

**Artificial Intelligence & Machine
Learning for HR... A Road Ahead
by
Deepak Bharara**

LEVERAGING PEOPLE FOR TOMORROW...

Artificial Intelligence....



WHAT IS A.I.?



Figure 1-1: The many names of artificial intelligence.

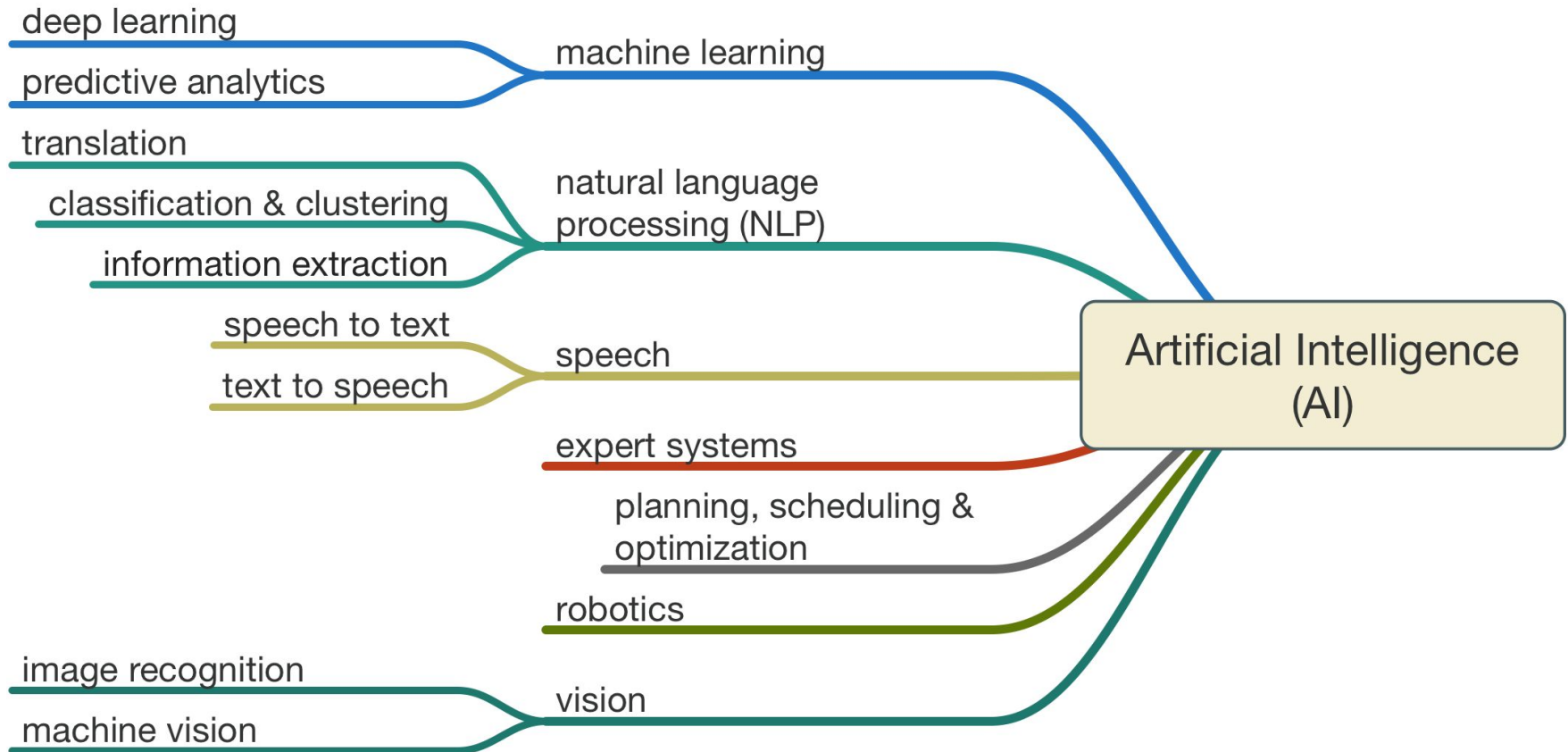
Artificial Intelligence....



Artificial Intelligence

- The automation of activities that we associate with human thinking, activities such as decision making, problem solving & learning
- A field of study that seeks to explain & emulate intelligent behavior in terms of computational processes
- The capability to a machine to imitate intelligent human behavior

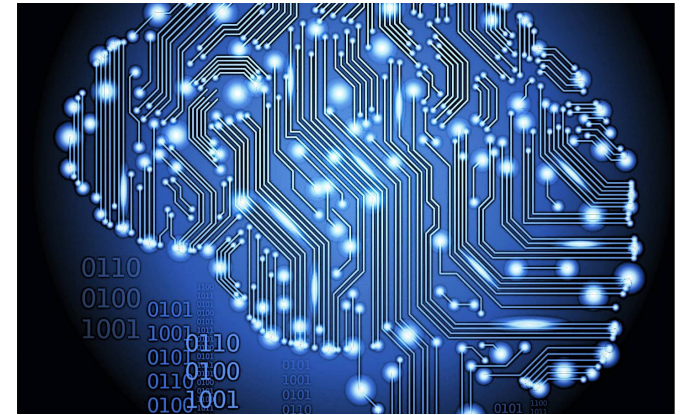
Artificial Intelligence....



Artificial Intelligence

Few examples..

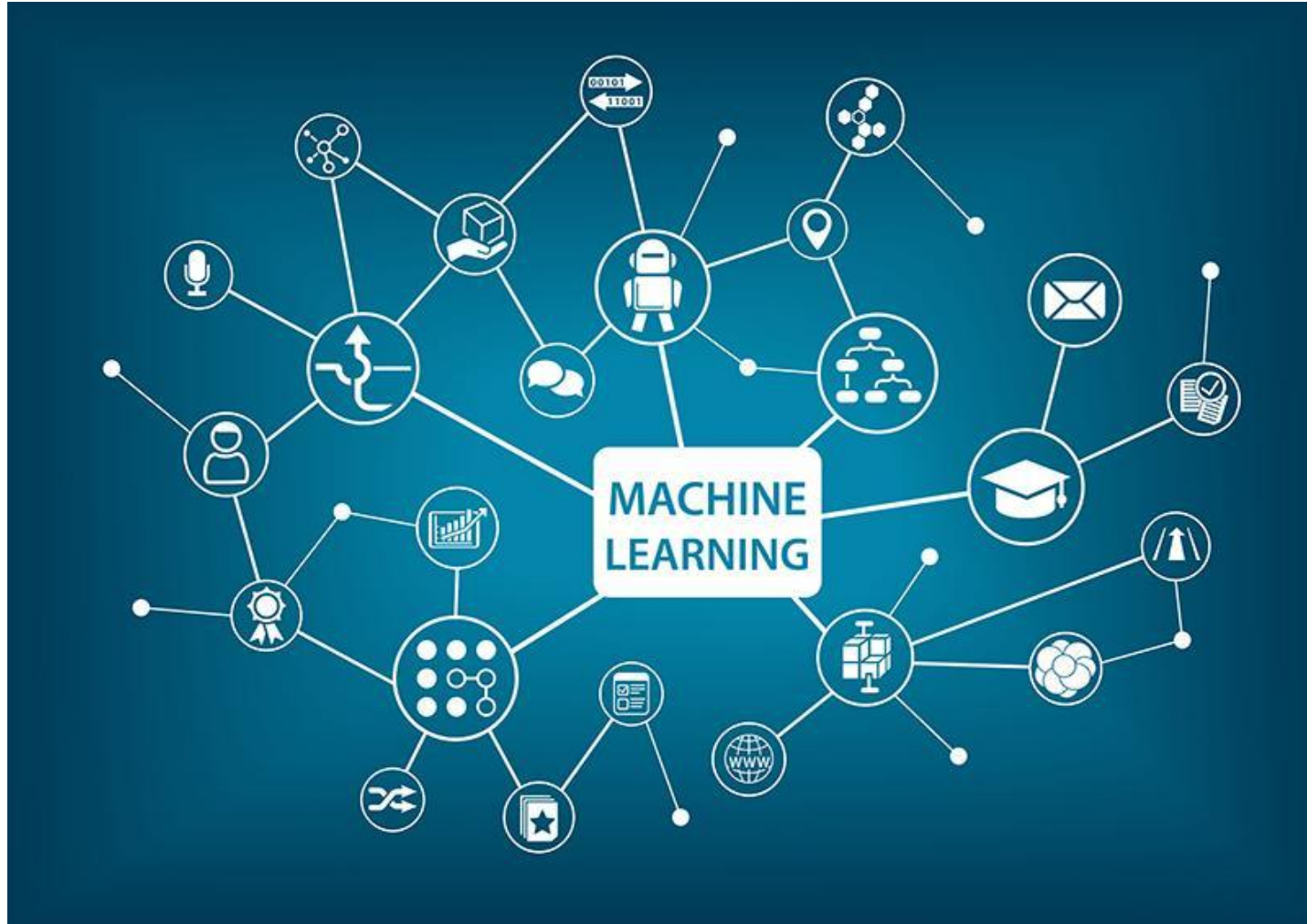
- Movie/Songs recommendation
- Fraud Detection – Credit card purchases
- Smart Home Devices
- Facebook – Tagging Friends
- Video Games
- Driverless Cars
- Robotics
- Image recognition
- Virtual personal assistants: Siri. Cortana



Artificial Intelligence....



Machine Learning



Machine Learning

Algorithms that do the learning without human intervention

Learning is done based on examples ... data set

Goal to make correct prediction for new input data

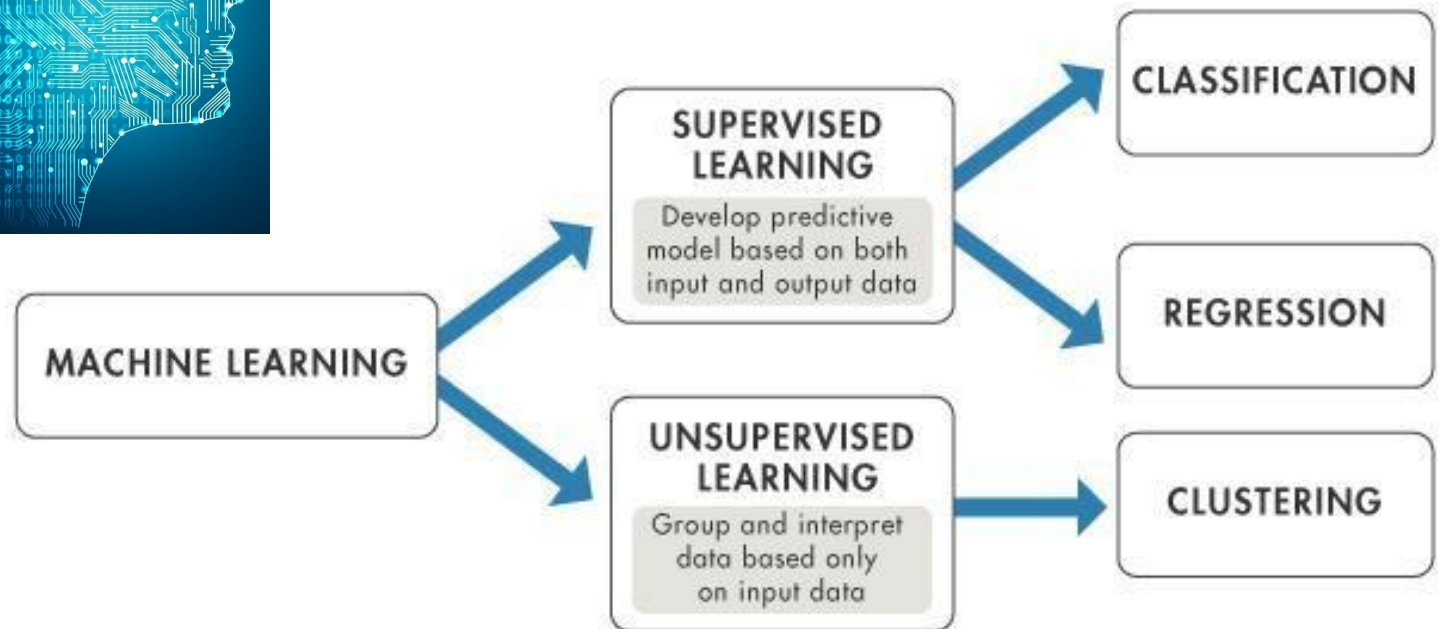
- Character Recognition
- Behind the scene –Feature extraction, Model & Data Normalization
- Gradient Descent – Inference

Machine Learning Success Stories

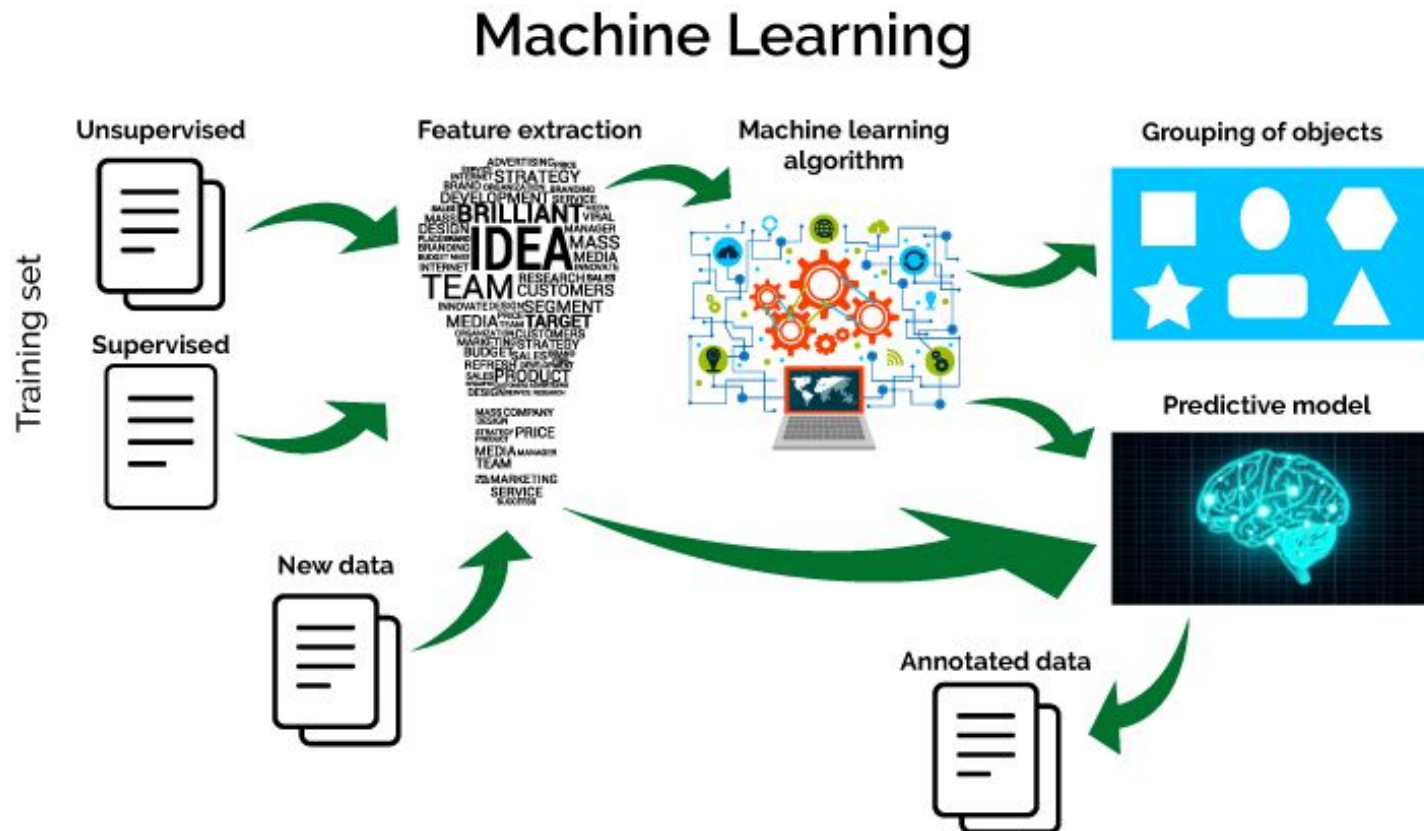
- Halo Player Matching
- Spam Filters
- Recommendation Engines
- Handwriting Recognition
- New Story Clustering
- Credit Fraud detections
- Ecommerce
- Transport Solutions - Uber/Ola



Machine Learning



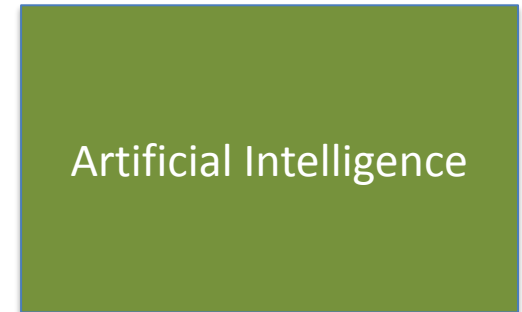
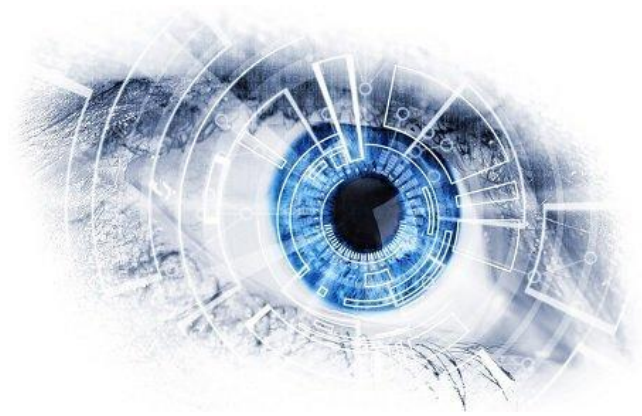
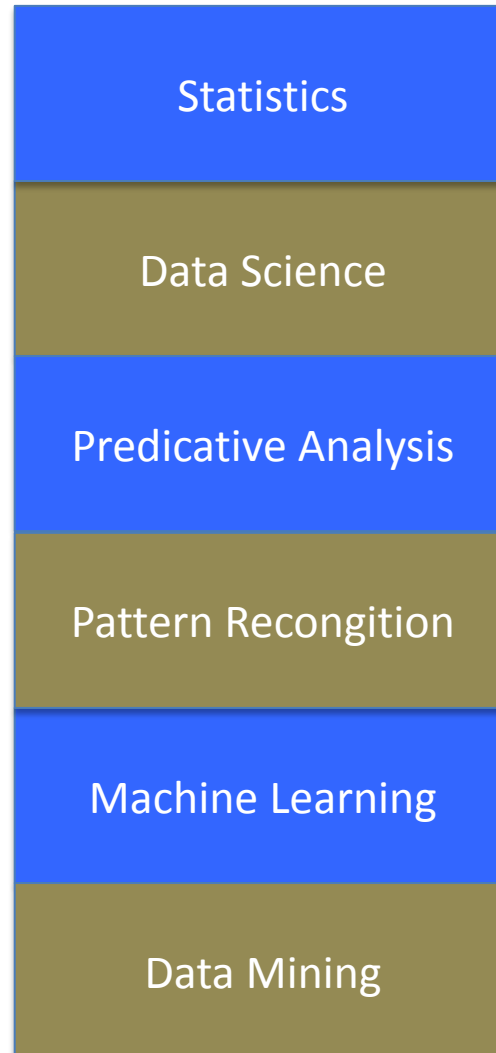
Machine Learning



How AIML Works....



Massive Volumes of
Structured &
Unstructured Data



The Study & design of
intelligent agents &
creation of machine
that learns

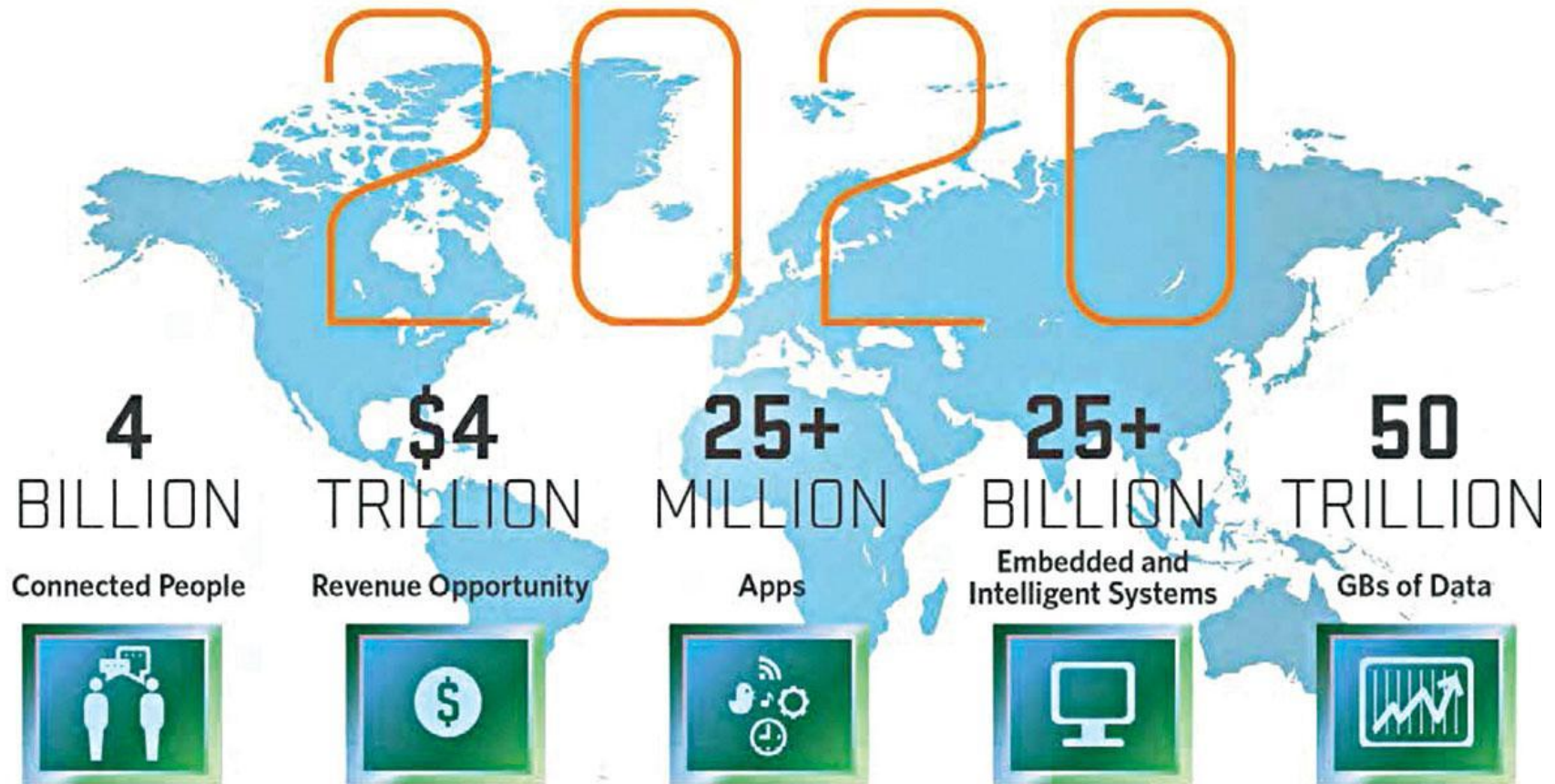
Seven Levels of AI Maturity

1. Perception ... What is happening now
2. Notification ... What do I need to know
3. Suggestion ... What do you recommend
4. Automation ... What should I always do
5. Prediction... What can I expect to happen
6. Prevention... What Can I avoid
7. Situational Awareness... What do I need to do right now

YEAR 2020 Scenario....

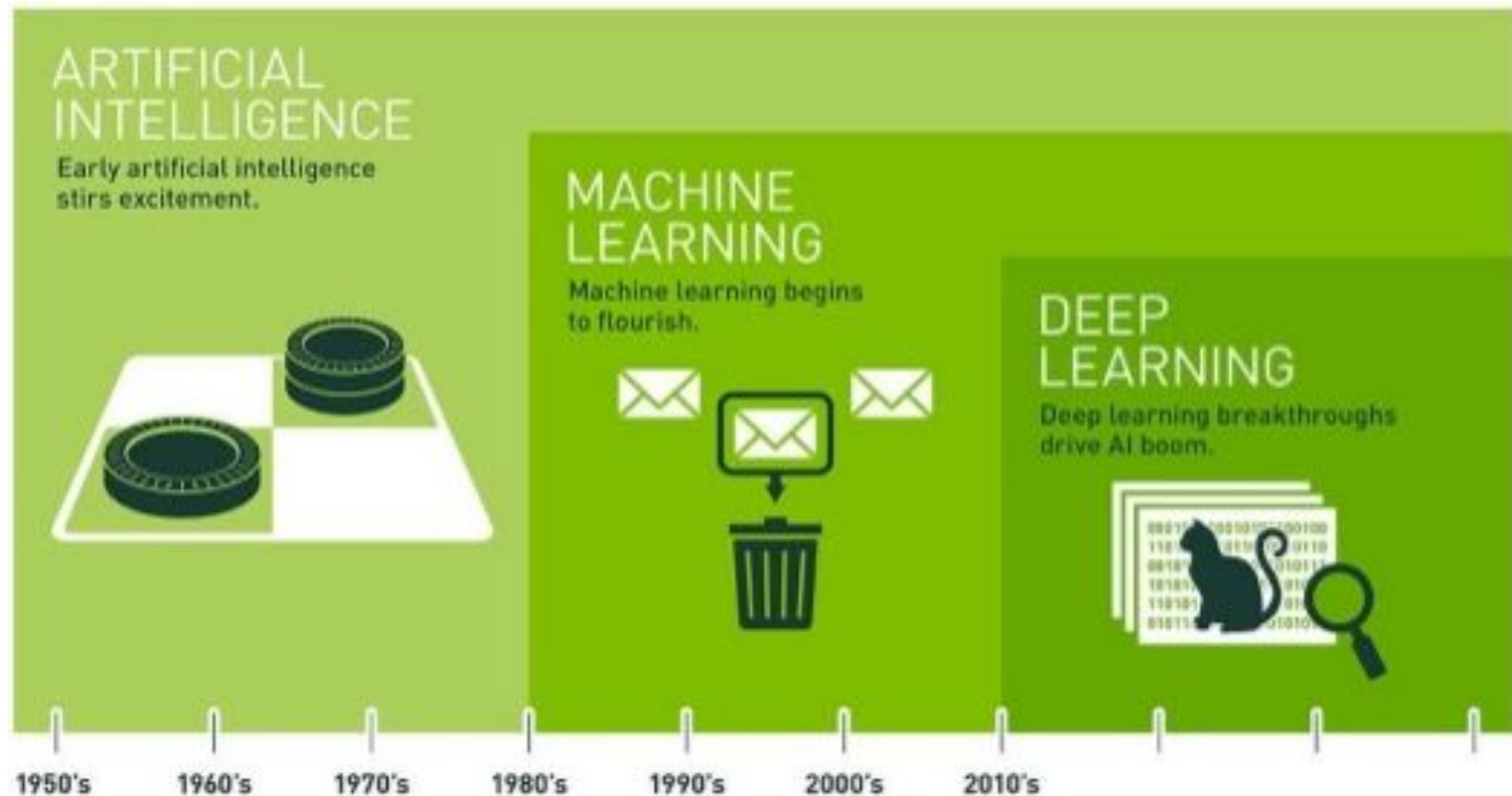


YEAR 2020 Scenario....



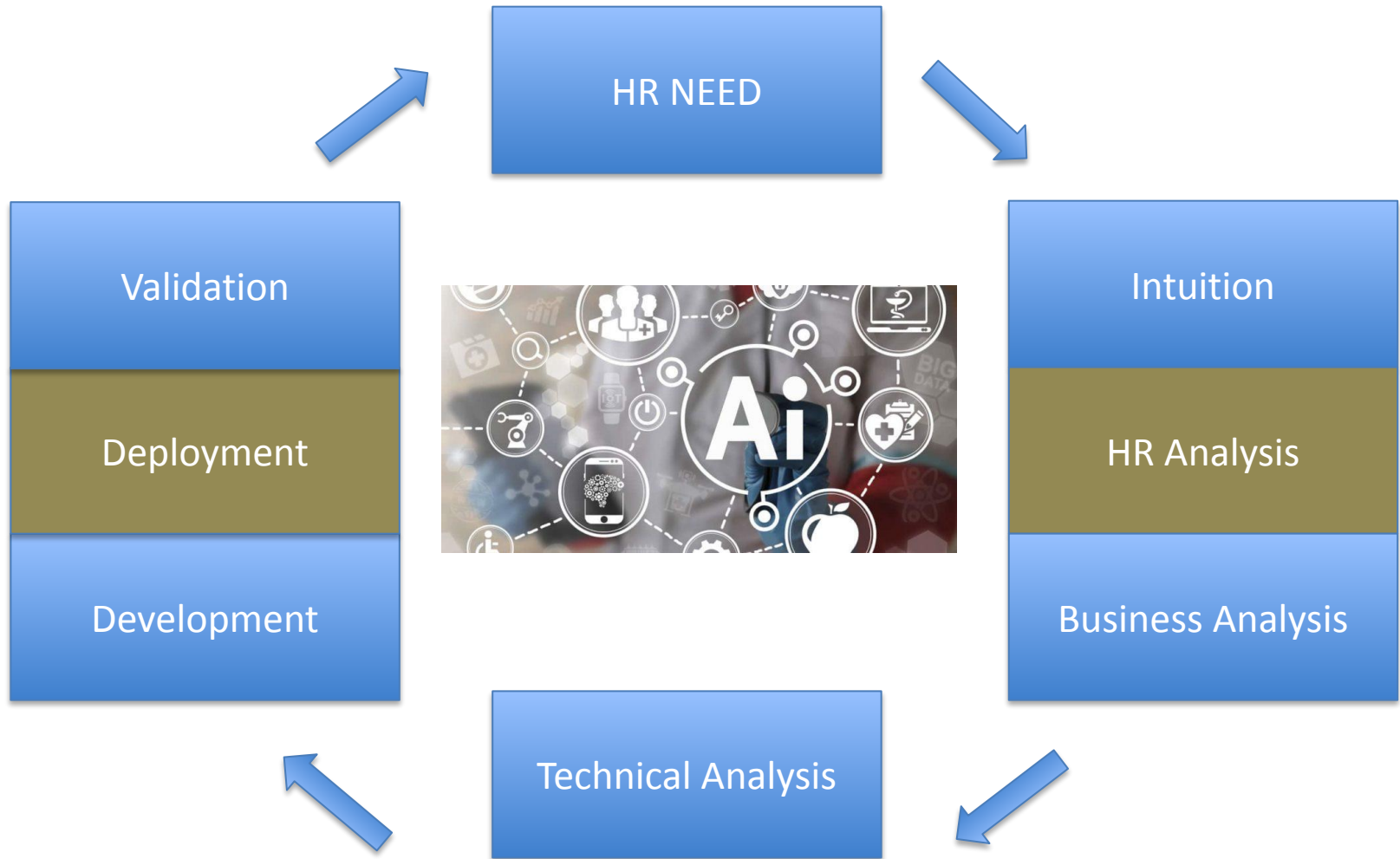
Source: Mario Morales, IDC

Journey of AI/ML/DL



Since an early flush of optimism in the 1950s, smaller subsets of artificial intelligence – first machine learning, then deep learning, a subset of machine learning – have created ever larger disruptions.

AIML & HR



Future of HR....

1. Changing Shapes of Organizations – Flatter, from Individuals to Network Teams
2. From Fixed jobs to fluid roles – End of fixed jobs
3. Different Talent Sourcing – Internet Talent Pool – Alumni, Intermediary, Talent Sharing, Self Employed, Start Ups
4. Hiring candidate & his/her network
5. Hire Stronger, Developer & Faster
6. Working with Digital Intelligent Assistants
7. Understand Block Chain Technology /Algorithm Aversion
8. Handle Multiple Generation at Work
9. From Collective to segments to individuals
10. Shrinking HR Teams

Future of HR....

11. Use of more Apps – from **Big programs to small experiments**
12. Multi Raters for Performance
13. Granular Feed back – Continuous feedback is the new norm
14. Performance Consultants at virtual Work place
15. Transcend Organization Boundaries
16. Effective use of Technology – from **intuition to evidence based**
17. Internal & External Focus
18. Working on Future Strategy & Processes
19. Learning in real time
20. Letting go small things

HR needs to be agile, adaptable & advanced

How Does AI Improves Sourcing

1. Better Job Candidate Matching
2. Increase in Speed
3. Better Sourcing Capabilities
4. Reducing hiring biases
5. Proactive Communication (Real Time & Unique)
6. Candidate Experience
7. End to Tradition Hiring Process



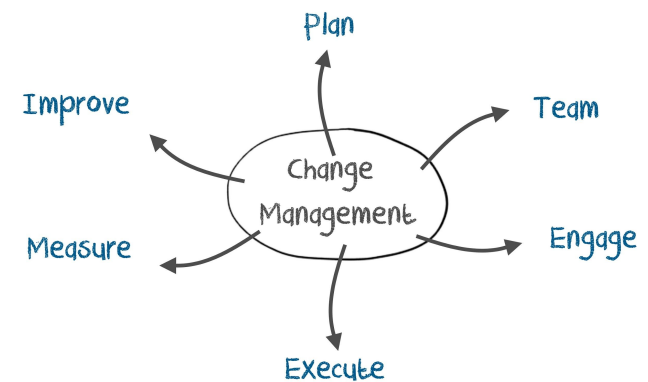
How Does AI Improves Productivity

1. AI Powered Personal Assistant
2. Regular Feed Back
3. Coaching – Personal Management Coach
4. Effective Communication
5. Auto email responses
6. Meeting Scheduler
7. Automated Help Desk
8. Behavior matching – Inter Personal Relationships



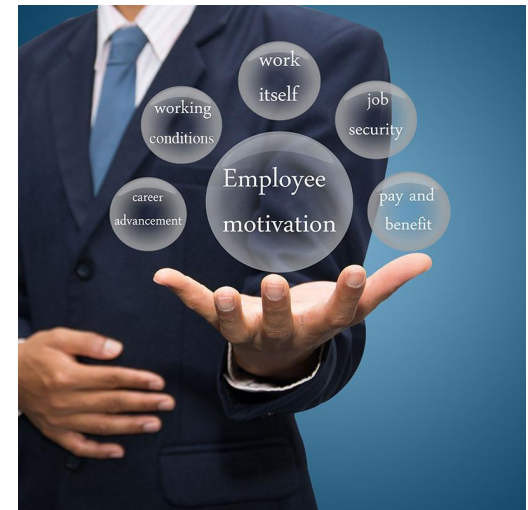
How Does AI Improves Change

1. Use of Chat box for regular feedback pre & post Initiatives
2. Work Culture Assessment
3. Engagement Assessment
4. Workforce Optimization
5. Work Environment Monitoring
6. Employee Monitoring – Moodo Meter
7. Identifying Influencing Factors



How Does AI Improves C&B

1. Help to Build Employer Brand to attract right talent
2. Salary Surveys & reports to get the right matrix
3. Flexible packages for different talent tracks – get paid for what you deserve
4. Market Driven pay packages & benefits
5. Tax Efficient Structures
6. Good Corporate Governance & Ethics



How Does AI Improves Talent /Succession

1. Consumerisation of HR
2. Identify high performance talent for Succession
3. Potential Assessment – Identify Detractors, Neutrals & Promoters
4. Job Crafting – Task, Relational & Cognitive
5. Job Piling
6. Recognize key & critical resources
7. Using Star Talent on critical Projects



How Does AI Improves Measurement

1. Knowing Daily how your employees are feeling
2. Understanding employees interest & engagements areas – Workometry – Capture real time feedback
3. Setting up of SMART Goals
4. Objective Assessments



Dark side of AI is

How artificial intelligence learn to be raciest

No one really knows how the advance algorithm do, what they do

What if the AI & Robots did not like dark skin in beauty context

What will happen when you company algorithms go wrong

How to burst your social media bubble

Benefits of AI/ML/DL is

New Dimensions

Increased Quality

Speed

Diversity

Man/Women + Machine



Negatives of AI/ML/DL is

Handling Biases

Handling Social Media Bubble

Privacy/Big Brother

Less Work /jobs

Managing Creativity

Managing Emotions/Feelings

Job automation will lead to unemployment



Today Generation....

I am fit – Physical/Emotional/Intellectual

I like it fast..., I like Variety..., I like to learn....

People Know What I like & Want

Tech is there to help me

Easy Does it ...

I like to make a difference & make the world a better place

Can we have some fun

I like to connect & hang out

With Introduction of AI/ML/DL/Robot ...

More than 55 % of jobs, which may likely to come up in next 10 years are not known to any one of us

More than 45% jobs, which exists today will go away with AI/ML/DL & Automation in next 5-7 years

The current education system are not keeping up with the fast – paced world, so there is going to be a big gap to bridge... What ever is being taught in colleges today, is going to be obsolete by the time students are passed out.

The technological change happened in last 4 years is equal to changes happened in last 100 years... the amount of data which is generated in last 2 years is equal to last 100 years of data...

With Introduction of AI/ML/DL/Robot ...

Earlier, Parents used to ask their children's ...

“What do you want to be in life..” or “what are you going to study...” or “What you will do when you grow up..” A Doctor, Lawyer, Engineer, Scientist, Marketier etc....? but today this question has lost its relevance....

These are quite dangerous question to ask as most of profession/career may not exist. Don't push by these questions.. to get struck, that world may not exist, in times to come.

Today the relevant question to be asked by parents will be *“How do you want/plan to contribute to the world, when you grow up..” or “How do you want to contribute to Humanity”*

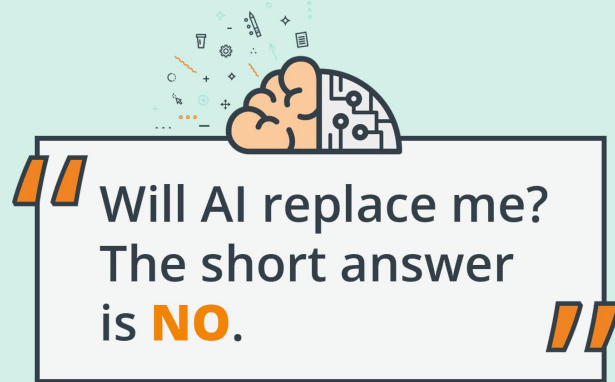
Open up the full field of thinking... meaningful & creating value.

Future Role of HR

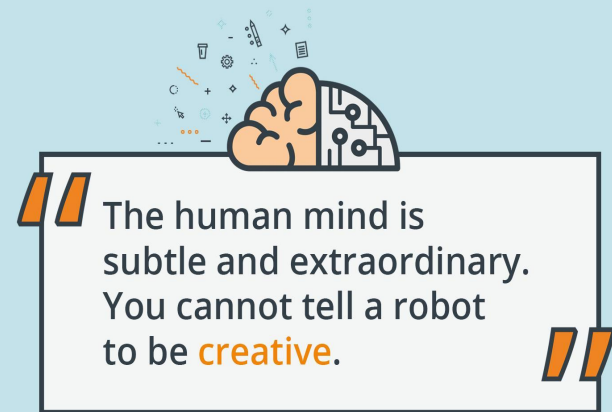
The role of HR is changing very fast.. HR will be away from mundane & time consuming jobs. The new role will be more of strategic:

1. Matching People & Organization Needs
2. Connect, learn & feel at home in an organization
3. Organization using full potential for top performance
4. Learning, Growing, Developing & staying Healthy
5. Aligning & improving Performance & Productivity
6. Managing People operation's through chat box/outourcing
7. Collecting & analyzing People Data – HR Analytics
8. Leaving & staying connected

Question is



Response is



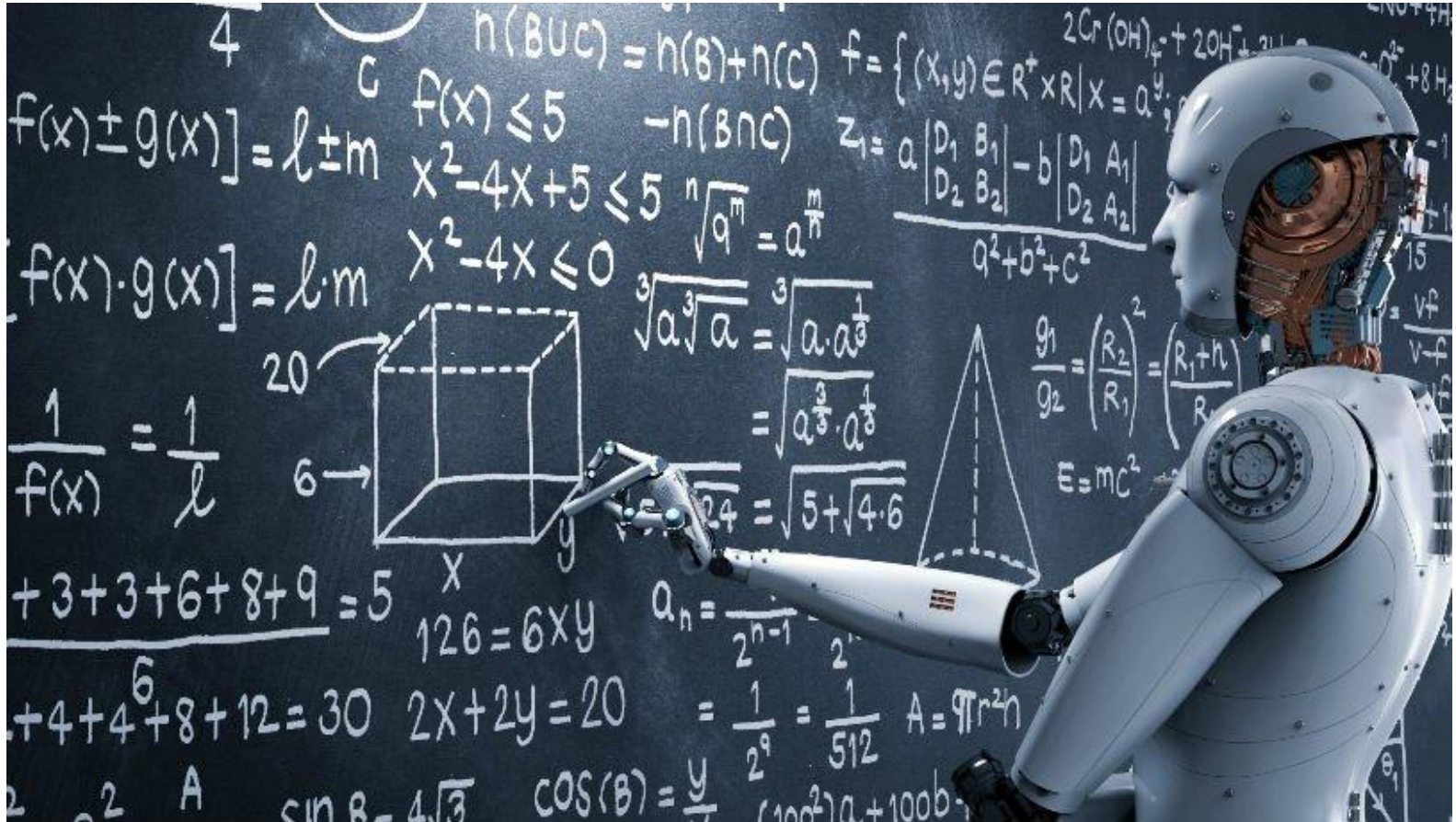
This AI/ML/DL has already entered in our daily lives & going to assist us....it is reality, let us accept & learn to adapt....



CUSTOMERS THE DAY AFTER TOMORROW

www.stevenvanbelleghem.com | [@stevenVBe](https://twitter.com/stevenVBe)

Going forward the most difficult & tedious jobs will be handled by AI/ML/DL



We all will co exist & work together.... But surely in our different roles....







Contact Us

Email: contact@peoplea2z.com

Twitter: @peoplea2z

LinkedIn: <https://in.linkedin.com/in/peoplea2z-advisory-n-solutions-a52837124>

Facebook: @peoplea2z

Mobile: +91 9810048409