## Abstract

RoomPriceGenie AG is a Swiss hospitality-tech company that offers a revenue management system (RMS). Having grown tremendously over the past two years and having raised over 3.1 million USD, the organization is on a quest to offer a more complete product with better revenue forecasting, pricing recommendations and more granular self-service analytics and reporting features.

Introduction

RoomPriceGenie offers a proprietary revenue management system with automated and dynamic pricing capabilities targeting small to medium sized hotels. It is currently used by 900+ hotels worldwide.

RoomPriceGenie wants to expand its target market and wants to offer a Pro plan that targets tech-enthusiast hotel owners and managers and existing revenue managers who are data driven.

RoomPriceGenie being essentialy a data product itself wants to implement solid data practices in a host of its workflows and internal decisions across all the departments.
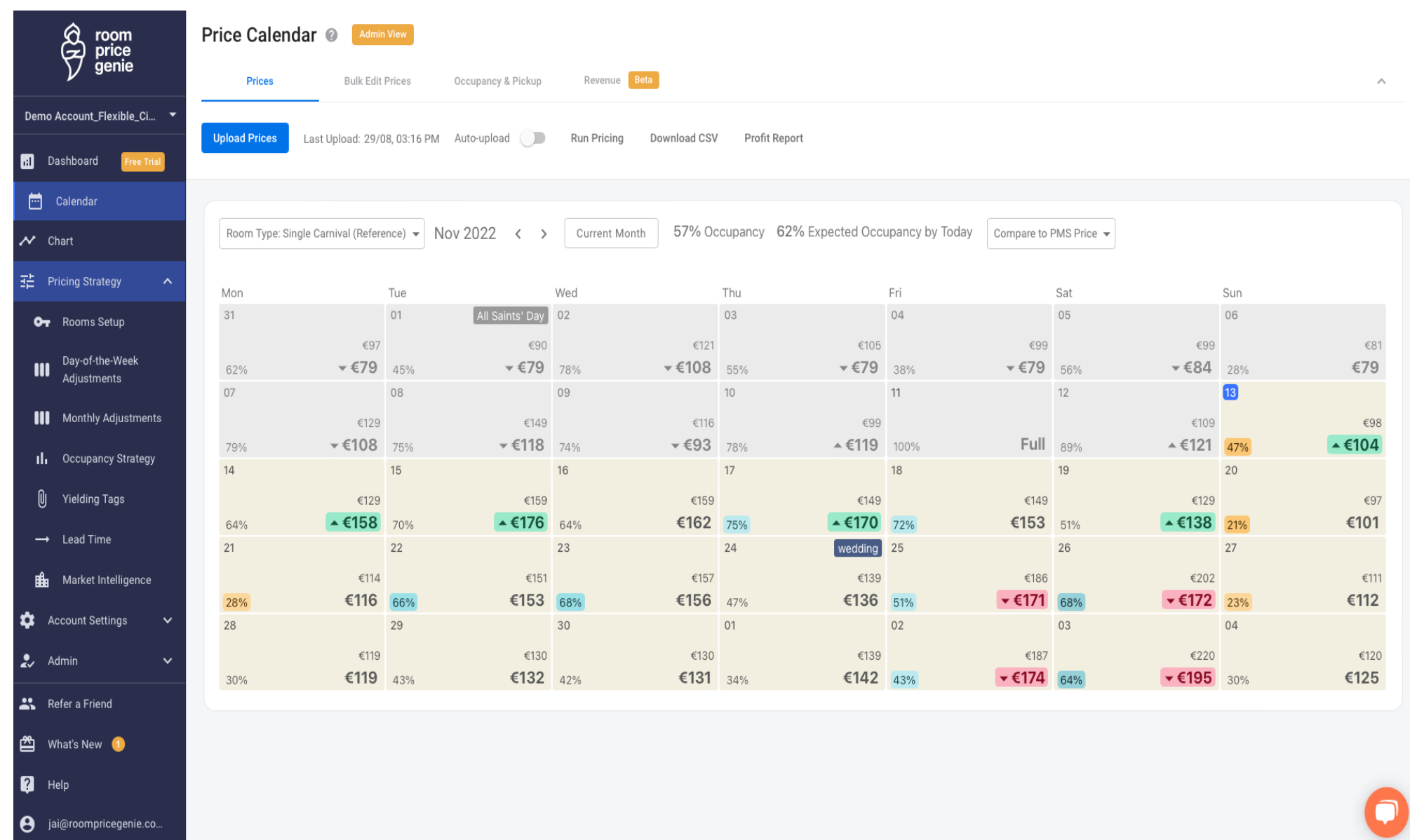
Methodology

Project I Analytics Engineering Project

This project mainly involved working alongside the data engineers, examining and testing existing pipelines o provide structured clean data that is 100% correct and is readily modelled to use for downstream analytics use cases and for the RoomPriceGenie dynamic pricing algorithm itself.

Project II RoomPriceGenie Dashboard Pro

In a bid to improve the analytics dashboard for its prospective PRO users, the project was commissioned to ideate, formulate, and serve further analytical reporting and self-service analytics features including the following – RPG Value Report, RPG Segmentation Report, RPG Day of the week report, RPG Room Distribution Report, RPG Channel distribution report.

Project IIII Automated Accounting Reporting

The executive team had to manually identify and monitor the bank statements and mark off each invoice payment manually within the invoice tracking software - Chargebee, thus consuming valuable man hours (2-3 Hours Weekly). With the aim of automating this task, a Python script was coded out that calls the Wise API every week, and sends a complete to-do report via email.

Project IV Text Mining Project

RoomPriceGenie aims to be data driven and analytical in all its decisions. This project was carried out in tandem with the customer success team who wanted to launch a newer version of RoomPriceGenie technical documentation using the Hubspot Knowledge Base feature.

Project V Market Research Project

The project involved indexing every possible hotel available online in the world. The entire dataset with over 1 million record and over 120 columns was parsed, cleaned, organized and geographically divided across regions.. Furthermore, a competitor analysis involving 28 similar tools was carried out as well.

Evaluation

Project I Analytics Engineering Project

The updated calculations are matched with internal reports from partner hotels itself to account for accuracy. Evaluation is carried out by testing and examining the findings by the team, writing updated test cases, and pushing necessary changes to the code.

Project II RoomPriceGenie Dashboard Pro

The posed ideas have been approved and prototypes have been developed. Further, new ideas shall keep on being testing depending upon standardized data availability from all RoomPriceGenie's commercial partners.The project is slated to launch early 2023.

Project IIII Automated Accounting Reporting

The project was monitored and tested upon by the Product team and was extensively tested upon manually to check for any missing transactions and the necessary fixes were made. The above project has resulted in savings of crucial man hours for the executive team as it involves managing incoming payments which are ultimately tied into active subscriptions.

Project IV Text Mining Project

The above project was carried out in close collaboration and constant back and forth discussions with the customer success department manager itself. Once the carried-out analysis was deemed satisfactory, an updated technical documentation was written from scratched and ultimately deployed for use in September 2022.
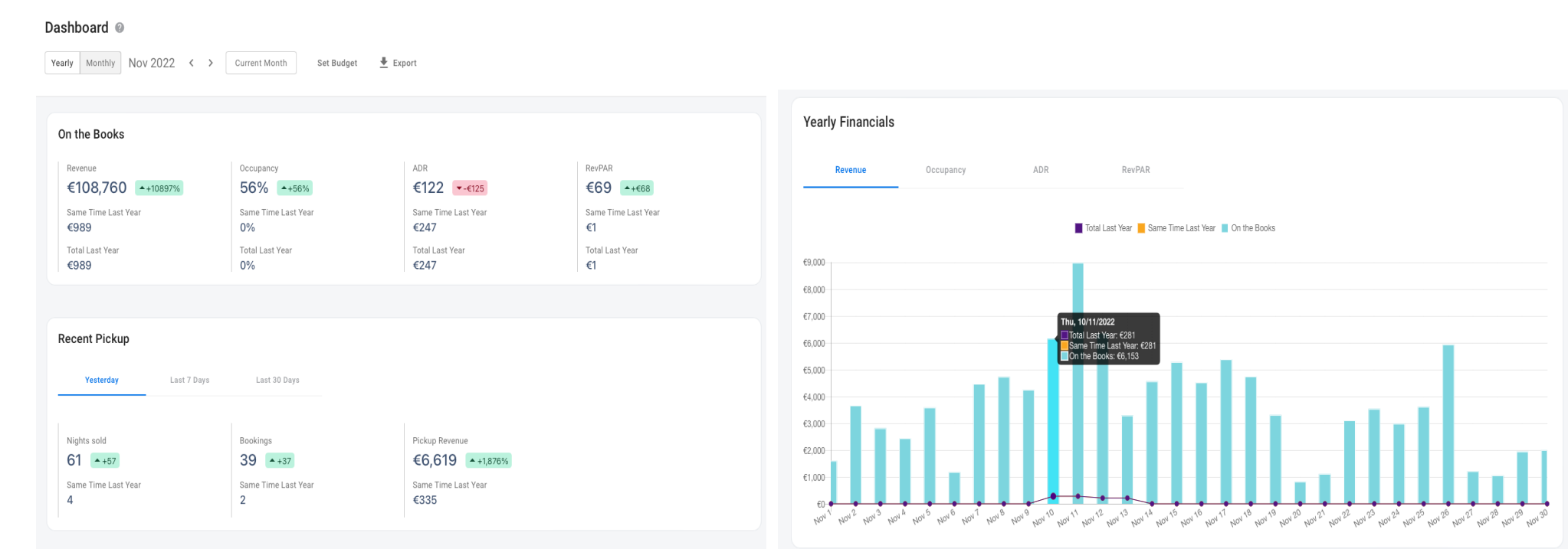
Project V Market Research Project

The project was examined and approved by the CEO of the company itself as the underlying findings were supposedly meant to be used in a board meeting with the investors. Further, the competitor analysis is constantly used upon and updated by the sales team to differentiate RoomPriceGenie from its competitors.
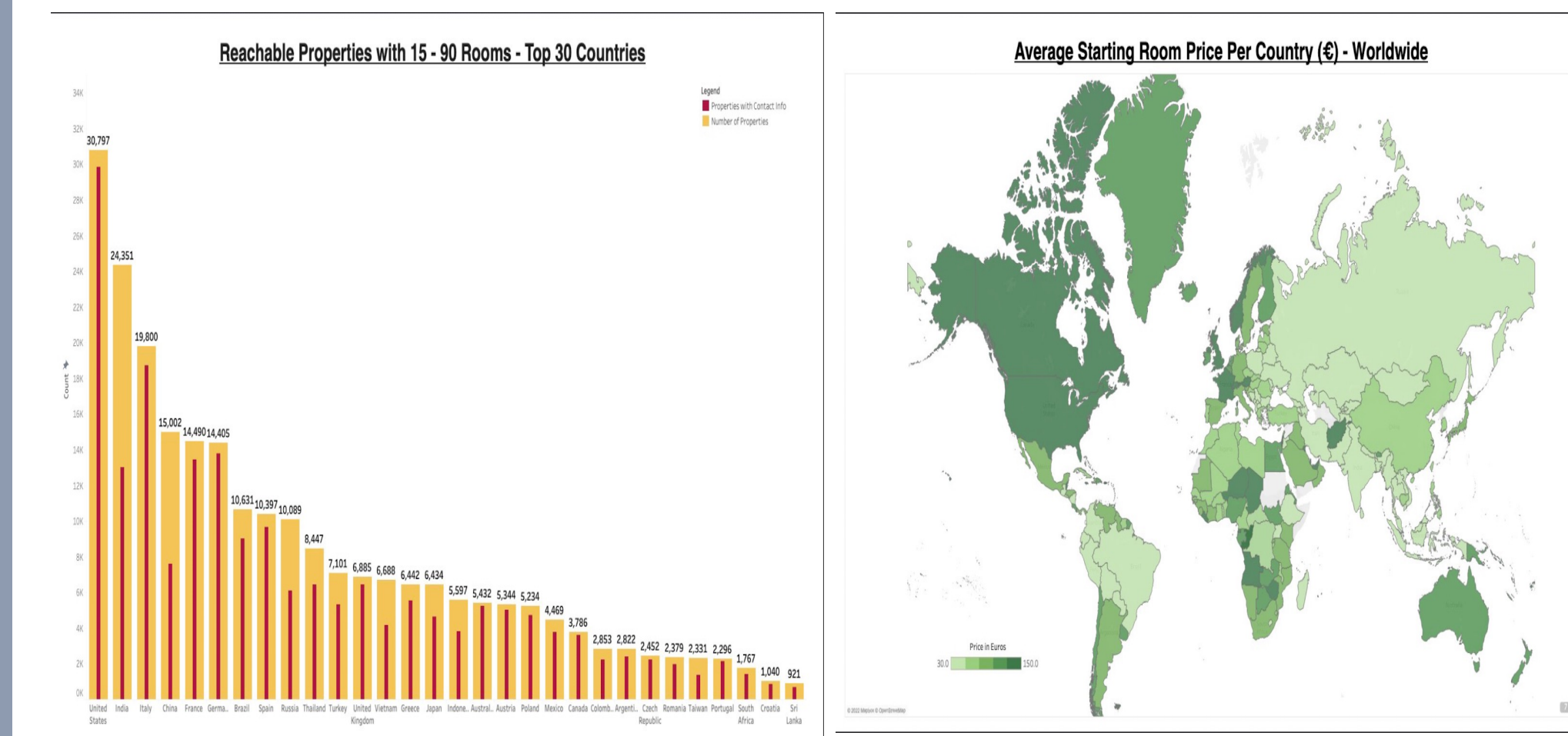
Conclusion

All in all, working at an early growth startup such as RoomPriceGenie carrying out Data Analytics projects within the product department has been one of the most fruitful periods of my education. Not only has it resulted in implementing the learnings learnt during the course of this Masters' degree in a practical setting but also carefully observing the inner workings of a modern data product. The ability to work in multiple fastmoving projects across various departments ranging from accounting to customer success to self-service analytics, the experience has proven to be a very valuable one, further, reinforcing the view as Data being the oil of the 21st century.

With an ever increasing competition for smaller hotels in today's world and a limited time available for decision making, any possible technology that can analytically automate daily tasks, do it exceptionally well and help one save valuable time makes RoomPriceGenie a truly unique and a low risk high reward offering.

Acknowledgement