

International Institute of Information Technology, Hyderabad.

Business Fundamentals - 1 Monsoon 2024 End Course Exam

SAURABH MISHRA

ROLL NO : 2023201034

QUESTION 1

PORTER'S FIVE FORCES ANALYSIS OF THE

ELECTRIC VEHICLES TWO WHEELER INDUSTRY

1. Threat of New Entrants – Moderate to High

- **Capital & Technology Needs:** Moderate entry barriers due to R&D costs for batteries and IoT systems.
- **Regulatory Compliance:** Government subsidies ease entry, but safety standards remain a hurdle.
- **Brand Loyalty:** New players struggle to match trust levels of Ather, Ola Electric, Hero Electric.

Conclusion: Market growth attracts entrants, but scaling and building trust take time.

2. Bargaining Power of Suppliers – Moderate

- **Supplier Diversity:** Dependence on lithium-ion batteries and semiconductors but with multiple suppliers.
- **Switching Costs:** Quality components like batteries require long-term partnerships.
- **Technological Dependency:** Suppliers with proprietary tech hold leverage initially.

Conclusion: Supplier power is balanced through diversification and strategic partnerships.

3. Bargaining Power of Buyers – High

- **Consumer Awareness:** Buyers access reviews and product comparisons easily online.
- **Price Sensitivity:** Competitive pricing is crucial in price-sensitive markets.
- **Brand Loyalty:** While brand loyalty exists, consumers switch for better value.

Conclusion: Buyers demand innovation and affordability, influencing pricing strategies.

4. Threat of Substitutes – High

- **ICE Vehicles & Public Transport:** Gasoline two-wheelers and public transport remain strong alternatives.
- **Range Anxiety:** Limited charging infrastructure adds to the appeal of substitutes.

- **Eco-Awareness:** Environmental awareness boosts EV adoption but isn't yet dominant.

Conclusion: Substitutes pose a challenge until charging infrastructure improves.

5. Industry Rivalry – Intense

- **Many Players:** Both legacy brands (Hero, Bajaj) and new entrants compete aggressively.
- **Innovation Pressure:** Companies continuously improve batteries and IoT integration.
- **Pricing War:** Price competition reduces profitability.

Conclusion: Success requires innovation, scaling, and customer retention.

Summary Table

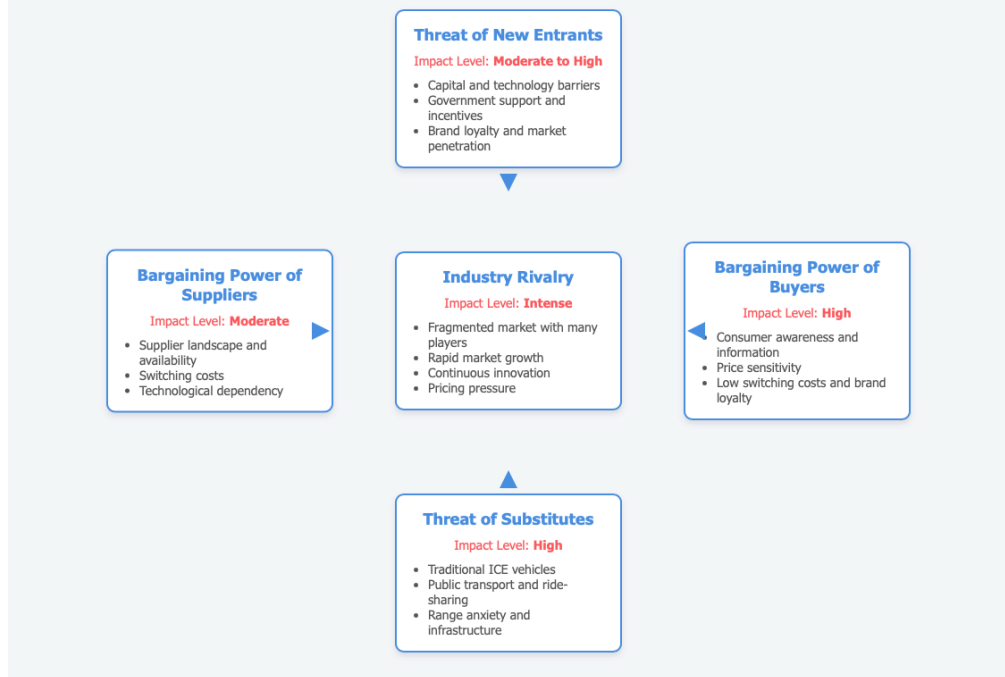
Force	Impact Level	Key Factors
Threat of New Entrants	Moderate to High	R&D costs, brand loyalty, government support
Bargaining Power of Suppliers	Moderate	Supplier diversity, technology reliance, switching costs
Bargaining Power of Buyers	High	Informed buyers, price sensitivity, low switching costs
Threat of Substitutes	High	ICE vehicles, public transport, range anxiety
Industry Rivalry	Intense	Numerous players, continuous innovation, pricing pressure

Conclusion

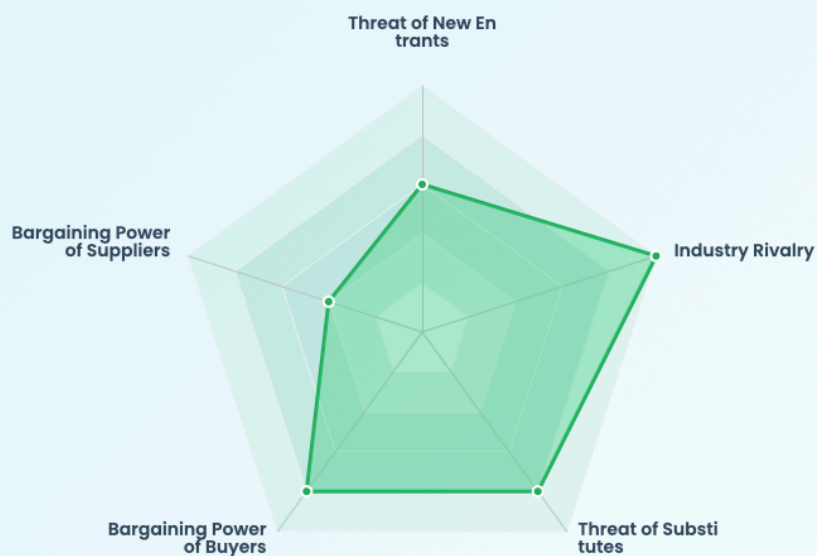
The electric two-wheeler industry is highly competitive with intense rivalry and significant buyer power. Market entry is easier with government incentives, but scaling remains difficult. Substitutes like gasoline vehicles and public transport challenge growth. Supplier power is moderate, but companies need innovation and cost-efficiency to succeed. Continuous investment in technology and customer satisfaction is essential to thrive in this market.

(PLEASE TAKE NOTE THAT THE VISUALISATIONS ARE MADE BY WRITING THE HTML CODE SPECIALLY AND NOT GENERATED FROM SOME LLM OR COPIED FROM SOME DOURCE. CAN EVEN PROVIDE THE CODE IF ASKED)

Porter's Five Forces Analysis Electric Two-Wheeler Industry



Porter's Five Forces Analysis Electric Two-Wheeler Industry



Question 2

Product Innovation Pitch for SaurabhMedSoft's Medical Research Software to the CIO of a Hospital Chain

Why:

In an era of rapid medical advancements and data-driven care, hospitals need tools that enable evidence-based decision-making and foster continuous learning. Traditional research processes can be fragmented and time-consuming, limiting access to critical insights. SaurabhMedSoft's platform empowers medical staff by enhancing collaboration, improving diagnostic support, and providing access to the latest global research—ultimately leading to better patient outcomes.

What:

Our comprehensive medical research software offers the following key features:

- **Training and Education:** Interactive learning modules, case studies, and data visualisation tools help train medical personnel and keep them updated with the latest advancements.
- **Clinical Case Support:** Provides access to global research and anonymised clinical datasets, helping doctors with rare diagnoses or when internal data is insufficient.
- **Real-Time Collaboration:** Enables cross-functional teams to share insights and research findings in real time, accelerating clinical discoveries and innovation.

How:

The platform integrates smoothly with EMRs and diagnostic tools already in use at your hospital, minimising disruptions. Our AI-powered search engine ensures quick access to relevant studies, while secure data management protocols ensure compliance with privacy standards. SaurabhMedSoft offers 24/7 support, customisable dashboards, and modular deployment options to meet your specific needs. With our platform, your hospital will stay at the forefront of medical research and education, enhancing patient care and empowering your workforce.

NOTE : “SAURABHMEDSOFT” IS A HYPOTHETICAL COMPANY CREATED SPECIFICALLY FOR THIS ASSIGNMENT, AND THE IDEA PRESENTED ABOVE IS A UNIQUE PROPOSAL DEVELOPED BY ME.

Question 3

Leadership Styles to Adopt for Completing the Mumbai Metro-3 Project

After eight years of progress, the Mumbai Metro-3 project faced a major setback when the government changed, halting operations for two years. Now that the project has resumed, completing it requires a thoughtful blend of leadership styles to address the challenges posed by the disruption. Managing multiple stakeholders, re-energising teams, and keeping the project on track demands flexibility, strategic vision, and people-centered leadership.

1. Adaptive Leadership (From Professor Slides : Leadership in a VUCA World)

The uncertainty caused by the sudden halt in the project has likely created confusion and resistance among teams and stakeholders. Adaptive leadership will help manage these challenges by encouraging people to embrace new realities and align with changing priorities. It's essential to listen to employees, acknowledge their concerns, and support them through the transition while motivating them to stay focused on their tasks.

2. Transformational Leadership (From Professor Slides : Introduction to Management)

After the delays, it is crucial to restore energy and drive among the team. Transformational leadership is about inspiring the workforce to see the larger purpose of their efforts, rekindling their sense of ownership, and guiding them toward project completion. By celebrating small milestones and giving teams autonomy, you can re-establish trust and momentum, ensuring everyone is motivated to see the project through.

3. Strategic Leadership (From Professor Slides : What is Your Strategy - New)

With time lost and resources stretched, strategic leadership will be key to meeting deadlines without compromising quality. This style involves prioritising critical tasks, managing risks, and ensuring that stakeholders—contractors, government officials, and the public—are aligned. Proactively addressing bottlenecks, negotiating resource availability, and maintaining transparency with all involved will help keep the project on course despite external pressures.

4. Servant Leadership (From Professor Slides : Leadership in a VUCA World)

Given the frustrations that may have built up during the two-year halt, adopting servant leadership will foster a positive work environment. Being visible and accessible to employees, addressing their concerns, and promoting open communication will build trust and morale. A collaborative atmosphere where everyone feels valued and motivated will ensure smoother operations and renewed dedication from the team.

Conclusion: Integrating Leadership Styles for Success

No single leadership style will be enough to overcome the challenges of restarting the Mumbai Metro-3 project. A **flexible blend of adaptive, transformational, strategic, and servant leadership** will be necessary to meet the evolving demands of the project. This approach will ensure the project is delivered successfully and within the newly defined timelines.

Question 4

Approach for Developing Software for NITI

Aayog's Aspirational Districts Program

Reference Link of the official website for the NITI Aayog's Aspirational Districts Program : <https://www.niti.gov.in/aspirational-districts-programme>

MVP Identification and Key Features

The Minimum Viable Product (MVP) for the software will focus on delivering core functionalities that address the immediate needs of District Collectors, administrative staff, and citizens. Following the program's 3C framework (Convergence, Collaboration, and Competition), the MVP will include:

1. **Performance Dashboards:** Track real-time progress across 49 Key Performance Indicators (KPIs) in areas like health, education, agriculture, financial inclusion, and infrastructure.
2. **Grievance Redressal System:** Citizens can report issues and provide feedback, fostering transparency and participation.
3. **Task Management Tools:** Help staff coordinate projects efficiently, ensuring timely interventions and smooth execution of district initiatives.

Key Stakeholders and Engagement

Key stakeholders include:

1. **District Collectors and Administrative Staff:** They require tools for monitoring, reporting, and tracking performance to manage development efforts effectively.
2. **Citizens:** As end-users of services, they will engage with the platform to provide feedback, raise complaints, and stay informed about local progress.
3. **State and Central Government Officials:** They rely on performance analytics to guide policy-making and allocate resources.

Engaging these stakeholders through workshops, interviews, and pilot launches will ensure their needs are incorporated from the start, encouraging adoption and alignment with program goals.

Use Cases and Iterative Development

1. The software will address essential **use cases**, including:
2. **Monitoring District Performance:** District Collectors can generate reports on key metrics and share them with state authorities for review.

3. **Citizen Feedback and Grievance Resolution:** Citizens can log grievances and track their resolution status through the platform.
4. **Resource Allocation Requests:** Administrative staff can use data insights to request additional support, ensuring alignment with district objectives.

A modular, user-centric design will allow the software to evolve iteratively based on user feedback, ensuring long-term sustainability and alignment with NITI Aayog's mission of inclusive growth and competitive federalism.

Question 5

Strategy for Growing Jio's Internet of Things (IoT)

Business

To establish Jio as a leader in IoT, the strategy will leverage Jio's 5G infrastructure, affordable services, and partnerships to create value across industries. This approach focuses on market segmentation, product innovation, partnerships, flexible pricing, and customer engagement.

Target Verticals and Market Focus

Jio will prioritise high-growth sectors, including:

- **Smart Homes:** Offer home automation bundles (smart plugs, lights, security devices) with JioFiber.
- **Industrial IoT:** Provide predictive maintenance, energy monitoring, and fleet tracking for factories.
- **Smart Cities:** Collaborate with government initiatives under the Smart Cities Mission to deploy urban solutions like smart grids and traffic systems.
- **Agritech:** Introduce precision farming tools using real-time soil and weather sensors.
- **Healthcare:** Develop wearable devices and remote patient monitoring tools to enhance healthcare delivery.

Product Innovation and Platform Development

Jio's IoT products will integrate seamlessly with **cloud services**, **analytics tools**, and Jio's telecom network.

- **End-to-End IoT Platform:** Centralised platform for device management, data analytics, and cloud storage.
- **Plug-and-Play Devices:** Simple, modular kits for homes and SMEs to encourage adoption.
- **Developer Ecosystem:** Provide APIs and SDKs to startups and partners, fostering innovation on the Jio platform.

Partnerships and Ecosystem Growth

Jio will build strategic alliances with:

- **Device Manufacturers:** Co-develop IoT-enabled products like appliances and vehicles.
- **Governments:** Collaborate on public infrastructure projects like waste management and traffic monitoring.

- **Global Partners and Startups:** Engage startups through APIs, encouraging new solutions on the Jio IoT platform.

Pricing, Customer Engagement, and Scalability

Jio will adopt flexible pricing models to increase adoption:

- **Subscription-Based Plans:** IoT-as-a-Service with monthly fees for devices and platform access.
- **Pay-Per-Use:** Usage-based pricing for industries based on data consumption.
- **Bundled Offers:** Discounts on IoT devices with JioFiber subscriptions.

To promote IoT adoption, Jio will run workshops, free trials, and marketing campaigns targeting businesses and consumers. Scalability will be ensured through 5G networks, edge computing, and secure data frameworks to manage large device ecosystems efficiently.

Conclusion

Jio's IoT strategy will focus on targeted market penetration, product innovation, partnerships, and customer engagement. By building an IoT ecosystem aligned with India's Smart Cities and Digital India missions, Jio will unlock value across industries, ensuring long-term success and positioning itself as a leader in India's IoT landscape.