The New York Times

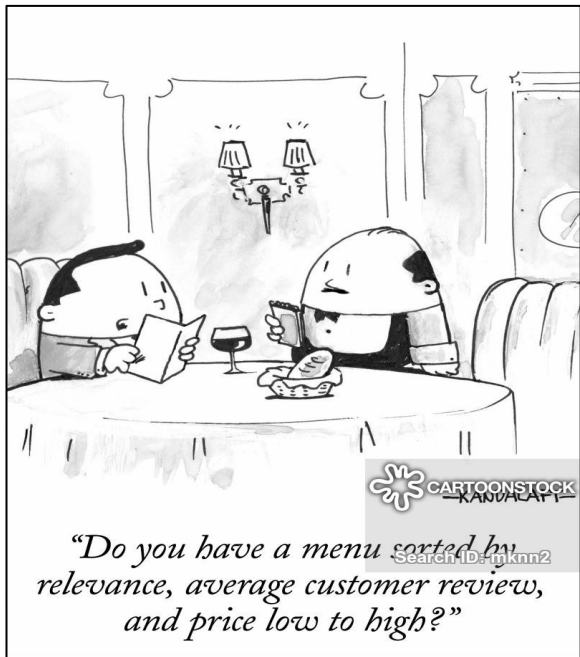# Restaurant Reviews

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Influence of Restaurant Reviews

"Do you have a menu sorted by relevance, average customer review, and price low to high?"

CNN travel

DESTINATIONS   FOOD & DRINK

FOOD & DRINK

Cheese soufflé at heart of trial over French chef's lost Michelin star
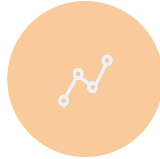
LIFE & STYLE

A Reckoning With the Dark Side of the Restaurant Industry

In the wake of Anthony Bourdain's suicide, chefs and restaurateurs speak out about rampant stress, depression a field and ways to fight back

Agenda

Data

Findings

**Objective**

Analysis

Next Steps

Background

The *New York Times* (NYT) has a large reader base and plays an important role in shaping public opinion and setting the tone of the public discourse, especially in the U.S.

"I had steak at Peter Luger after The New York Times gave it a scathing zero-star review, and it didn't live up to the hype"

Objective

Understand the influence of NY reviews on restaurant perceptions
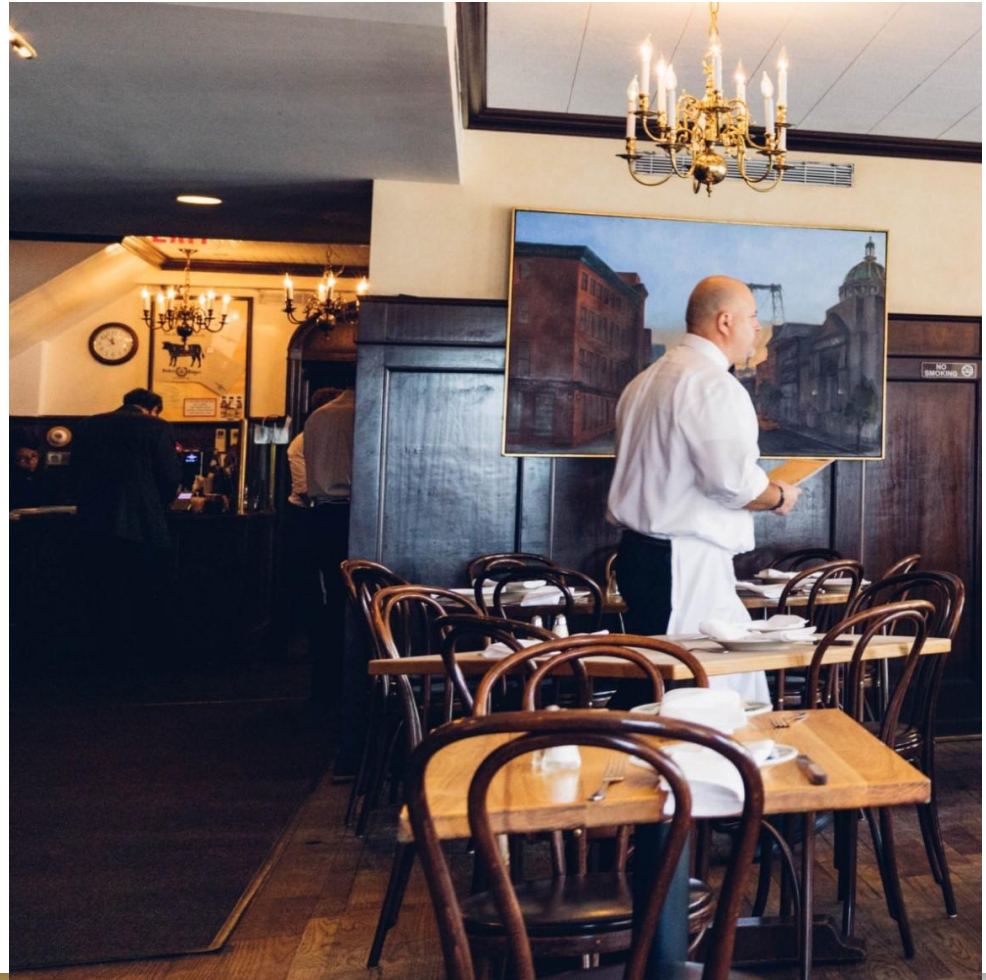
Data Summary

Scraping Yelp and NYT Reviews

Sanity Check

Filtering relevant data

> List of 19 restaurants

> Data filtered for different dates as per the New York Times review (6 months before and 6 months after)

> Average 600 reviews per restaurant
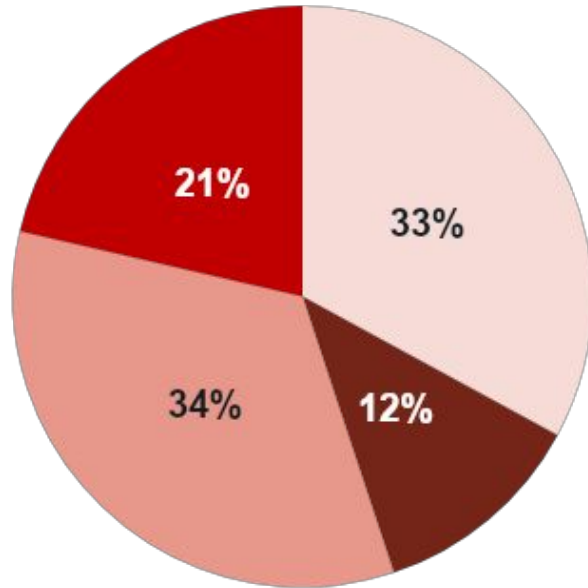
✅ **Topic Modelling**

✅ **Sentiment Analysis**

✅ **Evaluation**

Popular Keywords in Yelp Restaurant Reviews

Topic Modeling

What topics mattered the most?

Ambience : Place, Experience, View

Asian : Kaya. Malaysian, Rice

Food quality : Dish, Make, Order

Service : Wait, Table, Place

Ambience 33%
Asian 12%
Food quality 34%
Service 21%

Ambience ▪ Asian ▪ Food quality ▪ Service

Topics Discussed across Restaurant Reviews

Restaurant	New York Times Reviews (Topics)	Yelp Reviews (Topics)
Coco Pazzo	Food Quality	Food Quality
Dalongyi Hotpot	Food Quality	Food Quality
Fish Cheeks	Food Quality	Food Quality
Gotham Bar and Grill	Food Quality	Ambience
Kopitiam	Asian	Asian
Made Nice	Food Quality	Food Quality
Manhatta	Ambience	Ambience
Peter Luger	Service	Service
Sen Sakana	Ambience	Ambience
Tsismis	Asian	Asian
701 West	Ambience	Ambience

Sentiment Analysis
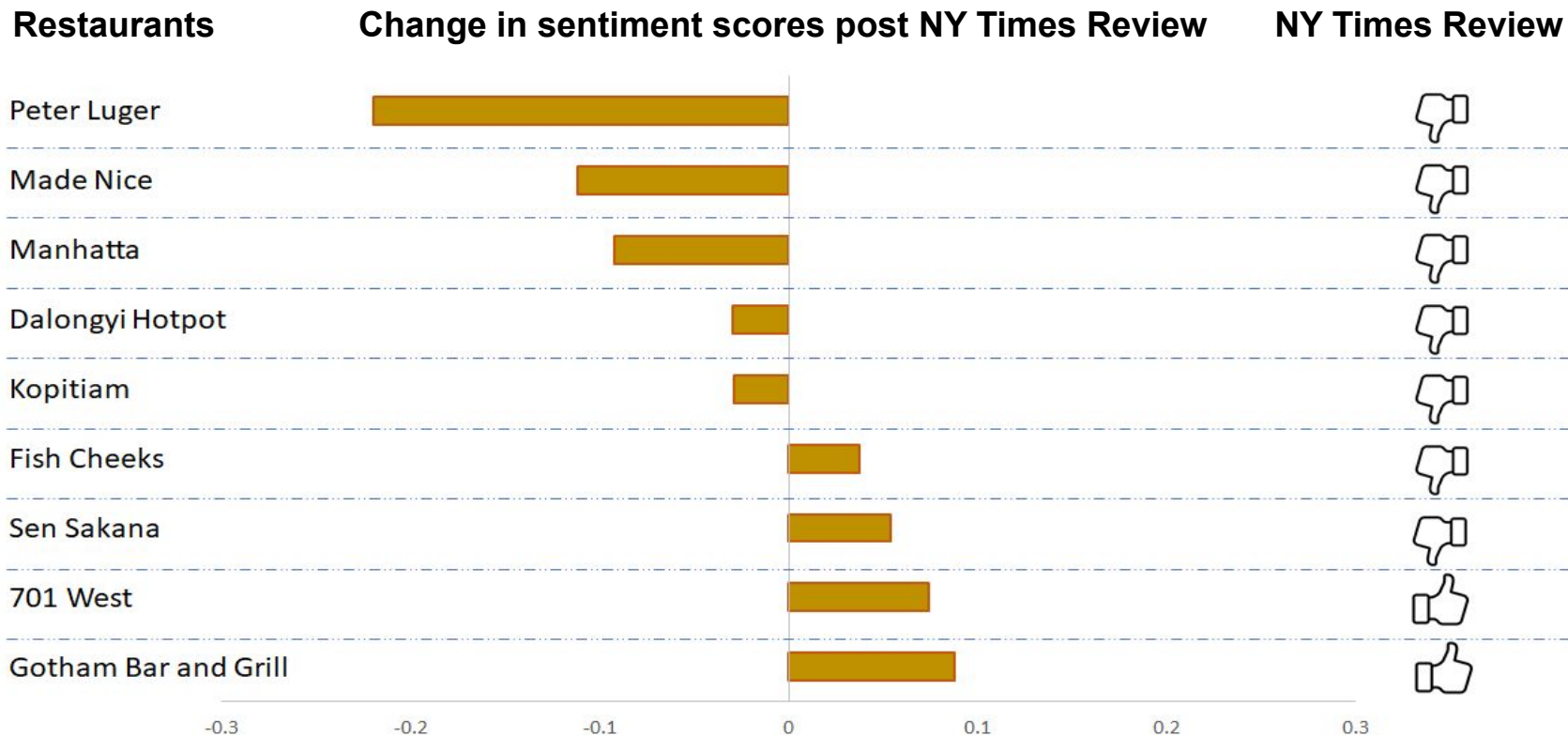
How Did NYT Review Affect Peter Luger's Sentiment?

Pre NYT Review	NYT Review Sentiment	Post NYT Review

- **86%** positive sentiment

- Popular keywords:
  Great, **Amazing, Delicious, Dessert**

- **67%** negative sentiment

- Popular keywords:
  Undercooked, Modest, Chef

- **72%** positive sentiment

- Popular keywords:
  Bland,Poor Mediocre, Steak

Problem with Approximating Footfall at Restaurants

Overview Photos Menu Specials Reviews Twitter

Boulud Sud

★★★★★ 4.6 💬 5922 Reviews 🔘 $50 and over 🍴 Mediterranean

Top Tags: Pre/Post Theatre Special Occasion Creative Cuisine

Chef Daniel Boulud's vibrant Mediterranean menu offers flavors from France, Spain, Italy, Greece, North Africa and Turkey. There is an emphasis on grilled fish and meats as well as an abundance of fresh vegetables. With an entrance on West 64th Street, Boulu...

Make a reservation

Party Size

For 2

Date   **Time**

Today   9:30 PM

Find a Table

↗ Booked 97 times today

Special offers available. See details

I'll reserve

- Confirmation is immediate
- No registration required
- No booking or credit card fees!

2 other people looked for your dates in the last 10 minutes

Summary

The NYC reviews do touch upon similar topics that are discussed between customers in Yelp

The reviews also catalyze the shift of sentiments across customers, thus effecting a lot on Restaurant's reputation

Future Scope

Yelp Sentiment Analyzer :
- Analysis of the topics, sentiments and trends to present a report on periodic basis
- Observing how changes in reviews and NYC article impact the business. Estimation of a dollar value

Scraping data from other webpages and observing whether these patterns are universal

Questions