BREWING SUCCESS

Presentation by Lucy Sorber
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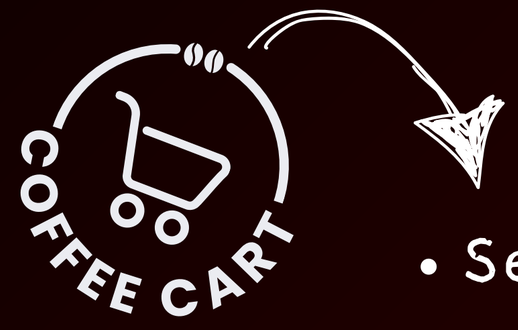
COFFEE CART DATA ANALASYS COFFEE CART



EFFICIENCY: THE GOAL

- Serve students, faculty, and staff across campus
- Data indicates: best hours, menu success, revenue times
- Goal: Maximize sales, minimize wasted effort

ICIENCY: THE GO

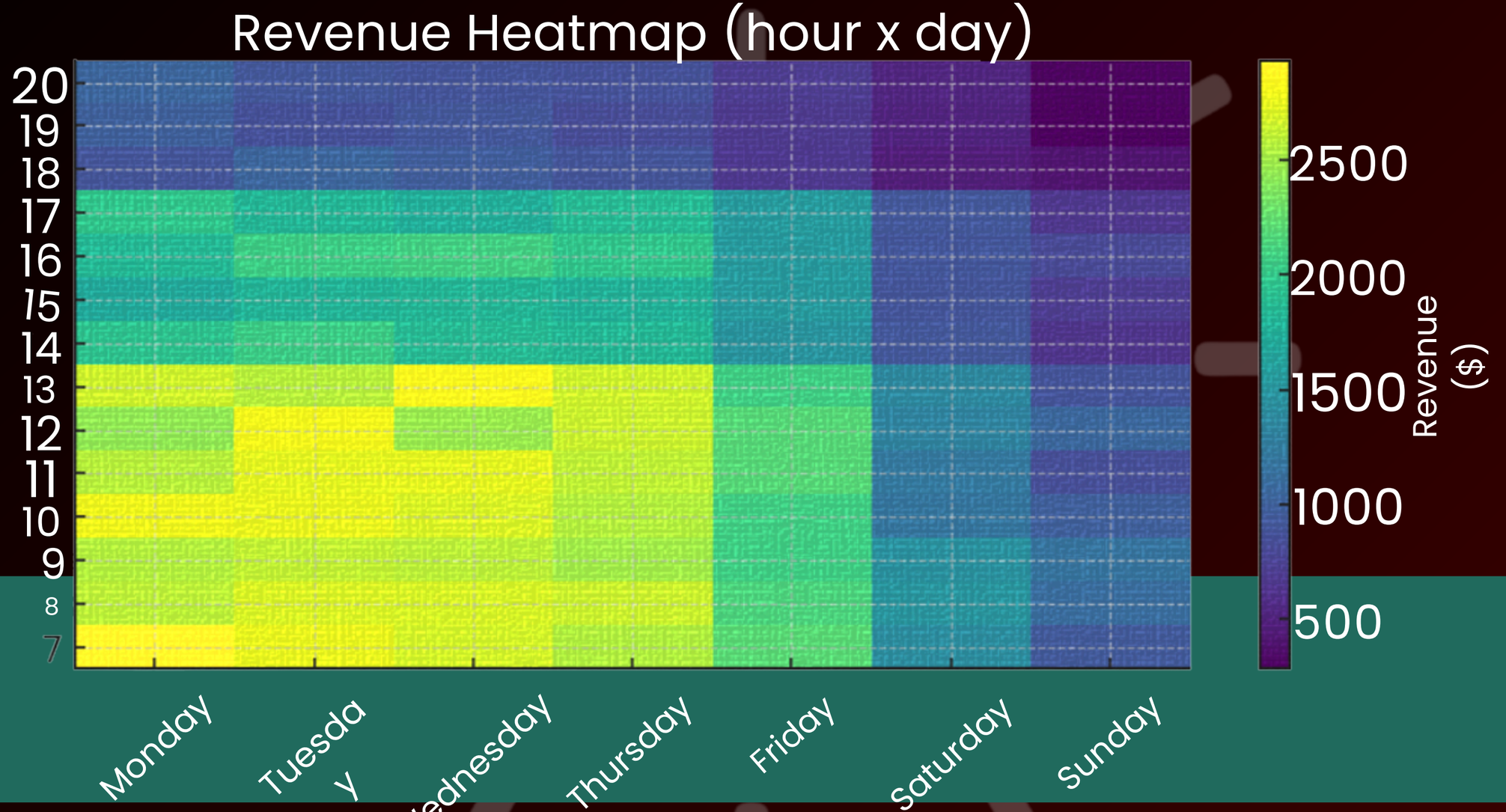
TIMING

WHEN ARE STUDENTS MOST CAFFEINATED?

7 AM coffee outperforms any other hour

- Morning (7–11AM) = peak transactions & revenue
- 7:00AM = single busiest hour
- Tuesday = most active weekday
- Fall = highest revenue overall

TIMING


Revenue Heatmap (hour x day)
20
19
18
17
16
15
14
13
12
11
10
9
8
7
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
2500
2000
1500
1000
500
Revenue ($)

FAVORITE DRINKS

01 Latte = #1 (8,023 transactions)

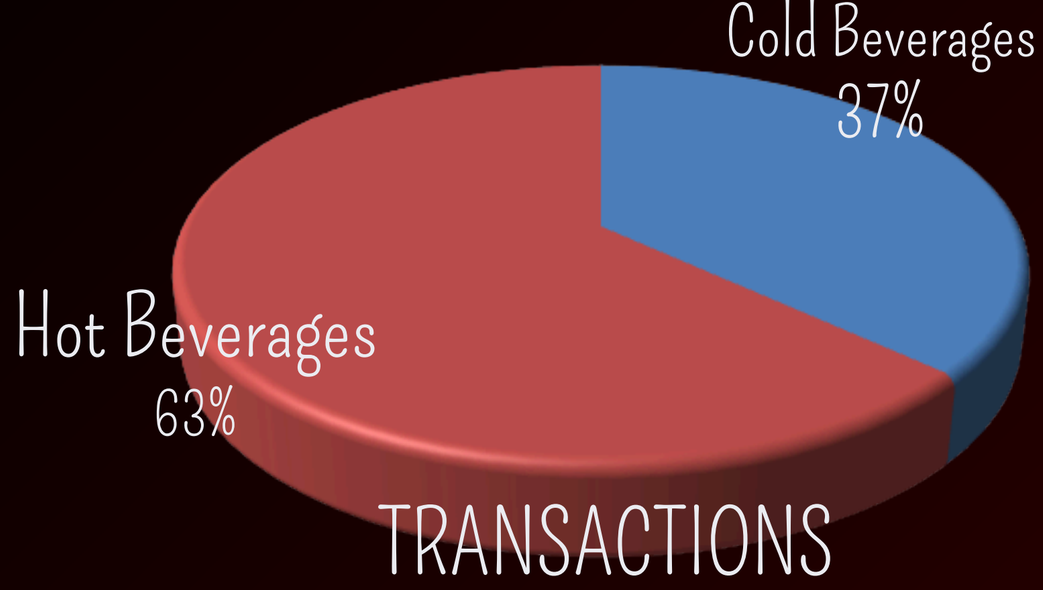
02 Hot drinks > Cold drinks overall

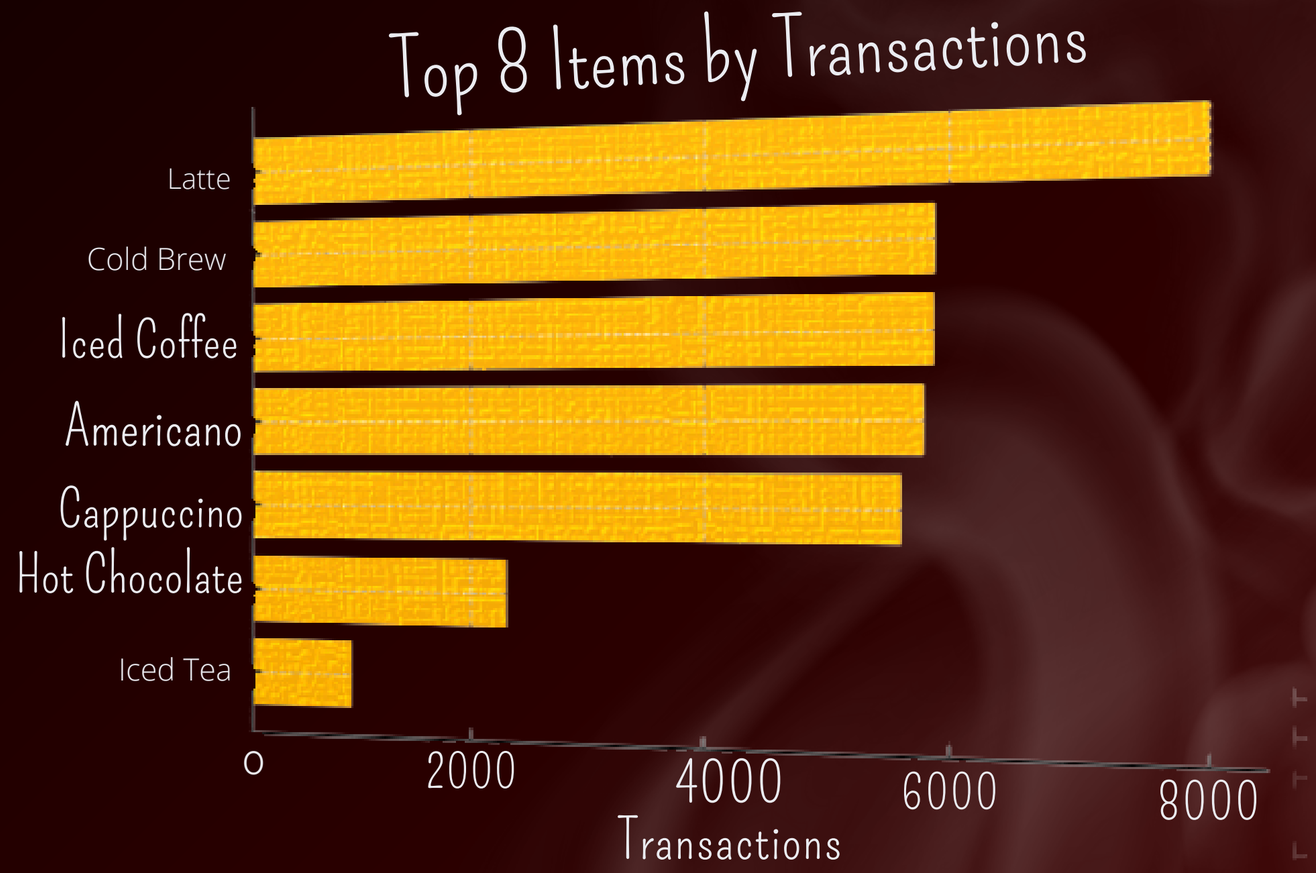
03 Hot drinks dominate cooler months; cold drinks rise in warm months

Suggestion:

Rotate warm seasonal specials for colder specials in summer to capture extra revenue

FAVORITE DRINKS





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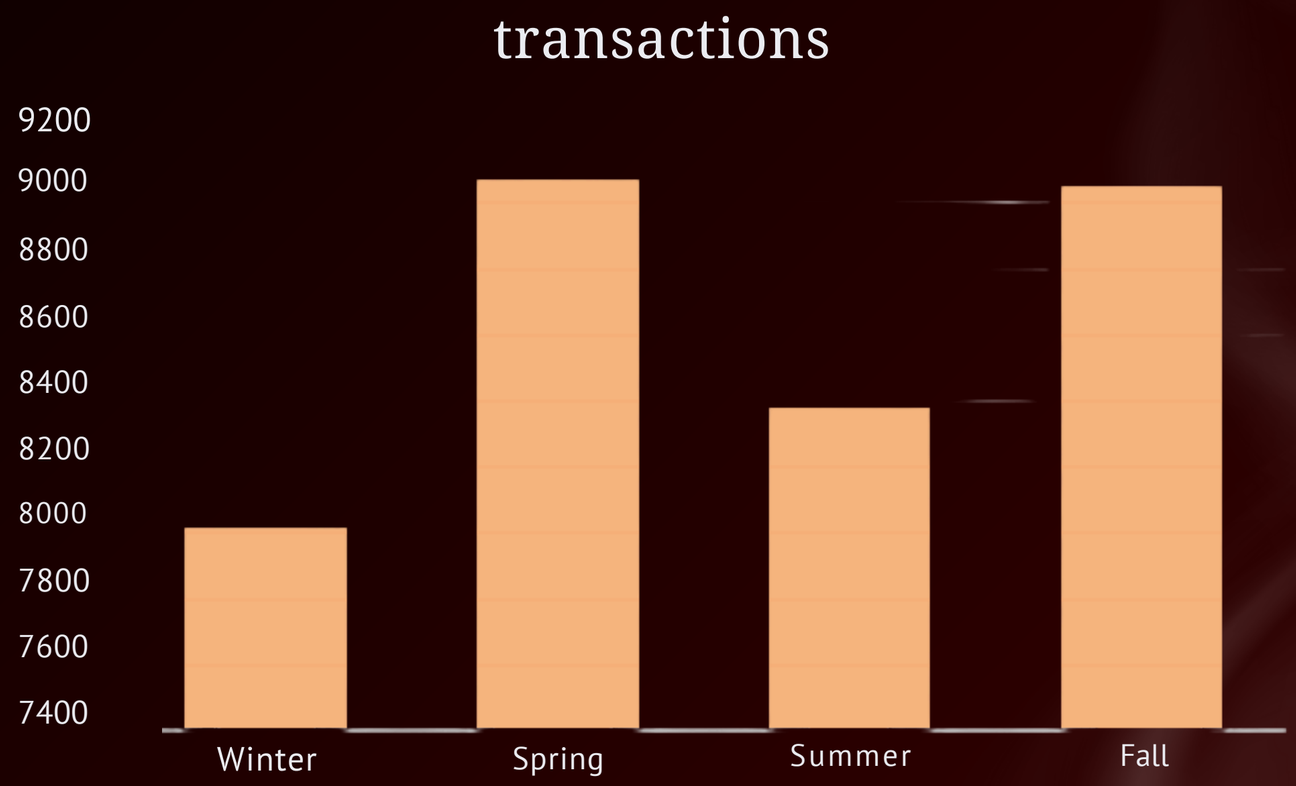


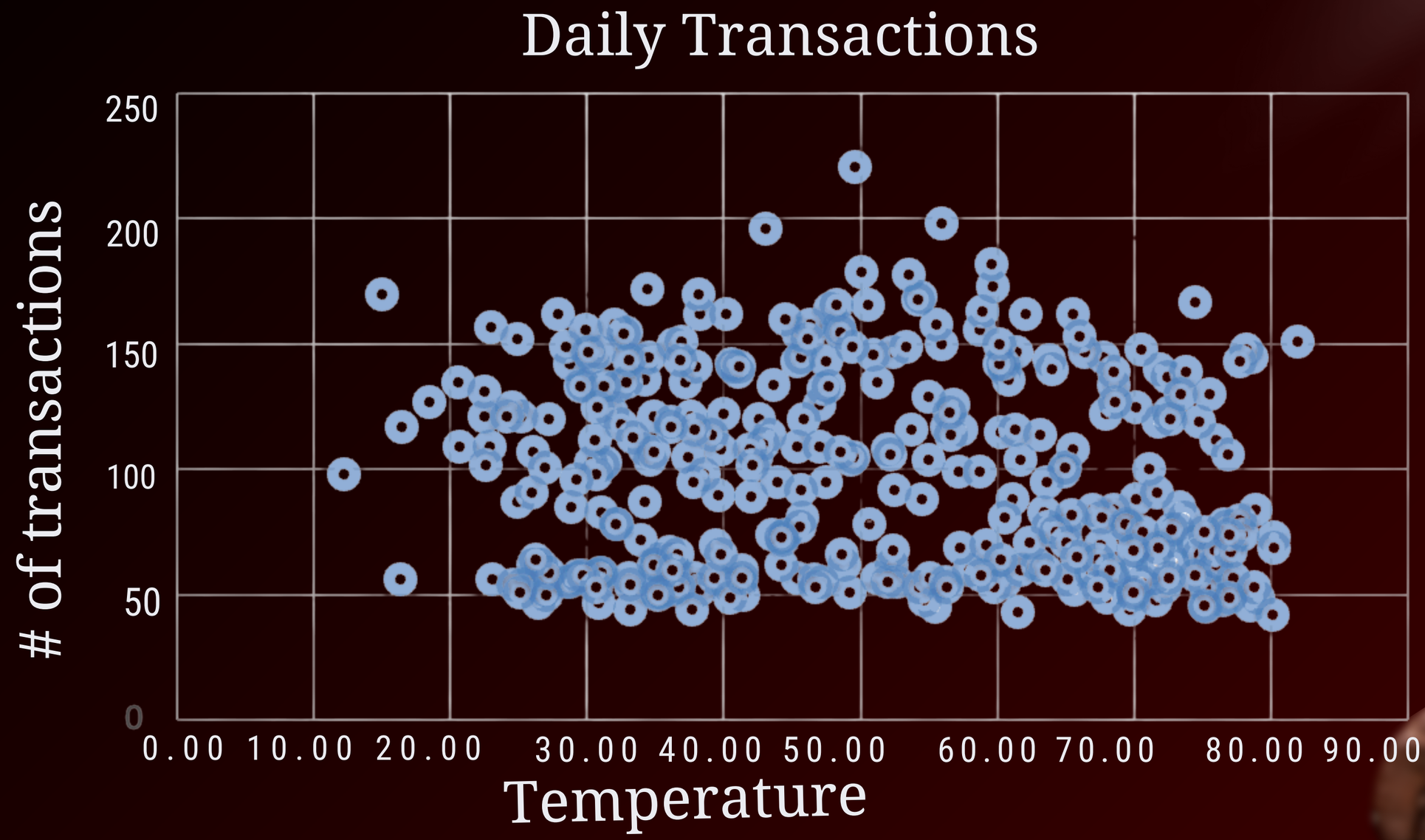
CORRELATION:

weak, negative correlation:
warmer days have slightly
fewer transactions
(r = -0.13, p = 0.014

WEATHER VS. COFFEE

- Hot drinks are more popular on colder days
- Cold drinks in warmer months
- Weather explains only a small part of demand

WEATHER VS. COFFEE



PEOPLE = COFFEE

THE FINDINGS FROM THE DATA INDICATE:

Moderately strong positive correlation: r = 0.78, p ≈ 4.43e-288

Correlation

More people nearby leads to more sales

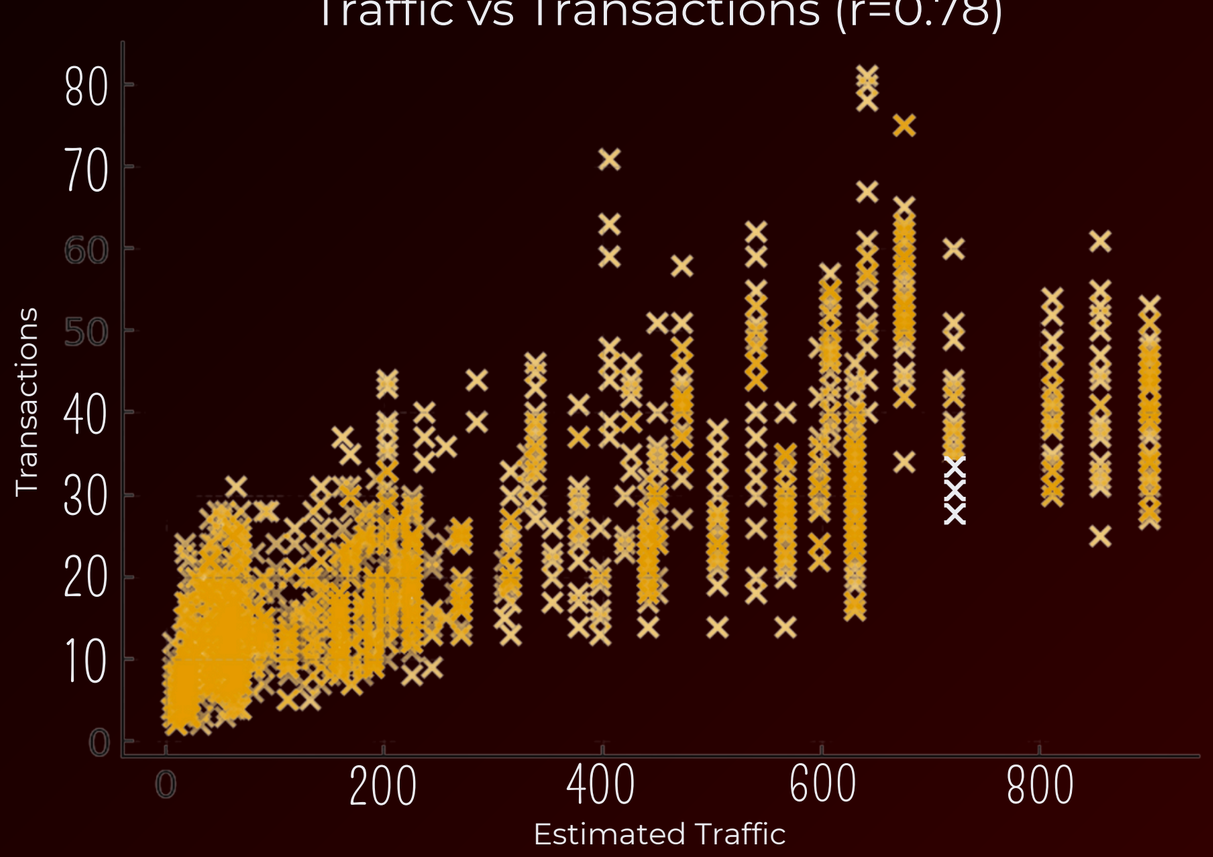
Conclusion

With the correlation, foot traffic is reliable predictor of revenue

Predictability

PEOPLE = COFFEE

THE DATA:



HOW TO OPERATE OPTIMALLY:

Optimized Time:

- Core hours: Morning (7-11) & Midday (11-2)

Staff adequately:

- Peak staffing: 7AM-11AM to accommodate high customer volume

Menu Focus:

- Menu focus: hot drinks in cold months
- cold drinks in warm months

Reduce Inefficiencies:

- Consider reducing hours on weekends and summer. only going when peak time and day is to minimize losses.

DAILY REVENUE ESTIMATE

HOW MUCH CAN WE MAKE ON AVERAGE?

- **Sample mean daily revenue:** $426.43
- **95% confidence interval:** $349.89 - $502.96

- **Winter average:** $458.59
- **Spring average:** $463.84
- **Summer average:** $430.47
- **Fall average:** $498.88

***TIP! TRACK DAILY PERFORMANCE TO IDENTIFY SPECIAL OPPORTUNITY DAYS!**

SCENARIO:

IF LIMITED TO A 4- HOUR, MOST PRODUCTIVE WINDOW:

01	02	03	04
BEST TIME OF DAY:	AVERAGE TRANSACTIONS:	AVERAGE REVENUE:	TOTAL HISTORICAL REVENUE:
7AM-11AM	36.10	$171.60	$60,917.75

RECOMMENDATIONS:

- Operate 7-11AM at full capacity, extend to 11-2PM if traffic continues
- Hot drinks dominate fall/winter, and cold drinks dominate spring/summer
- Staff allocation based on peak traffic (7-11AM)
- Use daily & seasonal trends to plan menu and promotions
- Consider adding special offers or loyalty program during slow periods

ECOMMENDATIONS

IDEAS TO INCORPORATE:

01

LOYALTY DISCOUNTS:

Card for repeat customers during morning rush with incentives

02

SEASONAL PROMOTIONS:

- Summer: “Iced Brew Wednesdays”
- Winter: “Hot Chocolate Fridays”

03

SMALL DATA EXPERIMENT:

Track which promotions increase slow-period sales and repeat successes

04

WEATHER SPECIALS:

Incorporate weather-triggered specials via app notifications

THANK YOU

NOVEMBER, 20TH, 2025