



“बेटी बचाओ, बेटी पढ़ाओ”

## **JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR**

### **Faculty of Law & Management**

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|-------------------------------|---|---|
| <b>Faculty Name</b>           | - | JV'n Divya Nagar (Lecturer)             |
| <b>Program</b>                | - | MBA 1 <sup>st</sup> Sem.                |
| <b>Course Name</b>            | - | Business Environment                    |
| <b>Session No. &amp; Name</b> | - | 1 (An overview on Business Environment) |

### **Introduction & Brief Discussion about the Topic**

#### **PRODUCT DEVELOPMENT**

#### **WHAT IS PRODUCT DEVELOPMENT?**

Product development refers to the process of creating, designing, and bringing a new product to market or enhancing an existing product to meet the changing needs and preferences of customers. It involves the entire lifecycle of a product, starting from the initial concept and ideation to the final launch and post-launch improvements. Product development is the process of creating new products or enhancing existing ones to meet customer needs and market demands. It involves transforming ideas into tangible, market-ready products through various stages of design, engineering, testing, and manufacturing.

#### **IMPORTANCE OF PRODUCT DEVELOPMENT:**

- 1. Meeting Customer Needs:** Product development ensures that products align with customer references and solve their problems effectively.

- 2. Competitive Advantage:** Innovative and well-developed products can provide a competitive edge in the market.
- 3. Revenue Growth:** Successful product development can lead to increased sales and revenue streams.
- 4. Market Expansion:** New product development allows companies to enter new markets and diversify their offerings.
- 5. Brand Loyalty:** Consistently delivering high-quality products can build strong brand loyalty among customers.

### **STAGES OF PRODUCT DEVELOPMENT:**

- 1. Idea Generation:** The process begins with generating ideas for new products or identifying opportunities for product improvements. Ideas can come from customers, employees, market research, or technological advancements.
- 2. Idea Screening:** Potential ideas are evaluated and filtered based on their feasibility, market potential, alignment with the company's strategy, and ability to meet customer needs.
- 3. Concept Development:** The most promising ideas are further developed into detailed product concepts. The team outlines the product's features, functionalities, and value proposition.
- 4. Design and Prototyping:** Detailed product designs and prototypes are created to visualize and test the product's form and functionality. Prototypes allow for feedback, iteration, and improvement before moving to production.
- 5. Testing and Validation:** The prototype is rigorously tested to ensure it meets performance, safety, and quality standards. User testing and feedback help refine the product further.

- 6. Manufacturing and Production:** Once the product design is finalized and validated, the manufacturing process is set up to produce the product at scale. Suppliers and production partners may be involved.
- 7. Market Testing:** A limited market launch or pilot run is conducted to gauge customer acceptance, gather feedback, and identify any issues that need addressing.
- 8. Commercialization:** The product is officially launched in the market, supported by marketing, sales, and distribution strategies.
- 9. Post-Launch Evaluation:** After the launch, continuous monitoring and evaluation of the product's performance, customer feedback, and market response are conducted.
- 10. Product Life Cycle Management:** As the product progresses through its life cycle, strategies for updates, improvements, extensions, or eventual discontinuation are planned.

## **PRODUCT DEVELOPMENT WITH EXAMPLE: ELECTRIC CAR**

Product development is the process of creating and bringing a new product to market, involving the various stages from ideation to commercialization. Let's explore the product development process using the example of an electric car.

### **Stage 1: Idea Generation**

In this stage, the idea of developing an electric car arises. Factors such as environmental concerns, rising fuel prices, and advances in battery technology drive the idea of creating an electric vehicle that offers eco-friendly transportation with reduced carbon emissions.

### **Stage 2: Idea Screening**

The concept of the electric car is evaluated based on market potential, technological feasibility, regulatory considerations, and customer demand. The

potential benefits of lower operating costs and reduced environmental impact make the idea promising.

### **Stage 3: Concept Development**

The concept of the electric car is further developed, specifying features like range, charging time, performance, safety features, and design elements. The team envisions a sleek, efficient electric vehicle with an impressive driving range and quick charging capabilities.

### **Stage 4: Design and Prototyping**

Detailed designs and engineering plans are created for the electric car. Prototypes are built to test the vehicle's performance, including battery efficiency, power output, handling, and safety. Engineers and designers iterate on the prototype to enhance the design and address any issues.

### **Stage 5: Testing and Validation**

The electric car prototype undergoes rigorous testing, including crash tests, environmental testing, and real-world driving scenarios. The team ensures that the vehicle meets safety standards, performs as expected, and meets customer requirements.

### **Stage 6: Manufacturing and Production**

Once the design is finalized and validated, the manufacturing process is set up to produce the electric car on a larger scale. Suppliers are sourced for components, and assembly lines are established to produce the vehicles efficiently.

### **Stage 7: Market Testing**

A limited number of electric cars are released in select markets for customer feedback and market testing. The company gathers data on customer acceptance, performance, and any potential issues.

### **Stage 8: Commercialization**

The electric car is officially launched in the market. The company initiates marketing campaigns to create awareness and promote the benefits of electric vehicles. Dealerships are established, and sales efforts are made to attract customers.

### **Stage 9: Post-Launch Evaluation**

After the launch, the company continuously monitors customer feedback, performance data, and market response. Any necessary updates or improvements are made based on this feedback to enhance the product and customer experience.

### **Stage 10: Product Life Cycle Management**

As the electric car gains popularity and matures in the market, the company may introduce newer models with improved features and technologies. They may also expand their electric vehicle lineup to offer different variants and cater to various customer segments.