

Yelp Inc. – Driving the Future of Reviewing

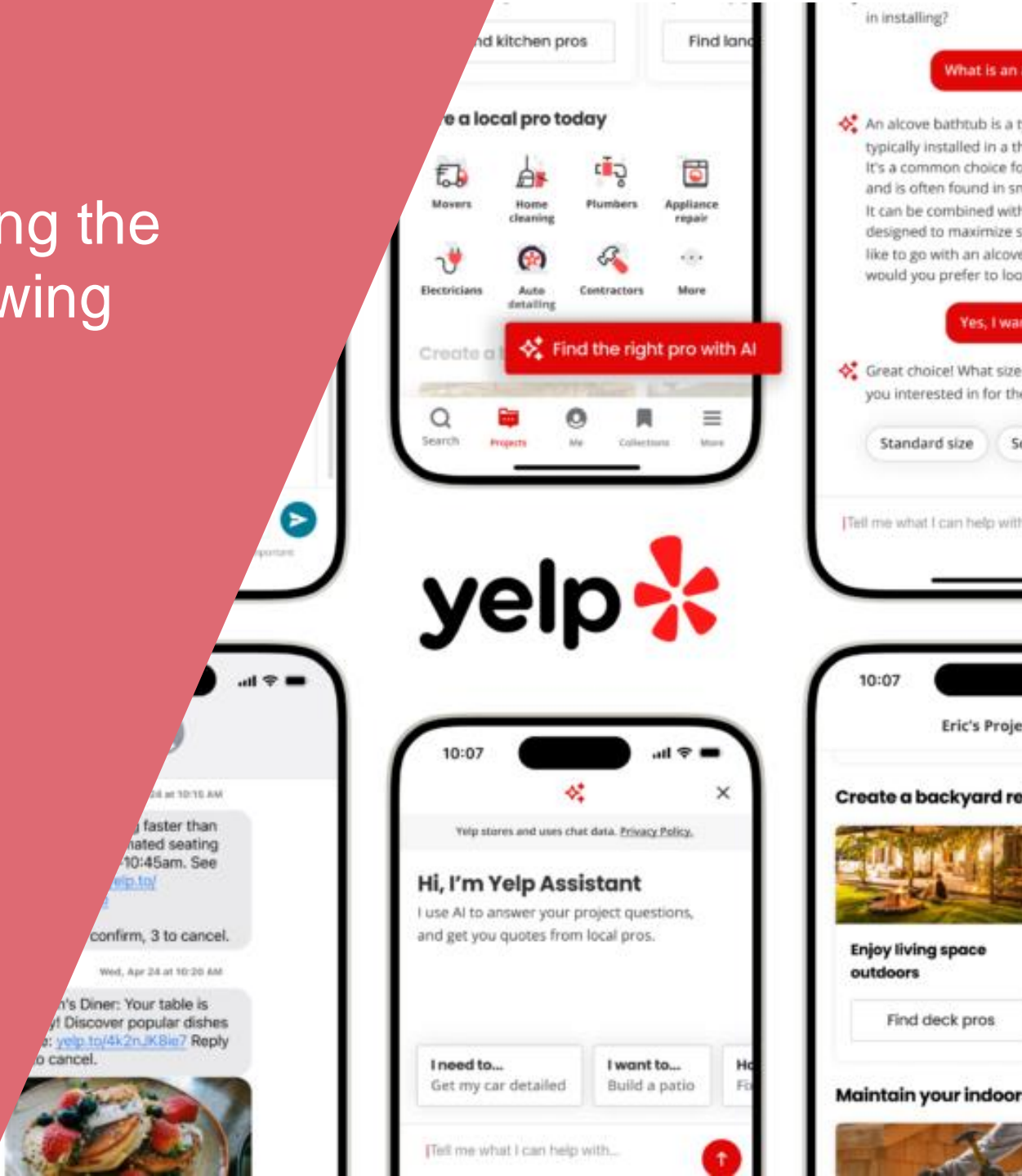
INSY 442 – Group 7

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November 27th, 2024



Agenda

A. Yelp Overview

- a. Company Overview
- b. Financial Performance
- c. Revenue Streams

B. Industry Analysis

- a. Competitors
- b. New Industry Pressures

C. Problem Statement

D. Data Description

E. Statistics Breakdown

- a. Business Statistics
- b. User Statistics

F. Segmentation Analysis

- a. Business Segmentation
- b. User Segmentation

G. Recommendation

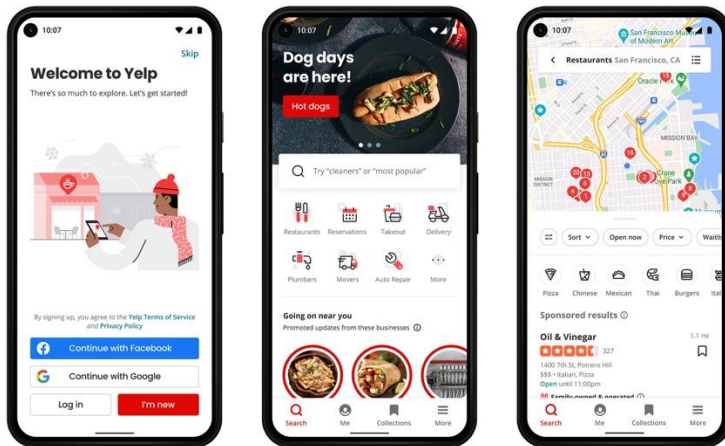
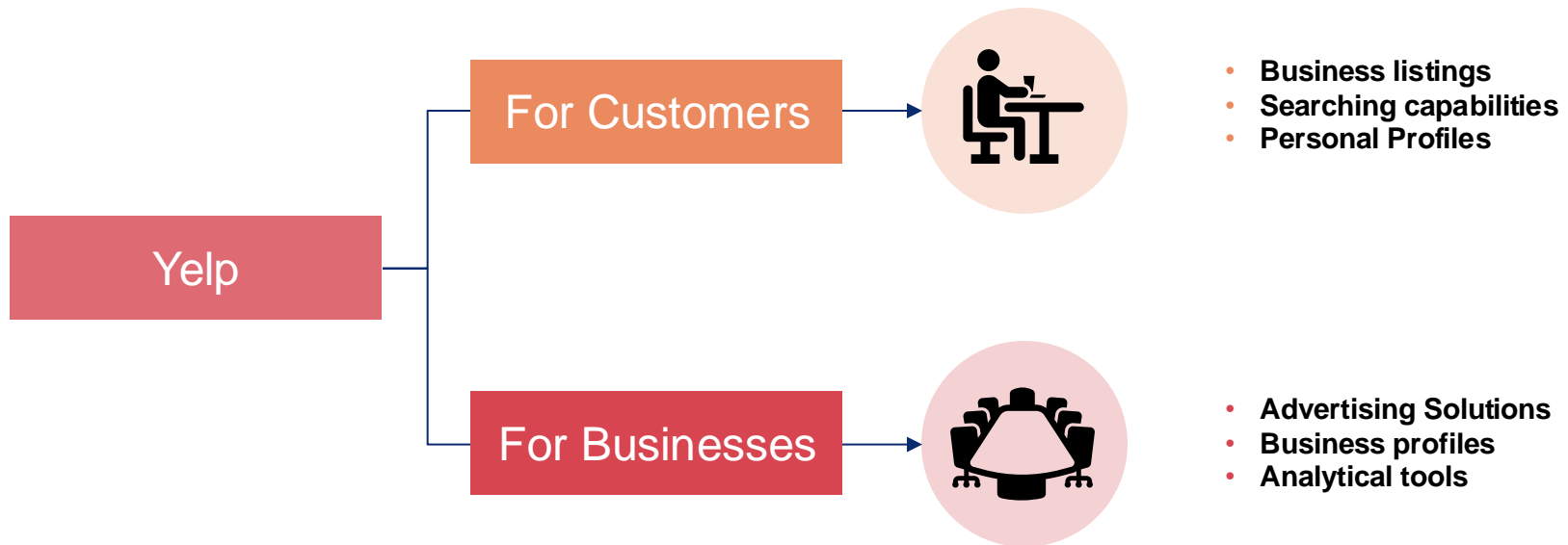
H. Impact

I. Conclusion

J. Appendix

Company Overview

Yelp Offers a Traditional Review Platforms for All Businesses



Business Model

- Free for customers
- Businesses pay for the services



- Yelp operates mainly in the US
- Operates in 30+ countries



Yelp connects customers with great businesses

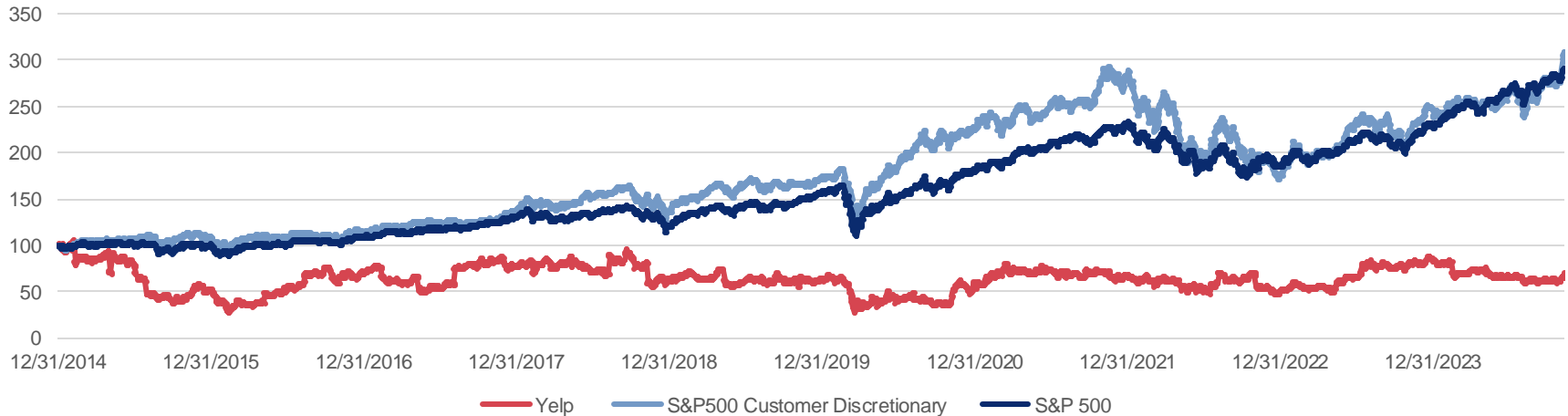
Source: Yelp Inc.



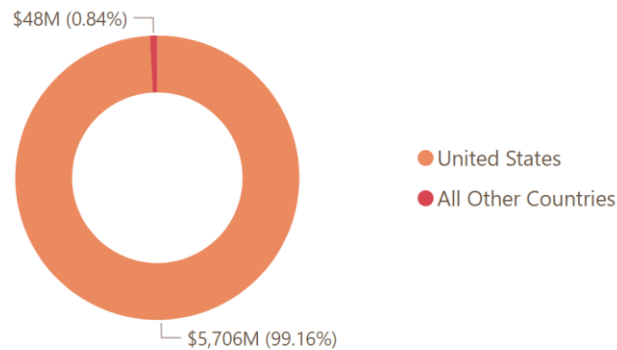
Yelp Company Performance

Poor financial performance driven by lack of revenue opportunities

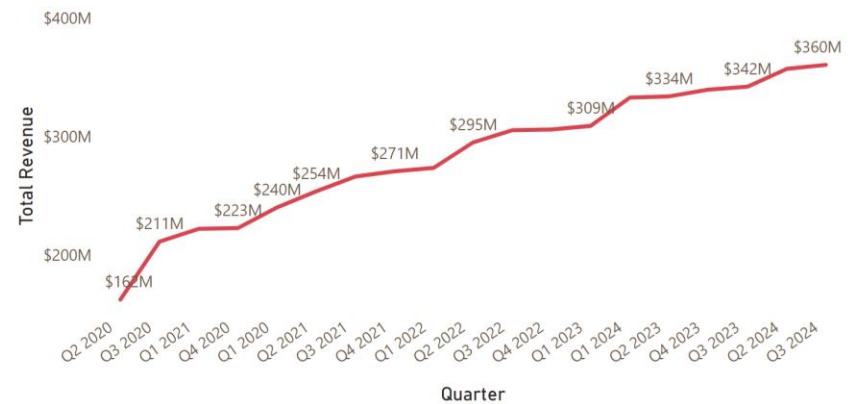
Yelp Stock Performance



Revenue by Geographic Area



Total Revenue over Time



Yelp has yet to successfully create long-term value, albeit growing revenue

Source: Bloomberg

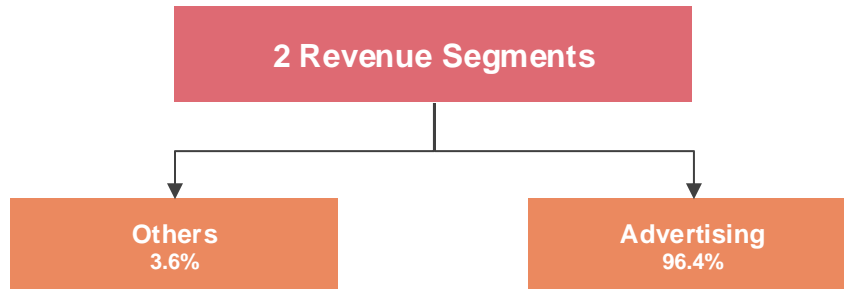
Yelp Revenue Segments - 2023

Yelp's revenue is heavily concentrated around their advertisement segment

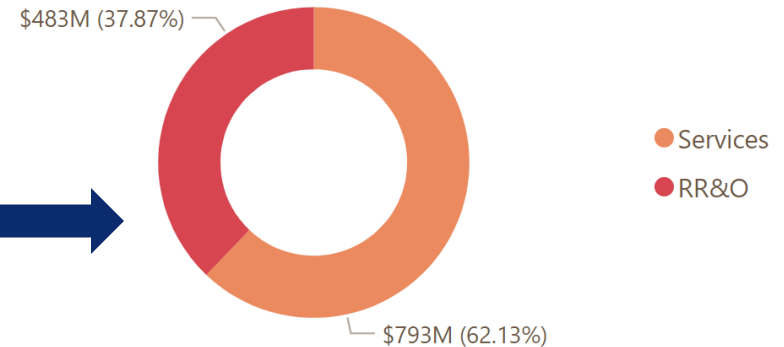
Total Revenue

\$1.32bn

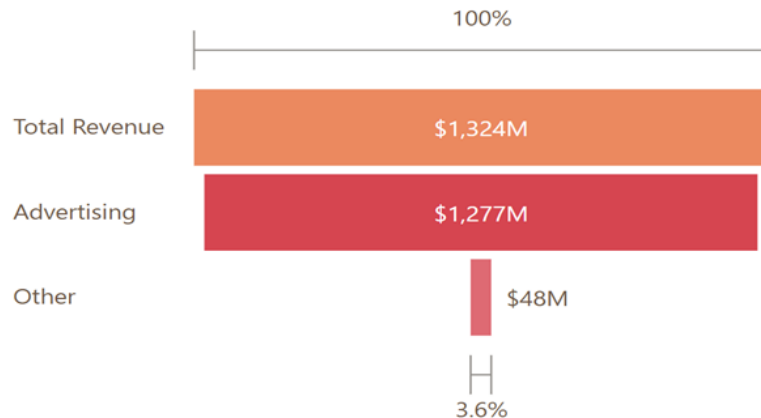
Revenue Model



Advertising Segment Breakdown



Revenue by Category



Total Revenue Over Time

“ We believe the decrease in RR&O paying advertising locations reflects the challenging operating environment facing businesses in these categories. ”

David Schwarzbach
Yelp CFO

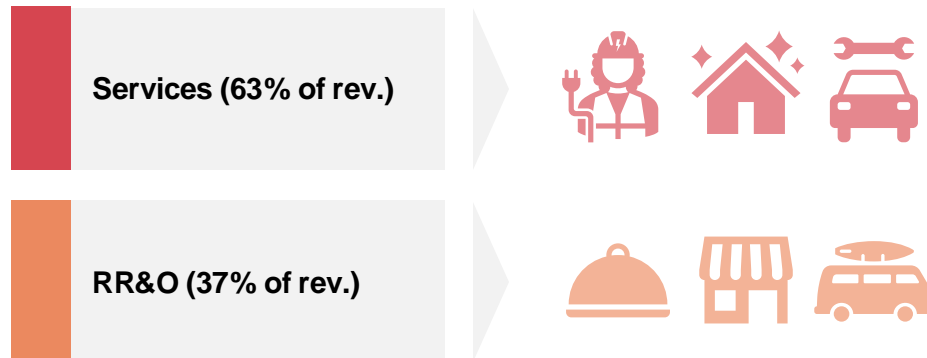
Yelp generated \$1.32bn in 2023, yet it hasn't translated into value for shareholders

Source: Yelp SEC Filings

Deep Dive on Advertising Revenue

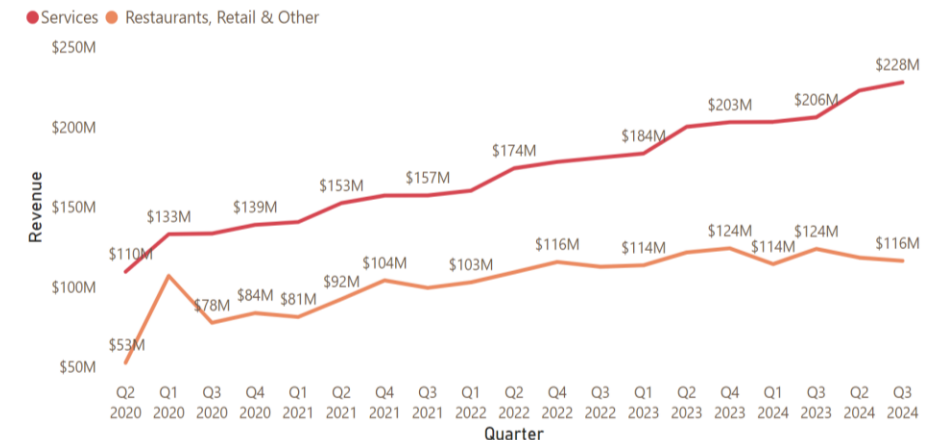
Surprisingly, most of Yelp's revenue comes from services

Advertising Business Breakdown



53%
of millennials have visited restaurants
after seeing it on TikTok

Advertising Revenue over Time



Insights

- RR&O is becoming less and less profitable
- But, as we will see, they make up most of the businesses signed up on Yelp
- Services are willing to pay for advertising, but restaurants are turning to different channels...

Declining profitability of the RR&O Segment – opportunity lies there

Source: MGH Marketing

Industry Analysis

Yelp faces considerable competition from established players

Traditional Competitors



- 1B + monthly users
- \$11.1B rev. in 2023
- 220+ countries



Tripadvisor

- 490M + monthly users
- \$1.8B rev. in 2023
- Focusing travel experience



- 1.3M + monthly reviews
- \$479M rev. in 2023
- Focus on bookings

New Competitors

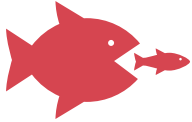
“
42% of people prefer using social media
to find restaurants than search engines
”

Kelly Esten
Toast CMO



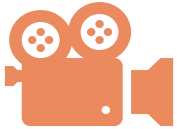
New industry pressures and established players are compressing Yelp's margins

Source: Morgan Stanley, Tripadvisor SEC Filings, Toast



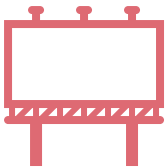
Intense Competition

- Dominance of established players, like Google that have integrated platforms and better information
- Businesses prefer optimizing their presence on other platforms



Shift Towards Influencers and Social Media Recommendations

- Consumers rely on influencer endorsement and peer recommendations
- Yelp's text-heavy reviews are losing value



Ad Revenue Pressures

- More affordable options than Yelp's advertisement model (Google Ads, Instagram Reels, TikTok, ...)
- Puts pressure on Yelp's ability to attract advertisers (which represents 97% of Yelp's revenue)

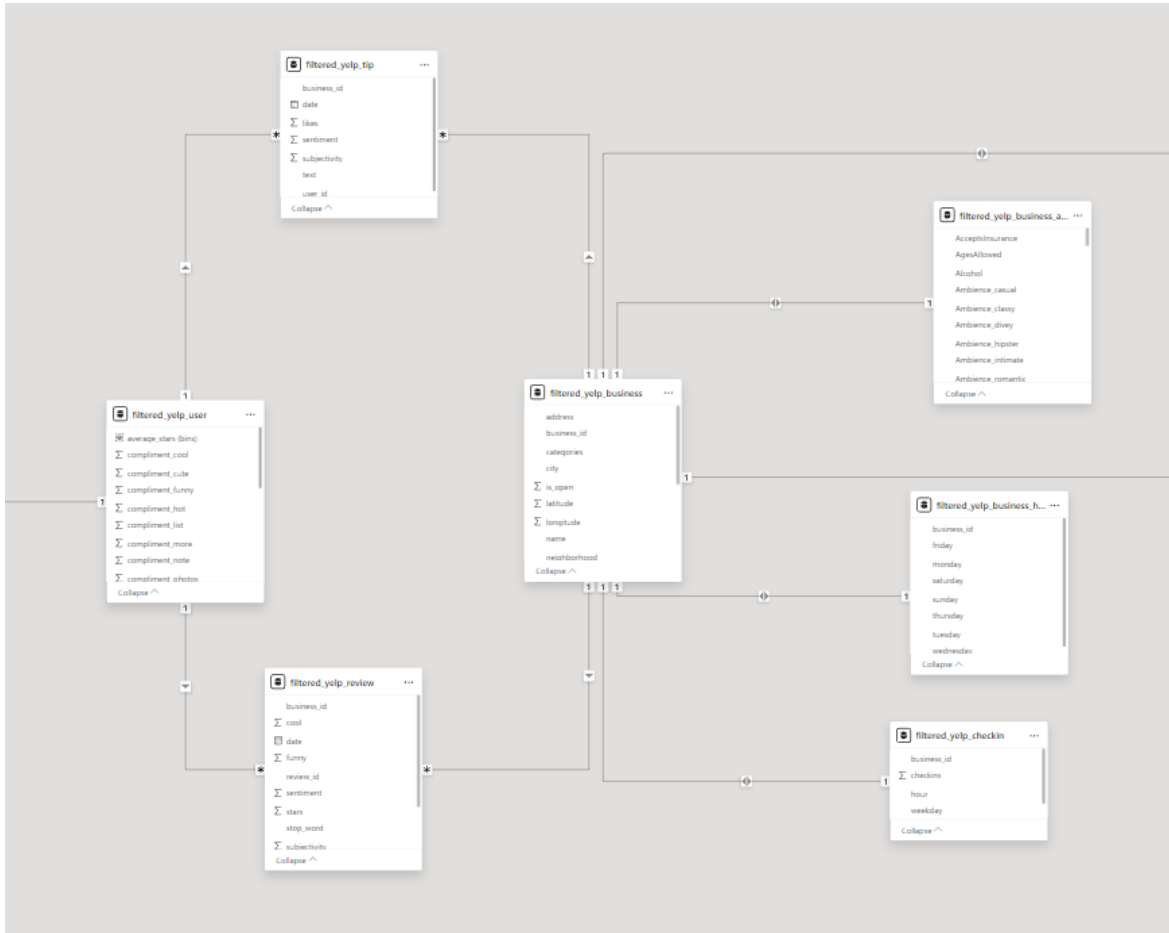
How do we get Yelp
to be competitive
again?

Considering Yelp's current and past performance, and strong industry pressures from competitors, what should be done?

Data Description

The Yelp dataset comprises multiple sources relating to both businesses and users

Relational ERD



Filtered Data



6,000
businesses



100,000
users

Primary Keys



business_id



user_id

Tables

- business
- business_attributes
- business_hours
- check_ins
- reviews
- tips
- users

NLP: TextBlob for text sentiment analysis

Integration across these sources allowed us to create a comprehensive view for segmenting businesses and users effectively

Businesses Breakdown – Statistics

Businesses on Yelp belong to a wide range of categories



Insights



The average star rating for businesses is 3.63



Majority of businesses on Yelp are food & dining

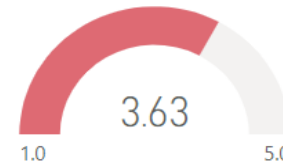


The sentiment of the reviews has an impact on the star rating

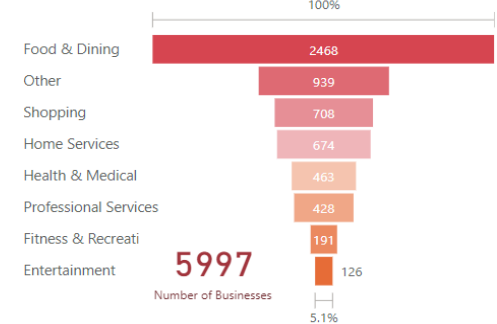
Business Distribution Worldwide



Average Star Rating

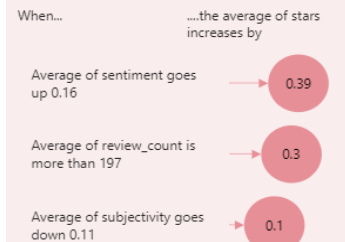


Number of Businesses per Category



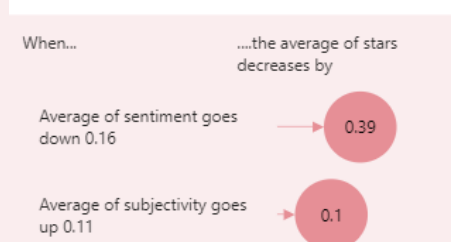
Key influencers

What influences stars to

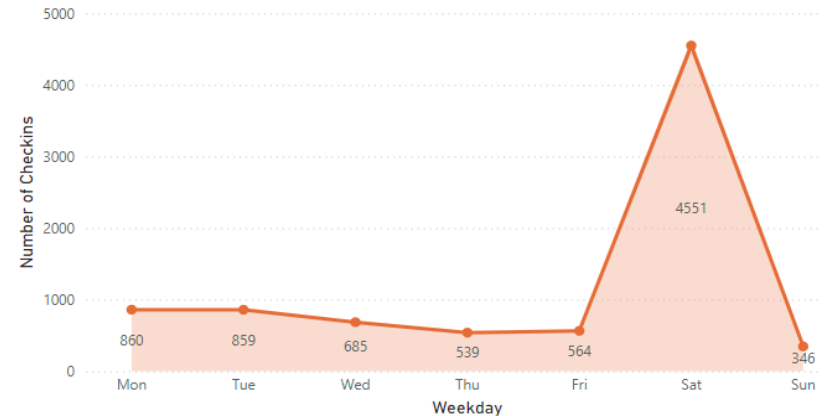


Key influencers

What influences stars to



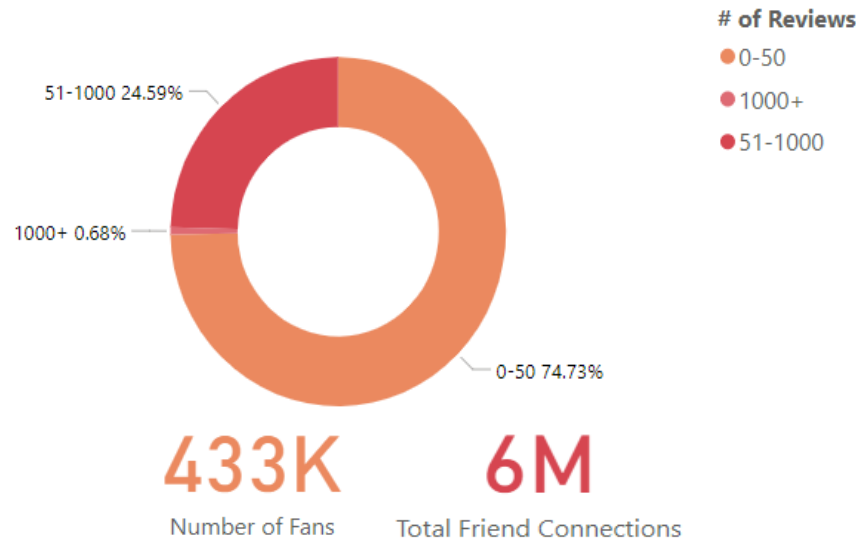
Checkins throughout the week



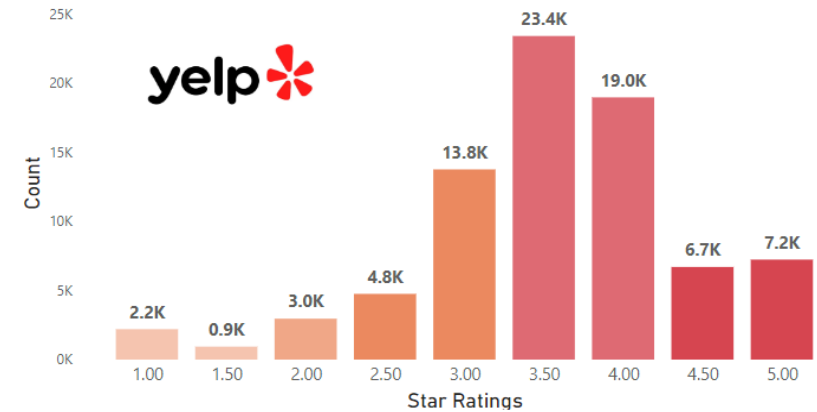
User Breakdown – Statistics

We see that Yelp Users are active, but registration numbers have decreased since the early 2010s

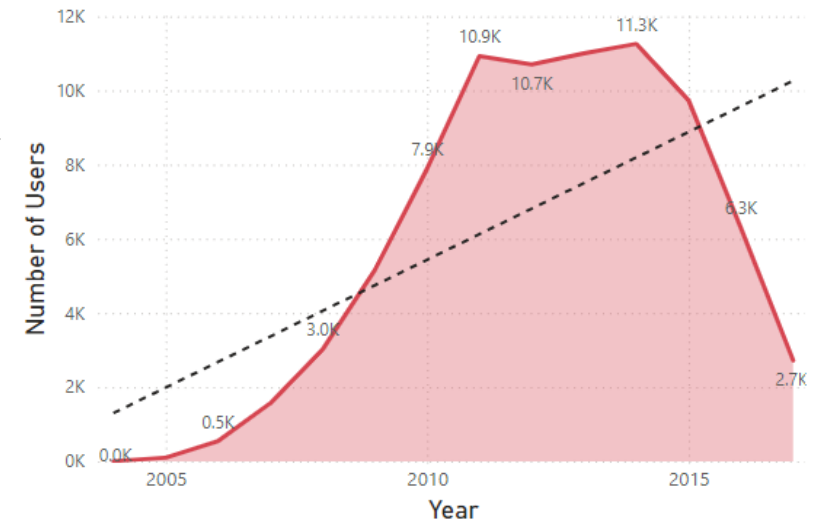
Number of Users by Number of Reviews



Distribution of Star Ratings



Yelp User Registration Over Time



Insights



Almost 75% of users have written 0 to 50 reviews



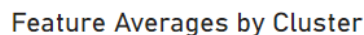
Most users tend to give ratings between 3 to 4 stars



User registration peaked in 2014 then steadily declined

Users might not be registering on Yelp and choosing other competitors due to a lack of incentive

Businesses can be divided into 3 segments



User Breakdown - Segmentation

Yelp users can be divided into 3 different segments

Average of Elite Length and Star Ratings

● Avg. Elite Length ● Avg. Star Rating



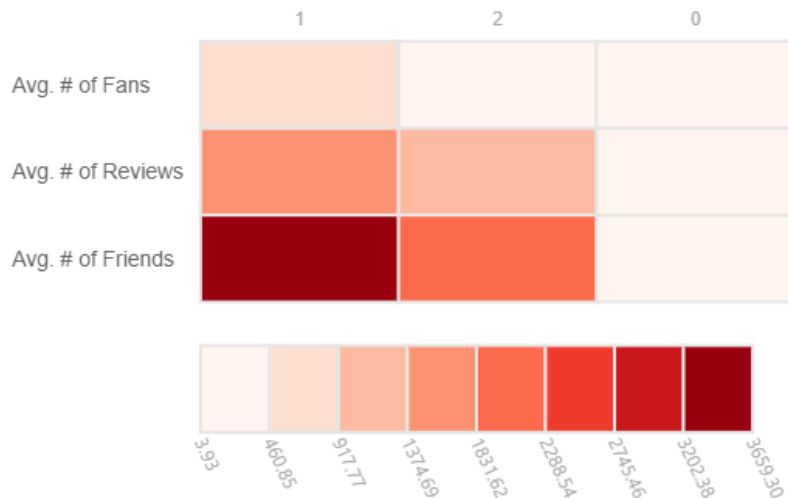
Table of Cluster Stats

Cluster Label	User # per Cluster	Funny Score	Avg. Days Yelping
0	80590	27	4357
1	33	28349	5821
2	326	6596	5607

Average Compliments Received



Average of Fans, Reviews, and Friends



Insights

0

Cluster 0:
Basic
Users

1

Cluster 1:
Top
Users

2

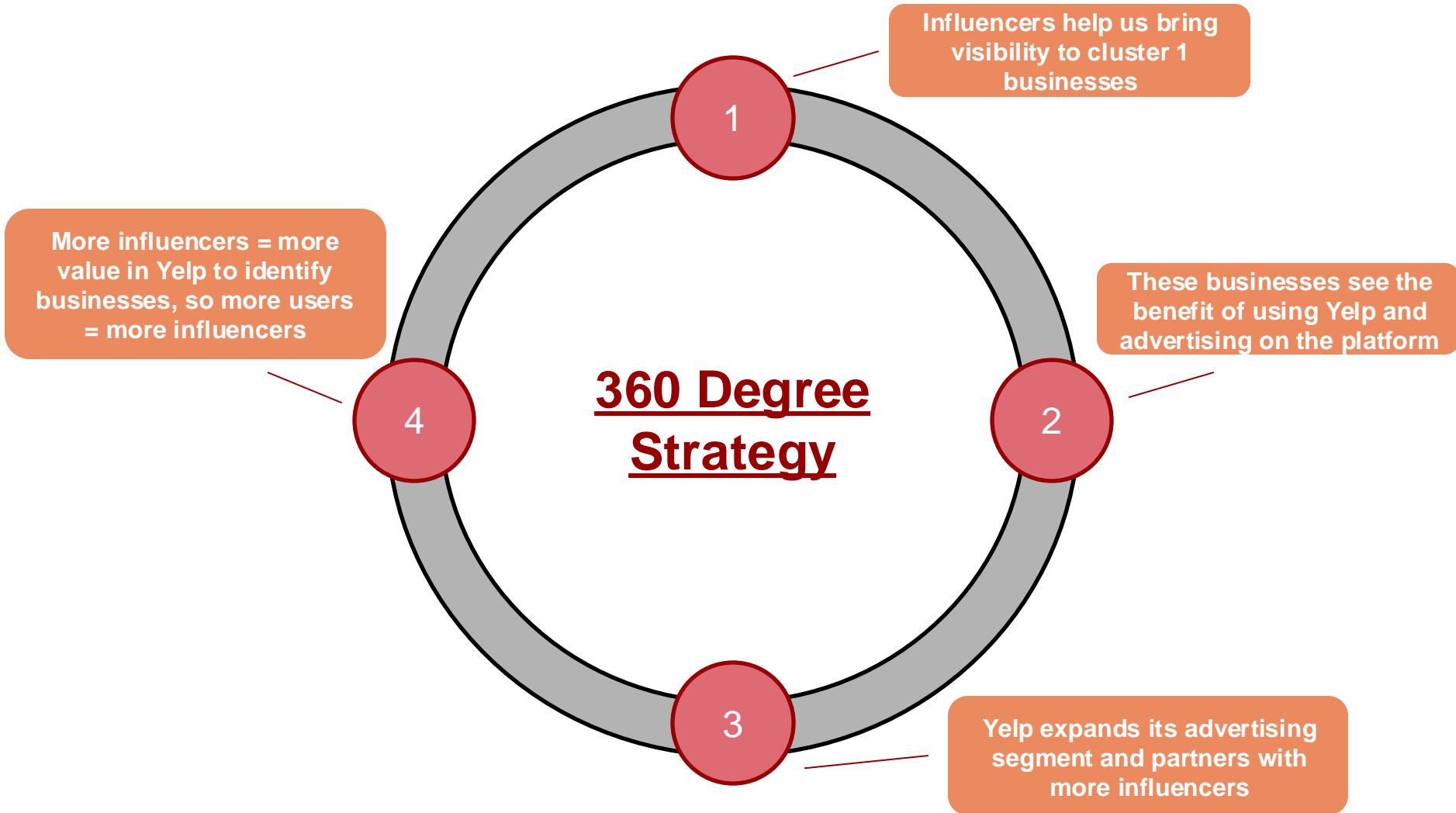
Cluster 2:
Medium
Users

- Can be described as "influencers" as other users pay attention to their reviews, comments, and opinions
- Highest average number of fans, reviews, and friends
- Most average amount of compliments received
- Highest average number of years being an elite member

Top users are considered influential in the Yelp community

Recommendation in Practice

Looking at how Yelp can create more value through influencers



Influencers are the start to a flywheel strategy

Evaluating the impact of our strategy

Does the strategy create long term value to Yelp and shareholders?



Assumptions

- 2x number of “power businesses”
 - From 415 to 830
- These businesses drive the most value for Yelp
- Other growth assumptions follow street consensus

Sensitivity Analysis of our Results

- Bear case: 1.33x current number of “power businesses”
- Bull case: 2.5x current number of “power businesses”
- Management is set to grow Yelp by 1.6% upside

**10.6%
Upside**

Which we can attribute to our recommendation

2 Sensitivity Analysis

		Recommendation Incremental Growth				
		Terminal Value Multiple				
		9.3x	9.8x	10.3x	10.8x	11.3x
Case	Bear	(27%)	(25%)	(22%)	(20%)	(18%)
	Base	(4%)	(1%)	2%	5%	8%
	Bull	10%	13%	17%	20%	23%

		Recommendation Incremental Growth				
		Perpetuity Growth Rate				
		0.00%	0.50%	1.00%	1.50%	2.00%
Case	Bear	(32%)	(29%)	(27%)	(24%)	(20%)
	Base	2%	6%	11%	15%	21%
	Bull	23%	27%	33%	39%	45%

We envision that our strategy is going to increase Yelp's stock price by 10.6% net of management's current trajectory

Source: See Excel File Attached, Yelp Inc. SEC Filings

Thank You!

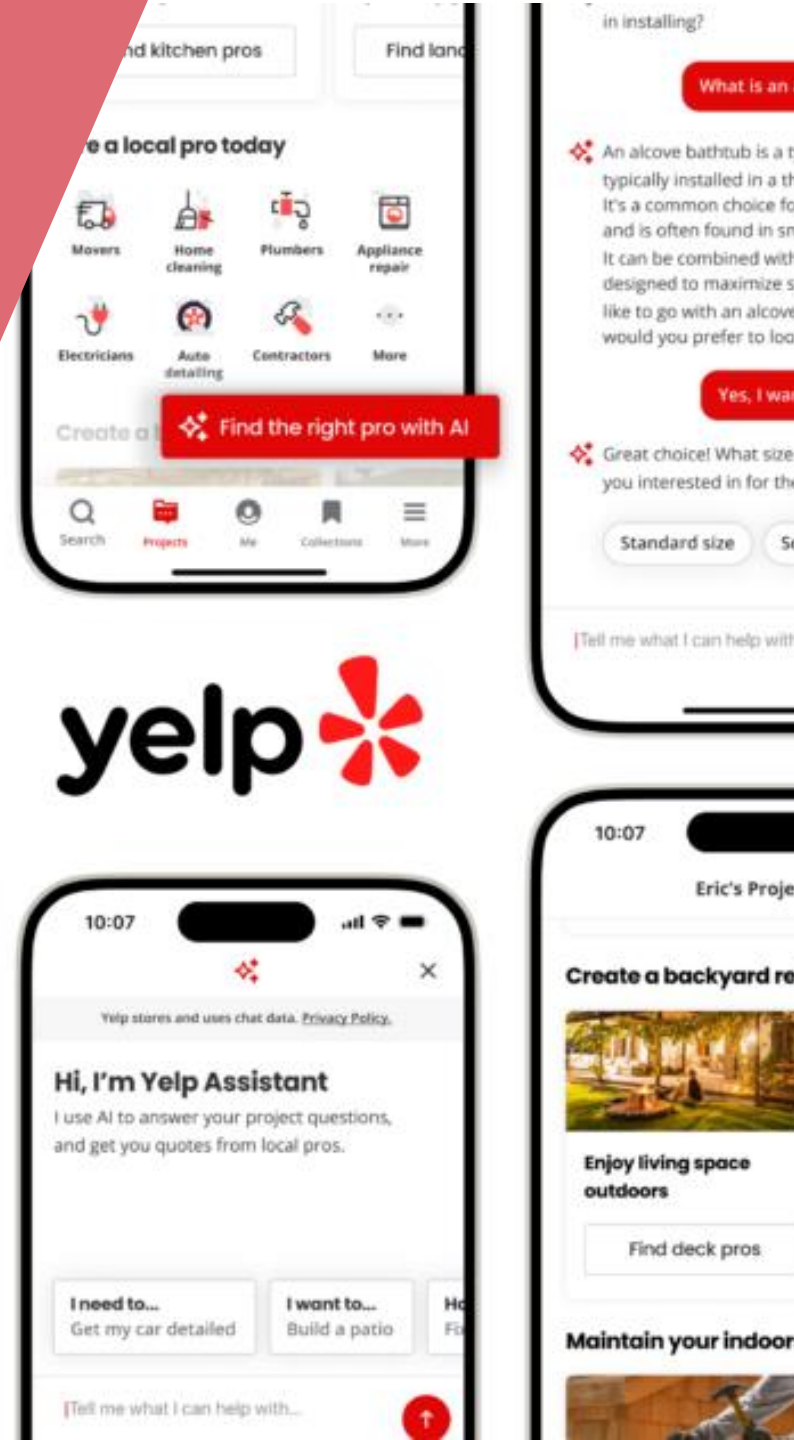
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Appendix

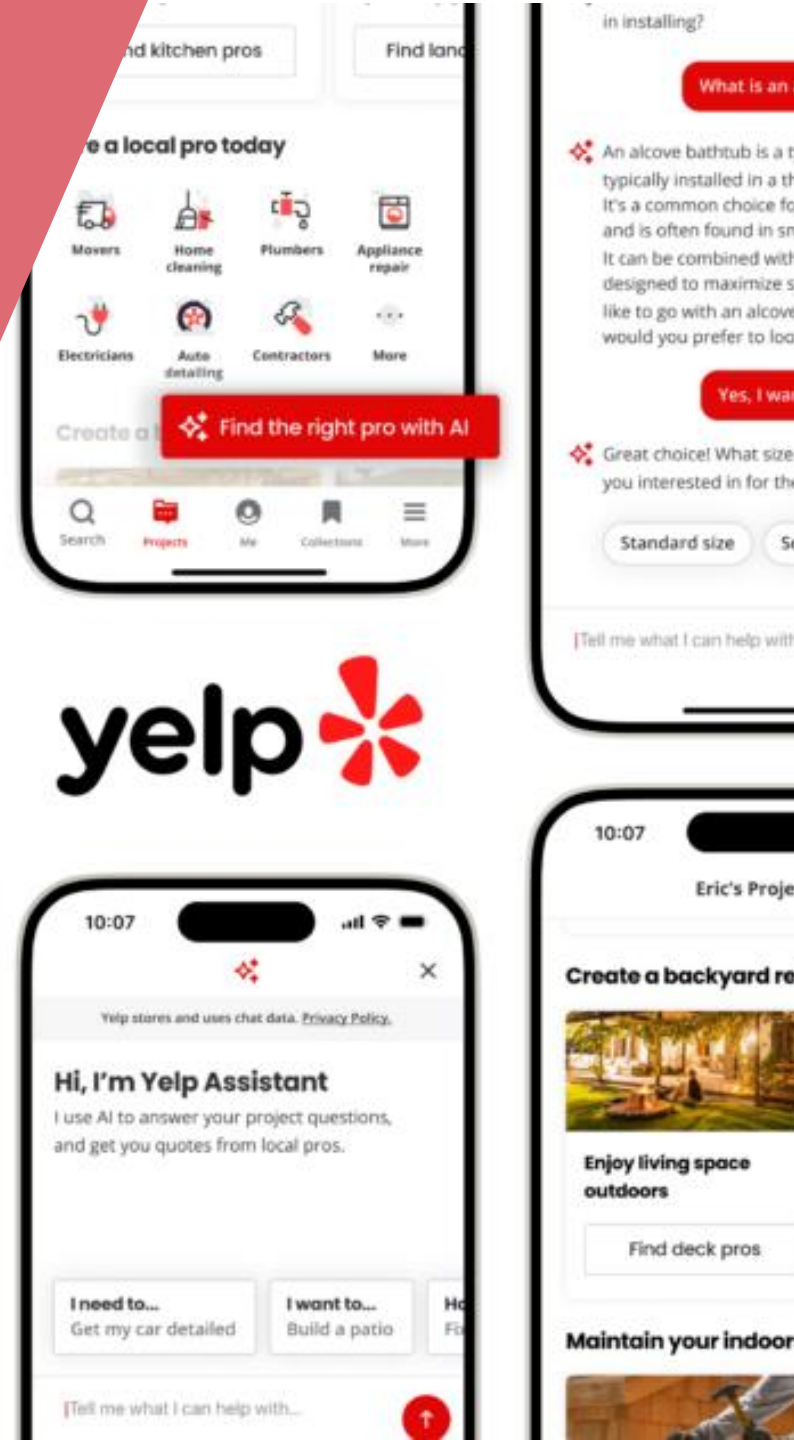
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Appendix 1

Financial Dashboard 1

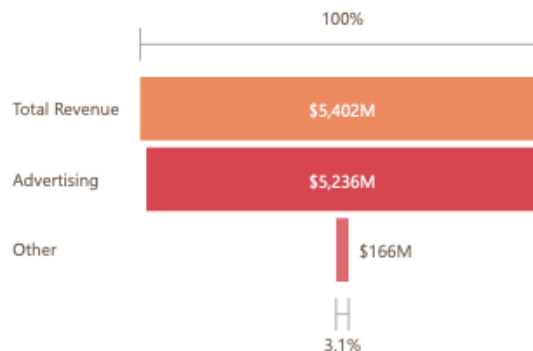
Yelp Financial Breakdown

From 2020 to 2024 (Q3 inclusive)

Date Filter

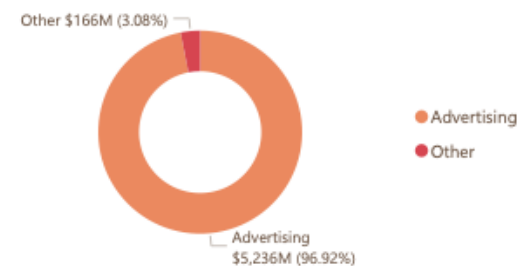
Q1 2020	Q2 2020	Q3 2020	Q4 2020
Q1 2021	Q2 2021	Q3 2021	Q4 2021
Q1 2022	Q2 2022	Q3 2022	Q4 2022
Q1 2023	Q2 2023	Q3 2023	Q4 2023
Q1 2024	Q2 2024	Q3 2024	

Total Revenue by Category

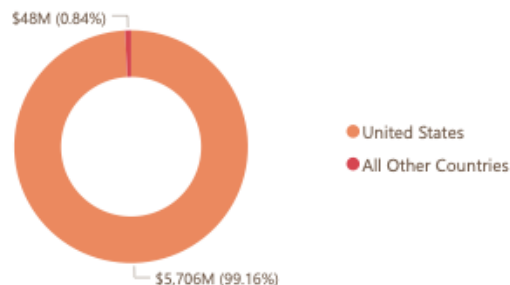


Most of Yelp's Revenue comes from Advertising

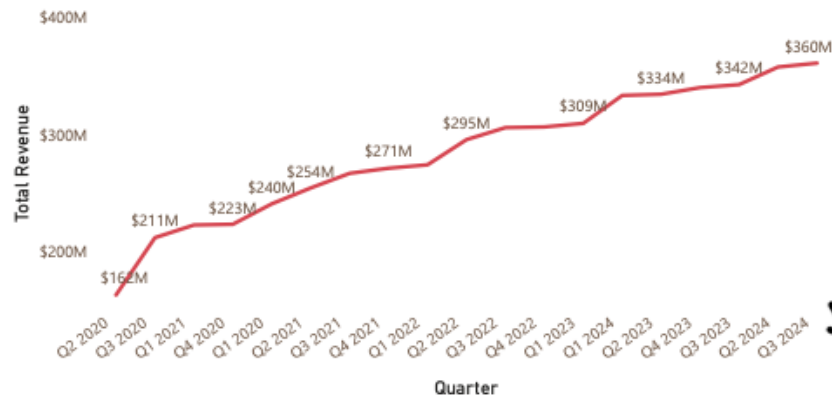
Revenue from Advertising and Other



Revenue by Geography



Total Revenue Over Time



Appendix 2

Financial Dashboard 2

Yelp Financial Breakdown

Looking at the Advertising Segment
From 2020 to 2024 (Q3 inclusive)

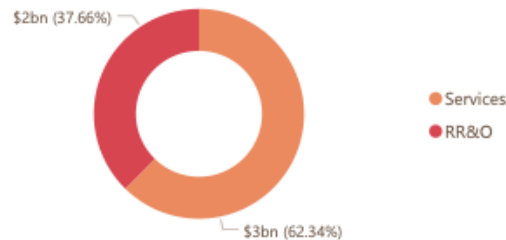
Date Filter

Q1 2020	Q2 2020	Q3 2020	Q4 2020
Q1 2021	Q2 2021	Q3 2021	Q4 2021
Q1 2022	Q2 2022	Q3 2022	Q4 2022
Q1 2023	Q2 2023	Q3 2023	Q4 2023
Q1 2024	Q2 2024	Q3 2024	

Advertising Revenue

\$5.24bn

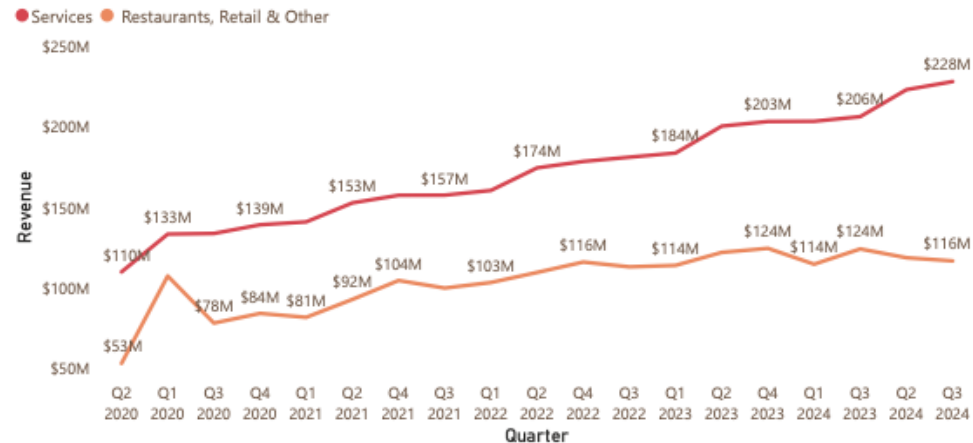
Advertising Segment Breakdown



Note:

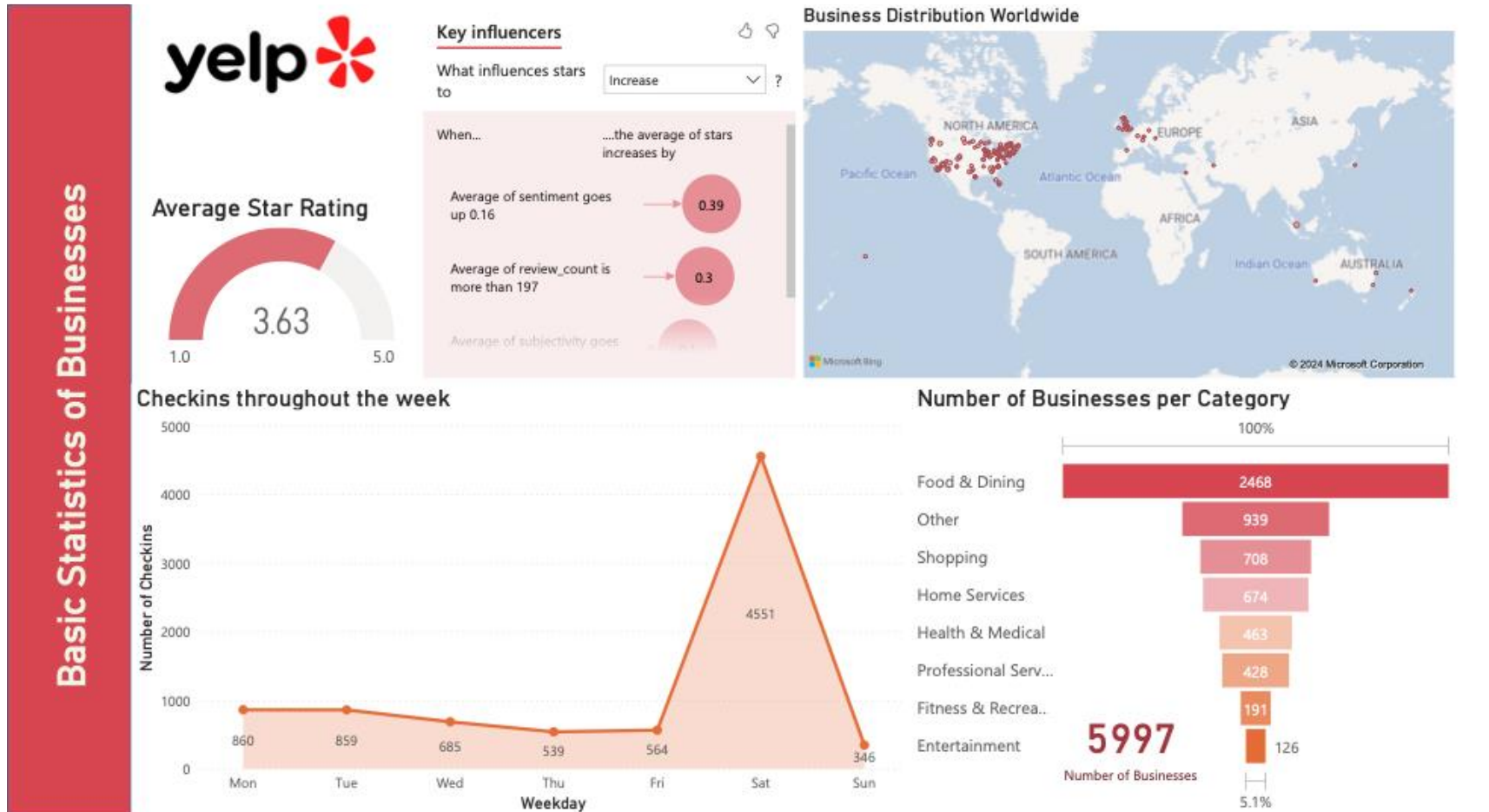
Services include home, local, auto, professional, pets, events, real estate and financial services
Restaurants, Retail & Others include the remaining segments

Advertising Revenue Over Time



Appendix 3

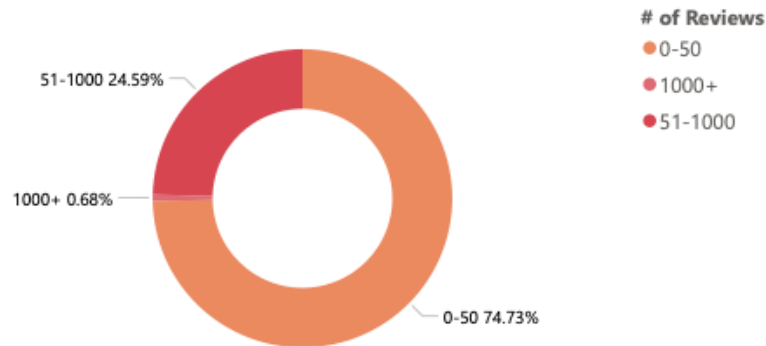
Basic Statistics of Businesses



Appendix 4

Basic Statistics of Users

Number of Users by Number of Reviews



Basic Statistics of Users

433K

Number of Fans

6M

Total Friend Connections

Review # Group Filter

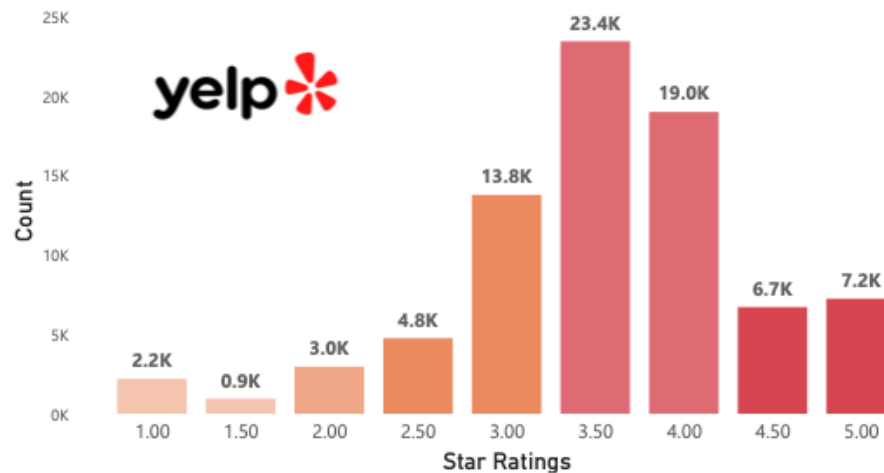
of Reviews

0-50

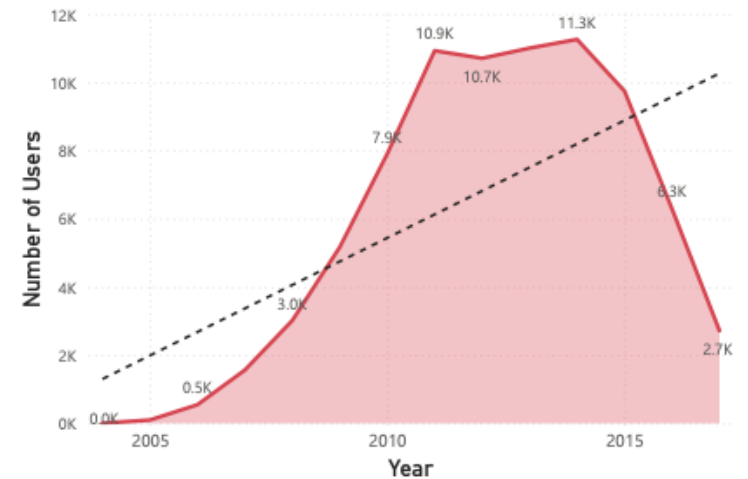
1000+

51-1000

Distribution of Star Ratings



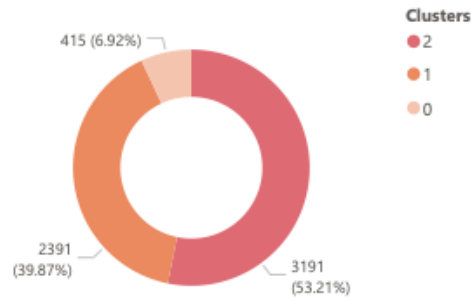
Yelp User Registration Over Time



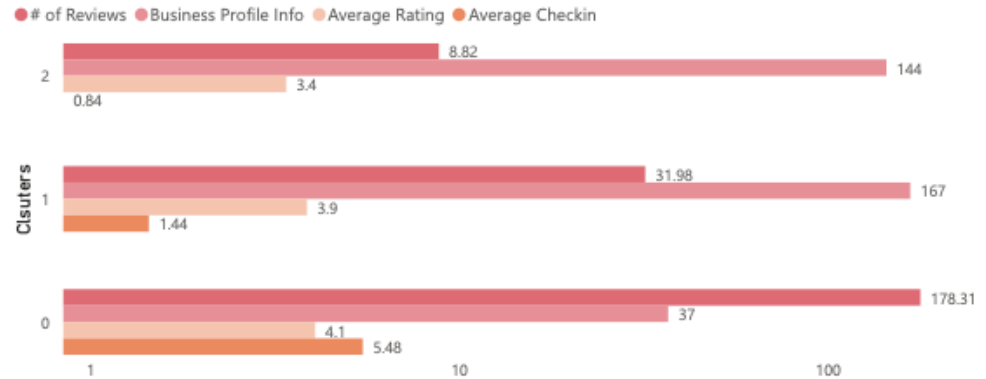
Appendix 5

Segmentation of Yelp's Businesses

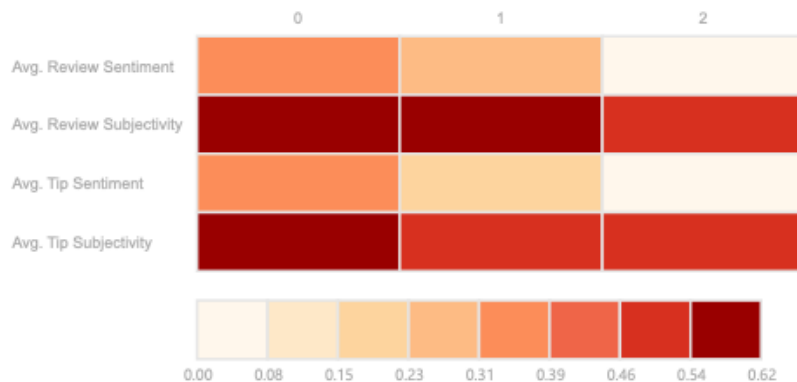
Segmentation-Businesses



Feature Averages by Cluster



Average of Sentiment and Subjectivity



Review Word Cloud



Appendix 6

Segmentation of Yelp's User Base

Average Compliments Received

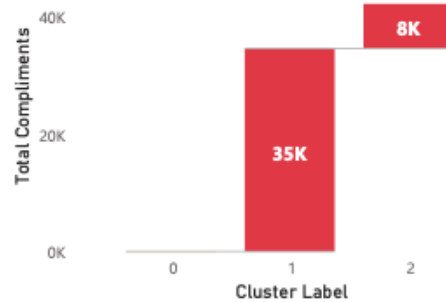
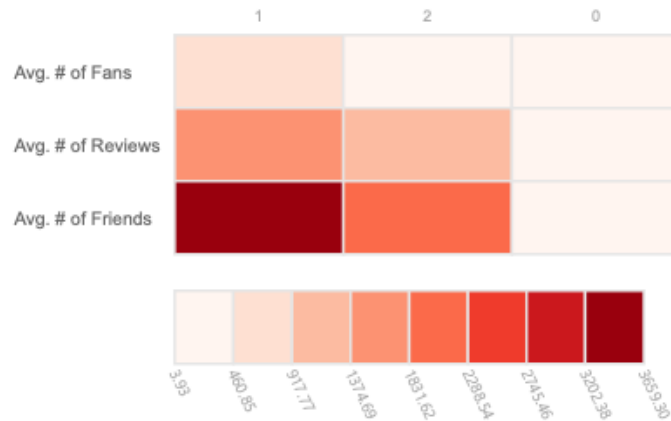


Table of Cluster Stats

Cluster Label	User # per Cluster	Funny Score	Avg. Days Yelping
0	80590	27	4357
1	33	28349	5821
2	326	6596	5607

Segmentation - Users

Average of Fans, Reviews, and Friends



Average of Elite Length and Star Ratings



Appendix 7

Yelp – Financial Assumptions

Yelp - Assumptions

		2022A	2023A	2024A	Forecasted					
1	Income Statement				2025E	2026E	2027E	2028E	2029E	2030E
1 Revenues										
Operating Revenues	2	15.7%	12.0%	4.7%	8.6%	3.5%	7.6%	7.6%	7.2%	8.5%
Bear	1				6.6%	1.5%	5.6%	5.6%	5.2%	6.5%
Base	2				8.6%	3.5%	7.6%	7.6%	7.2%	8.5%
Bull	3				9.6%	4.5%	8.6%	8.6%	8.2%	9.5%
2 EBIT										
EBIT as % of revenue	2	4.9%	5.9%	9.8%	10.2%	10.5%	11.6%	7.8%	10.0%	9.8%
Bear	1				8.2%	8.5%	9.6%	5.8%	8.0%	7.8%
Base	2				10.2%	10.5%	11.6%	7.8%	10.0%	9.8%
Bull	3				11.2%	11.5%	12.6%	8.8%	11.0%	10.8%
2 Recommendation										
1 EBIT as % of Current EBIT										
EBIT Incremental Increase	2	-	-	-	3.0%	3.8%	4.6%	5.4%	6.1%	6.9%
Bear	1				1.0%	1.3%	1.5%	1.8%	2.0%	2.3%
Base	2				3.0%	3.8%	4.6%	5.4%	6.1%	6.9%
Bull	3				5.0%	5.8%	6.6%	7.4%	8.1%	8.9%

Note:

Base case assumes that Yelp can double the amount of "power businesses" from its baseline in 2024. We assume this happens in 5 years, with steady increments.

Bull case assumes that Yelp can 2.5x the amount of "power businesses" from its baseline in 2024. We assume this happens in 5 years, with steady increments.

Bear case assumes that Yelp can only convert a 1/3 of the amount of "power businesses" from its baseline in 2024. We assume this happens in 5 years, with steady increments.

Table for Reference

	#of Users	% of Total
Cluster Label 0 - Power Users	415	6.92%
Cluster Label 1 - Average Business	2391	39.87%
Cluster Label 2 - Lower Quality	3191	53.21%
Total	5997	1

--> from dashboard analysis

Appendix 8

Yelp – Financial Schedule

Yelp - Schedule

		Historical				Forecasted					
		2021A	2022A	2023A	2024A	2025E	2026E	2027E	2028E	2029E	2030E
1	Income Statement										
1	Revenues										
	Operating Revenue	\$1,032	\$1,194	\$1,337	\$1,401	\$1,522	\$1,575	\$1,694	\$1,823	\$1,954	\$2,119
	YoY Growth		15.7%	12.0%	4.7%	8.6%	3.5%	7.6%	7.6%	7.2%	8.5%
	Total Revenues	\$1,032	\$1,194	\$1,337	\$1,401	\$1,522	\$1,575	\$1,694	\$1,823	\$1,954	\$2,119
2	EBIT										
	Operating Income	\$32	\$58	\$79	\$137	\$155	\$166	\$197	\$143	\$195	\$208
	% of Revenue	3.1%	4.9%	5.9%	9.8%	10.2%	10.5%	11.6%	7.8%	10.0%	9.8%
2	Recommendation Tab										
1	FCF										
	Current EBIT	-	-	-	-	\$155	\$166	\$197	\$143	\$195	\$208
	New EBIT	-	-	-	-	\$5	\$6	\$9	\$8	\$12	\$14
	% of current FCF	-	-	-	-	3.0%	3.8%	4.6%	5.4%	6.1%	6.9%

Appendix 9

Yelp – Recommendation Improvement

Yelp Inc. - DCF

0 Outputs						
Case Running			Recommendation Switch		Recommendation Switch	
Case Switch	Base		Recommendation On?	On	For Reference	Upside
Case Running	2				Recommendation Off	1.3%
					Recommendation On	12.0%
					Recommendation Incremental Growth	10.6%
General Assumptions			Bridge to Equity		Bridge to Equity	
Valuation Date	11/19/2024		Exit Multiple Method		Gordon Growth Method	
Ticker	YELP		Discount Rate	9.4%	Discount Rate	9.4%
Share Price	\$36.46		Sum of PV of Cash Flow	\$705.22	Sum of PV of Cash Flow	\$705.22
FD Shares Outstanding	69.16		Terminal Multiple	10x	Terminal Growth Rate	1.0%
Cash	\$261.59		Terminal Value	\$2,649.12	Terminal Value	\$3,061.79
Debt	\$70.30		PV of Terminal Value:	\$1,545.25	PV of Terminal Value	\$1,785.96
			Implied Terminal Enterprise Value	\$2,250.47	Implied Terminal Enterprise Value	\$2,491.18
DCF Assumptions			(+) Cash	\$261.59	(+) Cash	\$261.59
Tax Rate	20.0%		(-) Debt	\$70.30	(-) Debt	\$70.30
WACC	9.4%		Implied Equity Value	\$2,582.36	Implied Equity Value	\$2,823.07
Exit Multiple	10x					
Perpetuity Growth Rate	1.0%		Shares Outstanding	69.16	Shares Outstanding	69.16
Note:			Implied Share Price	\$37.34	Implied Share Price	\$40.82
WACC from Bloomberg			Implied Upside/Downside	2.4%	Implied Upside/Downside	12.0%

1 DCF	2025E	2026E	2027E	2028E	2029E	2030E
1 Current Business Model						
Revenue	\$1,522	\$1,575	\$1,694	\$1,823	\$1,954	\$2,119
% Growth	8.6%	3.5%	7.6%	7.6%	7.2%	8.5%
EBIT	\$155	\$166	\$197	\$143	\$195	\$208
% of Revenue	10.2%	10.5%	11.6%	7.8%	10.0%	9.8%
(-) Taxes	(\$31)	(\$33)	(\$39)	(\$29)	(\$39)	(\$42)
NOPAT	\$186	\$199	\$237	\$171	\$234	\$250
2 Addition of Our Recommendation						
EBIT from recommendation	\$5	\$6	\$9	\$8	\$12	\$14
% of Current EBIT	3.0%	3.8%	4.6%	5.4%	6.1%	6.9%
(-) Taxes	(\$1)	(\$1)	(\$2)	(\$2)	(\$2)	(\$3)
NOPAT	\$6	\$8	\$11	\$9	\$14	\$17
3 FCF						
Total NOPAT	\$192	\$206	\$248	\$180	\$249	\$267
(+) Depreciation & Amortization	\$39	\$39	\$40	\$40	\$46	\$49
(-) Capital Expenditures	(\$40)	(\$40)	(\$40)	(\$40)	(\$40)	(\$40)
(-) Change in Net Working Capital	(\$196)	(\$12)	(\$27)	(\$36)	(\$36)	(\$36)
Unlevered Free Cash Flow	(\$5)	\$193	\$220	\$145	\$219	\$240
Discount Factor	0.91	0.84	0.76	0.70	0.64	0.58
Discounted Free Cash Flow	(\$5)	\$161	\$168	\$101	\$140	\$140
Sum of PV of UFCF	\$705					

2 Sensitivity Analysis					
Recommendation Incremental Growth			Recommendation Incremental Growth		
Terminal Value Multiple			Perpetuity Growth Rate		
	9.3x	9.8x	10.3x	10.8x	11.3x
Case					
Bear	(27%)	(25%)	(22%)	(20%)	(18%)
Base	(4%)	(1%)	2%	5%	8%
Bull	10%	13%	17%	20%	23%