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 (£)?

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

total_price	month
669813	8
664488	1
653890	10
646971	5
642904	7
642131	3
632246	12
631721	6
631153	9
628058	11
626982	4
613207	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?

```
SELECT store_type, total_sales, ROUND(total_sales * 100 / (SELECT sum(total_sales) from total_sales_store_type)) AS percentage_total FROM total_sales_store_type

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