Excel Project Report

UK Tourism 2018 -2022

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Contents

1. Introduction

This project aims at practice EXCEL. Previously, UK Tourism 2018 -2022 was analysed using Python and Tableau (https://github.com/soichi-berson/mid-bootcamp-project). This time, it is executed using Excel and visualised by dashboards. The data come from 'Office for National Statistics'(https://www.ons.gov.uk/) from 2018 to 2022 relating to UK visitors from overseas is analysed. To investgate more, other columns were added based on data from the World Bank(https://databank.worldbank.org/) and Wikipedia(https://www.wikipedia.org/).

Through this data analysis, our objective is to gain insights into the UK tourism landscape.

2. Raw data

The Office for **National Statistics** from the UK Statistics Authority:
- The number of visitors by country from 2018 to 2022
- Average spending per day by country from 2018 to 2022
  *The data for 2020 is not available
- Average length of stay by country from 2018 to 2022
  *The data for 2020 is not available

Additional data was collected and incorporated to enhance the depth of the UK tourism analysis.

 The World Bank:
- -GDP (numerical)
- Population (numerical)
- Income Group (categorical)
- Region (categorical)

Wikipedia
- EU countries
- Commonwealth countries

3. Questions

To analyse the data and gain meaningful insights, we formulated five key questions.

1 . What is the trend of UK tourism last 5 years?

2020 was a remarkable year for the UK. The pandemic and Brexit happened in 2020. Comparing 2018 (2 years before) and 2022 (2 years after),

2. Which country has the largest number of visitors?
3. Which region made the largest contribution?
4. Can we find any particular differences or trends?
5. What is the trend of EU countries?

4. Excel Mastery: Unveiling the Process, Techniques and Notes

<File: UK_Tourism.xlsx>

Sheet: number_of_visitors 1-3

Tasks:
- data gathering
- data cleaning
- data validation

Featured Excel technique:
- pivot
- Xlookup()
- Vlookup()
- Define Name
- SUMIF()
- create charts

Notes:
Some data in 2020 are missing. Therefore, in the sheet of 'number_of_visitors_2', the number of visitors by regions are calculated based on the portions of previous year.

Sheets: cleaned_2022 & cleaned_2018

Tasks:
- data gathering
- data cleaning
- data validation

Featured Excel technique:
- IF()
- COUNTIF()

- Xlookup()
- Define Names
- Marcos

Notes:

1. To calculate contributions, the following formula was applied:
contributions = (the number of visitors) × (average spending per day) × (average length of stay in days)

2. To calculate popularity, the following formula was applied:
popularity= (the number of visitors) / (population)

3. China was divided into 'Other china' and 'Hong Kong'. Here it was gathered.

4. The technique used by Marcos, as recorded in 'cleaned_2022,' was applied again to gather the same data for 'cleaned_2018,' including EU countries, Commonwealth nations, and Visa Requirements.

<File: UK_Touris_Analysis_&_Dashboard.xlsx>

Sheets: pivots_1, pivots_2 and pivots_3

Tasks:
- prepare for dashboards
- create charts

Featured Excel technique:
- pivot
- charts (bar charts, line charts, pie charts)
- slicer

Sheets: Dashboard P1_1, Dashboard P2 and Dashboard P3

Tasks:
- create data dashboards
-

Featured Excel technique:
- Slicers
- Linking

5. Findings from Data Analysis and Insights

We here answered the questions.

1. What is the trend of UK tourism last 5 years?
From Dashboard 'UK tourism 2018-2022',
- The number of visitors dropped significantly during the pandemic (2020 and 2021), but it has been recovering.
- European & Central Asia has made the largest contribution for each of last 5 years

2. Which country has the largest number of visitors?
Looking at 'Maximum Visitors by Country in Dashboard, 'Comparison of UK tourism: 2018 vs. 2022 (1)' , USA is the highest. France, Germany, Spain and Ireland are also high.

3. Which region made the largest contribution?
Upon reviewing the 'Total Contribution' in Dashboard P2, it becomes evident that the Europe & Central Asia region made a more substantial contribution than other regions.

4. Can we find any particular differences or trends?
Upon reviewing the Total Contribution in Dashboard P2,
- Visitors from the South Asia region exhibit longer stays, often exceeding 20 days, in contrast to those from other regions.(Figure: Average of Stay).
- Spend per day increased in North America and Europe & Central Asia regions, while it decreased in other regions from 2018 to 2022 (Figure: Average of Spend per Day).

When examining Dashboard P3,
- The Europe & Central Asia region maintains the high contributions (Figure: The Contribution to the UK by Region).
- Approximately 90% of visitors originate from countries classified as high-income (Figure: Visitor Income Segments).
- The contribution by China dropped significantly among visa requirement countries (Figure: Visitor Distribution by Visa Requirements).

5. What is the trend of EU countries?
Looking at 'The Contribution in EU Countries TOP 10 ' in Dashboard P3, France Germany, Ireland and Spain are in the top 4.