# Storytelling with Data: Analytical Report on Goa Tourism

• Deliverable Number: Week 4

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• Date of Submission : 2-June-2025

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## **Executive Summary**

This report explores tourist behavior and engagement with local artisan markets in Goa, using insights derived from cleaned and analyzed survey data. The objective is to help stakeholders including the Department of Tourism, NGOs, and local businesses understand key patterns that can inform tourism strategy and cultural promotion.

The analysis focused on variables such as age, gender, spending habits, payment modes, and product preferences. Key findings revealed that tourists aged 30–55 and those from specific cities like Pune showed higher spending on artisan products. Credit cards emerged as the most commonly used payment method, highlighting the need for digital readiness among vendors.

Based on these insights, the report recommends actionable strategies such as launching local awareness campaigns, equipping artisans with digital payment tools, and improving future data collection. These efforts aim to strengthen Goa's artisan ecosystem while enhancing the overall tourist experience.

#### **Introduction**

Goa has always stood out on India's tourism map not just for its beaches and nightlife, but for its deep-rooted culture, festivals, and heritage. While most tourists come looking for sea and sun, there's a growing interest in Goa's local artisans who create everything from handmade pottery and textile crafts to authentic food products. These artisans aren't just vendors they're carriers of tradition and local stories.

What makes this even more important is how tourism can be shaped to support them. When we connect tourists with artisan markets, it adds value to their travel experience while also helping sustain local livelihoods and skills.

This report dives into survey data collected from tourists in Goa. By looking at what people buy, how much they spend, and how they pay we're hoping to pull out useful insights that can help tourism departments, NGOs, and small businesses make better, more informed decisions going forward.

# **Methodology Overview**

The analysis started with cleaning and preparing the raw data to ensure it was accurate and ready for use. This involved handling missing values, fixing issues like unrealistic age entries (eg: -1 or 120), negative quantities, or incorrect total prices. Conditional formatting, data validation, and formulas were used to identify and correct such problems.

The cleaned dataset focused on three main areas: tourist demographics (like age, gender, and location), purchase behavior (products bought, quantity, price, and payment mode), and whether the product was artisan or not.

To identify patterns and trends, a mix of univariate and bivariate analysis was used. Excel tools such as pivot tables and charts helped break down the data and uncover useful insights like what kinds of products were most popular, how much tourists spent, and who the potential buyers were. These form the base for the findings in this report.

#### **Key Insights and Findings**

## 1. Artisan Product Engagement is Strong, But Not Universal

Tourist spending clearly shows a preference for artisan products among many visitors. Items like Goan Pickles, Spice Mix, Local Art, and Handcrafted Mugs had noticeably higher total sales and quantity sold compared to generic items.

A new column named "artisan or NOT" was manually created to separate artisan and non-artisan products. Pivot table analysis showed that the total revenue from artisan products was almost double that of non-artisan ones.

Implication: There's strong demand for culturally rich, local products. Promoting these through better signage, curated shopping trails, or dedicated artisan stalls at popular tourist spots can drive even more engagement.

#### 2. Tourists in Their Late 20s and Early 30s Spend the Most

Looking at the average Total\_Price across age groups, tourists aged between 27 to 36 years recorded the highest per-transaction spending—over ₹900 on average. For example, age 27 had ₹1,011 and age 29 had ₹931, topping the list.

Meanwhile, younger tourists (18–25) were present in good numbers but didn't spend as much per visit. This could be due to tighter budgets or different priorities while traveling.

Implication: Targeting late 20s to early 30s travelers through premium packages, cultural workshops, or tailored artisan experiences could boost overall spending and engagement. They're the sweet spot for both interest and purchasing power.

#### 3. <u>Digital Payments Are the Preferred Mode of Transaction</u>

When we looked at the Payment\_Mode column, digital options stood out. Credit Card (22%) and UPI (21%) were the top two modes, while cash was used in only about 17% of cases.

This is important because many local artisans still rely heavily on cash. Without digital payment access, they might lose out on potential customers who prefer card or UPI.

Implication: It's a great time to introduce UPI-based payment setups for artisans. Simple training programs or partnerships with payment platforms can help artisans adapt and benefit from tourists' digital-first habits.

#### 4. Missing Data Limits Deeper Tourist Understanding

While the dataset had good details on demographics and purchase behavior, it didn't include key fields like "How did you hear about artisan markets?" or "Would you like to return?"

This made it impossible to answer questions around awareness sources or likelihood of repeat visits. That said, the high spending on artisan items hints at strong tourist interest in authentic cultural experiences.

Implication: Future surveys should include fields like source of awareness and revisit intent. That way, Goa Tourism can track what's working, improve marketing strategies, and design more engaging artisan experiences that tourists are likely to return for.

#### Recommendations

## 1. Add On-Ground Artisan Experience Zones

Instead of just showcasing products, Goa Tourism could create small live demo zones in popular tourist areas like Panjim streets, flea markets, or beach promenades. Tourists could watch a potter at work, get a quick caricature made, or try a simple DIY craft kit. This makes the experience more interactive and memorable turning a casual purchase into a story they'll share. It's not just about what they buy, but how they felt while buying it.

# 2. Build a "Goa Craft Trail" Mobile App

A lightweight mobile app (or even a simple website) can let tourists explore artisan clusters by region or product type bamboo goods, pottery, local art, etc. Add features like images, price range, map directions, and maybe even a "Chat with the Artisan" option for custom requests. This would make discovering Goa's crafts easier, especially for visitors who prefer planned, tech-supported travel.

### 3. Ask Smarter Survey Questions

Future surveys should go beyond age and product. Add multiple-choice questions like: "How did you hear about artisan stalls?" or "Would you return for a cultural shopping experience?" These insights would help design better marketing and tourism strategies that actually align with traveler behavior.

# Reflections on Analytical Storytelling

Turning the cleaned data into a stakeholder-friendly report wasn't as straightforward as expected. The biggest challenge was the missing fields like no information on return visits or how tourists discovered artisan markets. These gaps made it tricky to answer some important questions, which meant I had to focus on the story that could be told with what we had.

Another challenge was knowing what to include and what to leave out there was a lot to say, but not all of it would be relevant to decision-makers. So I had to shift from just analyzing the data to thinking about how it could actually help someone take action.

This assignment really showed me that storytelling is a part of analysis. You don't just show the numbers you connect them to real world decisions. A good narrative can make even simple insights more impactful when shared the right way.