

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA SEMESTER- IV - EXAMINATION-SUMMER-2024

Subject Code: 1549302**Date: 25/04/2024****Subject Name: Business Analytics****Time: 10:30 AM TO 01:30 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Use of simple calculators and non-programmable scientific calculators are permitted.

	Marks
Q.1 Explain the terms. (All compulsory)	14
(a) Business Intelligence	
(b) Web Mining	
(c) Metadata	
(d) Data Lake	
(e) Financial Analytics	
(f) KPI	
(g) What is Big Data? Give one real life example.	
Q.2 (a) Define Business Analytics. Discuss the need and components of business analytics with relevant examples.	07
(b) What is Data Warehouse? Differentiate between OLAP and OLTP. List down various models of OLAP and OLTP.	07
OR	
(b) How business managers use various types of business analytics for making better business decisions? Explain with examples.	07
Q.3 (a) What is digital data? Compare sources and characteristics of various types of digital data and give example of each data type.	07
(b) How is the digital dashboard useful in information visualization? Discuss the role of data visualization and visual analytics for improved business decision making.	07
OR	
Q.3 (a) With the help of neat sketch, describe the conceptual framework of Data Warehouse.	07
(b) What is data mining? Explain potential applications of data mining in healthcare industry.	07
Q.4 (a) What are the characteristics of Big Data? Explain with examples that how business problems can be addresses by big data analytics.	07
(b) What is text mining? Discuss with relevant examples some of the application areas of text mining in the context of Natural Language Processing.	07
OR	
Q.4 (a) What are sentiments? What is the role of sentiment analytics in social media analytics?	07
(b) Explain the BPM cycle with relevant examples.	07

Q.5 CASE STUDY:

Despite investing huge amount in enhancements to its mobile and web presence, a major retailer was having an increasingly difficult time converting online customer visits into sales. The gap between visitors to the site and completed purchases was widening. A growing number of consumers were losing interest in following the digital maze required to locate and purchase the products they were seeking. As a result, the retailer was having an increasingly difficult time converting online customer visits into sales. According to the company’s director of marketing, “We were constantly making changes to our website and offering special online promotions, but we found that some changes were having an opposite impact on sales than we were expecting. It seemed like one step forward often meant taking two steps backward.” The company later on implemented customer analytics solution provided by Accenture.

The retailer analyzed its customer data against industry benchmarks to identify where customers were leaving the funnel and to pinpoint reasons for the fracture. The retailer soon discovered, most of its online customers were looking for a direct route to the products they want to buy; in most cases, they would spend no more than one minute trying to locate a particular item. In recognizing the value of a streamlined shopping experience the retailer was able to simplify the customer’s digital experience, reduce points of fracture, and increase conversions. The company learned that fewer clicks resulted in more sales, the easier it is for customers to find a particular product, the more likely they will make a purchase. Repairing the fractures in the digital shopping experience and guiding the customer through the purchasing funnel more effectively resulted in improved results for this major retailer. As further enhancements to the retailer’s digital site are proposed, analytics will be used to determine whether or not certain enhancements will have the desired effect on the customer’s digital journey before they are implemented, helping to increase investment and improve returns quickly.

Their Director Marketing commented, “With a mobile marketplace that represents almost \$600 billion in business a year—and growing—every incremental increase in conversion rates represents significant sales growth. By relying on Accenture to help us get inside E-commerce data to streamline the customer journey, we can build a more dynamic, engaging digital experience for our customers. And allocating resources more effectively means earning a higher return on our digital investment and increasing sales.”

- (a) Discuss the importance of analytics in retail industry with reference to the above case. **07**
- (b) How could the retailer improve its digital shopping experience with the help of Accenture’s analytical solution? **07**

OR

- (a) “Analytics contribute in enhancing and adding value as well as streamlining the customer shopping experience.” – Comment **07**
- (b) How do marketing analytics help retailers in achieving and improving sales performance targets? **07**
