

Macy's Fulfill Online Order Process

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Agenda

- 1. Introduction**
- 2. Business process**
- 3. Issues in the as-is process**
- 4. Improvements and to-be process**
- 5. Design of our database - ER Diagram**
- 6. Sample SQL reports**

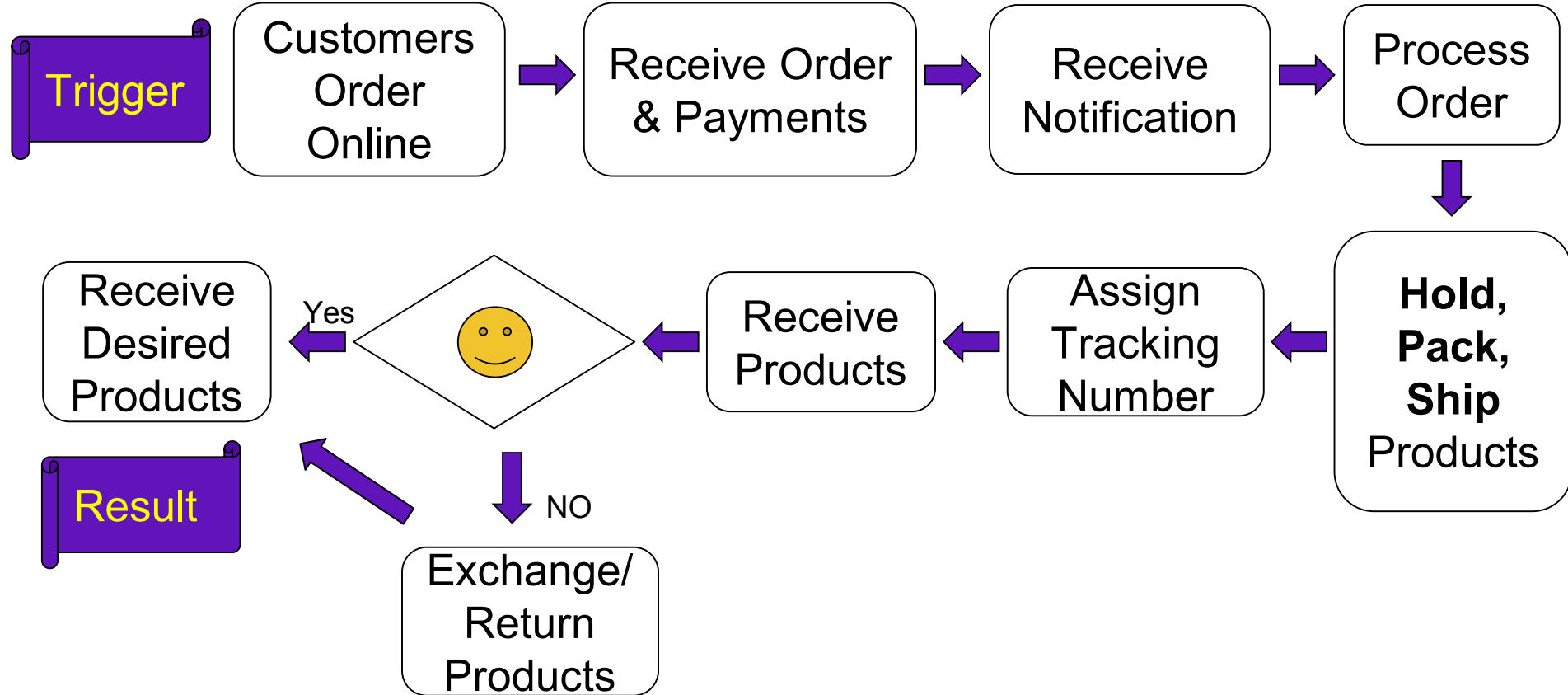
Company Description

- One of the most *excellent* retailers in US;
- 870 stores in 45 states;
- Essential part:

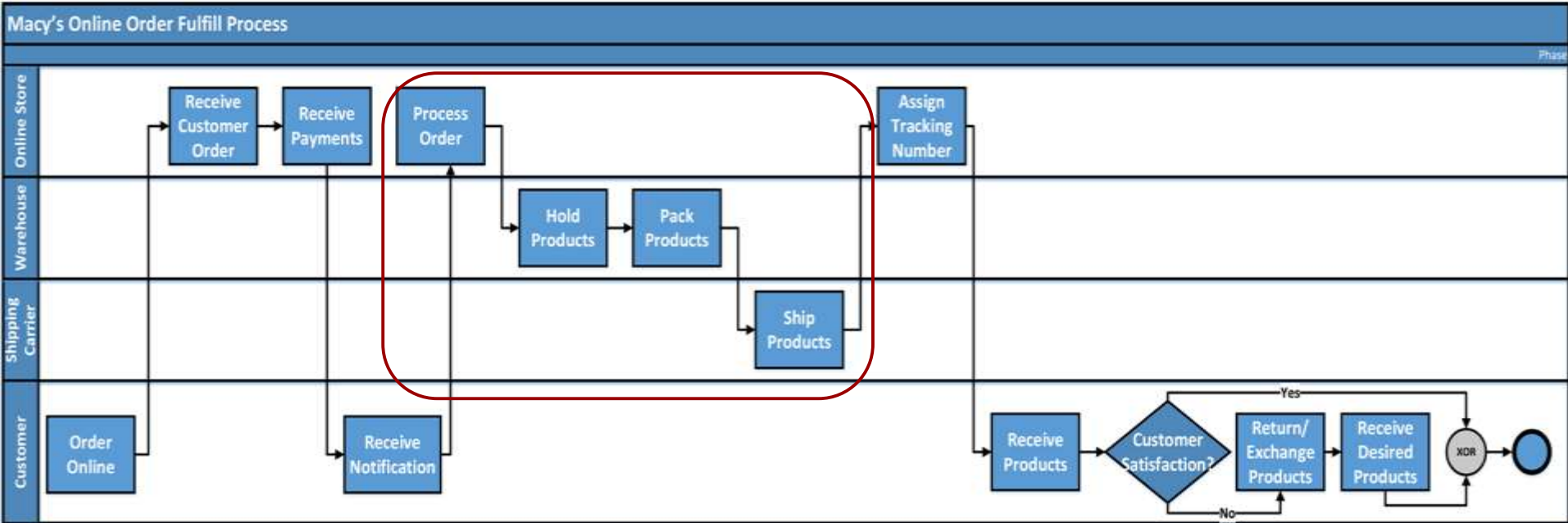
Fulfill Online Order process.



Macy's Fulfill Online Order Process

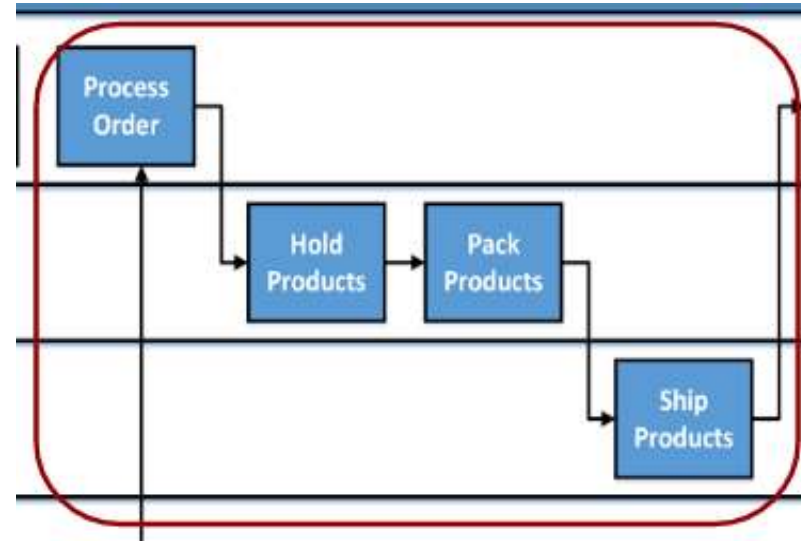


As-Is Process



Issues of AsIs Process

- Time delay
 - Process orders
 - Ship orders
- Inventory are not checked promptly
 - Should check automatically before customers place order



Improvements

- Improving Support Facilities:
 - Automatic Checking System to track inventory
- Changing the Workflow:
 - Pick up at the store



You're **\$2.20** away from
Free Shipping! [Exclusions Apply.](#)




your shopping bag

Bag ID: 6838-94811

Item availability and pricing are not guaranteed.

NEW! pick up in-store:

[select a store](#) to check availability in your area
what's this? 

item

delivery

price

qty.

total

customers also
loved

Availability

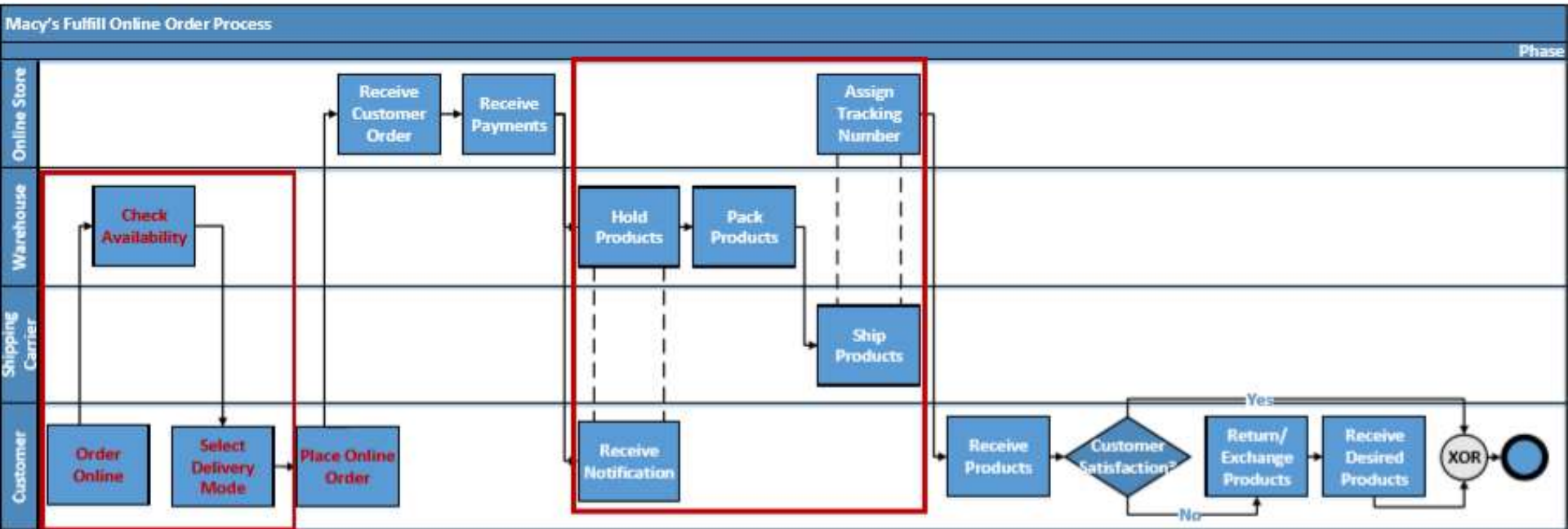


Ship
in stock

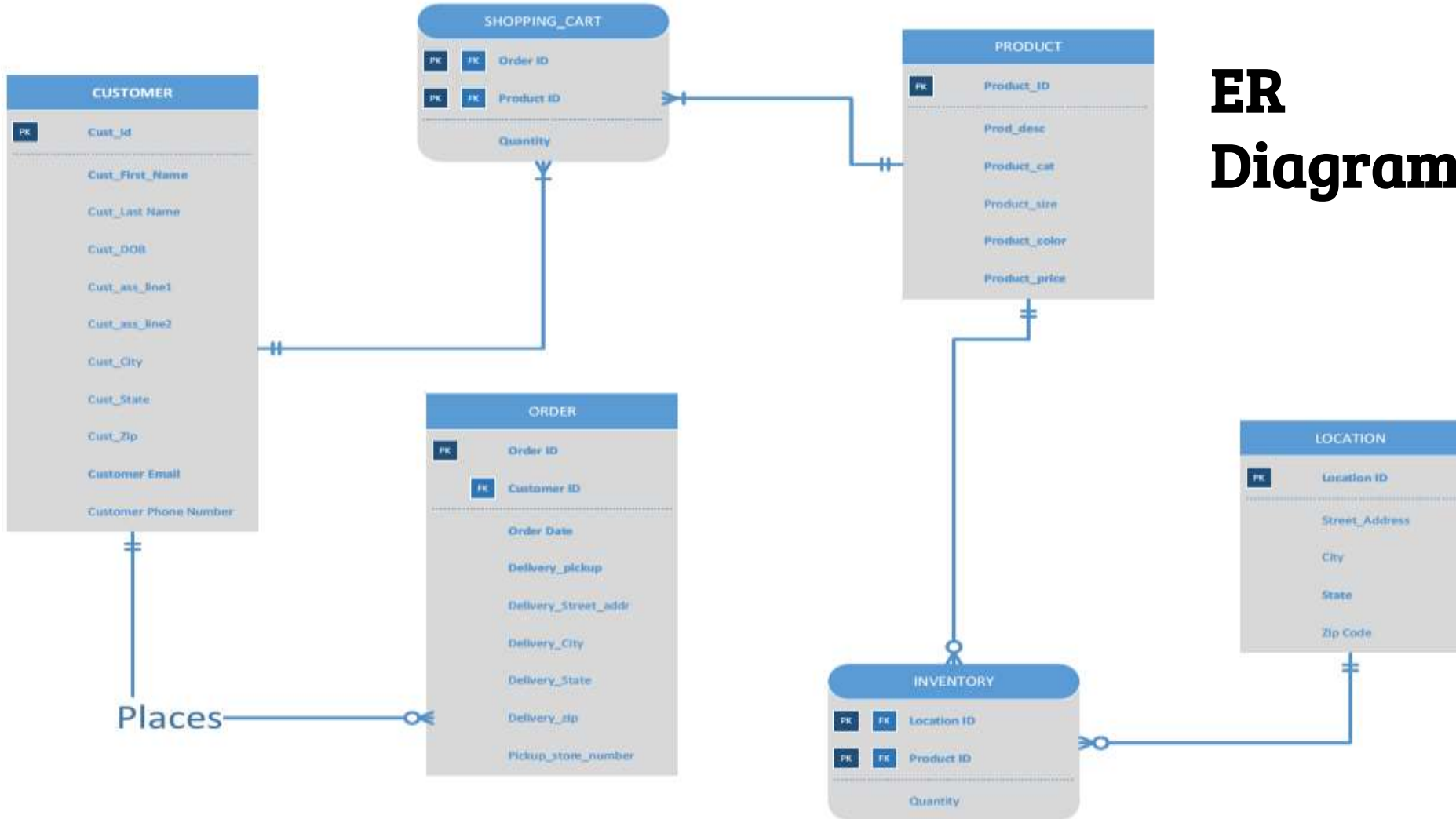


Pick up in store
[Check Store Availability](#)

To-Be Process



ER Diagram



SQL Reports

Revenue Obtained By the Two Methods



```
select o.DELIVERY_PICKUP, to_char(SUM(p.PRODUCT_PRICE), 'FM$99,999.00') Revenue
from orders o
JOIN shopping_cart sc
on o.order_id=sc.ORDER_ID
join product p
on p.product_id=sc.PRODUCT_ID
group by o.DELIVERY_PICKUP;
```

/*Finding the revenue obtained from both Pickup and delivery

	DELIVERY_PICKUP	REVENUE
1	Delivery	\$268.10
2	Pickup	\$194.23

How many customers choose delivery because of the unavailability of products for store pickup?

```
select o.cust_id,sc.PRODUCT_ID,o.order_id,lc.LOCATION_ID "Nearest Store",
iv.QUANTITY "Quantity at nearest store",sc.QUANTITY "Quantity ordered"
from orders o
join shopping_cart sc
on o.order_id=sc.ORDER_ID
join LOCATION_DETAILS lc
on upper(o.DELIVERY_CITY)=upper(lc.CITY)
JOIN inventory iv
on lc.LOCATION_ID=iv.LOCATION_ID
and sc.PRODUCT_ID=iv.PRODUCT_ID
where iv.QUANTITY<sc.quantity
and o.DELIVERY_PICKUP='Delivery';
```

	⚡ CUST_ID	⚡ PRODUCT_ID	⚡ ORDER_ID	⚡ Nearest Store	⚡ Quantity at nearest store	⚡ Quantity ordered
1	70029	2010654	01008	ST001	10	15

*Thank
you*

