Задача: необходимо составить дашборд для отдела продаж онлайн магазина: вывести основные показатели (KPI), которые позволили бы понимать текущее состояние бизнеса в целом и в разных странах, а также динамику наиболее важных метрик.

Основные метрики: выручка, MAU, количество заказов, средний чек. **Срезы:** товары, страны.

Ссылка на дашборд:

http://redash.lab.karpov.courses/public/dashboards/DYuD40wTS0Vj2W0GFvlxiRP3lt1JZEEYkGlifBH8?org_slug=default

default.retail – данные о транзакциях британского интернет-магазина в период с 1 декабря 2010 по 9 декабря 2011, где:

- InvoiceNo номер транзакции
- StockCode код товара
- Description описание товара
- Quantity количество единиц товара, добавленных в заказ
- InvoiceDate дата транзакции
- UnitPrice цена за единицу товара
- CustomerID id клиента
- Country страна, где проживает клиент

Запросы, которые были сделаны для реализации:

Запрос	График
SELECT	Товары, которые
I.StockCode,	возвращали чаще
I.Description,	остальных
r.refund_count_order,	
l.sent_count_order,	
r.refund_count_order / I.sent_count_order * 100 as	
res_refund_count_order,	
r.refund_SUM_Quantity / I.sent_SUM_Quantity * (-100)	
as res_refund_SUM_Quantity,	
r.refund_SUM_Prise / I.sent_SUM_Prise * (-100) as	
res_refund_SUM_Prise	
FROM	
(SELECT	
StockCode,	
any(Description) as Description,	
COUNT(InvoiceNo) as sent_count_order,	
SUM(Quantity) as sent_SUM_Quantity,	
SUM(TotalPrice) as sent_SUM_Prise	
FROM	
(SELECT	
StockCode,	
InvoiceNo,	
Description,	
Quantity,	
(Quantity * UnitPrice) AS TotalPrice	
FROM	
default.retail	

WHERE Quantity > 0)	
GROUP BY	
StockCode) as I	
LEFT JOIN	
возвраты	
(SELECT	
StockCode,	
COUNT(DISTINCT InvoiceNo) as	
refund_count_order,	
SUM(Quantity) as refund_SUM_Quantity,	
SUM(TotalPrice) as refund_SUM_Prise	
FROM	
(SELECT	
StockCode,	
InvoiceNo,	
Quantity,	
(Quantity * UnitPrice) AS TotalPrice	
FROM	
default.retail	
WHERE Quantity < 0)	
GROUP BY	
StockCode) AS r	
ON I.StockCode = r.StockCode	
WHERE I.sent_count_order >= 12	
ORDER BY res_refund_count_order DESC	
LIMIT 10	
SELECT	Построение фактоидов
SUM(Quantity * UnitPrice) AS revenue,	
uniqExact(CustomerID) AS uniq_users,	
SUM(Quantity) AS products_sold,	
uniqExact(Country) AS uniq_country,	
min(InvoiceDate),	
max(InvoiceDate)	
FROM	
default.retail	
SELECT	Выручка
month,	Выру іка
SUM(TotalPrice) AS revenue	
FROM	
(SELECT	
toStartOfMonth(InvoiceDate) AS month,	
Quantity * UnitPrice AS TotalPrice,	
if(Quantity > 0, Quantity * UnitPrice, null) AS Order,	
if(Quantity < 0, Quantity * UnitPrice, null) AS Refund	
FROM	
default.retail	
WHERE InvoiceDate < '2011-12-01')	
GROUP BY month	
SELECT	Количество заказов
toStartOfMonth(InvoiceDate) AS month,	
uniqExact(InvoiceNo) AS quantity_orders,	
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FROM	

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(SELECT	
toStartOfMonth(InvoiceDate) AS month,	
InvoiceNo,	
SUM(Quantity * UnitPrice) as TotalPrice	
FROM	
default.retail	
WHERE InvoiceDate < '2011-12-01' and Quantity > 0	
GROUP BY month, InvoiceNo)	
GROUP BY month	N/
SELECT	Уникальные
toStartOfMonth(InvoiceDate) AS month,	пользователи
uniqExact(CustomerID) AS unique_buyers	
FROM	
default.retail	
WHERE InvoiceDate < '2011-12-01'	
GROUP BY month	
SELECT	Средняя стоимость
month,	заказов
AVG(TotalPrice) AS average_check	
FROM	
(SELECT	
toStartOfMonth(InvoiceDate) AS month,	
InvoiceNo,	
SUM(Quantity * UnitPrice) as TotalPrice	
FROM	
default.retail	
WHERE Quantity > 0	
GROUP BY month, InvoiceNo)	
GROUP BY month	
SELECT	Топ стран для круговой
Country,	диаграммы
RevenueFromCountry,	
CASE	
WHEN RevenueFromCountry > 50000 THEN Country	
ELSE 'RevenueFromCountry < 50 000'	
END AS profit_groups	
FROM	
(SELECT	
Country,	
SUM(Quantity * UnitPrice) as RevenueFromCountry	
FROM	
default.retail	
GROUP BY Country)	T
SELECT	Топ стран
Country,	
RevenueFromCountry	
FROM	
(SELECT	
Country,	
SUM(Quantity * UnitPrice) as RevenueFromCountry	
FROM	
default.retail	

GROUP BY Country)	
ORDER BY RevenueFromCountry DESC	
LIMIT 10	
SELECT	Антирейтинг
Country,	
RevenueFromCountry	
FROM	
(SELECT	
Country,	
SUM(Quantity * UnitPrice) as RevenueFromCountry	
FROM	
default.retail	
GROUP BY Country)	
ORDER BY RevenueFromCountry	
LIMIT 10	
SELECT	ТОП товаров
StockCode,	
COUNT(InvoiceNo) as count_order,	
any(CustomerID) AS CustomerID,	
any(Description) as Description,	
any(UnitPrice) UnitPrice,	
SUM(Quantity) as SUM_Quantity,	
SUM(TotalPrice) as SUM_Prise	
FROM	
(SELECT	
StockCode,	
CustomerID,	
InvoiceNo,	
Description,	
Quantity,	
UnitPrice,	
(Quantity * UnitPrice) AS TotalPrice	
FROM	
default.retail)	
GROUP BY	
StockCode Stock Process Proces	
ORDER BY SUM_Prise DESC	
LIMIT 10	