

Leave us a review



Three horizontal black bars of varying lengths, representing a text input field for a review. A small green rectangular button is positioned to the right of the input area.



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AGENDA

1. Value Proposition
2. Use Case
3. Methodology
4. Demo
5. Next Steps
6. Questions

When businesses receive reviews online it's **hard** to track and respond to every customer.

Our goal is to make responding to customers **easy, fast** and **personalized**.

Value Proposition

For any given business, consumer feedback exists across multiple forums...



... and reviews are integral to future consumer visits ...

63.6%

consumers look at
online reviews before
visiting an
establishment

53%

consumers expect
businesses to respond
to negative reviews
within 7 days

63%

consumers never
receive a response

94%

consumers state an
online review has
helped them avoid a
business





45%

CONSUMERS WOULD
RETURN TO A LOW RATED
BUSINESS, DESPITE AN
INITIAL NEGATIVE REVIEW, IF
THE BUSINESS **RESPONDED**

... yet businesses hardly respond.

As of 2017, there were ~ 45.17MM restaurant Reviews on Yelp, most without responses from business owners

Food was amazing! Can't wait to come back!



Went here for my birthday. Good food, but no free cake



Slow service but good ambiance and food. Took a while for water



Awful service! Do not recommend



Typical local diner food. Ordered on UberEats- food was cold



**Opportunity exists to enable direct business
to consumer feedback across multiple
platforms with the help of a personalized
NLP plugin**

Use Case

Panda Mick's

Specializing in pandemic friendly cuisine since March, 2020



During the course of the pandemic, Panda Mick's has received an eclectic score of reviews across multiple platforms



5

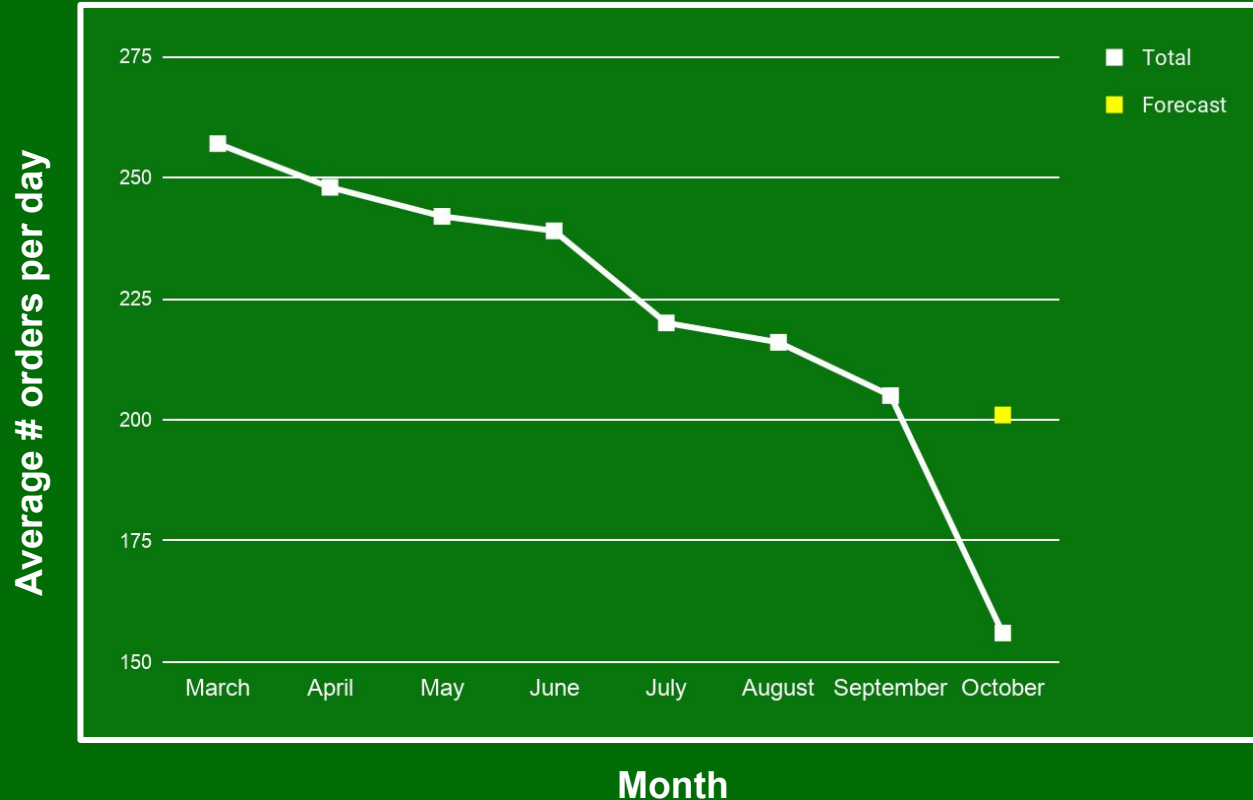
**KNOWN
PLATFORMS**



1.2K+

**AGGREGATED
REVIEWS**

of aggregate orders per day has steadily declined MoM, potentially due to lower ratings



With:

5 Sub-par Servers



4 Average Managers



2 Cute Yet Useless Supervisors



~200*

ORDERS PER DAY

* declined from 250 orders a day in March

5+

**DELIVERY & TAKEOUT
PLATFORMS**

**Panda Mick's barely has time to respond, let alone
differentiate negative from positive reviews!**

Steady decline in orders may be due to lack of business response - especially towards negative reviews.

If Panda Mick's was to implement an automated yet intuitive response system, average # of orders per day would increase since customers would feel acknowledged.

Model

Methodology

Train the Model

- Created shell NLP code for sentiment analysis
- Sampled a large YELP review dataset with **1MM** reviews from Kaggle
- Ensured basic sentiment was accurate; model was at 67% predictable accuracy



Personalize it

- Developed list of responses, ranging from very positive (5 stars) to abysmal (1 star)
- Produced list of variables, specific to Panda Mick's (i.e. server names, delivery services, etc)



Enhance the Model

- Joined the model with personalized variables and response types based on predicted star rating



Test it

- Created 5 sample responses and ensured model had predicted expected star rating & personalized responses



Demo

Test Cases

Scenario 1

Feedback: I loved this restaurant! Our servers were great, and very responsive to our needs. My wife and I went there for our 10th anniversary, and we will be recommending the experience to our friends.



Generated response: We're glad we could be a part of your special day! Congratulations on your anniversary.

Scenario 2

Feedback: What a lousy joint. The food was undercooked and mealy. I wouldn't go there if you paid me. The restaurant was dirty, and during Covid, that is a major concern for my family. Go there at your own risk.



Generated response: We assure you that Panda Mick's is taking all precautions. We apologize that we were not up to par during your visit. Please give us another chance to provide a better experience.

Test Cases (cont'd)

Scenario 3

Feedback: Just got my order from UberEats, and it was super fast. The food was good, especially the beignets, but some of it was a little damaged and they did not bring enough sauce. More sauce, please!



Generated response: Thank you for your response about your order. We are working with UberEats and we are both improving every day.

Scenario 4


Feedback: I was mostly happy with my meal. My sister's samosas were cold, as the service was a little slow. I would go there again and try something else.



Generated response: We're glad you enjoyed your meal! We are continuing to work on improving your service experience.

Test Cases (cont'd)

Scenario 5



Feedback: I went to Panda Mick's for dinner yesterday, and I will not be going back. Our server was very nice, but overwhelmed. There was a smell, and I don't think that the restaurant was as clean as I would like. Your mileage may vary, but you can't say I didn't warn you.

Generated response: We assure you that Panda Mick's is taking all precautions. We apologize that we were not up to par during your visit. Please give us another chance to provide a better experience.



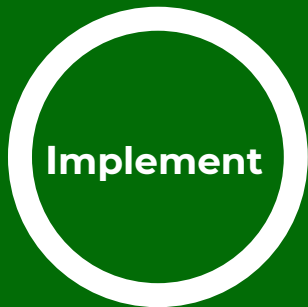
Market

Survey market and
competitively
price our product



Enhance

Train our model to
work for **industries**
beyond
restaurants



Implement

Implement our
responses live on
review websites

Next Steps

Questions?