

## 1.4 Big Data--Big Insights

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### ICE BREAKERS

(1) Give business suggestions to the respective industry/company for the following situations.

You have received data that -

(a) Many passengers prefer morning flights between 7 am and 9 am from Mumbai to Delhi.

**Suggestion:** Increase the number of flights between 7 am and 9 am.

(b) Many students are opting for UPSC/MPSC Exams.

**Suggestion:** Increase the number of examination centres as well as job opportunities.

(c) Many people go for morning walk to Kamla Nehru Park.

**Suggestion:** Open the gates of the Park earlier and close them only at noon. Also, clean the Park the previous night before closing or very early in the morning. Keep security guards in the mornings to maintain discipline.

(d) Many people buy clothes from miracle.com an online shopping site.

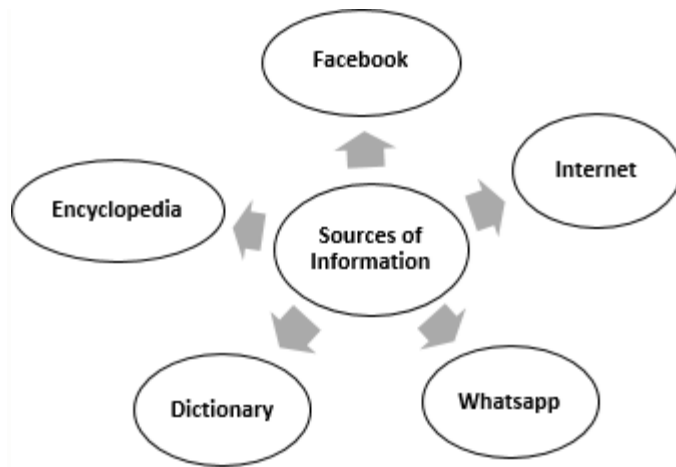
**Suggestion:** Increase the variety and brands in clothes. Give discounts and incentives to new and regular customers. Start various schemes.

(e) The viewership on television is more between 8 pm and 10 pm.

**Suggestion:** Telecast serials with the highest TRPs and socially important ads (like eye donation, polio drops, etc.) at this time.

(2) People get information from various sources: Can you name a few?

Ans.



## BRAINSTORMING

**(A1) YouTube has many videos on various things. Listen to the uses and health benefits of 'Lemon' and share them with your friends.**

**Ans.** Lemons can be used in various food and beverage preparations. From a simple fresh lime juice to a lemon pie, it's an ingredient that comes packed with a tangy taste. Some of its health benefits are:

1. It detoxifies the body.
2. Aids in weight loss.
3. Promotes heart and kidney health.
4. Improves digestion.
5. Is a good source of Vitamin C thus boosts immunity.

**(A2) (i) Make pointwise notes from the lesson regarding the uses of Big Data in the following application. Do not write complete sentences.**

**(a) Location Tracking -**

**Ans.** Uses of Big Data:

- (1) Used by Google Maps and GPS to identify and track location of a place.
- (2) Geographic positioning, radio frequency identification sensors; data about traffic conditions on particular route.

- (3) Can plan route according to travel time transportation of the goods.
- (4) Companies reduce risks in transport improves speed, reliability in delivery.

**(b) Health Care Industry -**

**Ans.** Uses of Big Data:

- (1) Various apps, smart watches, gadgets, etc. collect data about various functions of our body.
- (2) Data analyzed and feedback provided.
- (3) Doctors can have a better diagnosis of any ailment; effects of any drug.
- (4) Past data of patients maintained; suggestions, solutions for their problems given.
- (5) Helps in monitoring the outbreaks of epidemics, diseases.

**(c) Education Industry -**

**Ans.** Uses of Big Data:

- (1) Get information about the study patterns of students can now prepare customized and dynamic learning programmes according to need of individual students.
- (2) Every student's comprehension level is different - course material designed to cater to different requirements of the students. One-size-fits-all pitfall avoided.
- (3) Students' choices, difficulties, results, etc. are available.
- (4) Strengths and weaknesses gauged -guidance while choosing career.

**(ii) When you are asked for personal details on social media, mention precautions that you will take.**

**Ans.** When I am asked for personal details on social media, I first try to find out who wants them and why. I never reveal credit/ debit card pin numbers, even if it is a bank asking me. I never give my mobile/adhaar card numbers either. I also keep my social media accounts private and visible only to friends. Only after checking and re-checking do I give any details, for I know that there are many cases of exploitation going on.

(iii) Do you think all the data we receive is used for positive things? If 'No', make a list of the negative things which can be done with the help of Big Data.

**Ans.** Negative things which can be done with the help of Big Data:

(1) Loss of privacy-Big Data has all information about us.

(2) Misuse of personal information.

(3) Leaking of information this leads to thefts, blackmail, cheating, and so on.

(4) Data may fall into wrong hands, and a person may be harassed.

(5) Unsolicited calls and emails based on your internet history.

**(A3) Guess the meaning of the following idioms and phrases and use them in sentences of your own. One is done for you.**

**One-size-fits-all** - suitable for or used in all circumstances

The wrist watches have adjustable belts, so one-size-fits-all.

(a) 'Once in a blue moon' :

**Ans. Meaning :** very rarely.

**Sentence :** Our English teacher is very strict and smiles only once in a blue moon.

(b) 'One man army' :

**Ans. Meaning :** A 'one-man army' is someone who can do, or thinks he can do, everything by himself and without assistance.

**Sentence :** Sumit acted as a one man army for his teammates in office.

(c) 'Once bitten twice shy' :

**Ans. Meaning :** Being cautious after an unpleasant experience.

**Sentence :** Walking back on the stage was really difficult for me after my first performance was not well received – once bitten twice shy.

(d) 'One up on' :

**Ans. Meaning :** Having an advantage over.

**Sentence :** Ameeta always tried to have one up on her brother when it came to impressing their parents.

**(A4) (i) Do as directed.**

(a)

(1) Advertisers are one of the biggest players in Big Data. (Begin the sentence with 'Very few .....')

**Ans.** Very few players in Big data are as big as advertisers.

(2) Advertisers are one of the biggest players in Big Data. (Use 'bigger than' and rewrite the sentence.)

**Ans.** Very few players in Big Data are bigger than advertisers.

(b)

(1) No other diagnosis is as good as the diagnosis done with the help of Big Data. (Use 'best' and rewrite the sentence.)

**Ans.** The diagnosis done with the help of Big data is the best diagnosis.

(2) No other diagnosis is as good as the diagnosis done with the help of Big Data.

(Use 'better than' and rewrite the sentence.)

**Ans.** No other diagnosis is better than the diagnosis done with the help of Big Data.

(c)

(1) These internet giants provide the greatest data about people. (Begin the sentence with 'No other .....')

**Ans.** No other networking services provide greater data about people than these internet giants.

(2) These internet giants provide the greatest data about people. (Use 'greater than' and rewrite the sentence.)

**Ans.** No other networking services provide greater data about people than these internet giants.

**OR**

These internet giants provide greater data about people than any other networking services.

**(ii) Read the sentence from the text.**

New insights have enabled the banks and finance companies to come up with suitable plans.

This sentence can be rewritten as 'New insights have enabled the banks as well as finance companies to come up with suitable plans'.

Remember, 'as well as' serves the same purpose as that of co-ordinating the conjunction 'and' in the sentence. When one of them is inserted in the sentence, other should be removed.

**Use 'as well as', 'either ..... Or' in the following sentences.**

(a)

(1) Whatever activity we do online is recorded, monitored and analysed. (Rewrite using 'as well as'....)

**Ans.** Whatever activity we do online is recorded, monitored, as well as analysed.

(2) Whatever activity we do online is recorded, monitored and analysed. (Rewrite using 'either ... or')

**Ans.** Whatever activity we do online is either recorded, monitored or analysed.

(b)

(1) Big Data has been useful in identifying and tracking the exact location of a place. (Rewrite using 'as well as')

**Ans.** Big Data has been useful in identifying as well as tracking the exact location of a place.

(2) Big Data has been useful in identifying and tracking the exact location of a place. (Rewrite using 'either ... or')

**Ans.** Big Data has been useful in either identifying or tracking the exact location of a place.

(c)

(1) Weather sensors and satellites help us to understand the weather and help in weather forecasting. (Rewrite using 'as well as')

**Ans.** Weather sensors and satellites help us to understand the weather as well as help in weather forecasting.

(2) Weather sensors and satellites help us to understand the weather and help in weather forecasting. (Rewrite using 'either ... or')

**Ans.** Weather sensors and satellites help us to either understand the weather or help in weather forecasting.

(d)

(1) Big Data helps in monitoring the outbreaks of epidemics and diseases. (Rewrite using 'as well as')

**Ans.** Big Data helps in monitoring the outbreaks of epidemics as well as diseases.

(2) Big Data helps in monitoring the outbreaks of epidemics and diseases. (Rewrite using 'either ... or')

**Ans.** Big Data helps in monitoring the outbreaks of either epidemics or diseases.

(e)

(1) New insights have enabled the banks and finance companies to come up with suitable plans. (Rewrite using 'as well as')

**Ans.** New insights have enabled the banks as well as finance companies to come up with suitable plans.

(2) New insights have enabled the banks and finance companies to come up with suitable plans. (Rewrite using 'either ... or')

**Ans.** New insights have enabled either the banks or the finance companies to come up with suitable plans.

**(A5) (i) Interview the students of your class regarding the career they would like to pursue and the reason for selecting that particular career. Collect the data and analyse the information you have collected.**

**Ans.** (Sample questions)

Hi, Rohan. I would like to ask you a few questions regarding the career you would

like to pursue and the reason for selecting that particular career. Are you ready?  
Thanks.

- (1) Which are your favourite subjects?
  - (2) Have you decided on the career you would like to pursue?
  - (3) Why have you selected that particular career?
  - (4) What are the exams you have to pass or the qualifications you must have to pursue this career?
  - (5) What type of work does it involve?
  - (6) What are the job opportunities?
  - (7) Will you have chances of business travel?
  - (8) Is the salary structure good?
  - (9) Is your family happy with your choice?
  - (10) Is this your final choice, or are you still in the process of deciding?
- Thanks, Rohan. I have learnt a lot from this interview today. Bye.

**(ii) To listen well is as powerful a means of influence as to talk well and is essential to all true conversations. Form a group and have a group discussion on the topic.**

**Ans.**

(a) Social Media – Curse or Boon

**Ans.**

<b>Moderator :</b>	You've all been given a few minutes to think on your topic for today's group discussion, which is 'Social Media – Curse or Boon'.
<b>Sohil :</b>	In today's day and age, there aren't many people who are not on social media. It is a platform which helps us to network and to stay connected with our friends and acquaintances. It has made the world smaller and brought people closer together.
<b>Ritesh :</b>	I'm afraid I don't completely agree with that. We may be able to stay connected with our near and dear ones through social media, but this very platform is also the source of many hacking, internet frauds,



	identity thefts, etc. Thousands of people are duped through such cyber crimes.
<b>Ravi :</b>	That is true. But it can't be denied that social media has changed our lives for the better. It is a wonderful tool which connects like-minded individuals/groups, thus enabling exchange of ideas, transfer of information, etc.
<b>Sita :</b>	I am in agreement with Ravi. Social media can be a boon, but only if it is accessed carefully. As we users, we all need to be careful about which sites we visit and with what kind of people we interact. Social media is a complex web of millions of people interfacing at the same time. So, it is not uncommon to come across fraudsters, hackers and the like. If we use social media responsibly, it is definitely a boon.
<b>Pooja :</b>	I wish to add something here too. Apart from interacting, Social media is also used for spreading awareness, promoting businesses, and providing assistance for various issues or problems faced by the people. Therefore, it would be unfair to term it as a curse when it does so much for the community.
<b>Sita :</b>	Oh Yes! That is so true. Also, the best part about social media is that it all happens real-time, so there is no delay in communication and with the ever-changing community trends, people are able to keep up with the changing times. Whether it's the government sharing political news or the media sharing live updates, people always have access to the latest happenings through social media.
<b>Nilesh :</b>	That may be the case. But what about when one gets addicted to social media and it begins to affect a person's social and professional life. With the countless options available to keep us busy on social media, it is not difficult to develop an addiction and to be unable to draw ourselves away from it.
<b>Vikas :</b>	True, I could not agree more with Nilesh. With the endless networking sites, community pages, discussion forums, chat rooms, etc. people may get so attracted to social media that it may disrupt their lives.
<b>Moderator :</b>	We have almost reached the end of the allocated time. Would anyone like to conclude?
<b>Nilesh :</b>	To summarise today's discussion, social media can be boon or a curse, depending upon how the users access it. If they are responsible in their usage, then social media can definitely be a boon, but carelessness and ignorance while being active on social media can turn it into a curse. Thus, it can be said that social media is a double-edged sword, which requires the users' discretion at all times.

(b) Women empowerment and Equality.

**Ans.** Do it yourself.

(c) Climate Change.

**Ans.** Do it yourself.

**(A6) Find out job opportunities in the following areas and the skills required for them.**

**(a) Clinical Data Management.**

**Ans.** Clinical Data Management:

**Job Opportunities :** In pharmaceutical, biotech, and device/diagnostic companies.

**Required Skillset :** Strong written and verbal communication skills, database management skills, project management skills.

**(b) Network Operations.**

**Ans.** Network Operations:

**Job Opportunities :** In IT, banking and finance companies.

**Required Skillset :** Network support, network management, network monitoring and troubleshooting, communication skills.

**(c) Data Processing.**

**Ans.** Data Processing:

**Job Opportunities :** In ITeS, BPO and IT companies.

**Required Skillset :** Computer skills, time management, teamwork, multitasking skills, communication skills.

**(d) Data Operations and Research.**

**Ans.** Data Operations and Research:

**Job Opportunities :** In IT telecom and airline companies as well as government agencies.

**Required Skillset :** Research and analysis skills, critical thinking, wise decision

making, interpersonal skills, problem-solving, excellent with maths and writing, creative thinking, information interpretation.

**(e) Data Entry Operation.**

**Ans.** Data Entry Operations:

**Job Opportunities :** In BPO's, KPO's, Publishing and Web Industry.

**Required Skillset :** Knowledge of computers, fast typing skills, ability to multitask, strong verbal and written skills.