Business Innovation, Advanced Technology with Special Reference to Digital India

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Abstract: *This paper provides an insight towards Business Innovation technologies which will cover whole world, and its being a reality in coming future. Digital India Initiative of Honorable PM of India Shri Narendra Damodardas Modi is one of the First steps towards its achievement. Some of the key drivers of growth of the sector in India are digital transformation, Wearable technologies, automation, use of AI and IoT, and fifth generation (5G) network. Digital technologies are increasingly being adopted by Indian industries which will drive growth and enhance competiveness, the use of technologies such as AI, machine learning in manufacturing industries, services in agriculture firms and DevOps (development and operations) can improve efficiency and productivity into these sectors, also discussed global trends.*

Keywords: AI (Artificial Intelligence), DevOps (development and operations), PEAS (Performance, Environment, Actuators and Sensors).

Government Achievement:

The Ministry of Electronics & Information Technology (MeitY), Government of India and the enabler of Digital India program, has undertaken numerous revolutionary initiatives in the area of IT/ ITeS and electronic manufacturing that have put India on the global map. Data points that proceeded the country to march towards a robust digital economy:

MyGov: This is a citizen-centric digital collaboration platform that empowers people to connect with the Government & contribute towards good governance. Started on July 26th 2014 and with a modest 8.74 lakh users in the first year, today MyGov has over 50 lakh active users under 64 groups who contribute their ideas through 756 discussion groups and participate through 701 earmarked tasks that has grown from 36 lakh active users in 2016.

The Mobile Phone Revolution:

Today India is home to 121 Crore Mobile Phone users, compared to 103 crore in 2016.

- ➢ *Smartphone Users:* The number of smart-phone users have grown from 30 crore in 2016 to 40 crore in 2017

- ➢ *Internet Users:* The number of internet users have grown from 40 crore in 2016 to 50 crore in 2017

Growth in Mobile Phone Manufacturing:

- ➢ 105 mobile/ ancillary manufacturing units

- ➢ Jump of 60% in terms of units made. Manufacturing of mobile phones has reached 17.5 Crore units in 2016-17 from 11 crore in 2015-16.

- ➢ Created **4** lakh direct and indirect jobs since 2014 of which 2.4 lakh added in 2017

Growth in Digital Payments: There has been a significant growth in various forms of digital payment due to initiatives taken by the Government in the aftermath of demonetization. The trend can be explained through the following table:

Sl No.	Mode	8th Nov 2016	18th Oct, 2017
1	BHIM/ UPI	4000/ day	25.6 lakh/ day
2	Mobile Wallets	22 lakh/ day	88.43 lakh/ day
3	Debit Cards	40 lakh/ day	82 lakh/ day

Digital Locker System (DigiLocker): DigiLocker, launched in July 2016, serves as a platform to enable citizens to securely store and share their documents with service providers electronically after giving due permission. So far, over 197 crore document have been placed in DigiLocker enabling access to over 88 lakh users. For the first time both CBSE 10th Class results and NEET Results were also sent digitally into Digital Locker.

Aadhaar: With an objective to empower residents of India with a unique identity and a digital platform to authenticate anytime, anywhere, Aadhaar today is the world's largest biometrics based digital identity system. Total number of Aadhaar account holders reached 119 Crore in 2017 compared to 104 Crore in 2016. Aadhaar is being used as a digital platform to enhance governance.

Direct Benefit Transfers (DBT) through Aadhaar Payment Bridge (APB): A total of Rs. 2.43 Lakh Crore have been disbursed through Aadhaar based DBT to beneficiaries of 394 government schemes which have led to saving of Rs. 57,000 Crore in the last 3 years by removing fictitious claimants. Through this process a total of 2.33 Cr. Bogus ration cards and 3 crore fake LPG connections were identified.

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Jeevan Pramaan: It is an Aadhaar based platform for biometric authentication of the pensioners and senior citizens. Since its launch on 10 November 2014, over 150.15 lakh pensioners have registered on the portal till date, which was 16.54 lakh in 2016.

Other noteworthy achievements:

➢ *National Scholarship Portal:* 1.4 Crore students registered

➢ *Jan Dhan Accounts:* 30 Crore

➢ *Jan Suraksha Schemes Registrations:* 15 Crore

➢ *India BPO Promotion Scheme:* 18,160 seats of BPO already allocated. Another 13822 sect allocation nearing finalisation

➢ *eNAM:* 50 lakh registered farmers; 455 Agri Markets linked

➢ *MUDRA:* 9 lakh people got Rs. 4 lakh Crores of loan

➢ *Soil Health Card:* 9.5 Crore cards made

TECHNOLOGICAL ADVANCEMENTS ACROSS GLOBE:

What is Artificial Intelligence

Like and intelligent humans brain an Artificial Intelligence is a way so that a computer or a software think intelligently .It's like a robot. Concept of AI is achieved by knowing how human brain thinks while trying to resolve a problem situation, and finally based on the outcomes of the situation intelligent software system is formed. So To Implement Human like Intelligence in Machines, there is a need of creating a system that understands, learns, thinks and behaves like human beings.

How Artificial Intelligence is formed

Agents and Environments: AI system is composed of an agent and its environments. The agents reside in their environment. The environment may contain many other agents. An agent is any entity that can perceive its environment through sensors and act upon that environment through actuators. For Example:

▪ Human agent: Sensors are: Vision, audio, eyes, ears, smell, touch, taste

➢ **Actuators are:** Hands, muscles, secretions, legs, mouth, changing mind etc.

▪ Robotic agent: **Sensors are:** Cameras, laser range finders, etc.

➢ **Actuators are:** Wheels, motorized limbs, etc**.**

So Agents interact with environments through actuators and sensors.

Fig. 1: Percept & Action

So an agent perceives its environment through the sensors and acts upon it through the actuators (or Effectors, depending on whom it is asked for). Artificial Intelligence is more interested in agents with substantial computation resources and environments which require non trivial decision making.

Rationality: These agents are also known as Rational Agents. A rational agent always chooses whichever action maximizes the expected value (Output) of the performance measure. The rationality of an agent is measured by its performance measure, the prior knowledge it have, the environment it can perceive and an actions it can perform. The above mentioned properties of the intelligent agents are often grouped in the term PEAS, which stands for Performance, Environment, Actuators and Sensors.

▪ Performance measure: Vehicle costs, Income, fines, insurance premiums, Potential consumer base

▪ Environment: Roads, drivers, Consumers

▪ Actuators: Fuel, safety features, Steering, Oil, brake.

▪ Sensors: Radar, Camera, Accelerometer, Engine sensors, Microphone

5 G Revolution (Data speed will increase)

Today telecom players like Jio Dan Dana Dan has helped nation and its people by floating data revolution across nation, it helped poor people to gain knowledge in as good as nil cost. Its Credit goes to Reliance Chairman Honorable Mukesh Ambani. The initiative is appreciated as Reliance never compromised in spreading the technology, for an example to get Jio Sim card operated it requires 4G handset. 4G handset has got its own benefits which has got futuristic features like video calling, live TV and whole world is in the palms of a mobile user. Jio never thought of building a solution so that it must be compatible with 3G handsets. People accepted the technology and purchased 4G handsets which shows every individual wants to become technological civilian.

Though for the spread of technology Reliance faced economic loss but they presented a strong image by this data revolution. At present, we use 4G and think that the speed is good, but in the coming time, this speed is also going to be low, because in the coming days everything will be connected to the Internet and it will operate from the internet. Then the 4G people will not be able to meet the demand of data speed and more data speed will be demanding across the country.

Keeping this demand in mind, Dr. Pavan Kumar Mishra, PhD Scholar of NIT, has analyzed the 5G Networks through its PhD research and enhanced its parameters. This will reduce the data speed by up to 1000 times the speed of 4G and the consumption of the battery can also be up to 10 times. He has done his research on 'The Analysis and Announcement of Quality of Service Parameters for 5G Networks'. This research work has been done under the guidance of Dr. Sudhakar Pandey and Dr. Sanjay Kumar Vishwas, in which he has worked on the quality and service parameters of 5G Networks. Dr. Pawan said that when the increase in data speed and the number of towers will increase, then the impact will also be on the battery. Battery consumption will be reduced up to 10 times, because increasing number of towers from 5G will result in better connectivity in every area, which will easily get network in mobile. These less will be for this, because the tower is very far away. Due to this there is a problem in connectivity and mobile has to work a lot. Due to this, the battery ends very soon. Which will not make him time due to more towers or connectivity.

Work done in view of demand

He said that keeping in mind the demand of data in the coming days, it has been worked on the 5G architecture model, through which its service parameters of 5G can be increased. Research has been done using a variety of new-new technologies. In view of the advantages, the work done during the research has been accepted for international reputable general and publication in the conference. He said that its benefits would be that the data cost would be much less than now, so that every person could use it. Also, the internet service will reach the village. Research can be used in every field.

CONCLUSION

So as we have seen Government role in elevating technology as well as Telecommunication and AI helping to shape future innovations. These Govt. initiatives are the first start in achieving advancement towards nation's growth. World trends show rapid progress in so many areas of technology that it brings an incredible show of human achievement. The trends indicate that human Wealth will increase due to rapidly improving technology throughout the world economy. It is by Mobile Technology, people around the world will work together and with more efficiently than ever before. Future technology is based on what people want. But a lot more

is possible when human values in people are elevated, scientists in particular realize the same. The implementation of new technologies will mean that increasing numbers of employees will spend more time in research. Issues can only be addressed by developing strong elements of trust in both superior and subordinate. This can only be achieved through personal human contact for now.

The current change will mean that workers must increasingly reinvent themselves for the workplace. Permanent jobs may largely disappear. Temporary jobs, short term projects, and consultancies will become increasingly common. Beyond the immediate horizon of what's in the lab it is today, the future is shaped by the same forces/circumstances that shaped the passed, and the past is one of our best guides for prediction.

Technological impact will be on what we currently describe as "management". We need to start developing a new paradigm with the possible effects of these new technologies on both people and organizations. Hence, one of the most important roles for leaders is to be able to predict the effect of the new technologies on their organizations. Traditionally, the primary role of leaders is to define reality. Leaders of organizations need to develop an awareness and understanding of the reality of new technologies but also to recognize their limitations and must start concentrating on transformation in the area of HUMAN VALUES which was least important area's under consideration by Organizations, but it will collapse them in future if HUMANITY is ignored.

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