# Some of the main queries we used to implement the data base – ADMT Farzad and Frida

INSERT INTO public.originalnewspaper(

day2digits, month2digits, year4digits, weekdaywholestring,

holidayboolean, weeknumber, quarter, printinghouse, printingcost,

pstreetaddress, phousenumber, pdistrict, pcity, pcountry,

productioncost, sstreetaddress, shousenumber, sdistrict,

scity, scountry, shippingcost, shippedbyplaneboattrain)

VALUES (04, 10, 2017, wednesday,

false, 40, 4, nordlys, ,

?, ?, ?, ?, ?,

?, ?, ?, ?, ?,

?, ?, ?);

INSERT INTO public.fact\_newspapersales(

date, printing, productioncost, store, shipping, quantity, priceperpaper)

(SELECT datenew.dateid, printing.printingid, productioncost.productioncostid, store.storeid, shipping.shippingid,

originalnewspaper.quantity, originalnewspaper.priceperpaper

FROM originalnewspaper JOIN datenew ON datenew.day = originalnewspaper.day2digits and

datenew.month=originalnewspaper.month2digits and datenew.year=originalnewspaper.year4digits

JOIN printing ON printing.printinghouse=originalnewspaper.printinghouse

JOIN productioncost ON productioncost.productioncost=originalnewspaper.productioncost

JOIN store ON store.streetaddress=originalnewspaper.sstreetaddress

JOIN shipping ON shipping.shippingcost=originalnewspaper.shippingcost

and shipping.shippedbyplaneboattraincar=originalnewspaper.shippedbyplaneboattraincar

group by datenew.dateid, printing.printingid, productioncost.productioncostid,

store.storeid, shipping.shippingid, originalnewspaper.quantity, originalnewspaper.priceperpaper)

select count(\*)

from datenew

create table datenewnew as (

select distinct on (day,month,year) \* from datenew)

1. select distinct on (day,month,year) \* from datenew
2. create table datenewnew as (

select distinct on (day,month,year) \* from datenew)

1. delete from datenew
2. insert into datenew select \* from datenewnew
3. drop table datenewnew

table datenew

delete from datenew

select \*

from datenew

order by day, month, year

select count(\*)

FROM originalnewspaper JOIN datenew ON datenew.day = originalnewspaper.day2digits and

datenew.month=originalnewspaper.month2digits and datenew.year=originalnewspaper.year4digits

drop table datenewnew

Select count(\*)

FROM originalnewspaper JOIN datenew ON datenew.day = originalnewspaper.day2digits and

datenew.month=originalnewspaper.month2digits and datenew.year=originalnewspaper.year4digits

JOIN printing ON printing.printinghouse=originalnewspaper.printinghouse

JOIN productioncost ON productioncost.productioncost=originalnewspaper.productioncost

JOIN store ON store.streetaddress=originalnewspaper.sstreetaddress

JOIN shipping ON shipping.shippingcost=originalnewspaper.shippingcost

and shipping.shippedbyplaneboattraincar=originalnewspaper.shippedbyplaneboattraincar

create table printingnew as (select distinct on (printinghouse, printingcost) \* from printing)

delete from printing

insert into printing select \* from printingnew

drop table printingnew

INSERT INTO public.fact\_onlinesub(

time, subscriber, typeofsubscription,date,discount,duration,price)

(SELECT timedim.timeid, subscriber.subscriberid, subscriptiontype.subscriptionid, datenew.dateid,

originalsubscriptionregister.discount, originalsubscriptionregister.lengthofsubscriptioninmonths,

originalsubscriptionregister.discountinteger

FROM originalsubscriptionregister

JOIN timedim ON dim.hours = originalsubscriptionregister.hour and

timedim.minutes=originalsubscriptionregister.minute

JOIN subscriber ON subscriber.firstname=originalsubscriptionregister.firstname and

ON subscriber.surname=originalsubscriptionregister.surname

JOIN subscriptiontype ON subscriptiontype.bundle=originalsubscriptionregister.bundle

JOIN datenew ON datenew.day = originalsubscriptionregister.day and

datenew.month=originalsubscriptionregister.month and

datenew.year=originalsubscriptionregister.year)

create table subscriptiontypenew as (select distinct on (bundle) \* from subscriptiontype)

delete from subscriptiontype

insert into subscriptiontype select \* from subscriptiontypenew

drop table subscriptiontypenew

select count (\*)

FROM originalsubscriptionregister

JOIN timedim ON timedim.hours = originalsubscriptionregister.fromhour and

timedim.minutes=originalsubscriptionregister.fromminute

JOIN subscriber ON subscriber.firstname=originalsubscriptionregister.firstname and

subscriber.surname=originalsubscriptionregister.surname

JOIN subscriptiontype ON subscriptiontype.bundle=originalsubscriptionregister.bundlestudentornormal

JOIN datenew ON datenew.day = originalsubscriptionregister.fromday and

datenew.month=originalsubscriptionregister.frommonth and

datenew.year=originalsubscriptionregister.fromyear4digits

INSERT INTO public.fact\_onlinesub(

time, subscriber, typeofsubscription,date,discount,duration,price)

(SELECT timedim.timeid, subscriber.subscriberid, subscriptiontype.subscriptionid, datenew.dateid,

originalsubscriptionregister.discountinteger, originalsubscriptionregister.lengthofsubscriptioninmonths,

originalsubscriptionregister.priceinteger

FROM originalsubscriptionregister

JOIN timedim ON timedim.hours = originalsubscriptionregister.fromhour and

timedim.minutes=originalsubscriptionregister.fromminute

JOIN subscriber ON subscriber.firstname=originalsubscriptionregister.firstname and

subscriber.surname=originalsubscriptionregister.surname

JOIN subscriptiontype ON subscriptiontype.bundle=originalsubscriptionregister.bundlestudentornormal

JOIN datenew ON datenew.day = originalsubscriptionregister.fromday and

datenew.month=originalsubscriptionregister.frommonth and

datenew.year=originalsubscriptionregister.fromyear4digits)

**Implementing address id for the subscriber (after adding an addressid-column + inserting the customer addresses into the address dimension).**

UPDATE public.subscriber

SET addressid=address.id

FROM address

WHERE subscriber.street=address.street and subscriber.housenumber=address.houseno;

select printing.printinghouse,

SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper) AS "Revenue",

SUM(shipping.costs) AS "Shipping costs",

SUM(printing.costs) AS "Printing costs",

SUM(production.costs) AS "Production costs",

SUM(shipping.costs+printing.costs+production.costs) AS "Total\_costs",

SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper

-shipping.costs

-printing.costs

-production.costs) AS "Surplus in 2017"

FROM printing, fact\_newspapersales, date, production, shipping

WHERE fact\_newspapersales.printing = printing.id and

fact\_newspapersales.production = production.id and

fact\_newspapersales.shipping = shipping.id and

fact\_newspapersales.date=date.id and

date.year=2017

GROUP BY printing.printinghouse

ORDER BY "Surplus in 2017" DESC

SELECT date.day AS "Day in October 2017",

shipping.method AS "Shipping method",

address.city AS "Printing House Location City",

address2.city AS "Store Location City",

SUM(fact\_newspapersales.quantity) AS "Total quantity shipped",

sum(shipping.costs) as "Shipping costs"

FROM fact\_newspapersales, date, shipping, address, store, printing, address AS address2

WHERE fact\_newspapersales.shipping=shipping.id and

fact\_newspapersales.date=date.id and

fact\_newspapersales.store=store.id and

fact\_newspapersales.printing=printing.id and

store.addressid=address.id and

printing.addressid=address2.id and

date.year=2017 and date.month=10 and

address.country = 'norway'

GROUP BY shipping.method,

GROUPING SETS ((date.day), (address.city, address2.city))

ORDER BY date.day

## RANKING AFTER SURPLUS PER PRINTING HOUSE

SELECT date.month AS "Month in October 2017",

printing.printinghouse AS "Printing house",

SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper) AS "Revenue",

SUM(shipping.costs+production.costs+printing.costs) AS "Total costs",

SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper

-(shipping.costs+production.costs+printing.costs)) AS "Surplus",

RANK() OVER (ORDER BY SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper

-(shipping.costs+production.costs+printing.costs)) DESC)

FROM fact\_newspapersales, date, shipping, printing, production

WHERE fact\_newspapersales.shipping=shipping.id and

fact\_newspapersales.date=date.id and

fact\_newspapersales.production=production.id and

fact\_newspapersales.printing=printing.id and

date.year=2017

GROUP BY printing.printinghouse, date.month

# WINDOW: How was the printing papers surplus compared to the average surplus for all the printed newspapers in 2017?

SELECT printing.printinghouse AS "Printing house",

SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper) AS "Revenue",

SUM(shipping.costs+production.costs+printing.costs) AS "Total costs",

SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper

-(shipping.costs+production.costs+printing.costs)) AS "Surplus",

AVG(SUM(fact\_newspapersales.quantity\*fact\_newspapersales.priceperpaper

-(shipping.costs+production.costs+printing.costs)))

OVER ()

FROM fact\_newspapersales, date, shipping, printing, production

WHERE fact\_newspapersales.shipping=shipping.id and

fact\_newspapersales.date=date.id and

fact\_newspapersales.production=production.id and

fact\_newspapersales.printing=printing.id and

date.year=2017

GROUP BY printing.printinghouse

# Period-to-period: How many new online subscribers did the company gain compared to the last term that sold >0?

SELECT date.year, date.quarter,

count(\*) AS "New Subscribers",

LAG(count(\*),1) OVER (ORDER BY date.year, date.quarter) as "Last active quarter"

FROM date, fact\_onlinesub

WHERE fact\_onlinesub.date = date.id

GROUP BY date.year, date.quarter

ORDER BY date.year, date.quarter

SELECT printing.printinghouse, store.name, date.weekday,

CASE WHEN GROUPING(date.holiday)=1 THEN 'true' ELSE date.holiday END AS "Sunday?"

FROM fact\_newspapersales, printing, date, store

WHERE fact\_newspapersales.printing=printing.id AND

fact\_newspapersales.date=date.id AND

fact\_newspapersales.store=store.id

GROUP BY printing.printinghouse, store.name,date.weekday, holiday