

## Queries for Slide 1-

*Total orders:*

```
SELECT sum(orders)
FROM `dh-interview-case-study.logistics_service_product_analytics.orders`
```

*Total delays:*

```
SELECT count(distinct event_id)
FROM `dh-interview-case-study.logistics_service_product_analytics.events`
```

*Total vouchers:*

```
SELECT count(distinct voucher_id)
FROM `dh-interview-case-study.logistics_service_product_analytics.events`
```

*Data considerations for computing total survey responses:*

Refer to the 'DeliveryHero\_CaseStudy.ipynb'- ignored flags with multiple in either survey flag or event flag as per the assumption.

*Total survey responses:*

computed on excel 'country split' excel file, base for that data-

With basetable1 as

```
(
SELECT a.customer_id as customer,*
FROM `dh-interview-case-study.logistics_service_product_analytics.customer_suveys` as a
inner join `dh-interview-case-study.logistics_service_product_analytics.events` as b
on a.customer_id = b.customer_id and survey_response_ts > event_ts
where date(survey_response_ts) between date('2020-07-01') and date('2020-07-31') ),
```

```
basetable2 as (
SELECT customer,count(survey_id)
from basetable1
group by 1
having count(survey_id) =1),
```

basetable3 as (

```
select basetable2.customer,basetable1.survey_id
from basetable2
inner join basetable1
on basetable2.customer = basetable1.customer)
```

```
select c.customer,action_type,country,event_type,c.survey_id,survey_rating
from basetable1 as c
inner join basetable3 as d
on c.customer = d.customer and c.survey_id = d.survey_id
where DATE_DIFF(date(survey_response_ts), date(event_ts), DAY) between 0 and 5
```

*Total satisfactory responses:*

Computed through the country split excel file

## **For Slide 2-**

*For delay rate:*

used the below query and divided by total orders calculated by similar logic in orders table-

```
SELECT EXTRACT(WEEK FROM event_ts AT TIME ZONE "UTC") AS
the_week_utc,count(distinct event_id)
FROM `dh-interview-case-study.logistics_service_product_analytics.events`
group by 1
order by 1
```

*For voucher provision rate:*

```
SELECT EXTRACT(WEEK FROM event_ts AT TIME ZONE "UTC") AS
the_week_utc,count(distinct voucher_id)/count(distinct event_id)
FROM `dh-interview-case-study.logistics_service_product_analytics.events`
group by 1
order by 1
```

### **For Slide 3-**

Refer 'country split' excel file for calculations related to the table on this slide

Refer the 'Excel file for Wow-cher' file for calculations related to the hypothesis test

### **For Slide 4-**

Refer to the 'country split' excel file

### **For Slide 5-**

Refer to the 'customer value index split' excel file, base for the data-

With basetable1 as

```
(  
SELECT a.customer_id as customer,*  
FROM `dh-interview-case-study.logistics_service_product_analytics.customer_suveys` as a  
inner join `dh-interview-case-study.logistics_service_product_analytics.events` as b  
on a.customer_id = b.customer_id and survey_response_ts > event_ts  
where date(survey_response_ts) between date('2020-07-01') and date('2020-07-31') ),
```

basetable2 as (

```
SELECT customer,count(survey_id)  
from basetable1  
group by 1  
having count(survey_id) =1),
```

basetable3 as (

```
select basetable2.customer,basetable1.survey_id  
from basetable2  
inner join basetable1  
on basetable2.customer = basetable1.customer)
```

```
select c.customer,action_type,customer_value_index,event_type,c.survey_id,survey_rating  
from basetable1 as c  
inner join basetable3 as d  
on c.customer = d.customer and c.survey_id = d.survey_id  
where DATE_DIFF(date(survey_response_ts), date(event_ts), DAY) between 0 and 5  
and customer_value_index != -1
```

