<u>Using Artificial Intelligence (AI) for improving Global Competitiveness- (Dr Kanak Madrecha)</u>
<u>AI Definition</u>: Artificial intelligence (AI) is the simulation of human intelligence processes by machines, especially computer systems. These processes include learning (the acquisition of information and rules for using the information), reasoning (using rules to reach approximate or definite conclusions) and self-correction. Sometimes AI is also called machine intelligence as against intelligence shown by human beings. Particular applications of AI include expert systems, speech recognition and machine vision.

<u>Al is the future</u>: Al is changing how we work and live our lives – from SIRI to robots to self-driving cars. While science fiction portrays Al as Robots with human-like characteristics. Over USD 35 Billion has been invested into Al by companies around the world in 2018 and most of these companies have not benefited tangibly but all of them believe in its significant future prospectus and hence they go on.

Economic Impact of AI in future on Global Competitiveness: As per PwC's Global Artificial Intelligence Study - Total economic impact of AI in the period to 2030 AI could contribute up to \$15.7 trillion to the global economy in 2030, more than the current output of China and India combined. Of this, \$6.6 trillion is likely to come from increased productivity and \$9.1 trillion is likely to come from consumption-side effects. That means organizations can use AI for becoming globally competitive.

Countries like US are claiming to be leaders in AI. Organizations in US claiming to be AI leaders are Google, Facebook, Amazon, Apple and Microsoft are all working on AI. Facebook's FAIR (Facebook Artificial Intelligence Research) program engages with academia to assist in solving long term problems in AI. Facebook is hiring AI experts around the world to assist in their project. Microsoft purchased Maluuba in January 2017, an AI company that uses machine learning for natural language processing. Google Brain is machine learning by trial and error, and Google Translate can translate writings into different languages. AI has beaten the best human competitors in the games Go, Chess, Checkers, Scrabble, Jeopardy! and the poker game No Limit Texas Hold'em.

<u>Google, Facebook, Amazon, IBM, Apple, and Microsoft</u> have partnered together to form the Partnership on Artificial Intelligence to benefit People and Society, referred to as the "Partnership on Al", to ensure ethical, transparent work on Al.

Al Education: Top 5 Best Artificial Intelligence Colleges in USA (as per ranking guidelines) are:-

- 1. Carnegie Mellon University (Pittsburgh, PA)
- 2. Stanford University (Stanford, CA)
- 3. Massachusetts Institute of Technology "MIT" (Cambridge, MA)
- 4. University of California, Berkeley (Berkeley, CA)
- 5. Harvard University (Cambridge, MA)

Number of degrees and courses/conference are also available on Al across the globe.

<u>Successful Applications of Al</u>: Al has already entered successfully into manufacturing, healthcare, telecommunication, transportation, banking, education etc. Only time will tell how human intelligence will maintain its competitive advantage over the machine intelligence (or Al).

<u>UAE working towards global leadership in Al:</u> UAE has appointed His Excellency Omar Sultan Al Olama (very young/30 year old) as Minister of State for Artificial Intelligence in October 2017. It has a vision to become a world leader in Al by 2031, creating new economic and social opportunities for citizens, governments and businesses and generating upto AED 335 Billion in extra growth.

<u>Author: Dr Kanak Madrecha</u> (Past Jury-DQA, DHDA & SKEA, Ph.D. & PG in Industrial Engineering & BE (Mech.Engg), An Expert of Man-Machine Systems, Excellence Advisor who supported 42 organizations from 25 industry sectors to win 93 excellence advisors in UAE in last 20 years)

E-Mail: dr.kanak.madrecha@gmail.com Mobile/Whatsapp: 0097150 6583159