REVENUE OPTIMIZATION

User Journey Workflow



Executive Summary

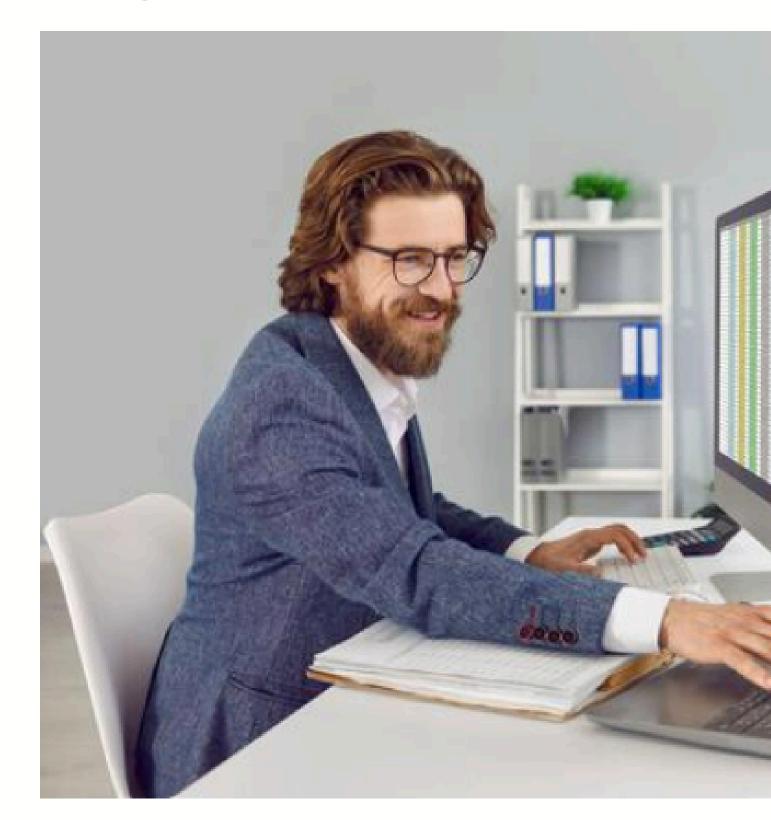
Objective:

Redesign the Barcelona booking workflow powered by **Artificial Intelligence (Al Agents)** to reduce friction at the payment step, boost booking completion rates, and elevate the overall user experience. By integrating tools like **Open AI -4, LangChain** and **Postman Flows** the system becomes smarter, more intuitive, and optimized for conversion.

Context:

Javier, Airbnb's Revenue Optimization Manager, oversees pricing and booking performance in Barcelona. After identifying **high drop-off rates** during the payment stage, he implemented AI Agents to streamline the user journey.

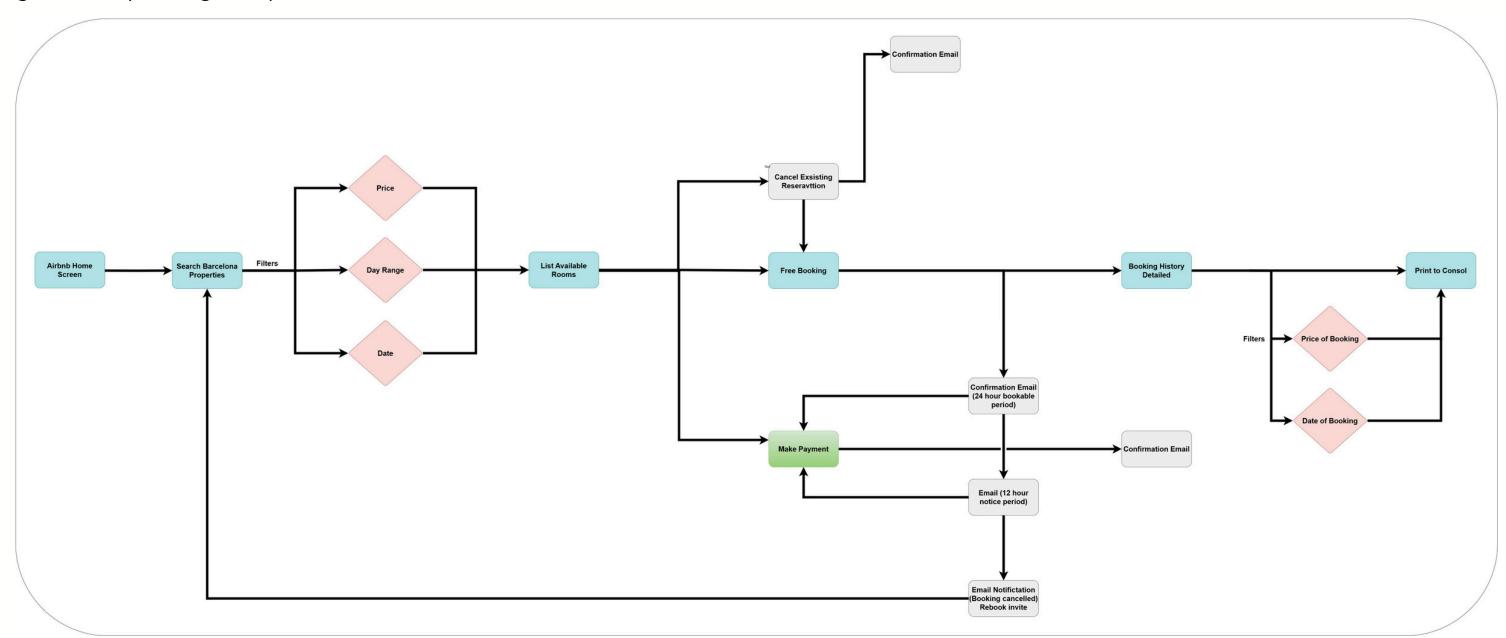
While he encourages users to adopt this new agentic workflow for a faster, Al-assisted experience, he also maintains a manual user journey for **flexibility.** This balanced approach ensures a seamless transition for users, offering both a traditional and an Al-enhanced pathway to successful reservations.



Manual User Workflow

- The user begins at the Airbnb home screen and initiates a **search** restricted to Barcelona properties.
- They apply filters based on price, date, and day range to view a curated list of available rooms.
- From there, they can proceed to book a **room or cancel** an existing reservation.
- Upon booking, users receive a confirmation email and enter a **24-hour holding period.** If payment is not completed, they receive a 12-hour reminder, followed by a cancellation notice and rebooking prompt.
- Beyond booking, users can access a detailed booking history, filtered by price or date, and print this data as needed.

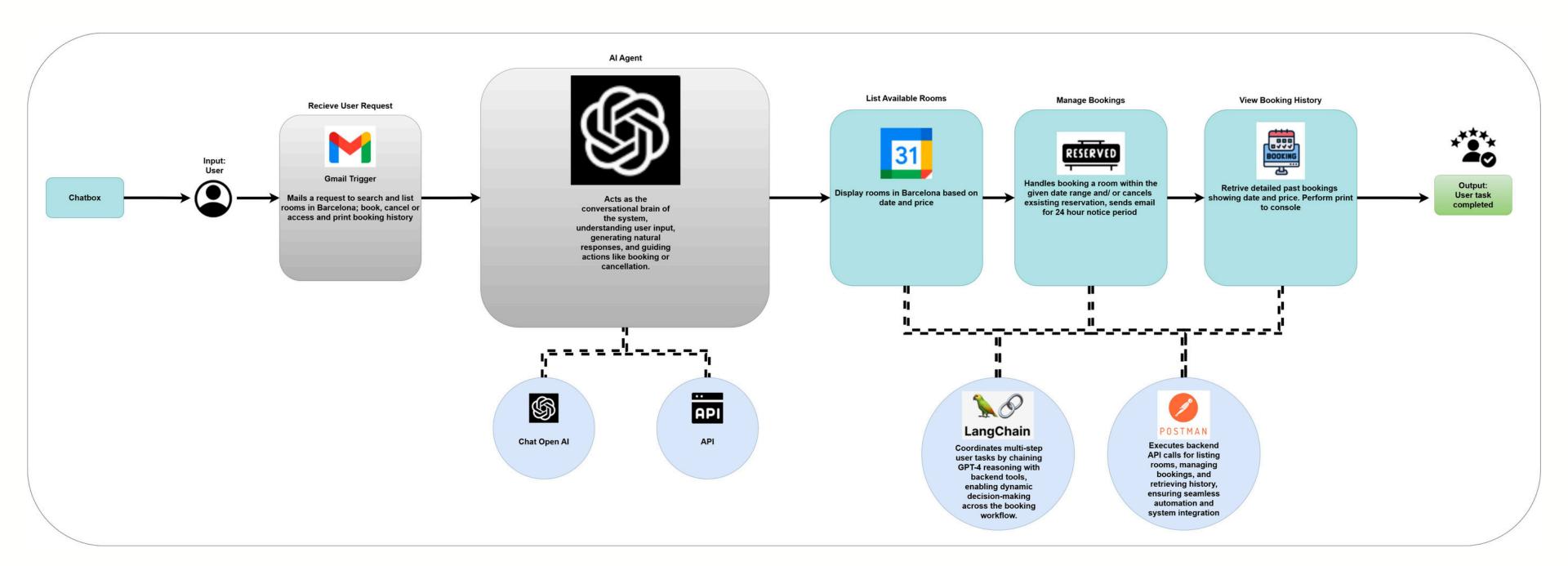
This journey balances autonomy and structure providing users with control while ensuring clarity, automation, and timely interventions that reduce friction and support Javier's goal of improving completion rates.



AI-Powered Workflow

- The user initiates a booking-related request through a Gmail-triggered chatbot; whether to search, book, cancel, or retrieve bookings.
- From there, the OpenAI agent (GPT-4) interprets the natural language request, guides the interaction, and confirms the user's intent in a conversational way.
- LangChain manages the logic flow, ensuring all actions comply with booking rules like minimum one-day stays and Barcelona-only availability.
- All backend operations; listing rooms by date and price, booking and cancellation, and retrieving booking history with filters are executed through Postman Flows, which automates the API calls and prints booking history to console.

The result is a seamless, low-effort user experience that reduces steps, saves time, cuts costs, and directly supports Javier's goal of improving booking conversions.

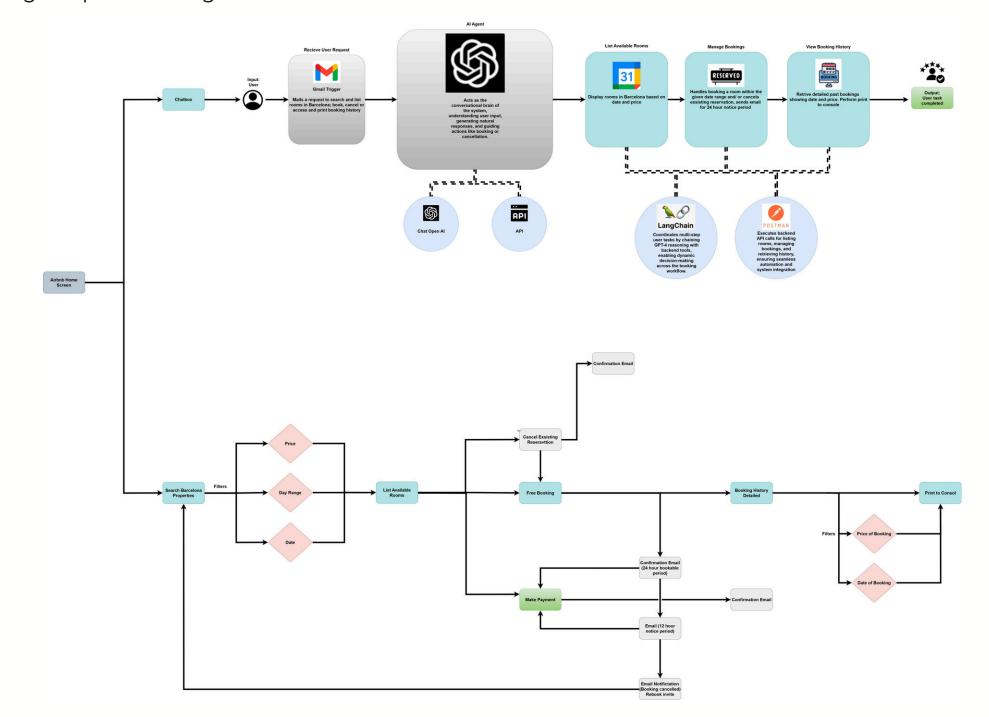


Refined Booking Workflow to Boost User Conversions



While the optimized manual workflow reduces friction and maintains user control, the agentic workflow powered by GPT-4, LangChain, and Postman Flows delivers a faster, more intuitive experience. The system automates search, booking, cancellations, and history retrieval; minimizing user effort while ensuring accuracy and reliability. By incorporating both workflows, Javier offers users the flexibility of manual control and the efficiency of Al-powered automation.

- To scale success, Javier should continue investing in agentic tools that scale personalization while reducing operational complexity.
- Additionally, he should invest in user education, such as **brief tutorials or onboarding prompts**, to ensure users feel confident using the chatbot interface; maximizing engagement and reducing drop-off during the transition to AI-assisted workflows.





Thank JOU