

IBM Applied Data Science Capstone

Opening a New Hotel in Paris, France

By: Vipul Sindha

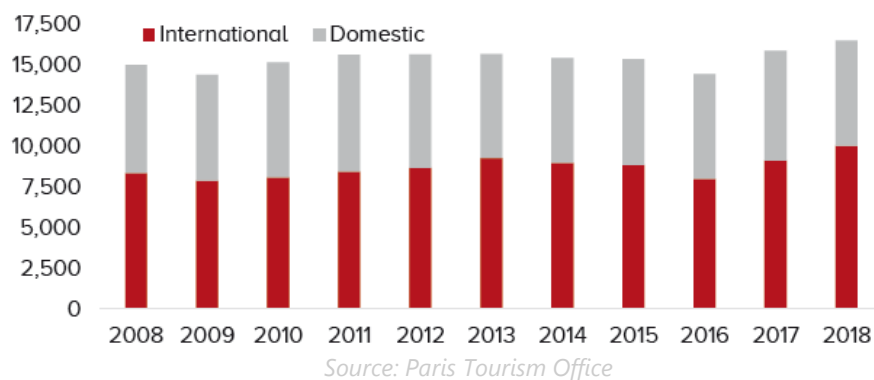
May 2020



Introduction

Business environment in France has experienced positive change since start of 2019 with a decrease in unemployment rate and an increase in purchasing power, following the 'gilets jaunes' disruption. The Economist Intelligence Unit forecasts modest GDP growth to pick up to around 1.5% for the foreseeable future. In terms of tourism, Paris enjoys an exceptionally well-balanced mix of business and leisure demand, which allows the City of Lights to have both a broad seasonality and strong average rate. Paris has remained, alongside London, one of the two most desirable destinations for hotel investment for more than a decade.

Visitation to Paris is robust and has remained broadly static at 15-16.5 million over the past ten years. 2018 saw a further increase in visitation thanks to the international market (accounting for approximately 60%), especially with the return of US visitors – the number one source country – and thanks to city-wide events such as the 2018 Ryder Cup.



Paris is still one of the most attractive markets in Europe and, once again, achieved the highest price per room in HVI. The general resilience and strong fundamentals of the Paris market have led us to consider that a continued improvement in performance can be expected for the rest of 2020, despite a rocky start to the year. The organization of large events such as the 2023 Rugby World Cup and the 2024 Summer Olympic Games will certainly help maintain, and even improve, Paris's strong performance.



Business Problem

Aspects considered by planners when a Hotel is to be built include feasibility of the site in terms of the traveler's demand, market conditions, property prices, land availability, adequate connectivity with airports, train stations; and size, access, and topography of the site, as well as availability of utilities, zoning laws, and land use in the immediate area. Economic conditions of the area, the sociology of the region, and local commercial competition and attitudes determine the size of Hotel that can be supported and the kind of accommodation acceptable to a given guest.

The objective of this capstone project is to analyze and select the best locations in Paris to open a new Hotel. Using data science methodology and machine learning techniques like clustering, this project aims to provide solutions to answer the business question:

In the city of Paris, if a property developer is looking to open a new Hotel, where would you recommend that they open it?

Target Audience of this project

This project is particularly useful to property developers and investors looking to open or invest in new Hotels in the capital city of France i.e. Paris.

Paris's hotel investment market has remained liquid and sought-after, despite the recent turmoil. French REIT Gecina sold its entire portfolio of five hotels to Angelo Gordon and EQ Group for €181 million (€222,000 per room) in June 2019. In 2018, the most significant single hotel transaction was The Westin Paris – Vendôme, sold by Singapore sovereign wealth fund GIC to Henderson Park for €550 million (€1.3 million per room, the highest value per key European transaction in 2018). For the latest value trends, please refer to our annual *European Hotel Valuation Index*, which showed that Paris maintains by a significant margin the highest value per room compared to other European markets.

Property	Sale Date	Rooms	Estimated Price (€)	Per Room (€)
Staycity Courbevoie (forward sale)	Jul 2019	216	73,000,000	338,000
Gecina Hotels Portfolio (5 Hotels)	Jun 2019	814	181,000,000	222,000
Mama Shelter La Defense	Apr 2019	211	Undisclosed	
ibis Paris Tour Montparnasse 15eme	Jan 2019	45	Undisclosed	
ibis Styles Paris Montmartre Nord	Jan 2019	46	Undisclosed	
Phileas Hotel Gare Saint Lazare	Dec 2018	39	5,300,000	136,000
Hotel Lancaster	Nov 2018	56	Undisclosed	
Westin Paris	Oct 2018	428	550,000,000	1,285,000
66 Champs-Elysees - 128 Boetie	Jun 2018	109	80,000,000	734,000
Motel One Porte Dorée (forward sale)	Jan 2018	255	Undisclosed	