

DATA ANALYSIS OF COFFEE SHOP

AGENDA

01. ER Diagram

02. Data Preparation

03. Data Analysis

04. Conclusion

ER DIAGRAM



DATA PREPARATION

1

```
--CLEANING DATA
--1. remove empty column
alter table staff
drop column column7, column8;
```

Remove empty column.

2

```
--2. change column name
EXEC sp_rename 'dbo.[pastry inventory].waste1', 'waste%', 'COLUMN';
```

Rename column.

```
update [pastry inventory]
set waste = start_of_day, [waste%] = '100%'
where quantity_sold = 0
```

	sales_outlet_id	transaction_date	product_id	start_of_day	quantity_sold	waste	waste%
1	3	2019-04-05	69	18	0	0	0
2	3	2019-04-18	69	18	0	0	0
3	5	2019-04-12	73	18	18	0	0%
4	8	2019-04-14	69	18	18	0	0%

4

Update the data.

3

```
--3. set PK & FK
alter table customer
add constraint FK_generations
foreign key(birth_year) references generations(birth_year)

alter table dates
drop constraint PK_dates
alter table dates
add constraint PK_Dates Primary key(transaction_date)

alter table [sales targets]
add constraint FK_outlet_target
foreign key(sales_outlet_id) references sales_outlet(sales_outlet_id)
alter table [sales targets]
drop constraint [PK_sales targets]

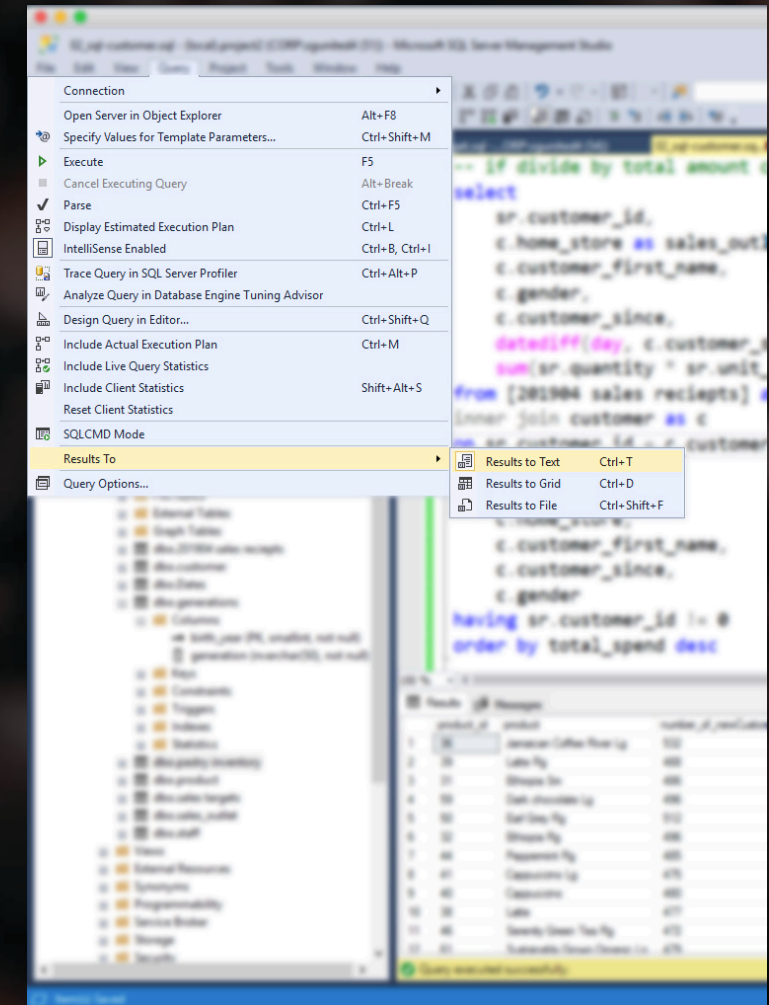
alter table [pastry inventory]
add constraint FK_outlet
foreign key(sales_outlet_id) references sales_outlet(sales_outlet_id),
constraint FK_trans_date
foreign key(transaction_date) references dates(transaction_date),
constraint FK_product
foreign key(product_id) references product(product_id)
```

Set Primary Key and Foreign Key.

DATA PREPARATION

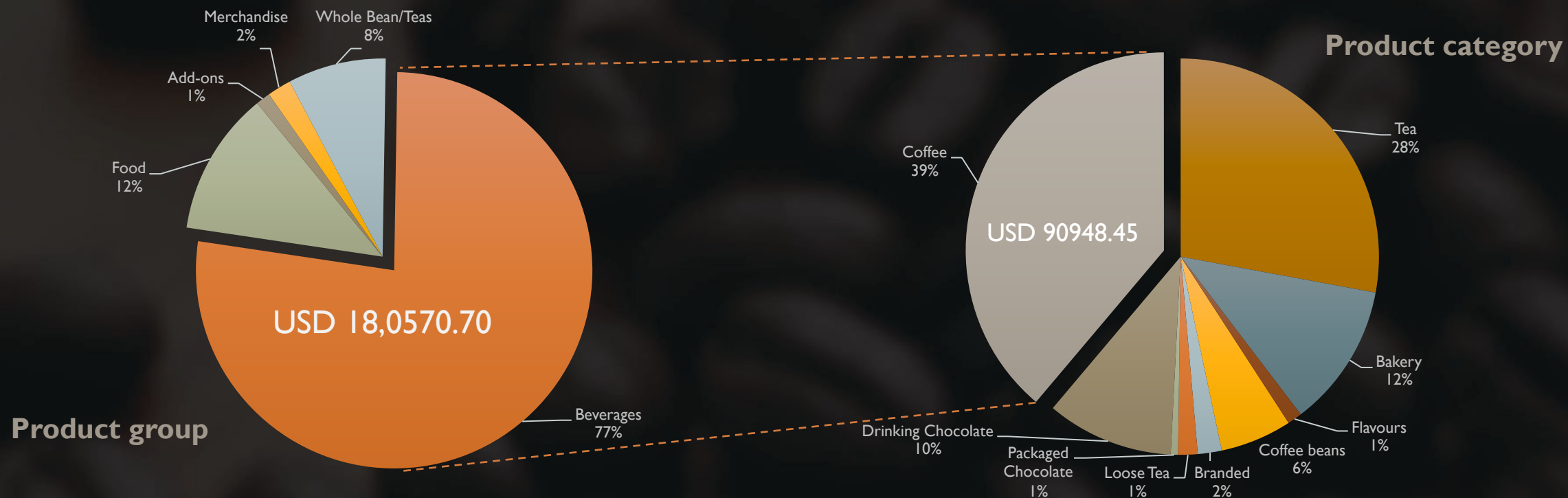
There are 2 ways:

1. Result to text, save it as txt format, then transfer other computer.
2. copy the table with header and paste it directly in excel.



The background of the slide is a top-down view of several coffee cups on a dark wooden table. The cups contain coffee with latte art. A dark horizontal band is overlaid across the middle of the image, containing the title text.

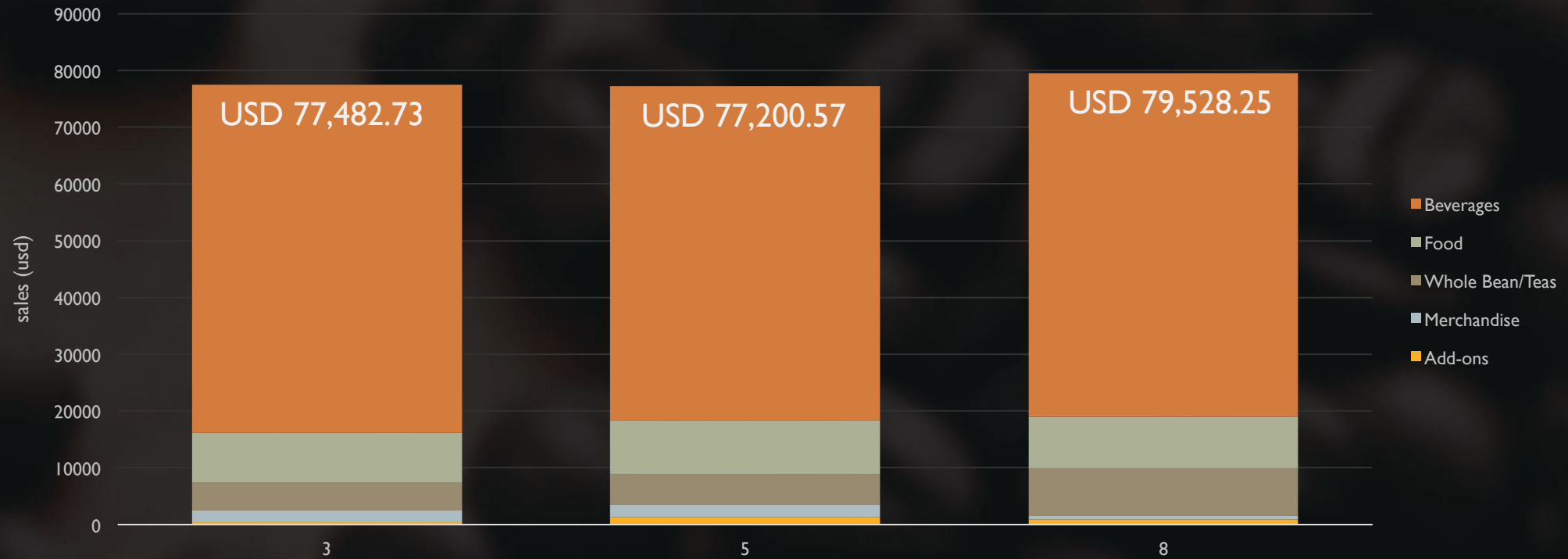
DATA ANALYSIS



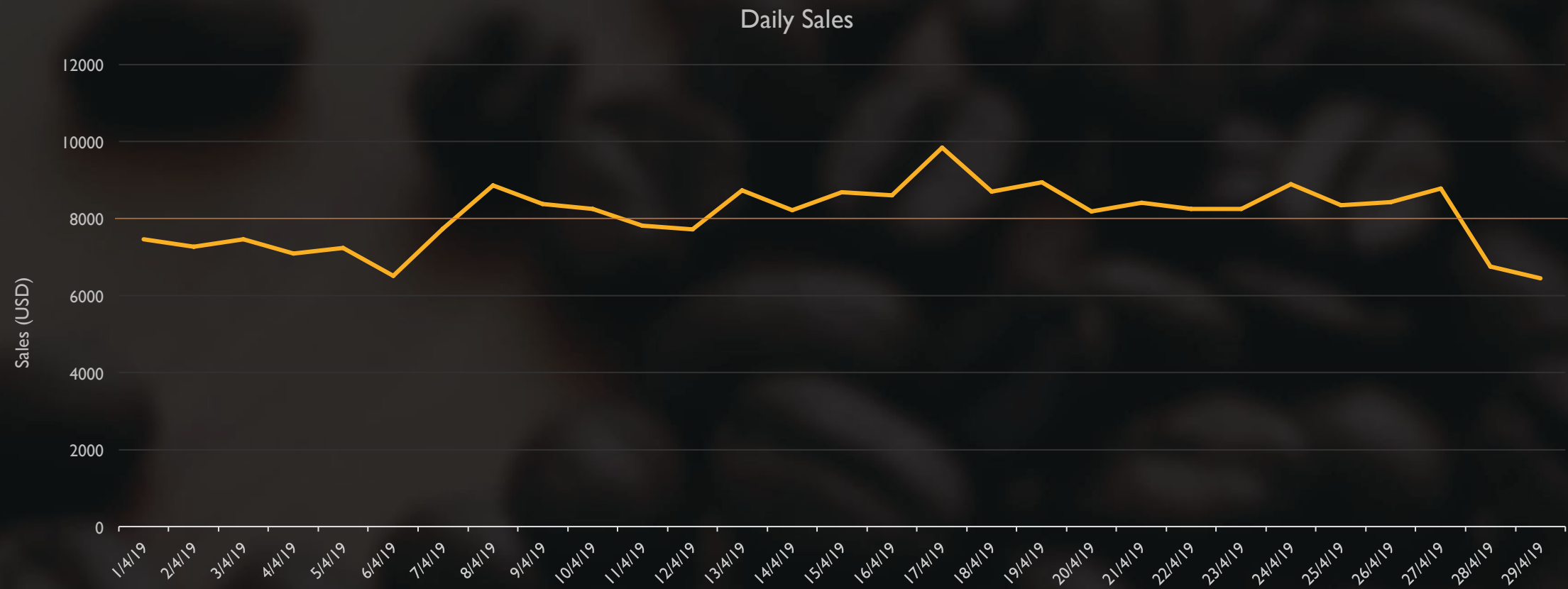
ANALYSIS OF SALES

(BY PRODUCT GROUP AND CATEGORY)

Product Sales by Group on Outlets

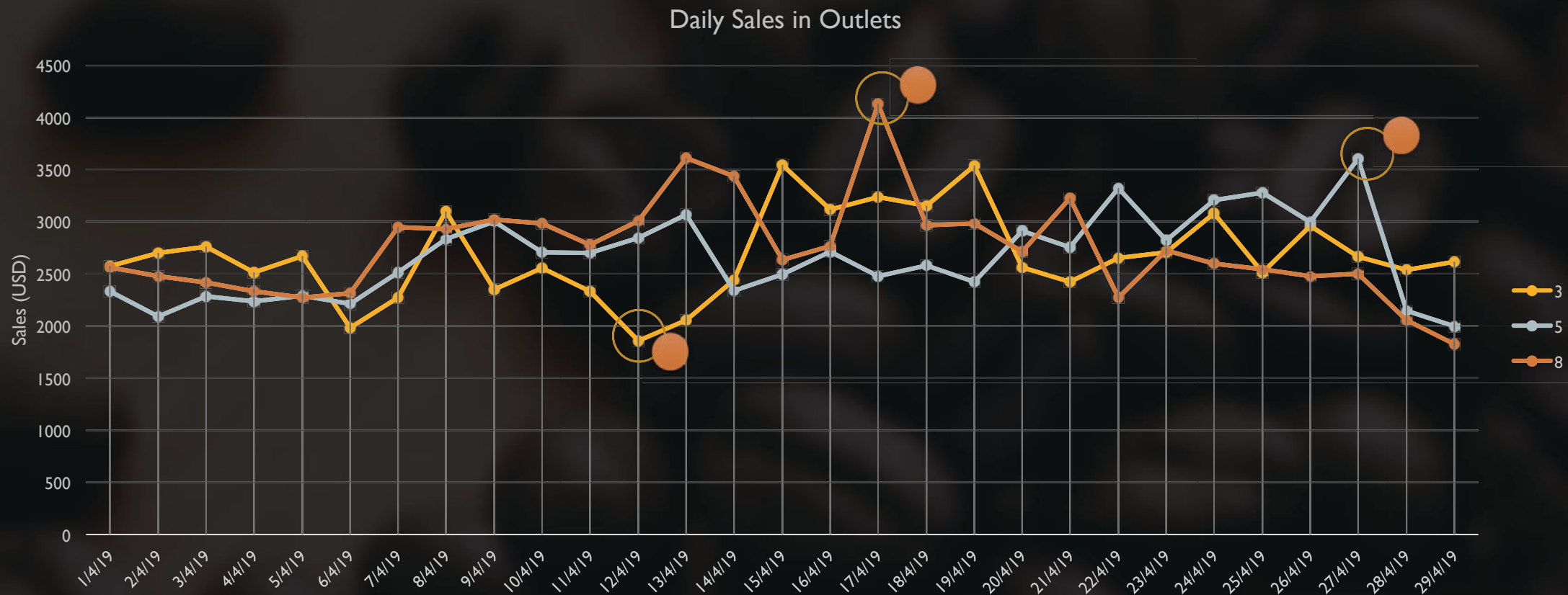


ANALYSIS OF SALES (BY OUTLET)



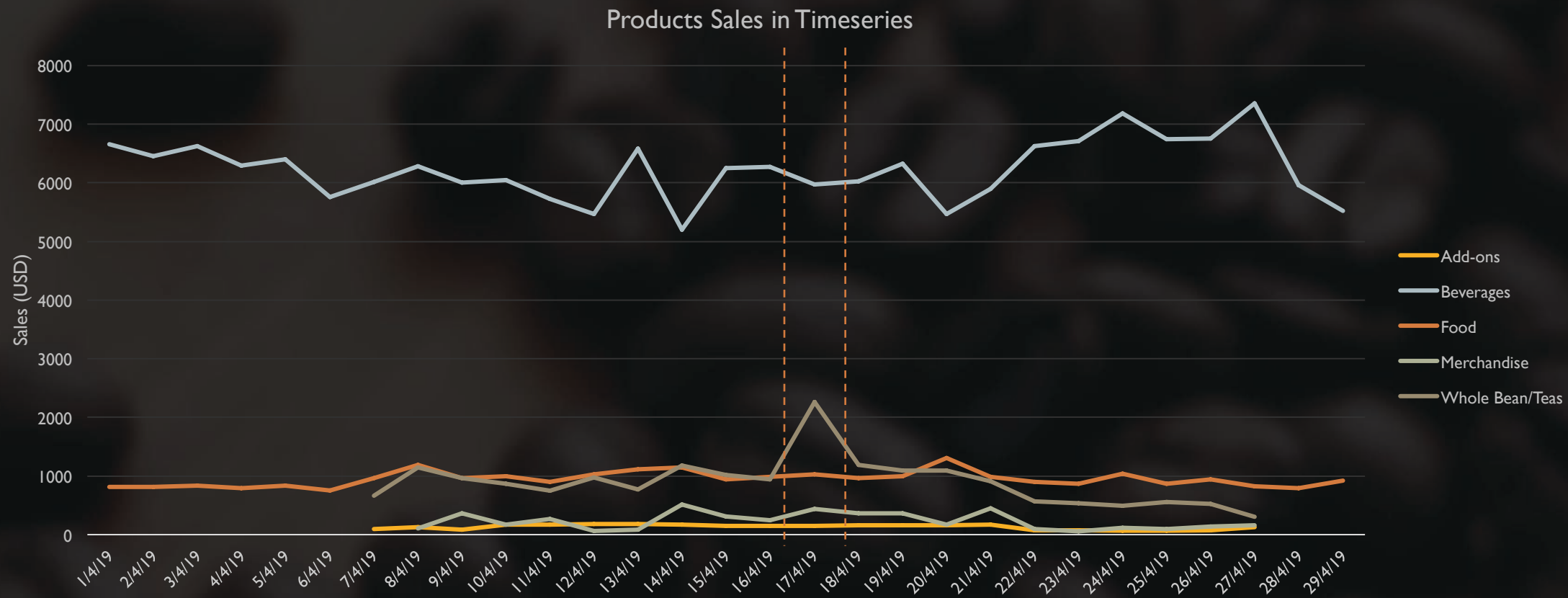
ANALYSIS OF SALES

(BY TIMESERIES)



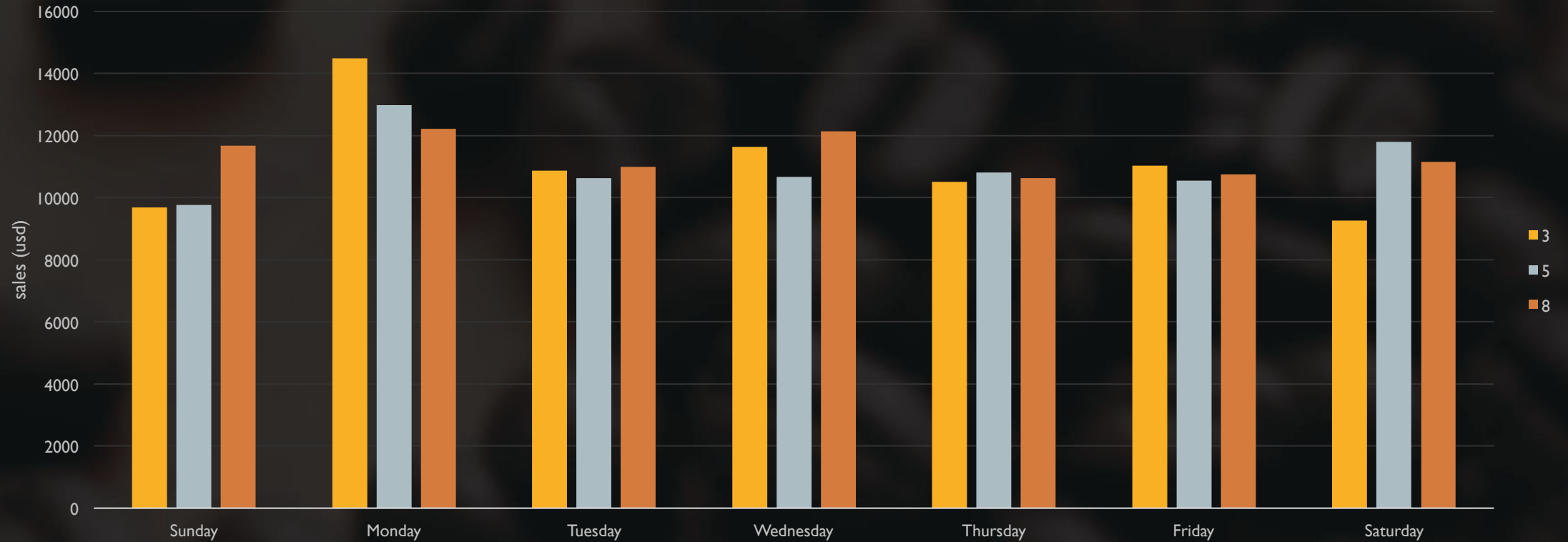
ANALYSIS OF SALES

(BY OUTLET IN TIMESERIES)

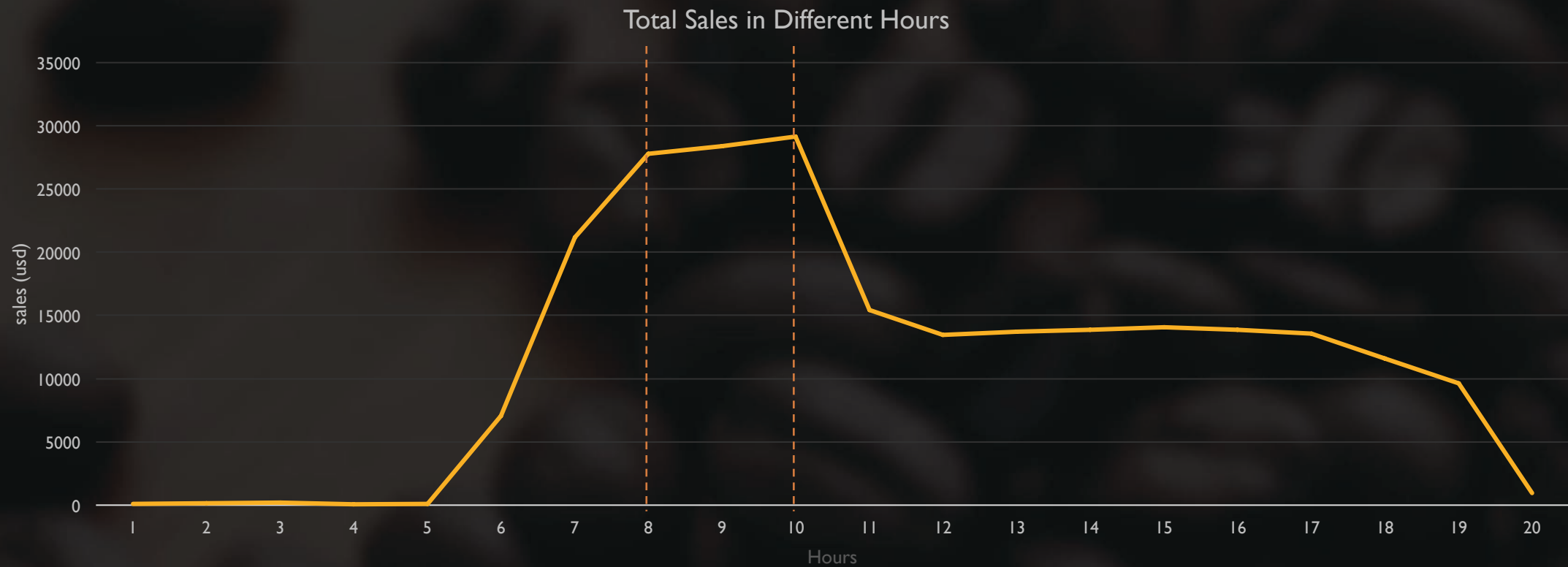


ANALYSIS OF SALES (BY PRODUCT IN TIMESERIES)

Product Sales in Weekday View

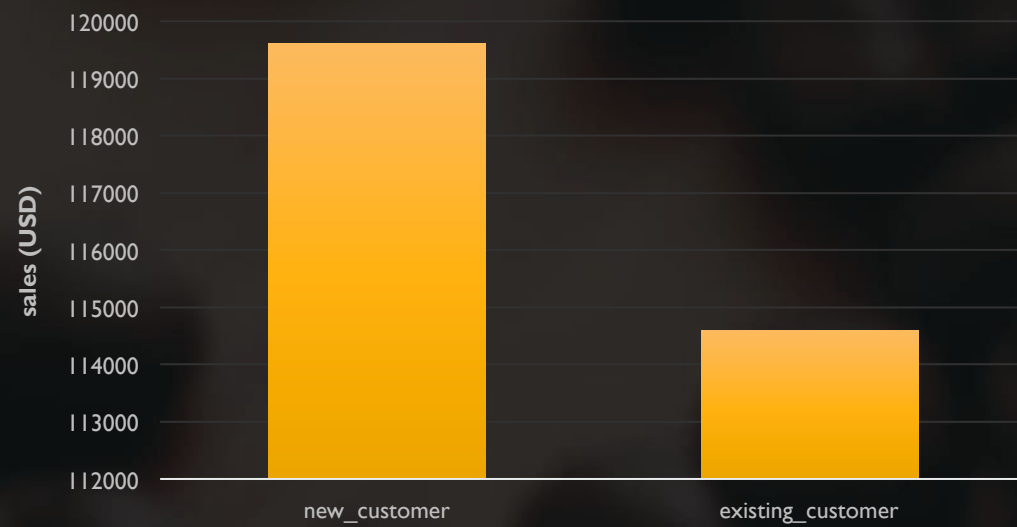


ANALYSIS OF SALES (BY OUTLETS AND WEEKDAY)

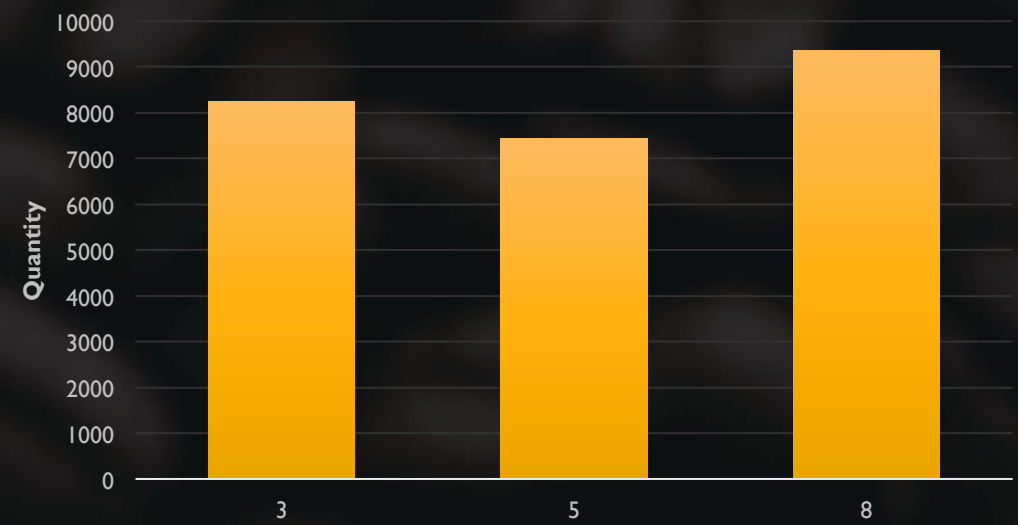


ANALYSIS OF SALES (BY TIMESERIES)

Spend

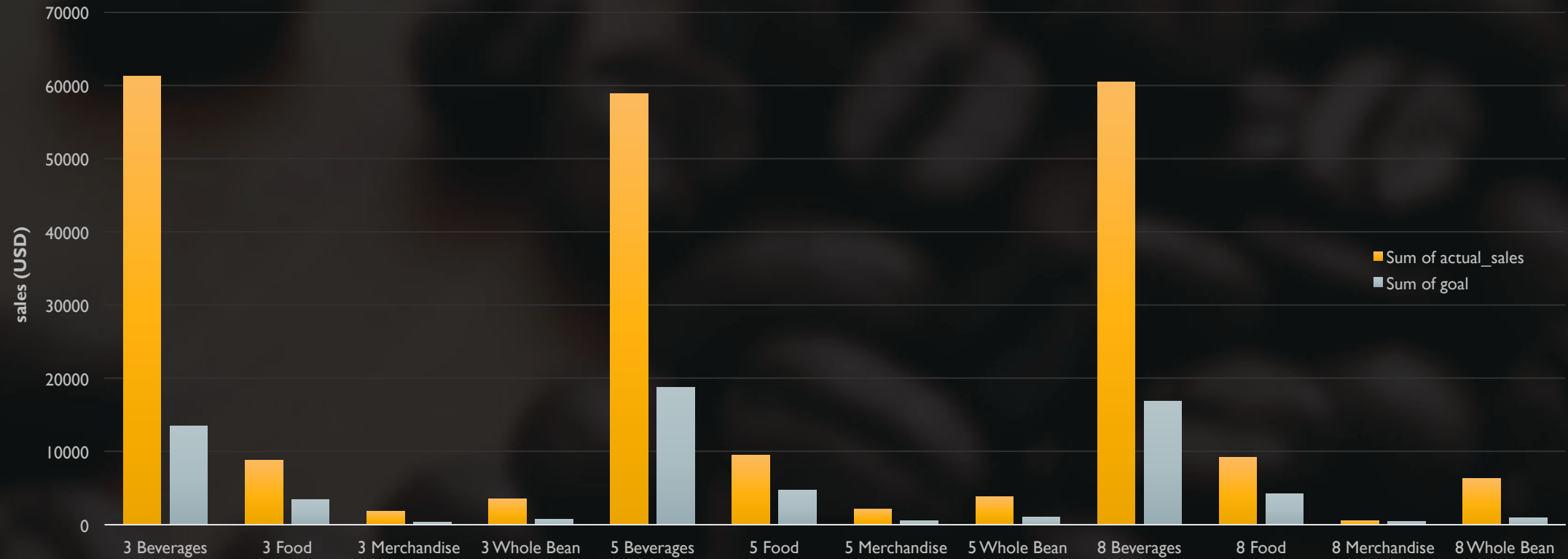


Most new customer outlet



ANALYSIS OF CUSTOMER (BY SALES AND OUTLETS)

Target VS Actual Sales



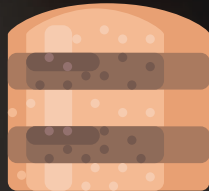
ANALYSIS OF TARGET (BY SALES)

18



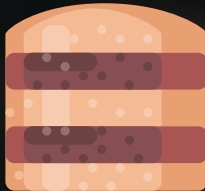
Hazelnut Biscotti

48



Ginger Scone

18



Cranberry Scone

18



Chocolate Croissant

18



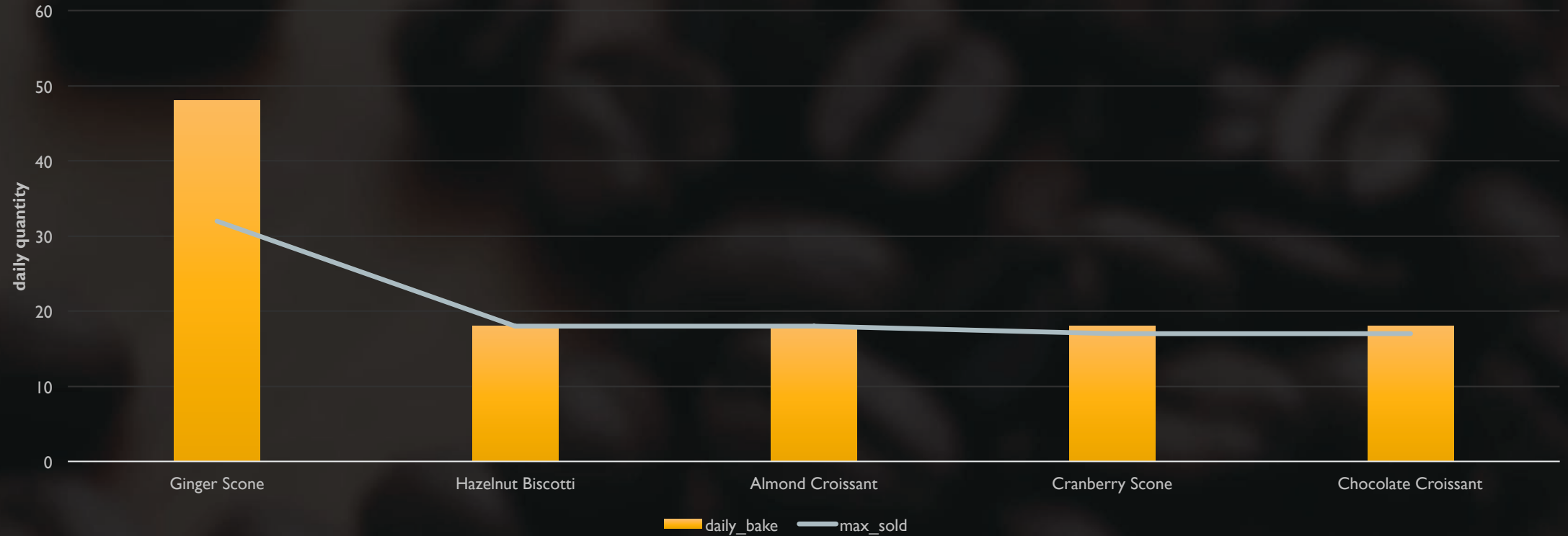
Almond Croissant

ANALYSIS OF WASTE (BY PRODUCT AND OUTLET)



ANALYSIS OF WASTE (BY PRODUCT AND OUTLETS)

Maximum of the Quantity Sold



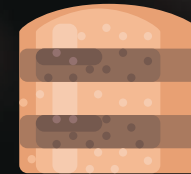
ANALYSIS OF SALES (BY TIMESERIES)

April 2019						
SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

with promo



Chocolate Croissant



Ginger Scone



Ouro Brasileiro Shot

ANALYSIS OF PROMO (BY PRODUCT)



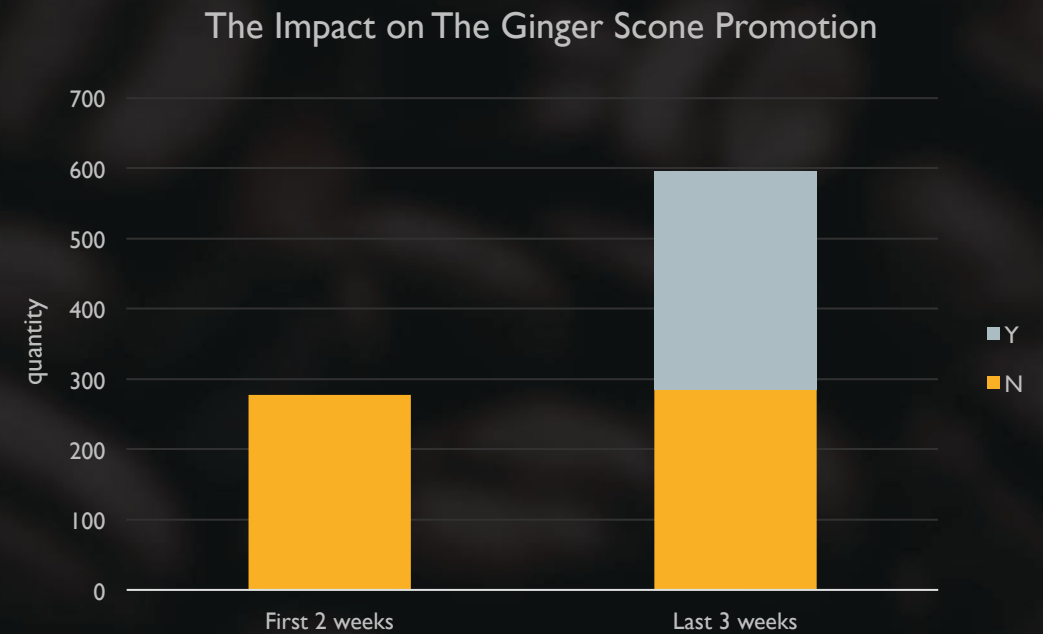
Ouro Brasileiro Shot

Ginger Scone

USD 2.65 (Promo)

USD 3.25 (Promo)

USD 3.25 (Regular Price)



ANALYSIS OF PROMO (BY PRODUCT)

CONCLUSION

1. Their business is doing well.
2. Aware of the waste and started their solution.
3. Continue with the promotion.
4. Consider to introduce the new products around 8 - 10am on Monday.
5. Doing some promotion after 5pm to increase the sales.
6. Encourage new customer to sign up as member so that we can better analyze their buying habit.





THANK YOU!