



# HOTEL REVENUE

Victoria Della Chiesa

---

Data Science Project - May 2022

---



# TABLE OF CONTENTS

- Meet the Data
- Meet the Hotel
- Key metrics
- Forecasting
- Conclusion
- Next steps



# MEET THE DATA

2017 - 2022

Data analyzed

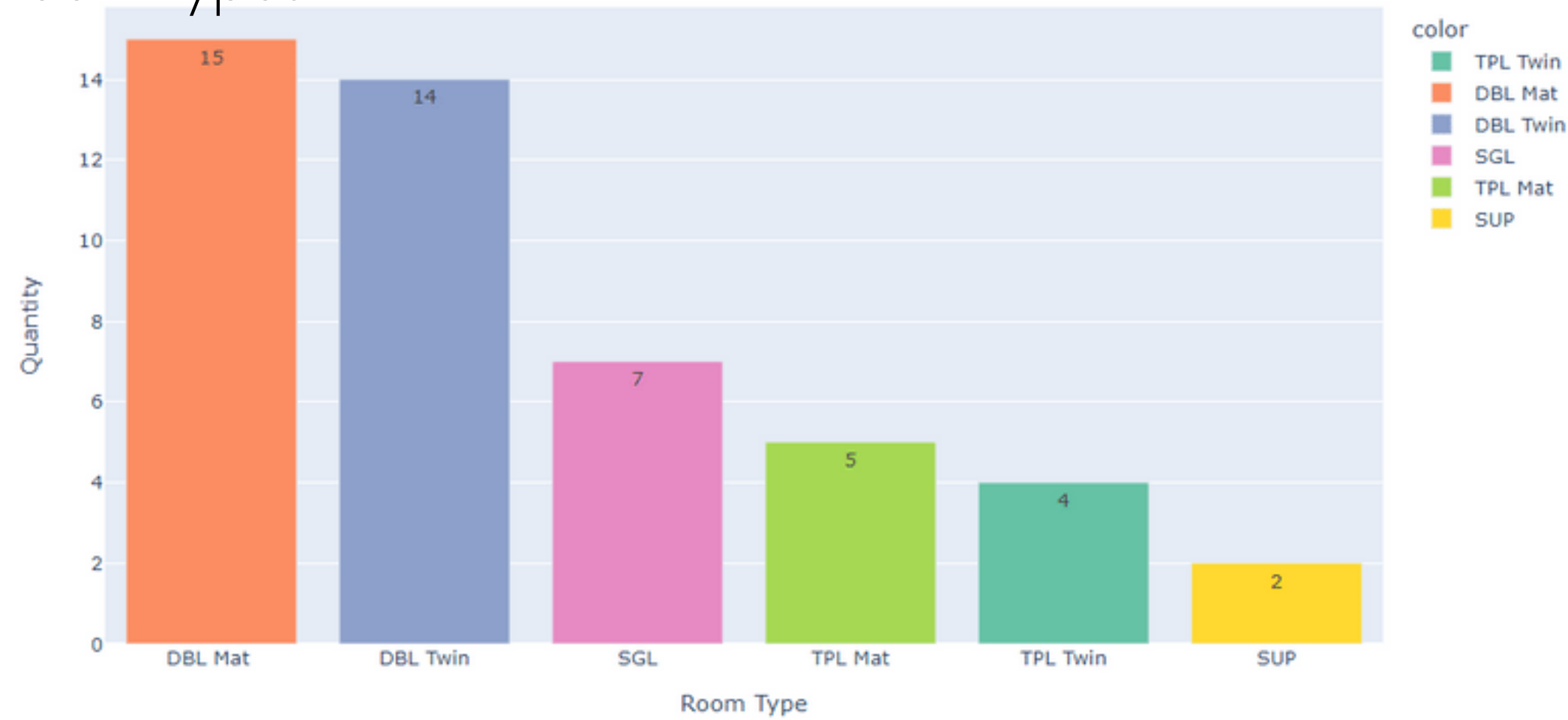
5

Years & 2 months of booking data

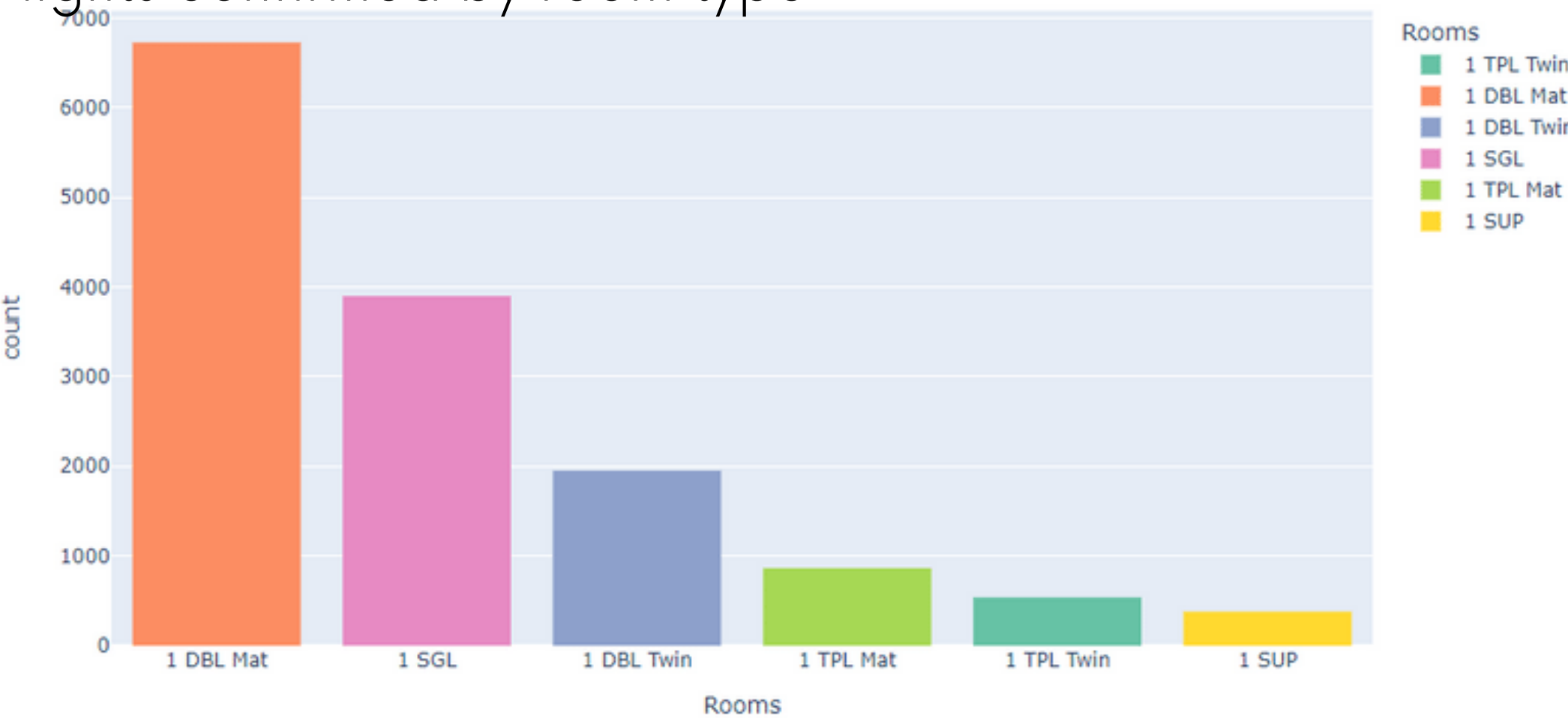
~ 16000

Bookings

# Room Types



# Nights confirmed by room type

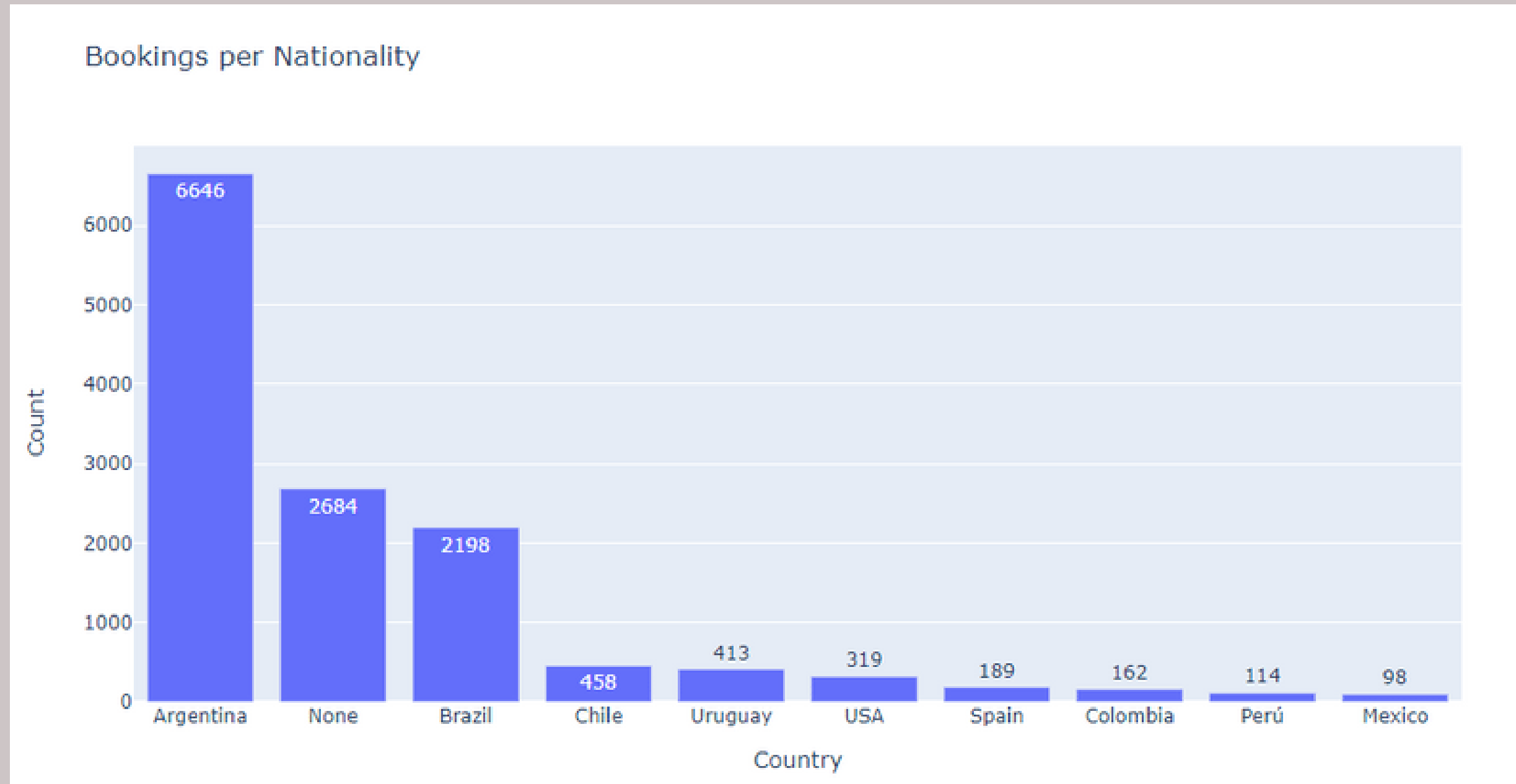


# MEET THE HOTEL

- Buenos Aires City Hotel \*\*\*
- 45 rooms
- Average net price of USD50
- Higher demand for DBL rooms

💡 There is a higher demand for Single Rooms (SGL) than available

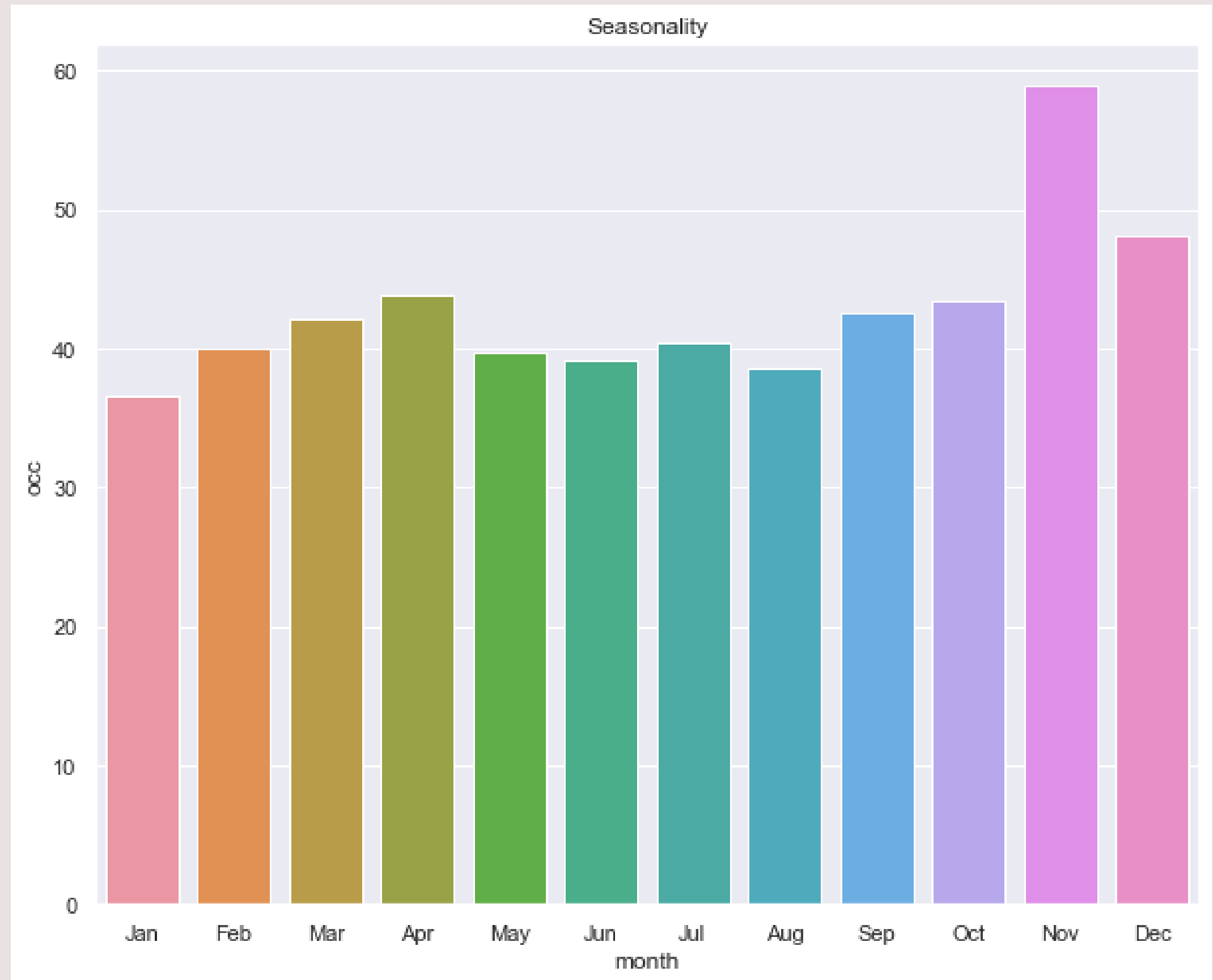
# WHO VISITED THE HOTEL?



During 2020 - 2021 the guests were on its majority form Argentina as the country was closed for tourism

# SEASONS

This hotel doesn't show a high seasonality, although we can see higher demands in March-April and Nov-Dec

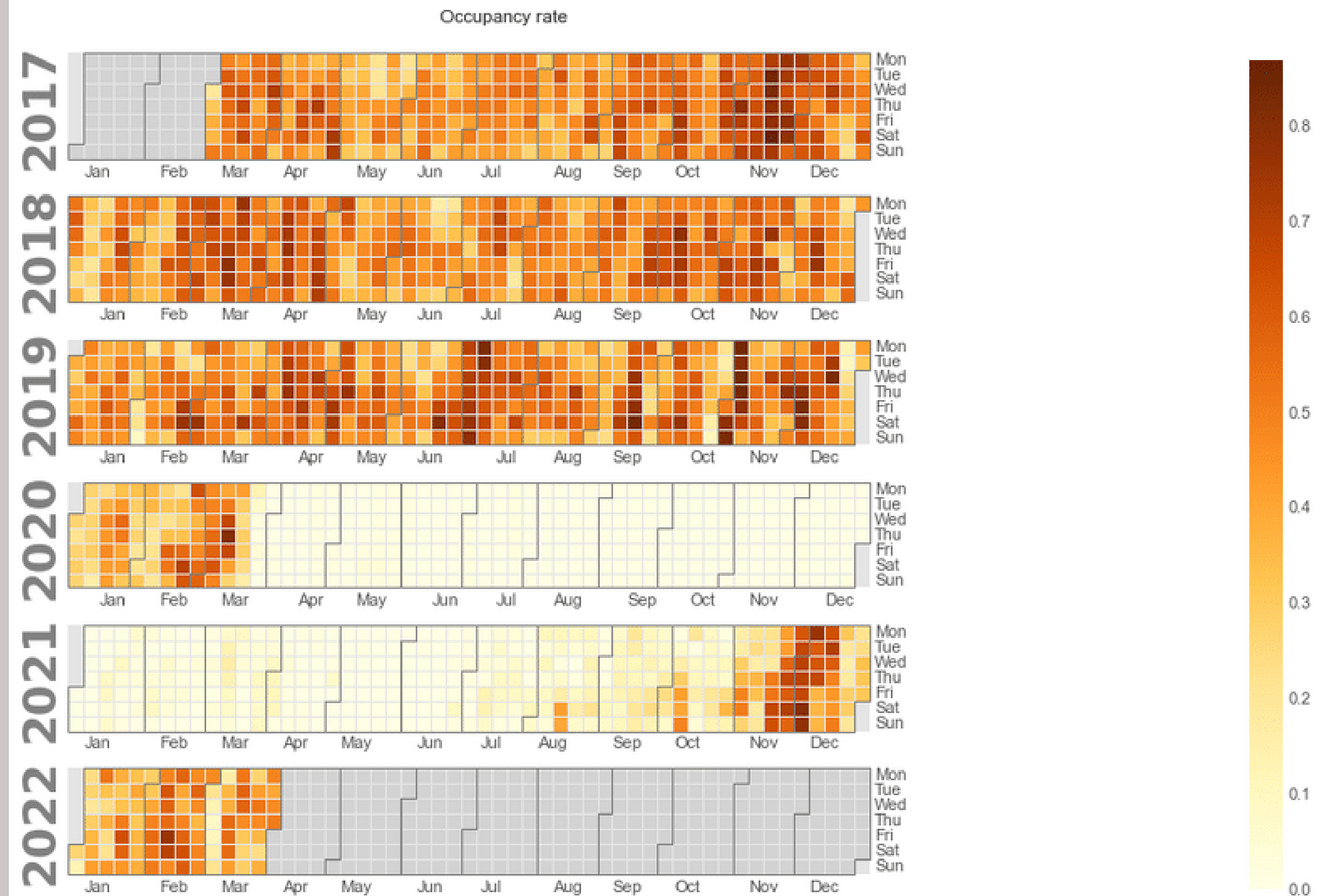


# OCCUPANCY RATE

$$\text{Occupancy rate} = \frac{\text{N}^\circ \text{ sold rooms}}{\text{N}^\circ \text{ total rooms}}$$



2020 and 2021 were highly impacted by the Covid-19 pandemic.

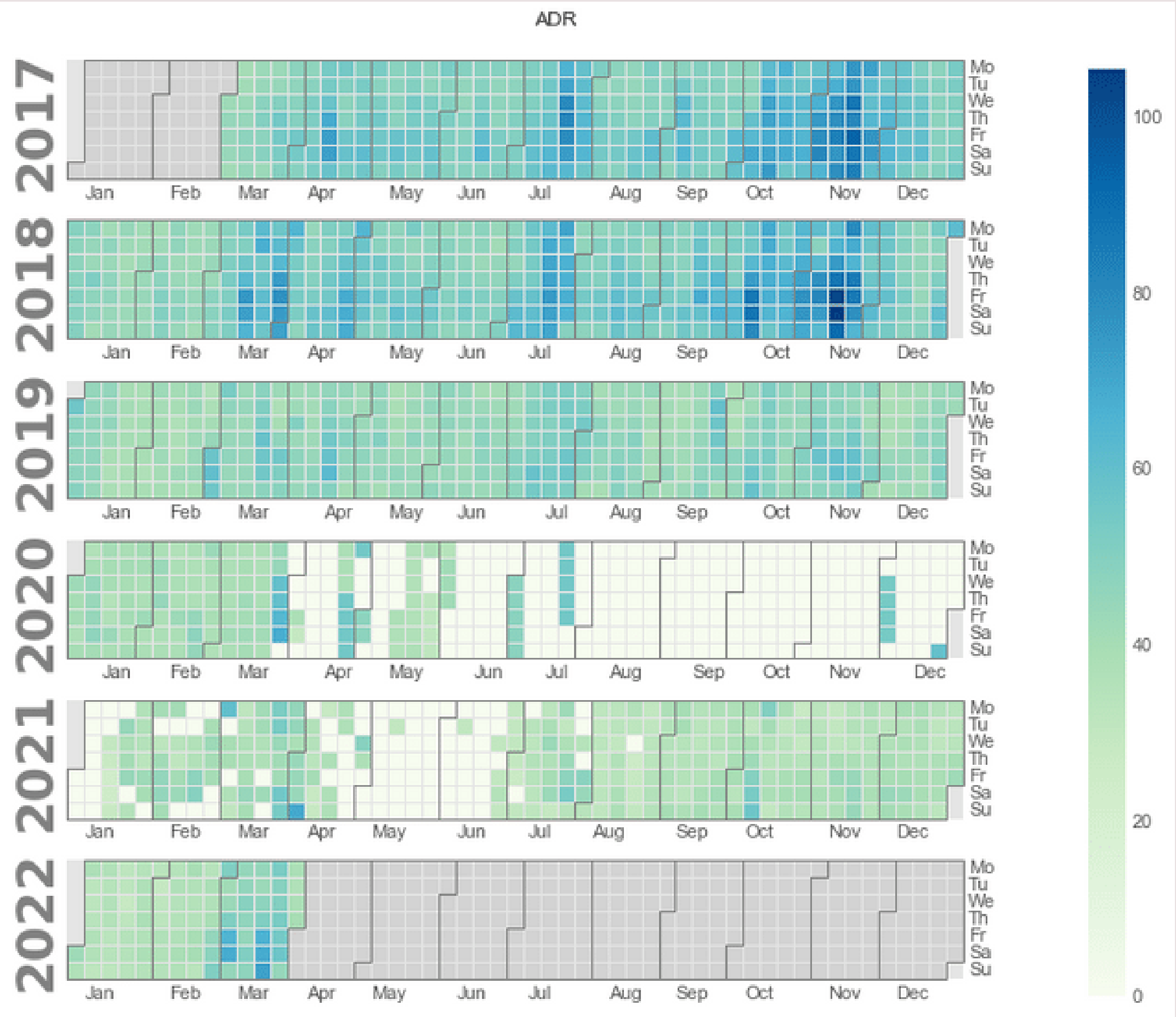


# AVERAGE DAILY RATE (ADR)

The same room type can be sold at different prices for the same date (long stay discount, when was the booking done, etc)

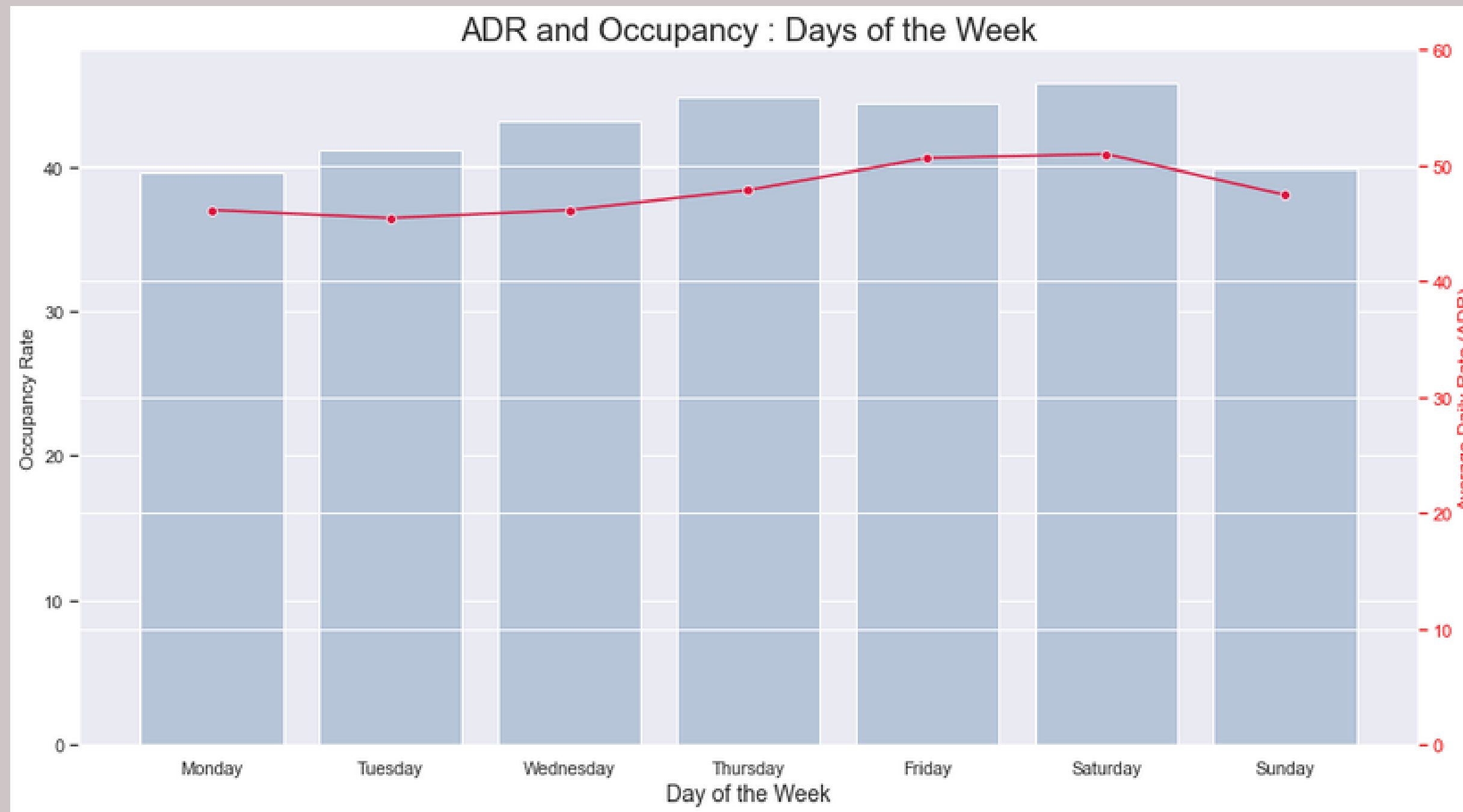
The ADR is the average room rate per night





$$\text{ADR} = \frac{\text{Total Revenue}}{\text{Nights confirmed}}$$





We can see that this hotel effectively manages its daily room rate to optimize the occ rate and revenue. (How to do this?...)

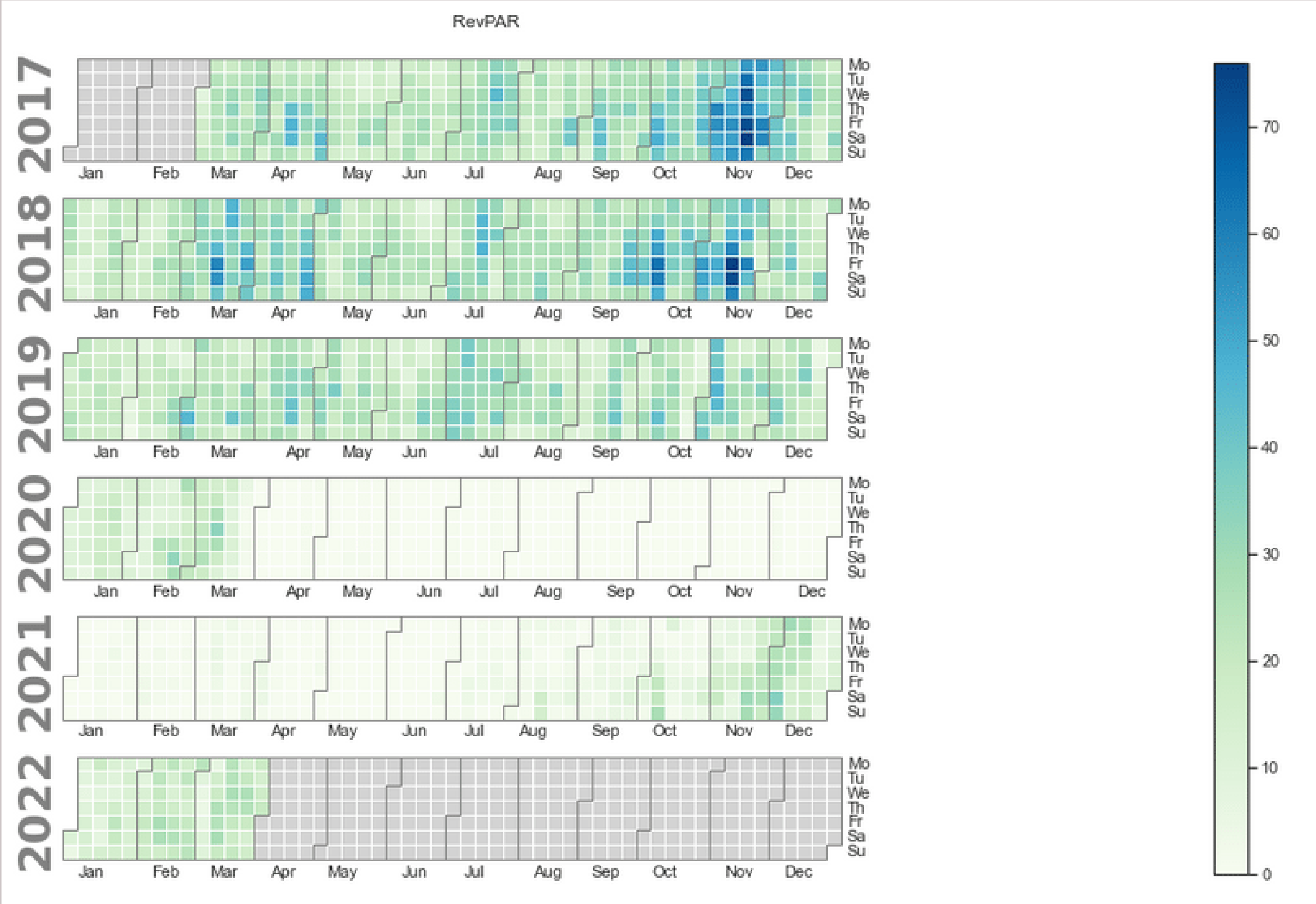
# REVPAR

---

RevPAR, or Revenue Per Available Room, is one of the key performance metrics used in the hotel industry.

$$\text{RevPAR} = \text{Occupancy Rate} \times \text{ADR}$$

---

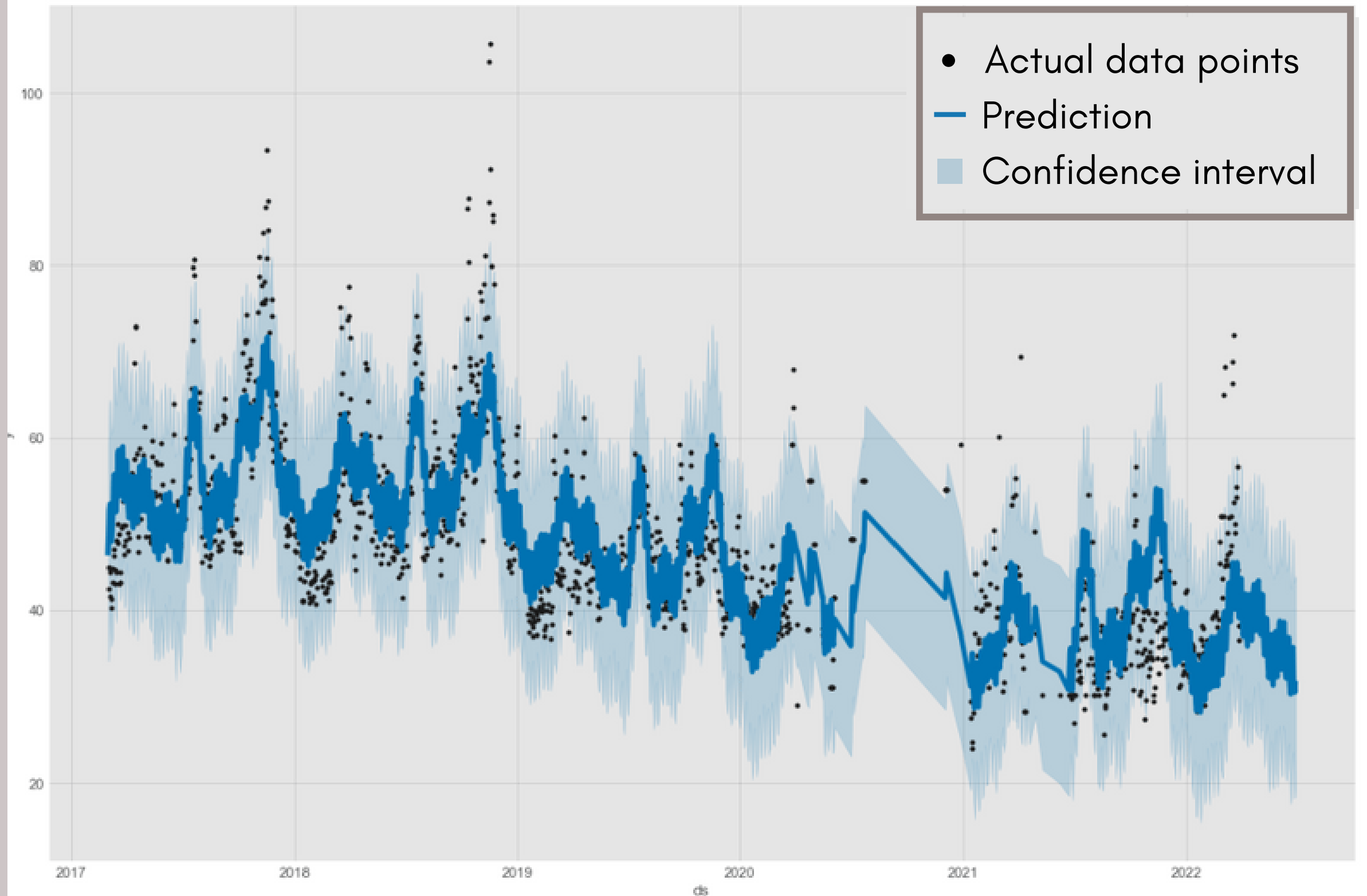


# FORECASTING

Used ML models to predict Average Daily Rate for the next 90 days



## ADR Forecasting



# CONCLUSION

---

The tourism is picking up in Buenos Aires.

As we get further away from the Covid-19 more consistent data will be available & we will be able to apply these ML models to achieve more reliable predictions.

## WHAT'S NEXT?

- Revised forecast with May-June bookings
- projection and budgeting for 2023





# FUTURE PLANS

- Revised forecast with May-June bookings
- Projection and budgeting for 2023





# THANK YOU



[github.com/victoriadc](https://github.com/victoriadc)



[linkedin.com/in/victoriadc](https://linkedin.com/in/victoriadc)

