



Department of

Electronics and Communication Engineering

Jaypee University of Information Technology

Waknaghat

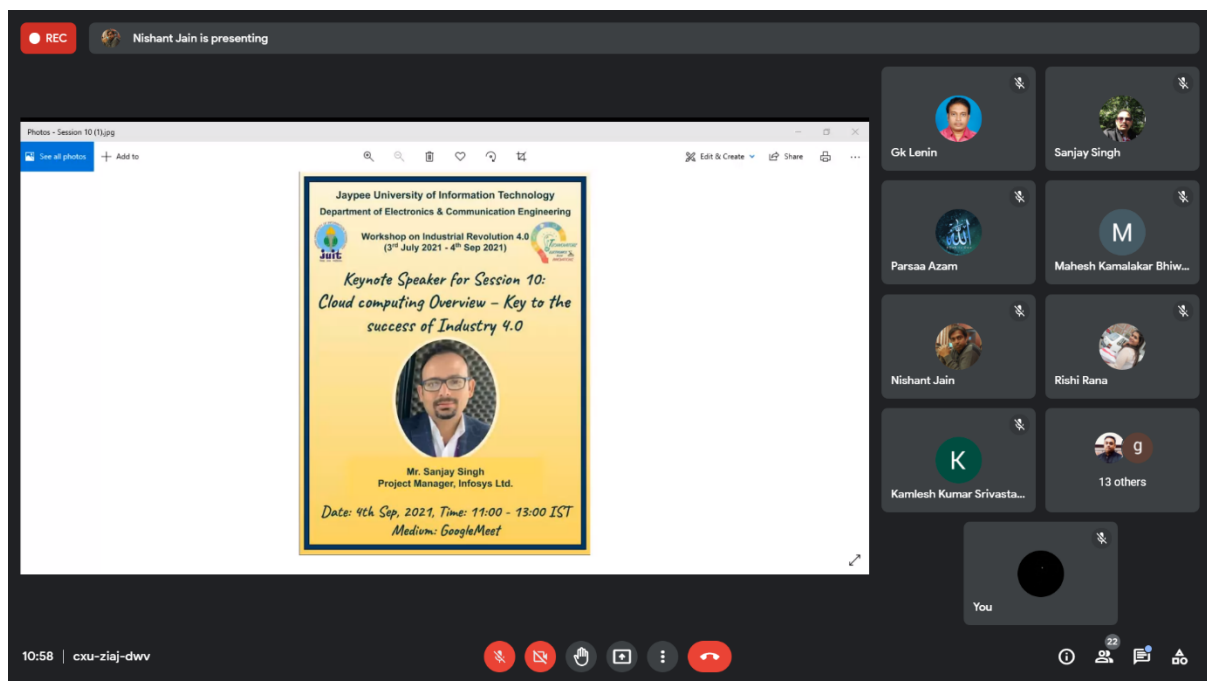


## WORKSHOP ON INDUSTRIAL REVOLUTION 4.0

### Event Report: Session-10

4<sup>th</sup> September, 2021

Department of Electronics and Communication Engineering of Jaypee University of Information Technology, Solan organized an amazing last session of Workshop on “**Industrial Revolution 4.0**” on 4<sup>th</sup> September 2021. The topic of the 10<sup>th</sup> session was **Key to success of Industry 4.0: Research Issues and Challenges**, delivered by an honourable speaker **Mr. Sanjay Singh**, Project Manager, Infosys Ltd.



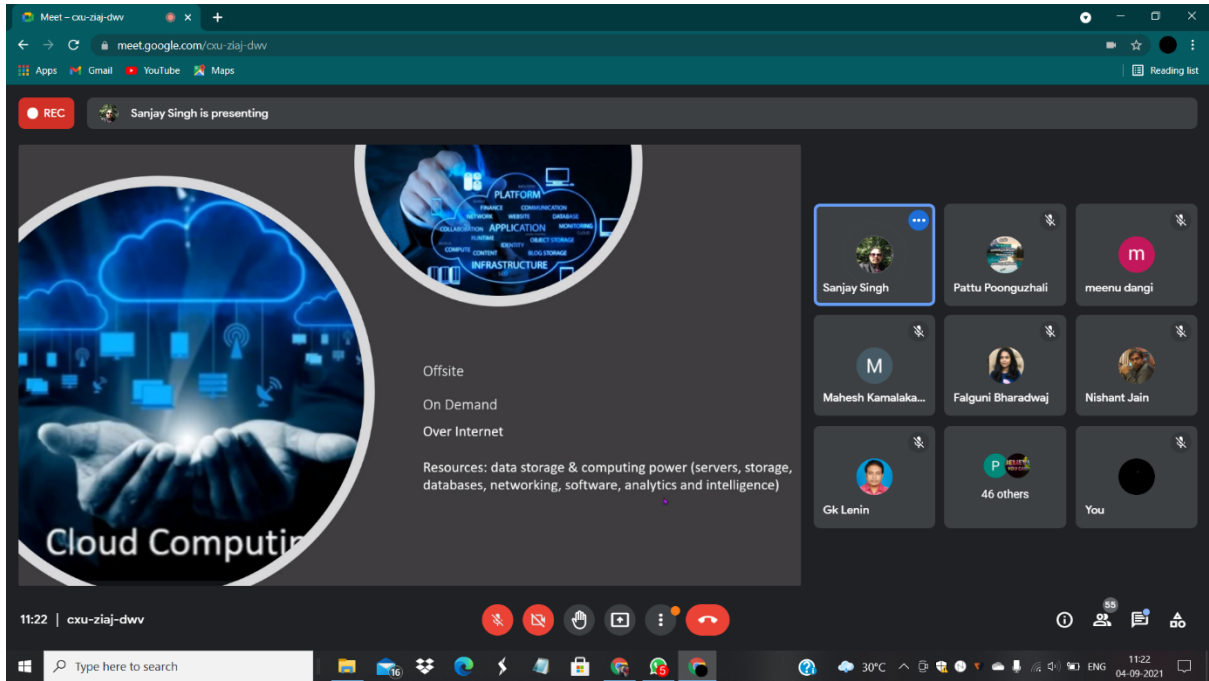
Our eminent speaker invited by Dr. Nishant Jain, Assistant Professor, Department of Electronics and Communication Engineering served as an inspiration to several faculty members and students of Electronics and Communication Engineering by delivering his

motivation towards the domain of IoT and his immense great work in various fields including Computer Networks, Machine Learning, Applications and Protocols and Wireless Networks.

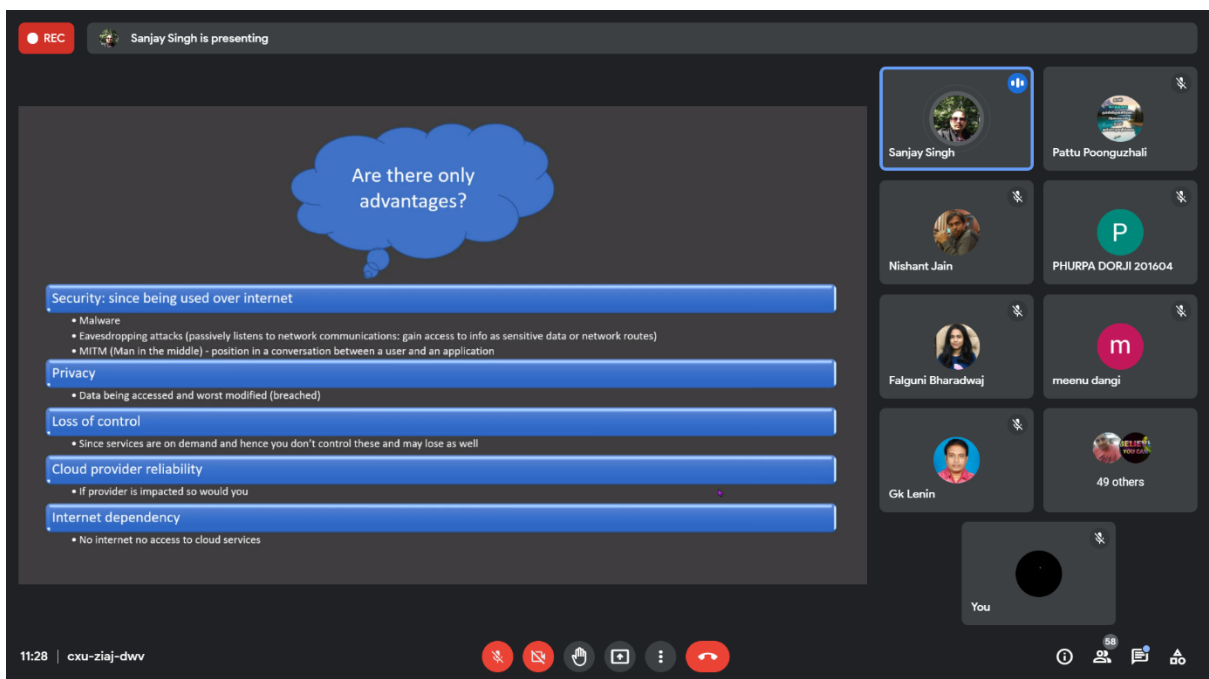
The screenshot shows a Google Meet interface with a presentation slide. The slide features a blue cloud icon on the left. The main text reads: "Cloud computing Overview – Key to the success of Industry 4.0". Below this, it says "4th Sep, 2021" and "- Sanjay K Singh". A quote by Rick Cook is displayed: "Programming today is a race between software engineers striving to build bigger and better idiot-proof programs, and the Universe trying to produce bigger and better idiots. So far, the Universe is winning." The slide also includes a "Stop sharing" button and a "Help" link. The Meet interface shows a grid of participants on the right, including Sanjay Singh, Pattu Poonguzhali, Parsaa Azam, Mahesh Kamalakar Bhiw..., Falguni Bharadwaj, Nishant Jain, meenu dangi, and 46 others. The bottom of the screen shows the time 11:13 and the ID cxu-ziaj-dwv.

He began with the introduction of Cloud computing and explained popular terms, features and interactions in cloud. The guest speaker gave an overview of Cloud services types, advantages and discussed the disadvantages as well.

The screenshot shows a Google Meet interface with a presentation slide. The slide features a timeline of Industry 4.0 evolution. The timeline is a horizontal arrow pointing right, with four stages marked by colored dots and arrows: 1.0 Mechanical (Water and Steam for mass production, 18th Century - 1784), 2.0 Electrical (Mass/Assembly line Production, 19th & Early 20th Century - 1870), 3.0 Internet (Automated Production, 20th Century (1969)), and 4.0 Digital (Automated Complex Tasks, Early 21st Century - 2010). A list of technologies associated with 4.0 Digital is shown: AI, Cyber-physical system, IoT, Cloud computing, and Cognitive computing. The slide also includes an image of gears and a wrench on the left, and an image of a factory on the bottom left. The Meet interface shows a grid of participants on the right, including Sanjay Singh, Pattu Poonguzhali, meenu dangi, Mahesh Kamalakar Bhiw..., Falguni Bharadwaj, Nishant Jain, Gk Lenin, and 51 others. The bottom of the screen shows the time 11:19 and the ID cxu-ziaj-dwv.



He then explained the advantages of cloud computing in brief. Cloud computing offers a competitive edge over your competitors. It is one of the best advantages of Cloud services that help you to access the latest applications.



Sanjay Singh is presenting

# Cost Estimation

### Considerations

- Usage Pattern
- Management costs
- Transition cost
- Project/App Life
- Variables

### Cost Estimation: Tools

- AWS TCO Calculator
- AWS Simple Monthly calculator
- GCP Calculator
- NetApp Azure calculator

11:44 | cxu-ziaj-dwv

Cost saving is one of the biggest Cloud Computing benefits. It helps you to save substantial capital cost as it does not need any physical hardware investments. Also, you do not need trained personnel to maintain the hardware. The buying and managing of equipment is done by the cloud service provider.

Sanjay Singh is presenting

### Discovery

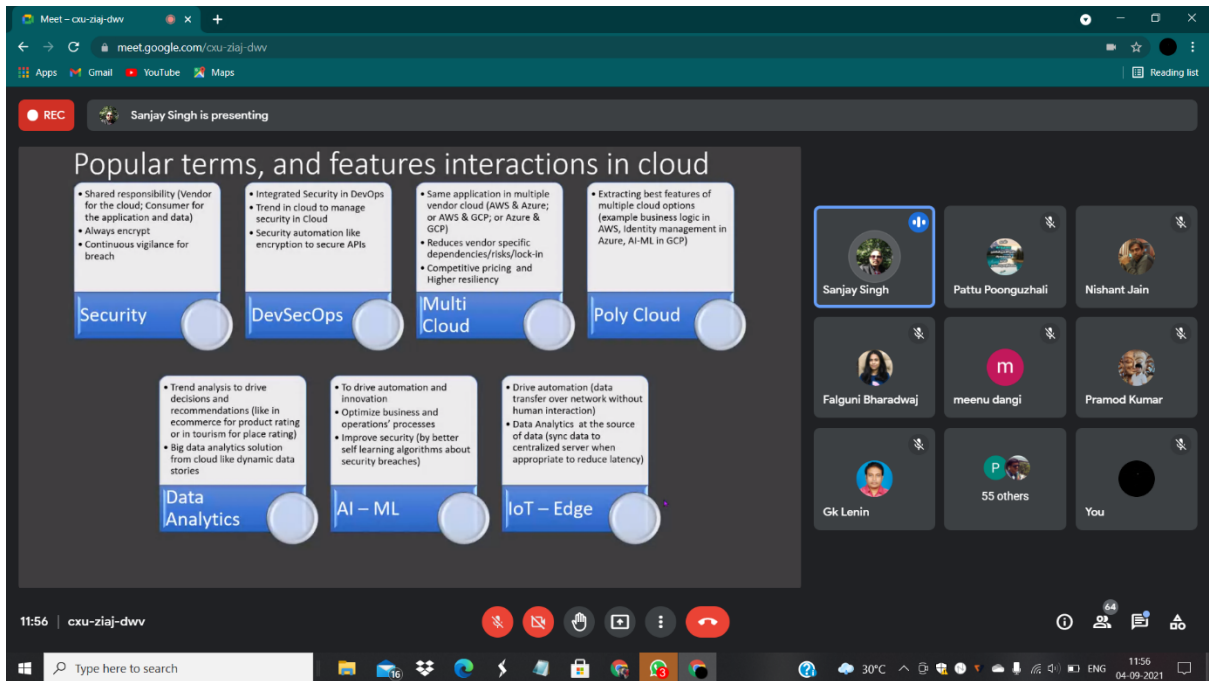
- As is Infra sizing
- As is Infra usage
- Application dependencies (software, hardware, interface, technologies)
- Services to be moved

### Assessment

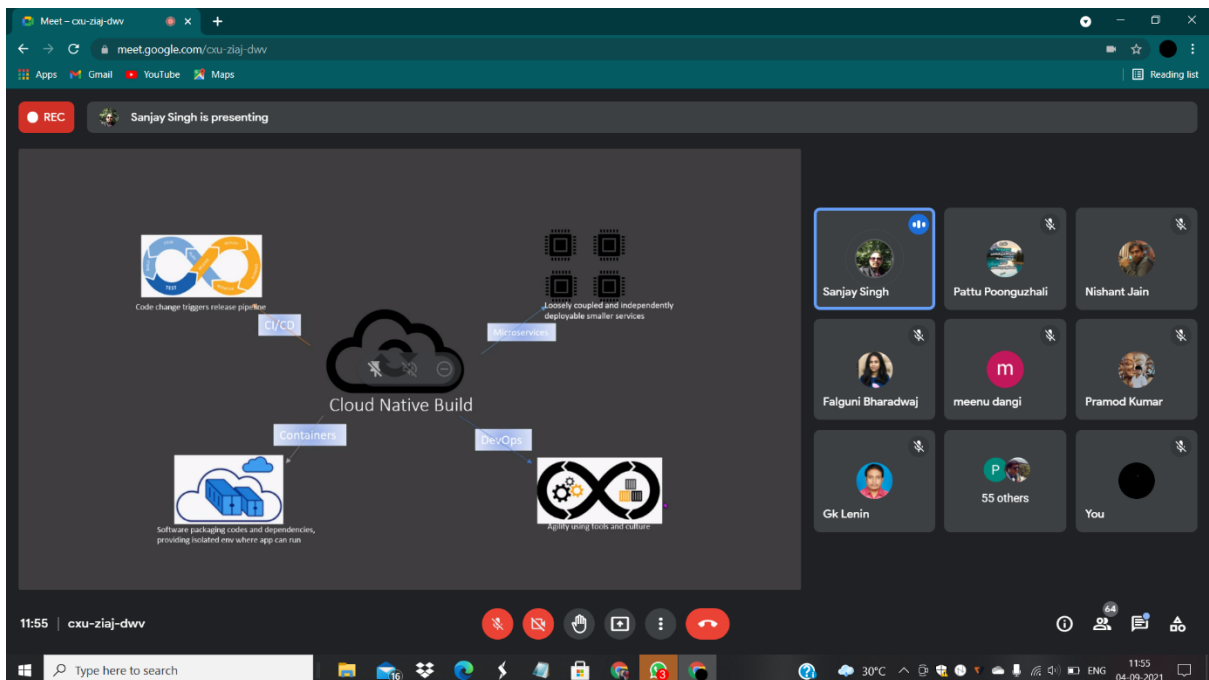
- Architecture
- Server inventory
- TCO (total cost of ownership\*)
- Migration readiness
- Proof of concept

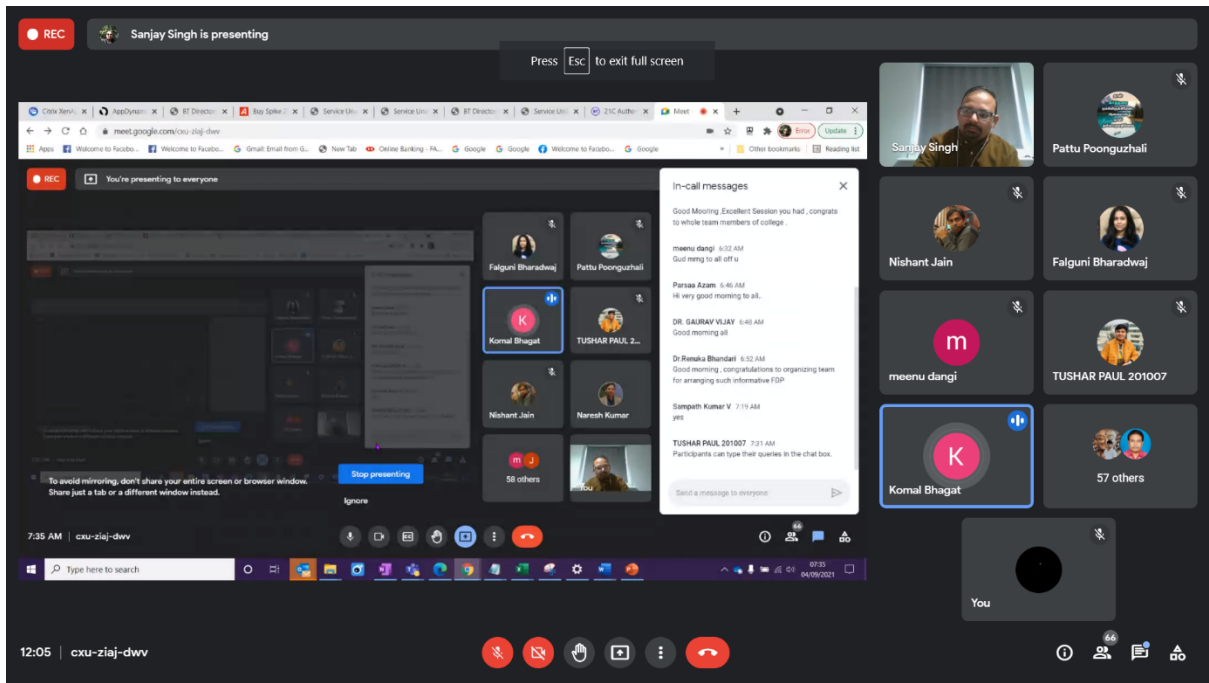
\*TCO: Financial metric that is used to estimate and compare direct and indirect costs of a product or a service (generally new IT equipment/Infra/Service)

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An hour long workshop was appreciated by the participants and helped them gain a good amount of knowledge in the domain of Cloud Computing.





At last the several queries raised by the participants were answered and developed immense interest in various fields and applications.