

INDIVIDUAL TASK – 03

UNDERSTANDING BIG DATA AROUND ME

Exploring How Big Data Influences My Everyday Life

1. Introduction

Big Data refers to extremely large volumes of data that are generated every second from various sources such as smartphones, social media, online transactions, sensors, and digital devices.

It is not just about “large data”, but about:

- How data is collected
- How it is processed
- How insights are extracted

In today’s digital world, Big Data is everywhere around us — even when we do not realize it.

2. What is Big Data?

Big Data is characterized by the 5 V's:

1. Volume – Massive amount of data
2. Velocity – Speed at which data is generated
3. Variety – Different types (text, images, videos, audio)
4. Veracity – Accuracy and reliability
5. Value – Useful insights extracted

For example:

- Billions of messages sent daily on WhatsApp
- Millions of searches performed every minute on Google Search

3. Big Data Around Me as a Student

Let me explain how Big Data surrounds me daily:

→1. Social Media Usage

Platforms like:

- Instagram
- YouTube

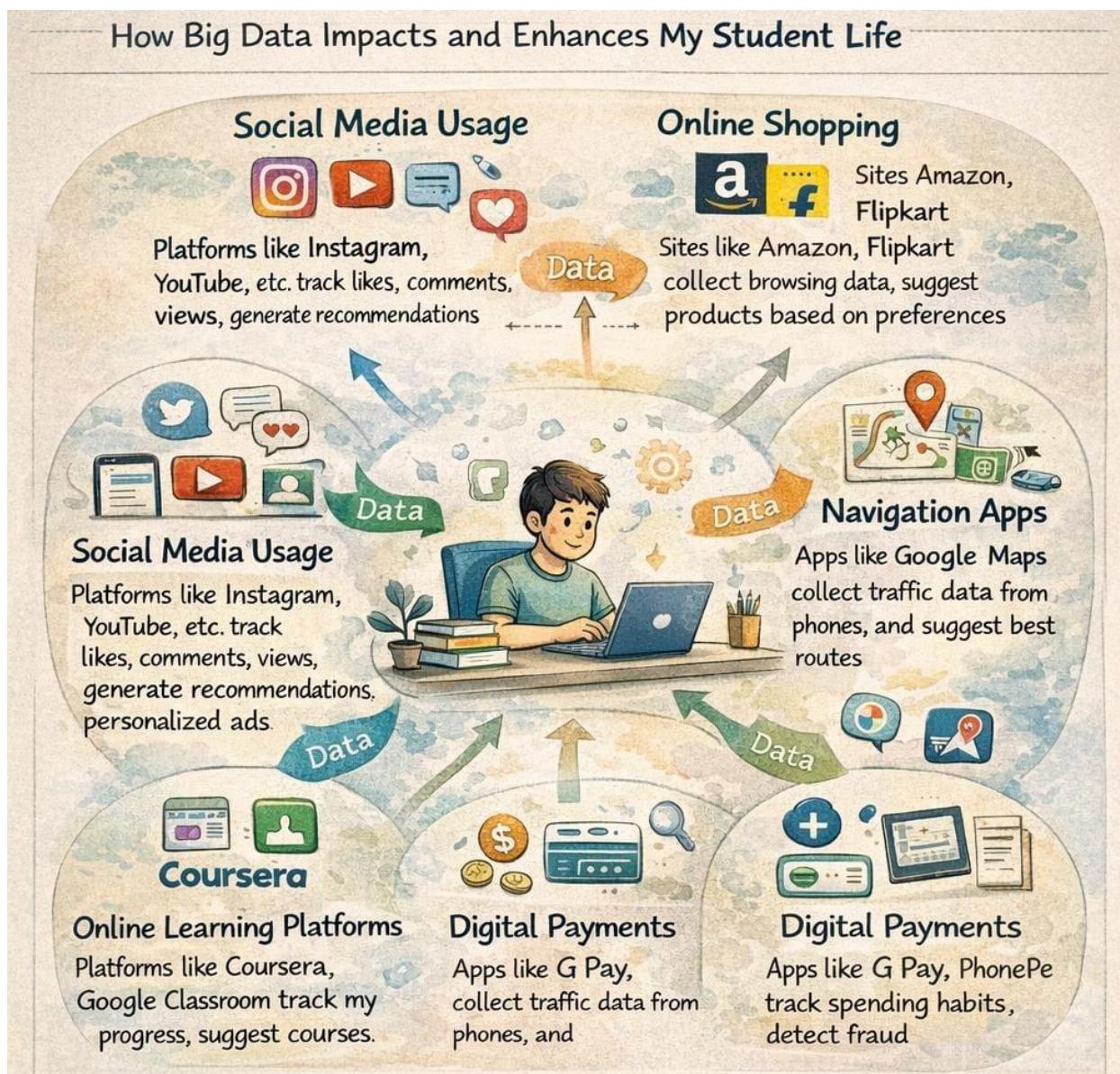
Track:

- What I watch
- How long I watch
- What I like and comment

Based on this data:

- Recommendations are generated
- Ads are personalized

This is Big Data in action.



→2. Online Shopping

When I browse products on:

- Amazon
- Flipkart

The system:

- Records my searches
- Analyzes buying behavior
- Suggests similar products

Big Data helps companies predict what I might buy next.

→3. Online Learning Platforms

When I attend classes or watch tutorials:

- My learning pattern is tracked
- My progress is analyzed
- Personalized suggestions are given

For example:

- Coursera
- Google Classroom

Big Data helps improve student performance.

→4. Digital Payments

Apps like:

- Google Pay
- PhonePe

Analyze:

- Spending habits
- Transaction frequency
- Fraud detection

If unusual activity is detected, the system alerts instantly.

→5. Navigation and Maps

Using:

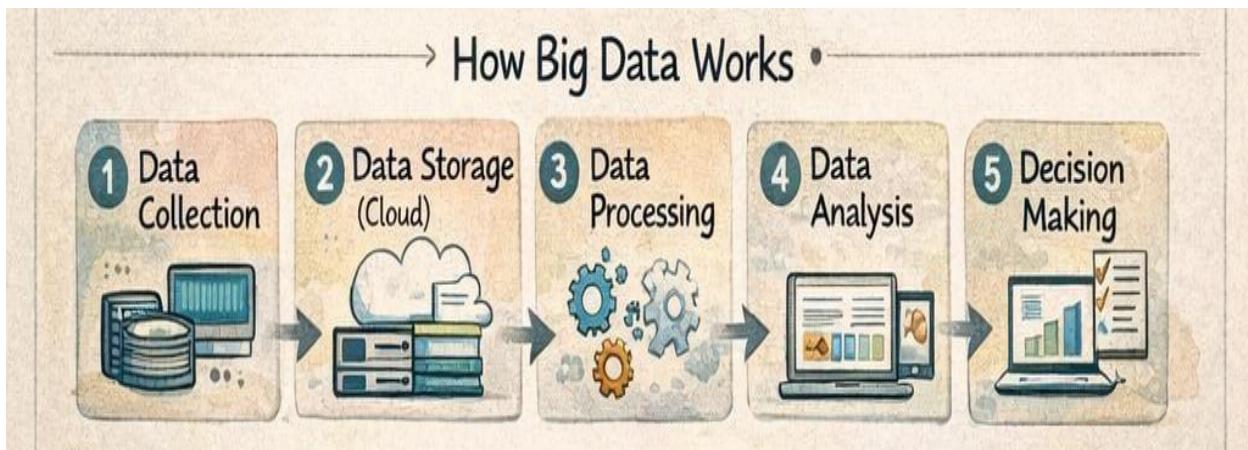
- Google Maps

The app:

- Collects real-time traffic data
- Analyzes millions of vehicles
- Suggests fastest route

This is real-time Big Data processing.

4. How Big Data Works



The working of Big Data generally includes:

1. Data Collection
2. Data Storage (Cloud/Distributed Systems)
3. Data Processing
4. Data Analysis
5. Decision Making

Technologies used:

- Hadoop
- Spark
- Cloud Computing
- Machine Learning

5. Benefits of Big Data Around Me

✓ Benefits of Big Data

- ✓ Personalized Experience
- ✓ Faster Services
- ✓ Better Recommendations
- ✓ Fraud Detection

✓ Unique perspective:

Big Data is everywhere around me!
It works silently in the background from my social media to online shopping, analyzing massive data to improve services.

- ✓ Personalized experience
- ✓ Faster services
- ✓ Improved recommendations
- ✓ Better fraud detection
- ✓ Smarter decision-making

6. Challenges of Big Data

- ✗ Privacy concerns
- ✗ Data misuse
- ✗ Security risks
- ✗ High storage cost
- ✗ Data bias

As a student, I must also be aware of how my data is being used.

7. Big Data and My Future Career

As a Computer Science student, understanding Big Data helps me:

- Work in Data Science
- Develop AI systems
- Improve business analytics
- Build intelligent applications

Big Data skills are in high demand in today's industry.

8. Unique Perspective: Big Data is Invisible but Powerful

The most interesting fact about Big Data is:

→ It works silently in the background.

Every click, swipe, search, and purchase contributes to data.

Companies use this invisible data to improve services and maximize profit.

We are not just users of technology —

We are also data generators.

Conclusion

Big Data is not a distant technological concept; it is deeply embedded in my daily life. From social media to digital payments and online education, Big Data continuously analyzes information to provide better services.

Understanding Big Data around me helps me:

Become a responsible digital citizen

Protect my privacy

Prepare for future career opportunities

Thus, Big Data is shaping the world around me — and I am a part of it.