



# Passport Paradise Cys Favorite

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# Executive Summary

Passport Paradise is a full-service travel agency committed to delivering seamless, personalized travel experiences to clients worldwide. Our focus is on creating memorable journeys, from luxurious getaways to budget-friendly adventures. We specialize in vacation planning, corporate travel, group bookings, and tailored itineraries, ensuring that each trip reflects the client's unique preferences and needs.

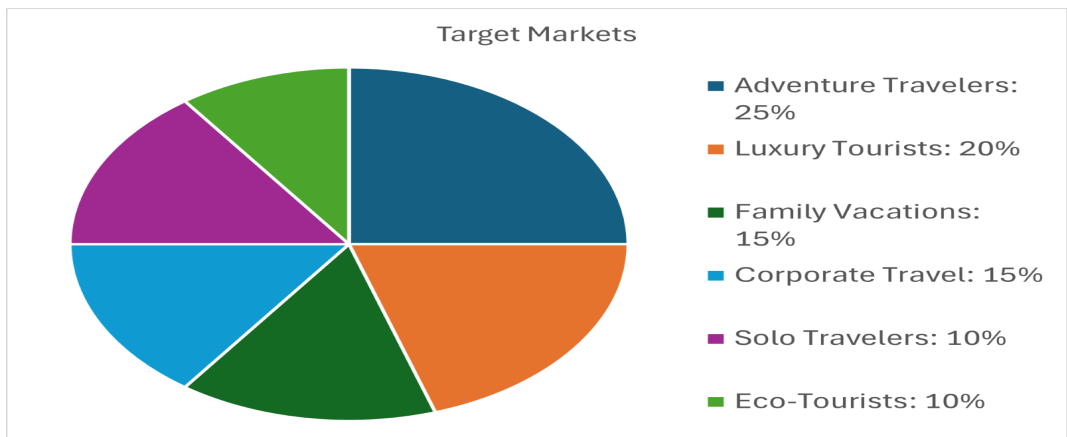
**Mission:** To inspire and facilitate extraordinary travel experiences by providing professional and personalized services, helping travelers explore the world with ease and comfort.

**Vision:** To be the go-to travel agency for individuals and businesses, known for our unparalleled customer service, extensive destination knowledge, and ability to turn travel dreams into reality.

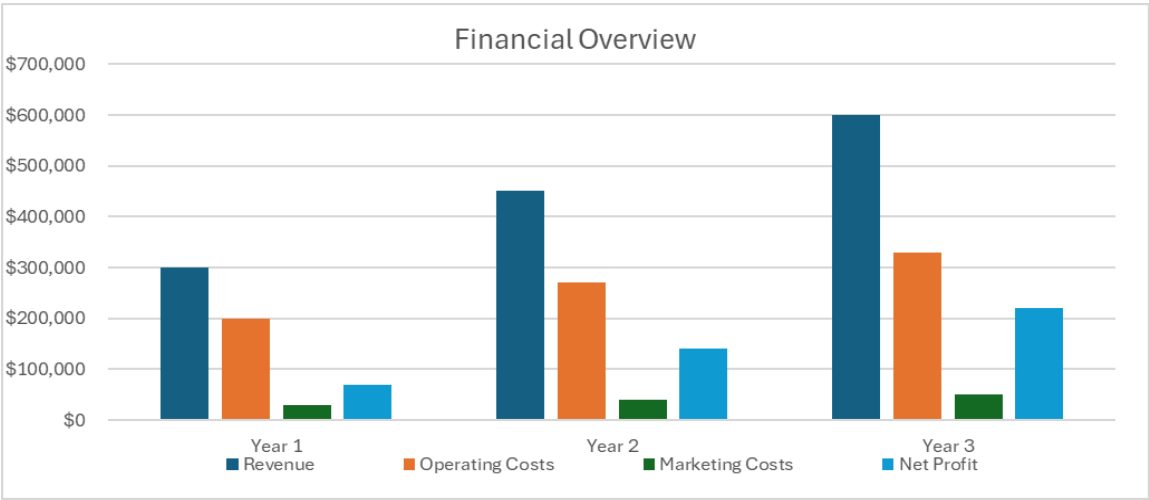
## Services Offered:

- Leisure Travel: Customized vacation packages, family holidays, honeymoon planning, and more.
- Corporate Travel: Tailored solutions for business trips, meetings, and incentive travel.
- Group Travel: Group bookings for special events, tours, and destination weddings.
- Luxury Travel: High-end, exclusive travel experiences, including private jets, yachts, and five-star accommodations.
- Travel Consultancy: Expert advice on travel trends, destination tips, and itinerary planning.

# Highlights



The target market for the Passport Paradise is strategically segmented to cater to a diverse range of travelers, ensuring broad market coverage and revenue potential. By catering to a diverse range of customer segments, from adventure seekers to eco-tourist travelers, Passport paradise positions itself to serve the broad and dynamic travel industry. Each segment presents unique opportunities for growth, from high-value luxury tourists to niche markets like eco-tourism and cultural travelers. This diverse customer base not only spreads risk but also allows the business to capitalize on emerging trends within the global travel market. By offering tailored packages that meet the specific needs of each segment, passport paradise can build a strong reputation and ensure long-term customer loyalty.



The projected financial overview chart is crucial for Passport Paradise, providing critical insights into the company’s expected financial trajectory over the next three years. It allows Passport Paradise to anticipate revenue growth, monitor operating and marketing costs, and forecast net profits, which are critical for strategic planning. By understanding these projections, Passport Paradise can make informed decisions about resource allocation, identify areas where costs can be further optimized, and plan for future investments in marketing and operations.

Objectives

- Identify meaningful trends and patterns from data gathered on travel experiences, reviews, and destination preferences
- Develop strategies focused on marketing, identifying target audience, and optimizing travel experience
- Use data analysis to describe data, make predictions, and develop suggestions to the travel industry

## Keys to Success

**Data-Driven Travel Insights:** We leverage data analytics to identify trends in traveler preferences, experiences, and reviews, providing actionable insights to optimize marketing strategies and enhance the customer journey.

**Targeted Marketing Strategies:** By analyzing customer data, we identify key audience segments, allowing for personalized marketing campaigns that resonate with travelers' specific interests and destination preferences.

**Predictive Analytics for Travel:** Utilizing advanced data techniques, we forecast emerging travel trends and preferences, enabling businesses to stay ahead of the curve and tailor offerings to future demands.

**Enhanced Travel Experience:** Our continuous focus on improving customer satisfaction ensures that we use data to suggest and implement meaningful improvements in the travel experience.

## Description of Business

Our Travel company is committed to creating individualized travel experiences that meet each client's requirements and interests. Our unique itineraries, exclusive travel offers, and round-the-clock customer service set us apart and guarantee a smooth and stress-free travel experience for our customers. Our distinctive method consists of customized travel itineraries created by knowledgeable advisors, exclusive savings obtained through solid industry relationships, and 24-hour support for any concerns pertaining to travel. Our main objectives are to encourage eco-friendly travel and attain exceptional customer happiness. By concentrating on these locations, we hope to emerge as the leading option for tourists looking for unique and unforgettable experiences.

## Products and Services

- Customers are matched with a personal experience curator who specializes in designing itineraries that are specifically catered to their interest.
- Create a custom app for each trip that includes interactive maps, daily schedules, real-time updates, and local recommendations. The app could also have built-in features like language translation and emergency contacts.
- Create a subscription service that provides members with regular travel inspiration, exclusive offers, early access to deals, and curated travel content tailored to their interests.

- Provide clients with special rates, upgrades, or added amenities at luxury hotels and resorts.
- Offer integrated booking services that include flights, accommodations, and ground transportation.
- Our main objective is to give customers amazing travel experiences by providing professional guidance, customized itineraries, and easy booking services. This involves figuring out the practicalities of the trip, getting to know the client's preferences, and making sure the trip is easy and pleasurable.

## Other data about the company

In the world of travel, smart financial management is key to ensuring our agency's success. In this section, we will explore the financial strategies that will help us maintain profitability and build a sustainable business. We'll discuss how we plan to manage our cash flow effectively, optimize our operating costs, and outline the financial requirements necessary to keep our travel agency running smoothly.

The core of ensuring our travel agency's profitability lies in effective cash flow management, which includes the following components:

**Strategic Cash Flow Management:** Given the initial investment of \$20,000 in equipment and software, along with legal and setup costs, we will ensure steady cash flow by securing upfront deposits for travel bookings and tours. By requiring clients to pay a portion in advance, we reduce the risk of late or missed payments and maintain liquidity for ongoing operations like rent, utilities, and payroll.

**Targeted Marketing and Advertising ROI:** With \$8,000 allocated for advertising and promotions, we will focus on cost-effective digital marketing strategies, such as social media advertising and search engine optimization (SEO), to attract travelers who are searching for personalized travel experiences. Tracking the ROI from these efforts ensures we maximize every marketing dollar, reaching the right audience without overspending.

**Client-Centered Payment Terms:** To reduce the impact of late payments, we will create clear payment terms that require an initial deposit upon booking and full payment before travel. This minimizes the risk of cash flow issues and ensures we can meet operating costs like payroll and utilities, which total \$50,000 and \$2,500 per month respectively.

**Optimizing Operating Costs:** While our rent in Des Moines, Iowa is projected at \$18,000 per year, we will aim to minimize utility expenses and other operational costs by implementing energy-efficient practices and negotiating better service agreements for utilities and office

supplies. Keeping overhead costs low will allow us to invest in areas that directly contribute to client satisfaction.

**Leveraging Partnerships:** We will work closely with hotels, airlines, and local travel partners to negotiate discounted rates, increasing our margins while offering competitive pricing to customers. These partnerships can also help us build exclusive travel experiences that attract repeat customers.

### **Start Up Costs and Operating Budget**

**Equipment and Supplies:** We estimate \$20,000 to be allocated towards initial equipment and software

**Legal and Professional:** Legal fees and business establishment cost us \$5,000

**Renovation/Design:** As we will be meeting with clients in the office, it is important that we create a welcoming environment. We have reserved \$10,000 for renovations and office set up.

**Advertising and Promotion:** We have allocated \$8,000 towards start-up promotion and website development.

**Rent:** We will have 5 full-time employees and will be located in Des Moines, Iowa. A standard office space for this many people in Des Moines costs about \$18,000 per year.

**Utilities:** We estimate for an office space of about 1,500 square feet to spend \$2,500 per month on utilities such as heating and cooling, water, electricity, and internet.

**Insurance:** We expect to spend \$500 per month on health insurance, and \$100 per month plus a \$10,000 deductible for professional indemnity insurance.

**Payroll:** Salary and incentives will cost \$50,000 per month.

**Loan Payments:** We will take out a loan of \$40,000 which will require monthly payments of \$500 to be paid off in ten years

**Office Supplies:** We have devoted \$3,000 for office supplies per month

**Travel and Entertainment:** \$500 per month will be reserved for company outings, entertainment, and work-related travel.

**Legal and Accounting:** We estimate that compliance and accounting costs will total \$6,000 per year.

**Advertising and Promotion:** We will allocate \$8,000 per year for advertising

**Repairs and Maintenance:** We budget \$2,000 per month for miscellaneous repairs and maintenance.

**Depreciation:** \$4,000 will designated for depreciation

## **Project Detail**

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### **Analytical Question**

Geographics

1. Where are the most popular destinations?

## Time-Period

2. What time of year do people like to travel most?

## Customer Preference

3. What airlines do people prefer and why?

## Market Insight

4. As a company what insight can we provide our customers regarding ratings and positive reviews vs negative reviews?

## Data Sources

The dataset we are using for this project is from Kaggle, an online platform that supports data science and machine learning efforts by offering datasets, competitions, and tutorials for data exploration and modeling.

Specifically, we are using the Argo Datathon 2019 dataset, which contains synthetic data related to corporate travel, including trip times, distances, durations, and transportation modes. This dataset simulates real-world travel data, making it valuable for testing machine learning models that optimize travel behavior and predictions within the business travel sector. Key subdivisions in this dataset include:

- **Trip Details:** Information on departure and arrival locations, times, and distances.
- **Transportation Modes:** Types of transport used for trips, such as air travel, car rentals, and public transport.
- **Travel Durations:** Metrics that detail how long each trip takes.
- **Cost Data:** Information regarding the expenses incurred during travel.

This big data project aims to create a model using semi-structured data in order to establish recommendations for changes and additions from a business standpoint.

## Type of Analytics used:

- **Descriptive Analytics:** This looks at booking patterns, customer types, and travel choices. By making reports and charts, we can see what customers like and popular places, helping us improve marketing and operations.
- **Diagnostics Analytics:** By finding patterns, we can understand what affects customer satisfaction, the success of marketing, and changes in travel preferences. This helps us make better decisions and improve services for a better customer experience.
- **Predictive Analytics:** This predicts travel trends, peak demand times, and possible issues. It helps us make smart choices about marketing, pricing, and resources, keeping us competitive in a changing market.



- **Prescriptive Analytics:** This involves adjusting prices for flights and hotels based on current demand and customer behavior. It also includes creating personalized marketing campaigns to attract specific customer groups.

## Research Questions

In this section, we outline the key research questions that guide our exploration of consumer behavior and preferences within the travel industry, leveraging big data analytics to enhance customer experiences and optimize business strategies.

Demographics:

1. What Demographics factors correlate with specific outcomes?
  - a. This will help us understand how certain demographics influence can guide choices that travelers are more likely to make
2. What factors influence travelers' destination choices
  - a. Allows us to evaluate key influences such as cost, culture, climate with allow us to make sure we are using the correct marketing strategy tailor to our business

Trend:

3. Are there significant trends over time in the data?
  - a. Identifying trends can help forecast future outcomes and evaluate the effectiveness of specific programs and policies.
4. What are the seasonal patterns in destination popularity?
  - a. Analyzing seasonal trends can help in resource planning, pricing strategies, and promotional campaigns

Predictive:

5. What are the most predictive variables for the outcomes?
  - a. Focusing on specific and predictive variables will enhance decision making and allocation

## Data Acquisition

**Data Source:** We sourced our datasets from Kaggle, which includes files on Flights, Hotels, and Users for our analysis.

<https://www.kaggle.com/datasets/leomauro/argodatathon2019>

- You must have a Kaggle account to access and download the dataset. If you don't have one, sign up or log in.
- Once logged in, navigate to the "Data" tab on the dataset page.

The dataset is composed of multiple JSON files, each representing different types of data such as business information, user reviews, user profiles, check-ins, tips, and photos. A summary of these JSON files and their respective number of attributes is provided below:

### Flights Dataset (flights.json)

**Description:** Contains information about flight bookings, including details on routes, prices, and agencies.

**Number of Attributes:** 8

**Key Attributes:**

- **travelCode:** integer (identifier for travel instance)
- **userCode:** integer (identifier for the user booking the flight)
- **from:** string (departure city)
- **to:** string (arrival city)
- **flightType:** string (class of service, e.g., firstClass)
- **price:** float (cost of the flight)
- **time:** float (duration of the flight in hours)
- **distance:** float (distance of the flight in kilometers)
- **agency:** string (travel agency providing the flight)
- **date:** string (date of the flight, formatted as MM/DD/YYYY)

### Hotels Dataset (hotels.json)

**Description:** Contains information about hotel bookings, including details on prices, duration of stay, and locations.

**Number of Attributes:** 7

**Key Attributes:**

- **travelCode:** integer (identifier for travel instance)
- **userCode:** integer (identifier for the user booking the hotel)
- **name:** string (name of the hotel)
- **place:** string (location of the hotel)
- **days:** integer (number of nights stayed)

- **price:** float (cost per night)
- **total:** float (total cost for the stay)
- **date:** string (date of the booking, formatted as MM/DD/YYYY)

### **Users Dataset (users.json)**

**Description:** Contains detailed profiles of users, highlighting their characteristics and booking behaviors.

**Number of Attributes:** 5

**Key Attributes:**

- **user\_id:** integer (primary key, unique identifier for each user)
- **company name:** string (name of the user's company)
- **name:** string (name of the user)
- **gender:** string (gender of the user)
- **age:** integer (age of the user)

## **Tools for data Preparation**

### **1. Data Cleaning and Preparation**

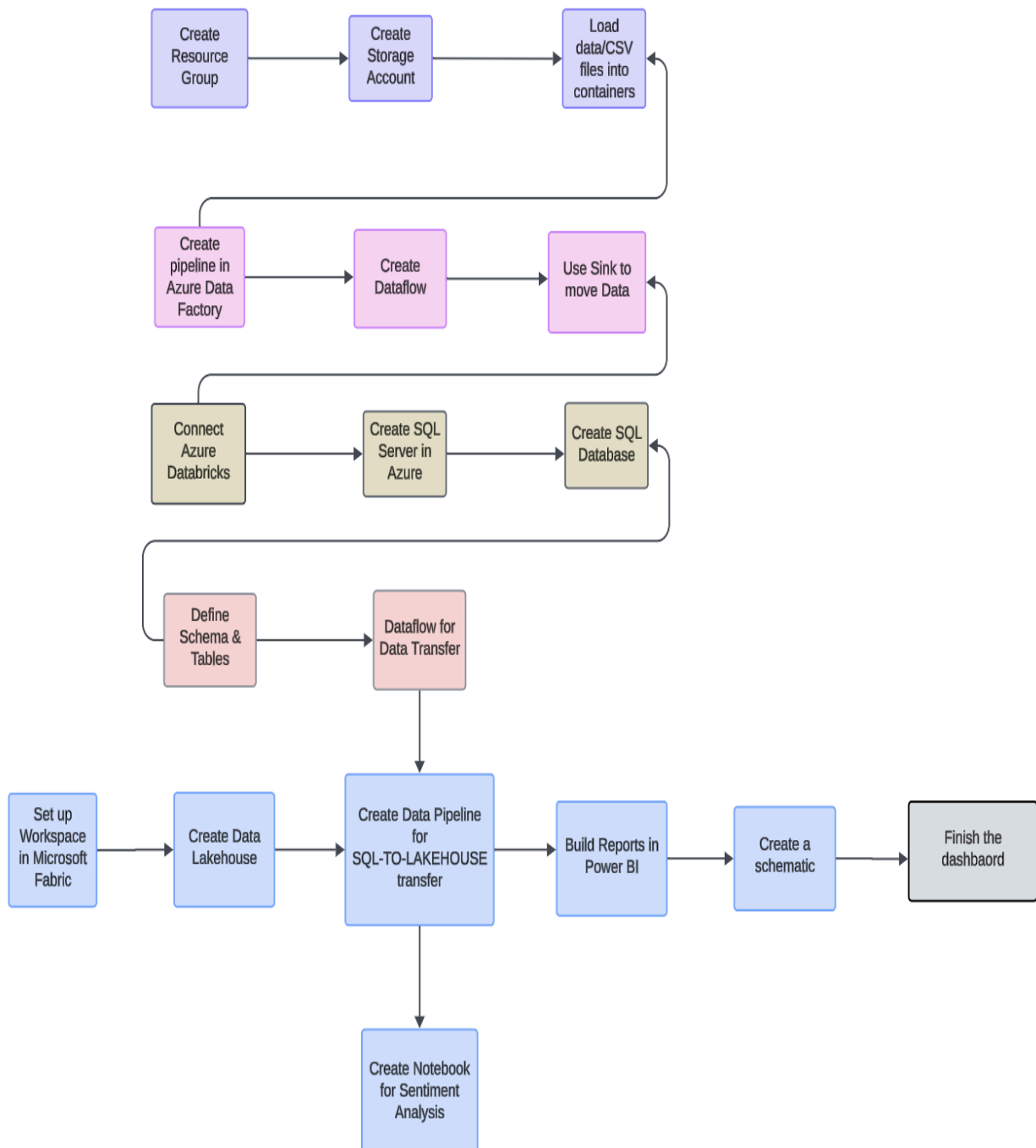
- a. Power BI:** Can use this to find specific trends and most popular decisions that travelers make when looking to book a trip. Which would include hotels, flights, and destinations.
- b. Excel:** We can use this to break down out data sets into certain categories to find what each traveler/hotel/designation have in common
- c. Microsoft Fabric:** This can easily connect to different data sources to gather and transform data in one place. Also uses power query to clean the data which. May include adding missing values, formatting issues, and merging datasets

### **2. Data Visualization**

- a. Power BI:** Useful for business intelligence and visual analytics to create graphs and queries to make the most popular trends knows
- b. Microsoft Fabric:** Create dashboards that visualize key metrics such as, average hotel prices by season, popular destinations, or climate impacts on travel

## Data Preparation

High-level data processing schema:




Data Ingestion & Storage in Azure

**Create Resource Group:** We started by creating a Resource Group in Azure to organize and manage all related resources for our project. This allows for better resource management and cost tracking as all components are grouped logically.

**Create Storage Account:** Following the resource group, we set up a Storage Account. This account will store our data in various containers, facilitating easy access and management of our raw and processed data.

**Load Data into Containers:** We then loaded the raw data into designated container within the storage account. These containers act as staging areas for our data, where it can be easily accessed for transformation and processing.

[Home](#) > [mis315projectstorage\\_1727752102768 | Overview](#) > [mis315projectstorage | Containers](#) >

 mis315projectcontainer

Container

Search

«

Upload

Change access level

Refresh

Delete

Change tier

Acquire lease

Break lease

View snapshots

Create snapshot

Give feedback

Overview

Diagnose and solve problems

Access Control (IAM)

Settings




Authentication method: Access key (Switch to Microsoft Entra user account)

Location: mis315projectcontainer

Search blobs by prefix (case-sensitive)

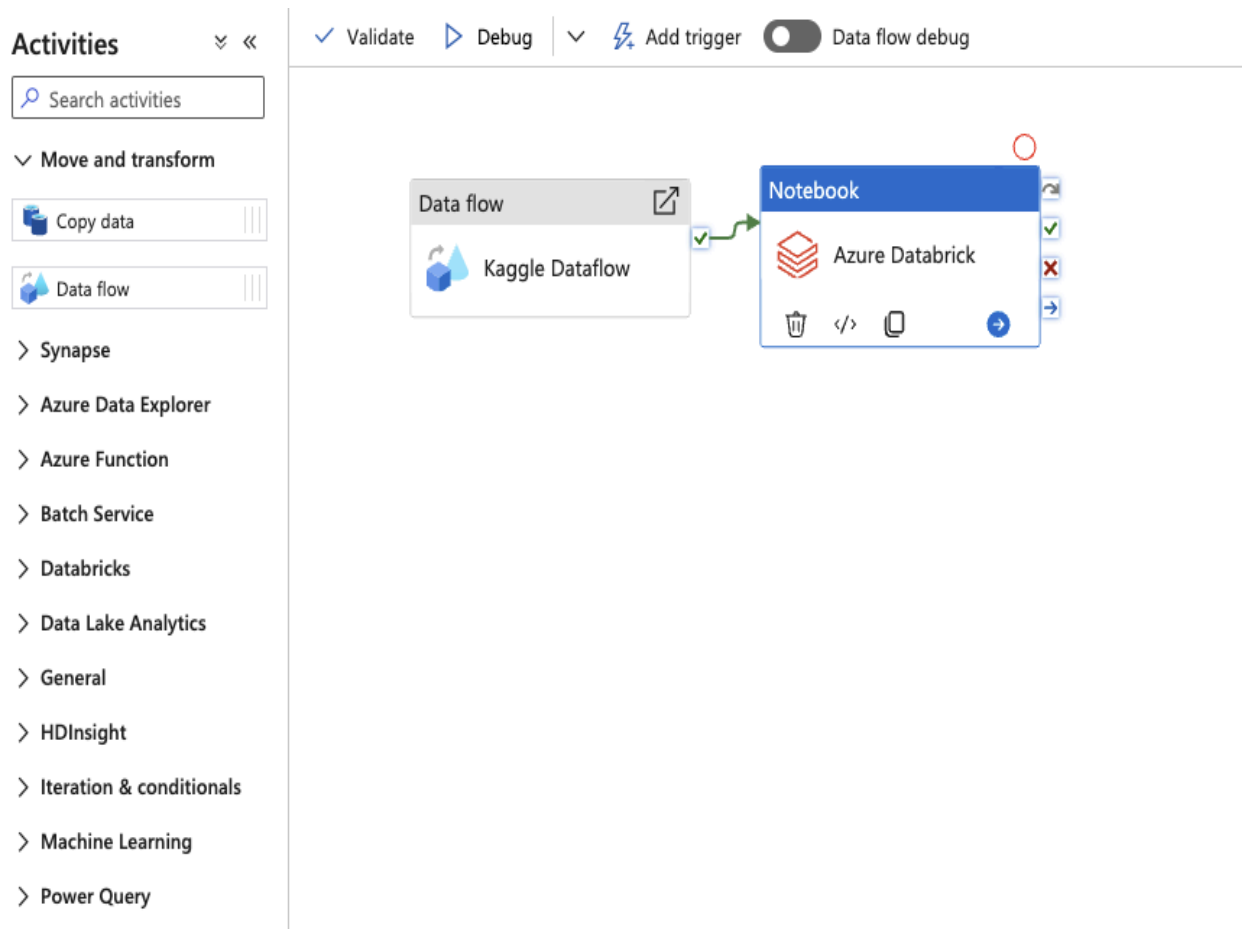
Show deleted blobs

Add filter

Name	Modified	Access tier	Archive status	Blob type	Size	Lease state
 flights.csv	9/30/2024, 10:13:22 PM	Hot (Inferred)		Block blob	23.43 MiB	Available
 hotels.csv	9/30/2024, 10:13:21 PM	Hot (Inferred)		Block blob	2.39 MiB	Available
 users.csv	9/30/2024, 10:13:21 PM	Hot (Inferred)		Block blob	50.51 KiB	Available

## Data Processing in Azure

After loading the data, we will create a pipeline in Azure Data Factory (ADF). This pipeline will include a Dataflow for data transformation, where we can perform essential operations like data type conversions, filtering, and basic aggregations. To enhance our processing capabilities, we will integrate Azure Databricks within the ADF pipeline, allowing us to leverage Spark for advanced data manipulation and machine learning tasks.



The initial phase of our analysis involved creating a dataflow that facilitated column selection and data filtering to ensure we retained only the relevant information. We utilized three CSV files as our data sources: Flights, Hotels, and Users. Each dataset underwent individual selection and filtering processes tailored to extract essential columns and criteria. Afterward, we joined the results from these datasets using a join function to create a comprehensive view of our data, which would inform our visualizations and analyses in Power BI.

### Overview of the Select and Filter usage on the datasets:

Data File	Select Columns	Filter
Flights	TravelCode, userCode, From, To, Flight type, Price, Time, Distance, Agency, Date	<ul style="list-style-type: none"><li>-Only include flights booked between 2019 and 2023</li><li>-Select flights with a price below the average price for that year.</li></ul>
Hotels	TravelCode, userCode, Name, Place, Days, Price, Total, Date	<ul style="list-style-type: none"><li>-Only include hotel stays from 2019 to 2023.</li><li>- Filter hotels based on location to include only those in popular travel destinations.</li><li>- Include stays where total price is below a specific threshold.</li></ul>
Users	Code, Company, Name, Gender, Age	<ul style="list-style-type: none"><li>- Only users with more than one trip booked are included.</li><li>- Filter by age to focus on users aged 18-65.</li><li>- Include users from specific companies or industries that show higher engagement.</li></ul>

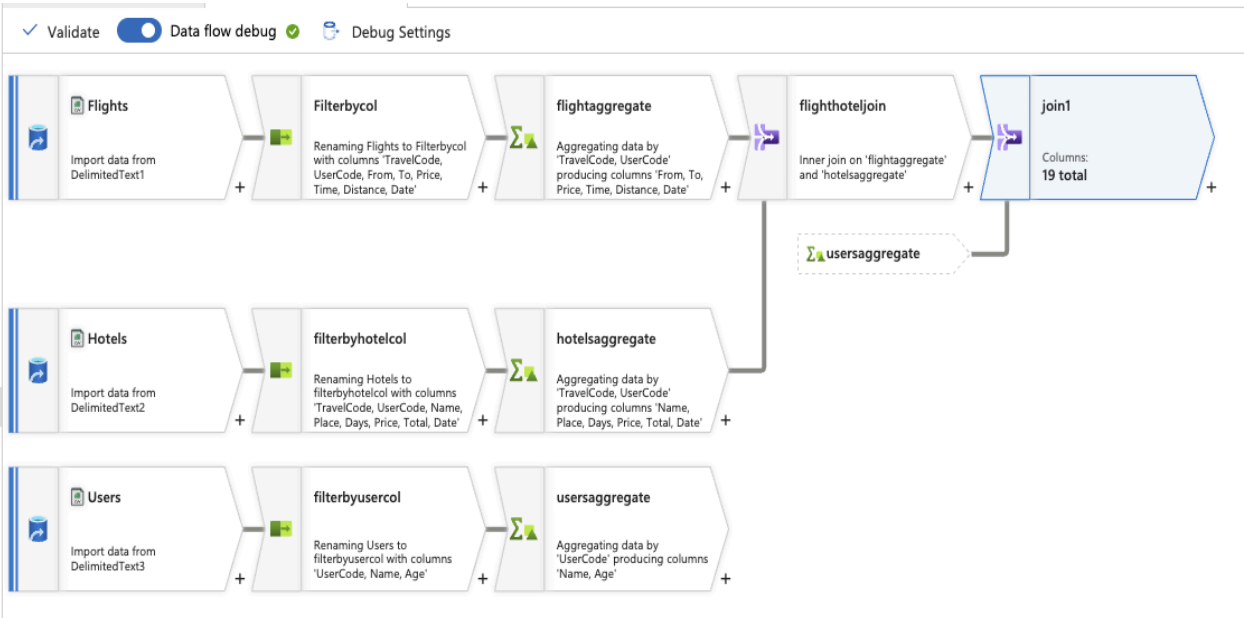
We applied filters to clean and prepare the datasets by removing unnecessary columns and irrelevant records.

In the Flights dataset, we eliminated the Agency and Flight Type columns, as they were redundant and did not contribute valuable insights for analyzing travel patterns or user behavior. We also filtered out incomplete records, focusing on crucial fields like TravelCode, UserCode, and Price to ensure data integrity.

Similarly, in the Users dataset, we removed the Company and Gender columns, as they did not provide significant insights for our travel analysis.

After filtering, we identified and removed duplicate entries across the datasets to ensure a clean dataset for analysis. For the Flights dataset, duplicates were removed based on the TravelCode and UserCode columns, which serve as unique identifiers for each record. In the Hotels dataset, we applied the same criteria, ensuring each record was distinct. For the Users dataset, duplicates were eliminated using the unique identifier in the UserCode column.

The next step involved joining the datasets on common keys to the information into a single dataset for analysis. We joined the Flights and Hotels datasets using TravelCode and UserCode, aligning travel bookings with hotel stays to create a comprehensive travel itinerary. Then, we joined the Users dataset with the combined Flights-Hotels dataset using UserCode, enriching the data with user-specific information such as name and age. We executed these joins using an inner join to ensure that only valid and complete records were carried forward for further analysis.





## *Data Integration Using SQL*

As we process the data, Azure Data Factory will orchestrate the movement into an Azure SQL Server, where we will subsequently create a SQL Database. We will define the schema and tables in the database to structure our data effectively. For any SQL-based transformations, we can incorporate stored procedures into the ADF pipeline.

## *Data Lakehouse in Microsoft Fabric*

To integrate with Microsoft Fabric, we will set up a workspace and create a Data Lakehouse. This will involve establishing an ADF pipeline that transfers data from our Azure SQL Database to the Lakehouse, ensuring a seamless flow of information.

### **Assumptions Made:**

#### **1. What Demographics factors correlate with specific outcomes?**

Customers have an average age of 42.74, so we assume the large majority of customers are middle-aged. We can use age as a key variable in predicting purchasing decisions, loyalty, or spending patterns.

#### **2. What factors influence travelers' destination choices**

Flights have a spike on Thursdays and Sundays. This is likely related to business travelers of weekend getaways; we can use this pattern to prepare pricing models or promotions.

#### **3. Are there significant trends over time in the data?**

Flight data shows decreasing flights over time; we can assume the trend will continue if no major changes are enacted.

#### **4. What are the seasonal patterns in destination popularity?**

Most popular destinations are Rio De Janeiro and Salvador. Destination popularity is likely heavily correlated with weather.

#### **5. What are the most predictive variables for the outcomes?**

Price and destination will be the major variables we research going forward.

Data Analysis

Data Visualization

- a. **Power BI:** Useful for business intelligence and visual analytics to create graphs and queries to make the most popular trends knows
- b. **Microsoft Fabric:** Create dashboards that visualize key metrics such as, average hotel prices by season, popular destinations, or climate impacts on travel

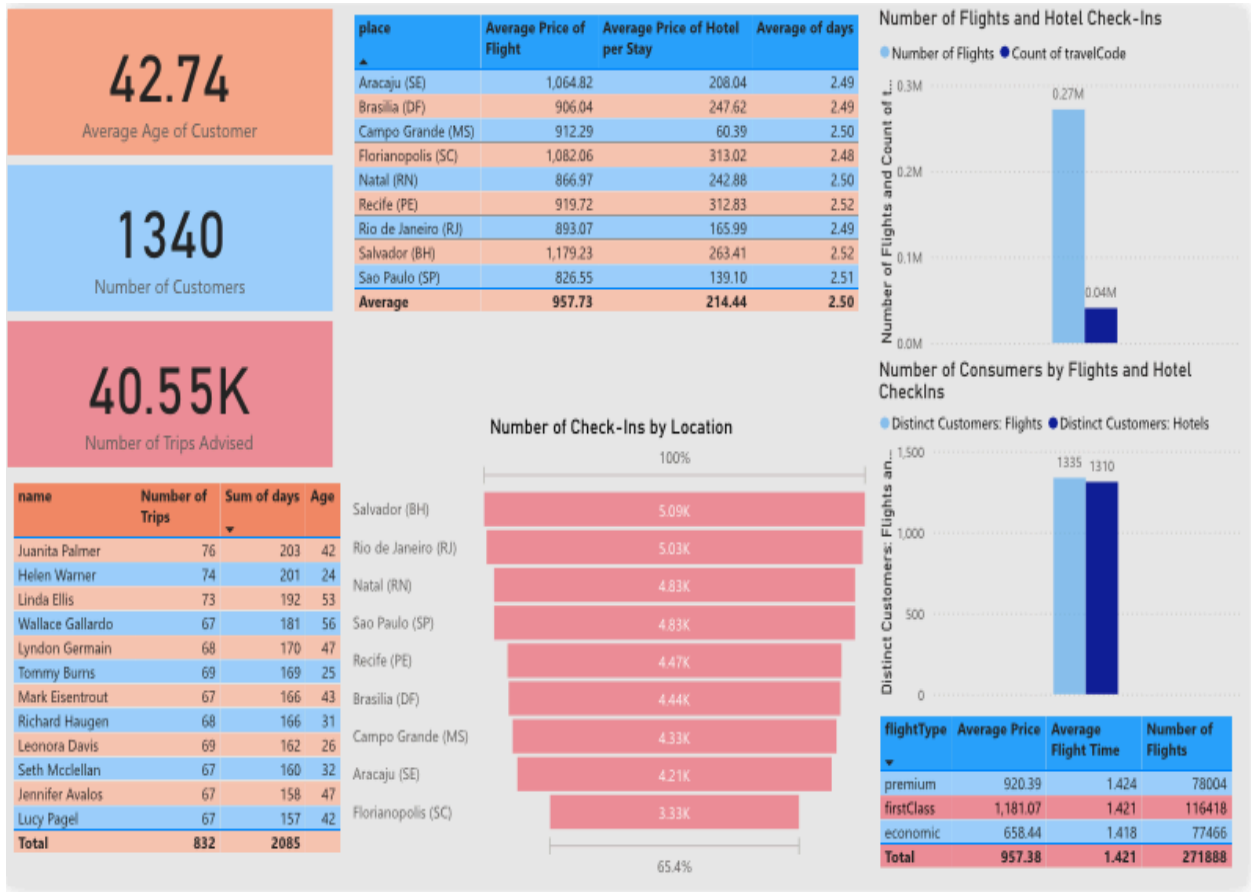
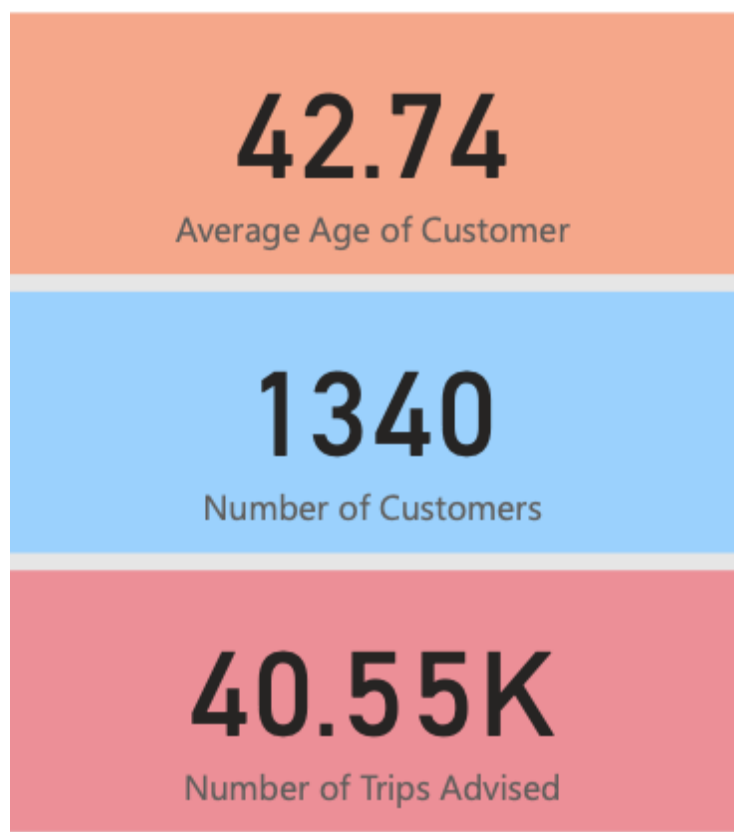


Image 1: Interactive Dashboard displaying information regarding users, flights, and hotels.



**Image 2: Average age, number of customers, and number of trips (by hotels) advised**

place	Average Price of Flight	Average Price of Hotel per Stay	Average of days
Aracaju (SE)	1,064.82	208.04	2.49
Brasília (DF)	906.04	247.62	2.49
Campo Grande (MS)	912.29	60.39	2.50
Florianópolis (SC)	1,082.06	313.02	2.48
Natal (RN)	866.97	242.88	2.50
Recife (PE)	919.72	312.83	2.52
Rio de Janeiro (RJ)	893.07	165.99	2.49
Salvador (BA)	1,179.23	263.41	2.52
São Paulo (SP)	826.55	139.10	2.51
<b>Average</b>	<b>957.73</b>	<b>214.44</b>	<b>2.50</b>

**Image 3: By location, average price of flight, average price of hotel per stay, and average length of stay**

name	Number of Trips	Sum of days	Age
Juanita Palmer	76	203	42
Helen Warner	74	201	24
Linda Ellis	73	192	53
Wallace Gallardo	67	181	56
Lyndon Germain	68	170	47
Tommy Burns	69	169	25
Mark Eisentrout	67	166	43
Richard Haugen	68	166	31
Leonora Davis	69	162	26
Seth Mcclellan	67	160	32
Jennifer Avalos	67	158	47
Lucy Pagel	67	157	42
<b>Total</b>	<b>832</b>	<b>2085</b>	

Image 4: Top 12 customers, number of hotel trips advised, total days per customer spent away, and age

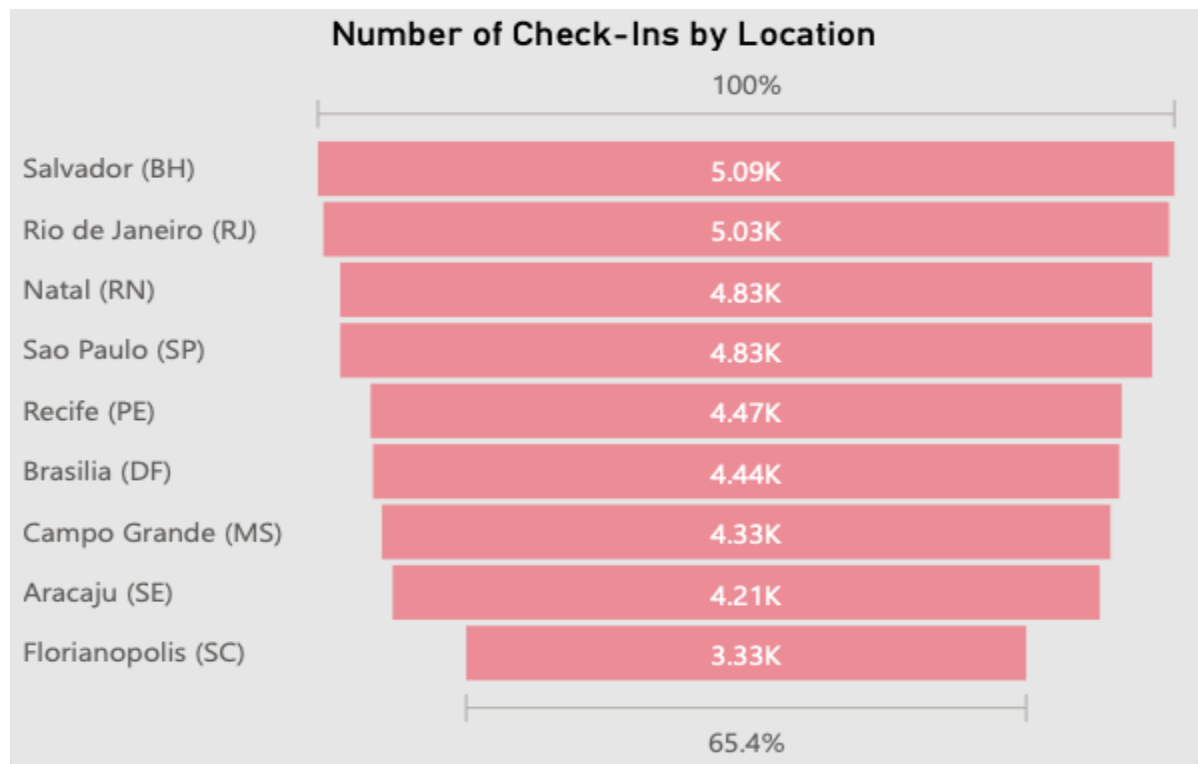


Image 5: Check-ins by location

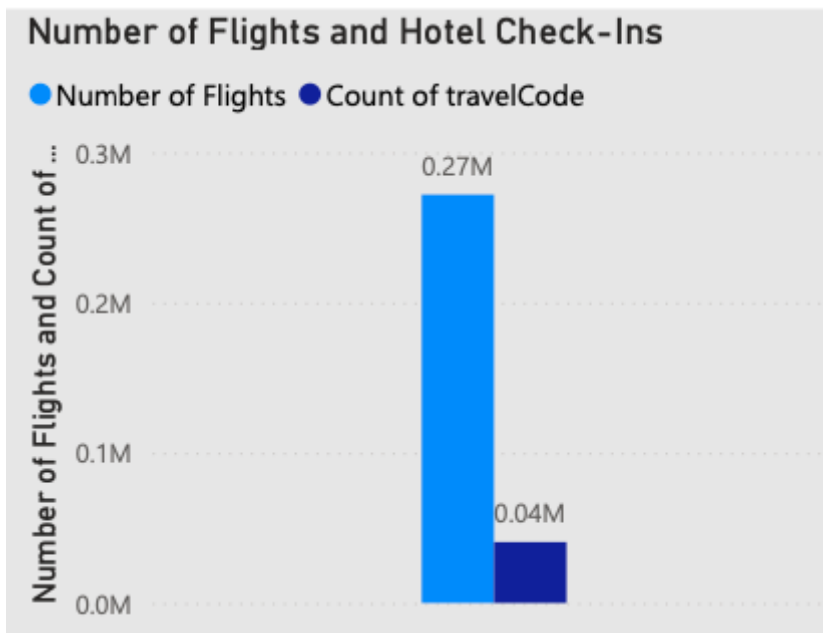


Image 6: Total flights booked, and total hotels trips reserved (Note: Due to some customers booking one-way flights, round-trip flights are counted as two flights).

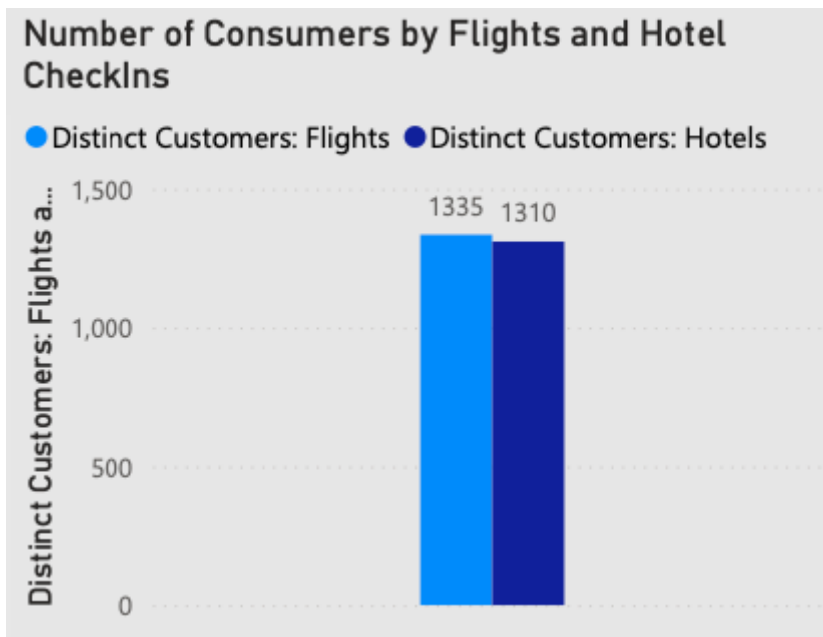


Image 7: Number of customers who booked flights with us and number of customers who booked hotel rooms with us.

flightType	Average Price	Average Flight Time	Number of Flights
premium	920.39	1.424	78004
firstClass	1,181.07	1.421	116418
economic	658.44	1.418	77466
Total	957.38	1.421	271888

Image 8: Summary of flights broken down into class, average price, average flight time, and number of flights booked.



Image 9: Number of hotel check-ins by date from 2019 to 2023



Image 10: A closer look at the number of hotel check-ins for the year 2021.

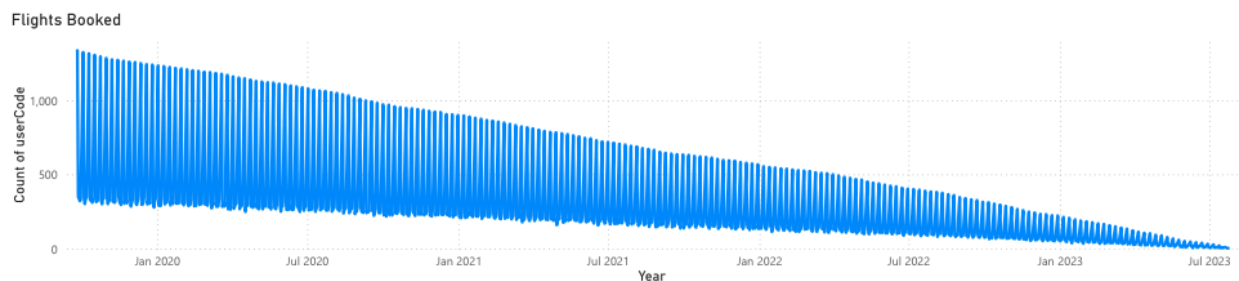
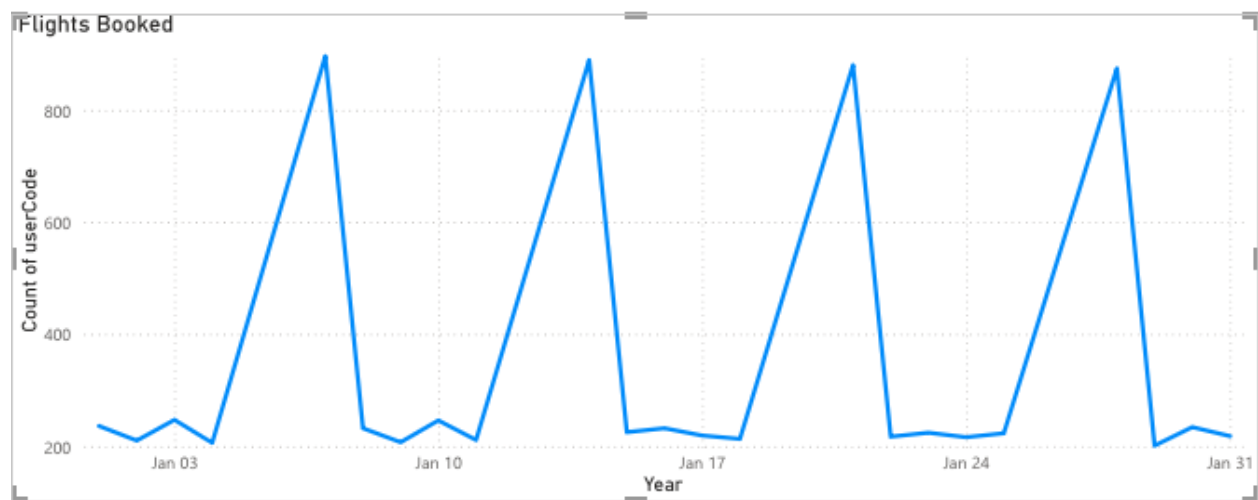
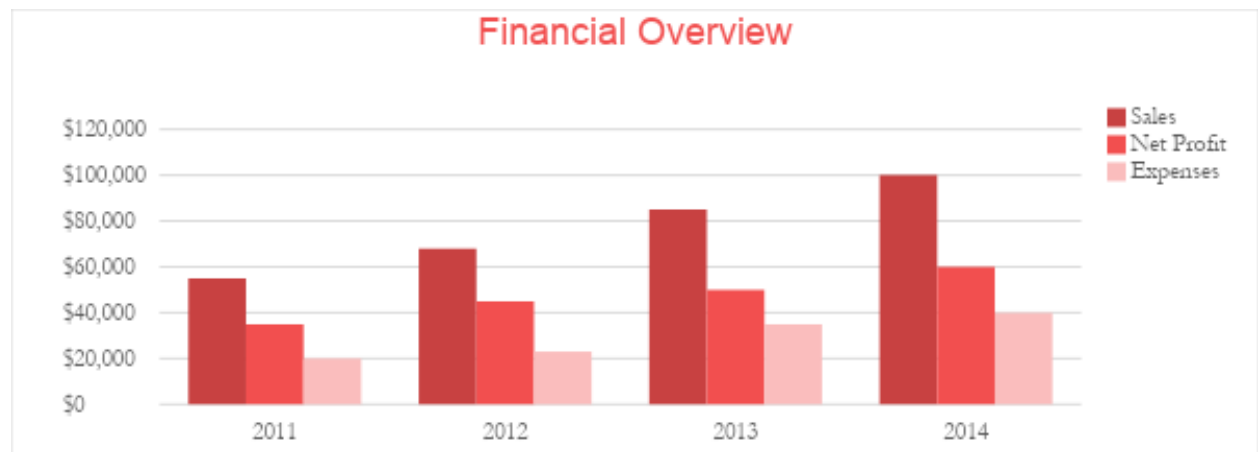


Image 11: Flights booked from 2019-2023. We can see it creates an oscillating pattern.



**Image 12: A closer look at January 2021 flights. An increase in flights on Thursdays, and a small increase on Sundays.**



## Analysis Results

### Implementation Recommendations

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**Sample Dataset(s) before any manipulation**

Business Licenses	
Incorporation Expenses	
Deposits	
Bank Account	
Rent	
Interior Modifications	
Equipment/Machinery Required:	
Item 1	
Item 2	
Item 3	
<i>Total Equipment/Machinery</i>	
Insurance	
Stationery/Business Cards	
Brochures	
Pre-Opening Advertising	
Opening Inventory	
Other (list):	
Item 1	
Item 2	
<b>Total Startup Expenses</b>	



## Profit and Loss Statement



*This table essentially contains the same basic information as the income projection statement. Established businesses use this form of statement to give comparisons from one period to another. Many lenders may require profit and loss statements for the past three years of operations.*

*Instead of comparing actual income and expenses to an industrial average, this form of the profit and loss statement compares each income and expense item to the amount that was budgeted for it. Most computerized bookkeeping systems can generate a profit and loss statement for the period(s) required, with or without budget comparison.*

### ***Profit and Loss, Budget vs. Actual: ([Starting Month, Year]—[Ending Month, Year])***

	[Starting Month, Year]—[Ending Month, Year]	Budget	Amount over Budget
Income:			
Sales			
Other			
<i>Total Income</i>			
Expenses:			
Salaries/Wages			
Payroll Expenses			
Legal/Accounting			
Advertising			
Travel/Auto			
Dues/Subs.			
Utilities			
Rent			
Depreciation			
Permits/Licenses			
Loan Repayments			
Misc.			

	[Starting Month, Year]—[Ending Month, Year]	Budget	Amount over Budget
<i>Total Expenses</i>			
<b>Net Profit/Loss</b>			

## Milestones



*This is a list of objectives that your business may be striving to reach, by start and completion dates, and by budget. It can also be presented in a table or chart.*

## Break-Even Analysis



*Use this section to evaluate your business profitability. You can measure how close you are to achieving that break-even point when your expenses are covered by the amount of your sales and are on the brink of profitability.*

*A break-even analysis can tell you what sales volume you are going to need in order to generate a profit. It can also be used as a guide in setting prices.*

*There are three basic ways to increase the profits of your business: generate more sales, raise prices, and/or lower costs. All can impact your business: if you raise prices, you may no longer be competitive; if you generate more sales, you may need added personnel to service those sales which would increase your costs. Lowering the fixed costs your business must pay each month will have a greater impact on the profit margin than changing variable costs.*

**Fixed costs:** *Rent, insurance, salaries, etc.*

**Variable costs:** *The cost at which you buy products, supplies, etc.*

**Contribution Margin:** *This is the selling price minus the variable costs. It measures the dollars available to pay the fixed costs and make a profit.*

**Contribution Margin Ratio:** *This is the amount of total sales minus the variable costs, divided by the total sales. It measures the percentage of each sales dollar to pay fixed costs and make a profit.*

**Break-even Point:** *This is the amount when the total sales equals the total expenses. It represents the minimum sales dollar you need to reach before you make a profit.*

**Break-even Point in Units:** For applicable businesses, this is the total of fixed costs divided by the unit selling price minus the variable costs per unit. It tells you how many units you need to sell before you make a profit.

**Break-even Point in Dollars:** This is the total amount of fixed costs divided by the contribution margin ratio. It is a method of calculating the minimum sales dollar to reach before you make a profit.

**Note:** If the sales dollars are below the break-even point, your business is losing money.

## Miscellaneous Documents



In order to back up the statements you may have made in your business plan, you may need to include any or all of the following documents in your appendix:

- Personal resumes
- Personal financial statements
- Credit reports, business and personal
- Copies of leases
- Letter of reference
- Contracts
- Legal documents
- Personal and business tax returns
- Miscellaneous relevant documents.
- Photographs