



# ACHARYA INSTITUTE OF TECHNOLOGY

Affiliated to Visvesvaraya Technological University, Belagavi, Govt. of Karnataka.

Approved by AICTE, New Delhi

## Department of Computer Science & Engineering (Data Science)

### TASK 4: Analytics & Tool Match

Business Question	Analytics Type	Tool
What happened?	Descriptive Analytics	SQL, Power BI, Tableau, Excel
Why did it happen?	Diagnostic Analytics	Google Analytics, Drill-down Dashboards, Data Mining
What will happen next?	Predictive Analytics	Machine Learning (Python/R), Apache Spark, SAS
What action should be taken?	Prescriptive Analytics	Recommendation Engines, AI Optimization, Simulation Tools

#### Explain Big Data to a 10-year-old :

Imagine you have a toy box the size of a football stadium, and it's filled with trillions of toys some are LEGOs, some are videos, some are voice recordings, and new toys are being dumped in by a giant helicopter every single second.

That is Big Data.

It's too much for one person (or one normal computer) to ever sort through. To handle it, you need three special things:

1. The Team (Hadoop): Since the box is too big for one computer, you hire a thousand "robot helpers" to work together. Each robot takes one small corner of the stadium to organize.



# ACHARYA INSTITUTE OF TECHNOLOGY

Affiliated to Visvesvaraya Technological University, Belagavi, Govt. of Karnataka.

Approved by AICTE, New Delhi

## Department of Computer Science & Engineering (Data Science)

- 
- 
- 2. The Speed: The robots have to work super fast because the helicopter never stops dropping new toys.
  - 3. The Brain (AI): The robots are so smart they can find patterns. They might say, Hey, every time a kid picks up a blue LEGO, they usually look for a yellow wing next! In short: Big Data is taking a mountain of messy information and using a team of super-fast computers to find secrets or patterns that humans would never notice.