

Government of India

Ministry of Electronics and information Technology

National Informatics Centre, Himachal Pradesh, Shimla

Technical Presentations by NIC HP Officials: 17-Feb-2024

As part of an ongoing series of 10-minute technical talks presented by NIC officials of their choice on a regular basis, the recent technical session held on 17-Feb-2024.

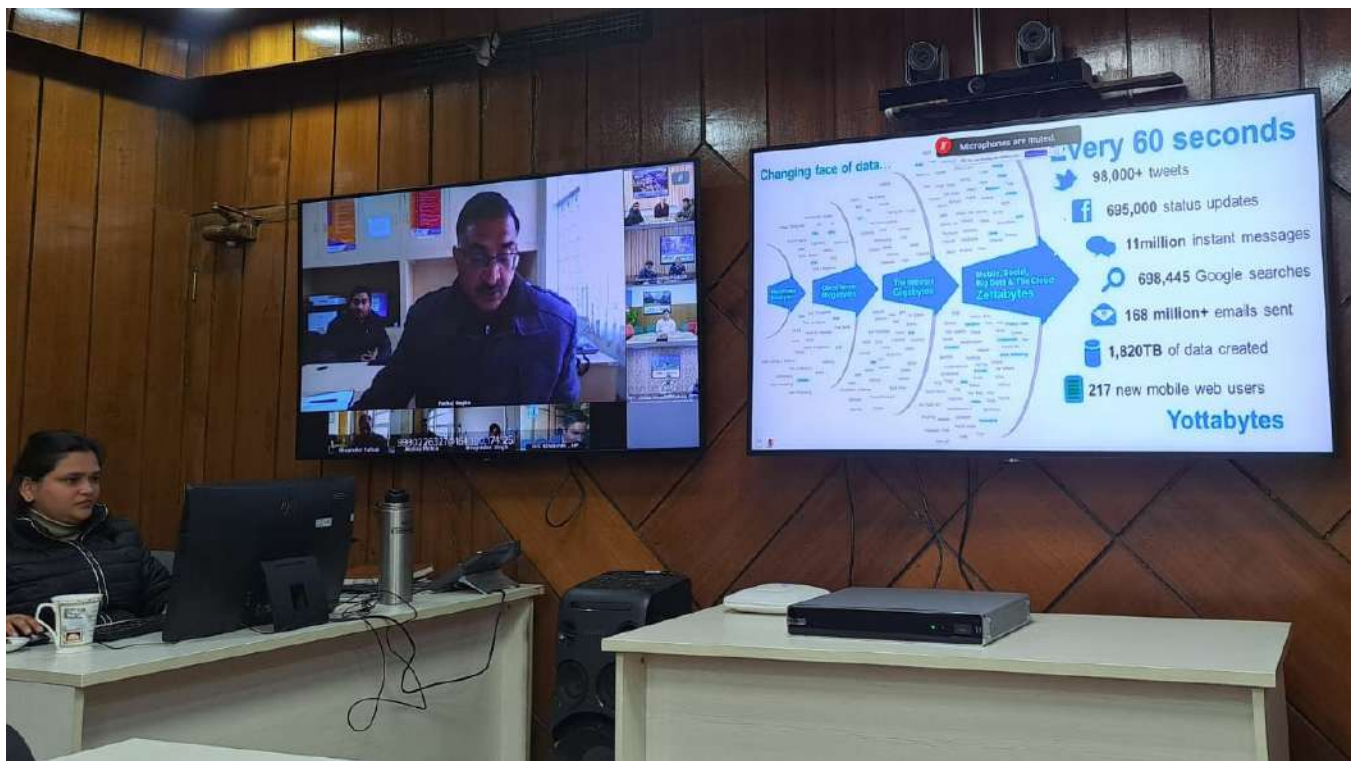
The details of the presenters, along with their topics and ratings, were as follows:

S.No.	Name	Designation	Topic	Rating (5.0)
1.	Sh. Pankaj Gupta	Scientist-F	Big Data	4.2
2.	Sh. Vinod Kumar Garg	Scientist-F	Web Scrapping	4.6
3.	Sh. Mukesh Kumar	Scientist-C	Database Battle	4.7
4.	Sh. Sanjay Gupta	Scientist-E	Smart Contract	4.2

Big Data

Sh. Pankaj Gupta explained about Big data which refers to the massive volume of structured and unstructured data that inundates businesses on a day-to-day basis. This data comes from various sources such as social media, sensors, devices, transactions, and more. Big data is characterized by its volume, velocity, and variety, commonly referred to as the three Vs. Analyzing big data enables organizations to uncover hidden patterns, correlations, and insights that can lead to better decision-making, strategic moves, and operational optimizations.

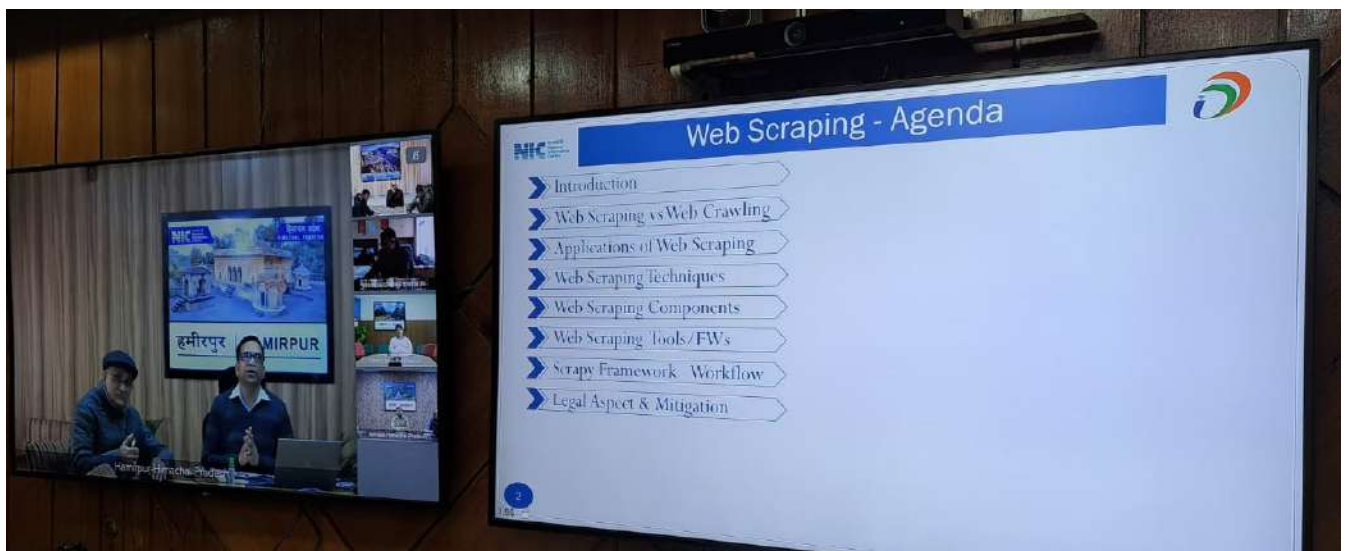
He explained about different big data types structured, semi-structured and unstructured data and challenges involved in Big Data. The one challenge is in breaking down data silos to access all data an organization stores in different places and often in different systems. Another challenge is in creating platforms that can pull in unstructured data as easily as structured data.



Sh. Pankaj Gupta, DIO Shimla showing the demonstration of Big Data

The importance of big data doesn't simply revolve around how much data you have. The value lies in how you use it. With the aid of advanced analytics tools and technologies, big data has revolutionized industries across sectors, including healthcare, finance, retail, and manufacturing, empowering businesses to gain a competitive edge, innovate, and adapt to changing market dynamics.

Web Scraping



Sh. Vinod Garg, DIO Hamirpur giving the Technical Talk on Web Scraping

Sh. Vinod Garg gave a comprehensive overview of web scraping which is the automated process of extracting large amounts of data from websites quickly and efficiently. This technique involves using software tools to navigate through web pages, gather relevant

information, and store it for further analysis or use. Web scraping has become increasingly popular due to its versatility and applicability across various domains, including market research, competitive analysis, data science, and business intelligence. He distinguished web scraping from web crawling, highlighting the former as the extraction of data from websites and the latter as the discovery of URLs.

By using web scraping, organizations can gather valuable insights from publicly available data sources on the internet, such as product prices, customer reviews, news articles, and more. These insights can inform decision-making processes, help identify trends, monitor competitors, and drive innovation.

Web scraping offers many benefits, it also raises ethical and legal considerations. Some websites may have terms of service or terms of use that prohibit scraping their content without permission. Therefore, it's essential for practitioners to adhere to ethical guidelines and respect the rights of website owners when conducting web scraping activities.

Smart Contracts



Sh. Sanjay Gupta, ADIO Kullu giving presentation on *Smart Contracts*

Sh. Sanjay Gupta explained about smart contract which is a self-executing contract with the terms of the agreement between the buyer and the seller being directly written into code. The code and the agreements contained therein exist across a distributed, decentralized blockchain network. Smart contracts allow for automatic execution of actions when predefined conditions are met, without the need for intermediaries or third parties. They are transparent, tamper-proof, and can streamline processes in various fields such as finance, real estate, supply chain management, and more. Smart contracts have gained significant attention due to their potential to increase efficiency, reduce costs, and enhance trust in transactions.

The result of the quiz competition was as follows:

Position	Participant Name	Designation	Place of Posting
1 st	Kum. Ankita Mishra	Scientist-B	NIC HP State Centre
2 nd	Sh. Ashwani Kumar	Scientist-E	NIC HP District Centre, Mandi
3 rd	Sh. Prithvi Raj	Scientist-C	NIC HP State Centre

The functionality enabling participants to rate individual presenters has already been implemented in the app. Now, participants also have the option to provide feedback specifically for the technical talks. This enhancement has been integrated into the Hindi Bodh app.



NIC HP officials attending the technical session

As decided that the following NIC officials will present a technical talk on the topic of their choice during the upcoming meeting scheduled for coming Saturday, 02-Mar-2024.

S.No.	Participant Name	Designation	Place of Posting
1.	Smt. Monika	Scientist-B	NIC HP High Court
2.	Kum. Ankita Mishra	Scientist-B	NIC HP State Centre
3.	Shri Daljeet Singh Rana	Scientist-E	NIC HP State Centre
4.	Shri Bhupinder Singh	Scientist-D	NIC Distt Centre Una

The following officials were present in the technical talk on 17-02-2024:

NIC HP State Centre		
1	Sh. Ajay Singh Chahal	SIO-Cum-Scientist-G
2	Sh. Lalit Kapoor	Scientist-F
3	Sh. Sanjay Kumar	Scientist-F
4	Sh. Sanjay Sharma	Scientist-F
5	Sh. Vijay Kumar Gupta	Scientist-F
6	Sh. Vimal Kumar Sharma	Scientist-F
7	Sh. Daljeet Singh Rana	Scientist-E
8	Sh. Sanjay Thakur	Scientist-E
9	Sh. Ashish Sharma	Scientist-D
10	Sh. Mangal Singh	Scientist-D
11	Sh. Sarvjeet Kumar	Scientist-C
12	Sh. Mukesh Kumar	Scientist-C
13	Sh. Prithvi Raj	Scientist-C
14	Smt. Monika	Scientist-B
15	Kum. Ankita Mishra	Scientist-B
16	Sh. Ramnarayan Yadav	Scientist-B
17	Sh. Himanshu Gupta	Steno Grade-III
District Centre Bilaspur		
18	Sh. Rakesh Kumar	Scientist-D
District Centre Hamirpur		
19	Sh. Vinod Kumar Garg	Scientist-F
20	Sh. Anurag Gupta	Scientist-E
District Centre Kangra		
21	Sh. Bhupinder Pathak	Scientist-F
22	Sh. Akshay Mehta	Scientist-E
District Centre Kullu		
23	Sh. Brijender Kumar Dogra	Scientist-E
24	Sh. Sanjay Gupta	Scientist-E
District Centre Mandi		
25	Sh. Akhilesh Bharati	Scientist-E
26	Sh. Ashwani Kumar	Scientist-E

District Centre Shimla		
27	Sh. Pankaj Gupta	Scientist-F
28	Sh. Deepak Kumar	Scientist-C
District Centre Sirmour		
29	Sh. Vijay Kumar	Scientist-E
30	Sh. Mohan Rakesh Aggarwal	Scientist-D
District Centre Solan		
31	Sh. Sanjeev Kumar	Scientist-C
32	Sh. Swetansh Shatak	Scientific/Technical Assistant-B
District Centre Una		
33	Sh. Bhupinder Singh	Scientist-D