

yang_2021_revealing_industry_challenge_and_business_response_to_covid_19_a_text_mining_approach

Year

2021

Author(s)

Mu Yang and Chunjia Han

Title

Revealing industry challenge and business response to Covid-19: a text mining approach

Venue

International Journal of Contemporary Hospitality Management

Topic labeling

Manual

Focus

Secondary

Type of contribution

Established approach

Underlying technique

Manual labeling assisted by associated documents

Topic labeling parameters

\

Label generation

Two extra researchers in hospitality research were recruited in our project for the topic label assignment. By looking at the top words and close reading of a substantial number of tweet examples for each topic, the labels were discussed and assigned by the research team. We report these labels, along with each topic's proportion and top seven words in Table 2.

Topic no.	Topic label	Topic proportions (%)	Top words
Topic 9	Covid-19 impact	7.3	Covid, coronavirus, pandem, hospit, will, covid- and hoteli
Topic 15	Marketing news	5.8	Hospit, new, market, brand, podcast, blog and live
Topic 20	Advice and experience sharing for success	5.3	Can, custom, way, help, technolog, use and busi
Topic 24	New hotel opening	5.3	Hotel, resort, success, hostel, hoteli, entrepreneur and luxuri
Topic 13	Food delivery	5.2	Restaur, deliveri, hospit, food, pub, foodservic and cafe
Topic 18	Sector support	4.9	Hospit, busi, sector, retail, award, leisur and govern
Topic 29	Catering job ads	4.6	Career, job, cater, look, recruit, full and chef
Topic 5	Manager job ads	4.5	Job, manag, open, latest, hire, check and click
Topic 17	Guest experience	4.4	Hospit, guest, experi, welcom, stay, love and servic
Topic 12	Special day celebration	4.3	Thank, day, work, team, year, love and happi
Topic 22	Event hosting	4.0	Hospit, great, event, meet, follow, venu and forward
Topic 28	IIHM-related	3.7	Chef, hospit, food, iihm, iihmhotelschool, iihmbestyear and cater
Topic 6	Solution and training	3.5	Learn, manag, train, solut, student, career and join
Topic 21	Business running tips	3.4	Hospit, week, next, want, start, tip and give
Topic 14	Travel booking	3.3	Travel, holiday, tourism, data, vacat, book and insight
Topic 27	Interior design	3.2	Design, hospit, interiordesign, project, interior, light and architectur
Topic 19	Booking offers	3.1	Offer, today, book, contact, visit, profession and call
Topic 16	Coping with Covid-19	3.0	Need, support, pleas, help, let, save and local
Topic 8	Sector changes	2.6	Hospit, consum, will, chang, launch, health and continu
Topic 26	Drinks	2.6	Resourc, bar, free, drink, get, wine and cocktail
Topic 23	Hotel for sale	2.4	Hospit, sale, locat, just, clean, citi and nation
Topic 25	Sports event	2.1	Good, news, intern, season, sport, premier and beyond
Topic 4	Guest praise	1.8	Hospit, perfect, qualiti, suit, weekend, inn and enjoy

(continued)

Topic no.	Topic label	Topic proportions (%)	Top words
Topic 11	Technology trend	1.8	Industri, trend, impact, interest, transform, iot and smart
Topic 7	General job ads	1.7	Group, outdoor, ireland, compass, cateringjob, rvpark and campground
Topic 30	Generic industry discussion	1.6	Look, take, come, like, care, futur and readi
Topic 3	Restaurant survival guide	1.3	Restaurantbusi, staff, wait, guid, edinburgh, medic and cornwal
Topic 2	Event planning	1.2	Eventprof, realli, happen, what, tonight, eventplann and forget
Topic 1	Pakistan/Caribbean food	1.1	Total, pakistan, caribbean, gorgeous, die, accorhotel and infoappli
Topic 10	Furniture	0.8	Hospit, furnitur, cafe, horeca, decorcom, piec and customfurnitur

Motivation

\

Topic modeling

STM

Topic modeling parameters

Nr of topics (k): 30 to 40

Nr. of topics

30

Label

Manually assigned single or multi word labels

Label selection

\

Label quality evaluation

\

Assessors

\

Domain

Paper: Tourism and Hospitality

Dataset: Social media (Twitter)

Problem statement

This study aims to conduct a “real-time” investigation with user-generated content on Twitter to reveal industry challenges and business responses to the coronavirus (Covid-19) pandemic.

Specifically, using the hospitality industry as an example, the study analyses how Covid-19 has impacted the industry, what are the challenges and how the industry has responded.

Corpus

Origin: Twitter

Nr. of documents: 141, 516 (94,340 after processing)

Details:

- tweets collected between October 2019 and May 2020
- using hashtags: hospitality, hospitalityindustry

Document

tweets' text content and their metadata such as tweets created time, hashtags, whether a tweet has media, whether a tweet has been replied, URLs, retweet count, likes count, follower count, user id, user screen name, etc.

Pre-processing

- Re-tweets removal
 - normalisation
 - stemming
 - stopwords, numbers and punctuation are removed
 - lowercasing
-

```
@article{yang_2021_revealing_industry_challenge_and_business_response_to_covid_19_a_text_mining_approach,
  author = {Mu Yang and Chunjia Han},
  date-added = {2023-04-12 16:11:50 +0200},
  date-modified = {2023-04-12 16:11:50 +0200},
  doi = {10.1108/ijchm-08-2020-0920},
  journal = {International Journal of Contemporary Hospitality Management},
  month = {mar},
  number = {4},
  pages = {1230--1248},
  publisher = {Emerald},
  title = {Revealing industry challenge and business response to Covid-19: a text mining approach},
  url = {https://doi.org/10.1108%2Fijchm-08-2020-0920},
  volume = {33},
  year = 2021}
```

#Thesis/Papers/FS