Method for combining all E2/R diagrams

1. Identifying Common Points

Users:
All three platforms focus on user registration processes, roles (customer, seller, administrator), and user-specific information (name, email, account status).

Customer Functions:

- Placing orders, managing payment details, and tracking deliveries.
- Leaving reviews for products or sellers.
- Managing the product return process.

Seller Functions:

- Managing store information (name, address, business type).
- Adding and managing product details.

Administrator Functions:

- Overall system management, resolving support tickets, and inventory management.

Shared Systems:

- Support ticket management.

2. Identifying Differences

Amazon:

- Prime membership system and customer benefits.
- There is no favorites list because there is no favorite feature.Customers can create multiple shopping lists instead.
- Additional details are maintained for international products (country, customs fees, estimated delivery time).
- Users can leave reviews without placing an order.
- Direct messaging between customers and sellers.

Trendyol:

- Elite membership system and customer benefits.
- There is a list of favorites and you can also create collections.
- The ability to follow sellers.
- Customers can ask questions about a product to the seller.
- If they have placed an order they can leave reviews.

Hepsiburada:

- Premium membership system and customer benefits.
- There is a list of favorites and you can also create shopping lists.
- Products are categorized as local or international.
- The ability to follow sellers.
- Customers can ask questions about a product to the seller.
- Payments can be made via the Hepsipay wallet.
- If they have placed an order they can leave reviews.

3. COMBİNED EER DIAGRAM

Customer Functions:

- Placing orders, managing payment details, and tracking deliveries.
- Leaving reviews for products or sellers.
- Managing the product return process.

Seller Functions:

- Managing store information (name, address, business type).
- Adding and managing product details.

Administrator Functions:

- Overall system management, resolving support tickets, and inventory management.

Shared Systems:

- Support ticket management.

Amazon:

- Additional details are maintained for international products (country, customs fees, estimated delivery time).

Trendyol and Hepsiburada:

- There is a list of favorites and you can also create shopping lists.
- The ability to follow sellers.
- Customers can ask questions about a product to the seller.
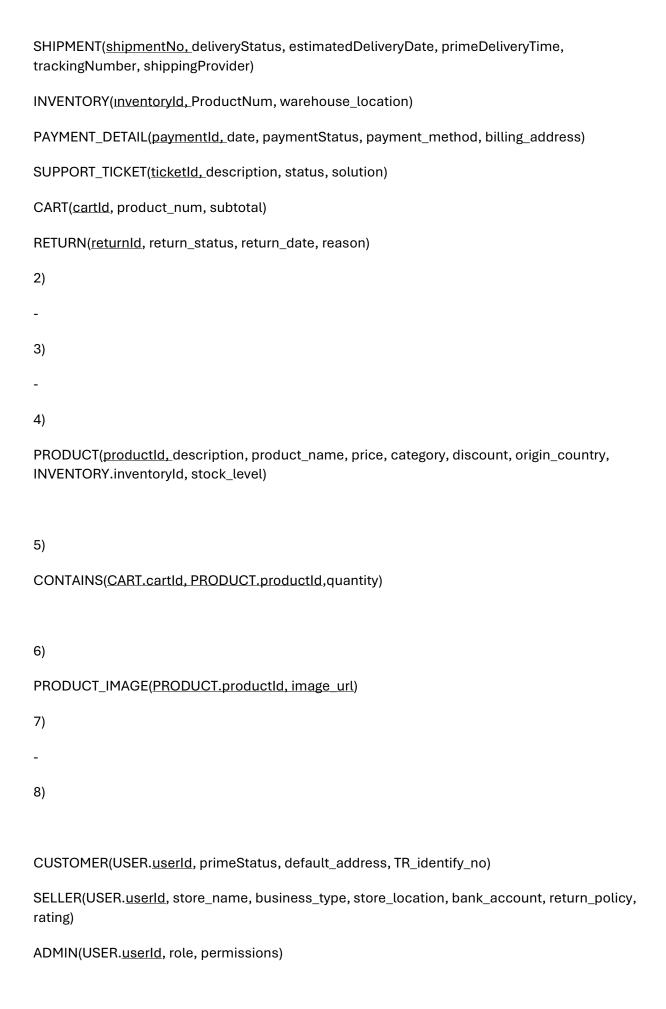- If they have placed an order they can leave reviews.

RELATİON MODEL

1.ITERATION

1)

USER(userId, name, e_mail, address, password, account_status, registration_date)

PRODUCT(productId, description, product_name, price, category, discount, origin_country)

SHIPMENT(shipmentNo, deliveryStatus, estimatedDeliveryDate, primeDeliveryTime, trackingNumber, shippingProvider)

INVENTORY(inventoryId, ProductNum, warehouse_location)

PAYMENT_DETAIL(paymentId, date, paymentStatus, payment_method, billing_address)

SUPPORT_TICKET(ticketId, description, status, solution)

CART(cartId, product_num, subtotal)

RETURN(returnId, return_status, return_date, reason)

2)

-

3)

-

4)

PRODUCT(productId, description, product_name, price, category, discount, origin_country, INVENTORY.inventoryId, stock_level)

5)

CONTAINS(CART.cartId, PRODUCT.productId, quantity)

6)

PRODUCT_IMAGE(PRODUCT.productId, image_url)

7)

-

8)

CUSTOMER(USER.userId, primeStatus, default_address, TR_identify_no)

SELLER(USER.userId, store_name, business_type, store_location, bank_account, return_policy, rating)

ADMIN(USER.userId, role, permissions)

INTERNATIONAL_PRODUCT(PRODUCT.productId,customsFee, currency, customsStatus, ShippingTime)

9)

TICKET_OWNER(ticket_ownerId)

CUSTOMER(userId, primeStatus, default_address, TR_identify_no,TICKET_OWNER.ticket_ownerId)

SELLER(userId, store_name, business_type, store_location, bank_account, return_policy, rating, TICKET_OWNER.ticket_ownerId)

ITERATION 2:

1) -

2)

ORDER(CUSTOMER.userId,PRODUCT.productId, order_date, shipping_adress,order_status)

SHOPPING_LIST(CUSTOMER.userId,PRODUCT.productId, list_name, privacy, is_default)

PRODUCT_QUESTION(CUSTOMER.userId,PRODUCT.productId, question_date, question, like_count,)

3)

RETURN(returnId, return_status, return_date, reason, ORDER.(CUSTOMER.userId, PRODUCT.productId, order_date))

CUSTOMER(user_id, primeStatus, default_address, TR_identify_no,TICKET_OWNER.ticket_ownerId, CART.cartId)

4)

PRODUCT(productId, description, product_name, price, category, discount, origin_country, inventoryId, stock_level,SELLER.userId)

SHIPMENT(shipmentNo, deliveryStatus, estimatedDeliveryDate, primeDeliveryTime, trackingNumber, shippingProvider, SELLER.userId)

ORDER(CUSTOMER.userId, PRODUCT.productId, order_date, shipping_adress,order_status, SHIPMENT.shipment_no)

PAYMENT_DETAIL(paymentId, date, paymentStatus, payment_method, billing_address,CUSTOMER.userId)

PRODUCT_QUESTION(<u>CUSTOMER.userId,PRODUCT.productId, question_date</u>, question, like_count,SELLER.userId, answer, answer_date)

INVENTORY(<u>ınventoryId,</u> ProductNum, warehouse_location, ADMIN.userId)

SUPPORT_TICKET(<u>ticketId,</u> description, status, solution, ADMIN.userId, TICKET_OWNER.ticket_ownerId)

5) FAVORITES(<u>CUSTOMER.userId, PRODUCT.productId</u>)

   FOLLOW(<u>CUSTOMER.userId,SELLER.userId</u>)

6) ADDRESS(<u>USER.userId, adress</u>)

7) -

8) DIAMOND_CUSTOMER(<u>CUSTOMER.userId</u>, membershipStartDate, membershipFee, diamondShipping, diamondDiscount)

9) -

3.ITERATION:

1) -

2) REVIEW(<u>ORDER.(CUSTOMER.userId, PRODUCT.productId, order_date), review_date</u>, rating, comment, like_count)

3) -

4) -

5) -

6) REVIEW_IMAGE(<u>REVIEW.ORDER.(CUSTOMER.userId, PRODUCT.productId, order_date), review_date, image_url</u>)

7) -

8) -

9) -