# PROJECT MICHELIN

Data Science Solution for Michelin :
Guide for the Michelin Guide

METIS Business Project

# History of the MICHELIN Guide

- Andrew & Edouard Michelin brothers founded tire company

- Encourage tourists to take the road using little red guidebook

MICHELIN STAR

Coveted by many chefs but bestowed upon only to an excellent few.
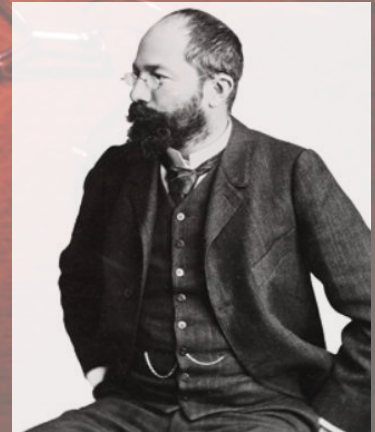Getting a star (or three) could change the fate of a restaurant.

High quality cooking, worth a stop

Excellent cooking, worth a detour

Exceptional cuisine, worth a special journey

# GOAL

Help Michelin with their scoping of choosing restaurants

Data Science **GOAL**: create a model to better **TARGET** restaurants suitable to earn Michelin stars during the pandemic
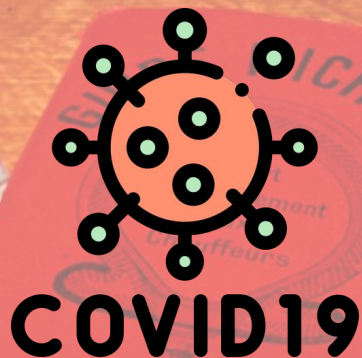
# Data Science Solution
## How does it help Michelin?

**DIVERSIFY** and **INTRODUCE** more type of cuisines around the world for people to explore

**IDENTIFY** which **REGIONS** are populated with Michelin restaurants, and by what type of **CUISINE**
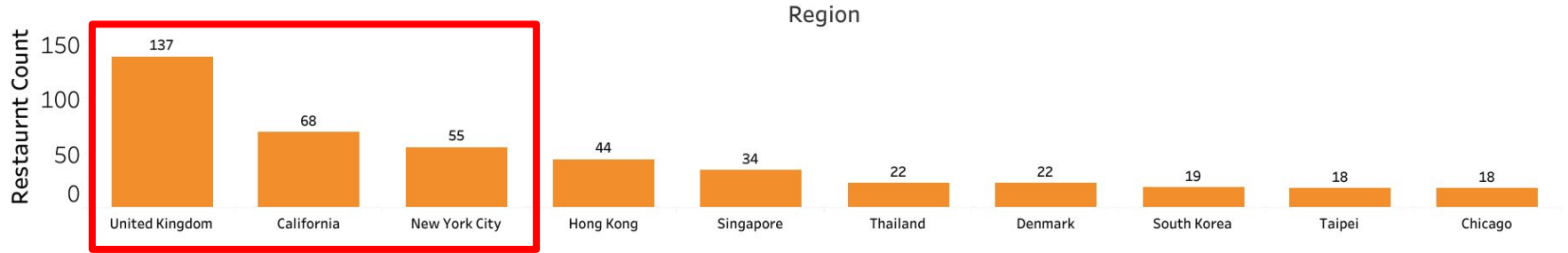
# Impact Hypothesis

Save Michelin time by **NARROWING** down restaurants without having to visit **EVERY** restaurants during the pandemic
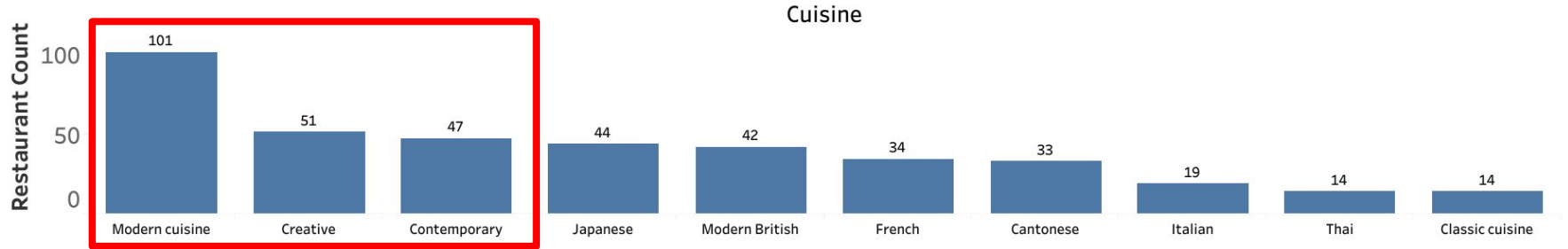
Provide connoisseurs with more **DIVERSE** options to choose from

One Star Michelin by Region

Region

| Region | Restaurant Count |
|---|---|
| United Kingdom | 137 |
| California | 68 |
| New York City | 55 |
| Hong Kong | 44 |
| Singapore | 34 |
| Thailand | 22 |
| Denmark | 22 |
| South Korea | 19 |
| Taipei | 18 |
| Chicago | 18 |

One Star Michelin by Cuisine

Cuisine

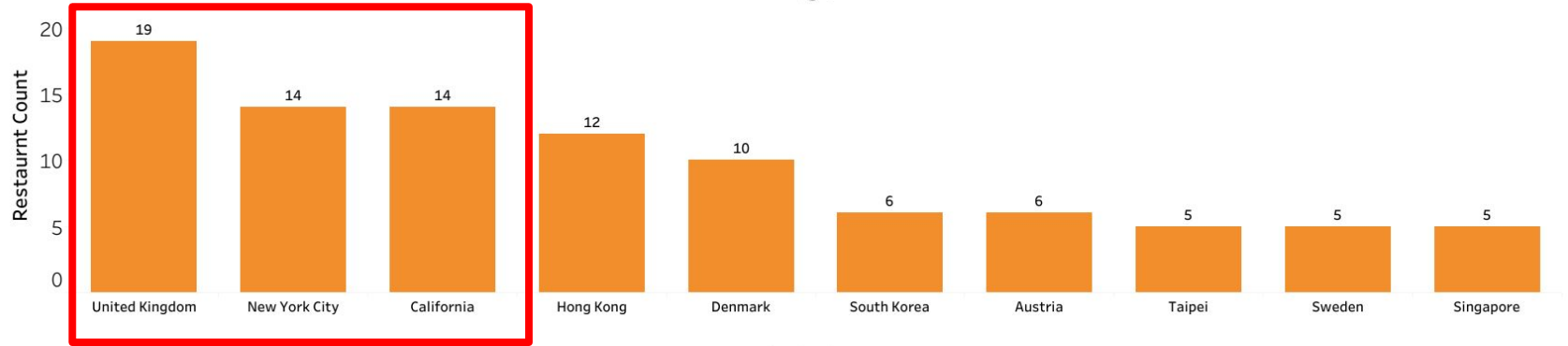| Cuisine | Restaurant Count |
|---|---|
| Modern cuisine | 101 |
| Creative | 51 |
| Contemporary | 47 |
| Japanese | 44 |
| Modern British | 42 |
| French | 34 |
| Cantonese | 33 |
| Italian | 19 |
| Thai | 14 |
| Classic cuisine | 14 |

❏ **United Kingdom** had the most number of 1 star restaurants
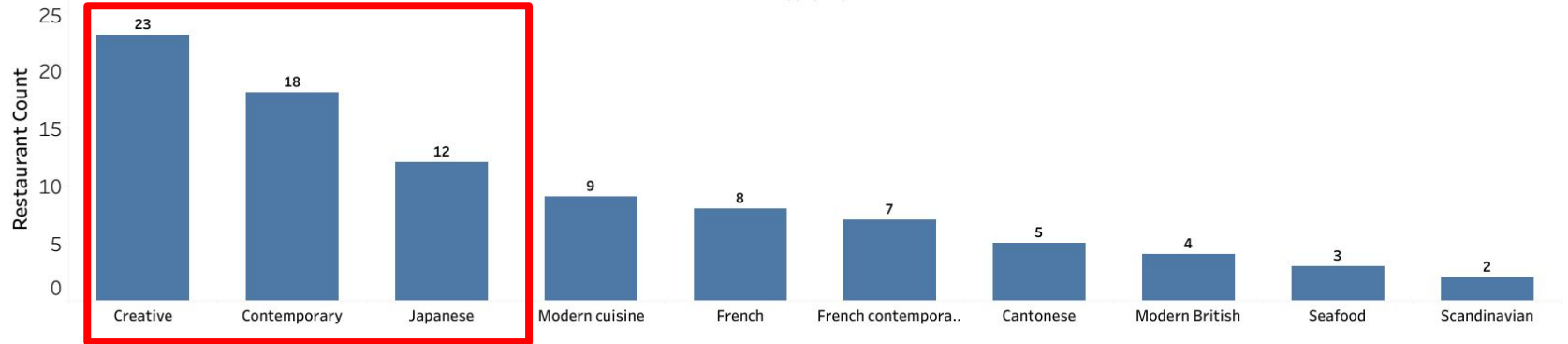❏ **Modern Cuisine** was the most popular cuisine

## Two Star Michelin by Region
### Region

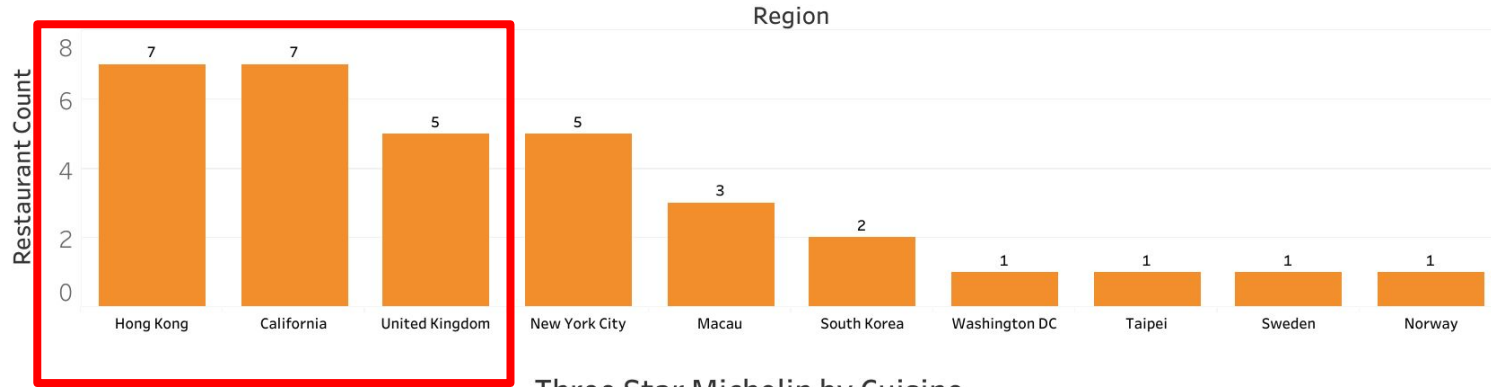## Two Star Michelin by Cuisine
### Cuisine

❏ **United Kingdom** was ranked top again followed by U.S cities

❏ **Creative Cuisine** was the most popular cuisine followed by **Contemporary**

**Three Star Michelin by Region**

Region

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hong Kong | California | United Kingdom | New York City | Macau | South Korea | Washington DC | Taipei | Sweden | Norway |
| 7 | 7 | 5 | 5 | 3 | 2 | 1 | 1 | 1 | 1 |

**Three Star Michelin by Cuisine**

Cuisine

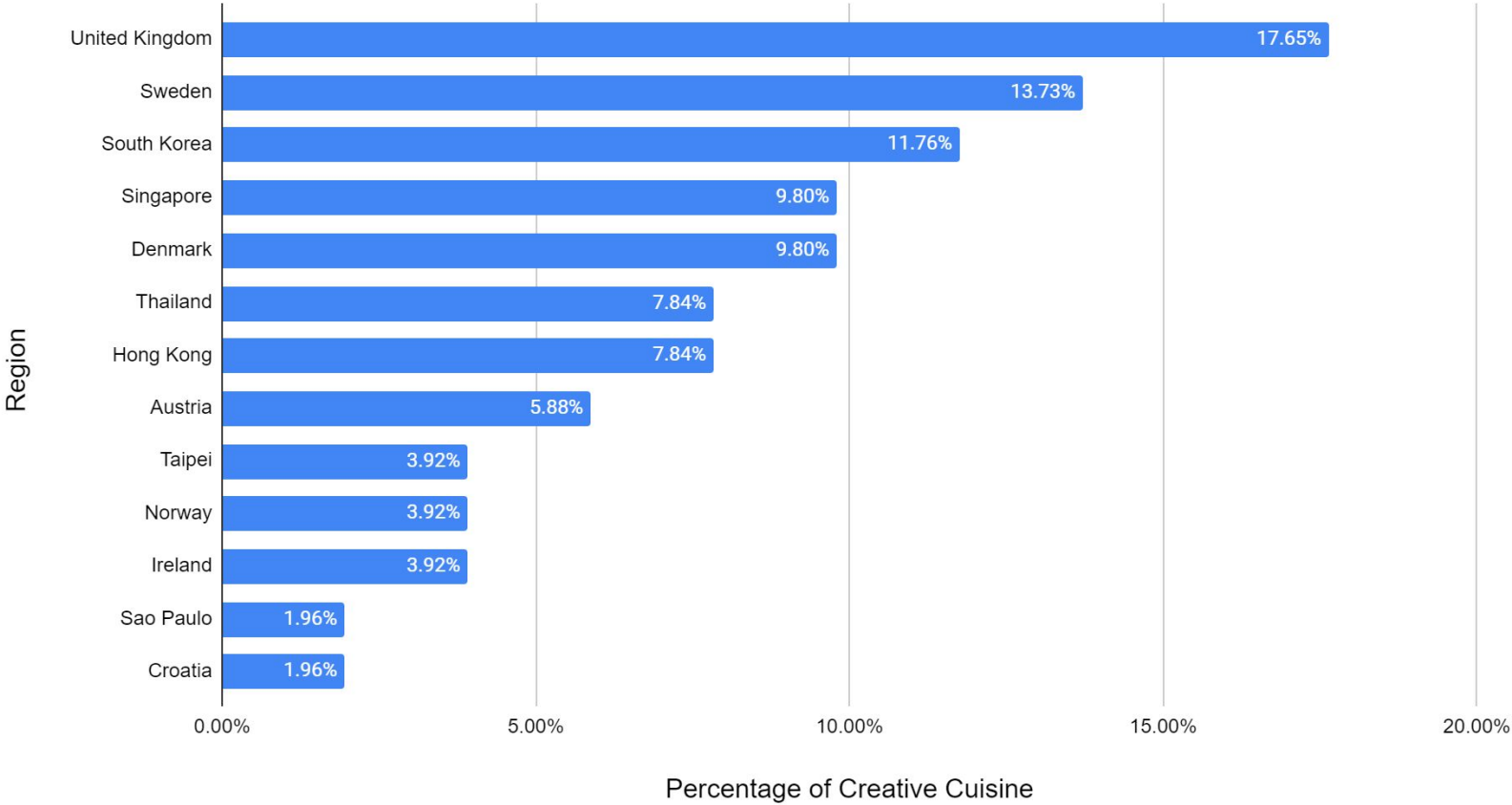| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Contemporary | Creative | Cantonese | Japanese | French | Modern cuisine | Korean | French conte.. | Seafood | Italian |
| 10 | 4 | 4 | 3 | 3 | 2 | 2 | 2 | 1 | 1 |

❑ **Hong Kong** was ranked 1st, **UK** came 3rd
❑ **Contemporary Cuisine** was the most popular cuisine
❑ **Cantonese**, **Japanese** that were in lower section of the rank was ranked high for Three Star

# One Star Modern Cuisine Distribution by Region

| Region | Percentage of Modern Cuisine |
|---|---|
| United Kingdom | 46.53% |
| Denmark | 12.87% |
| Ireland | 7.92% |
| Sweden | 4.95% |
| Hungary | 4.95% |
| Finland | 4.95% |
| Croatia | 3.96% |
| Austria | 2.97% |
| Poland | 1.98% |
| Rio de Janeiro | 1.98% |
| Czech Republic | 1.98% |
| Sao Paulo | 1.98% |
| Norway | 1.98% |
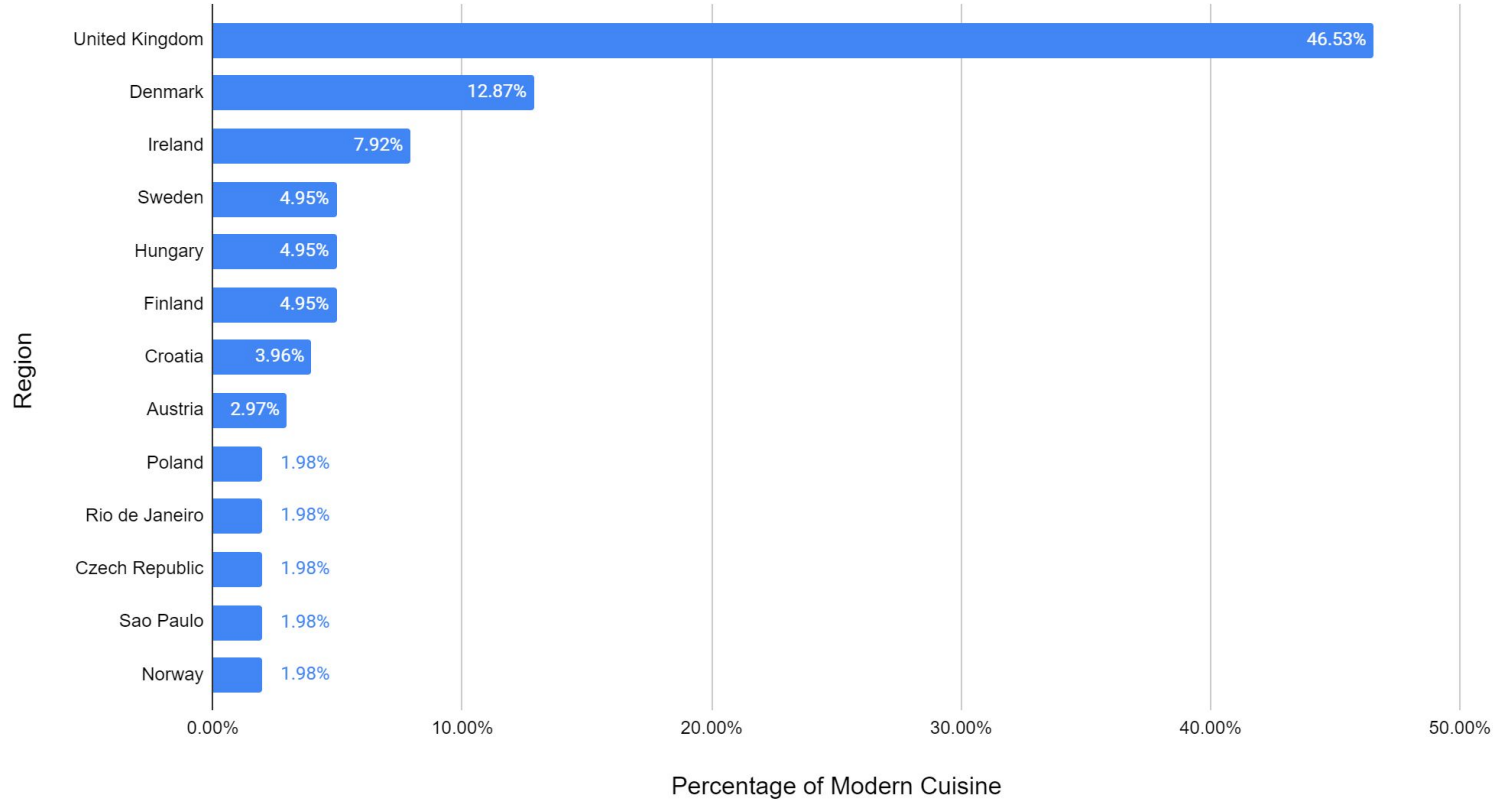
❏ Uneven distribution when broken down into specific cuisine

# One Star Creative Cuisine Distribution by Region



| Region | Percentage of Creative Cuisine |
|---|---|
| United Kingdom | 17.65% |
| Sweden | 13.73% |
| South Korea | 11.76% |
| Singapore | 9.80% |
| Denmark | 9.80% |
| Thailand | 7.84% |
| Hong Kong | 7.84% |
| Austria | 5.88% |
| Taipei | 3.92% |
| Norway | 3.92% |
| Ireland | 3.92% |
| Sao Paulo | 1.96% |
| Croatia | 1.96% |

# Analysis Takeaways/Future Modeling

❏ **Uneven** distribution of cuisine

❏ Michelin should focus on **balancing** types of cuisines

❏ Focus more on other cuisines other than **Contemporary**, **Modern** or **Creative** Cuisine

❏ Predictive Modeling by scraping detailed restaurant information:
- customer review
- review of food quality
- price

THANK YOU