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Hackathon = 3

Day1: Lying the foundation for your marketplace journey

Step=1 Choose your marketplace type:

General E-commerce

Step=2 Define Your Business Goals

• What problem does your marketplace aim to solve?

1. **Problem:** Customers are unable to find multiple categories of products on a single platform (e.g., clothing, electronics, groceries).

**Solution:** You create a general e-commerce platform that offers all types of products (multi-category) in one place, similar to Amazon, Flipkart, or Daraz.

2. **Problem:** Customers need fast delivery and flexible return/exchange policies.

**Solution:** You implement a system with fast shipping and customer-friendly return policies to enhance the user experience.

• Who is your target audience?

When it comes to general e-commerce, the target audience is quite broad because such platforms cater to a wide range of customers by providing products and services for everyone. However, creating a clear segmentation is essential to make marketing and operations more effective.

• What products or services will you offer?

How will you provide products or services on your e-commerce platform or marketplace that meet the needs of customers? This step defines the core offerings of the business and ensures that your platform is relevant and valuable.

EXAMPLE OF PRODUCT AND SERVICES BASED ON E-COMMERCE TYPE:

General E-commerce Platform:

PRODUCTS:

1.Fashion: Clothes, Shoes, Accessories.

2.Electronics Mobiles, Laptops, Gadgets.

SERVICES:

1.Easy return and exchange policies.

2.Discount offers and cashback.

• What will set your marketplace apart (e.g., speed, affordability, customization)?

Speed: Will your marketplace deliver products faster than competitors (e.g., within an hour)?

Reduce standard delivery and focus on 2-day delivery.  
 **Competitive Edge:** Flexible delivery options and timely service.

Affordability: Will your prices be lower or offer better value for money?

1.**Competitive Pricing:** Your prices should be lower than or equal to your competitors prices but with additional benefits.  
**Example:** Discounts, free delivery, or cashback offers.

**2.Value for Money:** Your focus should not only be on low prices but also on quality and customer experience.  
**Example:** High-quality products, reliable service, and easy return/exchange policies.

Step=3 Create a data Schema

Identify the Entities in Your Marketplace:

Identify the key components of your marketplace that interact with each other and form part of the platform's operations. These components are referred to as "entities" and are essential for understanding and implementing the business structure.

**Product:** The products or services available on the platform for sale or rent.

**Orders**: The record of transactions occurring between customers and the platform.

**Customers:** The marketplace's end-users who purchase or rent products.

**Delivery:** A system to manage the order delivery process efficiently.

**Payment:** The monetary exchanges that occur between customers and the platform.

Draw Relationships Between Entities:

Focus on Key Fields for Each Entity:

**1. Customer**

**Description:** The end-user purchasing or renting products.

* **Customer ID**: Unique identifier for each customer.
* **Name**: Full name of the customer.
* **Email**: Contact email for communication and notifications.
* **Phone Number**: For order updates and verification.
* **Address**: Delivery address, which can include multiple saved addresses.
* **Order History**: List of past orders placed by the customer.
* **Payment Methods**: Saved payment options (e.g., card, wallet, COD).
* **Loyalty Points/Rewards**: Optional, for customer retention.

**2. Order**

**Description:** Represents a transaction between the customer and the platform.

* **Order ID**: Unique identifier for the order.
* **Customer ID**: Links the order to the customer.
* **Product Details**: List of products in the order (ID, name, quantity).
* **Order Date**: Date and time the order was placed.
* **Payment Status**: Paid, Pending, Failed.
* **Shipment ID**: Links to the shipment entity.
* **Order Status**: Pending, Processed, Shipped, Delivered, Cancelled.

**3. Product**

**Description:** Items listed for sale or rent.

* **Product ID**: Unique identifier for the product.
* **Name**: Product name or title.
* **Description**: Detailed information about the product.
* **Price**: Cost per unit or rental fee.
* **Category**: Classification for easy search and filtering.
* **Stock Quantity**: Available inventory count.
* **Seller ID**: Links the product to the seller.
* **Ratings/Reviews**: Feedback from customers.
* **Images**: Product images for listing.

**4. Payment**

**Description:** Handles the financial transactions for orders.

* **Payment ID**: Unique identifier for the payment.
* **Order ID**: Links the payment to the order.
* **Payment Method**: Card, Wallet, COD, UPI.
* **Transaction Date**: Date and time of payment.
* **Amount**: Total payment amount.
* **Payment Status**: Paid, Pending, Failed.
* **Invoice**: Optional, for customer records

### ****5. Shipment****

**Description:** Tracks the physical movement of an order.

* **Shipment ID**: Unique identifier for the shipment.
* **Order ID**: Links the shipment to the order.
* **Courier Partner**: Name of the logistics provider.
* **Tracking Number**: Used for real-time tracking.
* **Shipment Status**: Pending, Dispatched, In Transit, Delivered, Returned.
* **Delivery Address**: Customer’s address.
* **Estimated Delivery Date**: Expected date of delivery.
* **Weight/Dimensions**: Package details for logistics.

**8. Delivery Agent**

**Description:** Responsible for the last-mile delivery.

* **Agent ID**: Unique identifier for the agent.
* **Name**: Full name of the delivery agent.
* **Phone Number**: For customer communication.
* **Assigned Shipments**: List of shipments assigned for delivery.
* **Status**: Available, On Duty, Off Duty.