Data Metrics

How many stores does the business have and in which countries?

```
SELECT country_code, COUNT(*) FROM dim_store_details
GROUP BY country_code;
```

country_code	**count**
GB	265
DE	141
US	34

Which locations currently have the most stores?

```
SELECT locality, COUNT(*) FROM dim_store_details
GROUP BY locality
ORDER BY count DESC;
```

locality	**count**
Chapeltown	14
Belper	13
Bushey	12
Exeter	11
Rutherglen	10
High Wycombe	10

Which months typically have the most sales (£)?

```
WITH product_sales_per_month AS
(
SELECT dim_products.product_price, orders_table.product_quantity,
dim_date_times.month
FROM orders_table
INNER JOIN dim_date_times ON orders_table.date_uuid =
dim_date_times.date_uuid
INNER JOIN dim_products ON orders_table.product_code =
dim_products.product_code
)

SELECT ROUND(SUM(product_price * product_quantity)::decimal, 2) as
total_price, month FROM monthly_product_sales GROUP BY month ORDER BY
total_price DESC;
```

total_price	month
669813.29	8
664488.19	1
653889.52	10
646971.12	5
642903.86	7
642131.12	3
632246.36	12
631720.61	6
631153.34	9
628057.64	11
626981.91	4
613206.80	2

How many sales are coming from online (vs. offline)?

```
SELECT SUM(count) as number_of_sales, SUM(sum) as product_quantity_count,
location
FROM
(SELECT COUNT(index), SUM(product_quantity), store_type,
CASE
WHEN store_type<>'Web Portal' THEN 'Offline'
WHEN store_type='Web Portal' THEN 'Web'
END AS location
From sales_store_type
GROUP BY store_type)
AS subquery
GROUP BY location;
```

number_of_sales	product_quantity_count	location
93166	374047	Offline
26957	107739	Web

What percentage of sales come through each type of store?

```
WITH product_details AS(
SELECT dim_store_details.store_type, dim_products.product_price,
orders_table.product_quantity
FROM orders_table
INNER JOIN dim_store_details ON orders_table.store_code =
dim_store_details.store_code
INNER JOIN dim_products ON orders_table.product_code =
dim_products.product_code
),
cte2 AS(
      SELECT store_type, ROUND(SUM(product_price * product_quantity)) AS
total_sales
      FROM cte1
      GROUP BY store_type
      )
SELECT store_type, total_sales, ROUND(total_sales * 100 / (SELECT
SUM(total_sales) FROM cte2)) AS percentage_total
FROM cte2
GROUP BY store_type, total_sales
ORDER BY percentage_total DESC;
```

store_type	total_sales	percentage_total
Local	3422619	45
Web Portal	1717965	22
Super Store	1218588	16
Mall Kiosk	695321	9
Outlet	629071	8

Which month in each year produced the most sales?

```
SELECT ROUND(SUM(product_price * product_quantity)) as total_sales, year,
month
FROM
(SELECT dim_products.product_price, orders_table.product_quantity,
dim_date_times.year, dim_date_times.month FROM orders_table
INNER JOIN dim_date_times ON orders_table.date_uuid =
dim_date_times.date_uuid
INNER JOIN dim_products ON orders_table.product_code =
dim_products.product_code)
AS subquery
GROUP BY year, month
ORDER BY total_sales DESC;
```

total_sales	year	month
27883	1994	3
27167	2019	1
27029	2009	8
26621	1997	11
26311	2018	12
26171	2017	9
26151	2019	8
25766	2010	5
25594	2000	1
25514	1996	8

What is our staff headcount in each location around the world?

```
SELECT SUM(staff_numbers) as total_staff_numbers, country_code
FROM
(SELECT staff_numbers, country_code FROM dim_store_details)
AS subquery
GROUP BY country_code
ORDER BY total_staff_numbers DESC;
```

total_staff_numbers	country_code
12807	GB
6054	DE
1304	US

Which German store type is selling the most?

```
SELECT COUNT(index) as total_sales, store_type, country_code
FROM
(SELECT dim_store_details.store_type, dim_store_details.country_code,
orders_table.index
FROM orders_table
INNER JOIN dim_store_details ON dim_store_details.store_code =
orders_table.store_code
WHERE country_code='DE')
AS subquery

GROUP BY country_code, store_type;
```

total_sales	store_type	country_code
3048	Outlet	DE
5756	Super Store	DE
17363	Local	DE
3817	Mall Kiosk	DE

How quickly is the company making sales?

```
WITH cte1 AS
(
SELECT year, CAST(CONCAT(year, '-', month, '-', day, ' ', timestamp) AS
timestamp) AS datetime
FROM dim_date_times
      ),
cte2 AS
(
      SELECT year, datetime,
LEAD (datetime, 1) OVER (ORDER BY datetime ASC) AS next_sale_time
FROM cte1
      ),
cte3 AS
(
      SELECT year, next_sale_time - datetime AS time_diff
FROM cte2
      )
SELECT year, AVG(time_diff) as actual_time_taken
FROM cte3
GROUP BY year
ORDER BY actual_time_taken DESC;
```

year	actual_time_taken
2013	02:17:15.655442
1993	02:15:40.129515
2002	02:13:49.478228
2008	02:13:03.532442
2022	02:13:02.003698
1995	02:12:59.084514
2016	02:12:58.099167
2011	02:12:29.826536
2020	02:12:10.518667
2021	02:11:48.370733