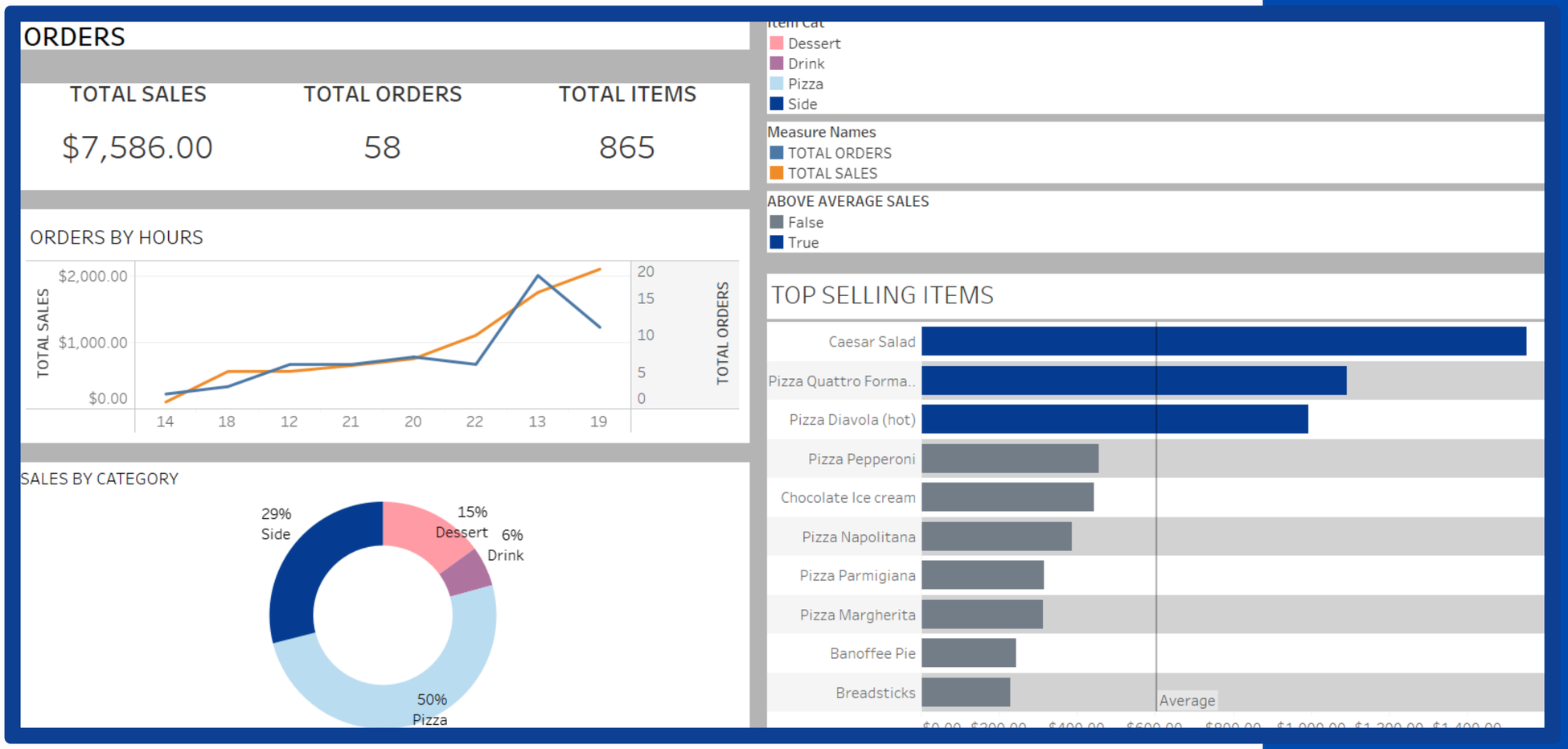
# BEN'S PIZZA

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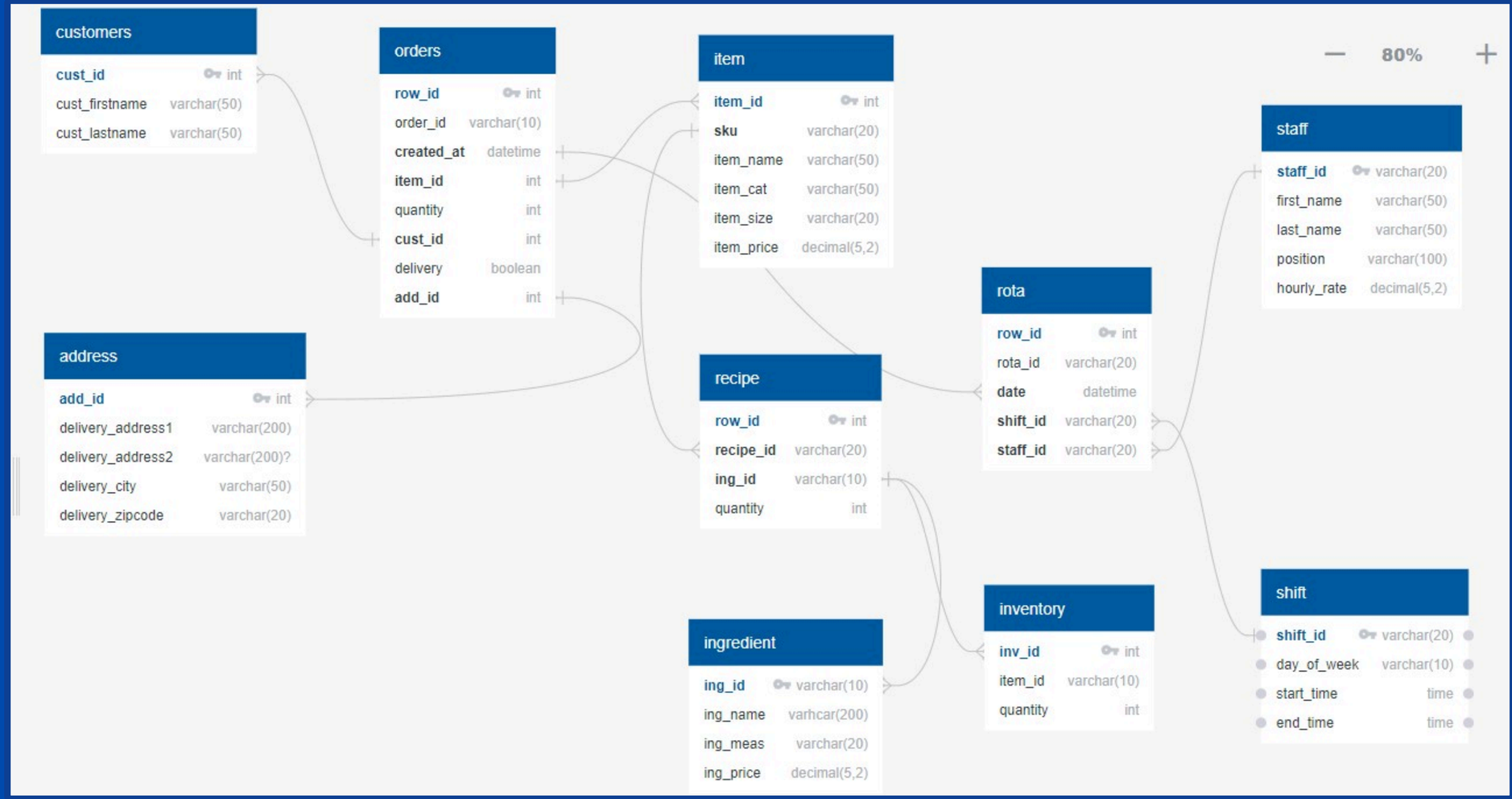
# Projects Focus

- Database Design
- SQL Queries
- Visualization
- Insights

# Database Design

The project utilizes QuickDBD, a database design tool, to construct a graphical depiction of the database schema.



# SQL Queries

**Dashboard 1: Order and sales insights.**

The project entails crafting bespoke SQL queries to extract and manipulate data stored in the database, leveraging MySQL. These SQL queries are instrumental in fetching specific data, applying filters, and conducting various calculations as needed.

```
SELECT
o.order_id,
i.item_price,
o.quantity,
i.item_cat,
i.item_name,
o.created_at,
a.delivery_address1,
a.delivery_address2,
a.delivery_city,
a.delivery_zipcode,
o.delivery
FROM orders o
LEFT JOIN item i on o.item_id = i.item_id
LEFT JOIN address a on o.add_id = a.add_id;
```

# SQL Queries

**Dashboard 2: Ingredient Insights and Cost Analysis**

The subsequent dashboard delves into granular ingredient insights, focusing on costs and inventory control. It dissects total ingredient quantities, associated costs, computed pizza expenses, and the percentage of remaining stock for each ingredient.

```
select
s1.item_name,
s1.ing_id,
s1.ing_name,
s1.ing_weight,
s1.ing_price,
s1.order_quantity,
s1.recipe_quantity,
s1.order_quantity*s1.recipe_quantity as ordered_weight,
s1.ing_price/s1.ing_weight as unit_cost,
(s1.order_quantity*s1.recipe_quantity)*(s1.ing_price/s1.ing_weight) as ingredient_
from
 (select
o.item_id,
i.sku,
i.item_name,
r.ing_id,
r.quantity as recipe_quantity,
ing.ing_name,
sum(o.quantity) as order_quantity,
ing.ing_weight,
ing.ing_price
from orders o
left join item i on o.item_id = i.item_id
left join recipe r on i.sku = r.recipe_id
LEFT JOIN ingredient ing on ing.ing_id = r.ing_id
group by
```

# SQL Queries

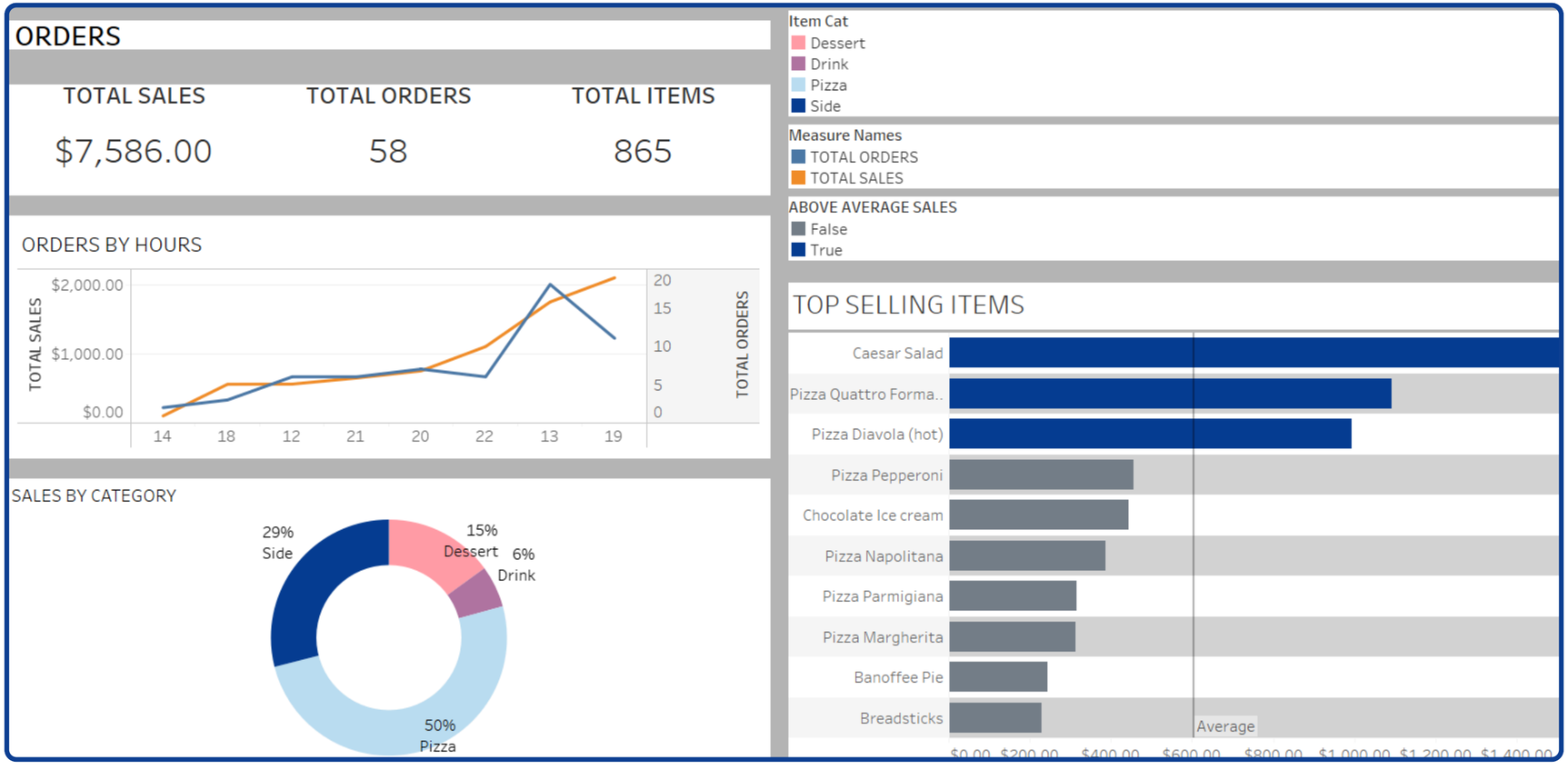
**Dashboard 3: Staffing and Cost Management**

The concluding query centers on staffing insights, highlighting total labor expenses, hours logged, and a summary of staff details.

```
select
r.date,
s.first_name,
s.last_name,
s.hourly_rate,
sh.start_time,
sh.end_time,
(TIME_TO_SEC(TIMEDIFF(sh.end_time, sh.start_time)) / 3600) AS hours_in_shift,
(TIME_TO_SEC(TIMEDIFF(sh.end_time, sh.start_time)) / 3600) * s.hourly_rate AS
from rota r
left join staff s on r.staff_id = s.staff_id
left join shift sh on r.shift_id = sh.shift_id
```

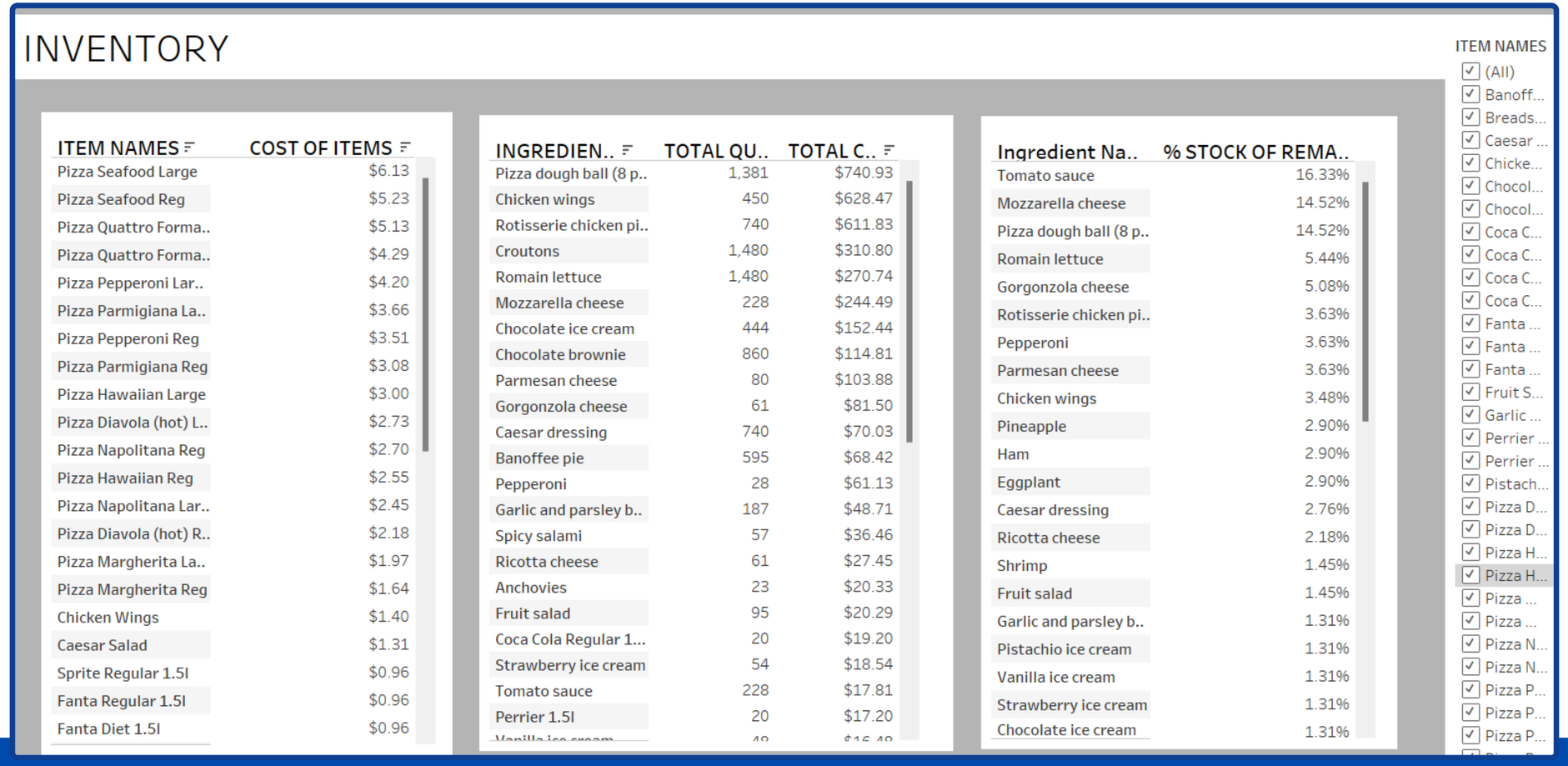
# Dashboard 1: Orders

The initial Tableau Public dashboard provides a visual overview of order-related insights, including total orders, sales, items, and average order value. Sales distribution by product is depicted in a pie chart, while total sales by product subcategory are displayed in a bar graph. Another pie chart distinguishes orders with and without delivery. A line graph showcases the flow of total orders and sales hourly, and a map pinpoints order locations for a geographic perspective on distribution.



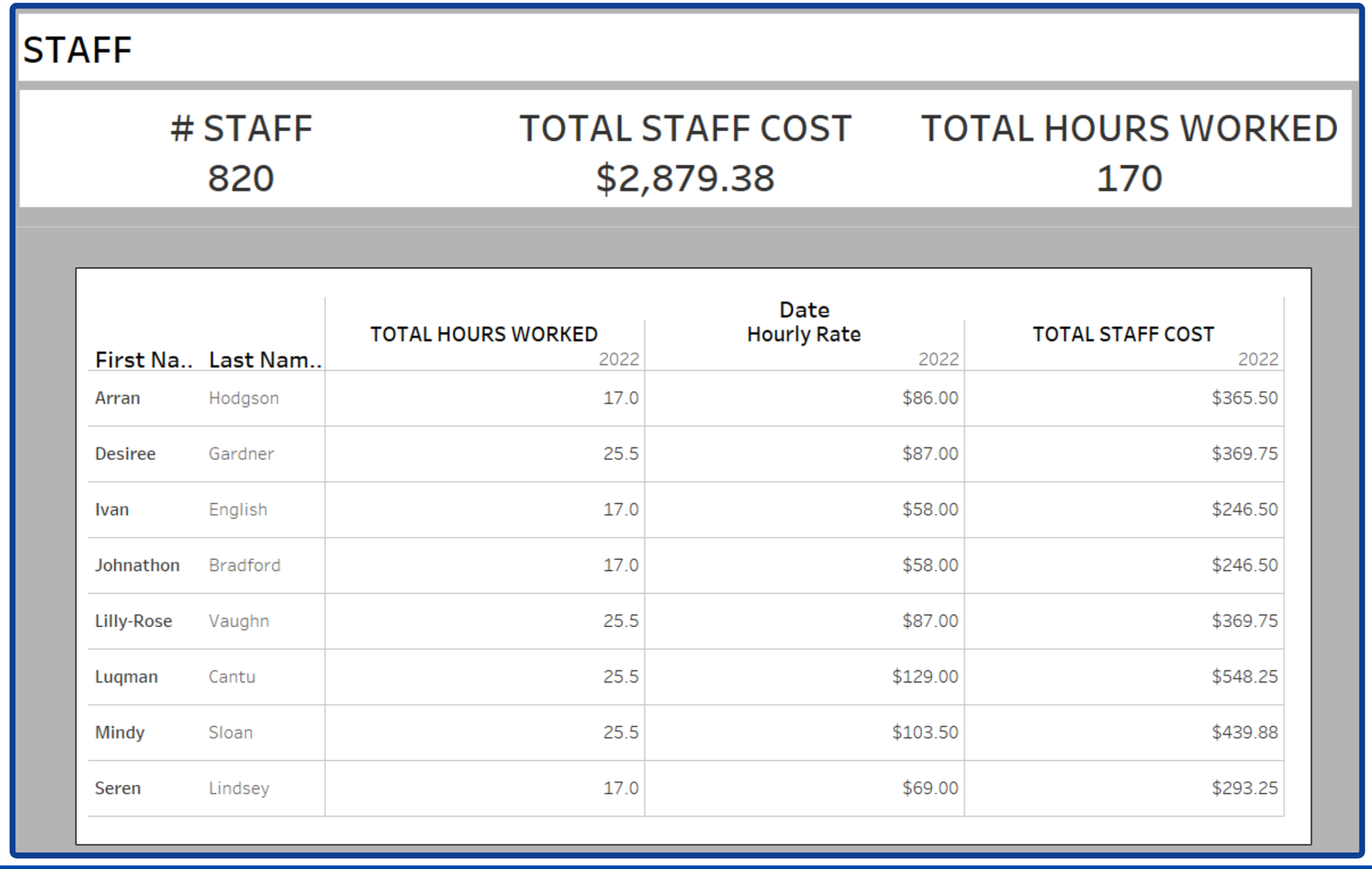
# Dashboard 2: Inventory

The subsequent Tableau Public dashboard focuses on inventory metrics, illustrating ingredient costs, total quantity, total cost, and the percentage of remaining inventory. It also calculates the cost of each pizza based on ingredient costs, aiding the team in monitoring inventory health and making informed decisions regarding ingredient procurement and usage.



# Dashboard 3: Staff

The third Tableau Public dashboard offers insights into staffing costs and hours worked, visually presenting staff costs, total hours worked, and other staffing details. This information assists in optimizing workforce management, ensuring alignment of staffing resources with peak hours of operation.



STAFF

| # STAFF | TOTAL STAFF COST | TOTAL HOURS WORKED |
|---|---|---|
| 820 | $2,879.38 | 170 |

| First Na.. | Last Nam.. | TOTAL HOURS WORKED 2022 | Date Hourly Rate 2022 | TOTAL STAFF COST 2022 |
|---|---|---|---|---|
| Arran | Hodgson | 17.0 | $86.00 | $365.50 |
| Desiree | Gardner | 25.5 | $87.00 | $369.75 |
| Ivan | English | 17.0 | $58.00 | $246.50 |
| Johnathon | Bradford | 17.0 | $58.00 | $246.50 |
| Lilly-Rose | Vaughn | 25.5 | $87.00 | $369.75 |
| Luqman | Cantu | 25.5 | $129.00 | $548.25 |
| Mindy | Sloan | 25.5 | $103.50 | $439.88 |
| Seren | Lindsey | 17.0 | $69.00 | $293.25 |

# RESULTS

Following the project's completion, Ben will have a strong database that can easily handle orders from customers, simplify stock control, and improve employee supervision. Through the use of interactive dashboards generated from this database, Ben is able to efficiently track and evaluate the success of his company, enabling wise decision-making using insightful information obtained from real-time data analysis.