# Ai- driven Exploration and Prediction of Company Registration Trends with Registrar of Companies (RoC) edit set Access Page Actions Innovation

## Project 2

Project overview:

      Much is expected from AI. For years the hype has raged, with vendors often overpromising and underdelivering on what AI could really accomplish. Today those perceptions are starting to change, driven by increased adoption and a new understanding of what is achievable within the field of AI.

Respondents to this survey are strong advocates, with large majorities agreeing that AI will deliver powerful transformational benefits for their organization. Key areas highlighted include:

- Transforming operations
- Enhancing engagement with customers
- Reimagining the sales process

Even so, challenges remain top of mind for many respondents, including:
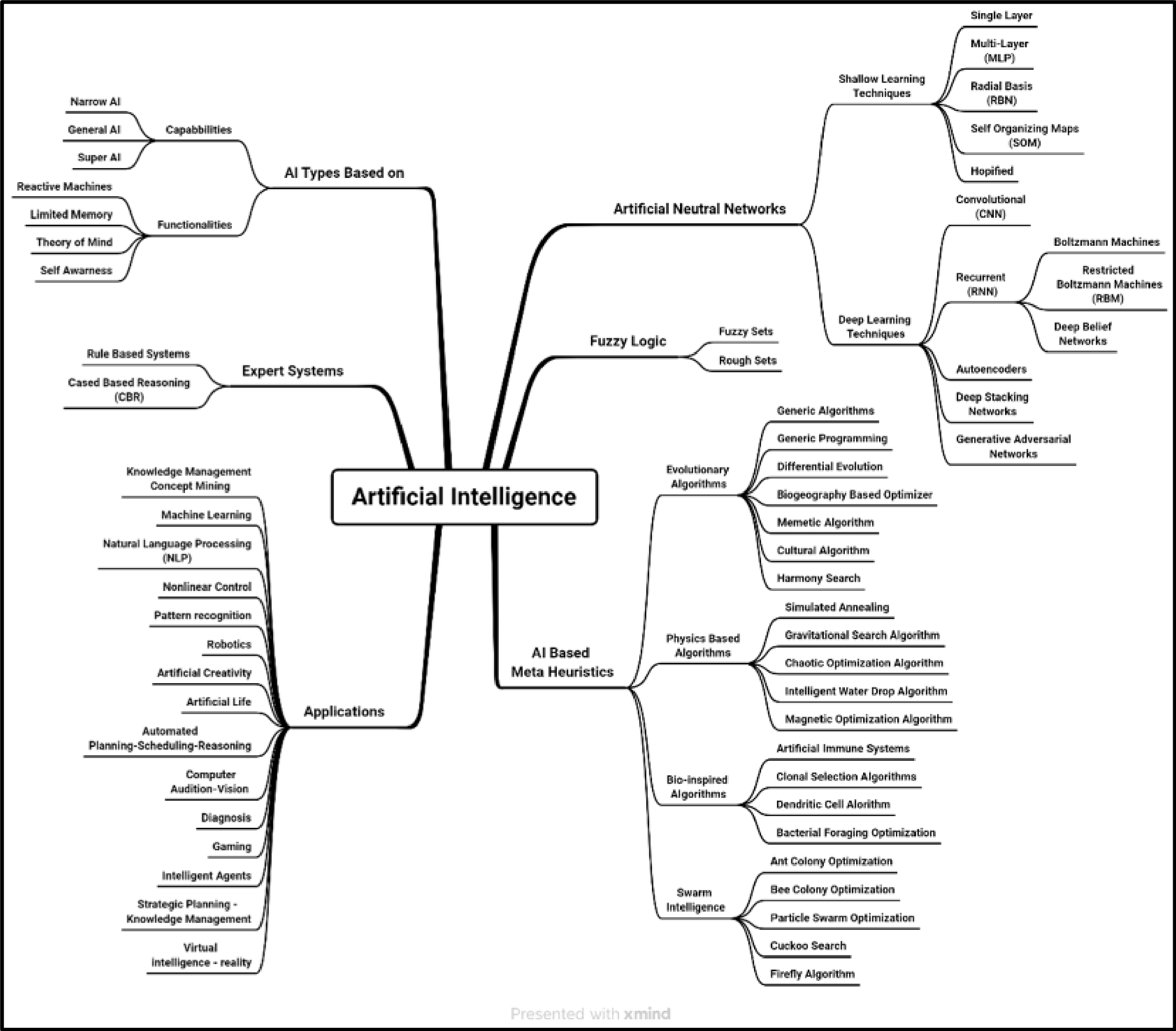
- Data privacy
- Managing AI implementations across the organization
- Lack of internal expertise

Despite the growing media attention around the ethics of AI, less than half of those surveyed named ethical considerations as a primary reason for delaying AI implementation of expansion.
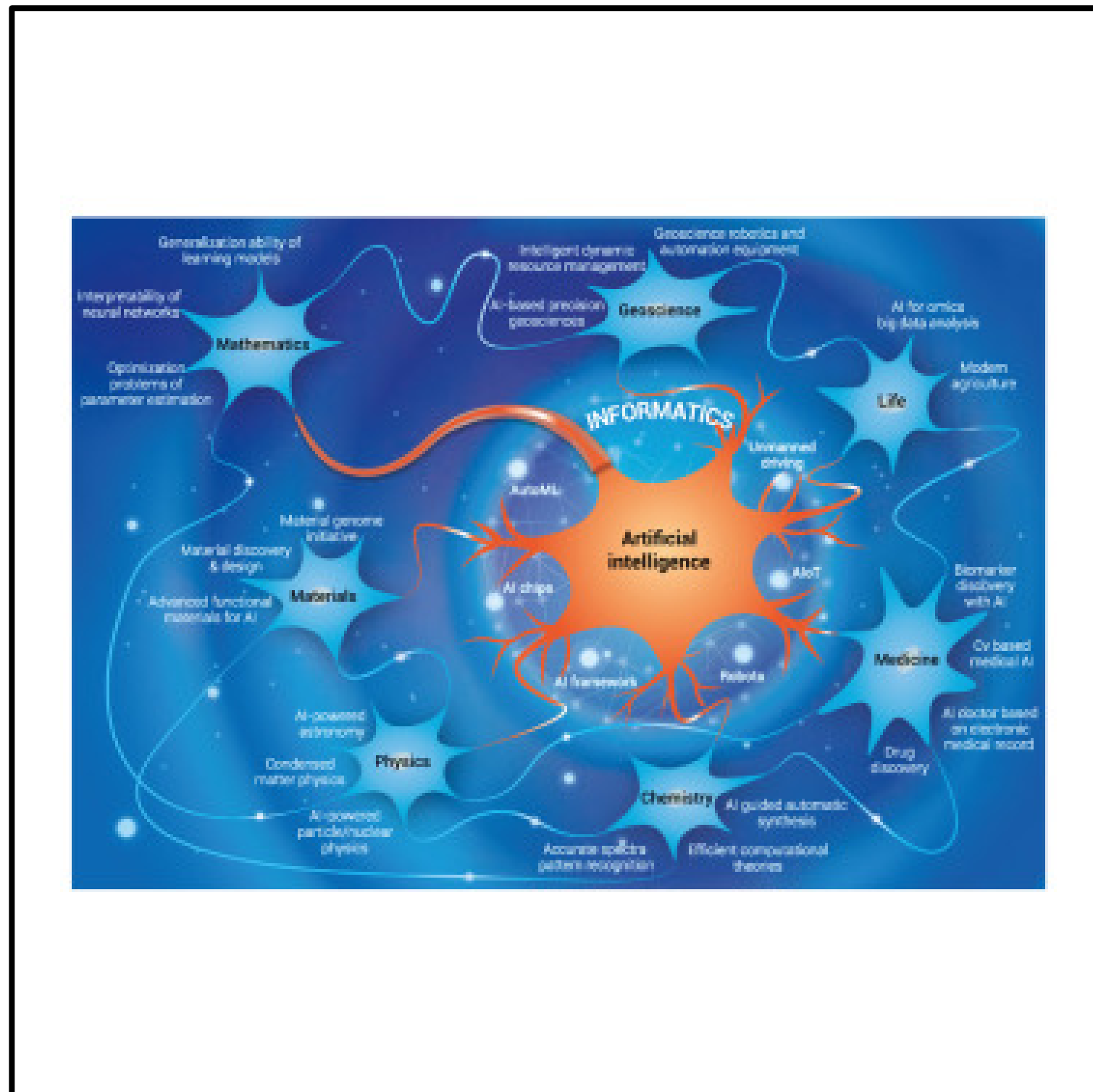
Dataset link:

https://tn.data.gov.in/resource/company-master-data-tamil-nadu-upto-28th-february-2019

Architecture of AI:

**Artificial Intelligence**

**AI Types Based on**
- Capabbilities
  - Narrow AI
  - General AI
  - Super AI
- Functionalities
  - Reactive Machines
  - Limited Memory
  - Theory of Mind
  - Self Awarness

**Expert Systems**
- Rule Based Systems
- Cased Based Reasoning (CBR)

**Applications**
- Knowledge Management Concept Mining
- Machine Learning
- Natural Language Processing (NLP)
- Nonlinear Control
- Pattern recognition
- Robotics
- Artificial Creativity
- Artificial Life
- Automated Planning-Scheduling-Reasoning
- Computer Audition-Vision
- Diagnosis
- Gaming
- Intelligent Agents
- Strategic Planning - Knowledge Management
- Virtual intelligence - reality

**Artificial Neutral Networks**
- Shallow Learning Techniques
  - Single Layer
  - Multi-Layer (MLP)
  - Radial Basis (RBN)
  - Self Organizing Maps (SOM)
  - Hopfied
- Deep Learning Techniques
  - Convolutional (CNN)
  - Recurrent (RNN)
    - Boltzmann Machines
    - Restricted Boltzmann Machines (RBM)
    - Deep Belief Networks
  - Autoencoders
  - Deep Stacking Networks
  - Generative Adversarial Networks

**Fuzzy Logic**
- Fuzzy Sets
- Rough Sets

**AI Based Meta Heuristics**
- Evolutionary Algorithms
  - Generic Algorithms
  - Generic Programming
  - Differential Evolution
  - Biogeography Based Optimizer
  - Memetic Algorithm
  - Cultural Algorithm
  - Harmony Search
- Physics Based Algorithms
  - Simulated Annealing
  - Gravitational Search Algorithm
  - Chaotic Optimization Algorithm
  - Intelligent Water Drop Algorithm
  - Magnetic Optimization Algorithm
- Bio-inspired Algorithms
  - Artificial Immune Systems
  - Clonal Selection Algorithms
  - Dendritic Cell Alorithm
  - Bacterial Foraging Optimization
- Swarm Intelligence
  - Ant Colony Optimization
  - Bee Colony Optimization
  - Particle Swarm Optimization
  - Cuckoo Search
  - Firefly Algorithm

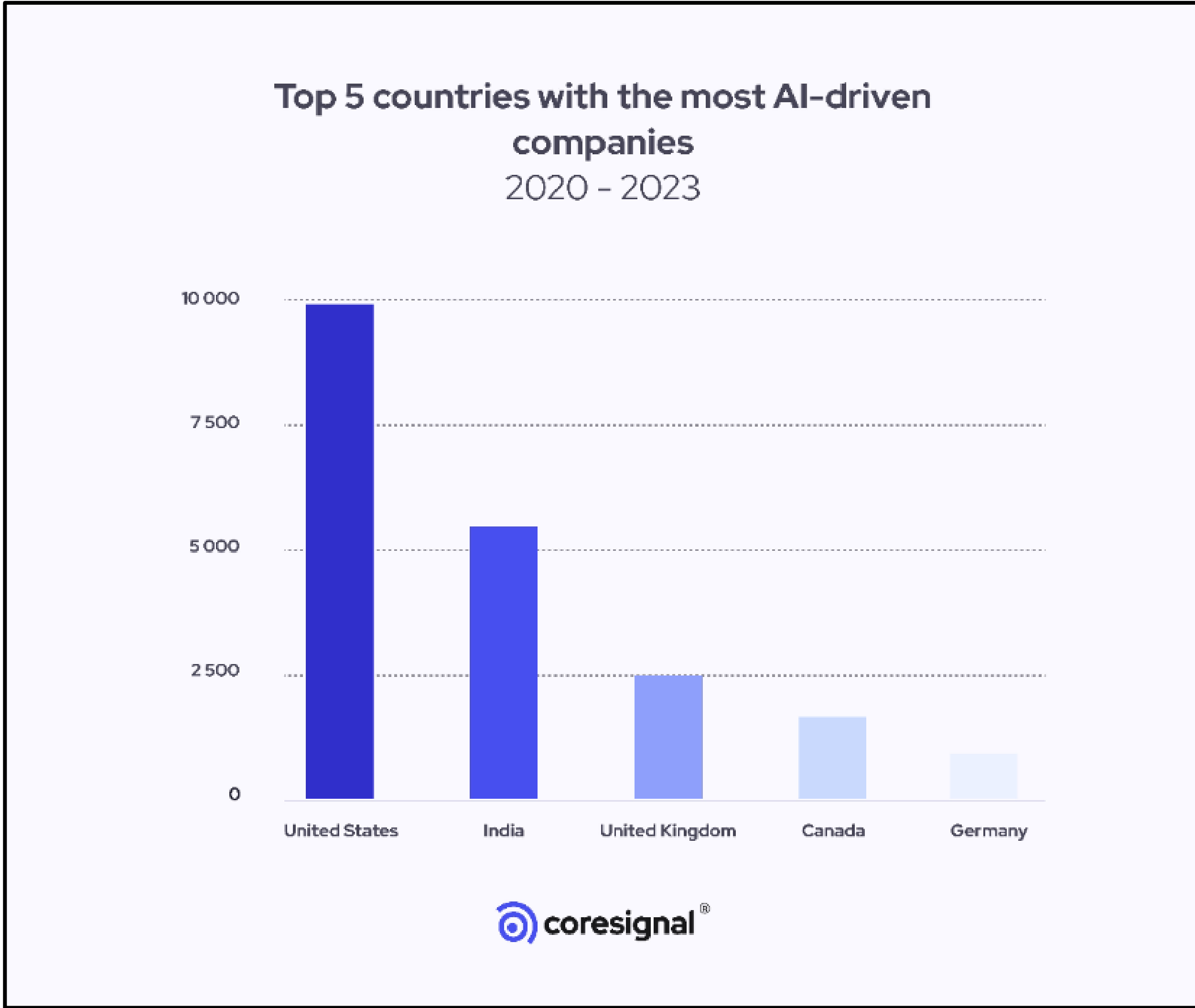Presented with xmind

Flow chart:

Introduction:

"Can machines think?" Alan Turing posed this question in his famous paper "Computing Machinery and Intelligence." [1] He believes that to answer this question, we need to define what thinking is. However, it is difficult to define thinking clearly, because thinking is a subjective behavior. Turing then introduced an indirect method to verify whether a machine can think, the Turing test, which examines a machine's ability to show intelligence indistinguishable from that of human beings. A machine that succeeds in the test is qualified to be labeled as artificial intelligence (AI).

AI refers to the simulation of human intelligence by a system or a machine. The goal of AI is to develop a machine that can think like humans and mimic human behaviors, including perceiving, reasoning, learning, planning, predicting, and so on. Intelligence is one of the main characteristics that distinguishes human beings from animals. With the interminable occurrence of industrial revolutions, an increasing number of types of machine types continuously replace human labor from all walks of life, and the imminent replacement of human resources by machine intelligence is the next big challenge to be overcome. Numerous scientists are focusing on the field of AI, and this makes the research in the field of AI rich and diverse. AI research fields include search algorithms, knowledge graphs, natural languages processing, expert systems, evolution algorithms, machine learning (ML), deep learning (DL), and so on.

The general framework of AI is illustrated in Figure 1. The development process of AI includes perceptual intelligence, cognitive intelligence, and decision-making intelligence.

Ai driven companies:

The list of companies included in this analysis was generated by extracting data from a large-scale database based on company specialties. All businesses that were selected had the keywords "Artificial Intelligence", "Artificial General Intelligence",



**Top 5 countries with the most AI-driven companies**
2020 – 2023

coresignal®

"AI", or "AGI" in their specialties.