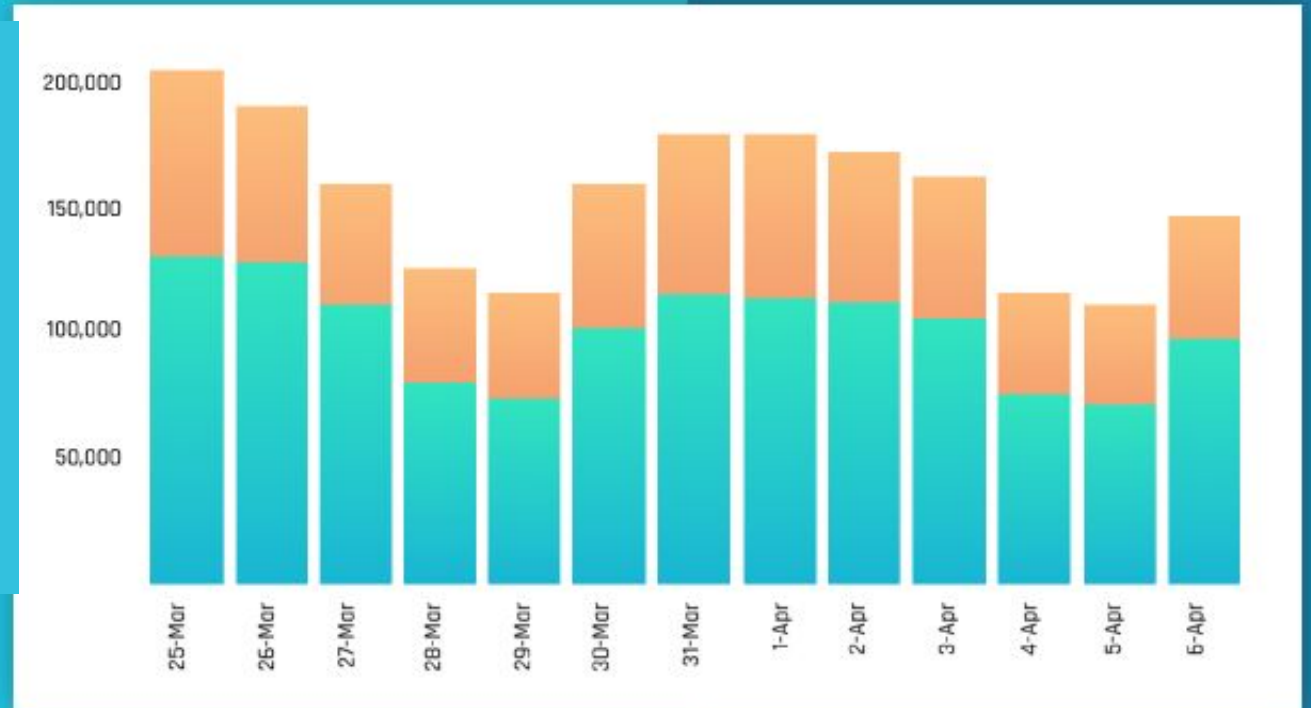# gumgum

Consumer Behavior Change Amid COVID-19: Seen Through CONTEXT
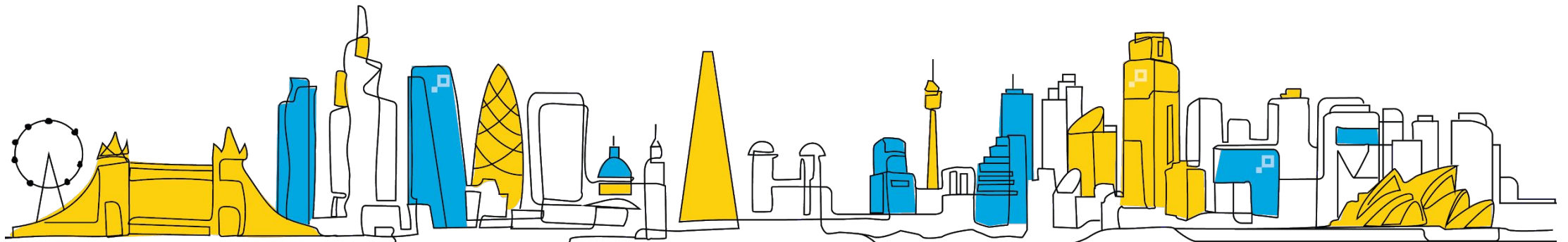
April 16th, 2020

Greetings from the CEO

This is, for all of us, a historic moment. Like you, we are closely monitoring the COVID-19 situation. And, like you, we are aware of the challenges and uncertainty surrounding it. We know that, at this time, you need partners who are nimble, flexible and creative—and we thank you for trusting GumGum to be those things for you.

I am writing to let you know not only that we remain fully mobilized to deliver on your business objectives with the highest level of support, but also that we are taking concrete steps to support our partners who are being impacted.

Commitment to the success and well-being of our clients and partners has always been central to our mission. Rest assured, my team and I are pledged to that commitment, now more than ever.

All the best,

Phil Schraeder
CEO, GumGum

Topics

Leading Company of Contextual Targeting

GumGum is an artificial intelligence company with patented semantic (contextual) analysis and image recognition technology. We are an advertising platform specializing in the real-time understanding of the **context** of a page. Founded in Santa Monica in 2008, we are the market leader in contextual advertising.
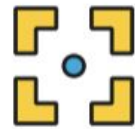
SA
**Est.
Santa Monica, US**
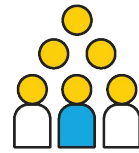
300+
Global Staff

401M+
Global Reach

AI
**Computer Vision
(Image analysis technology)**
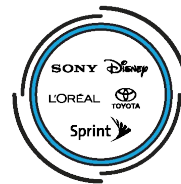
70%
**Used by over 70% of
Fortune 100 companies**

44%
**Higher brand recall
than the IAB average**

US Case Study: Trends in the US advertising industry surrounding COVID-19

39% of consumers are reading online news more than usual

Interest in new content online is growing.

70% of consumers actively consider booking travel from 2021

Considering travel once the situation settles down.

42% of advertisers have changed March-June marketing strategies

Advertisers have reduced targeting news and political content.

63% of advertisers have adjusted their ad messaging

More mission-driven messaging (+42%) and more educative (+41%) marketing techniques.

Trends related to marketing strategy:

- **42% of advertisers** consider adding additional budget to mission-based marketing
- **41% of advertisers** consider adding advertising budget to cause-related marketing

If you need to work from home, Teams is free.

Microsoft Teams Learn more ❯

As remote work is being strongly encouraged globally, Microsoft is offering free use of Microsoft Teams for a limited time.

amazon
Find a job now
Earn up to $23.25/hr.*
Start as soon as 7 days.
Get working

amazon
Find a job now
Earn $17/hr* or more.
Start as soon as 7 days.
Get working

In the US, the unemployment rate surged due to the impact of COVID-19, and the number of unemployed people is estimated to be 7 million in March 2020.
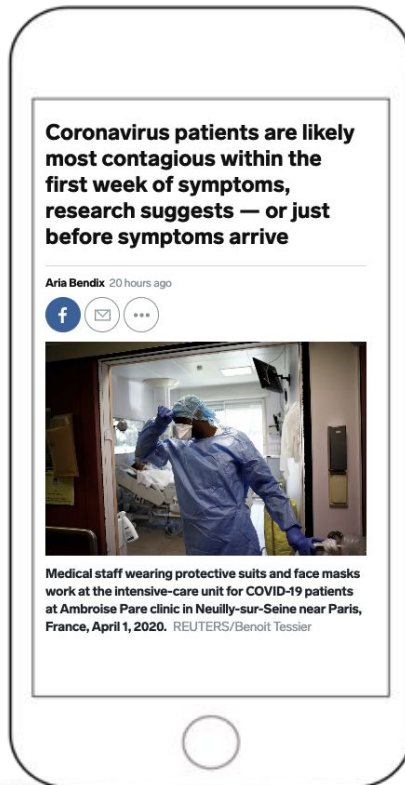
Amazon's cause-related marketing measures in response to the situation.

Brand safety trends:

- **About 1/3 of advertisers** have blacklisted COVID-19-related keywords
- "Coronavirus" became the **second-most common word** on block lists for news publishers
- **GumGum's own research** found that not all COVID-19-related content is necessarily negative.

  (See page 9)

Unsafe

The context suggests that the content includes negative content such as death or patient.
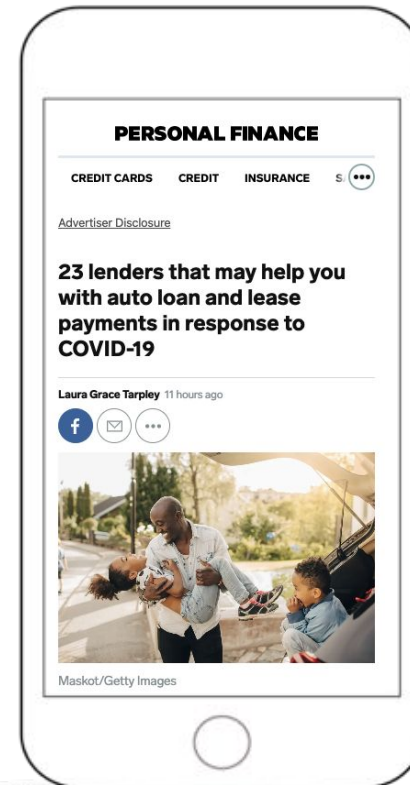
Safe

Although it is an article related to COVID-19, the content itself is positive about savings, car loans, and family.

AI

Image Recognition
Technology

PREMIUM PUBLISHER
DAILY NEWS AUTOS

AUTO DETECTION
XK COUPE
CHROME WHEELS
CHROME SIDE VIEW MIRRORS

SEMANTIC, TEXTUAL
& CONTEXTUAL ANALYSIS
JAGUARS
ELECTRIFIED
SPORTS CAR
JAGUAR
MANUFACTURER
ELECTRIFICATION
AUTOMAKER

LOGO DETECTION
JAGUAR

Data Collection Method

GumGum's machine learning-based content analysis and brand safety engine, Verity, identified pages across the GumGum publisher network that contain COVID-related keywords.
Utilizing image recogntion and natural language learning technology, we performed brand safety judgment and categorization into contexts. Category classification of context is based on IAB definitions.

Geo: US
Period：March 25 - 31, 2020

US Case Study: Brand Safety Analysis (In-house Research)

Brand safety judgment by GumGum's contextual analysis engine:

- **More than 60% of COVID-19 related articles** are safe to place ads on.
- **46% of COVID-19 related news and political articles** are safe for advertising

PAGES WITH COVID-19-RELATED KEYWORDS
Analysis: 3/25/2020 - 4/6/2020

Top 20: IAB Content Categories by Page Count
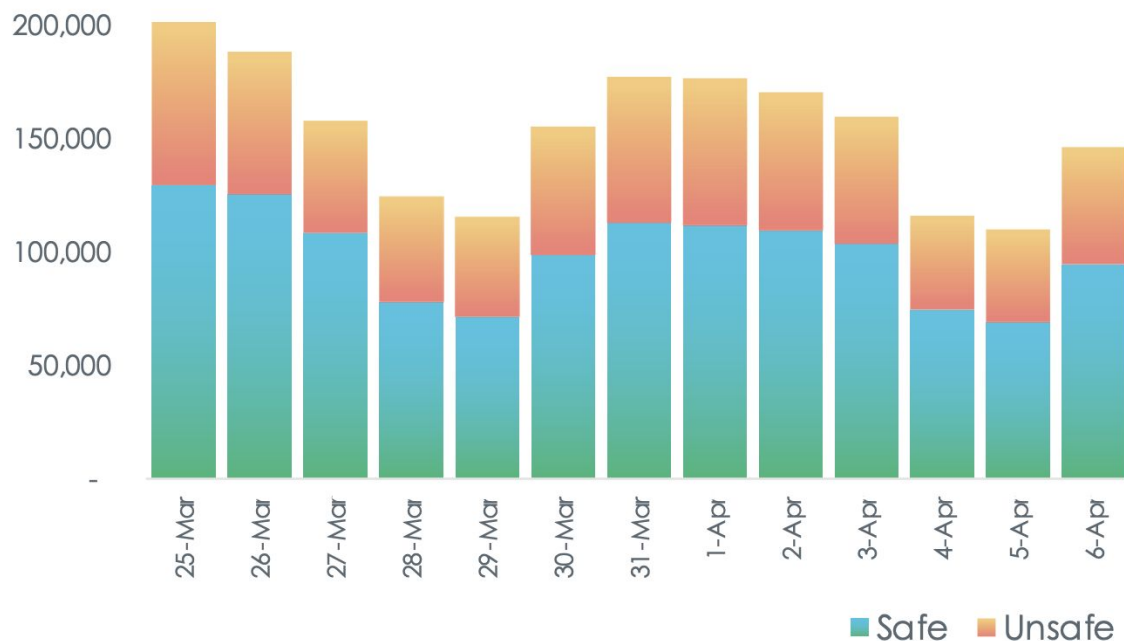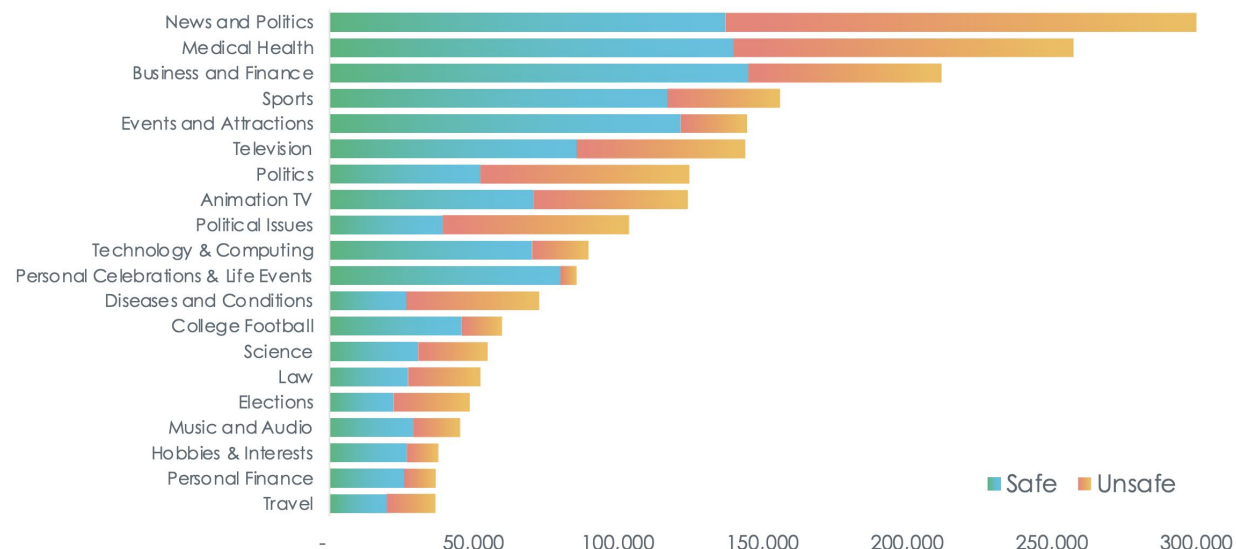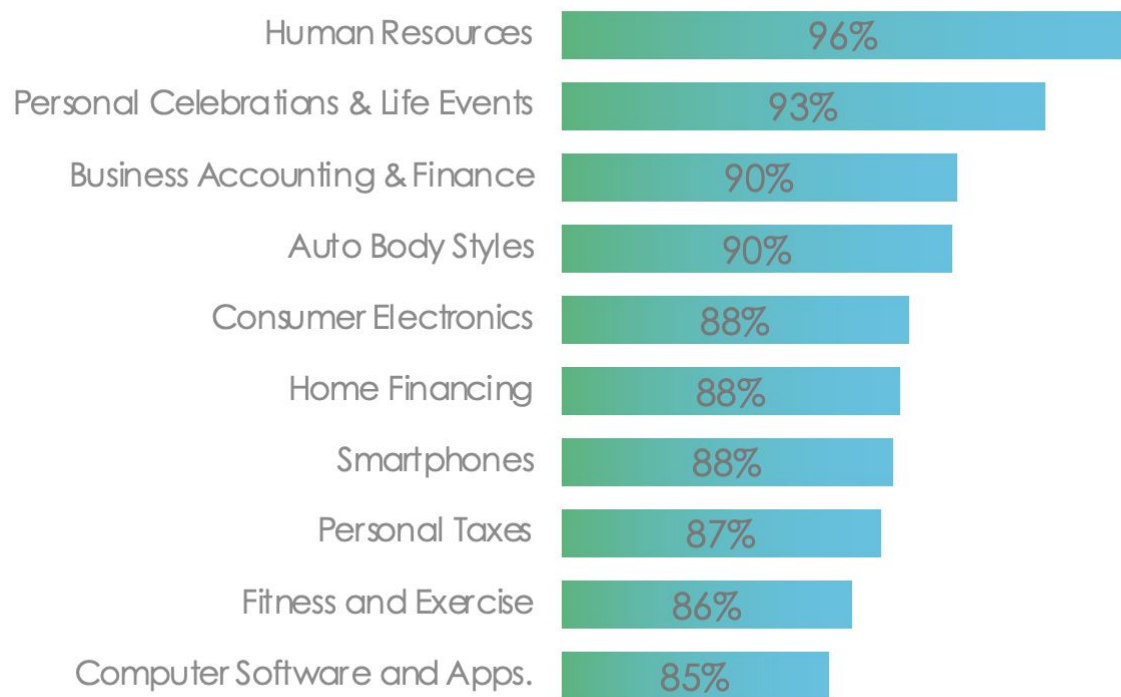
US Case Study: Brand Safety Analysis (In-house Research)

Brand safety judgment by GumGum's contextual analysis engine:

- 96% of Human Resources articles related to COVID-19 are safe
- 96% of Heart and Cardiovascular Diseases articles related to COVID-19 are not suitable for advertisement

IAB Content Categories: Top 10 Safe %

Human Resources	96%
Personal Celebrations & Life Events	93%
Business Accounting & Finance	90%
Auto Body Styles	90%
Consumer Electronics	88%
Home Financing	88%
Smartphones	88%
Personal Taxes	87%
Fitness and Exercise	86%
Computer Software and Apps.	85%

Minimum 1,000 pages

IAB Content Categories: Top 10 Unsafe %

Heart and Cardiovascular Diseases	96%
Endocrine and Metabolic Diseases	89%
Smoking Cessation	85%
Cold and Flu	83%
Lung and Respiratory Health	82%
Blood Disorders	81%
Crime	79%
Genetics	78%
Infectious Diseases	76%
Disasters	74%
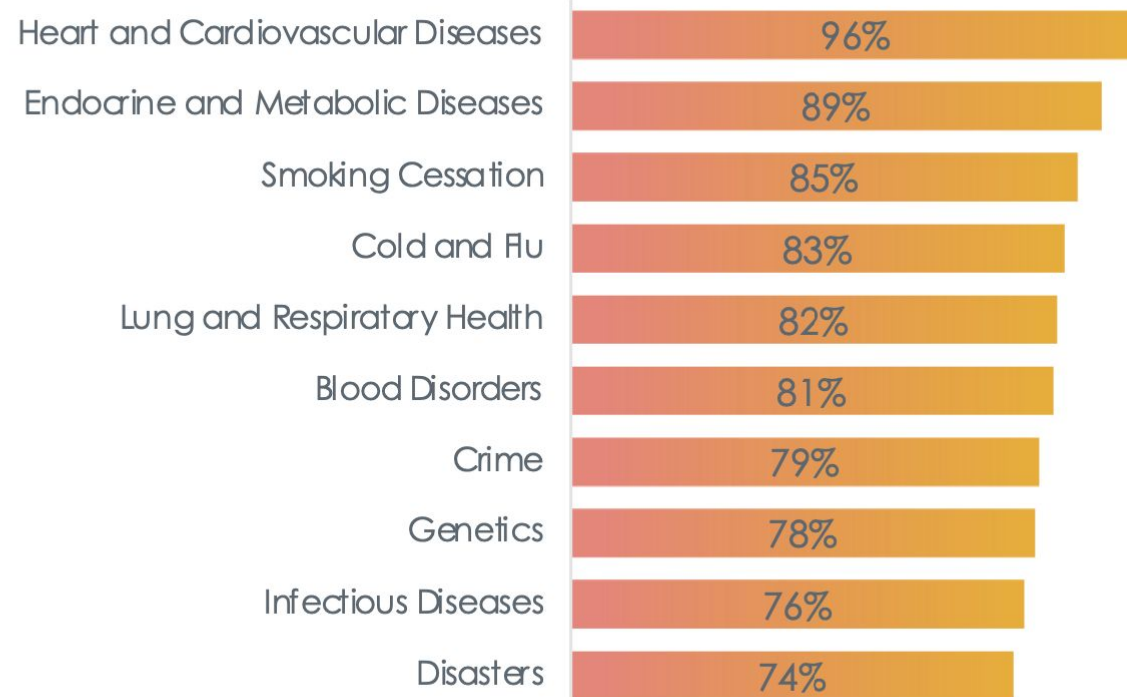
Minimum 1,000 pages

AI
Image Recognition
Technology

Data Collection Method

Screened Japan publisher partners' pages with GumGum's context analysis engine. Classifed the contexts and category attributes of each article based on the category list defined by IAB, and using GumGum's in-house tool, calculated the volume of the classified amount.
GumGum Context AI classified pages into 3 groups.
Large Classification: Site Category
Middle Classification: Contextual Category
Small Classification: Keyword Group

Research method: Compared the volume of content (large, medium, and small classifications) in the GumGum Japan network between January 2020 vs. April 2020.

Calculation method:　　　　(Volume in April ÷ Volume in January) - 100% = ○○%
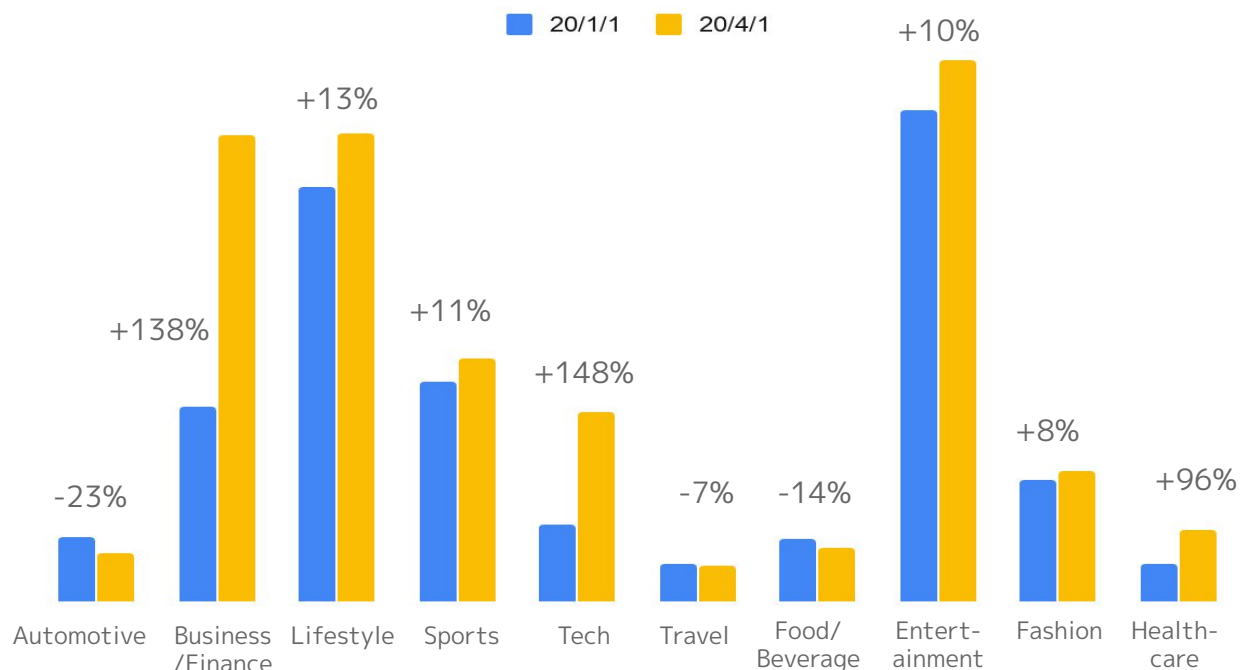　　　　　　　　　　Ex: (1,000,000 ÷ 500,000) -100%= 100% / April volume increased 100% (double) compared to January volume.

Geo: Japan
Period：January to April 7, 2020

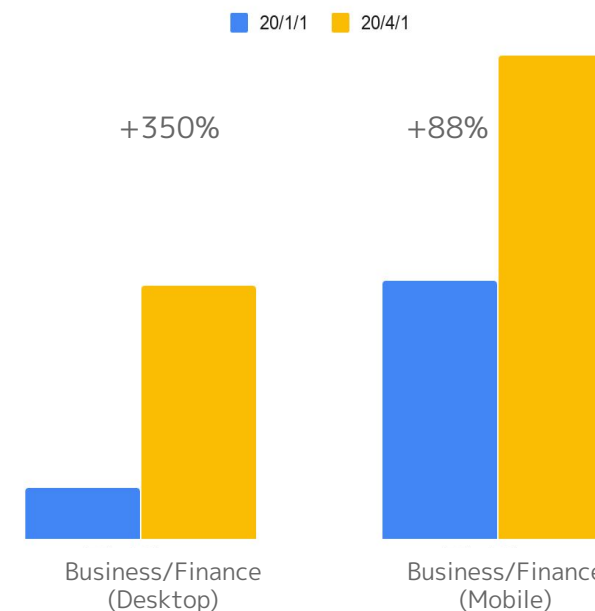## Large Classification: Site Category

IAB Content Categories: Total volume

20/1/1 · **20/4/1**

Automotive: -23%
Business/Finance: +138%
Lifestyle: +13%
Sports: +11%
Tech: +148%
Travel: -7%
Food/Beverage: -14%
Entertainment: +10%
Fashion: +8%
Healthcare: +96%

IAB Content Categories: Business & Finance Per Device

20/1/1 · **20/4/1**

Business/Finance (Desktop): +350%
Business/Finance (Mobile): +88%

Overall Trend

- Business/Finance content increased significantly. Since Technology is also increasing, it is considered that the content related to office environment around remote work and tech company donations has increased.
- Entertainment and Lifestyle are increasing.
- Travel, which is expected to be affected by the voluntary self-restraint request, has only decreased slightly.
- Automotive had the greatest decrease in views.
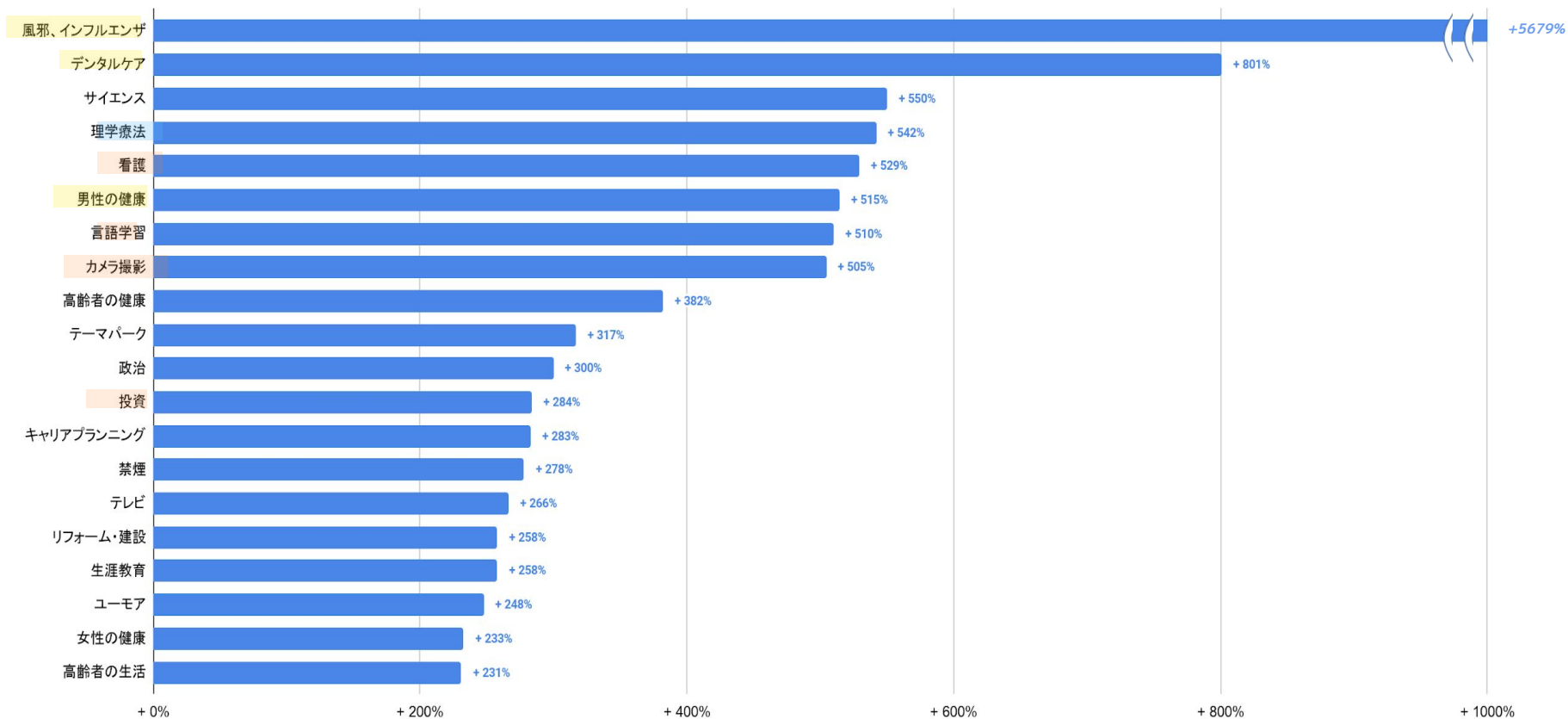
Business & Finance

- Comparing Business/Finance by device, we can see that mobile views have increased, while desktop views have increased significantly.
  Hypothesis: While there is a general interest in business & finance, we can assume that access from desktop has increased due to an increase in the number of businesspeople adopting remote work and a decrease in commuting/travel time.

Middle Classification: Contextual Category

Increase TOP 20:

- Increased awareness of health related issues such as cold/flu, dental care, and health topics for the elderly.

  Similarly, smoke-free content is increasing, but thought to be related to the April 1 enforcement of health promotion law amendment.

- There is growing interest in self-development and self-investment such as language learning, investment, career development, etc.

- Increased interest in psychological stability and bright topics such as physical therapy and humor

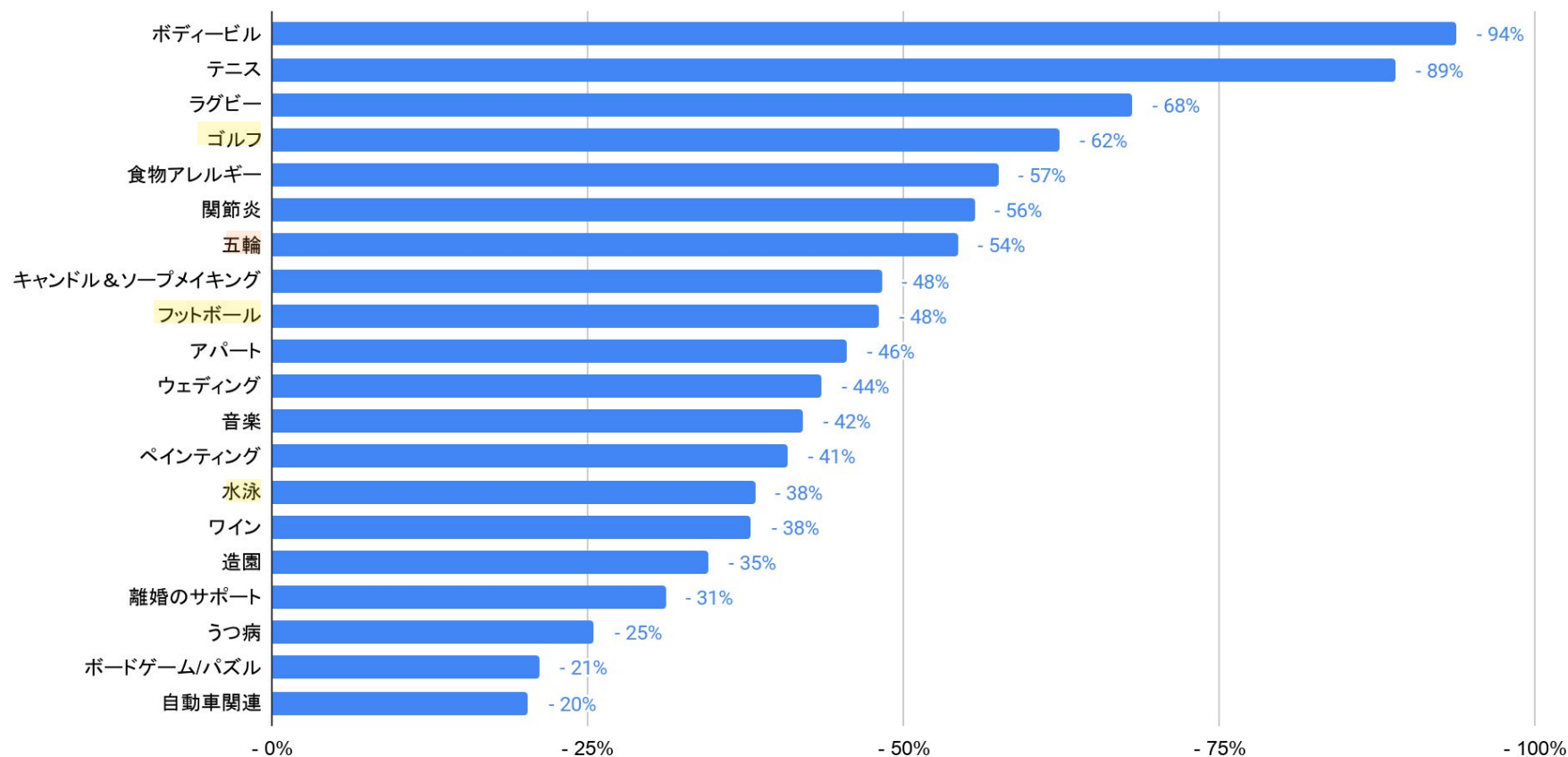| Category	Increase
風邪、インフルエンザ	+5679%
デンタルケア	+ 801%
サイエンス	+ 550%
理学療法	+ 542%
看護	+ 529%
男性の健康	+ 515%
言語学習	+ 510%
カメラ撮影	+ 505%
高齢者の健康	+ 382%
テーマパーク	+ 317%
政治	+ 300%
投資	+ 284%
キャリアプランニング	+ 283%
禁煙	+ 278%
テレビ	+ 266%
リフォーム・建設	+ 258%
生涯教育	+ 258%
ユーモア	+ 248%
女性の健康	+ 233%
高齢者の生活	+ 231%

Middle Classification: Contextual Category

Decrease TOP 20:

- Decreased interest in sports such as swimming, football, and golf
- Olympic-related views decreased by less than half in April, compared to January before the postponement was decided

ボディービル	- 94%
テニス	- 89%
ラグビー	- 68%
ゴルフ	- 62%
食物アレルギー	- 57%
関節炎	- 56%
五輪	- 54%
キャンドル＆ソープメイキング	- 48%
フットボール	- 48%
アパート	- 46%
ウェディング	- 44%
音楽	- 42%
ペインティング	- 41%
水泳	- 38%
ワイン	- 38%
造園	- 35%
離婚のサポート	- 31%
うつ病	- 25%
ボードゲーム/パズル	- 21%
自動車関連	- 20%

- 0% - 25% - 50% - 75% - 100%

Source: GumGum Japan Context AI 2020 Jan vs Apr

Small Classification: Keyword Group

Increases:

- Increase in articles about coronavirus, as well as views
- Along with the above rise, views of articles related to remote work and health-oriented articles increased.

■ 2020/01/01　■ 2020/04/06

+388,356%　　+684%

コロナウイルス　　衛生

■ 2020/01/01　■ 2020/04/06

+2,941%　+18%

在宅勤務　　健康志向
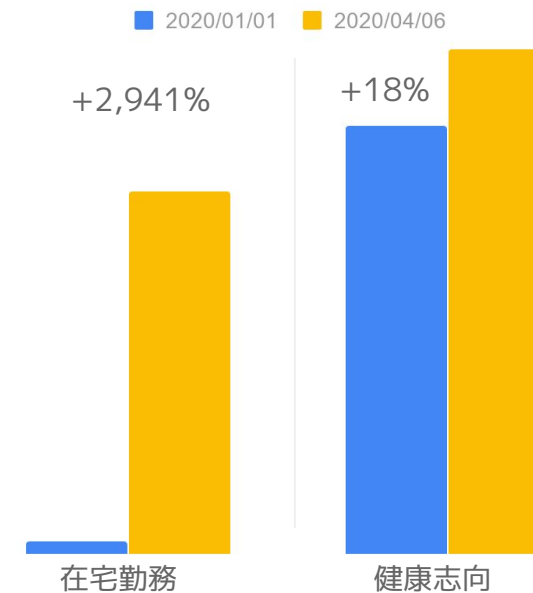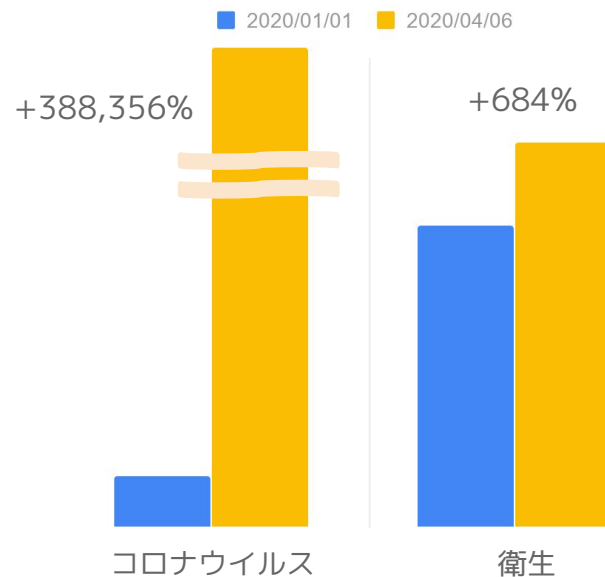
Keywords related to Coronavirus/Hygiene

- Keyword examples (Coronavirus)
  コロナウイルス ・ コロナ ・ コロナウィルス ・ corona virus
  corona ・ 新型コロナウイルス ・ 新型肺炎 ・ covid-19, etc.
- Keyword examples (Hygiene-related)
  感染症対策 ・ 飛沫感染 ・ 接触感染 ・ 濃厚接触 ・ 咳エチケット
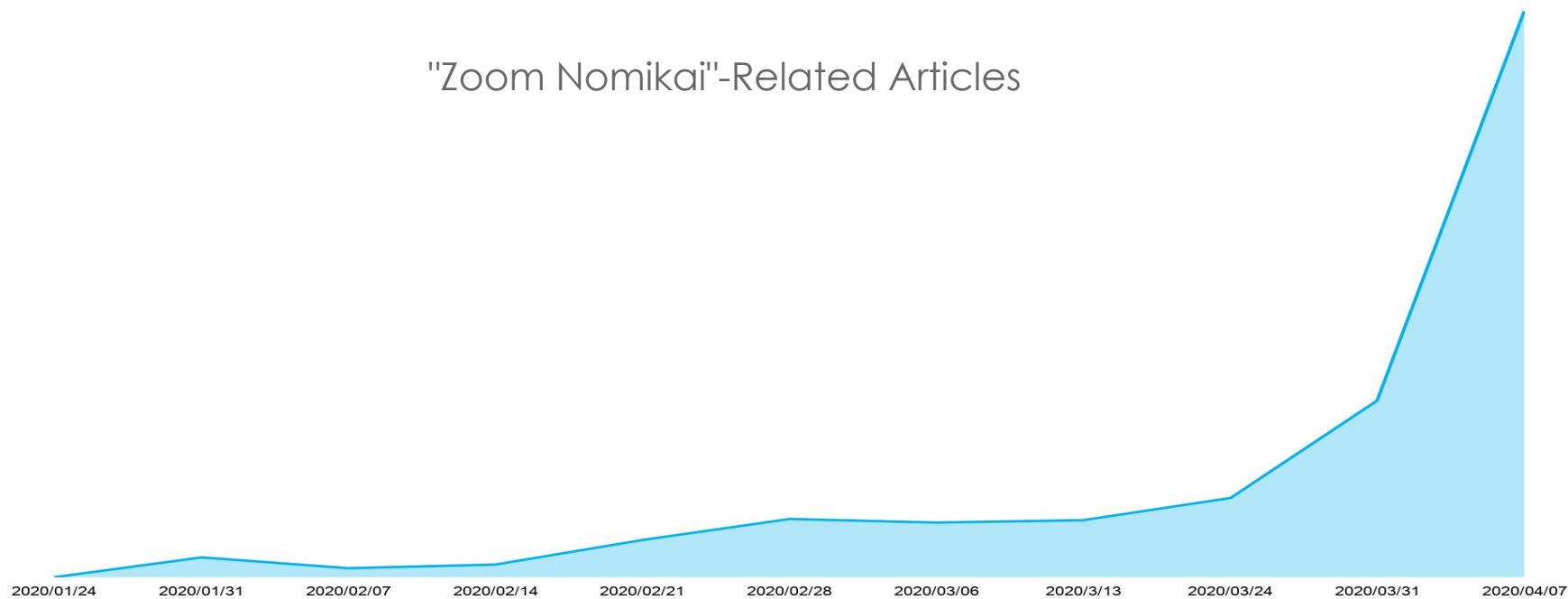 潜伏期間 ・ 衛生対策 ・ 手洗い ・ アルコール消毒, etc.

Keywords related to Self-restraint/Health

- Keyword Examples (Remote work)
  在宅勤務 ・ リモートワーク ・ テレワーク ・ インターネット環境
  オンライン会議 ・ ビデオ会議 ・ zoom ・ slack, etc.
- Keyword Examples (Health consciousness)
  乳酸菌 ・ R-1 ・ 睡眠 ・ 栄養 ・ 免疫力 ・ ビタミン
  タンパク質 ・ プロテイン ・ 免疫 ・ 入浴, etc.

Small Classification: Keyword Group

"Zoom Nomikai"-Related Articles

2020/01/24   2020/01/31   2020/02/07   2020/02/14   2020/02/21   2020/02/28   2020/03/06   2020/3/13   2020/03/24   2020/03/31   2020/04/07

Insight

- With the increasing focus on online conferencing, pages about drinking parties (Nomikai) using Zoom have been increasing.

- By using GumGum's targeting methods, it is possible to deliver campaigns aimed at promoting consumption at online drinking parties, etc., and campaigns to raise awareness of online meeting tools.

GumGum has partnered with the Ad Council to run an awareness campaign to encourage people in the US to stay home.

Overview

GumGum, as an awareness campaign for the spread of COVID-19 infections, has partnered with the public advertisement of the Ad Council to contribute to creative production and advertisement distribution. This was one of the first free advertising campaigns among media companies.

The message **#AloneTogether** calls on people in the US to stay at home and fight together to prevent the spread of COVID-19.

It is extremely important to increase the visibility of the messages that need to be conveyed when conducting awareness programs. GumGum's ads had 90% viewability and above-average engagement; thus showing that people are interested in the #AloneTogether message.
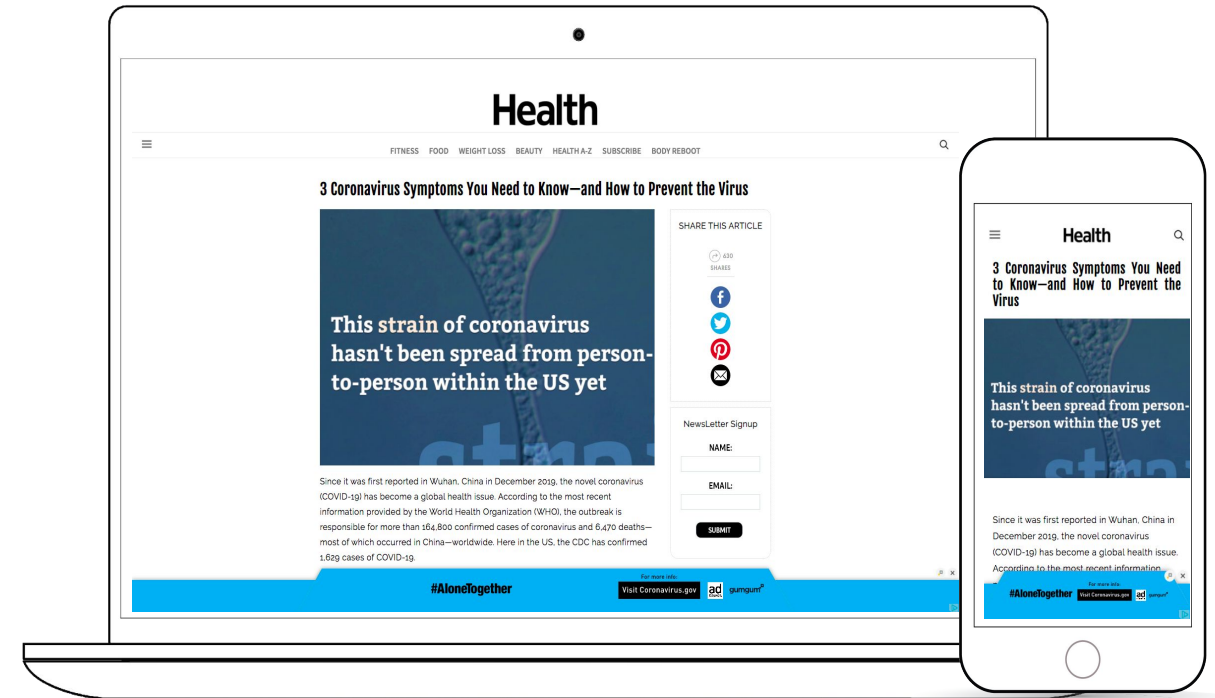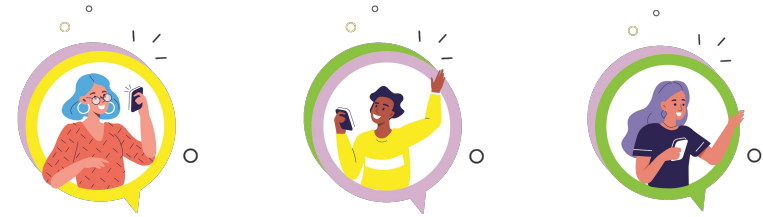
Click mock to view live demo

gumgum

Contact us:

japan-sales@gumgum.com