ACTIVE LEARNING

Name of the Faculty: Dr.G.JayaLakshmi	Designation : Sr.Assistant Professor	Subject: Business Intelligence
Year/ Semester: IV/I (CBCS)	Section: IV-A&B	Topic: turning data into actionable information, using an assortment of tools, techniques, and applications.
Name of the activity : Case Study with puzzle	Date: 5-12-2023	No. of students attended :19

Objective of the activity:

- Understand the capabilities of business intelligence systems
- Analyze importance of BI to organizations
- Evaluate potential barriers to BI system success

Execution Plan:

Time management: Class time: 50 mins

- Forming student groups (8-students) in 3 categories : 10 mins
 - Group 1
 - Group 2
 - Group 3

The learning objective of the puzzle was to understand the ETL (Extraction, Transformation, and Load) process and to conduct numerical data mining.

Bharti Airtel Limited is a leading global telecommunications company with operations in 18 countries across Asia and Africa. Headquartered in New Delhi, India, the company ranks amongst the top 3 mobile service providers globally in terms of subscribers. In India, the company's product offerings include 2G, 3G and 4G wireless services, mobile commerce, fixed line services, high speed home broadband, DTH, enterprise services including national & international long distance services to carriers. In the rest of the geographies, it offers 2G, 3G, 4G wireless services and mobile commerce. Bharti Airtel had over 403 million customers across its operations at the end of March 2019.

In puzzle ,the students were placed in 3 groups and given two files with numeric data from Airtel's Sales and Marketing department. (https://www.statista.com/statistics/740481/india-

bharti-airtel-revenue/). One file shows how many customers received an SMS on their mobile offering to purchase Airtel TV Digital services (extracted from Marketing department). The other file shows how many customers actually purchased Airtel TV Digital services regardless of having received an offer or not (extracted from Sales department).

Puzzle: The students were presented the following task: "The management at Airtel wants to know how effective the campaign was, meaning: How many who received an offer on their mobile, also purchased the single "Airtel TV Digital services"?"

Expected Outcomes:

- Understand the importance of
- Analyze what kind of companies use BI systems?
- Evaluate potential barriers to BI system success?

Assessment of the effectiveness of the activity

Group Id	Number	Assessment	Assessme nt after	Group Score	Group Score	(Dla	Im see a tick and s	pact	anget)
	students	activity (Taken Ass1)	activity (Taken Sess2)	Before	After	Negativ e change	No change	Improveme nt	%
Ι	8	9	11	8.68	9.6			1	81.2
		9	7.5				1		
		9.5	9.5					1	
		7	9.5			1			
		9.5	9					1	
		7.5	9.5					1	
		9	11					1	
		9	10				1		
II	8	8	11.5	9.18	10.1		1		78.6
		11	9				1		

		8.5	11.5				1		
		9	9.5					1	
		9	10			1			
		10	11				1		
		10	9	-		1			
		8	10	•				1	
III	8	8	11	8	9.5		1		74.3
		11	12			1			
		8	10.5					1	
		8.5	9				1		
		9	10					1	
		7	6	•		1			
		7.5	9				1		
		9	9					1	

Result:

Three groups presented the correct answer (2666 customers). The rest managed to transform the data and compare the two source files but failed to identify the two customers having purchased four songs each. When confronted with the fact that their response was not quite correct, one student shrugged and replied, "How important can it be?"

We argue that the puzzle approach works because it imitates the BI process. You start with a question or problem and a description of the structure of the available data. If the students pose questions that do not relate directly to the data structure, the query will be rejected. This teaches the students to formulate the questions based on the data structure, which is essential for under

standing the BI concepts and process.

		No of		No of	Group	Group	Group
	No of	students	No of	students with	Score	Score After	Impact (%)
	students	with	students	Improvement	Before	Activity	
	involved	Negative	without		Activity		
GroupId	in activity	change	change				
					8.68	9.6	
1	8	1	2	5			62.5
					9.18	10.1	
2	8	2	4	2			25
					8	9.5	
3	8	2	3	3			37.5



Students Performance	No of Students	Percentage
Improvement	5	41%

No Change	9	37%
Negative Change	5	20%

