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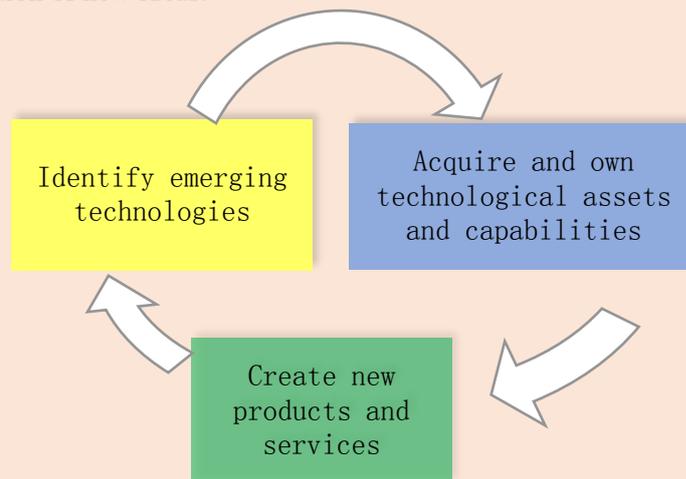
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Research Assistant

### About National Institute of Industrial Engineering (NITIE)

National Institute of Industrial Engineering (NITIE), established in 1963 by the Government of India. It is one of the leading Institute for Industrial Engineering and Management education. The institute offers five programmes at post graduate level- Post Graduate Diploma in Industrial Engineering (PGDIE), Post Graduate Diploma in Industrial Management (PGDIM), Post Graduate Diploma in Industrial Safety and Environmental Management (PGDISEM), Post Graduate Diploma in Manufacturing Management (PGDMM), Post Graduate Diploma in Project Management (PGDPM). In addition NITIE offers Post Graduate Program for Executives – Visionary Leaders for Manufacturing (PGPEX-VLFM) and Fellow (Doctoral) Programme too.

### About Centre for Technology and Innovation Management (CTIM)

Centre for Technology and Innovation Management (CTIM), was established in 2015. CTIM bridges “Engineering” and “Management” through focussed research, serves as a platform for collaborative research and development. It also provides an opportunity for practical application of new ideas.



### CTIM focuses on three key dimensions through-

- Identification of technology and innovation opportunity
- Implementation of technology
- Commercialization of technology

## PEARLS OF WISDOM- MOTI

MANAGEMENT OF TECHNOLOGY & INNOVATION

### Lecture on *Interaction Design for Emergent User* By Prof. Anirudha Joshi IDC, IIT Bombay

Session focused on understanding of human thinking and mental modes. Interaction design is the design of interaction between user and product. The goal of the interaction design is to create products that enable the user to achieve their objectives in the best way possible. The interaction between the user and the product often involves elements like motion, sound, space, and many more.



## EVENTS AT CTIM

### Workshop on *Breakthrough Thinking*

conducted by

**EREHWON Orbit shifting Innovation**

Organised by

**CTIM & M2M**

#### Key Learnings

- Habitual things & mental possibilities only restrict us from innovation.
- Focus should be on different frames instead of generating individual ideas for breakthrough innovation.
- Be a Fire starters to take on extraordinary challenges and fight against obstacles.



### International Conference on *Management of Intellectual Property Rights and Strategy (MIPS) 2018*



The **MIPS 2018** was inaugurated by Prof. Karuna Jain, Conference Chair; Prof. Rishikesha Krishnan, Chief Guest; Prof. Shishir Kumar Jha, Program Chair; Prof. Ruchita Gupta, CTIM Centre Coordinator.

The conference was showered with 2 keynotes -

- 1) Can we build IP-based businesses from India? by *Prof. Rishikesha T Krishnan*, Director, IIM Indore
- 2) IPR and Standardization in Indian Telecom Sector: Strategy for Digital India by *Prof. Abhay Karandikar*, IIT Bombay

Round Table on **Creating an Ecosystem for making India an IP Savvy Nation** was conducted. Three components of ecosystem- Generation, Exploitation and Protection were discussed. Some of the key takeaways are-

1. India has the potential to build IP-based, product businesses.
2. It is critical for academic Institutes to teach business propositions of Intellectual Property

## ONGOING RESEARCH PROJECTS



**Project Title:** Diffusion and Adoption of Mobile Value Added Service Innovations in rural India.

**Objective:**

- To develop a framework for diffusion and adoption of mobile value added service innovations in rural India.

**Researchers:** Prof. Ruchita Gupta, Prof. Karuna Jain, Mr. Durgesh Kumar Jaiswal

**Findings and Recommendation:**

- Information sharing about agriculture services is lacking and shall be the first action item to be considered.
- Subsidized services and incentives to use such services shall be provided.

## TELEHEALTH: AN IOT BASED OXYGEN FOR HEALTHCARE



Vipul Gandhi  
Center TA



Arjun V Prasad  
Center TA

From house calls to urgent care clinics, on-demand healthcare has always been a hot commodity. After all, nobody schedules strep throat or a twisted ankle ahead of time. The modern patient expects 24/7 access to their doctor, and physicians today can use telehealth to monetize remote assistance. Telehealth involves the distribution of health-related services via electronic information and telecommunication technology.

Telehealth became popular in rural areas, where populations with limited healthcare access could now reach specialists from afar. In the 1960's and 70's, the Public Health Department, National Aeronautics and Space Administration (NASA), the Department of Defence and the U.S. Health and Human Services Department all invested time and money for research in telehealth.

As latest technology trends continue to sweep the global healthcare industry with the advent of Internet of Things (IoT), we are witnessing medical device providers offering a range of innovative solutions to improve the quality of patient care. From physical devices to smart systems powering those devices, new technological advances are

helping doctors and patients connect in new ways, transmit vital data in real time, and identify and treat life-threatening events faster than ever before. The vision of “anywhere, anytime healthcare” is changing consumer expectations and fuelling the next wave of innovation growth.

The services under telehealth include telemedicine, tele-surgery, tele-monitoring and telehealth data service.

Telehealth is sometimes discussed interchangeably with telemedicine. The Health Resources and Services Administration (HRSA) distinguishes telehealth from telemedicine in its scope. According to HRSA, telemedicine only describes remote clinical services; such as diagnosis and monitoring, while telehealth includes preventive, promotive and curative care delivery. This includes all the non-clinical applications like administration and provider education which make telehealth the preferred modern terminology.

In most developing and under developed countries of our world, patients travel hours to receive surgical procedures and medical monitoring that they need. But, for various reasons, majority of these patients cannot travel long distances, which leads to the fact that patients in areas where there is a lack of medical personnel do not receive the medical care that they need. On the other side, the doctors that decide to travel to areas lacking qualified medical personnel to provide

medical services expose themselves to potential costs as well as to a heightened degree of risk associated with the travel. According to Rural Health Statistics 2017, 70% of India's population lives in rural areas, which face a 60% shortage of doctors. Thus, to ensure that proper health care facilities are provided to the needy without forcing medical professionals to fly over oceans,

cutting thousands of miles, tele-surgery and tele-monitoring serve as the two efficient interdisciplinary approaches to improve the health care system.

### Telehealth in India

In Utopia, every citizen may have immediate access to the appropriate specialist for medical consultation. In the real world however, this cannot even be a dream.

According to World Bank data, India currently has the second largest Compound Annual Growth Rate (CAGR) in healthcare (11%) among all BRIC countries, with China taking first place. Though this is the case, we in India face challenge to provide total primary medical care in the rural areas. Secondary and tertiary medical care is not uniformly available even in suburban and urban areas.

In contrast to the bleak scenario in healthcare, computer literacy is developing quickly in India. Healthcare providers are now looking at Telemedicine as their newly found Avatar. Theoretically, it is far easier to set up an excellent telecommunication infrastructure in

suburban and rural India than to place hundreds of medical specialists in these places.

The Apollo group of hospitals was a pioneer in starting a pilot project at a secondary level hospital in a village called Aragonda. 16 km from Chitoor in Andhra Pradesh on March 24th, 2000. Starting from simple web cameras and ISDN telephone lines, today the village hospital has a state-of-the-art videoconferencing system and a VSAT (Very Small

Aperture Terminal) satellite installed by ISRO (Indian Space Research Organisation).

The Indian government is trying to set up a National Optical Fibre Network to connect 2,50,000 gram panchayats in the country to the Internet, which aids the expansion of e-health. Further, to support IoT, the Ministry of Electronics and Information Technology (MeitY), Government of India has already come out with an IoT policy that

aims at building an entire ecosystem around IoT and to incentivise the players in the ecosystem.

With the successful implementation of various telemedicine health care projects by both private and government sectors, there is growing optimism regarding the role of telemedicine in the health care sector in India. To read more about IoT and its impact on different sectors, do watch for this column on the next issue.

## QUIZ

Answer this quiz before 15<sup>th</sup> April, 2018, 4:00 pm & win exciting prizes!!

<https://goo.gl/forms/jtXx5O4oA0Pmv6Ot1>



Scan me

### **CONGRATULATIONS TO ALL - Winners of CTIM Quiz 1.0**

- 1. Pratima Dabholkar (NITIE, Mumbai)**
- 2. Gayatri S Kumar (System Engineer, TCS)**
- 3. Kunal Ujjainkar (NITIE, Mumbai)**