

Business Report

Tourism industry in Finland via TripAdvisor app



INTRODUCTION

The report presents highlights of the Finnish tourism sector from 1/2002 until 12/2016. The sample is derived from TripAdvisor application.

The report starts with an overview part of the Finnish tourism. Afterwards, an exploratory analysis on customer behavior and review ratings are presented along with business implications.

The paper offers useful insights for Travel and Tourism Administration of Finland (or VisitFinland)

The main main beneficiary of this report will be individuals working in tourism sector, especially those concentrates on developing their business via digital applications.



TOURISM OVERVIEW

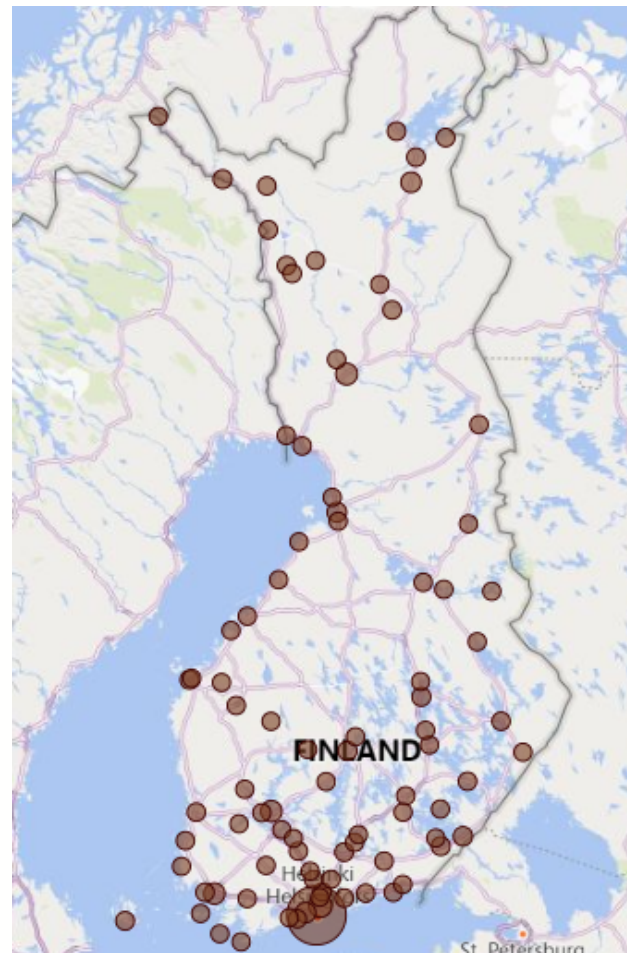
Geometric location

From 2002 to 2016, there are total of **56 696** tourists trips taken across **94 cities** in Finland. (P/s: in this report, each review is equivalent to one visit)

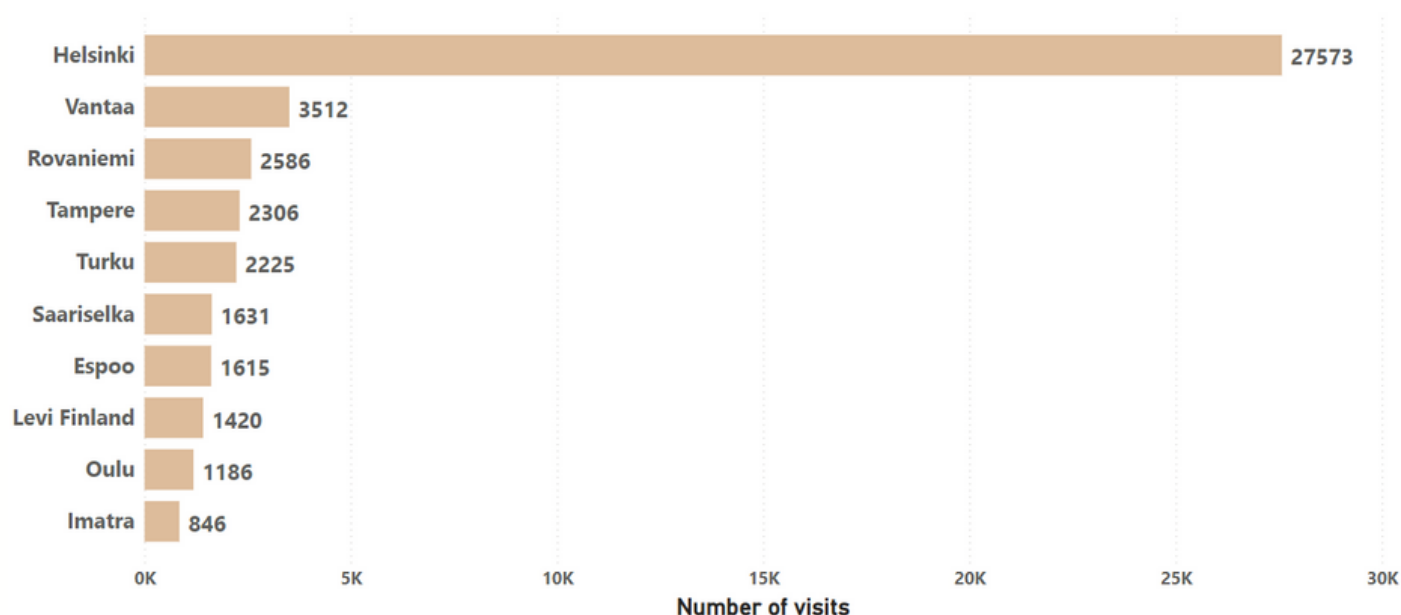
Most of visits are undertaken in the Southern of Finland. Especially, nearly **50% of trips took place in the capital Helsinki**.

Northern places such as **Rovaniemi** and **Saariselkä**, which are well-known for picturesque winter scenes, also attracted a great number of guests, taking the 3rd and 6th places in top 10 most-visited cities, respectively.

The central territory of Finland recorded very few visits during given period. Nevertheless, by its wild nature, this area is deemed as potential to develop **eco-tourism activities**.

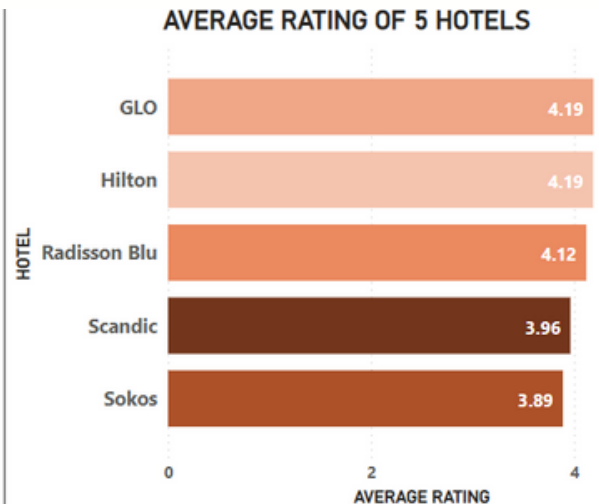
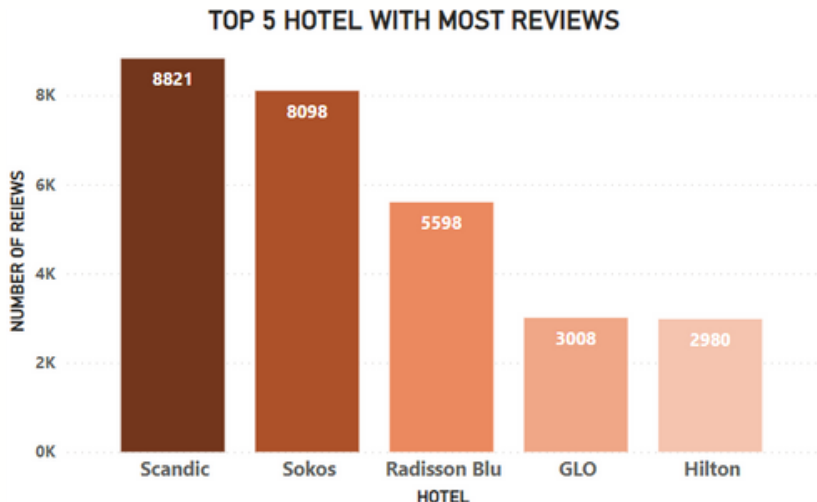


TOP 10 CITIES BY NUMBER OF VISITS



TOURISM OVERVIEW

Hotel chains



According to the collected sample, **Scandic**, **Sokos**, **Radisson**, **GLO**, and **Hilton** are top 5 favorite choice of tourists when travelling in Finland.

Customers tend to **prefer well-known hotel brands** as about of **a half** of them stayed in those five places. Hence, tourism is still a **promising yet challenging** space for **medium to small hotels** or places operated under private firm like **Airbnb**.

In general, five big hotel brands still have a **decent average rate** from guests. Except for Scandic and Sokos, other three receive rating score over 4.

50.28
% of visits at top 5 hotels

CUSTOMER BEHAVIOR

Common trend

As expected, **summer (May-Aug)** and **winter holiday (Dec-Jan)** seasons records **highest number of visits** in Finland.

At around 5 980, **August** experienced the highest quantity of visits and was 1.6 times larger than **April**, which had the lowest quantity.

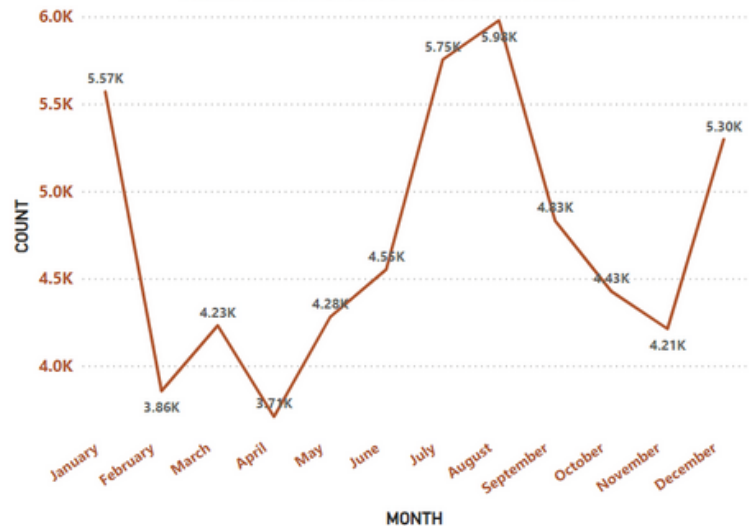
When visiting Finland, people tend not to go alone. The combination of '**couple**', '**family**', and '**friends**' categories already accounts for **60% of total of trips**.

Hence, improving quality of **double and large rooms** should be among top priorities of local hotels. Moreover, tourism agencies should design suitable **discount policies** for customers **travelling in group**.

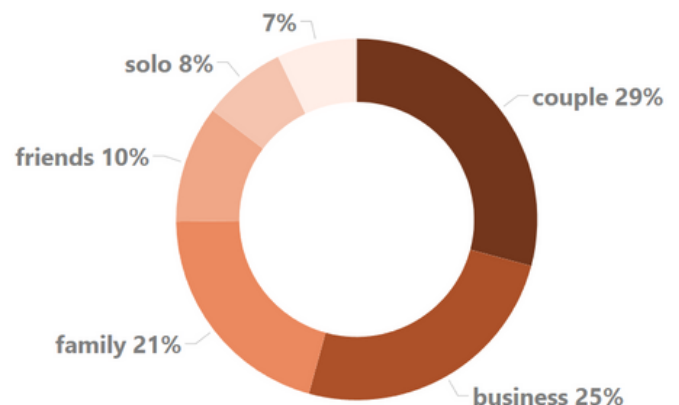
The trend in using **mobile phones and posting pictures** in review is **generally upward**, except for a **sharp decline, by 88%, in 2016**. This may arise as the algorithm of TripAdvisor **missed user values** in December (a holiday month) of that year.

Enhancing **room decoration** and **window view** or offering free **portable phone charger** are recommended for hotels to attract more customers.

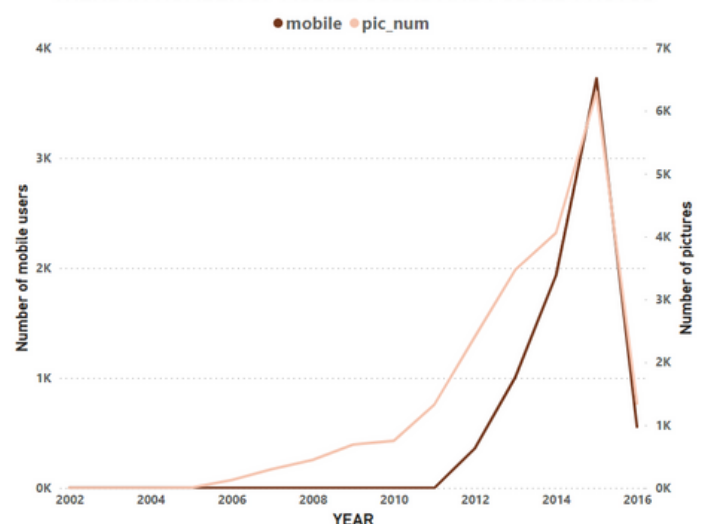
REVIEW/VISIT DISTRIBUTION BY MONTH



PIE CHART OF TOURIM STYLE



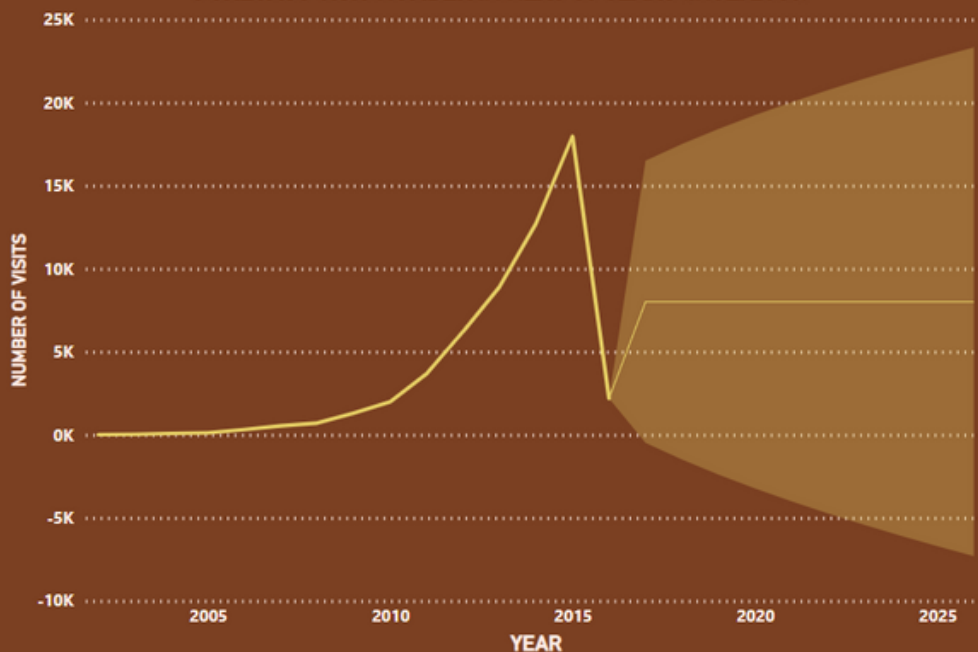
TREND IN NUMBER OF MOBILE USERS AND POSTED PHOTOS



CUSTOMER BEHAVIOR

Forecast trend

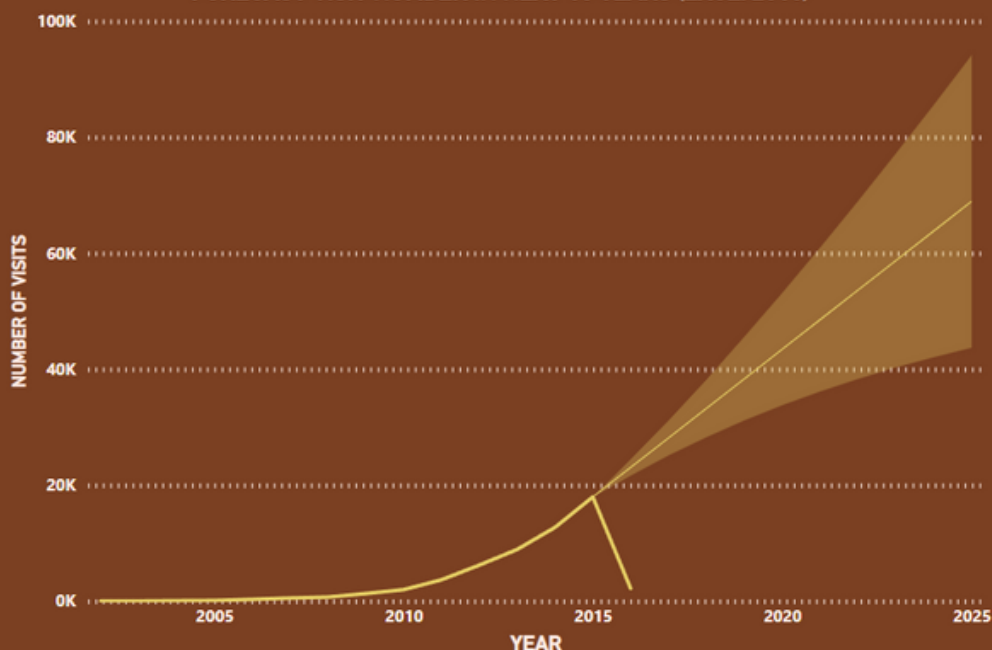
FORECAST VISIT NUMBER IN NEXT 10 YEARS (INCL. 2016)



The number of visits is predicted to remain at **8 000** from **2017 to 2025**. Although this is a positive growth compared to 2016, the uncertainty in this prediction is high due to dramatic volatility rate of past data.

Lacking of observations in the last month of 2016 is probably the reason behind this effect.

FORECAST VISIT NUMBER IN NEXT 10 YEARS (EXCL. 2016)



After removing 2016, the future quantity of customers is predicted to **increase significantly and continuously** until 2025. By this year, Finland is expected to welcome about **69 000 tourists**, a **growth of 383%** from 2015.

The **variance range** is also **diminished** considerably in this prediction.

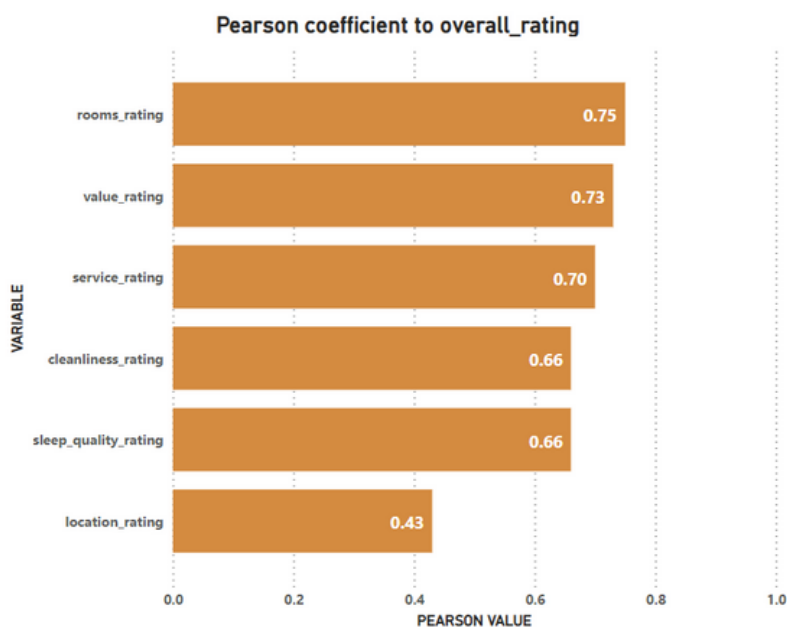
REVIEW RATING (*)

Customers are generally satisfied with travelling experience in Finland when their average rating for local tourism is **more than 4** (1: lowest and 5: highest satisfaction)

On TripAdvisor app, there are six criteria for customer to give feedback, including **location**, **sleep quality**, **room**, **service**, **value**, and **cleanliness**.

Except for **room and value**, other factors receive more a pretty good score, more than 4. **Location** is the best-rated feature while the lowest score belongs to **value** group.

4.04 Average of overall_rating		
4.43 Average of location_rating	4.25 Average of cleanliness_rating	4.20 Average of sleep_quality_rating
4.15 Average of service_rating	3.98 Average of rooms_rating	3.88 Average of value_rating



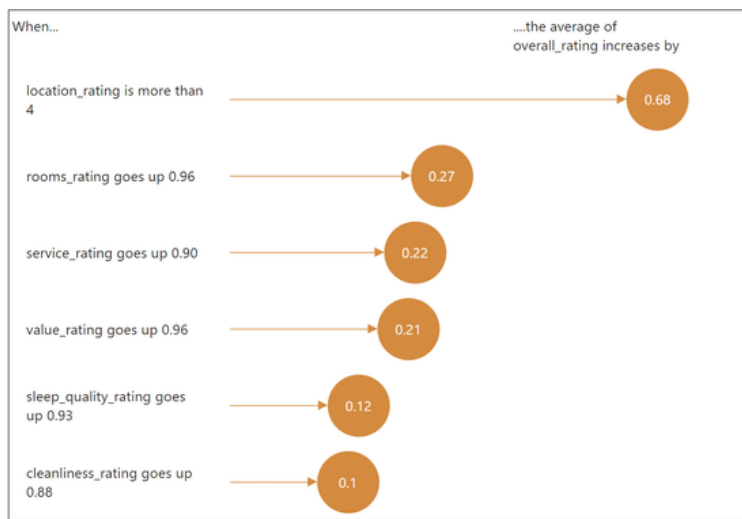
Pearson coefficient is a useful tool to investigate the relationship between 6 criteria and overall rating score. The higher the Pearson score is, the stronger the correlation is.

Interestingly, two features with **lowest average ratings** demonstrate **strongest correlation** with overall score. On the other hand, the **location** factor, which has the highest mean rate, shows the **weakest relationship** to the target variable.

(*) To ensure accuracy, only reviews having score on all 6 mentioned features are included in this analysis

REVIEW RATING

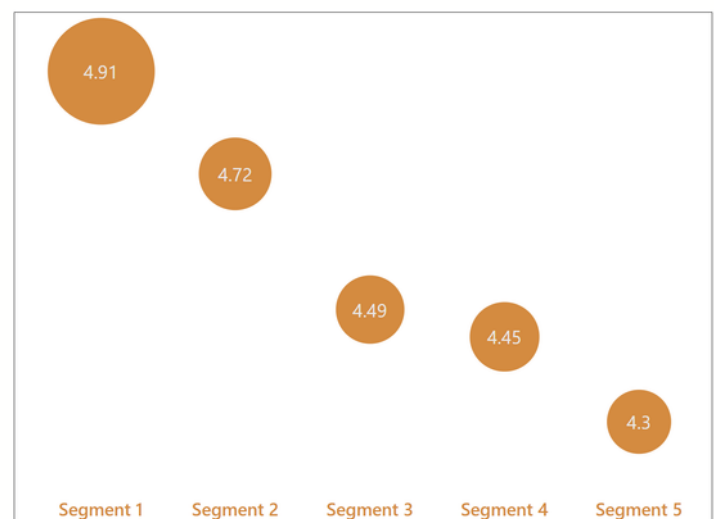
SUMMARY OF KEY INFLUENCERS



The overall rating is more likely to **rise only** when **location** rating is **more than 4** than otherwise. This is the reasons why this variable has the lowest Pearson coefficient. Nevertheless, **location** is the feature that can help tourist facilities or hotels increase customer ratings the **most quickly**. If a review has a location score more than 4, its overall rate may increase by 0.68 unit.

On the other side, as long as rating of five other features increases, overall scores will also increase on average. Upgrading **room, value, and service** quality are the most three **effective ways** to provide better experience for guests. Improving **cleanliness** quality can **takes the most time** to boost the overall rating. A 0.88-increase in this criterion is only equivalent to 0.1-rise in overall score.

TOP 5 SEGMENTS BY AVERAGE OVERALL RATING



After analyzing data, the author finds 5 segments that normally comes with highest ratings. These 5 segments can be treated as 5 **combination of strategies** that help to escalate customer pleasure.

Segment 1: room, service, value > 4

Segment 2 : room, service > 4 & value <= 4

Segment 3 : service, sleep > 4 & 3 <= room < 4

Segment 4: room > 4 & 3 <= service < 4

Segment 5: service > 4 & sleep <= 4 & 3 <= room < 4.

SUMMARY



Key findings

When visiting Finland, customers preferred mostly Southern and Northern locations. Central area is underexploited and potential for eco-tourism.

Large hotel chains still dominated in Finnish tourism, leaving challenges and opportunities for homestay service like Airbnb or Booking.

People often travelled to Finland with partners and in holiday seasons. The trend of using mobile phone and posting pictures was upward.

The number of reviews/visits in Finland is predicted to increase by 2025.

Room, service, and value are potentially the most three important criteria to improve customer satisfaction.



Limitations

The sample is quite outdated when it only contains value until 2016. Moreover, there are many missing values in vital features related to rating scores.

Collected data is limited to one application TripAdvisor. Future analysis should combine datasets from multiple applications to have a broader overview of Finnish tourism.