R.A. MASHELKAR BANKS ON INNOVATION FOR ENSURING SOCIETAL PROGRESS

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26 Feb. 2019: The Gandhinagar-based Pandit Deendayal Petroleum University (PDPU) hosted *Padma Vibhushan* Prof. (Dr.) R.A. Mashelkar for a Distinguished Lecture on February 26, 2019 at its auditorium. Prof. Mashelkar delivered a scintillating lecture on the topic 'From Incremental to Disruptive Game-changing ASSURED Innovation'.

Prof. Nigam Dave, the Director of the School of Liberal Studies (SLS), gave the welcome speech and introduced Prof. Mashelkar to the audience.

One of the 12 Indian National Research Professors at the prestigious National Chemical Laboratory (NCL) in Pune and the President of the Global Research Alliance, Prof. Mashelkar served as the Director General of the Delhi-based Council of Scientific and Industrial Research (CSIR).

Prof. Mashelkar was awarded *Padma Shri* in the year 1991, Padma Bhushan in the year 2000 and Padma Vibhushan, the second highest civilian award in India, in 2014 in recognition of his distinguished service to the nation.

Prof. Mashelkar started his lecture by remembering Dr. A.P.J. Abdul Kalam, the former President of India. He said that the success of any product or idea could be measured using the concept of ASSURED, which stands for Affordable, Scalable, Sustainable, Universal, Rapid, Excellent and Distinctive. He also differentiated between incremental and disrupted data. While explaining this concept, he talked about a few game-changing business models including:

- i. Uber, one of the largest global taxi companies possesses no taxi.
- ii. Airbnb, one of the largest hospitality companies does not have any hospitality property.

Prof. Mashelkar also delved on Artificial Intelligence (AI) and its presence in board meetings across the world. With technology threatening to replace human labour, Prof. Mashelkar stressed on a technology-proficient world with more jobs instead of a technology-based jobless world.

While talking about Disruptive Innovation, Prof. Mashelkar took the examples of Waterless Washing, Tubeless Tire, Paperless Printing and Driverless Vehicles. As a case study, Prof. Mashelkar took the examples of a few of the companies, whose growth could be identified using the ASSURED parameter. He further quoted the examples of Reliance Jio Mobile, TATA Nano Car, Blackberry Phone and the likes to measure their businesses.

Few of the remarkable quotes by Prof. Mashelkar included:

- Exponential growth cannot come unless there is a game-changing disruptive innovation.
- FAIL means First Attempt in Learning.
- In life, two things matter. They are 'Speed' and 'Direction'. If there is great speed with no direction, then it will lead to no destination.

According to Prof. Mashelkar, digital identity is a key to success in the contemporary world. While supporting this iteration, he took a very interesting example. He said that in order to reach 50 million customers, landline telephone took 50 years, mobile phone took 12 years, YouTube took four years, Facebook took three years, Twitter took two years and Reliance Jio took a measly 83 days.

Prof. Mashelkar further showed a slide, which depicted the reason for the exponential growth of Jio Mobile by creating a world record of 16 million subscribers in the first month of its operation in September 2016. It was possible due to the introduction of Aadhaar-based paperless Jio SIM activation process, which could be completed within a minute. Thus, we can have a successful business model if the innovation is 10-times better and cheaper, says Prof. Mashelkar.

Prof. Mashelkar also took the example of a few of the other businesses for their best practices such as iBreastExam, Narayana Health Heart Surgery and Jaipur Foot.

Towards the end of the session, Prof. Mashelkar recalled his first meeting with Barack Obama, the former American President. President Obama had asked, "What innovation do you do?" Prof. Mashelkar had replied, "I do innovation that works for all and not for the privileged lot."

Prof. Mashelkar asked the audience at the auditorium to come forward with innovative ideas. He suggested the PDPU faculty members to encourage their students to think out-of-the-box. At the end of the lecture, Prof. Dave gave the vote of thanks and announced that the PDPU incubation center is open to all new ideas. The varsity is looking forward to provide full assistance to meritorious students in order to take their innovations forward.
