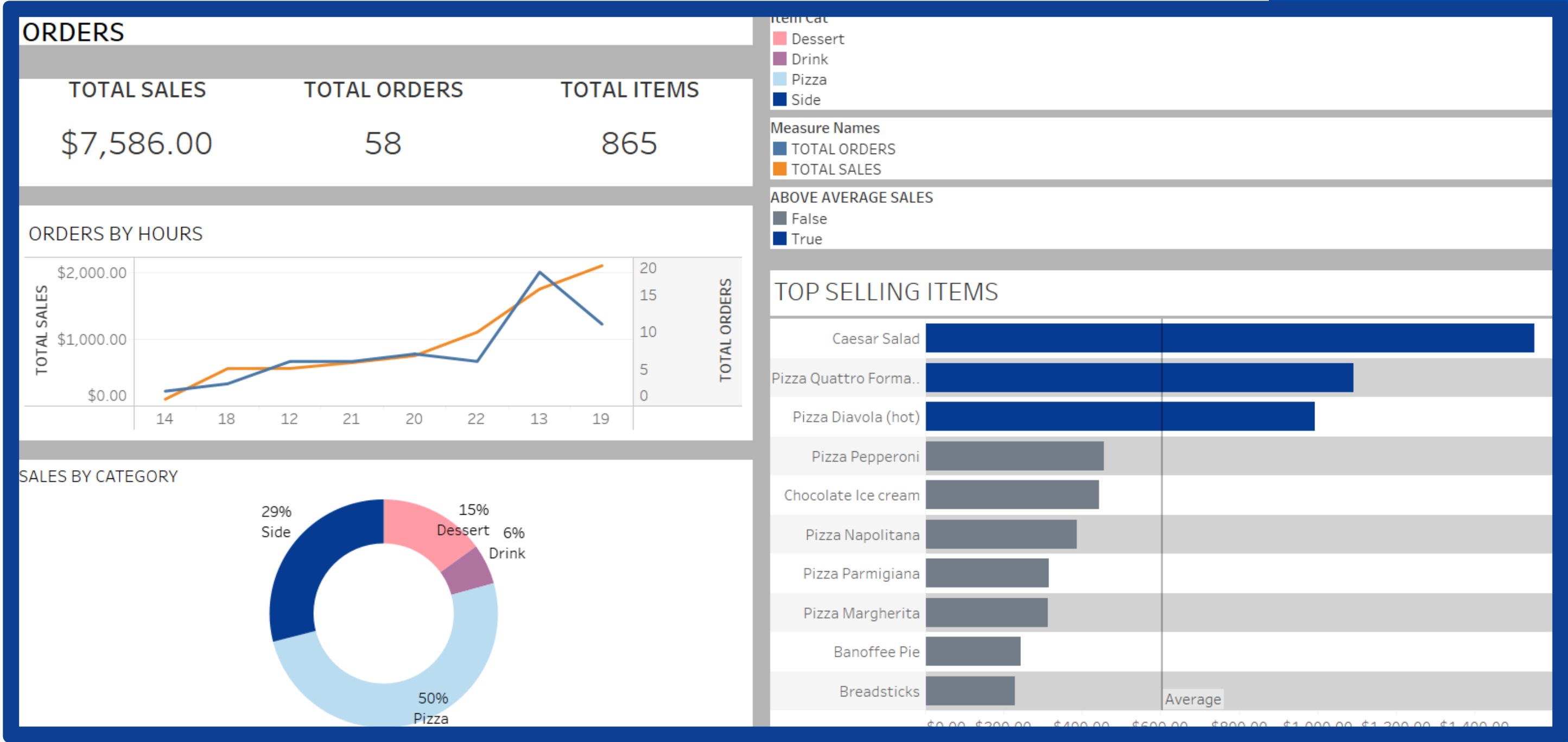


BEN'S PIZZA



Projects Focus

Database Design

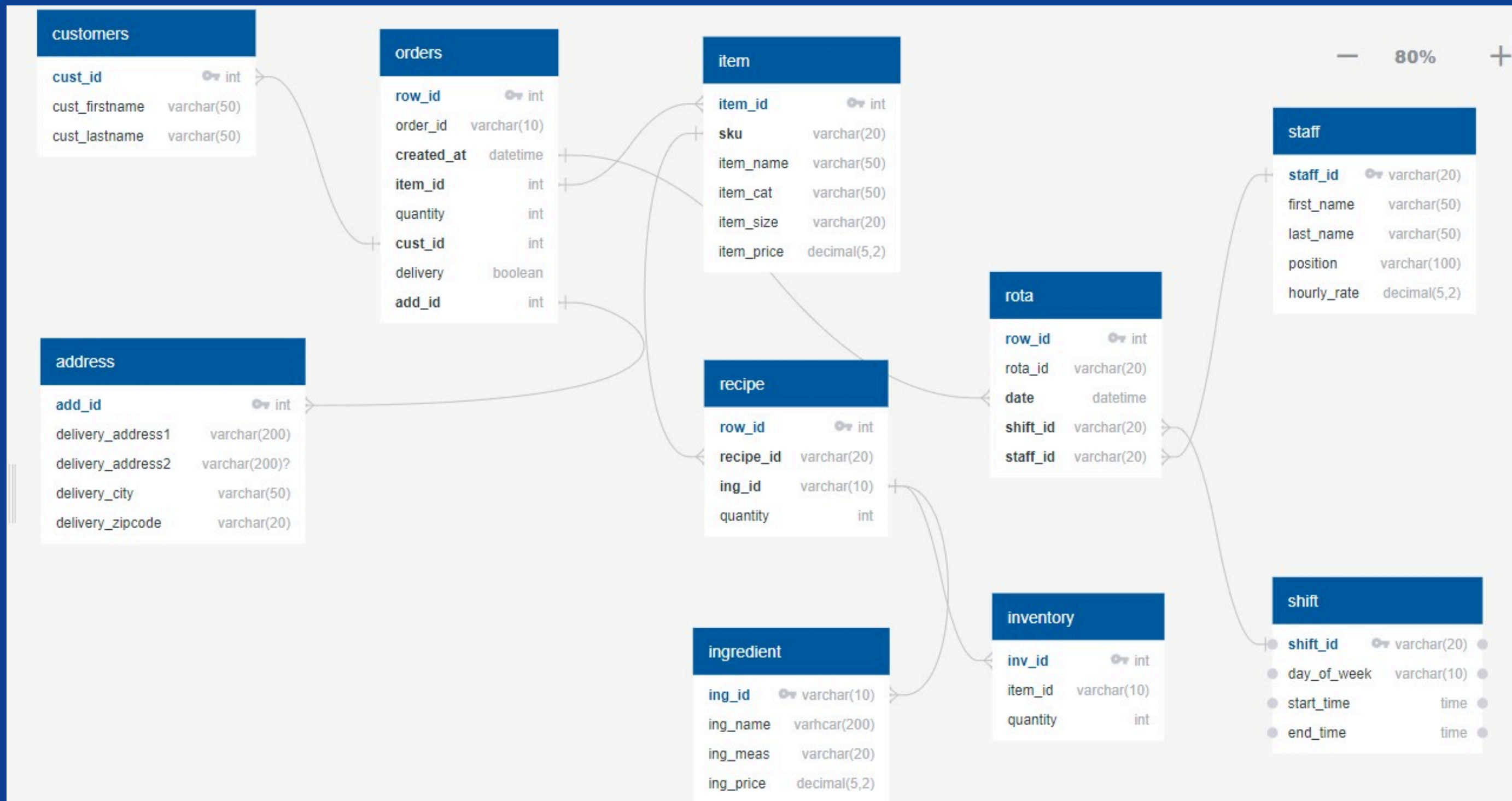
SQL Queries

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_cost
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
o.item_id,
i.sku,
i.item_name,
r.ing_id,
ing.ing_name,
ing.ing_weight,
ing.ing_price)
```

SQL Queries

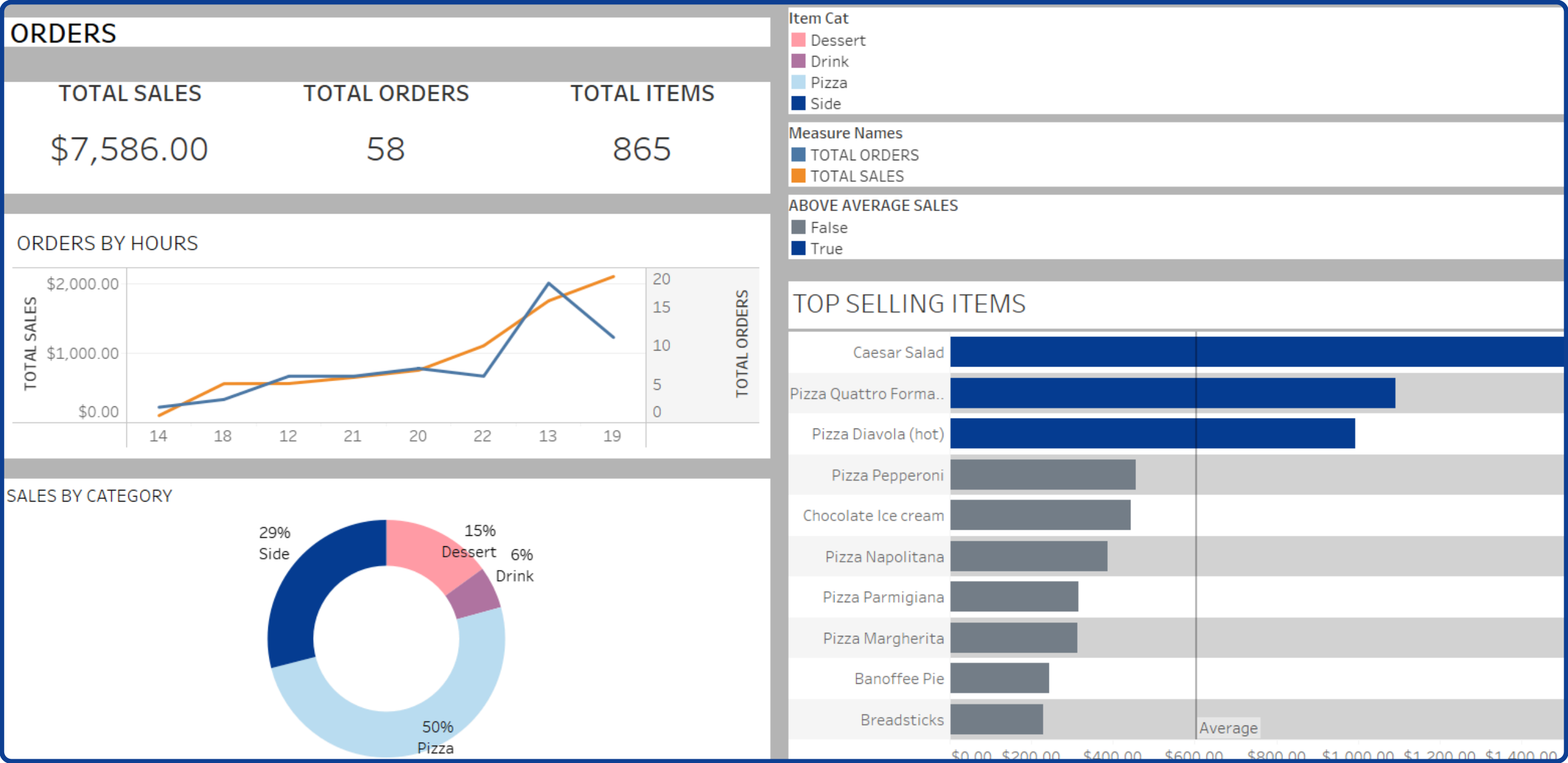
Dashboard 3: Staffing and Cost Management

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.

INVENTORY					ITEM NAMES	
ITEM NAMES	COST OF ITEMS	INGREDIEN..	TOTAL QU..	TOTAL C..	Ingredient Na..	% STOCK OF REMA..
Pizza Seafood Large	\$6.13	Pizza dough ball (8 p..	1,381	\$740.93	Tomato sauce	16.33%
Pizza Seafood Reg	\$5.23	Chicken wings	450	\$628.47	Mozzarella cheese	14.52%
Pizza Quattro Forma..	\$5.13	Rotisserie chicken pi..	740	\$611.83	Pizza dough ball (8 p..	14.52%
Pizza Quattro Forma..	\$4.29	Croutons	1,480	\$310.80	Romain lettuce	5.44%
Pizza Pepperoni Lar..	\$4.20	Romain lettuce	1,480	\$270.74	Gorgonzola cheese	5.08%
Pizza Parmigiana La..	\$3.66	Mozzarella cheese	228	\$244.49	Rotisserie chicken pi..	3.63%
Pizza Pepperoni Reg	\$3.51	Chocolate ice cream	444	\$152.44	Pepperoni	3.63%
Pizza Parmigiana Reg	\$3.08	Chocolate brownie	860	\$114.81	Parmesan cheese	3.63%
Pizza Hawaiian Large	\$3.00	Parmesan cheese	80	\$103.88	Chicken wings	3.48%
Pizza Diavola (hot) L..	\$2.73	Gorgonzola cheese	61	\$81.50	Pineapple	2.90%
Pizza Napolitana Reg	\$2.70	Caesar dressing	740	\$70.03	Ham	2.90%
Pizza Hawaiian Reg	\$2.55	Banoffee pie	595	\$68.42	Eggplant	2.90%
Pizza Napolitana Lar..	\$2.45	Pepperoni	28	\$61.13	Caesar dressing	2.76%
Pizza Diavola (hot) R..	\$2.18	Garlic and parsley b..	187	\$48.71	Ricotta cheese	2.18%
Pizza Margherita La..	\$1.97	Spicy salami	57	\$36.46	Shrimp	1.45%
Pizza Margherita Reg	\$1.64	Ricotta cheese	61	\$27.45	Fruit salad	1.45%
Chicken Wings	\$1.40	Anchovies	23	\$20.33	Garlic and parsley b..	1.31%
Caesar Salad	\$1.31	Fruit salad	95	\$20.29	Pistachio ice cream	1.31%
Sprite Regular 1.5l	\$0.96	Coca Cola Regular 1...	20	\$19.20	Vanilla ice cream	1.31%
Fanta Regular 1.5l	\$0.96	Strawberry ice cream	54	\$18.54	Strawberry ice cream	1.31%
Fanta Diet 1.5l	\$0.96	Tomato sauce	228	\$17.81	Chocolate ice cream	1.31%
		Perrier 1.5l	20	\$17.20		
		Vanilla ice cream	40	\$16.40		

ITEM NAMES

☒ (All)

☒ Banoff...

☒ Breads...

☒ Caesar ...

☒ Chicke...

☒ Chocol...

☒ Chocol...

☒ Coca C...

☒ Coca C...

☒ Coca C...

☒ Coca C...

☒ Coca C...

☒ Fanta ...

☒ Fanta ...

☒ Fanta ...

☒ Fruit S...

☒ Garlic ...

☒ Perrier ...

☒ Perrier ...

☒ Pistach...

☒ Pizza D...

☒ Pizza D...

☒ Pizza H...

☒ Pizza H...

☒ Pizza ...

☒ Pizza ...

☒ Pizza N...

☒ Pizza N...

☒ Pizza P...

☒ Pizza P...

☒ Pizza P...

☒ Pizza P...

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	Date Hourly Rate	TOTAL STAFF COST
		2022	2022	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.