

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

**POST GRADUATE DIPLOMA IN MANAGEMENT (2024-26)**  
**MID TERM EXAMINATION (TERM -IV)**

Subject Name: **Management of Technology**

Time: **01.00 hrs**

Sub. Code: **PGO44**

Max Marks: **20**

**Note: Read the following case and answer the following questions:**

**10×2 = 20 Marks**

**Kindly write the all the course outcomes as per your TLEP in the box given below:**

COs	Statement of Course Outcomes	Bloom's Taxonomy
<b>CO-1</b>	Understand and remember the strategic applications of Technology mixes	Remember-L-1 Understand- L-2
<b>CO-2</b>	Apply the strategies for innovation	Apply- L-3
<b>CO-3</b>	Examine diffusion strategies to be adopted by different marketers	Evaluate- L-5
<b>CO-4</b>	Develop the value chain plan based on internal and external environment to assess the strategic gaps in the organization	Create- L-6
<b>CO-5</b>	Analyze the contemporary issues and emerging trends in strategic innovation	Analyze -L-4

**Case Study 1: Tesla's Approach to Technology Management CO1**

**Background:**

Tesla Inc., founded in 2003, has become a global leader in electric vehicles (EVs) and clean energy solutions. Unlike traditional automobile companies, Tesla positions itself more like a technology company. Its success is built on the integration of advanced battery technology, artificial intelligence, and over-the-air (OTA) software updates.

Tesla manages its technology in a unique way:

- **Vertical Integration:** Instead of outsourcing critical technologies, Tesla produces its own batteries (Gigafactories) and develops its own software and AI systems (Autopilot, Full Self-Driving).
- **Rapid Innovation Cycles:** Tesla often introduces software updates directly to cars already sold, improving customer experience without physical recalls.
- **R&D Focus:** Tesla invests heavily in R&D compared to traditional automakers, focusing on AI, autonomous driving, and battery innovations.
- **Risk Management:** Tesla takes bold risks by experimenting with new technologies earlier than competitors (e.g., self-driving, Cybertruck design).
- **Market Impact:** Tesla's technology management has pushed other automakers to accelerate their EV and digital transformation strategies.

**Questions**

**Q. 1: (A).** How does Tesla's technology management strategy differ from traditional automakers? (5 marks)

**Q. 1: (B).** What are the risks and benefits of Tesla's decision to vertically integrate its technology?(5 marks)

**Case Study 2: Starbucks' Use of Mobile App and Data Analytics CO2**

Starbucks has successfully used **mobile technology and data analytics** to enhance customer experience. The Starbucks mobile app allows customers to order and pay ahead, collect loyalty points, and receive personalized offers.

Behind the scenes, Starbucks uses **big data analytics** to track purchasing patterns and preferences. For instance, the app suggests drinks based on previous orders, time of day, or even weather conditions. This personalization not only increases customer satisfaction but also boosts sales.

During the COVID-19 pandemic, the mobile app became essential in maintaining customer engagement through contactless ordering and pickup. Today, more than **40% of Starbucks transactions in the U.S.** are made through its app, showing the significant role of technology in driving sales.

**Questions:**

**Q. 2: (A).** How has Starbucks used mobile technology to improve customer loyalty? (5 marks)

**Q. 2: (B).** In what ways does data analytics help Starbucks design personalized marketing strategies? (5 marks)

**Kindly fill the total marks allocated to each CO's in the table below:**

<b>COs</b>	<b>Marks Allocated</b>
CO1	10 Marks
CO2	10 Marks

**Blooms Taxonomy Levels given below for your ready reference:**

**L1= Remembering**

**L2= Understanding**

**L3= Apply**

**L4= Analyze**

**L5= Evaluate**

**L6= Create**