CONNECTIONS

May to August 2020
Volume #6, Issue #2

DEPARTMENT OF INFORMATION TECHNOLOGY

In This Newsletter

Faculties' and Students Achivements

Students Development Activites

Departmetmental Activites

Extension Activites

Editorial Team

Dr. Radhika Kotecha, Head of Department

Prof. Nasim Shah, Assistant Professor

Dr. Vaishali Gaikwad, Assistant Professor

Ms. Snehal Mandavkar, Student - 4th Year

Vision of Department

To be recognized as a centre of excellence in the field of Information Technology where inquisitive minds of students are fostered, leading to skilled professionals and contributing citizens.

Mission of the Department

- To produce industry-ready engineers by imparting quality education and enhancing their proficiency with strong engineering foundation and in-depth knowledge of Information Technology.

- To encourage curiosity, creativity, innovative thinking, culture of continuous learning, and multidisciplinary activities for developing state-of-the-art solutions to real-world problems.

- To serve humanity by creating socially responsible citizens with high ethical values who can communicate effectively and work independently or in groups.

Program Educational Objectives (PEOs)

- Program Graduates will be able to apply knowledge of engineering fundamentals and cutting-edge Information Technology to identify and implement innovative solutions for engineering problems and issues in society.

- Graduates will be able to exhibit their employability skills and practice the ethics of their profession with a sense of social responsibility.

- Graduates will have strong interpersonal skills and will engage in life-long learning to enhance their career positions, both as team members and leaders.Objectives (PEOs).

Program Specific Outcomes (PSOs)

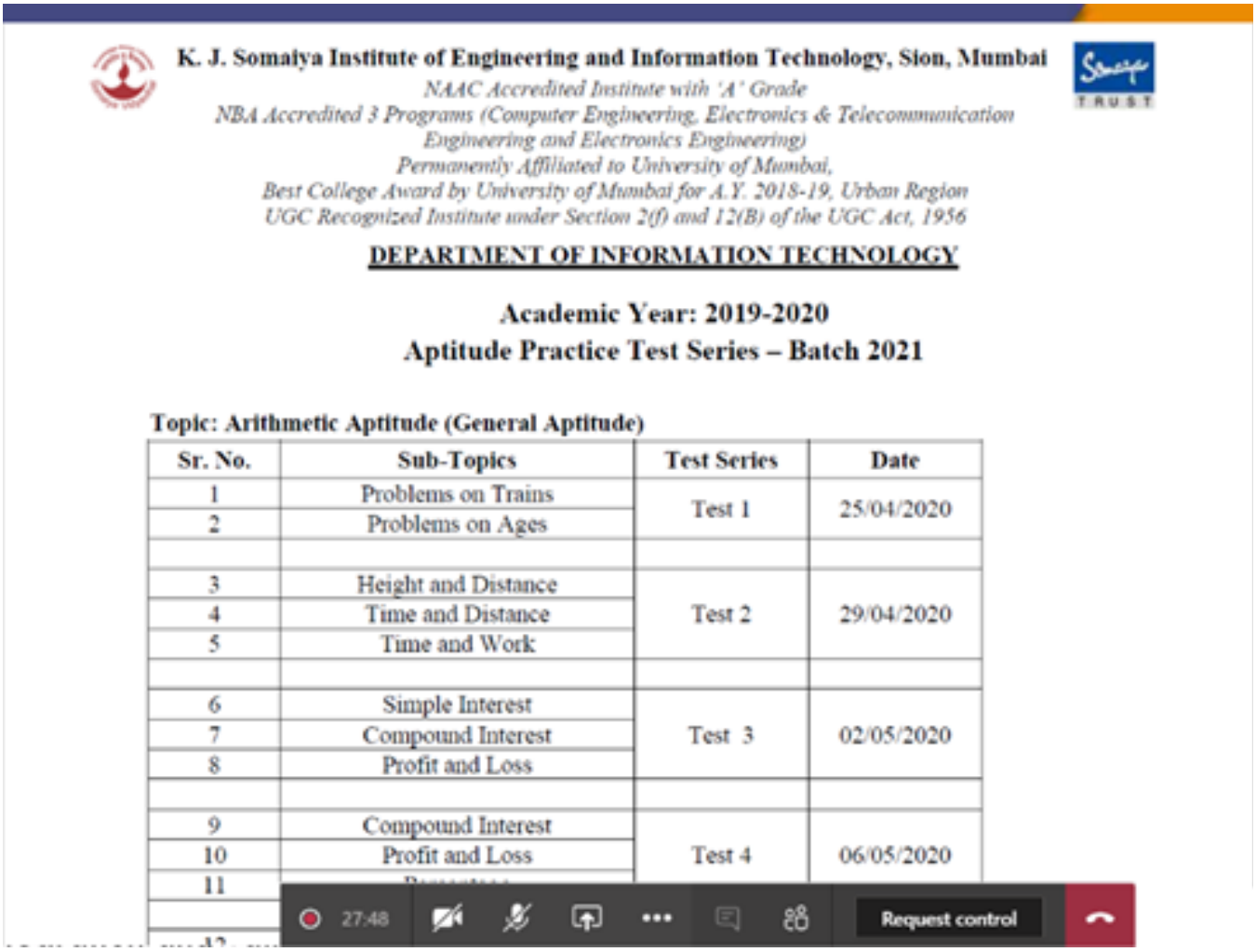
- Graduates will be able to apply standard software engineering practices in real-world project development to deliver efficient, secure and novel solutions.

- Graduates will be able to apply the contemporary trends in Information Technology like Internet of Things and Data Science in diverse application areas.

Departmental Activities

- Department of Information Technology organized "Training and Placement Practice Test Series" for TE students (entering Final Year) through Moodle during May 2020. The objective of the series was to sensitize students with the gamut of skills which facilitate them to enhance their employability quotient and do well in the professional space.

Training and Placement
Practice Test Series



K. J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai

NAAC Accredited Institute with 'A' Grade
NBA Accredited 3 Programs (Computer Engineering, Electronics & Telecommunication Engineering and Electronics Engineering)
Permanently Affiliated to University of Mumbai,
Best College Award by University of Mumbai for A.Y. 2018-19, Urban Region
UGC Recognized Institute under Section 2(f) and 12(B) of the UGC Act, 1956

DEPARTMENT OF INFORMATION TECHNOLOGY

Academic Year: 2019-2020
Aptitude Practice Test Series – Batch 2021

Topic: Arithmetic Aptitude (General Aptitude)

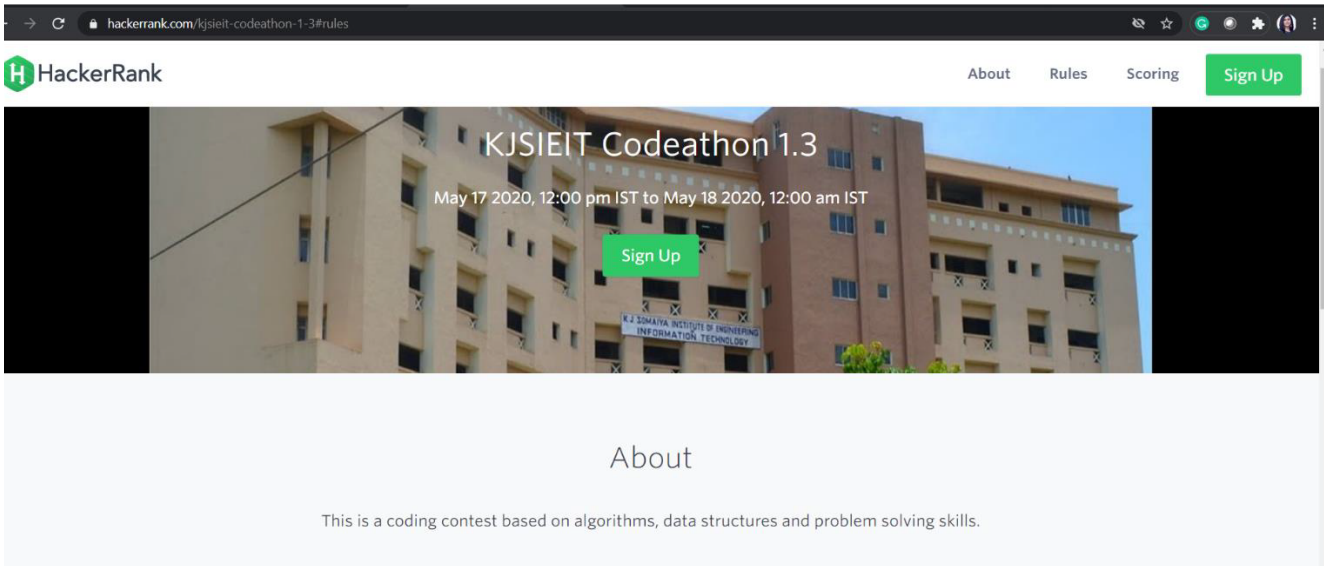
Sr. No.	Sub-Topics	Test Series	Date
1	Problems on Trains	Test 1	25/04/2020
2	Problems on Ages		
3	Height and Distance	Test 2	29/04/2020
4	Time and Distance		
5	Time and Work		
6	Simple Interest	Test 3	02/05/2020
7	Compound Interest		
8	Profit and Loss		
9	Compound Interest	Test 4	06/05/2020
10	Profit and Loss		
11			

27:48 Request control

Departmental Activities

- Department of Information Technology organized “Competitive Programming Practice Test Series” for SE and TE students during May-June 2020. Mr. Ranjan Chaubey from Tata Consultancy Services oriented the students for the series. The objective of this series is to make the students industry-ready and competent in solving competitive programming questions.

Competitive Programming Practice Test Series



Departmental Activities

- Department of Information Technology in association with Institution's Innovation Council (IIC) organized a 1-Month Summer Internship on the theme "Towards Industry 4.0" for the students of KJSIEIT during June 2020. This Summer Internship was attended by 302 students studying First, Second, and Third Year of Engineering from KJSIEIT. The objectives of the internship were to:

  1. Create awareness among the students about the 4 th industrial revolution Industry 4.0.
  2. Impart knowledge of components of Industry 4.0 and its realization using IT.
  3. Discuss upcoming trends and projects in industries with Industry 4.0.
  4. Offer mentoring to students by industrialists on various projects related to Industry 4.0.

  The resource personage for the online internship were eminent Industrialists & Researchers from India and abroad, affiliated to: NVIDIA, Amazon Alexa Services, Qualcomm, Byju's - Think & Learn Pvt. Ltd., Zycus, Indoco Remedies Ltd., Blueshift, Oracle, Citi, BNP Paribas India Solutions Pvt. Ltd., L. D. Engineering College, Worcester Polytechnic Institute (Massachusetts, US), Riidl, etc. on Industry 4.0 components Artificial Intelligence, Blockchain, Big Data Analytics, Cloud Computing, 3D Printing, IoT and 5G, Robotics, Smart Manufacturing, Autonomous Machines, etc.

With a vast experience in respective fields, these experts provided insights into practical aspects and upcoming trends with regards to the components of Industry 4.0 along with mentoring on innovative problem statements using the respective components.

Summer Internship 2020 sessions

K. J. SOMAIYA INSTITUTE OF ENGINEERING AND INFORMATION TECHNOLOGY, SION, MUMBAI

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DEPARTMENT OF INFORMATION TECHNOLOGY

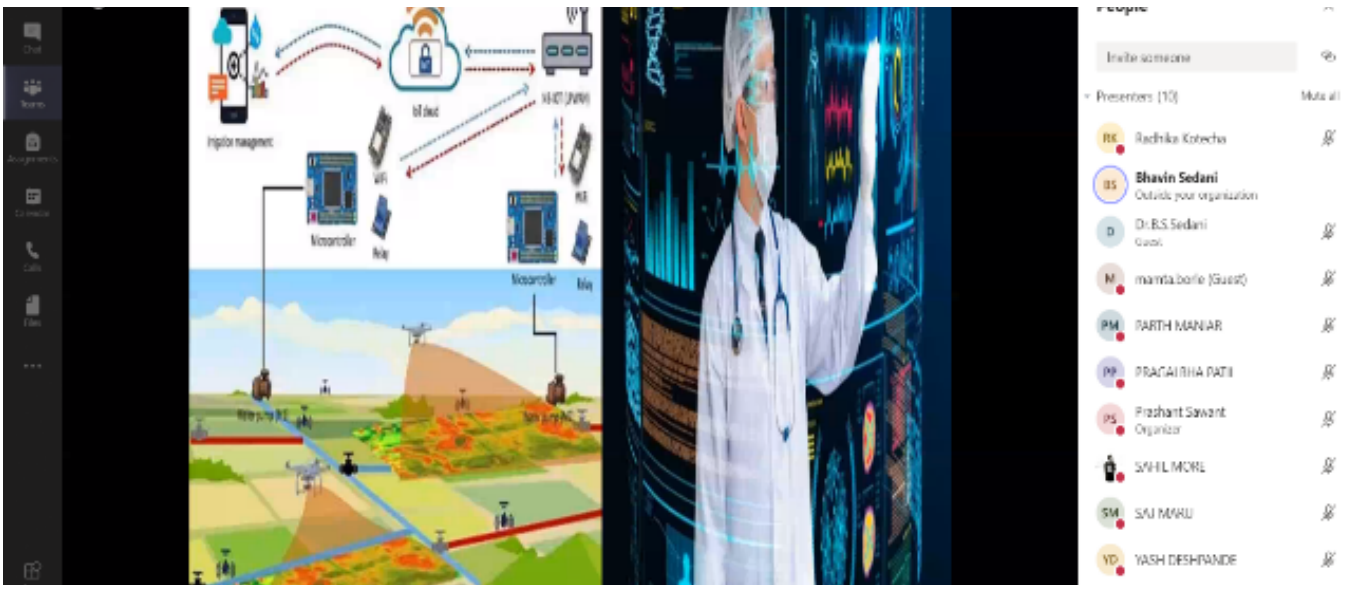
ORGANIZES

SUMMER INTERNSHIP 2020

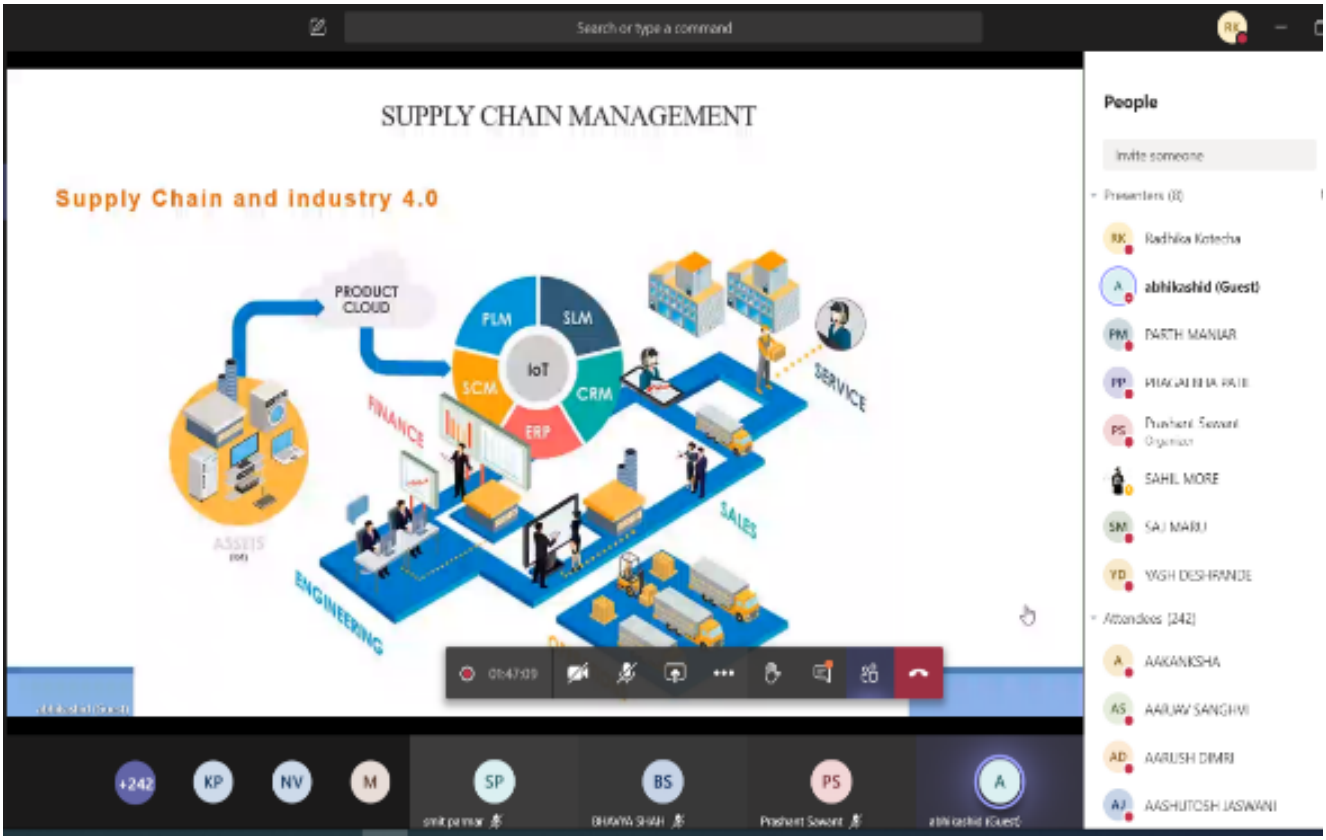
"TOWARDS INDUSTRY 4.0"

Duration: June 2020 (1 Month)
In association with

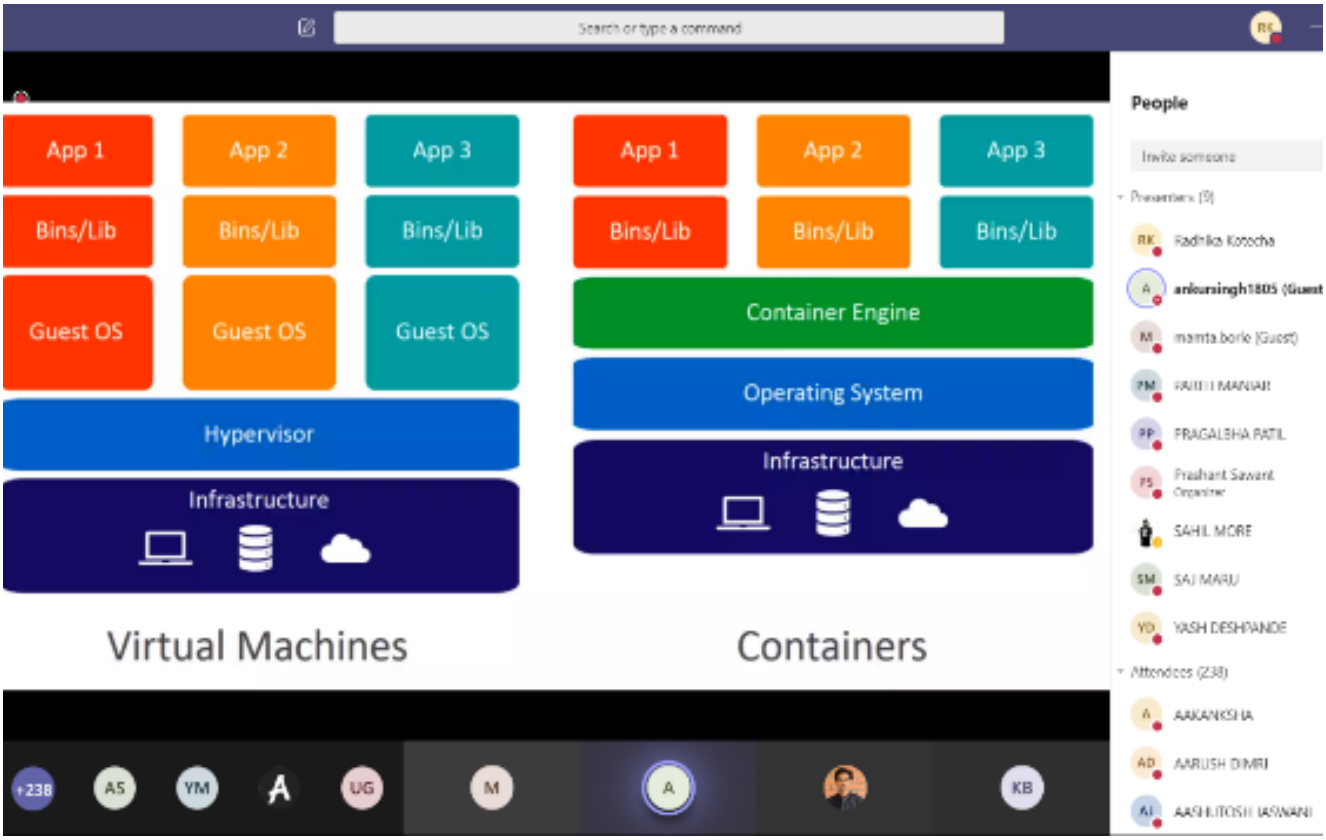
INSTITUTION'S INNOVATION COUNCIL
(Ministry of HRD Initiative)

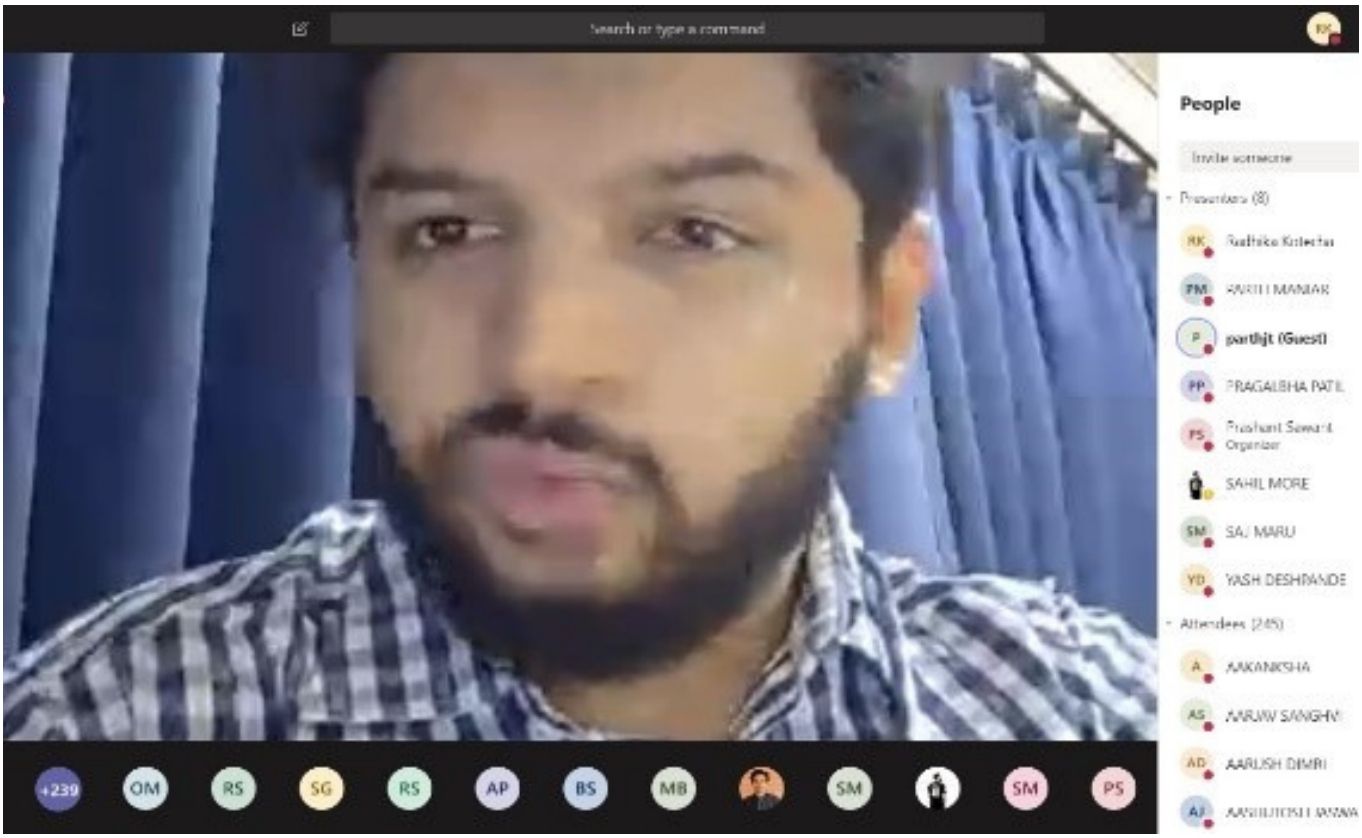


Departmental Activities



Departmental Activities





Departmental Activities

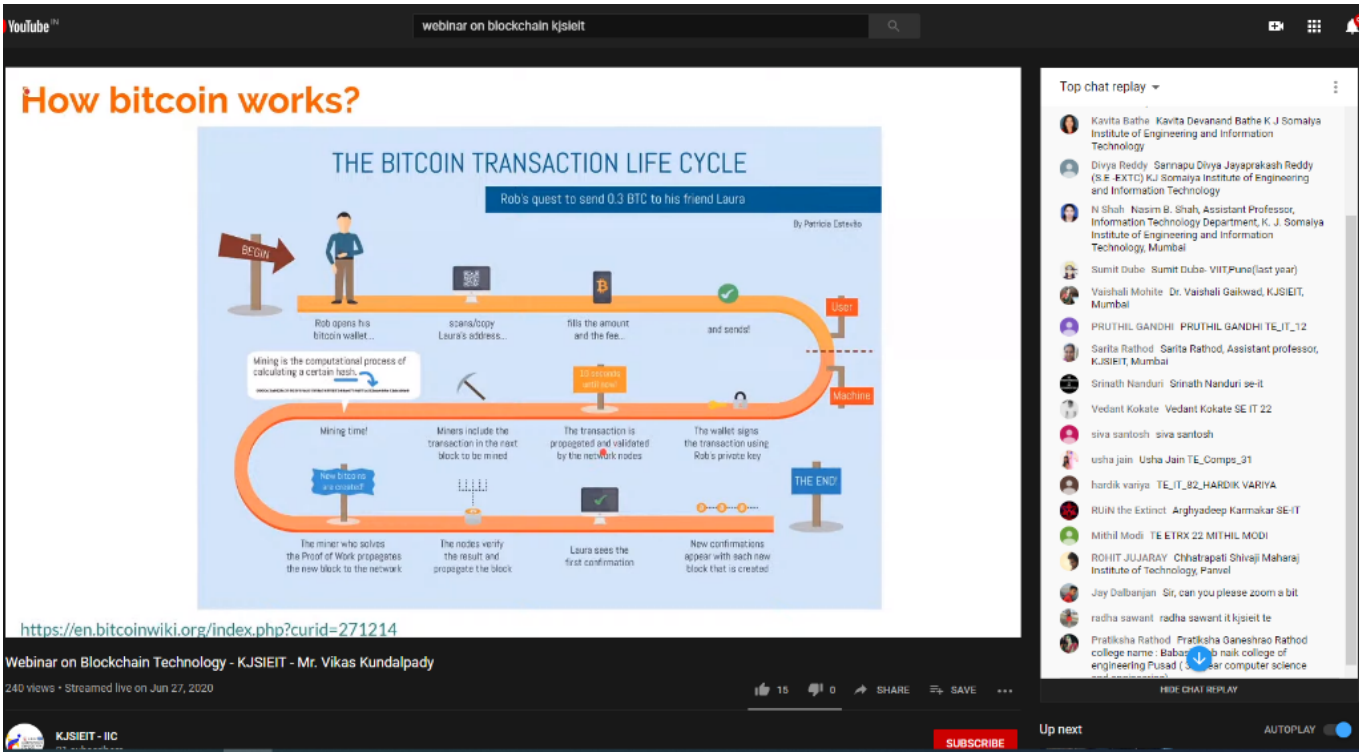
- Department of Information Technology in association with Computer Society of India (CSI) organized three webinars for FE, SE & TE students of all branches:

  1. Webinar on "Enhancing Career Opportunities with Abroad Studies" by Mr. Abhishek Mitra, Country Head for Study & Alumni, Stanford School of Business, India on June 12, 2020
  2. Webinar on "From Dreams to Reality with Brainheaters" by Mr. Harsh Patel, Founder, Brainheaters, Mumbai on June 27, 2020
  3. Webinar on "From Dreams to Reality with Helpnow" by Mr. Aditya Makkar, Founder, Helpnow, Mumbai on June 30, 2020

  The objective of these webinars was to motivate the students to work on their innovative ideas and believe in turning their dreams into a reality.

  ·Department of Information Technology in association with Institution's Innovation Council (IIC) organized an International Webinar on "Blockchain Technology" on June 27, 2020 through Zoom and YouTube Live with total 450+ of participants. The resource personage for the webinar was an international industry expert Mr. Vikas Kundalpady, Project Engineering Leader, Distributed Ledger Technologies Pte. Ltd., Singapore.

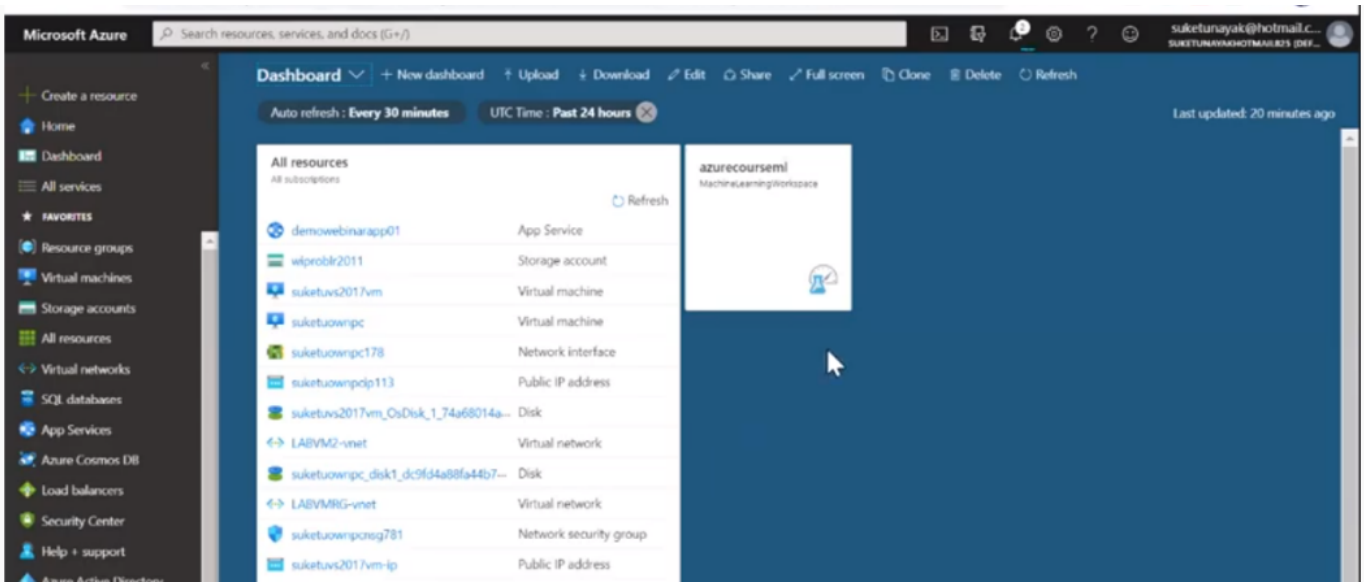
Webinar on Blockchain Technology



Departmental Activities

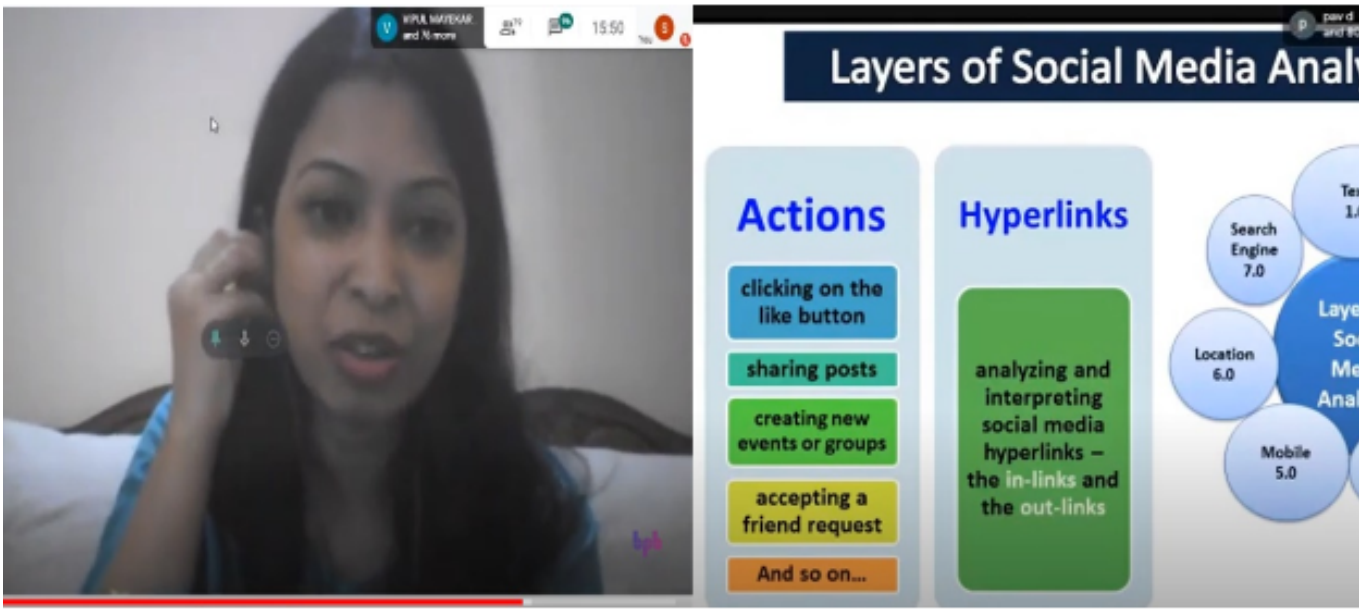
- Department of Information Technology in association with Institution's Innovation Council (IIC) organized a webinar on "Cloud Computing" on July 04, 2020 through Zoom and YouTube Live with total 600+ of participants. The resource personage for the webinar was an industry expert Mr. Suketu Nayak, Cloud Technology Evangelist, Chief Executive Officer, GetWings Technologies Pvt. Ltd., Ahmedabad, India

Webinar on
Cloud Computing



- Department of Information Technology in association with BPB Publications organized a webinar on "Data Science-Social Media Analytics" on July 6, 2020. The resource personage for the webinar was Dr. Gypsy Nandi, Assistant Professor (Sr.) from Don Bosco University, Guwahati, India.

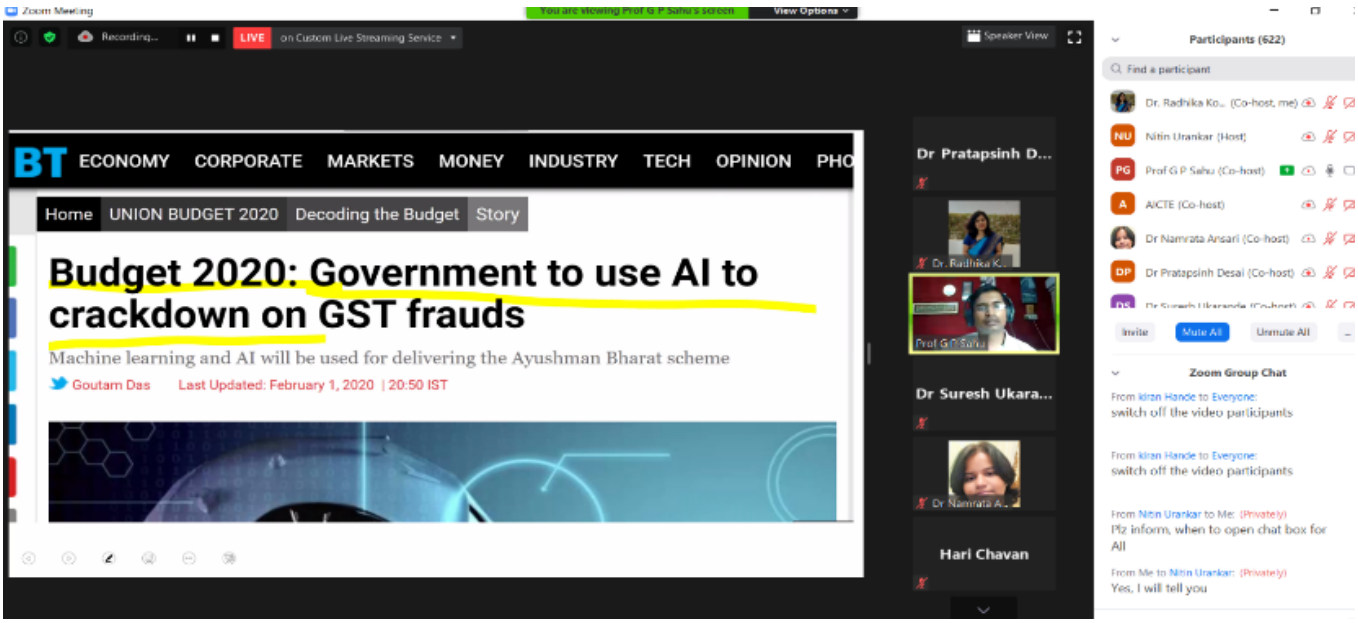
Webinar on
Data Science

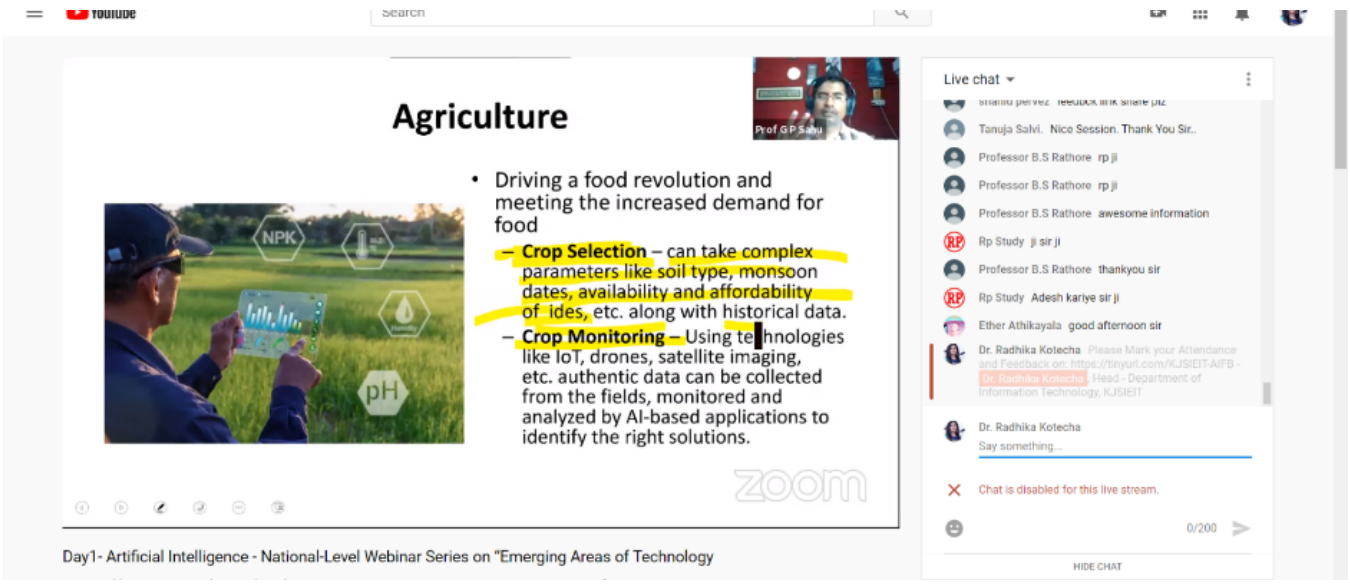


Departmental Activities

- ·Department of Information Technology organized a webinar on "Artificial Intelligence" Under National-Level Webinar Series on "Emerging Areas of Technology" on July 13, 2020 with total number of participants 2053. The resource personage for the webinar was Dr. G. P. Sahu, Professor, School of Management Studies, NIT – Allahabad.

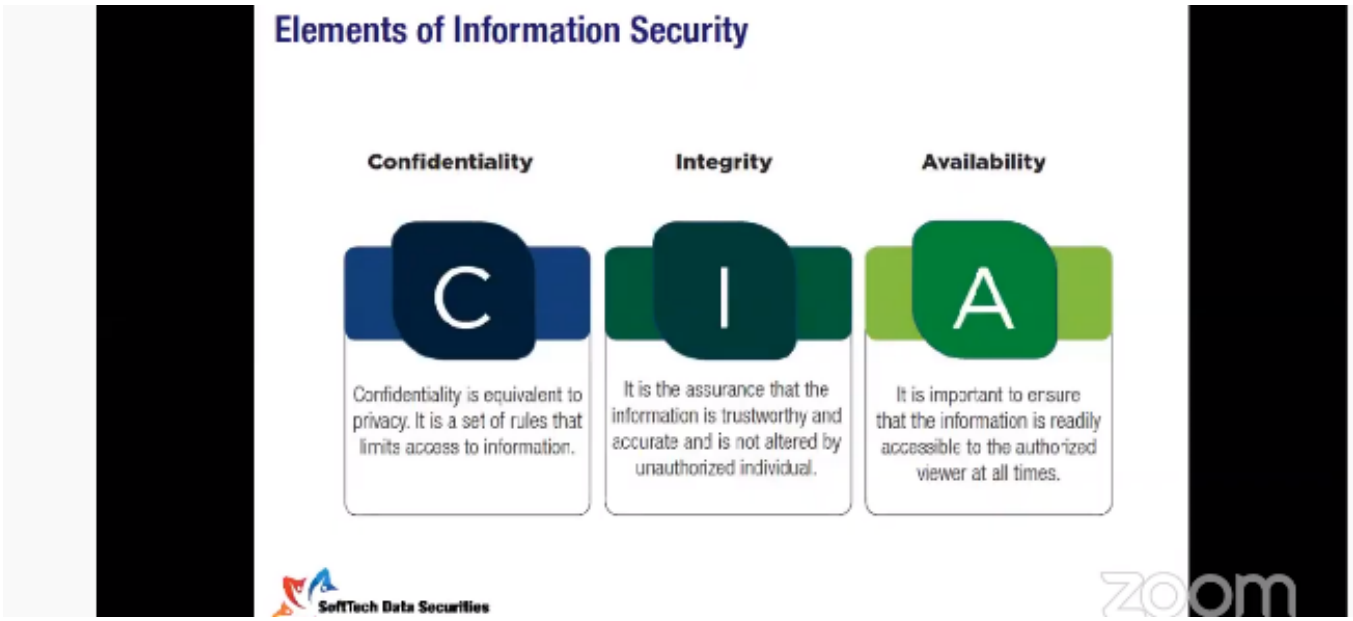
National-level Webinar on Artificial Intelligence





- Department of Information Technology organized a webinar on "Cyber Security" under National-Level Webinar Series on "Emerging Areas of Technology" through Zoom and YouTube Live on July 14, 2020 with total number of participants 1623. Mr. Amey Tambe, Director, SoftTech Data Securities, Pune

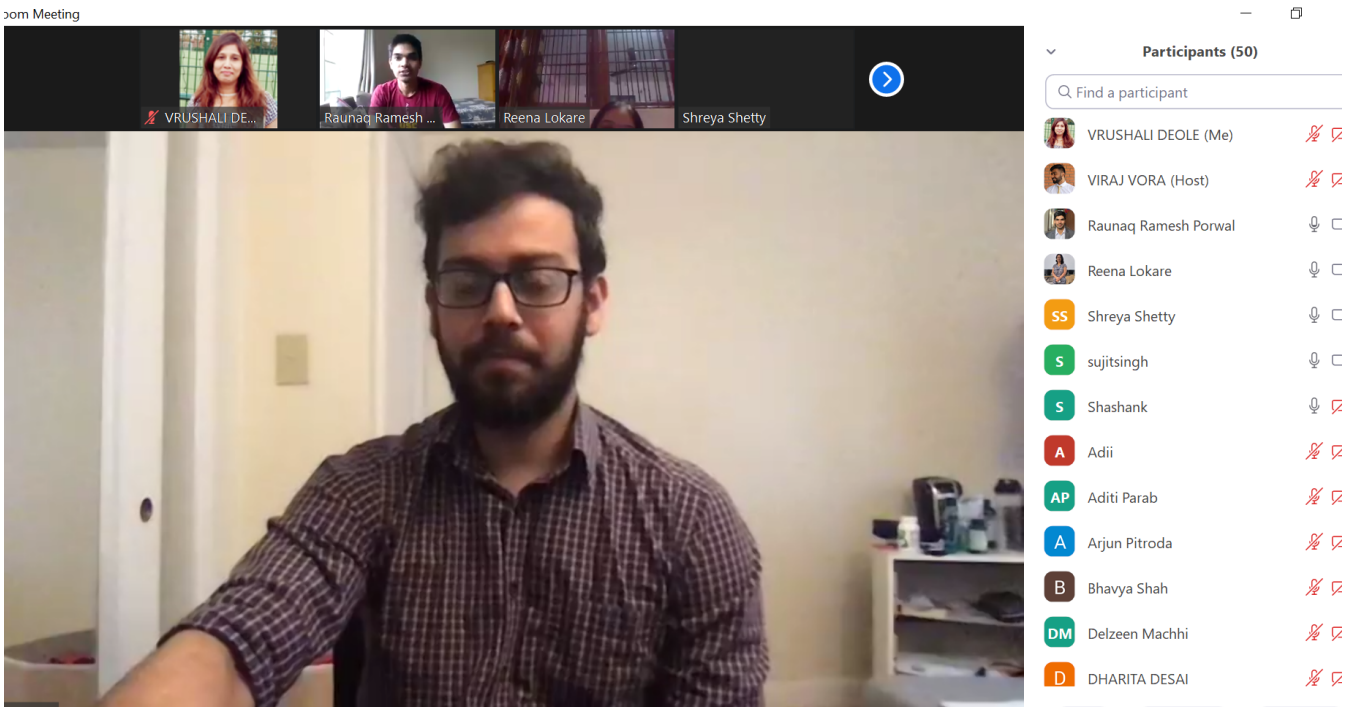
National-level Webinar on Cyber Security



- ·Department of Information Technology organized Let's Talk Series for the students on various contemporary topics with an objective to create a forum for providing students with precise guidance regarding their pursuits. Following discourses were organized under the series:

- Discourse on "Preparing for Higher Studies Abroad" in association with Alumni Committee under "Let's Talk Series" on July 25, 2020. To create a forum for providing students with precise guidance regarding different universities abroad, choosing the right institute and various job opportunities after completion of MS. The resource personage for this session were Mr. Sujit Singh, Software Engineer, Wayfair, US / Alumnus, KJSIEIT and University at Buffalo, New York, US) and Mr. Raunaq Porwal, Alumnus, KJSIEIT and PG student - University of Southern California, US

Speakers Interacting with Audience during Let's Talk Series – Session 1



- Discourse on “Work Culture in IT Industries” in association with Training and Placement Committee under “Let’s Talk Series” on July 26, 2020. To create a forum for providing students with precise guidance regarding working culture of IT industries and preparations required while transforming from engineering studies to jobs. The resource personage for this session were Mr. Meet Desai, Software Engineer, Majesco Pvt. Ltd., Mumbai, India and Mr. Kunal Dawda, Assistant Manager, Department of IP-MPLS & Automation, Reliance Jio Pvt. Ltd., Mumbai, India (Alumnus – KJSIEIT)

Speakers Interacting with Audience during Let’s Talk Series – Session 2

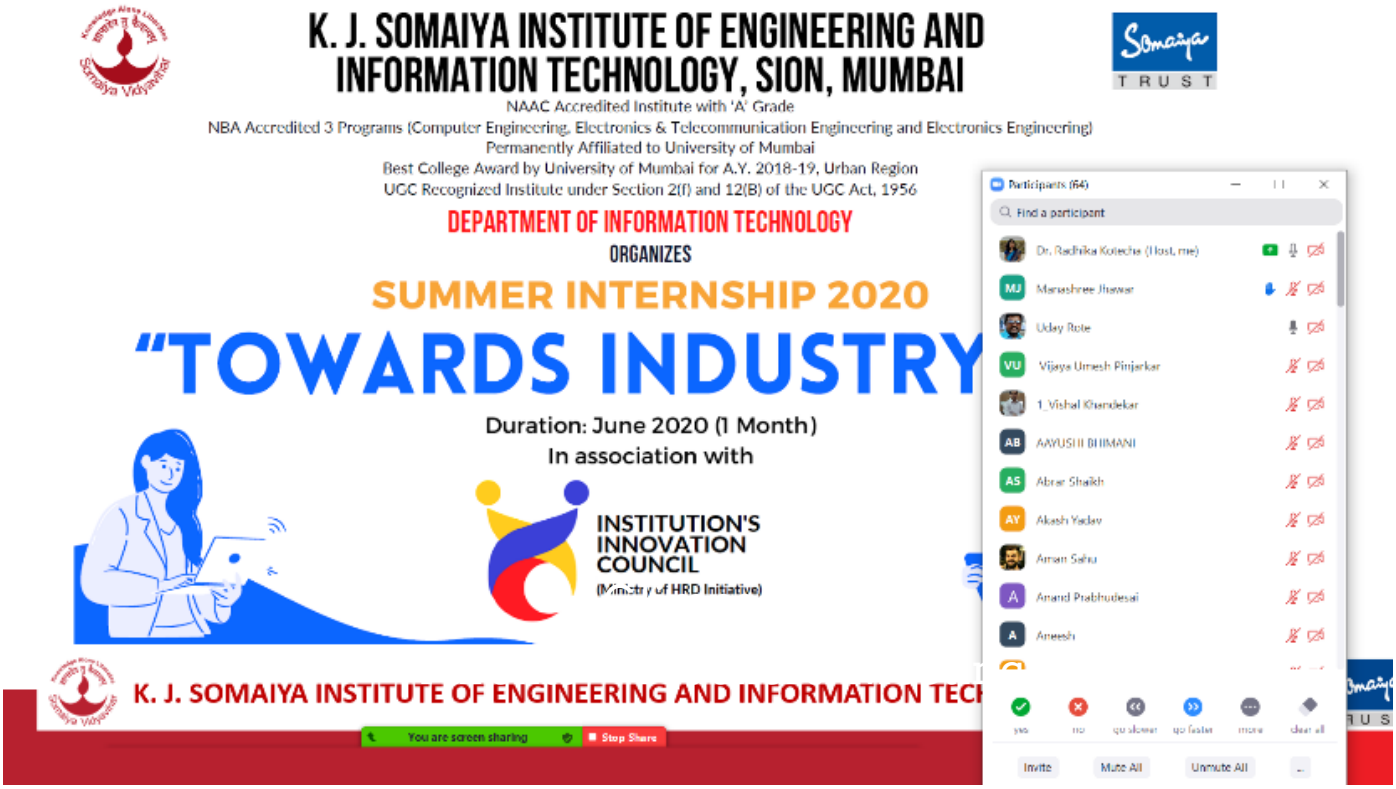
- Discourse on "How Big is Big Data" under "Let's Talk Series" on August 26, 2020. To create a forum for providing students technical guidance and insights on the big scope & opportunities of research as well as jobs in Big Data. The resource personage for this session was Mr. Jimish Kadakia, Business Intelligence Developer Maryland, USA (Alumnus – KJSIEIT).

Speaker Interacting with Audience during Let's Talk Series – Session 3

Departmental Activities

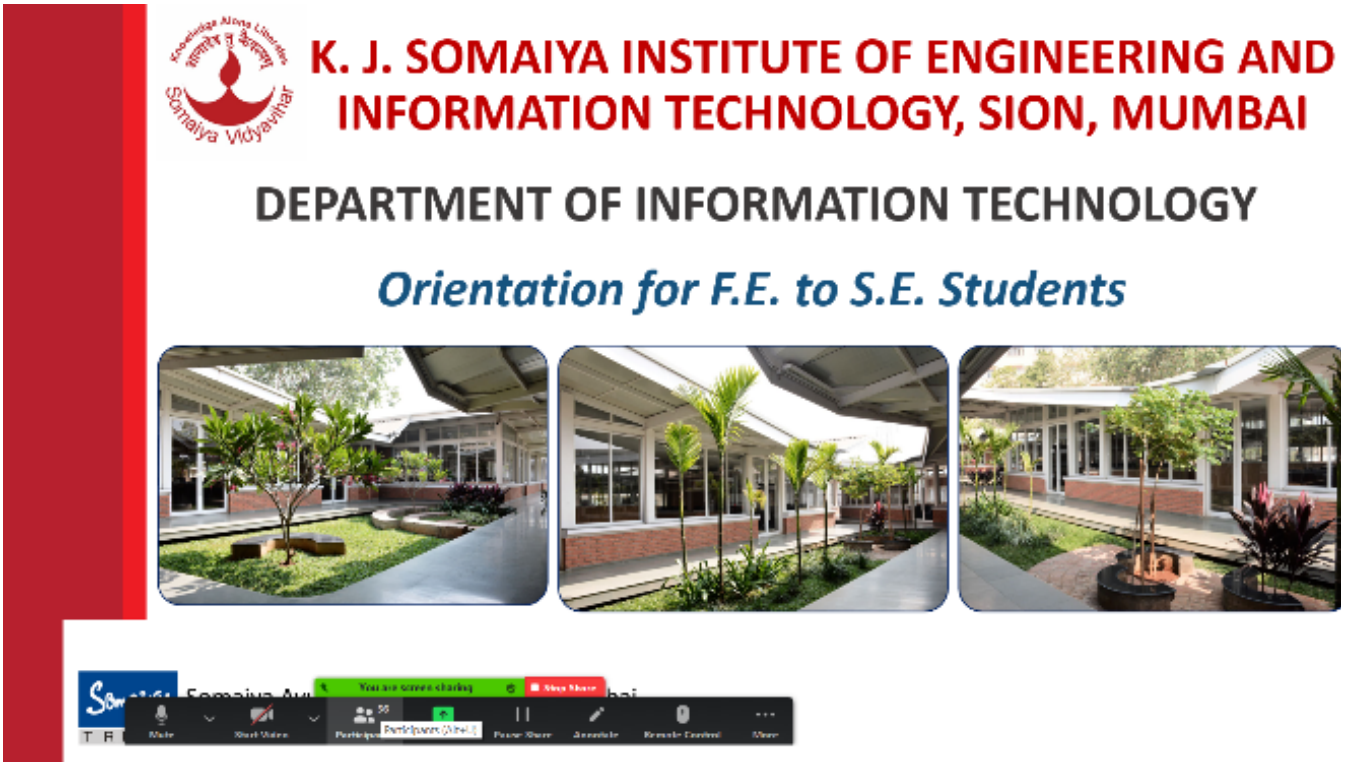
- Department of Information Technology organized "Parents'-Teachers' Meeting" on July 11, 2020 for SE (to TE) and TE (to BE) students' parents to convey the activities conducted by the Department for students during the lockdown period from March 17 2020, the plan of Online Teaching-Learning for the upcoming semester and interact with parents to address their concerns. The parents were very satisfied with the execution and appreciated the growth of their children even during the pandemic due to the efforts of the institute and the department.

Glimpse of
Parents' – Teachers' Meeting



- Department of Information Technology organized "Orientation Session" on July 18, 2020 for FE I.T. students entering into SE I.T. with an objective to orient them towards the faculties and practices of the department. The plan for upcoming semester was also conveyed to the students. The session witnessed enthusiastic participation of the students.

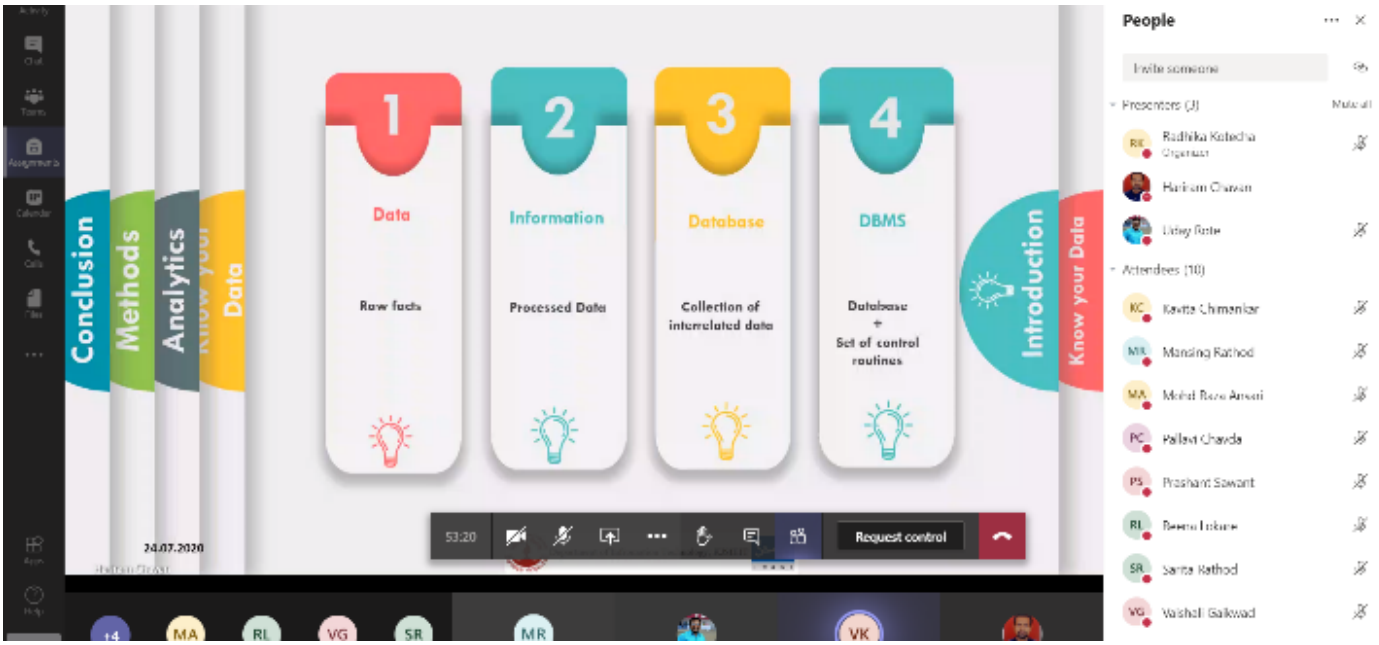
Second Year – Information Technology Students' Orientation

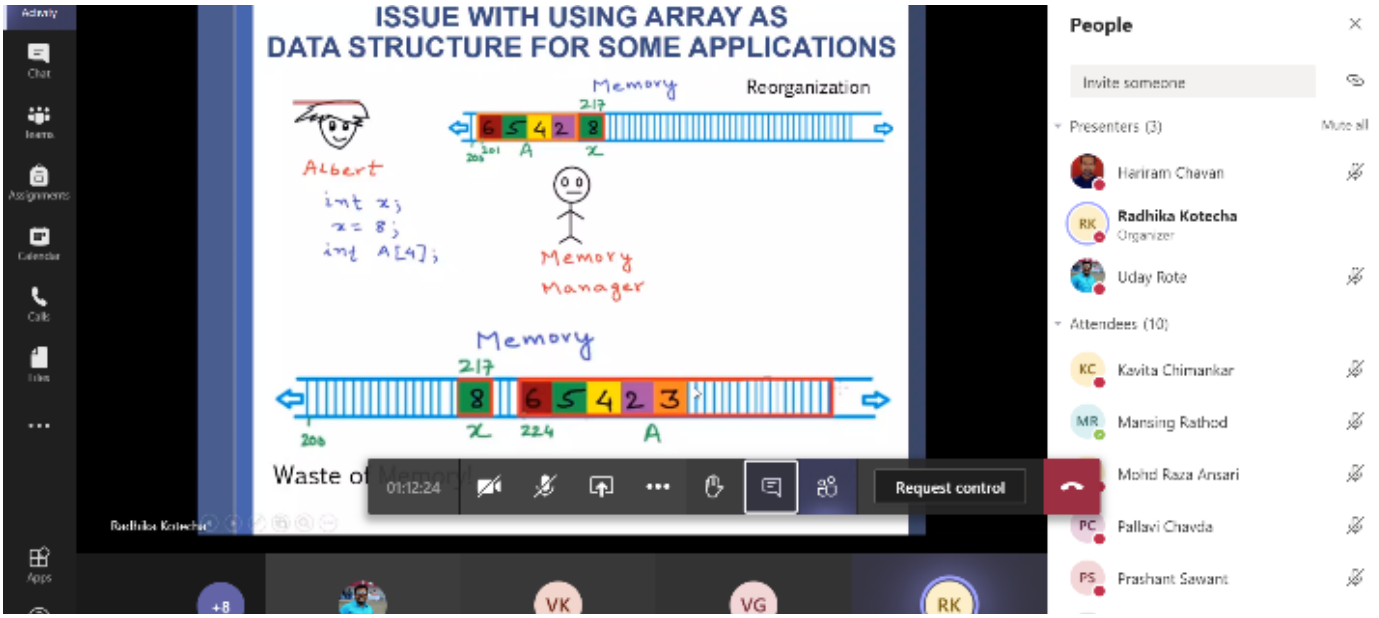


Departmental Activities

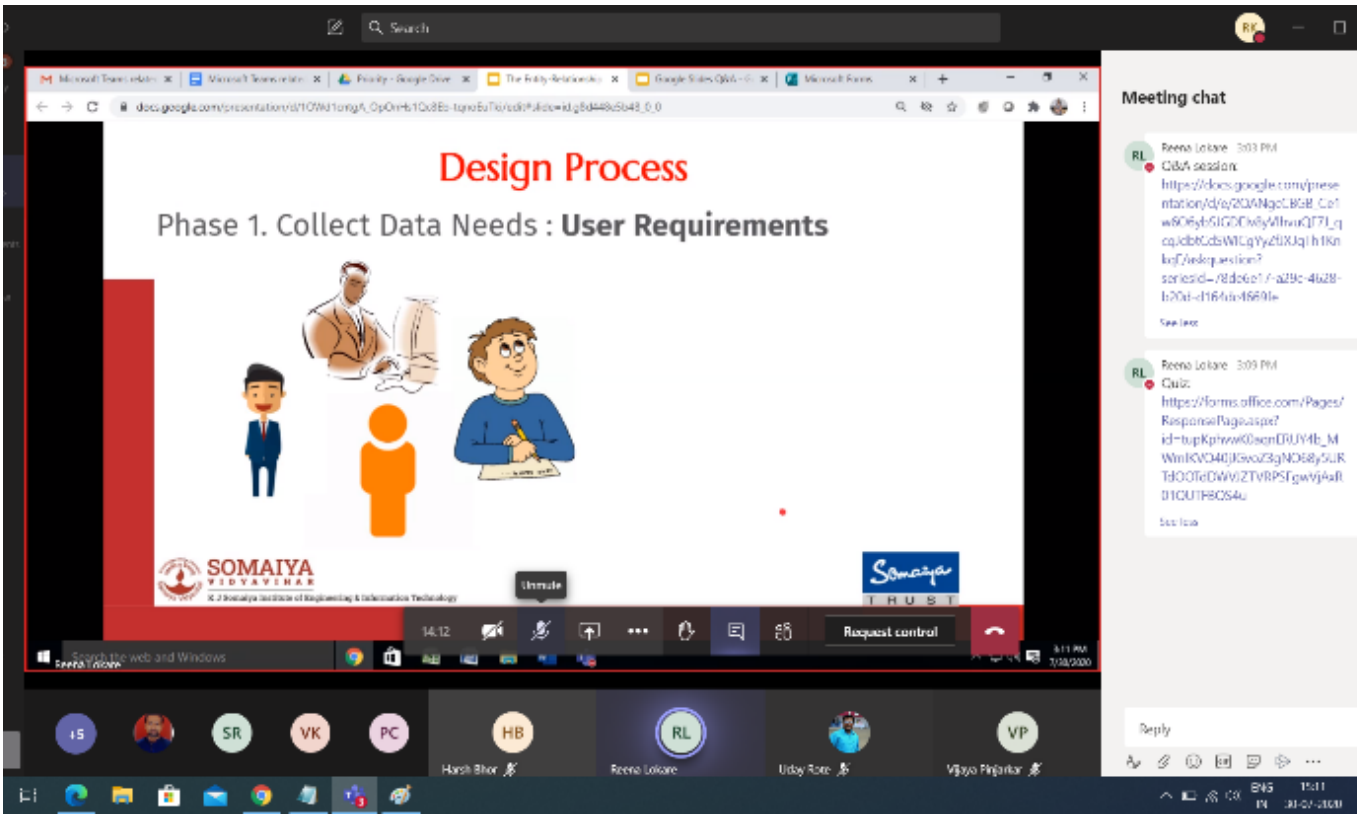
- Department of Information Technology organized "Peer-Learning Series" during July 27-31, 2020 to learn best practices for Online Teaching from peer faculties of the department. The series enhanced preparedness and quality of Online Teaching to students in upcoming semester.

Peer-Learning Series for and by Faculties





Departmental Activities



Faculties Achievements

- Dr. Radhika Kotecha received a grant of INR 2.53 Lakh from AICTE for organization of Short-Term Training Program (STTP) on "Leveraging Artificial Intelligence and Data Analytics for Healthcare", under AQIS 2019-20.

- Dr. Radhika Kotecha joined and contributing as a Reviewer of Manuscripts for International Journal: Expert Systems with Applications, Elsevier Publications with Thomson Reuters Impact Factor 4.292 and indexed in Scopus, etc.

- Dr. Hariram Chavan delivered a talk on "Subjective Answer Assessment" on May 29, 2020 in an online Research Seminar organized by Somaiya Institute for Research and Consultancy in collaboration with K. J. Somaiya College of Engineering and K. J. Somaiya Institute of Engineering and Information Technology.

- Dr. Hariram Chavan contributed as a Reviewer in the 1st International Conference on Automation, Computing and Communication (ICACC-2020) conducted virtually on June 27-28, 2020.

- Prof. Vijaya Pinjarkar published a paper "Classification Algorithm based Mental Health Prediction using Data Mining" in 5th International Conference on Electronics and Communication Systems, Coimbatore, India available on IEEE Xplore.

Achievements of Faculties and Students

- Papers of students & faculties of Department of Information Technology were published in proceedings of 3rd International Conference on "Advanced in Science and Technology (ICAST 2020), organized by the institute on May 28, 2020 published in SSRN-Elsevier.

Faculty Name :

Dr. Radhika Kotecha

- Strengthening e-Education in India using Machine Learning.
- Quadruped Robot Gait Planning for Enhanced Locomotion and Stability.
- Enhancing Attainment of Graduate Attributes through Data Mining.
- Indian Counterfeit Banknote Detection using Support Vector Machine.
- Early Prediction of Pre-Diabetes Using Machine Learning.

Achievements of Faculties and Students

Faculty Name : Prof. Uday Rote

- Tourism Application using Augmented Reality

- Real-Time Stock-Market Forecasting using Ensemble Deep Learning

Faculty Name : Dr. Mansing Rathod

- Canteen Automation System with Payment Gateway

Achievements of Faculties and Students

Faculty Name :

Prof. Vijaya Pinjarkar

- Mental Health Prediction using Data Mining: A Systematic Review

Faculty Name :

Prof. Nasim Shah

- Image Compression using DWT & Optimization using Evolutionary Algorithm

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- Detection of Malaria using Machine Learning (direct in SSRN)

Achievements of Faculties and Students

Faculty Name :

Prof. Harsh Bhor

- Predicting Rainfall from Historical data Trends

- Development of an Arduino based PicoSatellite-OBC

Faculty Name :

Dr. Vaishali Gaikwad

- Project Carbon

- Machine Learning in Refrigerator to Keep Inventory

Achievements of Faculties and Students

Faculty Name :

Prof. Reena Lokare

- Machine Learning approach for Predicting Breast Cancer using Genomic Data
- Private Data Classification Using Deep Learning
- Breast Cancer Prediction Using Deep Learning and ML Techniques

Faculty Name :

Dr. Vaishali Gaikwad

- DigiXpense: Handling Expense Compilation
- Resource Optimization based Cloud Gaming

Achievements of Faculties and Students

- Faculties and staff members of Department of Information Technology participated in various Online Faculty Development Program, Webinars, orientation programmes, Workshops & competitions (120+ development programmes) during May to August 2020.

- All the students in SE (to TE) and TE (to BE) of Department of Information Technology have pursued internship during the month of May to July 2020. With multiple internships done, 180+ internships have been attended in renowned companies.

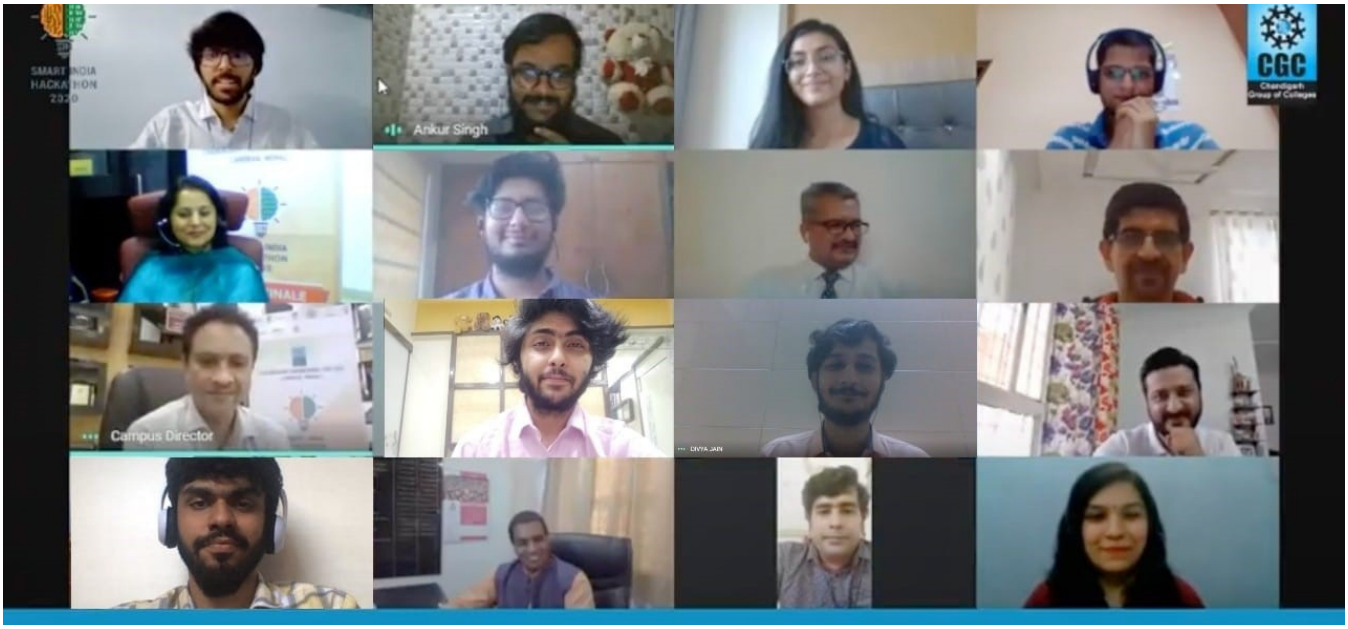
- All the students in SE (to TE) and TE (to BE) of Department of Information Technology have pursued online certification courses from NPTEL, Coursera Spoken Tutorial – IIT Bombay, etc., 370+ certification courses are done from May-August 2020

- All the students in SE (to TE) and TE (to BE) of Department of Information Technology participated in several online workshops, webinars, and Student Development Programmes during May-August 2020.

- Students from TE (to BE) Parth Maniar, Saj Maru, Shreya Singh and Meet Kotak of Department of Information Technology with students Divya Jain and Vinayak Malviya of Department of Computer Engineering mentored by faculty Dr. Radhika Kotecha (Head, Department of Information Technology) and industry expert Mr. Ankur Singh (DevOps System Engineer – Zycus, Mumbai) won First Prize INR 1 Lakh in National-level event Smart India Hackathon 2020 organized by AICTE and MHRD for the problem statement Unified System for Agricultural Prediction using Artificial Intelligence (USAPA) given by Cognizant Technology Solutions India Pvt. Ltd.

  Because of the COVID-19 pandemic, SIH 2020 Software Edition was conducted in ONLINE mode. Approx. 4.5 lakh students across the nation participated for SIH 2020, out of which 10,000 students were shortlisted for the Finale under different 200+ problem statements given by Central Govt. Departments, State Govt. Departments, and Industries.

Valedictory Session by SIH
Nodal Centre felicitating the team



- Students under the guidance of Dr. Hariram Chavan and Prof. Reena Lokare are working on a project "Artificial Intelligence and Deep Learning for Prediction of COVID-19" for K. J. Somaiya Hospital:
  - Yash Deshpande (BE IT)
  - Sahil More (BE IT)
  - Yash Nagda (BE IT)
  - Aman Misri (BE IT)
  - Manan Kotak (BE IT)
  - Jaideep More (TE IT)
  - Keshav Mishra (TE IT)

- Students under the guidance of Dr. Radhika Kotecha are working on a project "Weather-Based Short-Term Load Forecasting using Artificial Intelligence" for Tata Power and India Meteorological Department (IMD). Version 1 of the project is deployed at Tata Power:
  - Parth Maniar (BE IT)
  - Saj Maru (BE IT)

- Students under the guidance of Dr. Hariram Chavan and Prof. Reena Lokare are working on a project "SARI Survey Mobile Application for ASHA Workers" for Solapur Municipal Corporation. Project is deployed.
  - Sahil More (BEIT)
  - Yash Deshpande (BEIT)
  - Ritesh Sandbhor (BEIT)
  - Shatayu Thakur (BEIT)

- Students under the guidance of Prof. Vijaya Pinjarkar are working on a project "Receiver Design for Radiosonde" in association with Databyte Services and Systems:
  o Shrinath Nanduri (TE IT)
  o Saloni Pitadia (TE IT)
  o Jaydeep More (TE IT)
  o Keshav Misha (TE IT)
  o Akash Prabhudesai (TE IT)

- Students under the guidance of Prof. Harsh Bhor developed a project "Student Information Management System & Parents' Portal" for Automation of Departmental Activities:
  o Ritesh Sandbhor (BE IT)
  o Yash Deshpande (BE IT)
  o Shatayu Thakur (BE IT)
  o Sahil More (BE IT)
  oNagraj Vallakati (BE IT)

- Students under the guidance of Dr. Radhika Kotecha, Dr. Vaishali Gaikwad, Prof. Sarita Rathod developed a project "Event Management System: (A) Automated Event Planner, (B) Automated Event Report Generation, (C) Automated Certificate Design and Distribution" for Automation of Departmental Activities:
  oOmkar Manchekar (BE IT)
  oPayal Gidwani (BE IT)
  oShreya Singh (BE IT)
  oPankaj Sharma (BE IT)
  oTomal Ghosh (BE IT)
  oKrutik Bajriya (BE IT)
  oParth Maniar (BE IT)
  oRahul Singh (BE IT)

- Students under the guidance of Lab Staff Mrs. Kavita Chimankare, Mrs. Pallavi Chavda, Mr. Raza Ansari, Mr. Vishal Khandekarare developed a project "Inventory Management System: (A) Stationery Management System, (B) Equipment Management System" for Automation of Departmental Activities:

  o Akash Yadav (TE IT)
  o Het Parekh (TE IT)
  o Dakshit Vaviya (TE IT)
  o Harsh Vador (TE IT)
  o Tirth Shah (TE IT)
  o Jaydeep More (TE IT)
  o Keshav Mishra (TE IT)
  o Vedant Manelkar (TE IT)
  o Dhruv Panchal (TE IT)

Projects by Faculties and Students

- Students under the guidance of Prof. Prashant Sawant developed a project "E-Notice Board" for Automation of Departmental Activities:
  oNeel Shah (TE IT)
  oHardi Patel (TE IT)
  oJaydeep Patel (TE IT)
  oJay Shah (TE IT)

- Students under the guidance of Prof. Vijaya Pinjarkar are working a project "Training and Placement Portal" for Automation of Departmental Activities:
  oParth Kanani (BEIT)
  oManan Kotak (BEIT)
  oPradeep Ramola (BEIT)
  oSwapnil Joshi (BEIT)

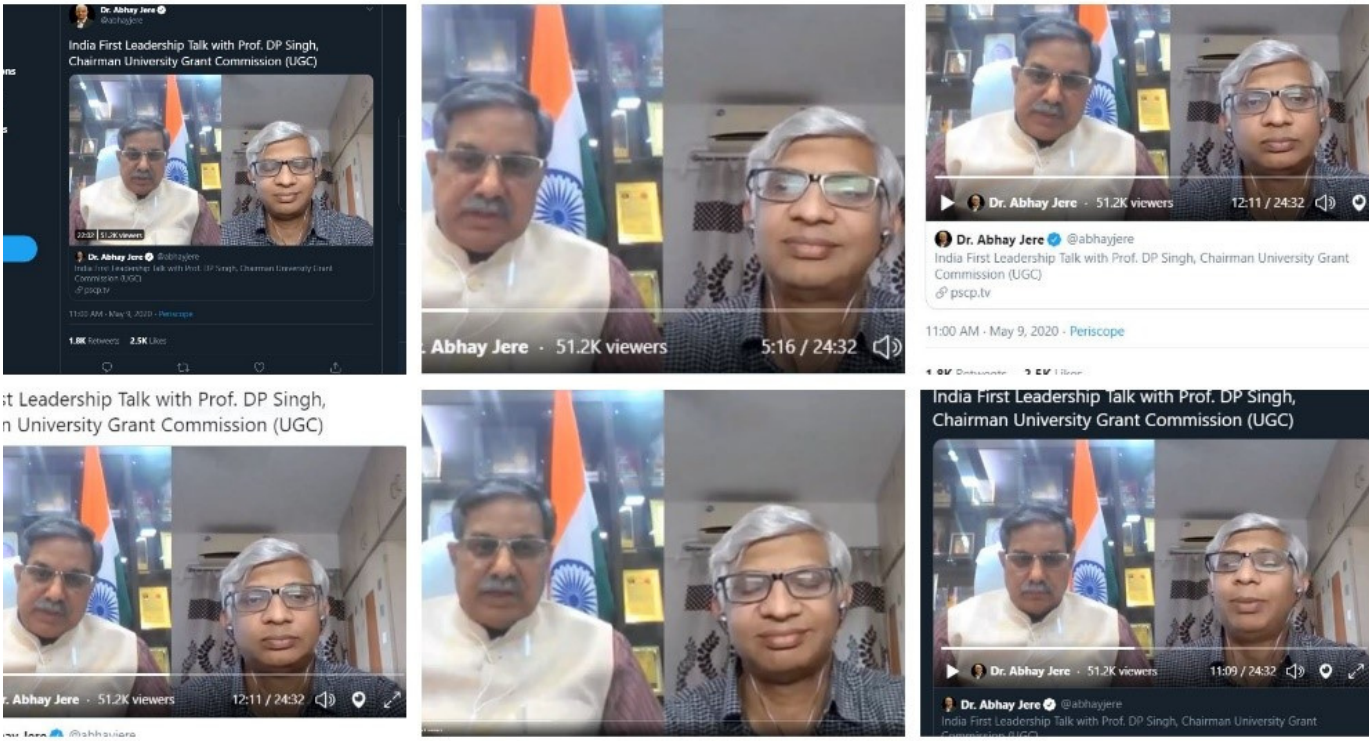
- KJSIEIT – IIC coordinated following webinars organized by MHRD's Innovation Cell (MIC) and telecasted live on Twitter with an objective to imbibe contributing and leadership skills:

- Leadership Talk with Dr. Madhuri Kanitkar, Lieutenant General on May 02, 2020

Leadership Talk with Dr. Madhuri Kanitkar

- Leadership Talk with Prof. DP Singh, Chairman, UGC on May 09, 2020

Leadership Talk with Prof. DP Singh



- Leadership Talk with Dr. Pramod Chaudhari, Founder & Chairman, Praj Industries on May 16, 2020

Leadership Talk with Dr. Pramod Chaudhari

- Leadership Talk with Shri Mahesh Babu, CEO, Mahindra Electric Mobility Ltd. on May 23, 2020

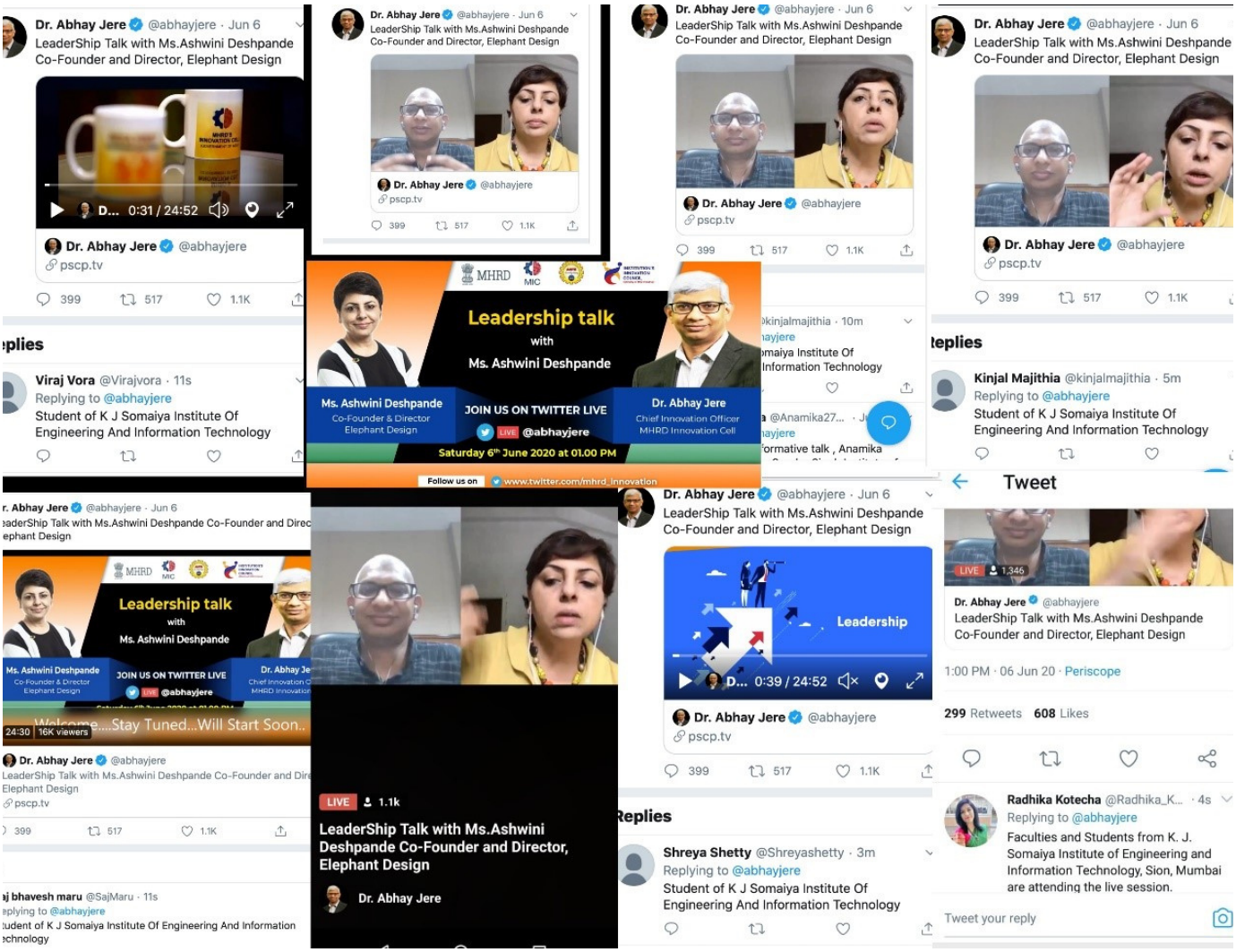
Leadership Talk with Shri Mahesh Babu

- Leadership Talk with Mr. Nilesh Oak, Specialist, Indian History and Civilization on May 30, 2020

Leadership Talk with
Mr. Nilesh Oak

- Leadership Talk with Ms. Ashwini Deshpande, Co-Founder and Director, Elephant Design on June 06, 2020

Leadership Talk with Ms. Ashwini Deshpande

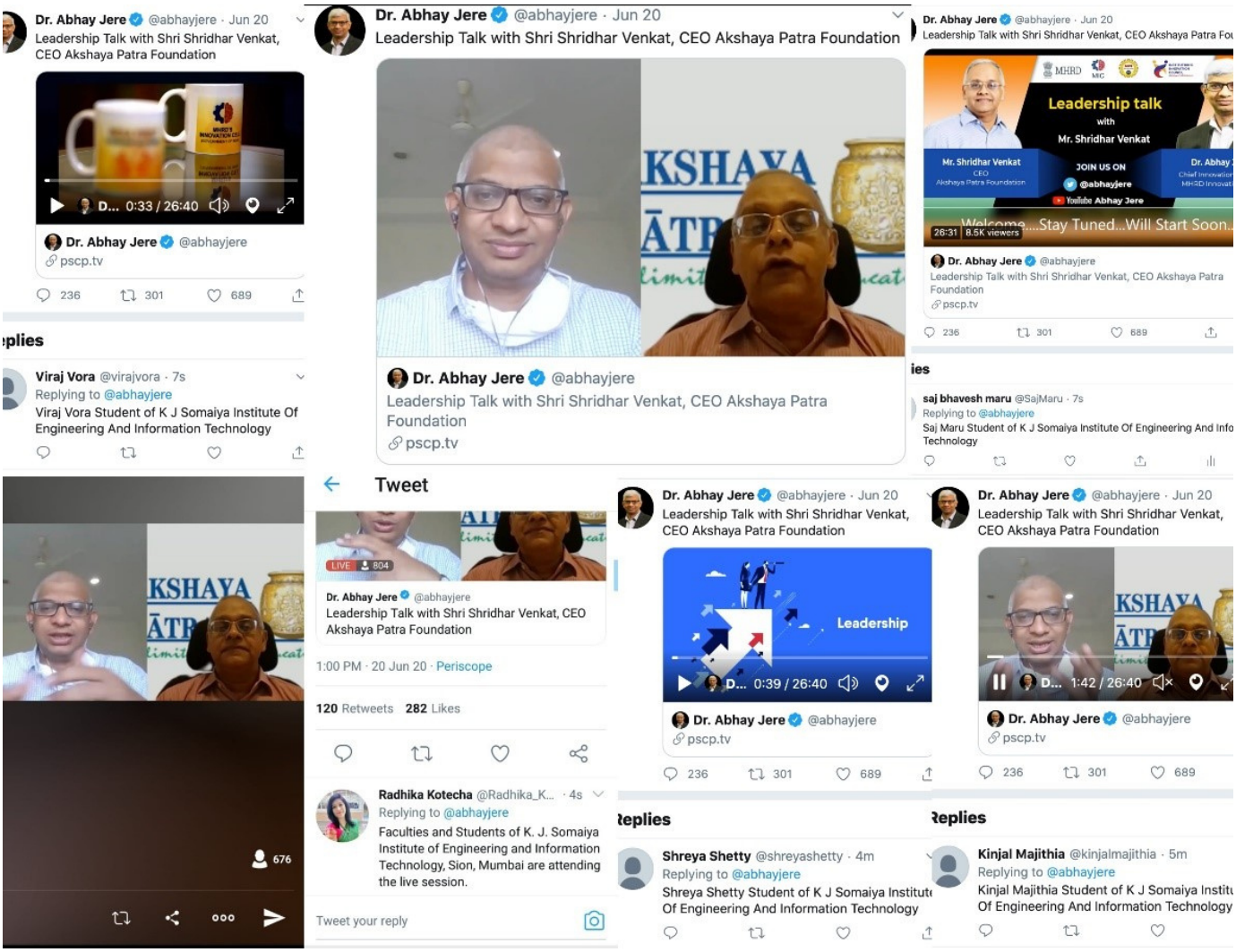


- Leadership Talk with Shri R Subrahmanyam, Secretary, Ministry of Social Justice and Empowerment on June 13, 2020

Leadership Talk with Shri R Subrahmanyam

- Leadership talk with Shri Shridhar Venkat, CEO Akshaya Patra Foundation on June 20, 2020

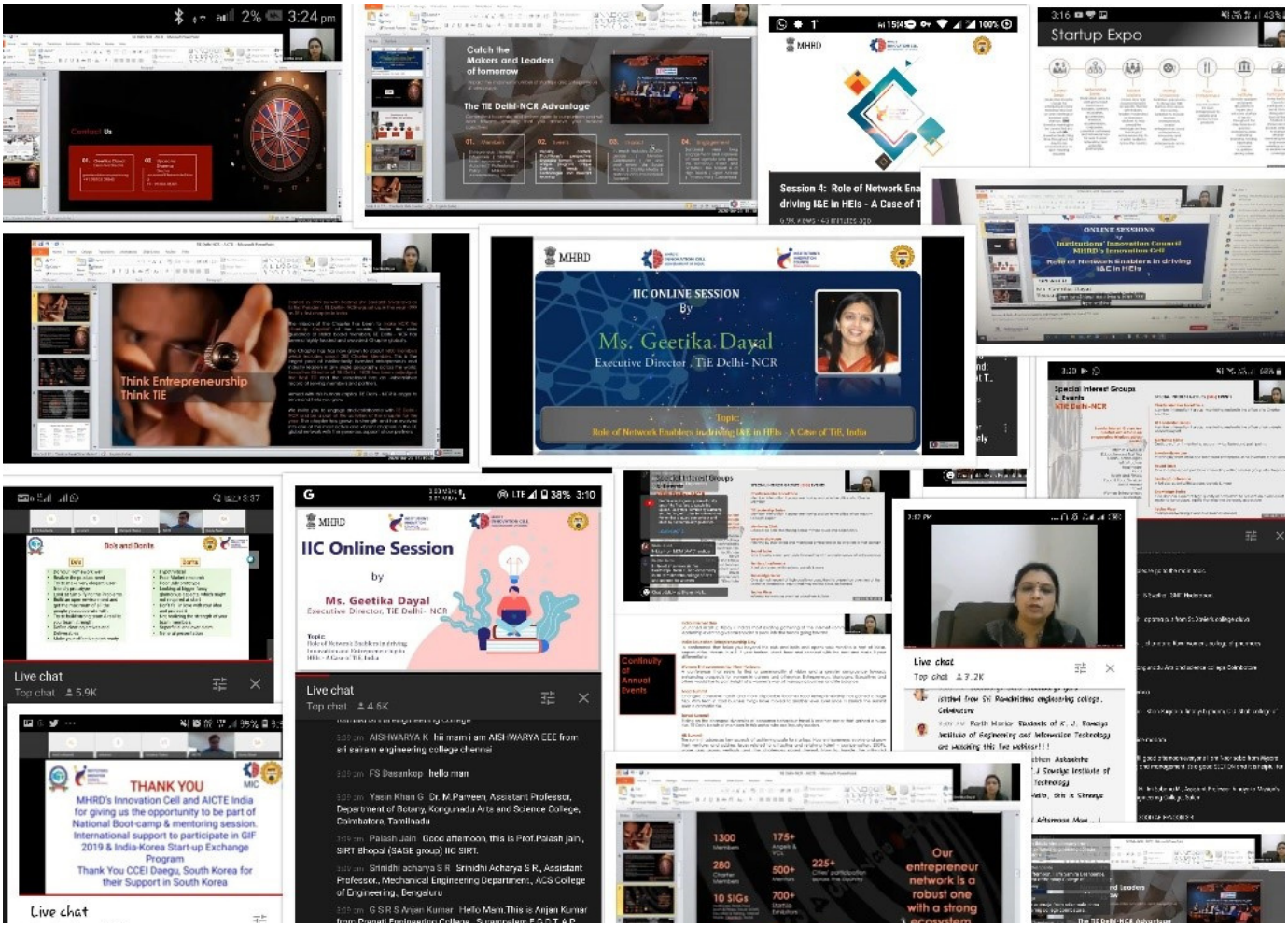
Leadership Talk with Shri Shridhar Venkat



- **MHRD's Innovation Cell organized 17 IIC Online Sessions on "Innovation, IPR, Entrepreneurship, and Start-ups" during April – May 2020:**

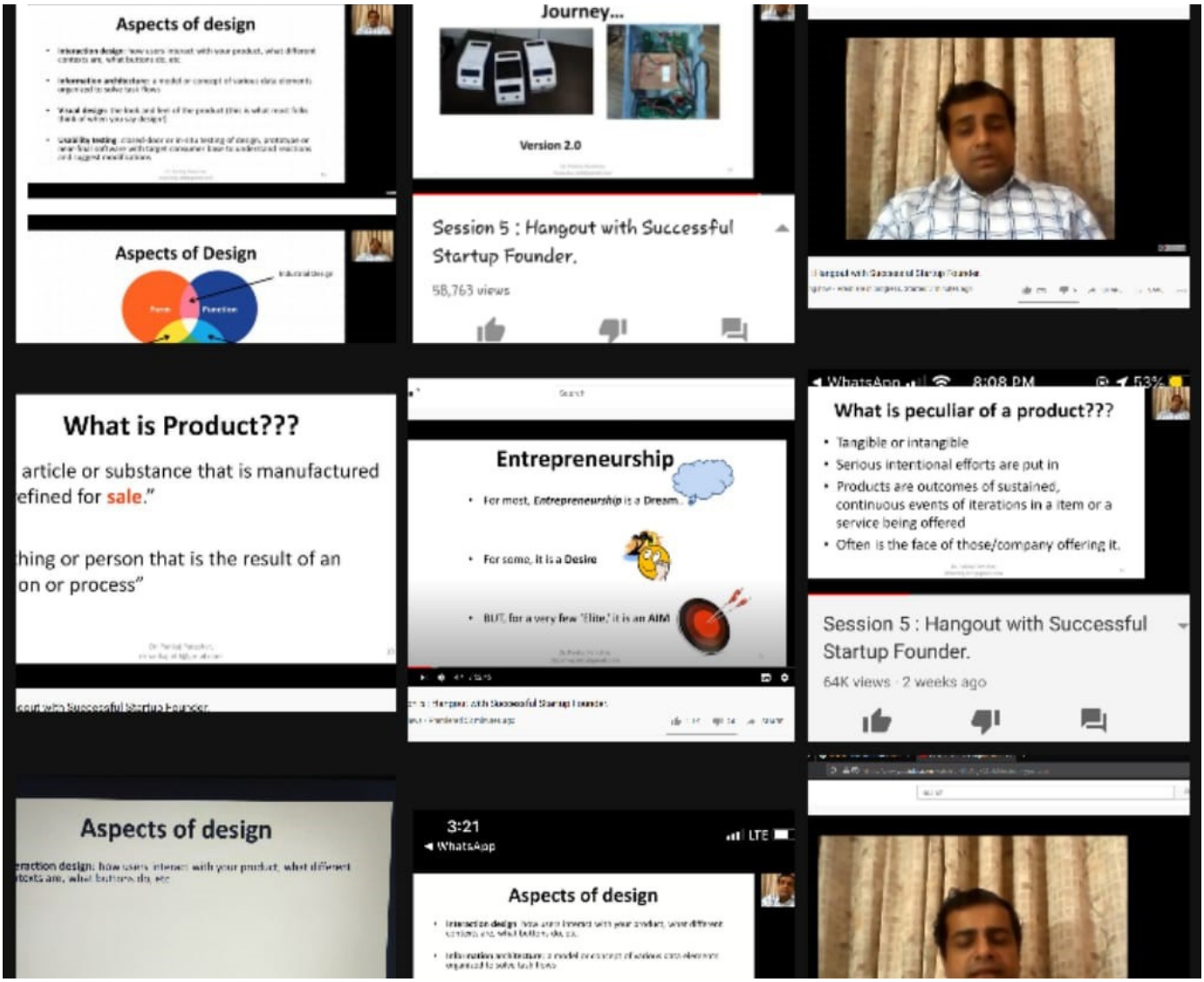
- IIC Online Session on Role of Network Enablers in driving I&E in HEIs - A Case of TiE, India by MHRD's Innovation Cell on May 01, 2020

IIC Online Session - 4



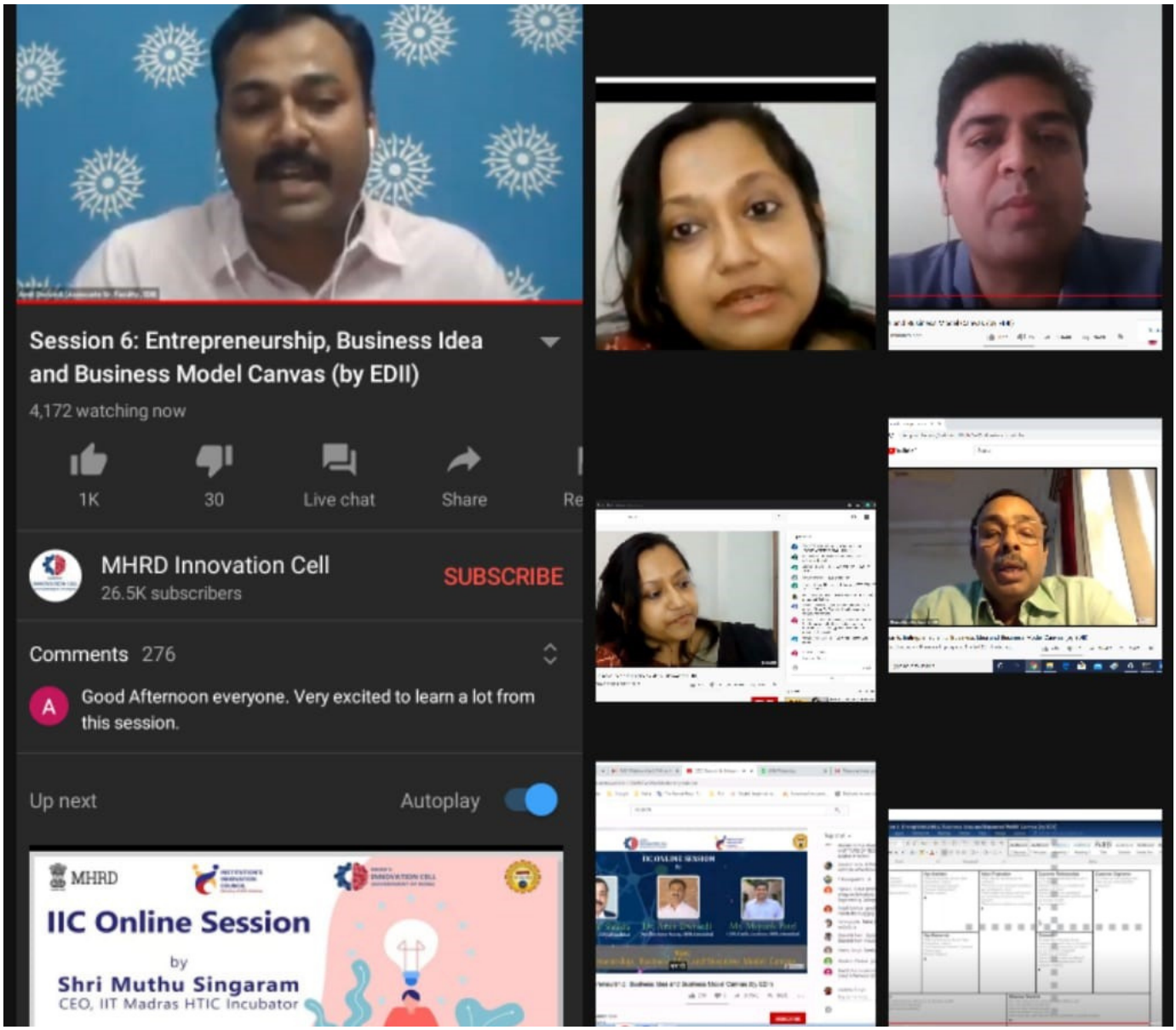
- IIC Online Session on Hangout with Successful Startup Founder and Learn on Design thinking Approach for Hardware Innovation by MHRD's Innovation Cell on May 04, 2020

IIC Online Session - 5



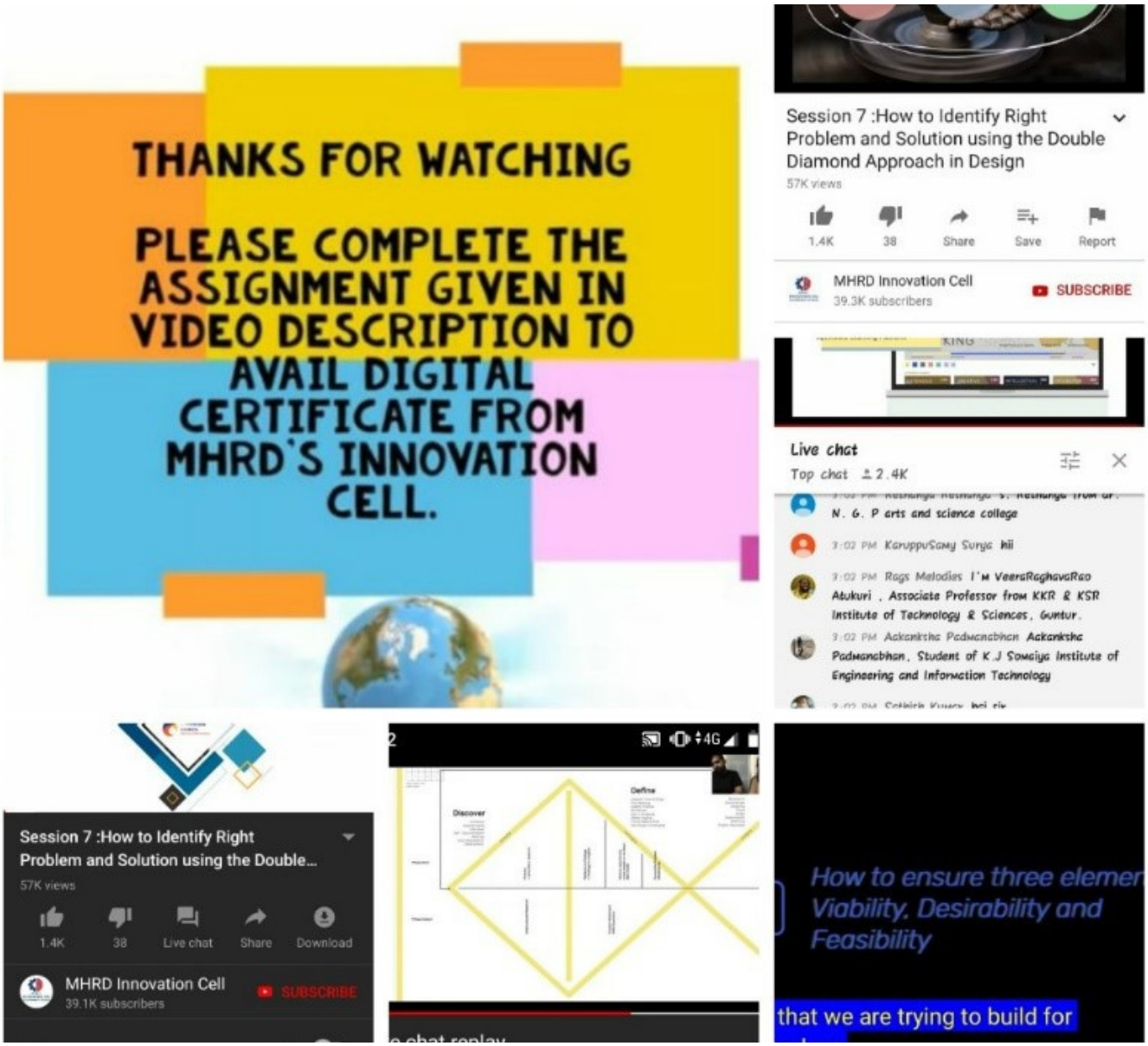
- IIC Online Session on Entrepreneurship, Business Idea and Business Model Canvas by MHRD's Innovation Cell on May 05, 2020

IIC Online Session - 6



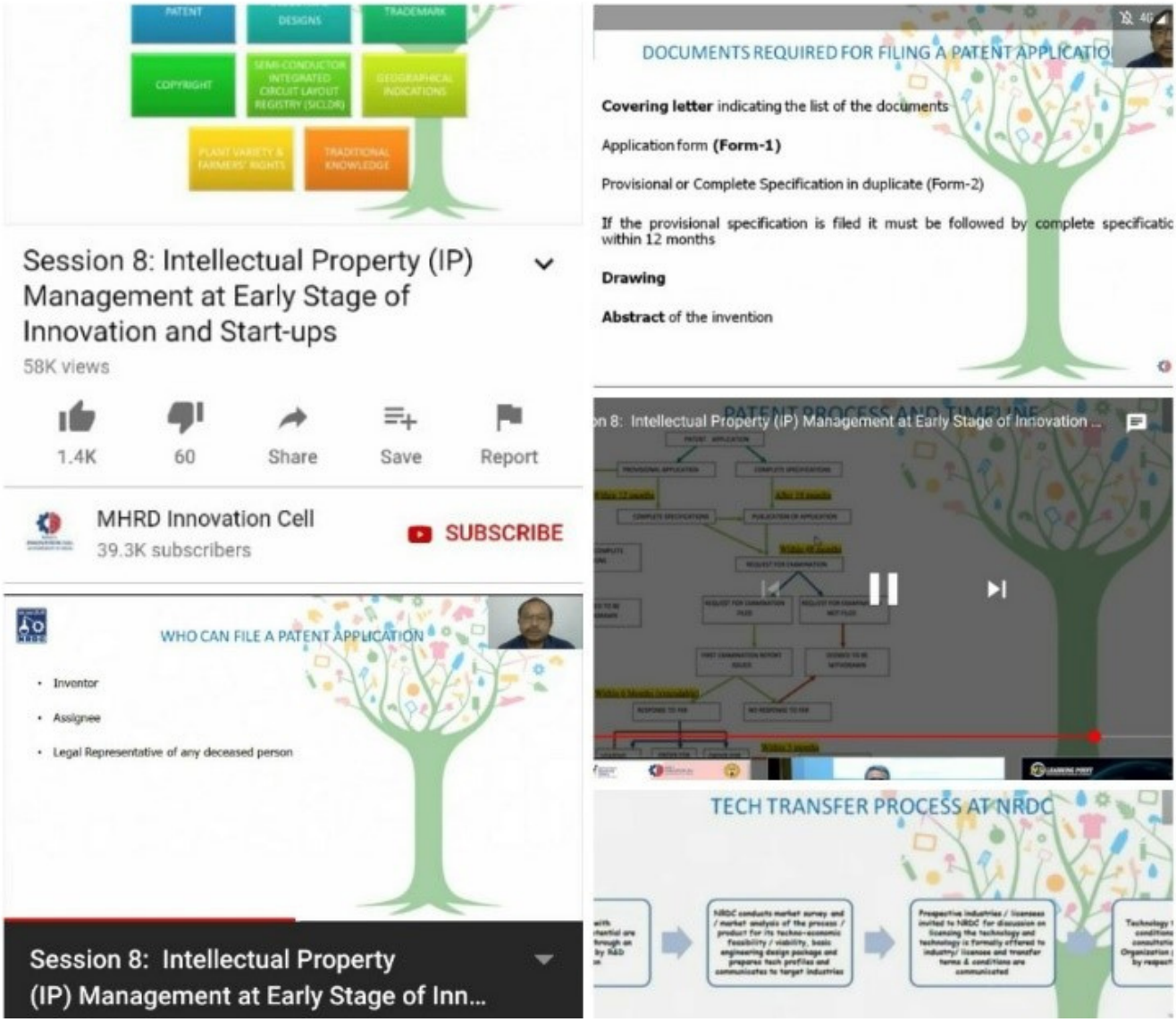
- IIC Online Session on How to Identify Right Problem and Solution using the Double Diamond Approach in Design by MHRD's Innovation Cell on May 06, 2020

IIC Online Session - 7



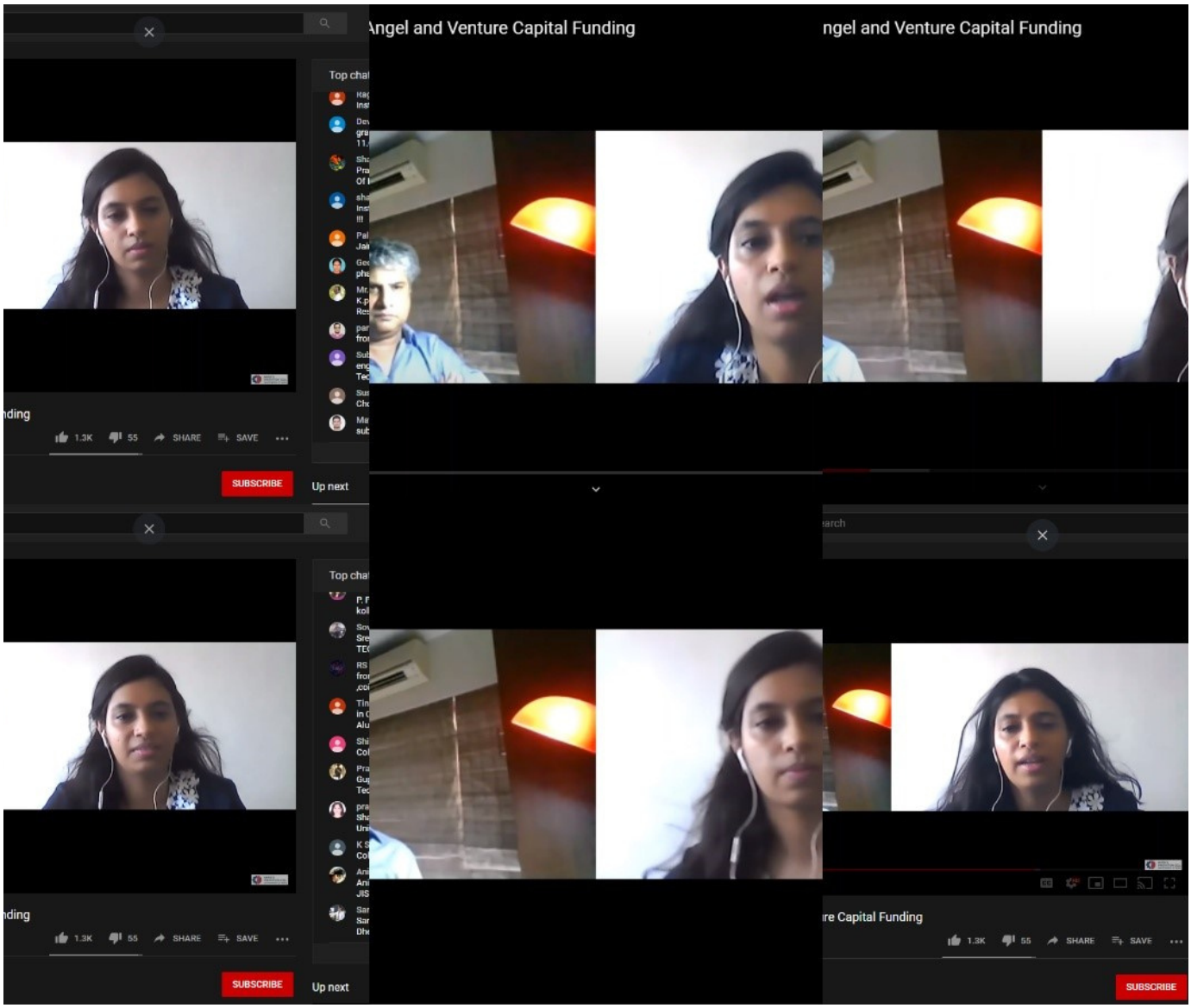
- IIC Online Session on Intellectual Property (IP) Management at Early Stage of Innovation and Start-ups by MHRD's Innovation Cell on May 07, 2020

IIC Online Session - 8



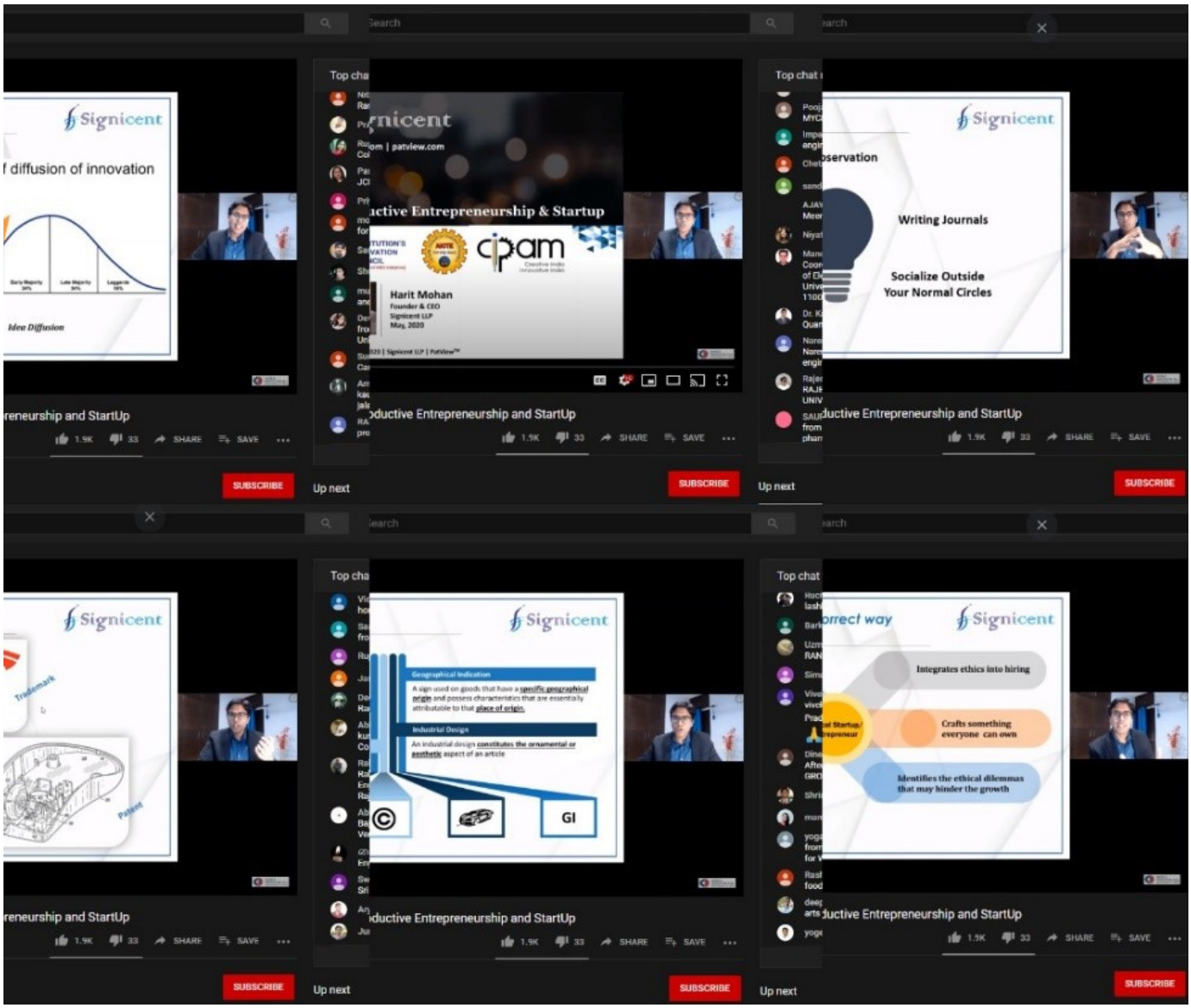
- IIC Online Session on Understanding Angel and Venture Capital Funding - by MHRD's Innovation Cell on May 08, 2020

IIC Online Session - 9



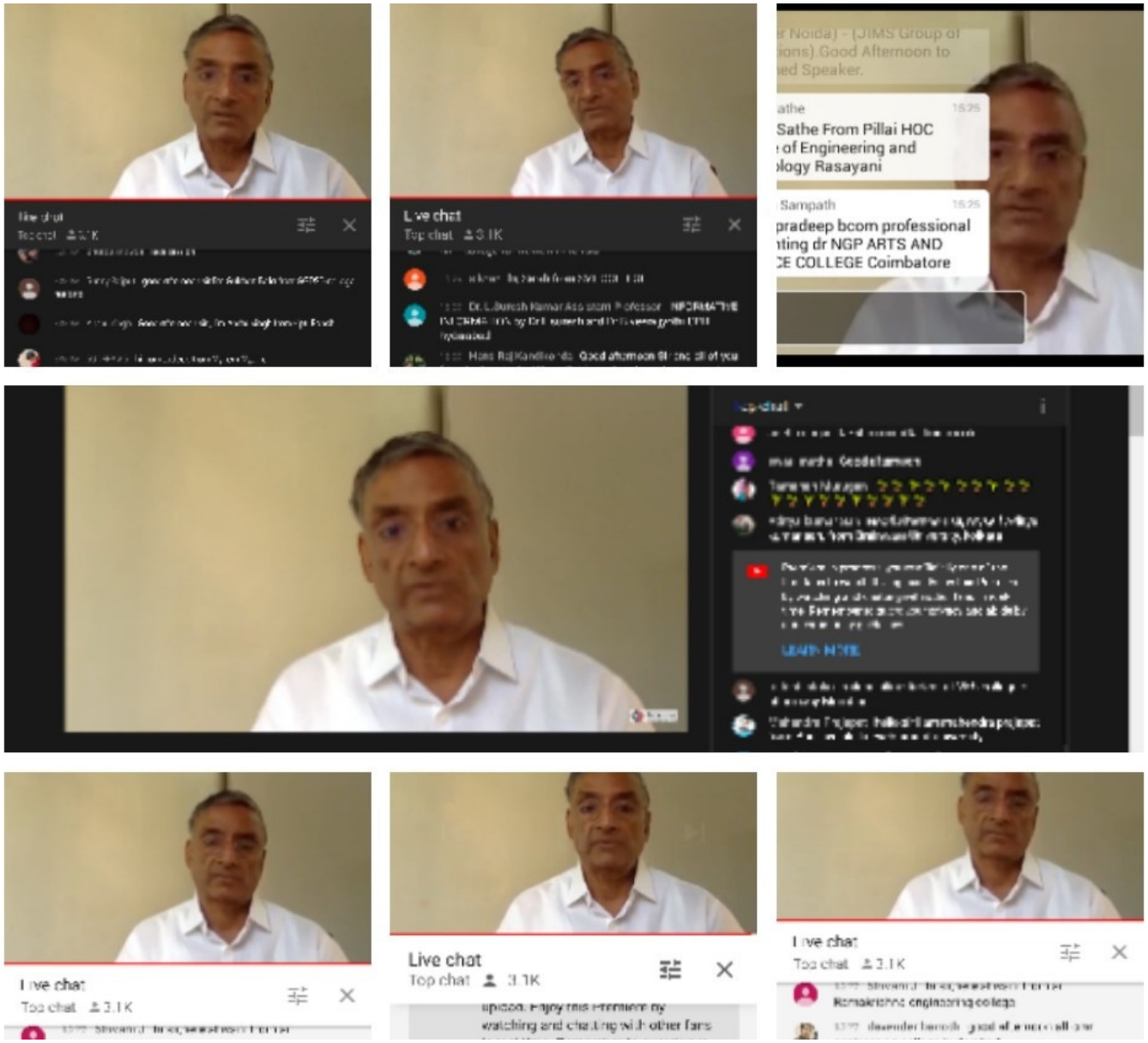
- IIC Online Session on How to plan for Start-up and legal and Ethical Steps by MHRD's Innovation Cell on May 12, 2020

IIC Online Session - 10



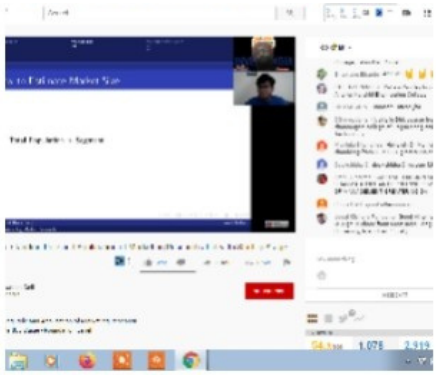
- IIC Online Session on Innovating Self- Screen and Identify right opportunities by MHRD's Innovation Cell on May 13, 2020

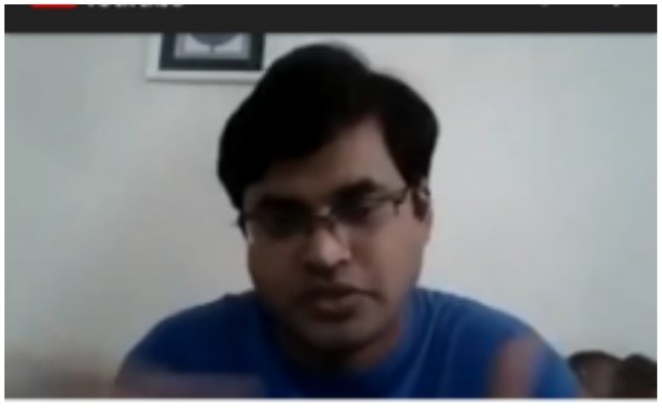
IIC Online Session - 11



- IIC Online Session on Understanding Role and Application of Marketing Research at Idea to Start-up Stage - Foundation Level by MHRD's Innovation Cell on May 14, 2020

IIC Online Session - 12

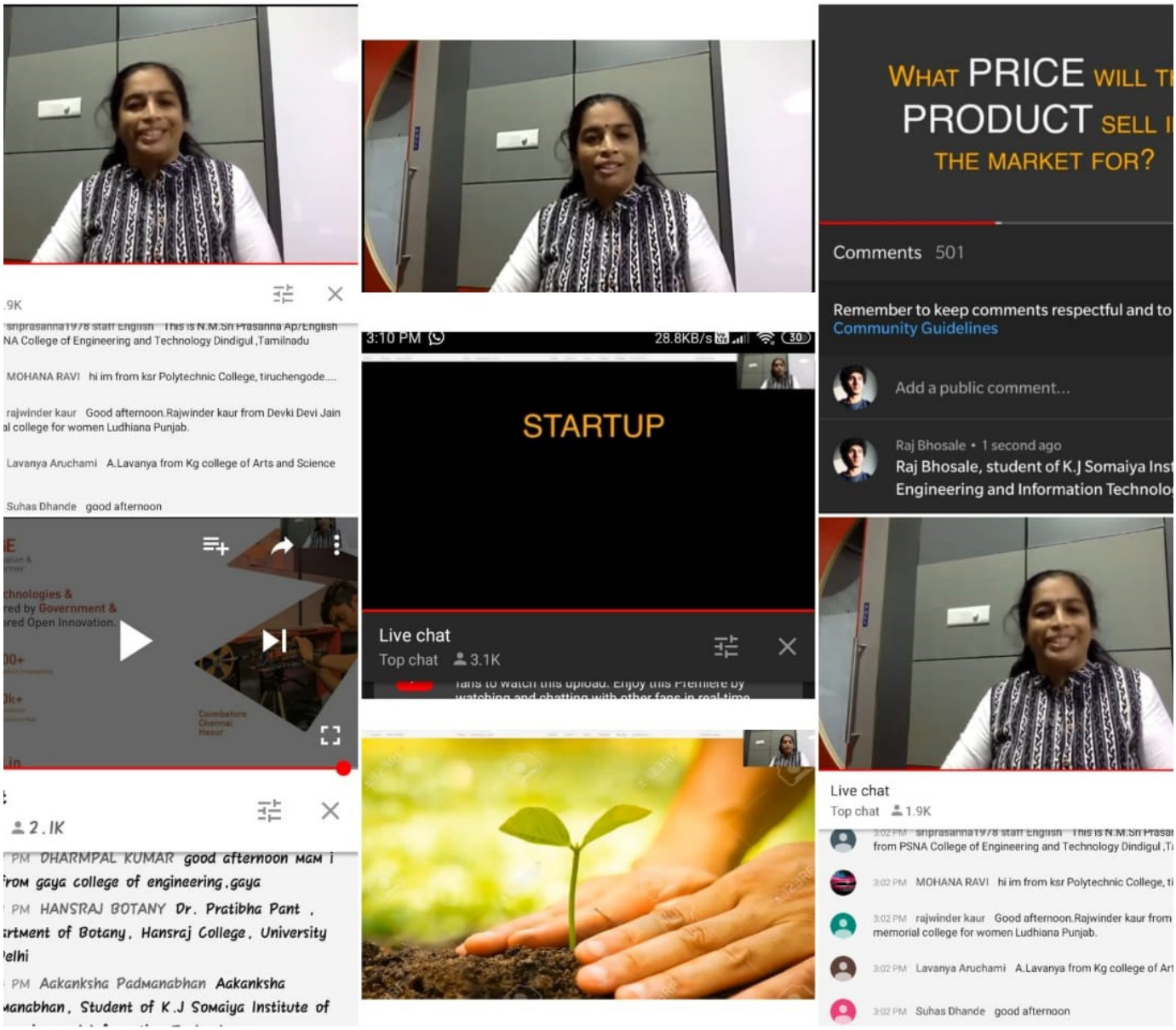




Session 12 : Understanding Role and Application of Marketing Research at I

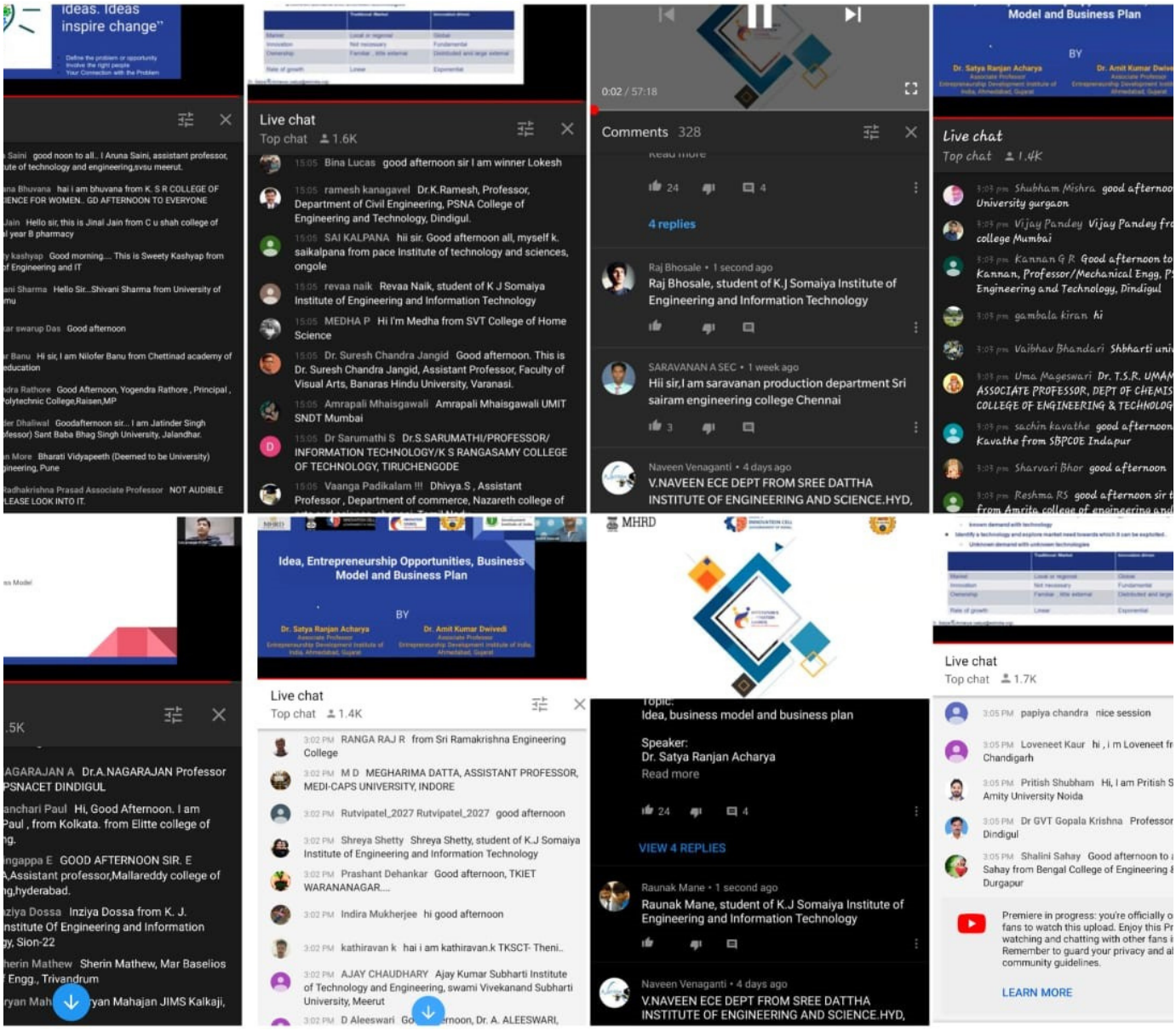
- IIC Online Session on Innovation Risk Diagnostic: Product Innovation Rubric (PIR) by MHRD's Innovation Cell on May 15, 2020

IIC Online Session - 13



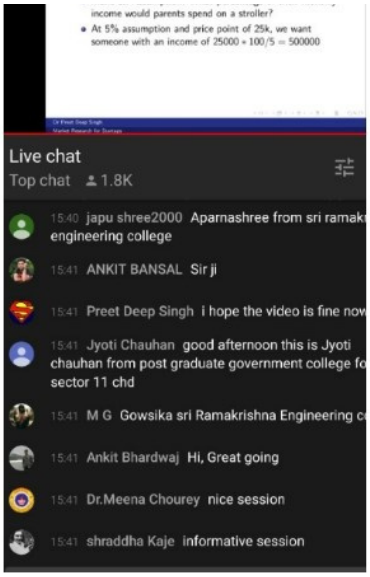
- IIC Online Session on Launching a Business Plan and Launching Business by MHRD's Innovation Cell on May 19, 2020

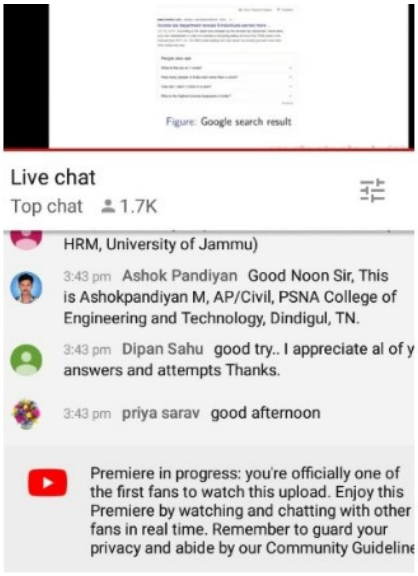
IIC Online Session - 14

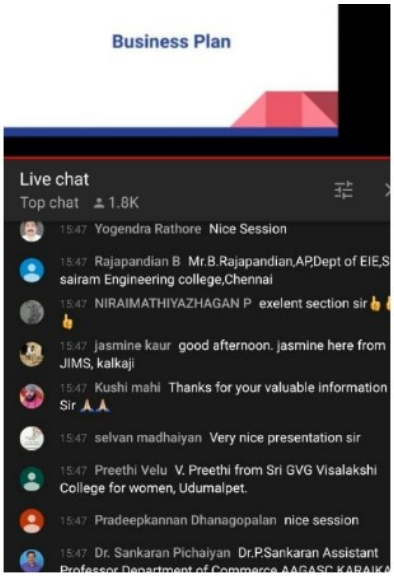


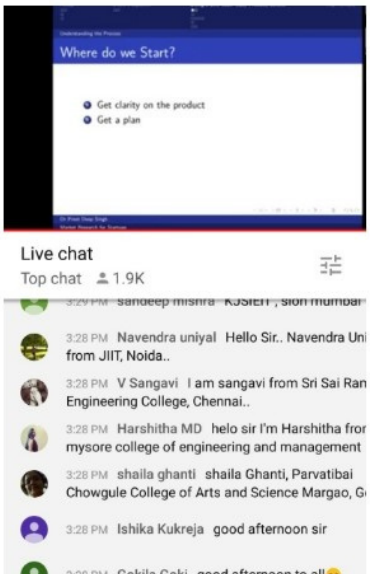
- IIC Online Session on Use of Market Data and Application of Marketing Research Tools and Methodology by MHRD's Innovation Cell on May 20, 2020

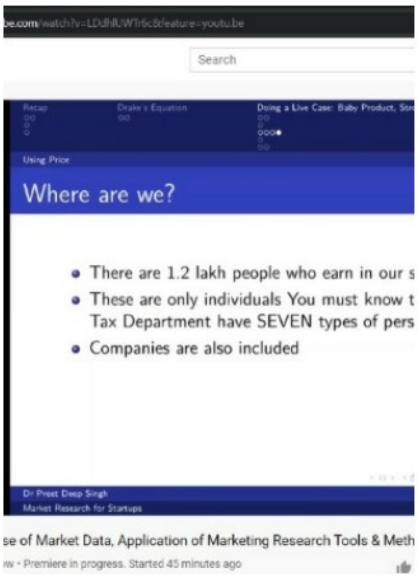
IIC Online Session - 15

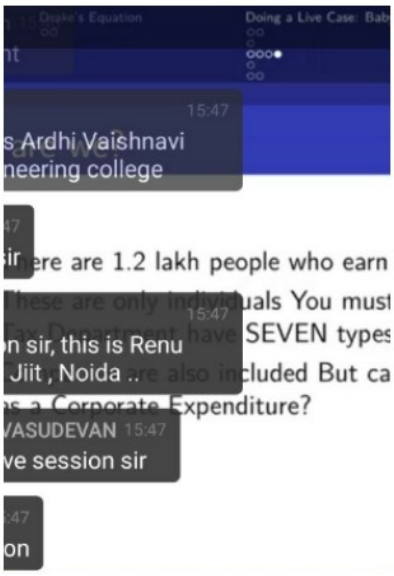






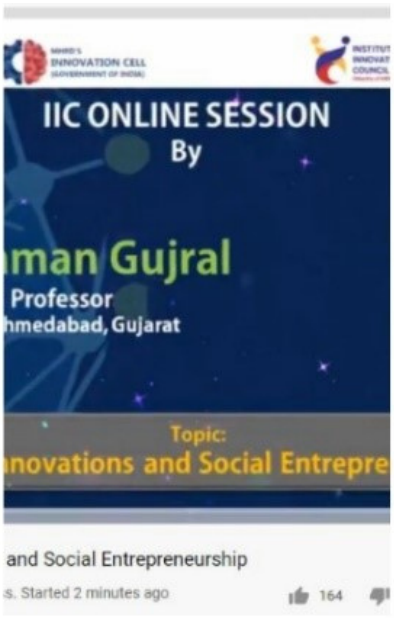


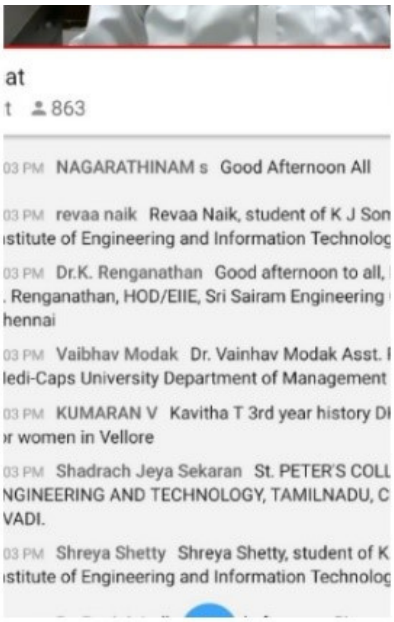


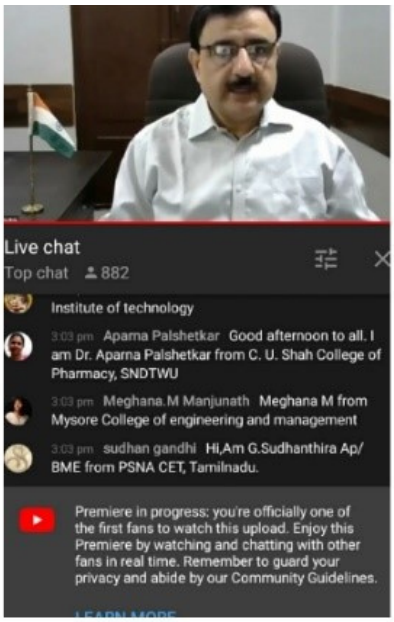


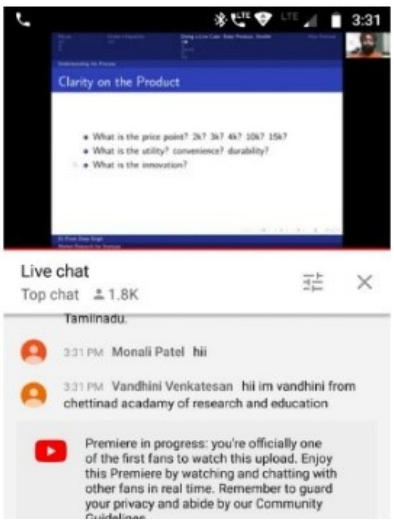
- IIC Online Session on Frugal Innovation and Social Entrepreneurship by MHRD's Innovation Cell on May 21, 2020

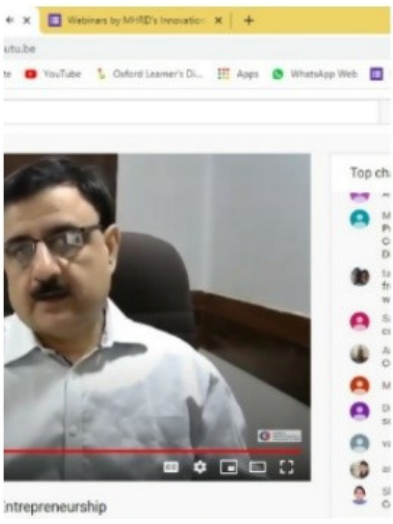
IIC Online Session - 16





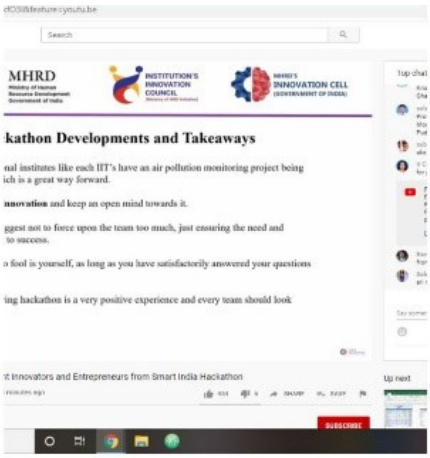


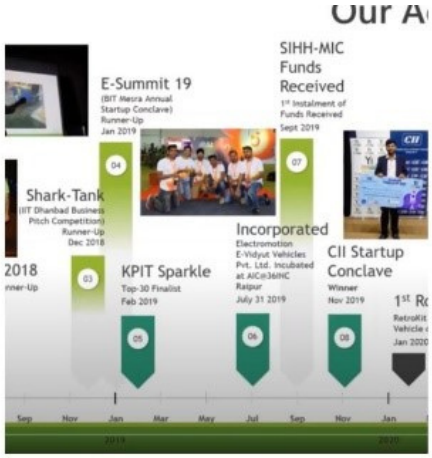


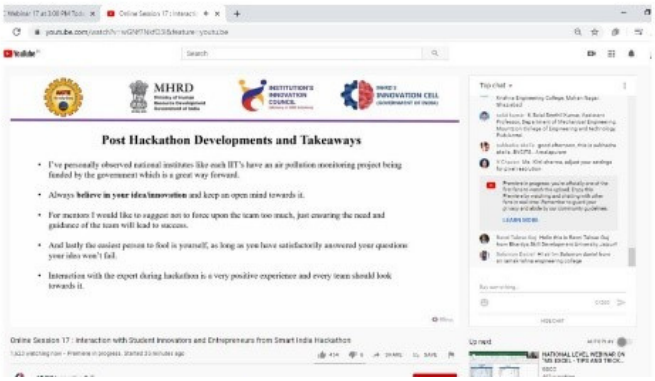


- IIC Online Session on Student Innovators and Entrepreneurs Emerged from Smart India Hackathon (SIH) by MHRD's Innovation Cell on May 22, 2020

IIC Online Session - 17







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