



The 3-Stage Analysis Framework

Stage 1: First Impressions (What Gets Clicks)

- GPT-4 Vision: Photo appeal scoring
- Test 3 personas via GPT-4: budget-conscious, family vacation, luxury seeker
- Title optimization for search keywords
- Price positioning vs competitors

Stage 2: Conversion Factors (What Drives Bookings)

- Description readability and persuasiveness
- Review sentiment analysis
- Amenity competitiveness scoring

Stage 3: Backend Validation

- Occupancy rate vs market average (AirDNA)
- Booking velocity comparison
- Google Trends: Seasonal validation
- Weighted Scoring: Photos (30%), Pricing (25%), Reviews (20%), Description (15%), Amenities (10%)

Error Handling (3-Layer Failover)

1. Data Collection: Webhook → API polling → Web scraping
2. Analysis: GPT-4 → Rule-based scoring → Cached data (7-day max)
3. Delivery: Slack → n8n retry queue → Email digest backup

Never skip alerts due to partial data - flag as "Limited Analysis" and proceed.

Data Sources Explained

- Internal Data: Your actual performance metrics
- AirDNA API: Market occupancy, ADR, RevPAR (\$500/month)
- Google Trends: Demand forecasting (free)
- Public Listings: Competitor analysis via ethical scraping

Cost Structure

- n8n hosting: \$50/month (unlimited executions)
- AirDNA API: \$500/month (market intelligence)
- GPT-4 Vision: ~\$180/month (100 properties daily)
- Total: ~\$730/month for complete intelligence

What makes this a great solution?

1. Scales efficiently: Same architecture works for 10 or 1000 properties
2. Cost-effective: Fixed \$730/month vs \$6000+ for Zapier at scale
3. Intelligent insights: Not just "what's wrong" but "why" and "how to fix"
4. Market context: Performance relative to competitors, not absolute thresholds
5. Actionable alerts: Specific fixes with expected ROI, not generic warnings
6. ROI: 1.5-4x return on investment through revenue protection