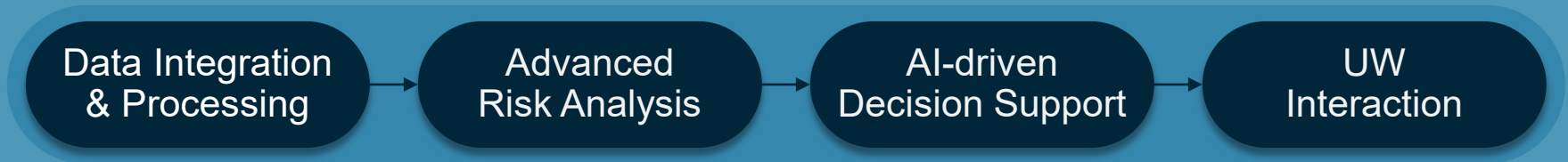


# Digitally Engineered Underwriting

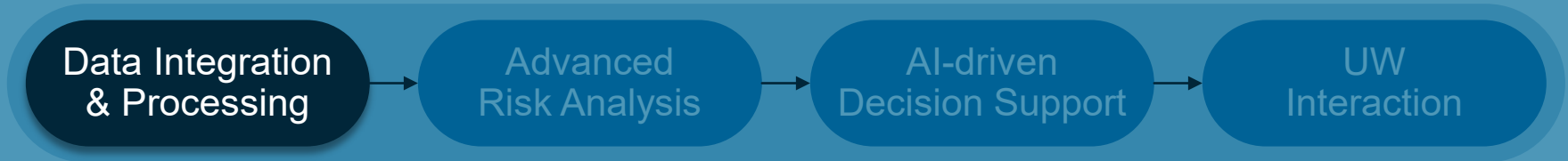
## How AI can help:

- ▶ Reduce churn during new business process
- ▶ Reduce cost of acquisition
- ▶ Improve accuracy and reduce human error

# Digitally Engineered Underwriting



# Digitally Engineered Underwriting

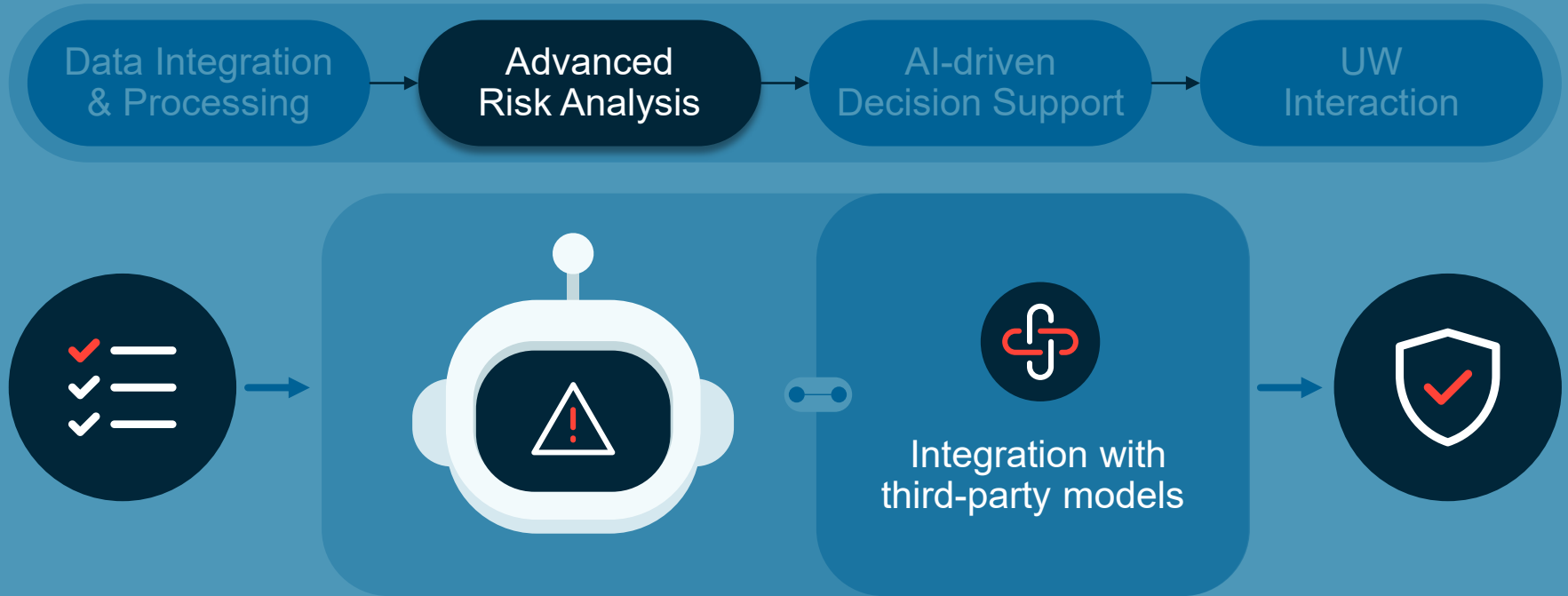


# Digitally Engineered Underwriting

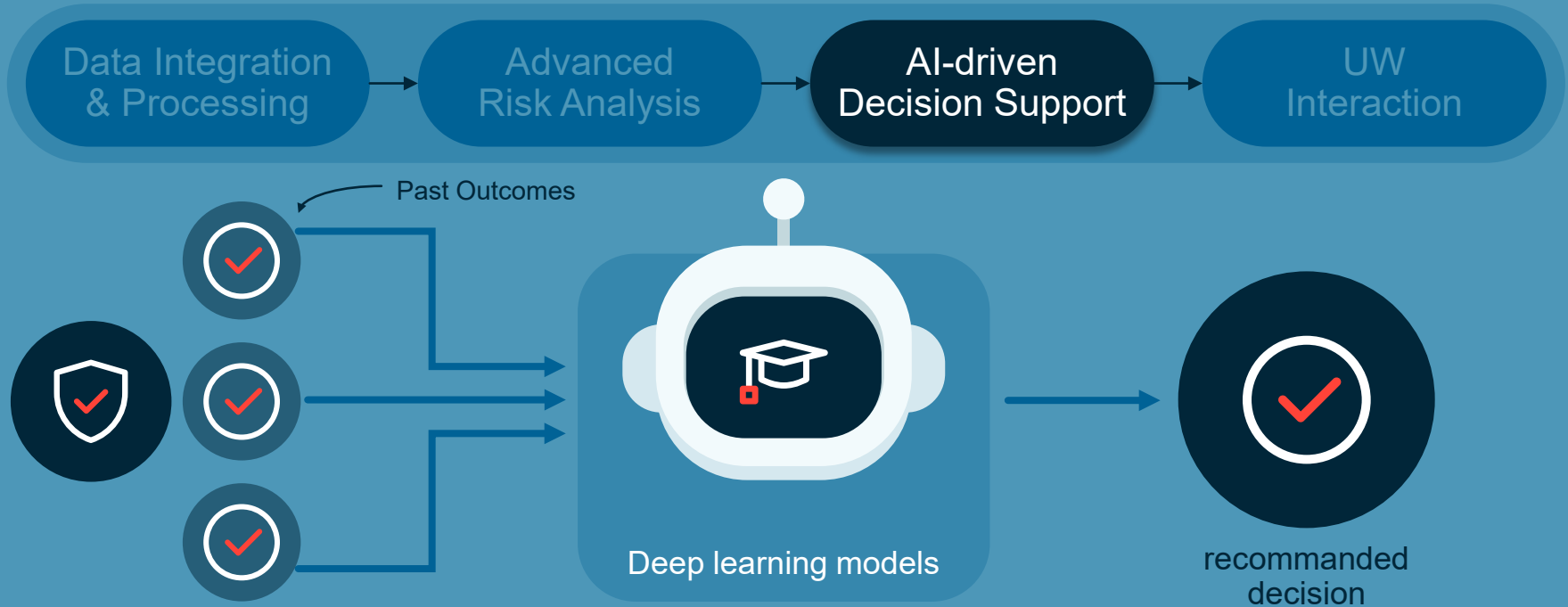




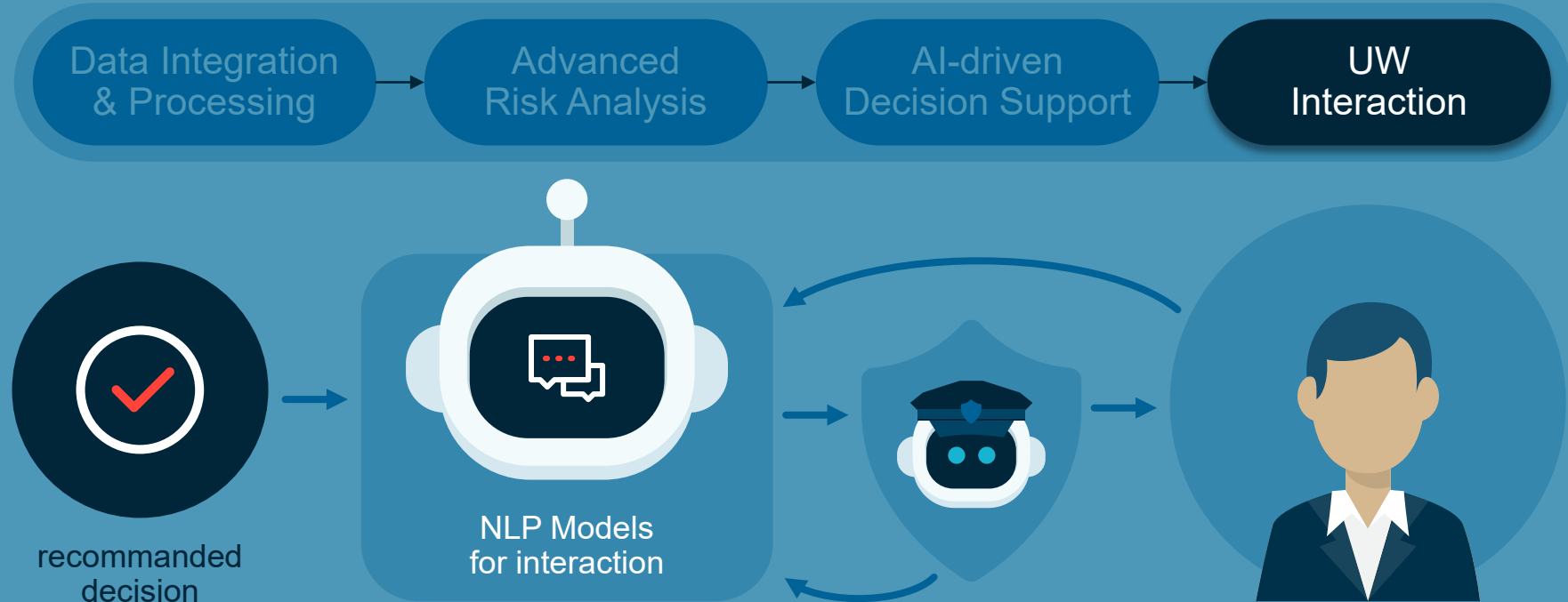
# Digitally Engineered Underwriting



# Digitally Engineered Underwriting



# Digitally Engineered Underwriting





# Maximize ROI: Reuse Your AI Models

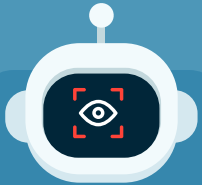
# Digitally Engineered Underwriting

Data Integration  
& Processing

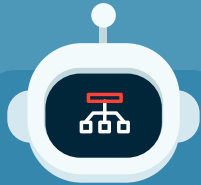
Advanced  
Risk Analysis

AI-driven  
Decision Support

UW  
Interaction



Computer  
vision



AI for  
classification



NLP for  
extracting data



Risk analysis  
models



Deep learning  
models

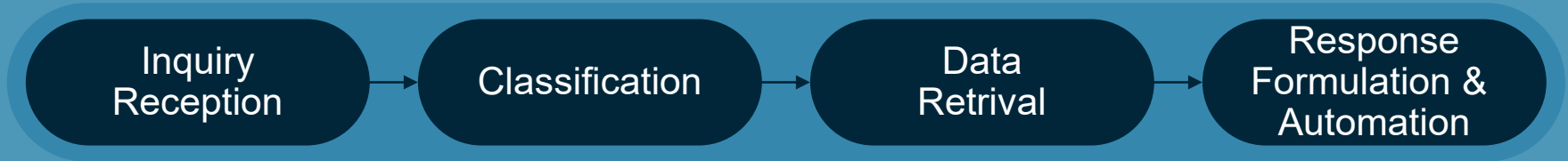


NLP Models  
for interaction

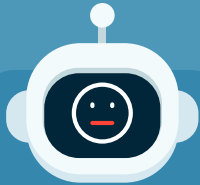


- Compliance
- Bias
- Regulations

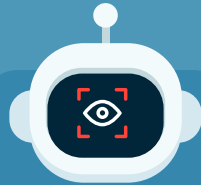
# Customer Support



NLP for text classification



AI for intent recognition



Computer vision



AI-driven query system



NLP Models



- Compliance
- Bias
- Regulations
- Hallucinations

## Key Takeaways

# What to Look After Today

- ▶ Prioritize Strategic AI Implementation
- ▶ Invest in Data Infrastructure
- ▶ Foster a Culture of Innovation and Adaptability
- ▶ Collaborate and Partner



# Future of AI Insurance





amazon go

08:55 Welcome Address

Hon. Gaston Browne  
**Prime Minister**  
Antigua & Barbuda

09:05 Video Presentation: 21<sup>st</sup> Century Government

CTU

09:10 Why 21<sup>st</sup> Century Government? *The potential in five minutes!*

**Mr. Leslie Lee Fook**  
Director,  
Incus

09:15 Feature Address: The Role of Caribbean Governments in the 21<sup>st</sup> Century

Dr. The Rt. Hon. Keith Mitchell  
**Prime Minister**, Grenada





COXX



**C – General Paper**  
**O - Chemistry**  
**X – Biology**  
**X – Math**



**Cambridge Assessment**  
International Education

**CERTIFYING STATEMENT**

General Certificate of Education

THIS DOCUMENT REPRESENTS AN OFFICIAL COPY OF GRADES ISSUED

This certifies that in the June 1997 examination series

**LESLIE G LEE FOOK**

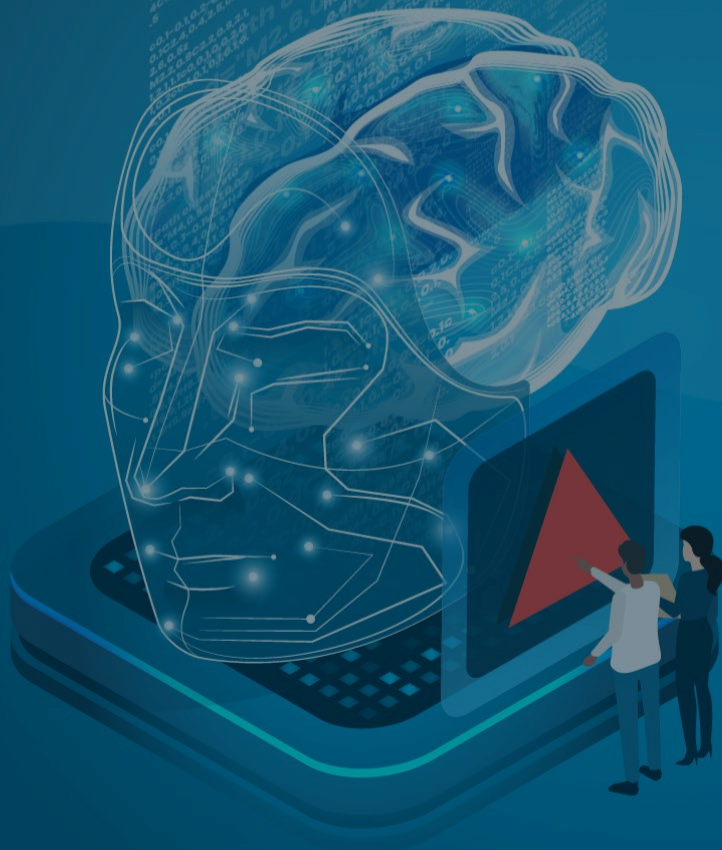
Date of Birth: 13 November 1977

of **ST MARY'S COLLEGE PORT OF SPAIN**

was awarded the following grade(s) in the syllabus(es) shown:

Syllabus	Level	Grade
General Paper	Alternative Ordinary Level	C(c)
Chemistry	Advanced Level	O(o)
Biology	No Result	X(x)
Mathematics	No Result	X(x)

A handwritten signature in black ink, appearing to be 'L. G. Lee Fook', is located at the bottom left of the page.



# AutoML

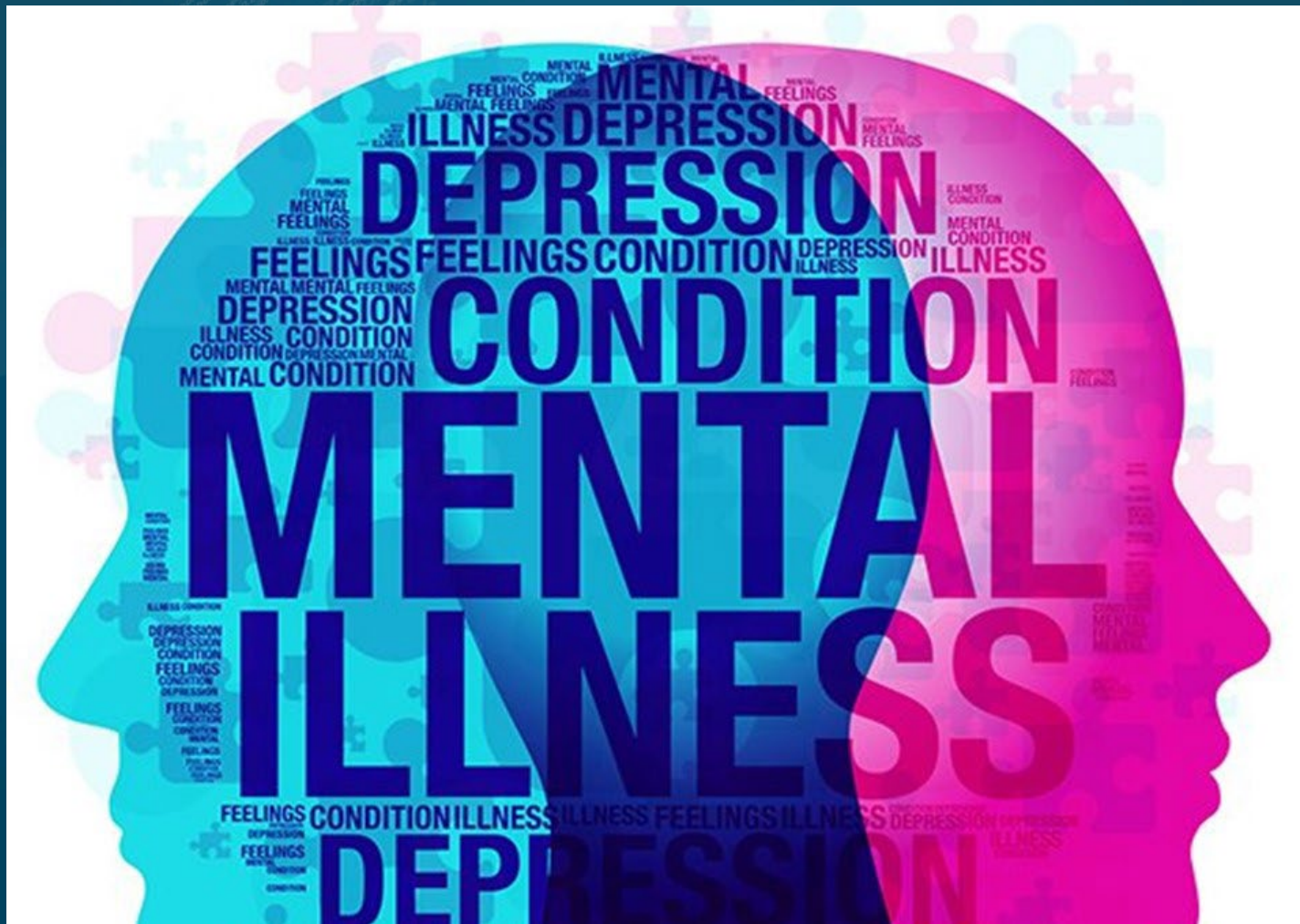
- ▶ 2017
- ▶ 43<sup>rd</sup> Best Data Scientist
- ▶ Clicked One Button



# Data Scientist Training







# I Had Three Choices

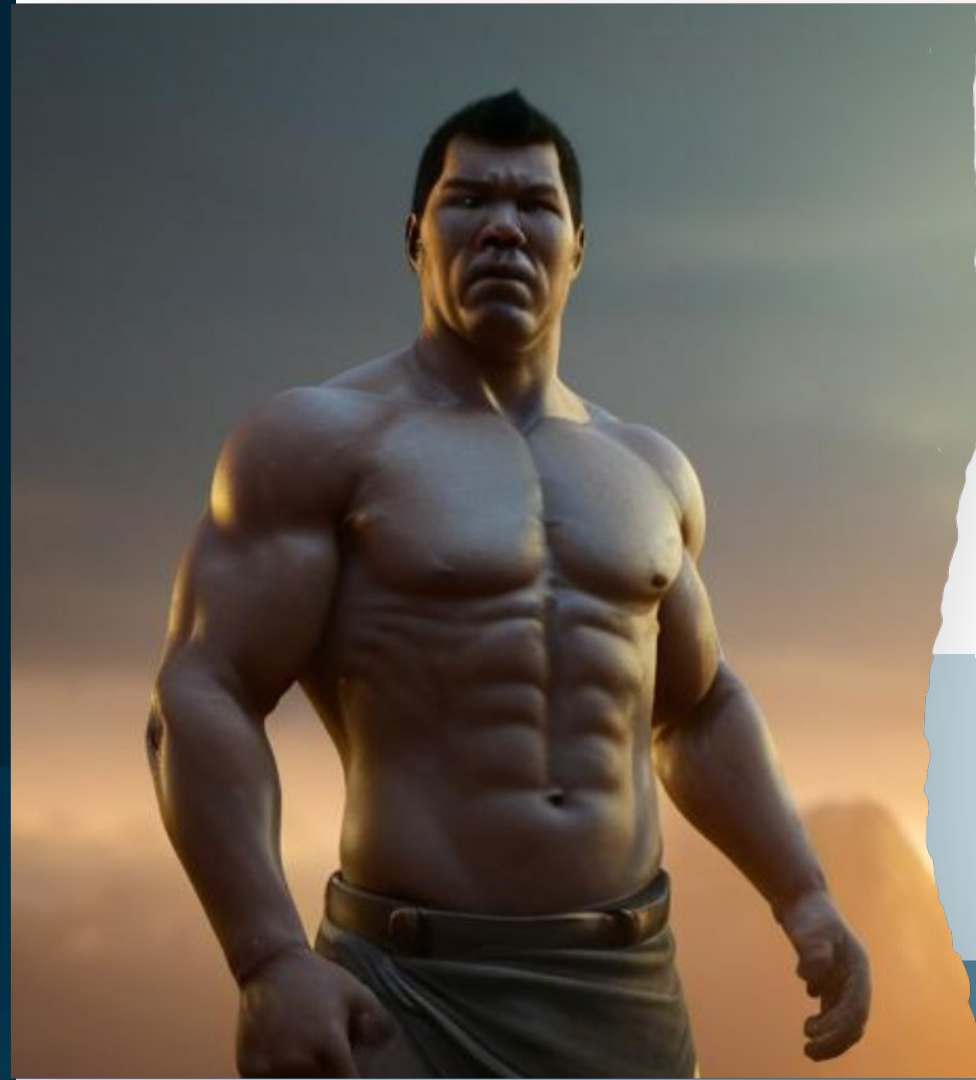




# 1. Get Rid of Everyone



## 2. Beat Everyone into Submission



### 3. Find Better Ways to Work



# Process Will Set You Free







# Typical Knowledge Worker



- ▶ 8 hours\day
- ▶ 5-8 task\day
- ▶ 1 hour\task
- ▶ **9,600\task\year**





18X







Artificial Intelligence  
otic Process  
Automati

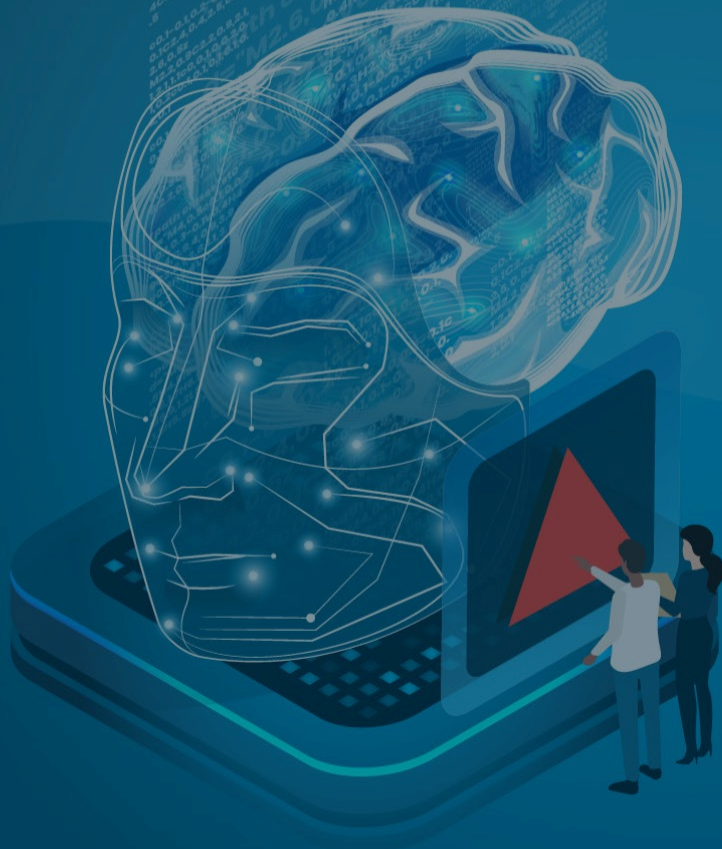
Data Analytics

Cyber Security



# Takeaway #1

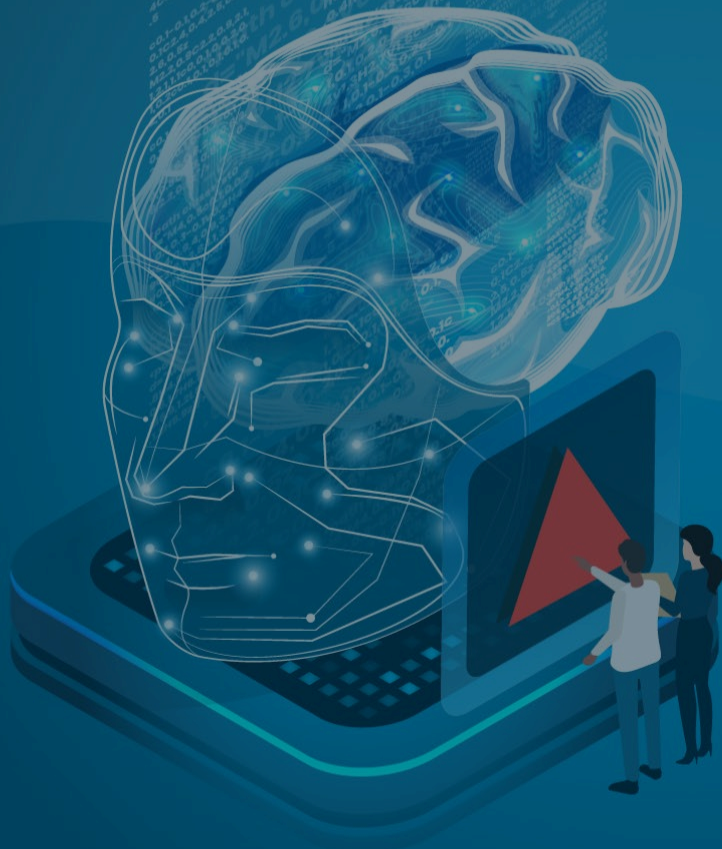
AI is **NOT**  
Complicated



## Takeaway #2

AI Won't replace  
You

**The People**  
The Use AI Will



## Takeaway #3

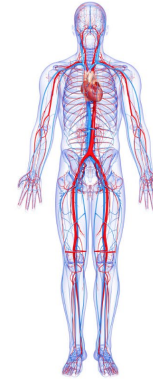
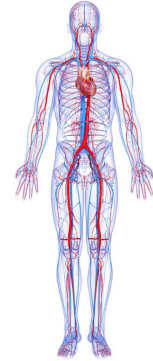
**Hyper**Automation  
is the Future



# Job Loss



# Workforce of the Future



# The One Person Billion Dollar Company

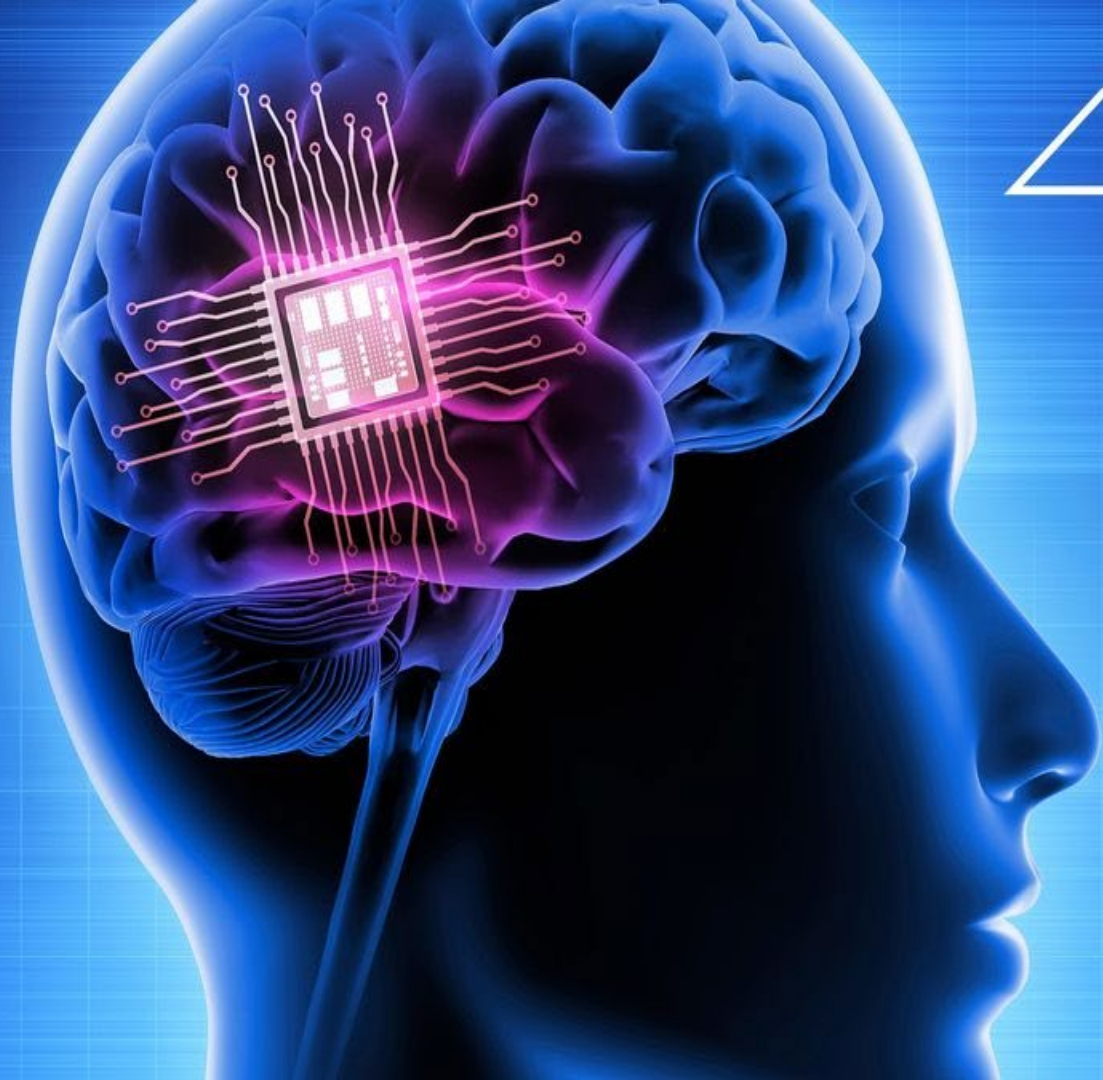




**Bonus**







 NEURALINK





# First Movers Advantage



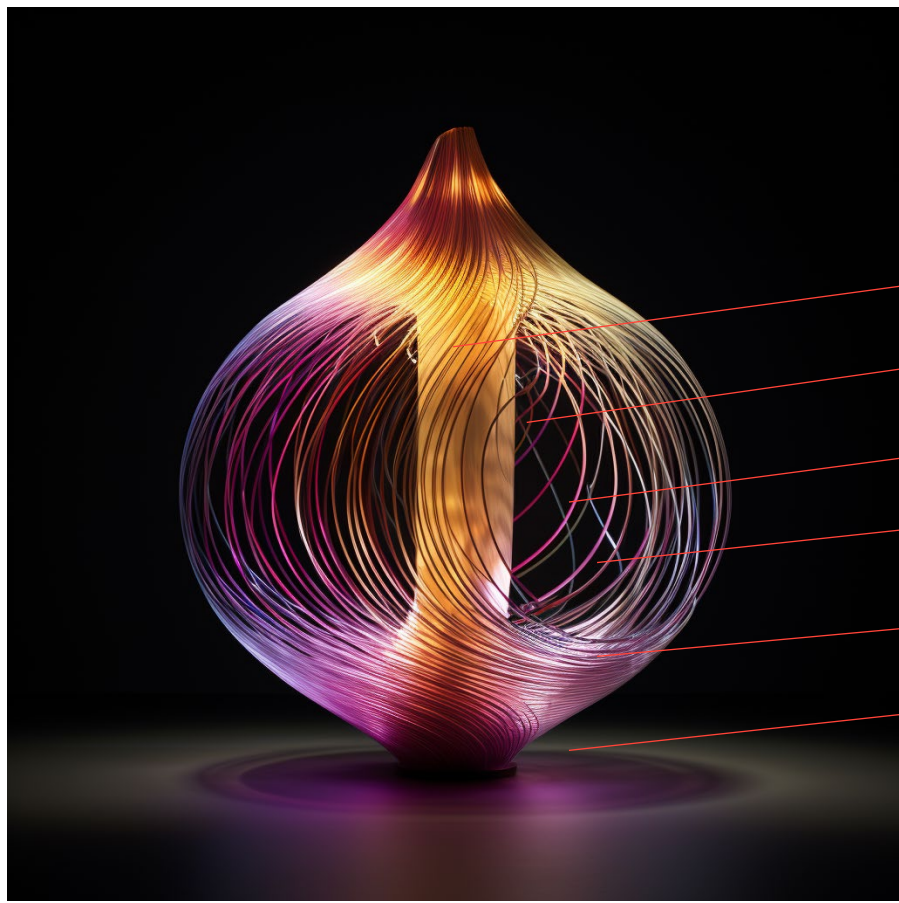
众安保险  
ZhongAn Insurance







# How do You Stay Ahead of the Curve?



Consciousness



**AI Intensive Master Class**



