Artificial Intelligence – An Overview

What does this session entails…

What is this talk about:

- Broad Framework to think about AI & its techniques
- Highlight relationship between AI, ML & Deep Learning
- Articulate the impact of AI & ML in Business Decision Making

What this talk is not:

- Does not deal with cost-benefit analysis of AI & ML
- Does not cover moral, ethical dimensions of AI & ML
- Does not cover any math behind the techniques

How delivered: I am going to put myself in your shoes, ask & answer key questions that you might have in your mind as you embark on this course!

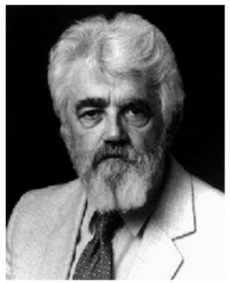
Question 1

Q1: Artificial Intelligence brings images of Terminator, Robots, Enthiran etc. What is the simplest way to understand AI?

What is Artificial Intelligence?

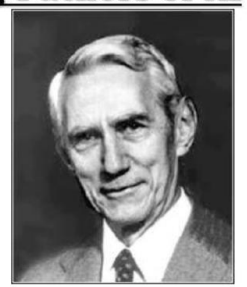
Artificial Intelligence refers to the theory and development of computer systems & machines with the ability to perform tasks normally requiring human intelligence

1956 Dartmouth Conference: The Founding Fathers of AI

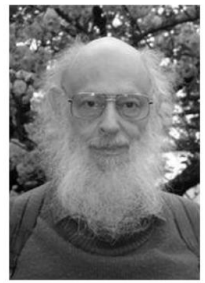


John McCarthy

Marvin Minsky



Claude Shannon



Ray Solomonoff

Alan Newell

Herbert Simon

Arthur Samuel

And three others...

Oliver Selfridge
(Pandemonium theory)

Nathaniel Rochester
(IBM, designed 701)

Trenchard More
(Natural Deduction)

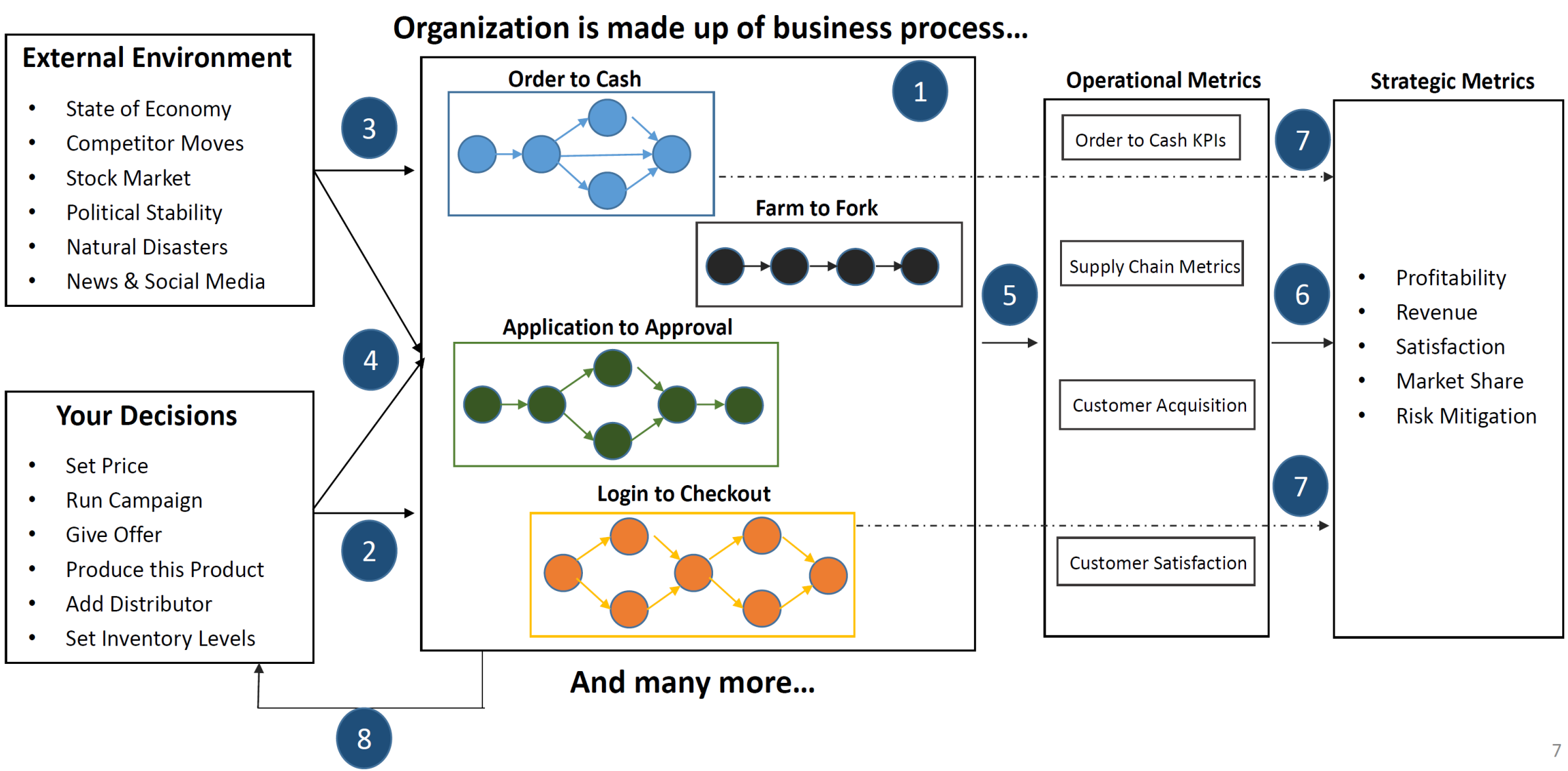
What is Human Intelligence?

1. Perceive the world, detect signals and collect data
2. Make sense of the world using data (Insights, Inference, Predictions etc.)
3. Decide on the next course of action
4. Act in the Real World

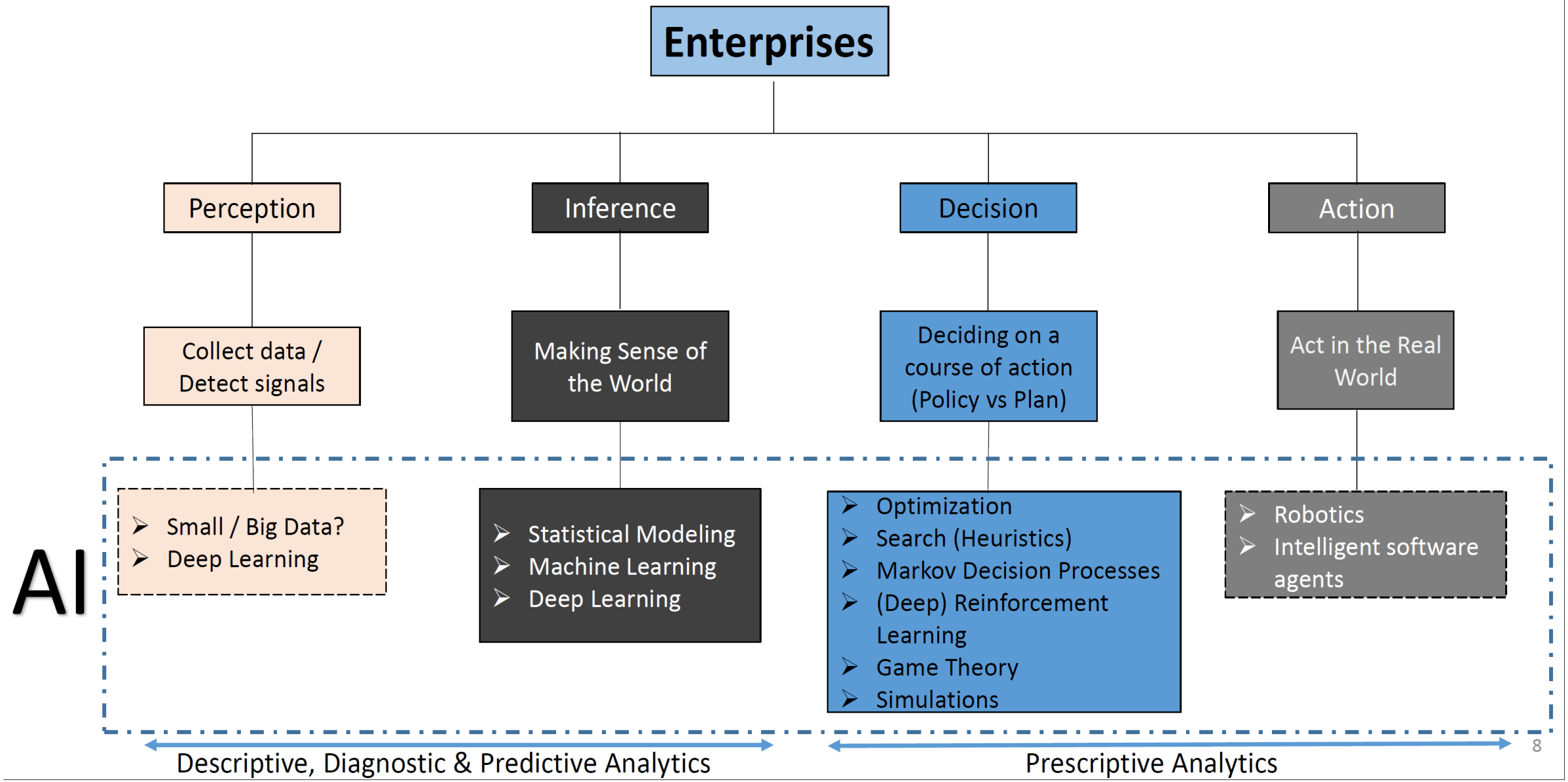
Question 2

Q2: Ok. I kinda understand what constitutes Human Intelligence. How is it relevant for enterprises?

Business Decision Making is Complex and Complicated…



AI Techniques in Organizations parallels to human intelligence…



Question 3…

Q3: What is the relationship between AI, ML & DL?

AI in relation to Machine Learning and Deep Learning

Artificial Intelligence

AI theory emerged, stirs excitement

Machine Learning

ML began to flourish

Deep Learning

Deep Learning breakthroughs driving AI boom

1950's | 1960's | 1970's | 1980's | 1990's | 2000's | 2010's | .... |

AI Conceptualized

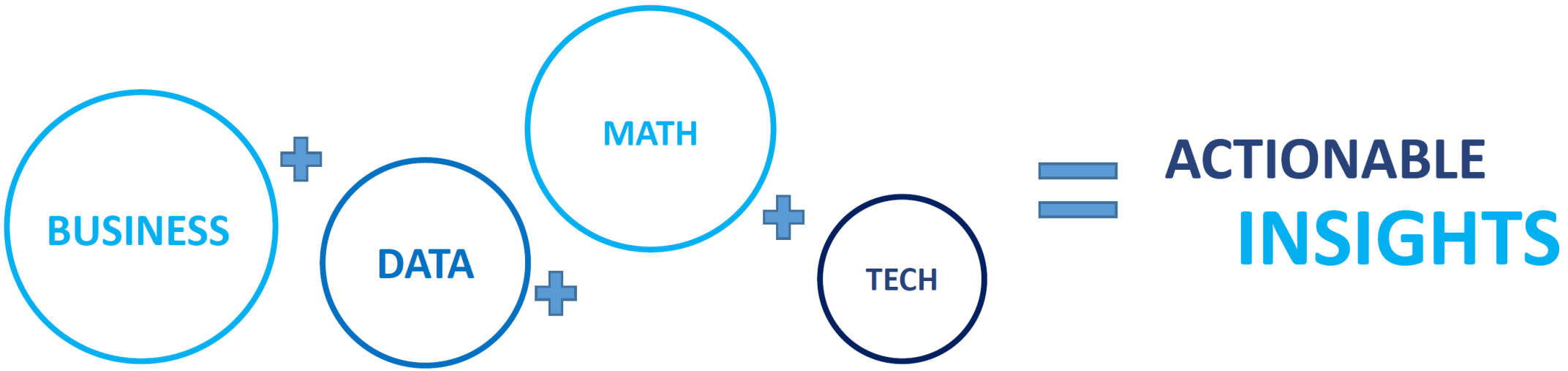
Data Availability

Advent of Cloud

Question 4

Q4: Enough of gyan on frameworks / high-level details. Practically, what skills do I need to acquire to solve problems? And can you show real-world examples?

Formula for AI & ML



Case Study 1 :
SR VII Process in SCB GBS

Question 5

Q5: How are you sure that AI & ML techniques are for the long-term and is not just a fad?

Digital Shift – Fundamental and Irreversible