Quality of life in London boroughs

Comparative analysis using spatial data and clustering methods

Part I of the final assignment for IBM Applied Data Science Capstone

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1. Introduction

London constitutes a home to around 9 million people[1] and is one of the top global financial centres, as well as a popular tourist destination. It is also one of the most expensive European cities to live in according to Mercer 2020 Cost of Living Survey.

On the one hand, London residents can greatly benefit from the world-class facilities such as theatres, museums and sport amenities. London also provides opportunity to study at the top universities as well as is famous for its nightlife. On the other hand, life satisfaction from living in the capital of the UK may be greatly undermined by high property prices, which in recent years have been driven up because of the role London plays as a tourist destination and a financial centre. In this regard London, has one of the worst scores in terms of finding good housing at a reasonable price.[2]

Nevertheless, according to a survey by the European Commission conducted in 2019, 93 per cent of Londoners were satisfied to live in the city, a score which was above the average for European cities. At the same time 88 per cent stated that London is a good place to live for people in general, a score slightly below the European average.[3]

Quality of life in the city has been of interest to a wide range of stakeholders. Policy makers conduct regular reviews on this matter (e.g European Commission), but it has also been subject to analysis prepared by consulting firms (e.g. CBRE Borough by Borough: London Living report).

This report will **aim** to provide a more in-depth view on the quality of life in London by comparing and analysing similarities and differences between its 32 boroughs. It will look at some of the indicators which are often used in surveys and reports measuring life quality or life satisfaction in the city (such as personal well-being indicators or average rent).

The contribution of this report stems from the use of spatial data on venues such as museums and restaurants, to see how these relate to other indicators analysed in this report. The report will also seek to answer to which extent London boroughs are homogenous in terms of venues and other indicators affecting quality of life.

[1] Eurostat, as of 2019.
[2] https://urban.jrc.ec.europa.eu/thefutureofcities/affordable-housing#the-chapter
[3] https://ec.europa.eu/regional_policy/en/information/maps/quality_of_life/

This report should be of interest to policy makers as a valuable source of information when designing a strategy for urban development and public services. Hopefully, private sector companies, such as consulting businesses, will also benefit from its findings. Last but not least, it should be of interest to Londoners as well as other people considering to move within or to London.

2. Data

Data on various life quality indicators come from London datastore, available publicly at: https://data.london.gov.uk/. These include data on dwellings per hectare, quality of air, earnings to residential price ratio.

London borough coordinates were extracted from the Wikipedia page available at: https://en.wikipedia.org/wiki/List_of_London_boroughs

Data on venues were extracted using Foursquare API, which returned the data on restaurants, museums, and galleries in a particular borough.

3. Methodology

tbc.

4. Results

tbc.

5. Conclusion

tbc.